

**BOUTIQUE HOTEL
275 KING EDWARD AVENUE
OTTAWA, ONTARIO**

FORECASTING DOCUMENT

August 9, 2021

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CONSULTING TRANSPORTATION ENGINEERS
P. O. Box 774, MANOTICK, ONTARIO K4M 1A7

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TABLE OF CONTENTS

	PAGE
INTRODUCTION	1
STEP 1 - SCREENING	1
STEP 2 - SCOPING	1
MODULE 2.1 – Existing and Planned Conditions	1
MODULE 2.2 – Study Area and Time Periods	10
MODULE 2.3 – Exemptions Review	11
STEP 3 - FORECASTING	12
MODULE 3.1 – Development-generated Travel Demands	12
MODULE 3.2 – Background Network Travel Demands	16
MODULE 3.3 – Demand Rationalization	19
APPENDIX	25

LIST OF FIGURES

2.1	SITE LOCATION PLAN	2
2.2	CONCEPTUAL SITE PLAN	4
2.3	PEAK AM AND PM HOUR EXISTING TRAFFIC COUNTS	8
3.1	PEAK AM AND PM HOUR SITE GENERATED PRIMARY TRIPS	17
3.2	PEAK AM AND PM HOUR SITE GENERATED PASS-BY TRIPS	18
3.3	2024 PEAK AM AND PM HOUR BACKGROUND TRAFFIC	20
3.4	2029 PEAK AM AND PM HOUR BACKGROUND TRAFFIC	21
3.5	2024 PEAK AM AND PM HOUR TOTAL TRAFFIC	23
3.6	2029 PEAK AM AND PM HOUR TOTAL TRAFFIC	24

LIST OF TABLES

2.1	COLLISION SUMMARY	10
3.1	INVENTORY OF DEVELOPMENT USE	12
3.2	VEHICLE TRIP GENERATION RATES	12
3.3	PEAK HOUR SITE GENERATED TRIPS	13
3.4	TOTAL PEAK HOUR SITE GENERATED PRIMARY PERSON-TRIPS	14
3.5	MODE SHARE SUMMARY (Peak Hour Person-Trips)	14
3.6	PEAK HOUR ASSIGNMENT OF VEHICLE-TRIPS	16

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INTRODUCTION

The owner of a parcel of land at the corner of King Edward Avenue and Clarence Street is in the process of preparing a Site Plan Application for the construction of an eight storey building which will provide a combination of hotel and condominium units. The hotel would be located at 275 King Edward Avenue with the west limit of the site bordering King Edward Avenue. The Boutique Hotel development will contain 67 hotel suites and 54 condominium units with 120 m² of leasable commercial space on the ground floor. The main entrance to the building will be located at the corner of Clarence Street and King Edward Avenue. Parking will be accommodated in an underground parking garage with access onto Clarence Street.

The firm of D. J. Halpenny & Associates Ltd. was retained to prepare a Transportation Impact Assessment report in support of the Site Plan Application for the project. The following documents the study steps which conform to the City of Ottawa *Transportation Impact Assessment Guidelines (2017)*.

STEP 1 - SCREENING

A Screening Form has been prepared for the project and is provided as Exhibit 1.1 in the Appendix. The Screening Form was submitted to the City of Ottawa which determined that the Trip Generation, Location, and Safety Triggers were all met and a Transportation Impact Assessment (TIA) study must continue onto the next stage. The following will address the requirements of the Scoping Document.

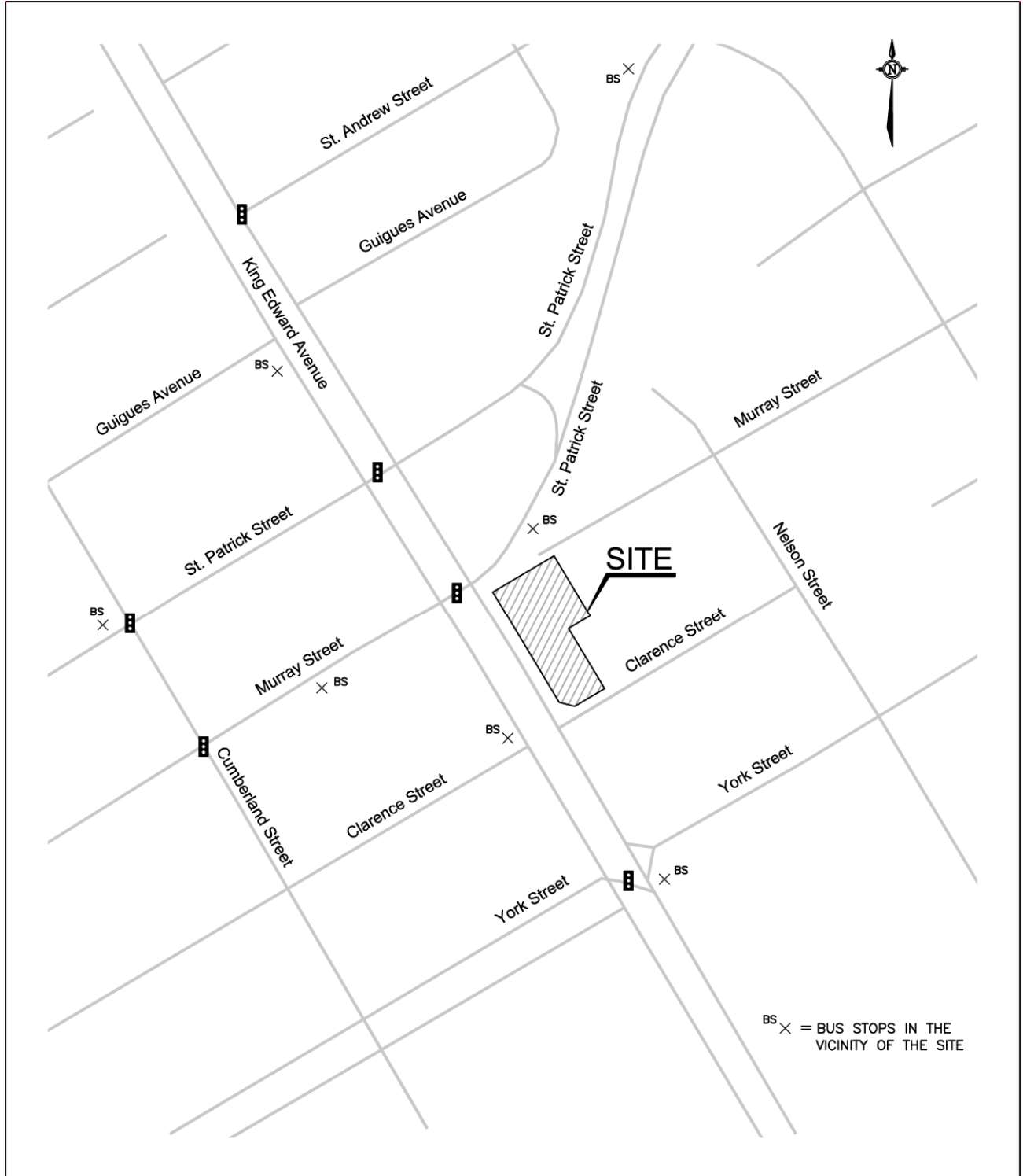
STEP 2 - SCOPING

MODULE 2.1 – Existing and Planned Conditions

Element 2.1.1 – Proposed Development

The Boutique Hotel will be a single eight storey building located at 275 King Edward Avenue. The property is located on the east side of King Edward Avenue with Murray Street at the north limit and Clarence Street at the south limit. Figure 2.1 shows the location of the Boutique Hotel.

FIGURE 2.1
SITE LOCATION PLAN



BS X = BUS STOPS IN THE VICINITY OF THE SITE

NOT TO SCALE

The development would contain 67 all-suite hotel units intended for short and long term stays on the 2nd to 4th floors, 54 condominium units on the 5th to 8th floor, and 120 m² of retail/commercial space on the ground floor. The entrance to the hotel will be located at the building corner at the intersection of King Edward Avenue and Clarence Street. The vehicular access to the underground parking garage will be from Clarence Street. The garage access will be a 6.3 m wide full movement access and will be located approximately 21.5 m from the centre of the access to the curb line of the northbound King Edward Avenue lanes.

The site access will be to a three-level parking garage containing 87 parking spaces which exceeds City By-law requirements. The site will provide 7 bicycle parking spaces which also exceeds the City By-law requirements.

The hotel would be located on a 1,590 m² parcel of land. The land is primarily vacant with a small two storey apartment building located at the north end of the property. The property is currently zoned TM 12 + TM (Mature Neighborhood Overlay) “Traditional Mainstreet”, which will support the proposed hotel development. The hotel/condominium will be constructed in a single phase with completion expected by the year 2024. Figure 2.2 shows a conceptual site plan of the development.

Element 2.1.2 – Existing Conditions

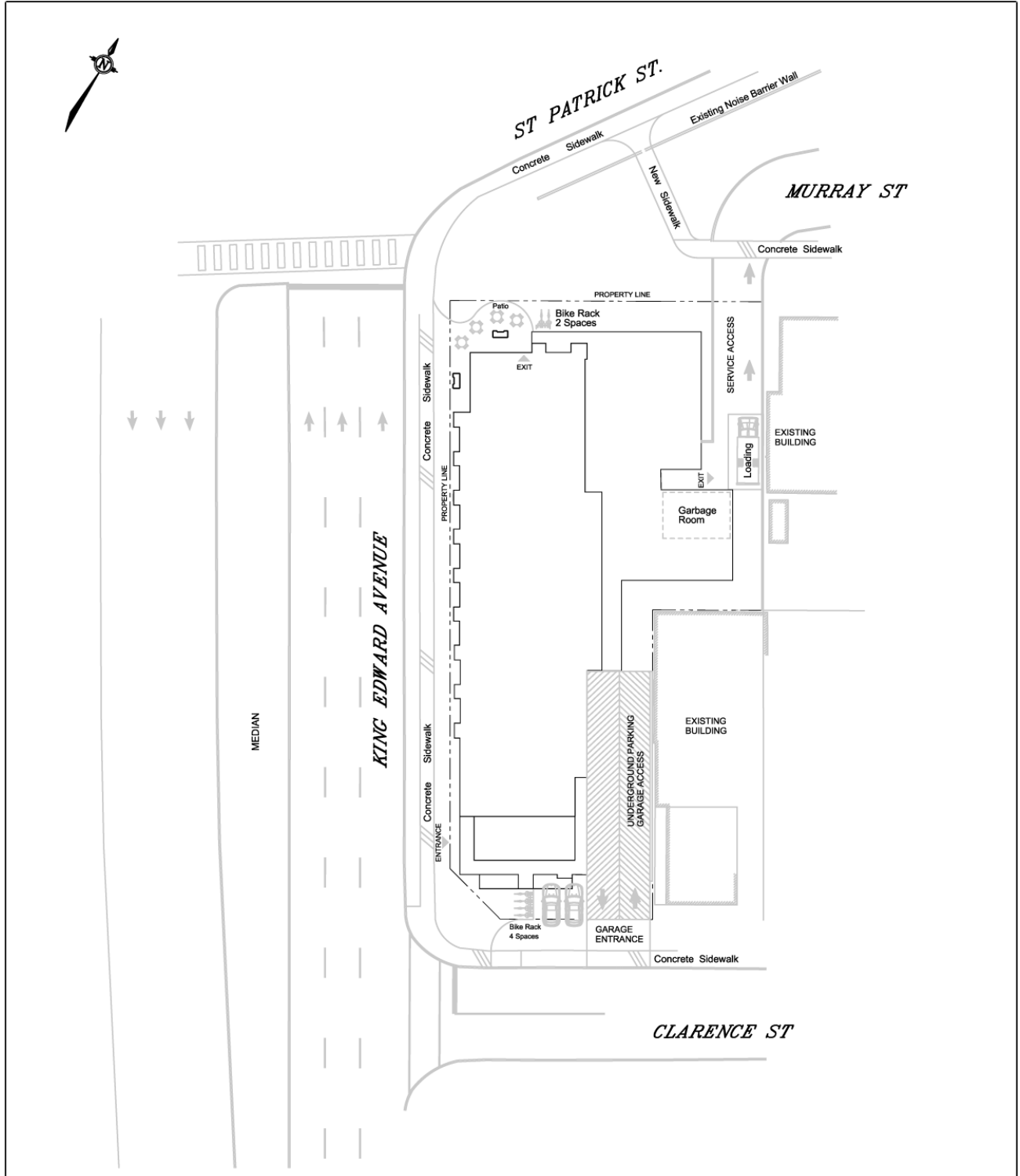
ROADS

The site will front onto King Edward Avenue which is designated as an arterial road in the City of Ottawa *Transportation Master Plan* (TMP). King Edward Avenue is a six lane urban road under the jurisdiction of the City of Ottawa. The southbound lanes comprise of the outside lane designated as a bus only lane from 3:30 PM to 5:30 PM Monday to Friday. The street has 1.5 m sidewalks along both sides of the road with a 1.5 m boulevard. There are no bike lanes along King Edward Avenue with no requirement under the TMP. In the northbound lanes across the frontage of the site there are signs posted “No Stopping” between 3:30 PM and 5:30 PM Monday to Friday, with 3 hour parking permitted between 7:00 AM and 3:30 PM Monday to Friday. In the southbound lanes “No Stopping” is posted from 7:00 AM to 9:00 AM and 3:00 PM to 5:30 PM Monday to Friday, with 3 hour parking permitted between 9:00 AM and 3:00 PM Monday to Friday. The posted speed limit along King Edward Avenue is 40 km./h.

Clarence Street borders the south side of the site. Clarence Street is a two lane local street with a pavement width of 8.5 m. The street has 2.0 m sidewalks adjacent to the curb along both sides of the street. Parking is prohibited along the north side of the street, and there is no posted speed limit.

Eastbound St. Patrick Street is an arterial road which borders the north side of the site. The roadway contains two eastbound only lanes west of King Edward Avenue which are designated as Murray Street, with the two eastbound lanes continuing as St. Patrick Street on the east side of King Edward Avenue. Eastbound St. Patrick Street has 2.0 m sidewalks along both sides of the road and no cycling facilities. Westbound St. Patrick

**FIGURE 2.2
CONCEPTUAL SITE PLAN**



NOT TO SCALE

Street has two westbound lanes with sidewalks on both sides of the road and no cycling facilities with the exception of a bicycle pocket between the through and right turn lanes as part of the approach to the St. Patrick/King Edward intersection. St. Patrick Street is designated in the TMP as a Spine Route in the Cycling Network - Primary Urban. "No Stopping" signs are placed along both the eastbound and westbound lanes of the road which prohibits the stopping of vehicles. The speed limit is posted at 50 km./h.

Murray Street east of King Edward Avenue is a local street with an 8.5 m pavement width. The street is approximately 100 m in length between the cul-de-sac adjacent to the site and Nelson Street. The Boutique Hotel proposes to have a service entrance from the site to the cul-de-sac.

INTERSECTIONS

Clarence/King Edward Intersection - The intersection is a two-way stop controlled intersection with a stop sign at the westbound Clarence Street approach. The median along King Edward Avenue prohibits westbound Clarence Street through movements with "No Enter" at the eastbound Clarence Street approach. Below is the lane configuration and aerial photograph of the Clarence/King Edward intersection:

Northbound King Edward Ave.	Two through lanes One through/right lane
Southbound King Edward Ave.	Two through lanes One through/right lane (Peak PM hr. bus only lane)
Eastbound Clarence St.	No approach entry
Westbound Clarence St.	One right turn lane (Stop sign)

INTERSECTION OF CLARENCE ST. AND KING EDWARD AVE.



St. Patrick (Murray)/King Edward Intersection - The intersection of eastbound St. Patrick Street (Murray Street) and King Edward Avenue is located approximately 85 m north of Clarence Street. The intersection is controlled by traffic signals with King Edward Avenue forming the northbound and southbound approaches, Murray Street the eastbound (one-way) approach, and St. Patrick Street would be the receiving street for eastbound one-way traffic on the east side of King Edward Avenue. The intersection has the following lane configuration with an aerial photograph of the intersection provided below:

Northbound King Edward Ave.	Two through lanes One shared through/right lane
Southbound King Edward Ave.	Two left turn lanes Two through lanes
Eastbound Murray St.	One through lane (Buses only 3:30 - 5:30 M-F) One left turn lane (60 m storage) One shared left/through lane One shared through/right lane

INTERSECTION OF ST. PATRICK ST. (MURRAY ST.) AND KING EDWARD AVE.



Westbound St. Patrick/King Edward Intersection - The St. Patrick/King Edward intersection is located approximately 165 m north of Clarence Street. The intersection is controlled by traffic signals with King Edward Avenue forming the northbound and southbound approaches, and St. Patrick Street the westbound one-way approach. The intersection has the following lane configuration with an aerial photograph:

Northbound King Edward Ave.	Three through lanes
Southbound King Edward Ave.	Four through lanes
	One shared through/right turn lane
Westbound St. Patrick St.	One shared left/through turn lane
	One through lane
	Two channelized right turn lanes

INTERSECTION OF WESTBOUND ST. PATRICK ST. AND KING EDWARD AVE.

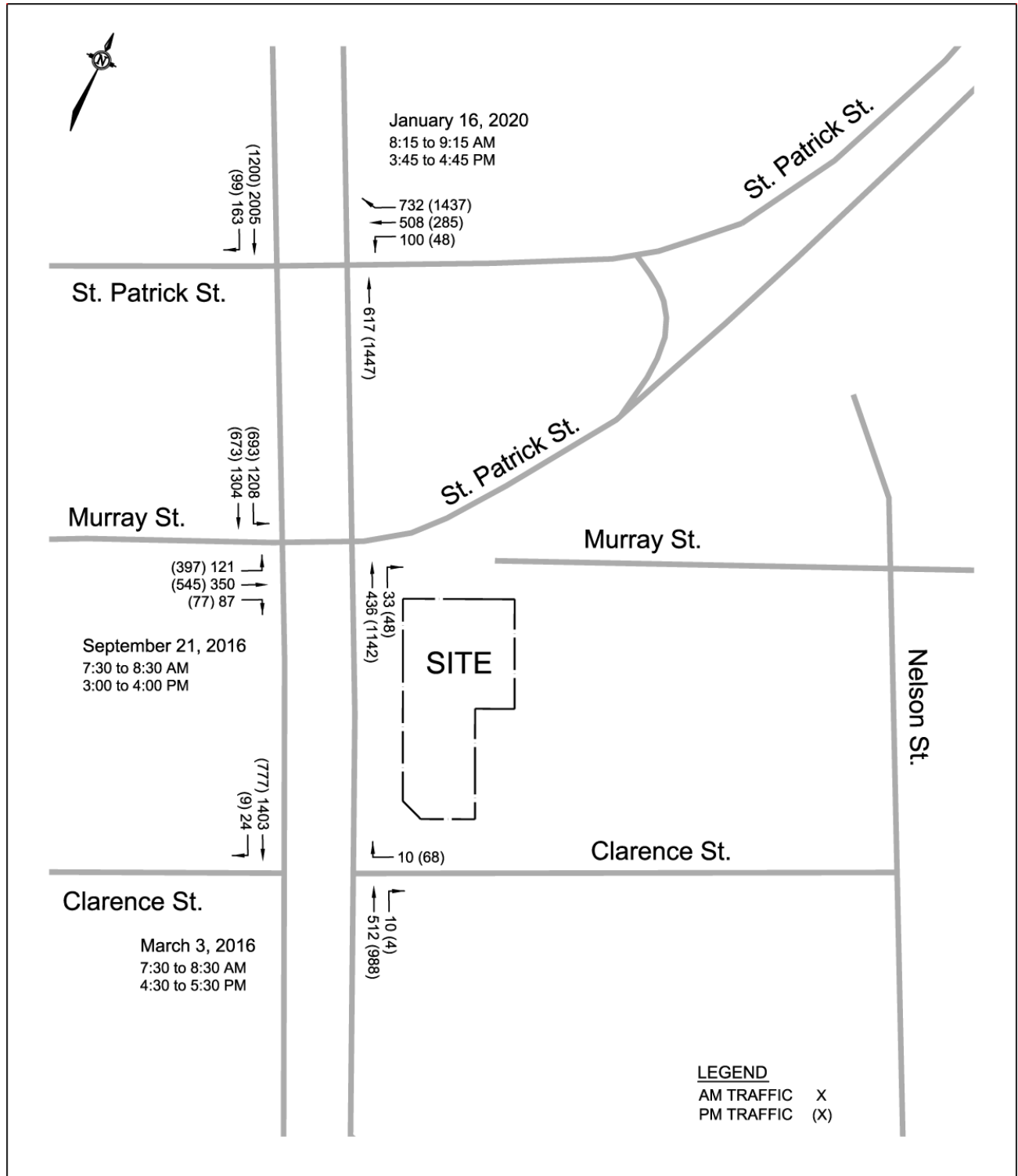


The most recent weekday peak AM and PM hour traffic counts were obtained from the City of Ottawa and are provided in the Appendix as Exhibit 2.1 for the 2016 counts at the intersection of Clarence/King Edward, Exhibit 2.2 for the 2016 counts at the intersection of St. Patrick (Murray)/King Edward, and Exhibit 2.3 for the 2020 counts at the intersection of westbound St. Patrick/King Edward. Figure 2.3 presents the weekday peak hour counts at the intersections within the study area.

TRANSIT

The site is serviced by OC Transpo Local Route 56 which is scheduled during peak periods Monday to Friday and Sundays. The route travels along King Edward Avenue to the downtown core and to the Tunney's Pasture Transit Station. The route schedule provides 15 minute service in the peak direction and 30 minute service in the nonpeak direction all day and weekends. The route map is provided as Exhibit 2.4 in the Appendix.

**FIGURE 2.3
 PEAK AM AND PM HOUR EXISTING TRAFFIC COUNTS**



NOT TO SCALE

Route 6 is a frequent route travelling along St. Patrick Street/Murray Street through the downtown core to the Greenboro Transit Station. The route operates 7 days a week with 15 minute service on weekdays. The route map is provided as Exhibit 2.4.

Bus stops are currently located at the Clarence/King Edward intersection for southbound transit Route 6 to the downtown core, and a block away from the hotel entrance (York/King Edward) for the northbound service. For transit Route 6 the westbound bus stop to the downtown core is located at the Cumberland/St. Patrick intersection, and eastbound bus stop on St. Patrick Street 55 m east of King Edward Avenue. The bus stop locations are shown in Figure 2.1.

COLLISION HISTORY

Collision reports were obtained from the City of Ottawa through Open Data Ottawa for the five year time period between the years January 1, 2015 and December 31, 2019. The collision reports were obtained for the three intersections of Clarence/King Edward, St. Patrick (Murray)/King Edward, and St. Patrick/King Edward. Reported collisions were also obtained along the road segment of King Edward Avenue between Clarence Street and St. Patrick Street. Table 2.1 summarizes the collisions by year and type.

Element 2.1.3 – Planned Conditions

The *Transportation Master Plan 2013* (TMP) has identified the two transit priority projects in the vicinity of the Boutique Hotel development. The first is identified in the TMP under Affordable Network and Network Concept as a transit signal priority along Murray Street, St. Patrick Street and Dalhousie Street between Vanier Parkway and Rideau Street. The project would improve travel time and transit reliability. The second project is identified under Network Concept and consists of transit signal priority along King Edward Avenue which will complement the existing southbound bus lane between Sussex Drive and Rideau Street. The project would improve transit capacity for the large number of STO buses.

The following are proposed or recently developed property within the immediate area of the site:

- The Holiday Inn Express and Suites hotel is located at 235 King Edward Avenue between St. Patrick Street and Murray Street. The hotel was completed in 2019.
- A 48 unit supportive housing project is proposed at 216 Murray Street.
- An application for a Zoning By-law Amendment has been made for the property at 284 King Edward Avenue. The amendment would allow changes to be made to the existing church building or identify potential development of the site.

**TABLE 2.1
 COLLISION SUMMARY**

YEAR	COLLISION TYPE				OTHER (SMV)	TOTAL
	REAR END	ANGULAR	TURNING	SIDESWIPE		
Clarence Street at King Edward Avenue Intersection						
2015						0
2016	2					2
2017				1		1
2018				1		1
2019						0
St. Patrick Street (Murray Street) at King Edward Avenue Intersection						
2015	5	2	2	3	3	15
2016	8	3		4	1	16
2017	3			5	1	9
2018	5	1	1	1	1	9
2019	5	1	2	3	1	12
St. Patrick Street at King Edward Avenue Intersection						
2015	6	3	1	10		20
2016	8	3	2	5	2	20
2017	6	1		11		18
2018	5	1	5	4	1	16
2019	9	2		5		16
King Edward Avenue Road Segment between Clarence Street and St. Patrick Street						
2015	1			1		2
2016				3	1	4
2017					1	1
2018				1		1
2019	2					2

MODULE 2.2 – Study Area and Time Periods

Element 2.2.1 – Study Area

The study area for the hotel development will be confined to the section of King Edward Avenue between Clarence Street and St. Patrick Street (westbound). The study would include the Clarence/King Edward, St. Patrick (Murray)/King Edward and St. Patrick/King Edward intersections.

The study will examine the intersection geometry and roadway segments in accordance with the City of Ottawa *Transportation Impact Assessment Guidelines (2017)*.

Element 2.2.2 – Time Periods

The time period for the analysis would be the weekday peak AM and PM time period of the background roadway traffic. This would be the peak period of traffic along King Edward Avenue and adjacent streets to the site.

Element 2.2.3 – Horizon Years

The TIA will address the impact of the site generated trips from the proposed Boutique Hotel. The horizon year of the study will be the completion of the development at the year 2024. The analysis will further examine the impact at the year 2029 which represents five years beyond completion.

MODULE 2.3 – Exemptions Review

The exemptions, which provide possible reductions to the scope of work of the TIA Study, were examined using Table 4: Possible Exemptions which is provided in the City's *Transportation Impact Assessment Guidelines (2017)*. Utilizing the table, the following lists the possible exemptions proposed for the TIA Study report:

MODULE	ELEMENT	EXEMPTION CONSIDERATIONS
Design Review Component		
4.1 Development Design	4.1.2 Circulation and Access	No – The intended use and function of the rear service access onto Murray Street will be examined.
	4.1.3 New Street Networks	Yes - Only required for subdivisions.
4.2 Parking	4.2.1 Parking Supply	No – The parking supply will be compared to that required as determined from City By-laws.
	4.2.2 Spillover Parking	Yes - Parking will meet the City of Ottawa By-laws. All hotel parking will be contained within the site.
Network Impact Component		
4.5 Transportation Demand Management	All Elements	No – TDM measures will be examined.
4.6 Neighbourhood Traffic Management	4.6.1 Adjacent Neighbourhoods	No – The site will have access onto Clarence Street, a local street.
4.8 Network Concept		Yes - The site would not generate more than 200 person-trips per peak hour in excess of the volume permitted by established zoning.

STEP 3 - FORECASTING

MODULE 3.1 - Development-generated Travel Demand

Element 3.1.1 – Trip Generation and Mode Shares

The Boutique Hotel will have a mixed use consisting of an all suites hotel, condominium, and some leasable commercial space. Table 3.1 presents an inventory of the type and size of development for each individual use.

**TABLE 3.1
 INVENTORY OF DEVELOPMENT USE**

TYPE OF USE	NUMBER OF UNITS GROSS FLOOR
All Suites Hotel	67 units
Condominium	54 units
Commercial Space	120 m ² (1,292 ft ²)

The number of expected site generated trips utilized the trip statistical data in the Institute of Transportation Engineers (ITE) document, *Trip Generation Manual 10th Edition*. The trip generation data was determined from the average vehicle trip rate for an All Suites Hotel (ITE 311), a Multifamily Housing Mid-Rise (ITE 221) located in a dense multi-use urban setting, and a Fast-Food Restaurant without a Drive-Through Window (ITE 933). The trip rates are shown in Table 3.2 with the ITE trip data graphs provided in the Appendix.

**TABLE 3.2
 VEHICLE TRIP GENERATION RATES**

Land Use	Peak AM Hour	Peak PM Hour
All Suites Hotel - ITE 311	0.34 T/Room	0.36 T/Room
Condominium - ITE 221	0.20 T/Dwelling Unit	0.18 T/Dwelling Unit
Commercial - ITE 933	25.10 T/1000 ft ² GFA	28.34 T/1000 ft ² GFA

The auto-trips are shown in Table 3.3 and are the product of the number of rooms/units or gross floor area for each of the land uses (Table 3.1) and the trip generation rates of Table 3.2. The number of future person-trips was determined by the number of auto-trips calculated from the ITE trip rates, and multiplied by 1.28 (from the TIA Guidelines)

to convert auto-trips to person-trips. Table 3.3 shows the future peak hour auto-trips and person-trips.

**TABLE 3.3
 PEAK HOUR SITE GENERATED TRIPS**

Trips	AUTO-TRIP GENERATION		FUTURE PERSON-TRIPS	
	Peak AM Hr.	Peak PM Hr.	Peak AM Hr.	Peak PM Hr.
All Suites Hotel	23 veh.	24 veh.	29 per.	31 per.
Condominium	11 veh.	10 veh.	14 per.	13 per.
Commercial	32 veh.	<u>37 veh.</u>	41 per.	<u>47 per.</u>
Total Trips	66 veh.	71 veh.	84 per.	91 per.

The Trip Reduction Factors which were provided in the TIA Guidelines were applied to the land uses as discussed below:

- 1) *Deduction of Existing Development Trips* - A small two floor residential building is located at the northwest corner of the site. The building is expected to generate few trips and therefore no existing trip deduction was applied.
- 2) *Pass-by Vehicle Trips* - Pass-by trips are trips that are already on the road and are passing by the site on their way to their primary destination. They are not considered new trips generated by the site. The only use that may not be the primary origin/destination would be the commercial use. The study has utilized the survey data provided in the ITE *Trip Generation Handbook 3rd Edition* for the closest land use to that proposed for the site. The study has used the pass-by data for a Fast-Food Restaurant with Drive-Through Window (ITE 934). The average pass-by trip percentage documented in the manual was 50 percent which was applied to both the peak AM and PM hours.
- 3) *Synergy or Internalization* - The site consists of several mixed uses. With few restaurants or coffee shops in the immediate area, the TIA analysis has assumed a 50 percent reduction of the primary trips to/from the commercial use (restaurant) which would be person-trips shared with the hotel or residential condominium use within the building.

The expected number of person-trips following the application of the three Trip Reduction Factors is shown in Table 3.4.

**TABLE 3.4
 TOTAL PEAK HOUR SITE GENERATED PRIMARY PERSON-TRIPS**

Trips	FUTURE PERSON-TRIPS	
	Peak AM Hr.	Peak PM Hr.
All Suites Hotel	29 per.	31 per.
Condominium	14 per.	13 per.
Commercial	41 per.	47 per.
Pass-by Trip Reduction (50%)	-20 per.	-23 per.
Internal Trip Reduction (50%)	<u>-10 per.</u>	<u>-11 per.</u>
Commercial	11 per.	13 per.
Total Trips	54 per.	57 per.

The Boutique Hotel is located along the east side of King Edward Avenue in what the City of Ottawa designates as the “Ottawa Inner Area”. The mode share for peak hour trips was determined from Table 8 in the *TRANS Trip Generation Manual - Summary Report 2020* for High-Rise Multifamily Housing. The multifamily housing category was assumed due to the condominium development and the all suites hotel which caters to long term stays. Table 3.5 presents the peak AM and PM hour mode share, and the

**TABLE 3.5
 MODE SHARE SUMMARY (Peak Hour Person-Trips)**

FUTURE MODE SHARE TARGETS FOR HIGH-RISE HOUSING						
Travel Mode	AM % Peak Hr.	AM Primary Per. Trips	AM Pass-By Per. Trips	PM % Peak Hr.	PM Primary Per. Trips	PM Pass-By Per. Trips
Auto Driver	26%	14	5	25%	15	6
Auto Passenger	6%	3	1	8%	5	2
Transit	28%	15	6	21%	12	5
Cycling	5%	3	1	6%	3	1
Walking	34%	19	7	39%	22	9
Total	99%	54 Trips	20 Trips	99%	57 Trips	23 Trips

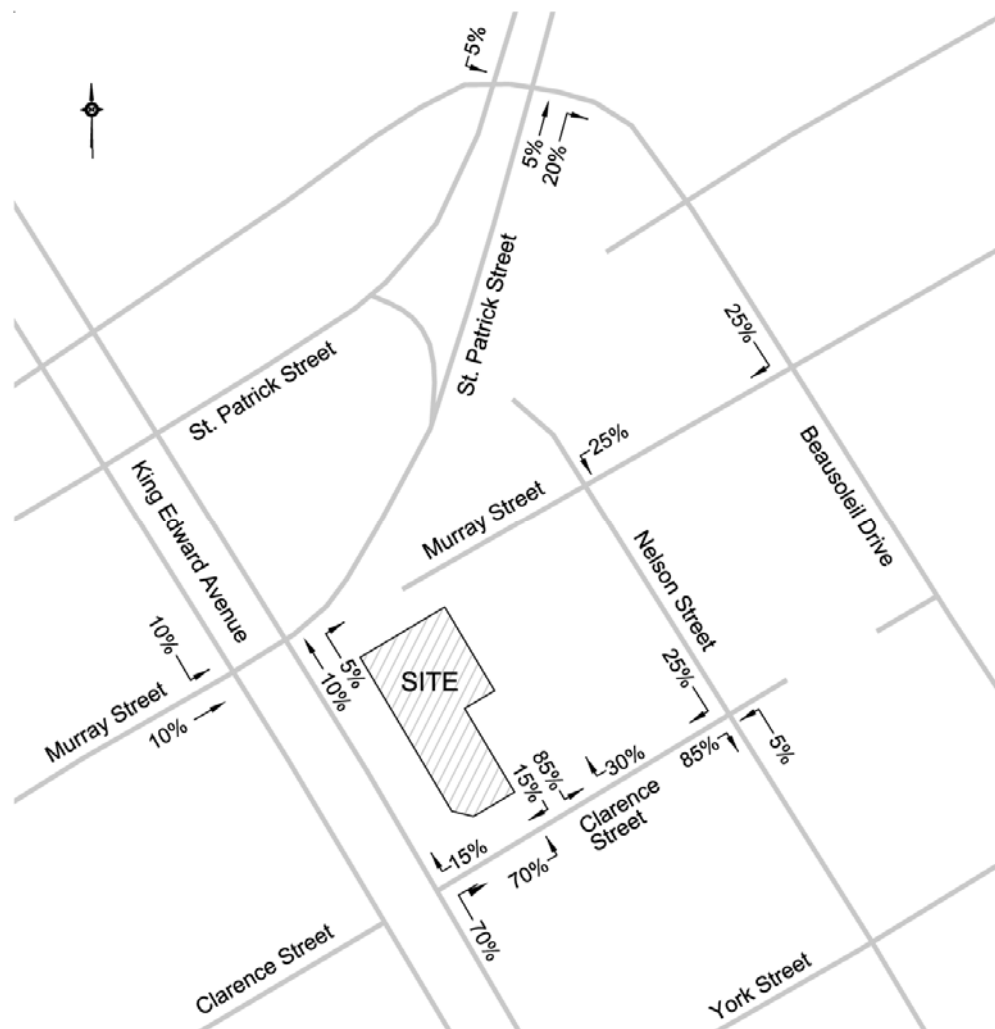
Element 3.1.2 – Trip Distribution

The distribution of the peak hour site generated primary trips from the Boutique Hotel was determined by examining the *2011 NCR Household Origin-Destination Survey* for the origin/destination of peak AM hour trips for the Ottawa Inner Area, and the peak hour traffic counts at the surrounding intersections. The survey and counts would represent trips to/from work for the condominium residents and long term occupants of the hotel. The trip distribution percentage for the site trips during the weekday peak AM and PM hours are as follows:

	Peak AM & PM
To/From the north along King Edward Avenue	10%
To/From the south along King Edward Ave. and Nelson St.	30%
To/From the east along St. Patrick St., Nelson St. & King Edward Ave.	15%
To/From the west along Murray St. and King Edward Ave.	45%

Below shows the percentage of peak AM and PM hour trips entering/exiting the site.

BOUTIQUE HOTEL PRIMARY TRIP DISTRIBUTION



The pass-by site generated trips are trips already on the road and passing by or in the vicinity of the site. The distribution of pass-by trips was determined from the traffic counts of existing traffic at adjacent intersections to the site, and the convenience of routes entering and exiting the site from the mainstream traffic.

Element 3.1.3 – Trip Assignment

The distribution of site generated vehicle-trips entering and exiting was determined by applying the directional distribution shown in Table 9 of the TRANS manual for a Multi-Unit (High-Rise) dwelling unit type, to the Auto Driver trips shown in Table 3.5. The same trip assignment was applied to both the primary trips and pass-by trips. Table 3.6 presents the distribution of vehicle-trips entering and exiting the hotel site.

**TABLE 3.6
 PEAK HOUR ASSIGNMENT OF VEHICLE-TRIPS**

TRIP TYPE \ PEAK HOUR TRIPS	WEEKDAY PEAK AM HR.			WEEKDAY PEAK PM HR.		
	TOTAL	ENTER	EXIT	TOTAL	ENTER	EXIT
Primary Trips	14	4 (31%)	10 (69%)	15	9 (58%)	6 (42%)
Pass-by Trips	5	2 (31%)	3 (69%)	6	3 (58%)	3 (42%)
Total Vehicle-Trips	19	6	13	21	12	9

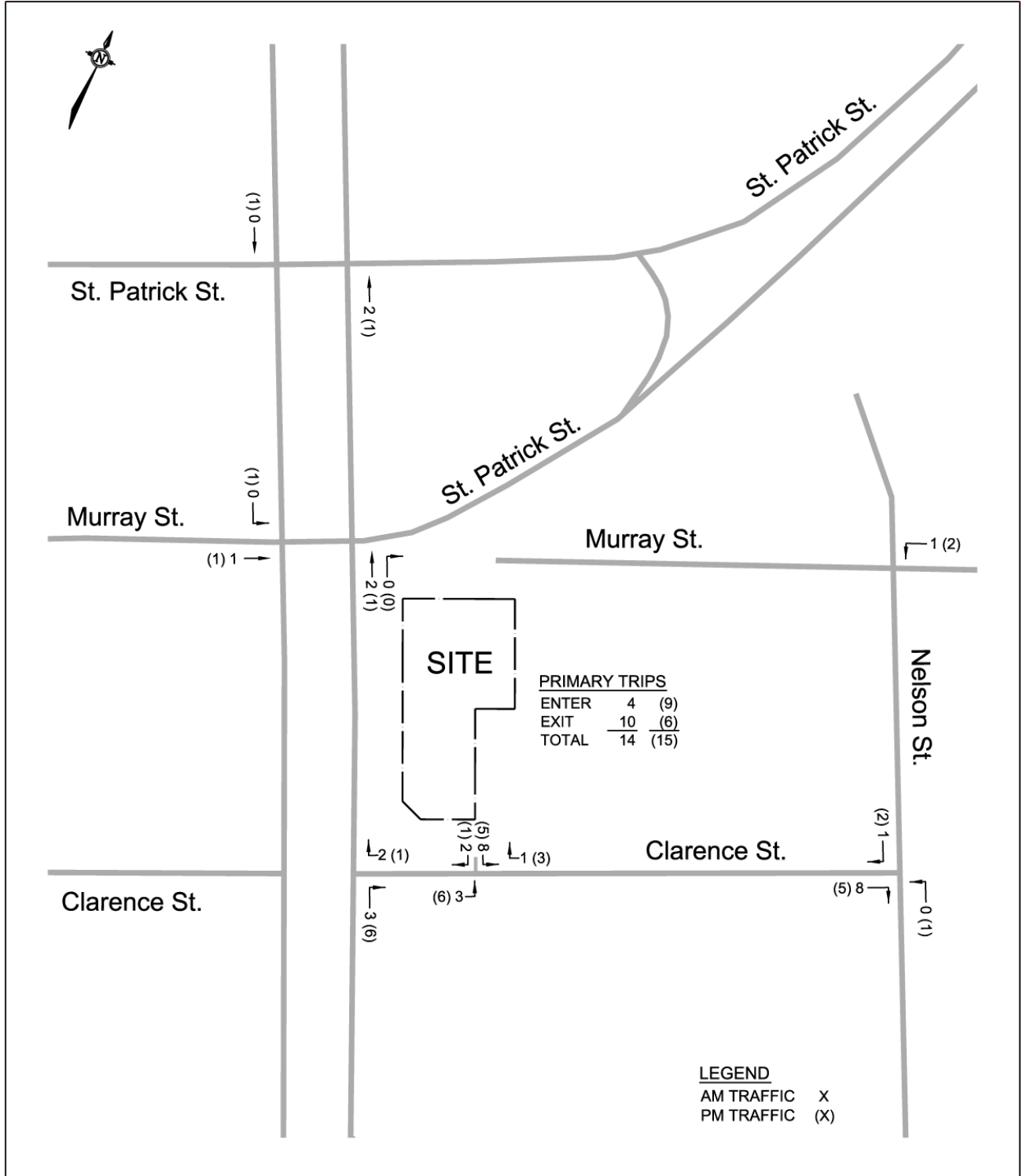
The trip distribution, as discussed in Element 3.1.2, was applied to the peak AM and PM peak hour primary and pass-by vehicle-trips shown in Table 3.6. Figure 3.1 presents the peak AM and PM hour primary trips to/from the site, and Figure 3.2 the peak AM and PM hour pass-by trips.

MODULE 3.2 - Background Network Travel Demands

Element 3.2.1 – Transportation Network Plans

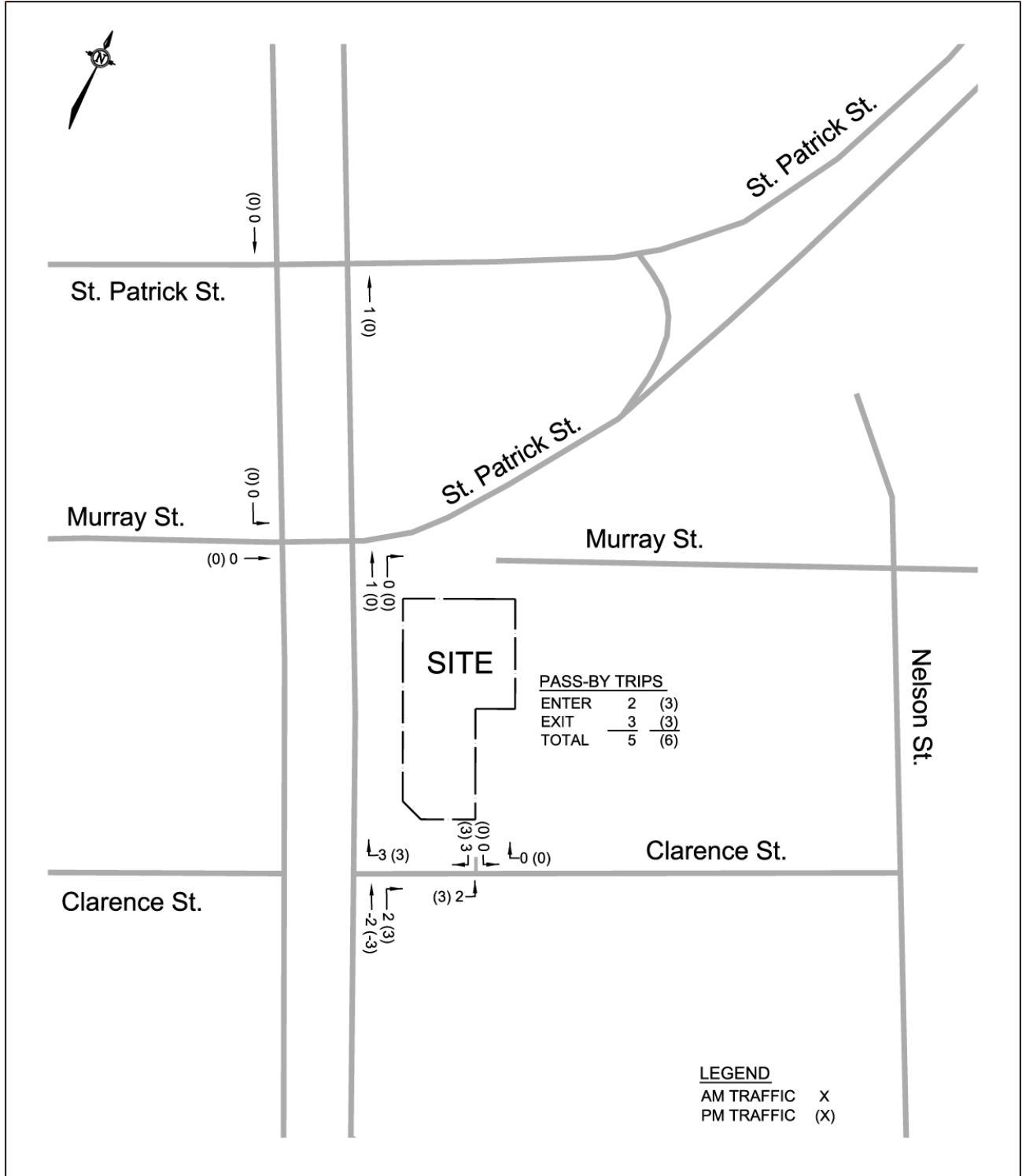
The City of Ottawa *Transportation Master Plan (TMP) 2013* was reviewed to identify transit and roadway projects in the vicinity of the development. Transit signal priority projects were identified along Murray Street, St. Patrick Street and Dalhousie Street between Vanier Parkway and Rideau Street under the Affordable Network and Network Concept which would reduce travel time and improve OC Transpo reliability. Under the Network Concept, transit signal priority is proposed along King Edward Avenue to complement the existing southbound bus lane between Sussex Drive and Rideau Street. There were no roadway modification projects proposed in the vicinity of the site.

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



NOT TO SCALE

FIGURE 3.2
PEAK AM AND PM HOUR SITE GENERATED PASS-BY TRIPS



NOT TO SCALE

Element 3.2.2 – Background Growth

The growth in background traffic was determined utilizing the City of Ottawa *Transportation Master Plan (TMP) 2013* population growth and employment growth statistics. The data in Exhibit 2.10 of the TMP presented the 2011 actual and 2031 projected growth for the Ottawa Inner Area. The statistical data determined the population to increase at an annual average compounded growth of 0.91 percent and employment growth at 0.84 percent.

The study has therefore assumed that the background traffic would experience an annual average compounded increase of 1.0 percent. The 1.0 percent annual increase would translate to the following growth factors which were applied to all intersection approaches:

Growth Factor at the Clarence/King Edward and Murray/King Edward Intersections

2016 → 2024 = 1.083 Completion
2016 → 2029 = 1.138 Completion + 5 Years

Growth Factor at the St. Patrick/King Edward Intersection

2020 → 2024 = 1.041 Completion
2020 → 2029 = 1.094 Completion + 5 Years

Element 3.2.3 – Other Developments

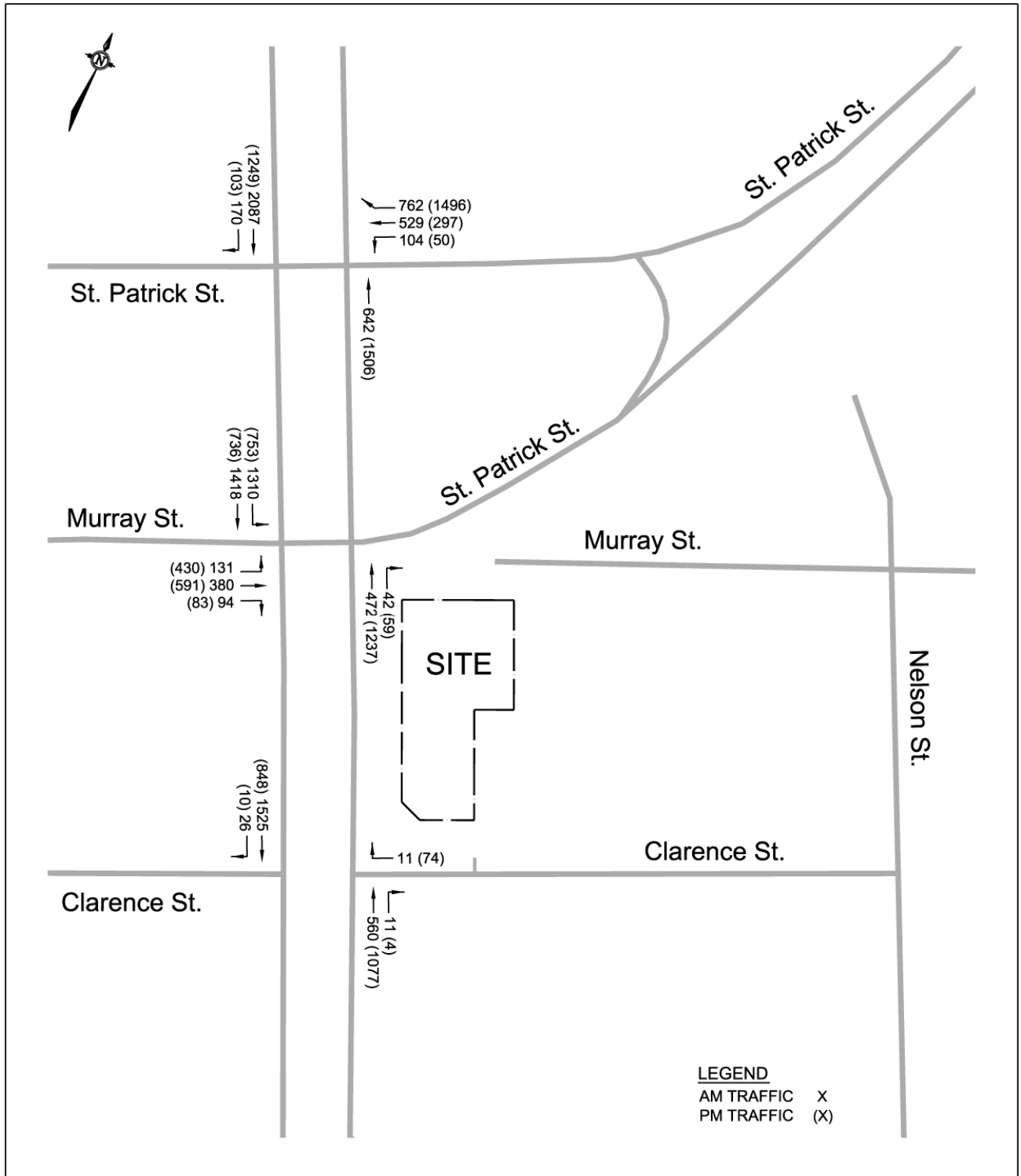
Other development in the area which would contribute to the increase in background traffic is the Holiday Inn Express & Suites hotel at 235 King Edward Avenue located at the corner of King Edward Avenue and St. Patrick Street. The hotel was completed in 2019 and contains 167 rooms. The expected trips to/from the site were determined using the trip generation procedure from this study, and applied to the background traffic at the Murray/King Edward and Clarence/King Edward intersections. The Holiday Inn trips were not applied to the background traffic at the St. Patrick/King Edward intersection since the background traffic was based on the 2020 traffic counts which would already include the Holiday Inn trips.

Figure 3.3 presents the 2024 peak AM and PM peak hour background vehicle traffic (does not include trips from the proposed Boutique Hotel). Figure 3.4 shows the expected 2029 peak hour background traffic which represents five years beyond completion of the development.

MODULE 3.3 - Demand Rationalization

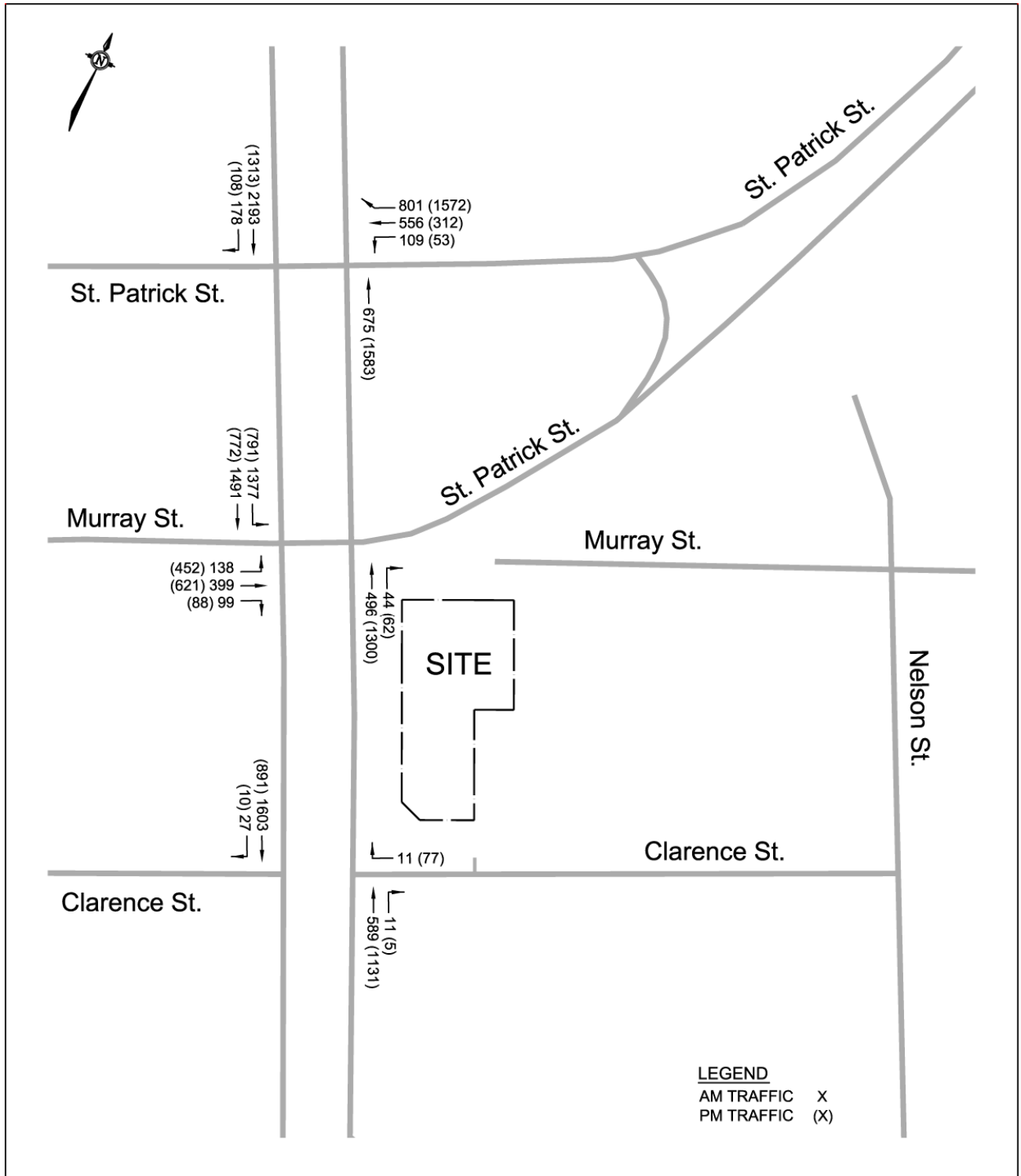
The Boutique Hotel is located in the Ottawa Inner Area in close proximity to employment, entertainment, and other amenities. The hotel would be a low trip generator adjacent to a major roadway. The expected trip demand would have a minor impact on the surrounding roadway network. The trip demand would not result in an issue with capacity of the intersections within the study area.

FIGURE 3.3
2024 PEAK AM AND PM HOUR BACKGROUND TRAFFIC



NOT TO SCALE

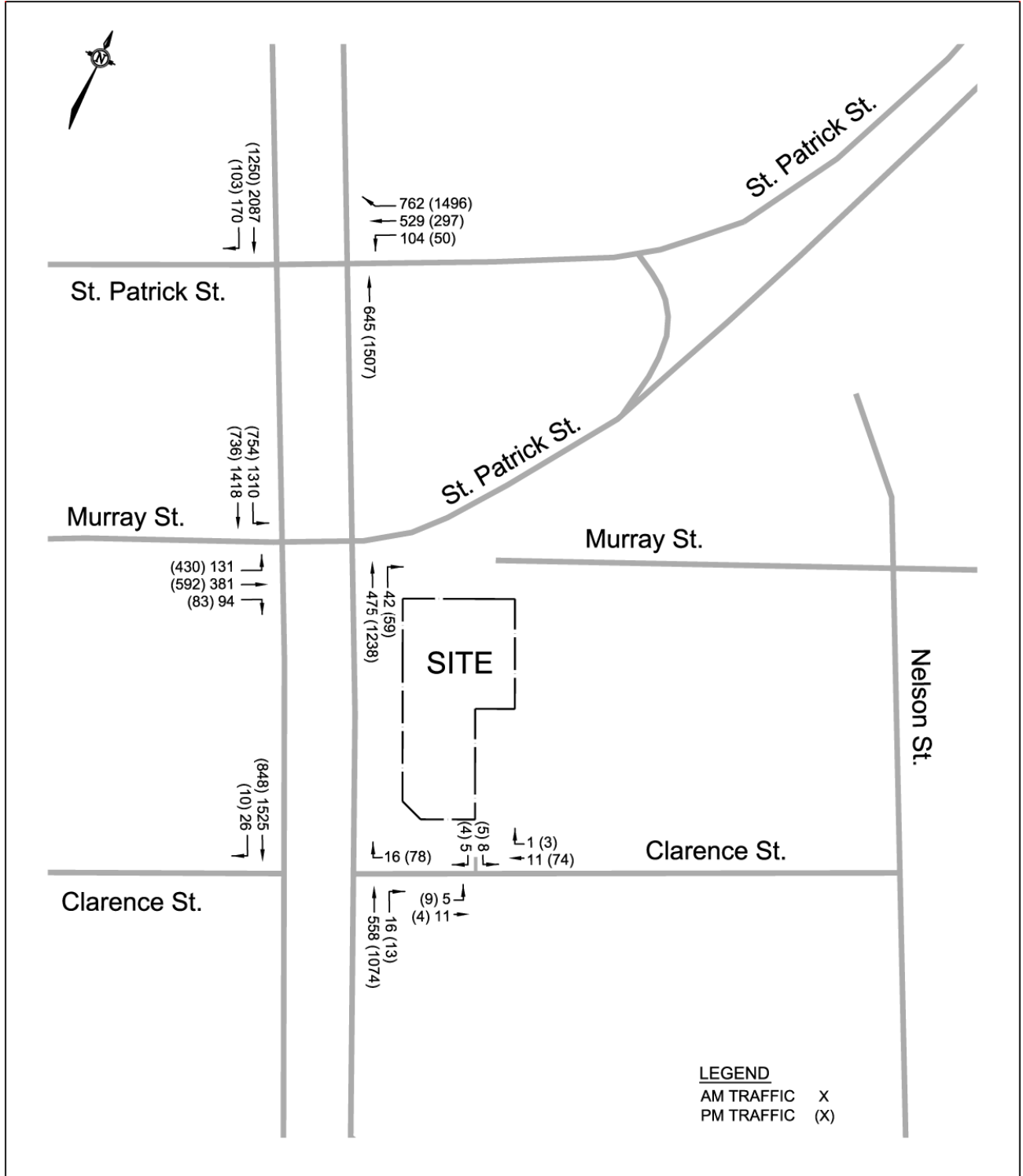
FIGURE 3.4
2029 PEAK AM AND PM HOUR BACKGROUND TRAFFIC



NOT TO SCALE

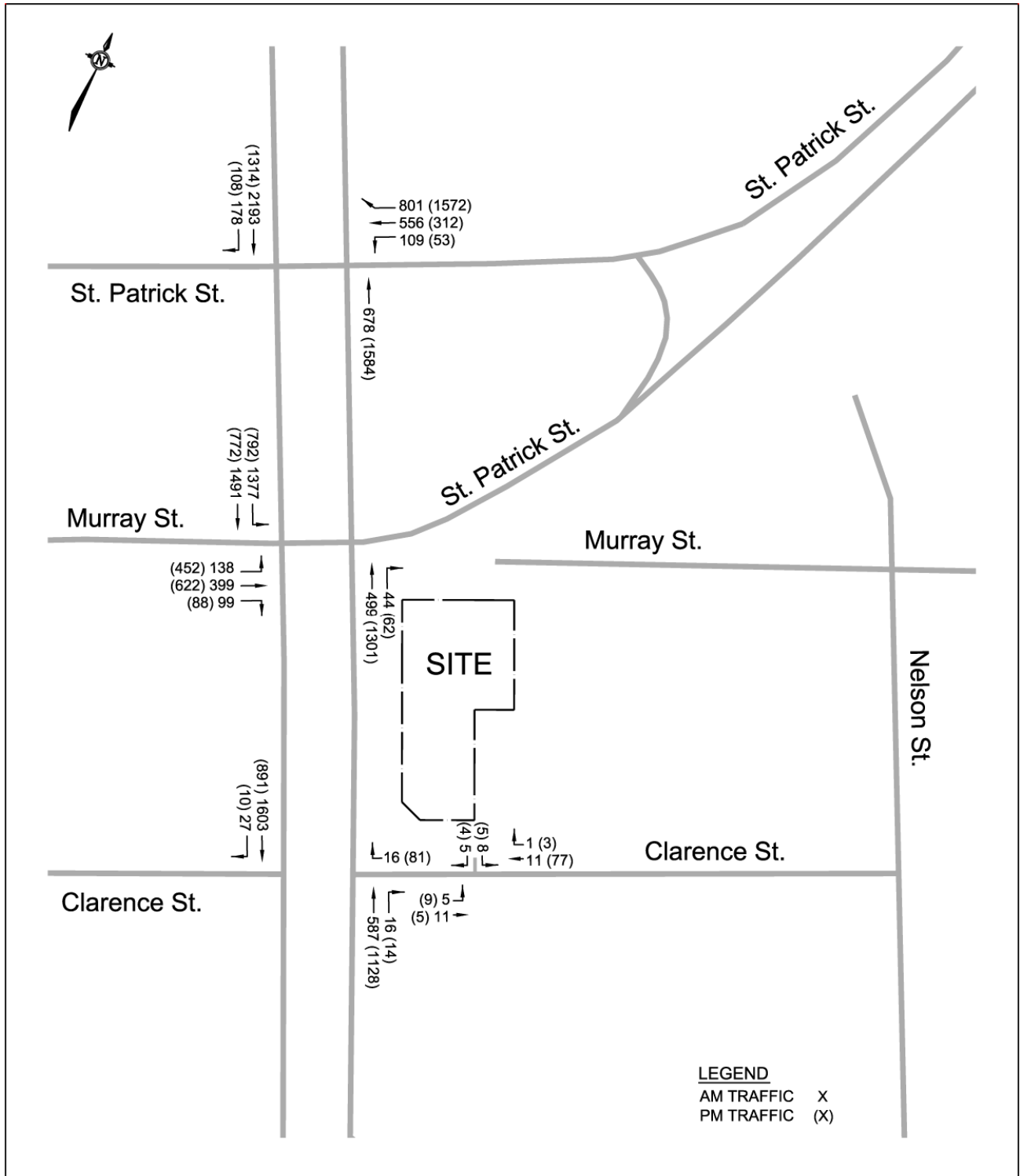
The total vehicular traffic is the sum of the peak hour site generated primary (Figure 3.1) and pass-by trips (Figure 3.2), and the peak hour background traffic (Figure 3.3 for the year 2024 and Figure 3.4 for the year 2029). Figure 3.5 presents the total unbalanced 2024 peak hour vehicular traffic and Figure 3.6 the total 2029 peak hour vehicular traffic.

FIGURE 3.5
2024 PEAK AM AND PM HOUR TOTAL TRAFFIC



NOT TO SCALE

FIGURE 3.6
2029 PEAK AM AND PM HOUR TOTAL TRAFFIC



NOT TO SCALE

APPENDIX

SCREENING FORM

TRAFFIC COUNTS

OC TRANSPO BUS ROUTES

EXHIBIT 1.1 SCREENING FORM

City of Ottawa 2017 TIA Guidelines Screening Form

1. Description of Proposed Development

Municipal Address	275 King Edward Avenue, Ottawa
Description of Location	Boutique Hotel - northeast corner of Clarence St. & King Edward Ave.
Land Use Classification	"TM 12 + TM (Mature Neighborhood Overlay)" Zoning - Traditional Mainstreet
Development Size (units)	67 Hotel Suites, 54 condo units and 120 m ² retail/commercial
Development Size (m ²)	1,574 m ² Lot Area
Number of Accesses and Locations	Entrance from Clarence St. Service entrance from Murray St.
Phase of Development	Single Phase of development
Buildout Year	2024

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.

Land Use Type	Minimum Development Size
Hotel Suites and Condominium units	121 units
Retail/commercial	120 m ²

	Yes	No
135 Hotel Suites = 43 Person Trips Retail/Commercial = 41 Person Trips Total Development = 84 Person Trips > 60 Peak Hour Person Trips	X	

* If the development has a land use type other than what is presented in the table above, estimates of person-trip generation may be made based on average trip generation characteristics represented in the current edition of the Institute of Transportation Engineers (ITE) Trip Generation Manual.

If the proposed development size is 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 City's Transit Priority, Rapid Transit or Spine Bicycle Networks?		X
Is the development in a Design Priority Area (DPA) or Transit-oriented Development (TOD) zone?*	X	

*DPA and TOD are identified in the City of Ottawa Official Plan (DPA in Section 2.5.1 and Schedules A and B; TOD in Annex 6). See Chapter 4 for a list of City of Ottawa Planning and Engineering documents that support the completion of TIA).

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 km/hr or greater?		X
Are there any horizontal/vertical curvatures on a boundary street limits sight lines at a proposed driveway?		X
Is the proposed driveway within the area of influence of an adjacent traffic signal or roundabout (i.e. within 300 m of intersection in rural conditions, or within 150 m of intersection in urban/ suburban conditions)?	X	
Is the proposed driveway within auxiliary lanes of an intersection?		X
Does the proposed driveway make use of an existing median break that serves an existing site?		X
Is there a documented history of traffic operations or safety concerns on the boundary streets within 500 m of the development?		X
Does the development include a drive-thru facility?		X

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

5. Summary

	Yes	No
Does the development satisfy the Trip Generation Trigger?	X	
Does the development satisfy the Location Trigger?	X	
Does the development satisfy the Safety Trigger?	X	

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).

EXHIBIT 2.1
2016 PEAK AM HOUR TRAFFIC COUNTS - Clarence/King Edward



Transportation Services - Traffic Services

Turning Movement Count - Peak Hour Diagram

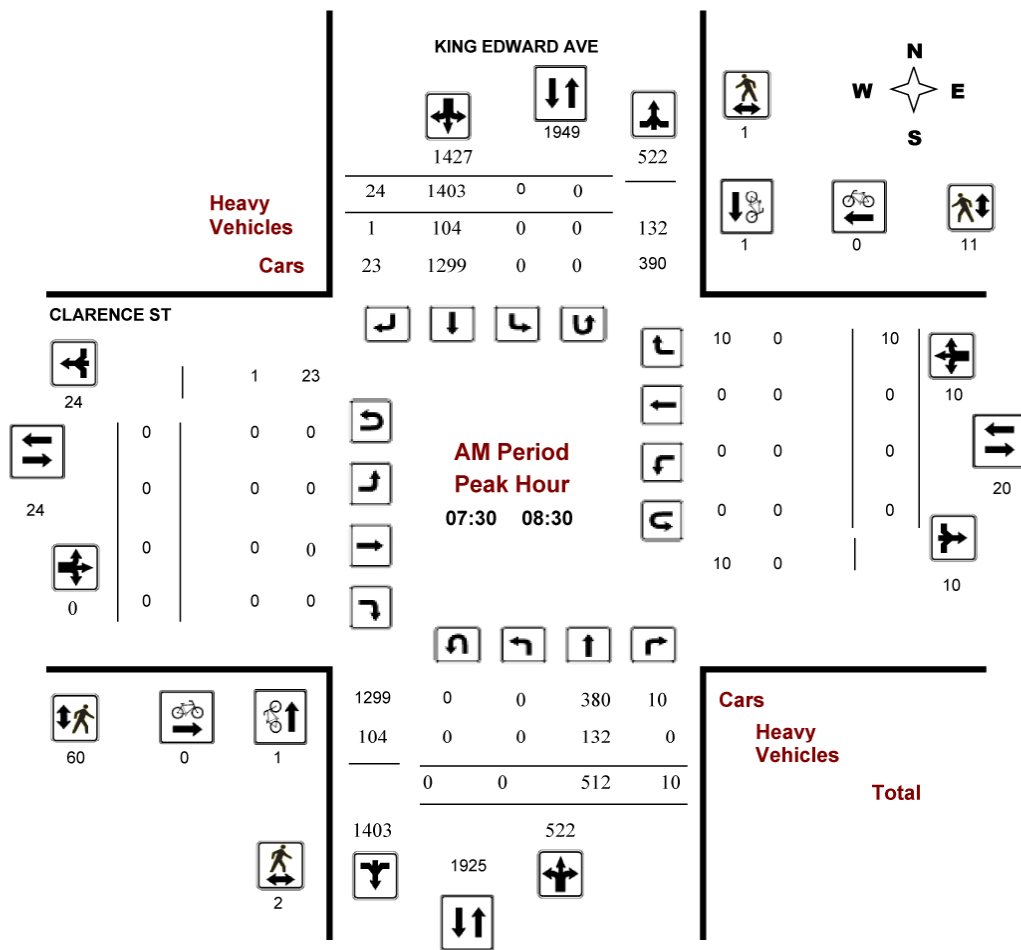
CLARENCE ST @ KING EDWARD AVE

Survey Date: Thursday, March 03, 2016

WO No: 35763

Start Time: 07:00

Device: Miovision



2016 PEAK PM HOUR TRAFFIC COUNTS - Clarence/King Edward



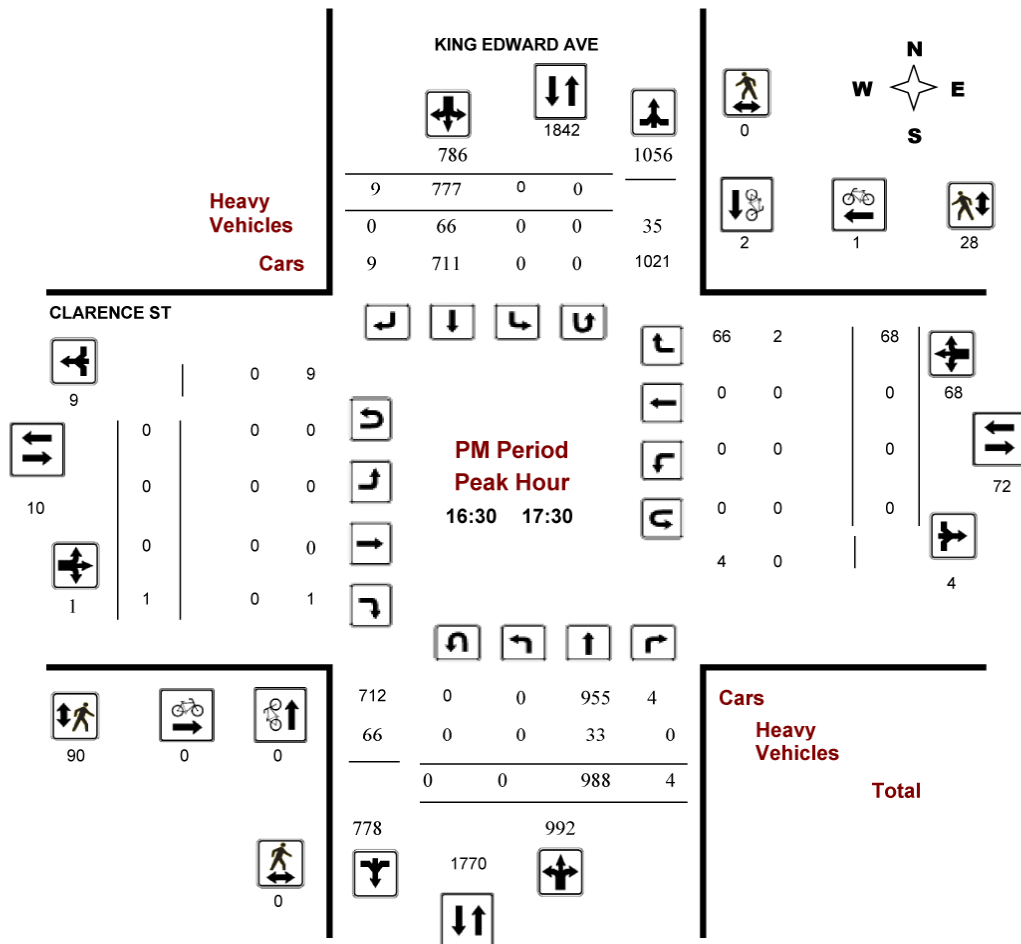
Transportation Services - Traffic Services

Turning Movement Count - Peak Hour Diagram

CLARENCE ST @ KING EDWARD AVE

Survey Date: Thursday, March 03, 2016
Start Time: 07:00

WO No: 35763
Device: Miovision



Comments

EXHIBIT 2.2
2016 PEAK AM HOUR TRAFFIC COUNTS - St. Patrick (Murray)/King Edward



Transportation Services - Traffic Services

Turning Movement Count - Peak Hour Diagram

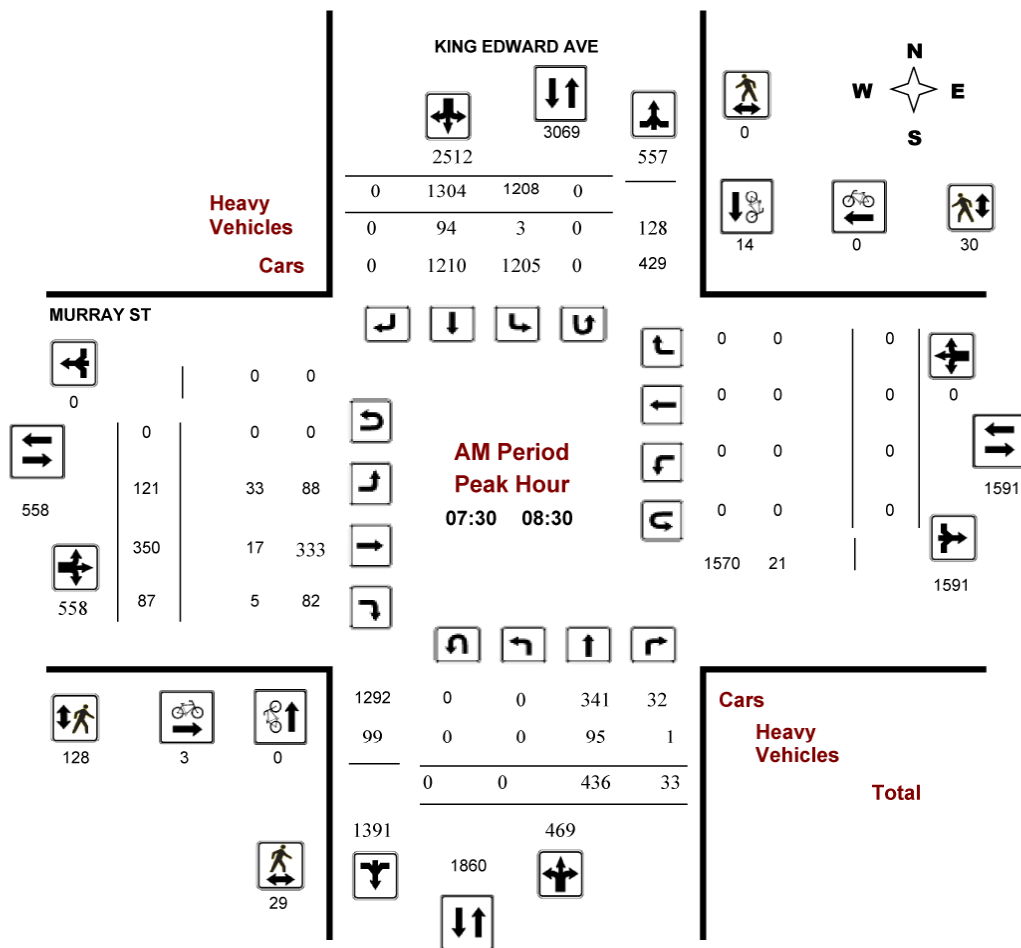
KING EDWARD AVE @ MURRAY ST

Survey Date: Wednesday, September 21, 2016

WO No: 36335

Start Time: 07:00

Device: Miovision



Comments

2016 PEAK PM HOUR TRAFFIC COUNTS - St. Patrick (Murray)/King Edward



Transportation Services - Traffic Services

Turning Movement Count - Peak Hour Diagram

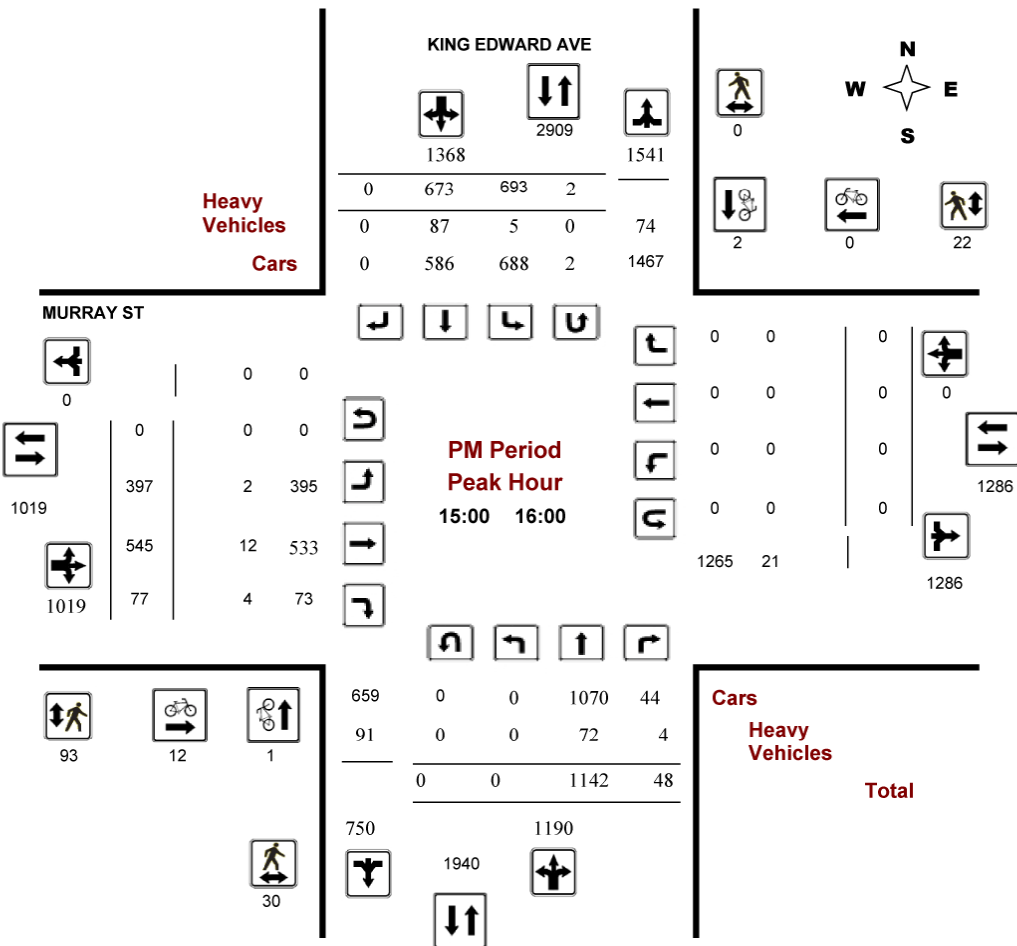
KING EDWARD AVE @ MURRAY ST

Survey Date: Wednesday, September 21, 2016

WO No: 36335

Start Time: 07:00

Device: Miovision



Comments

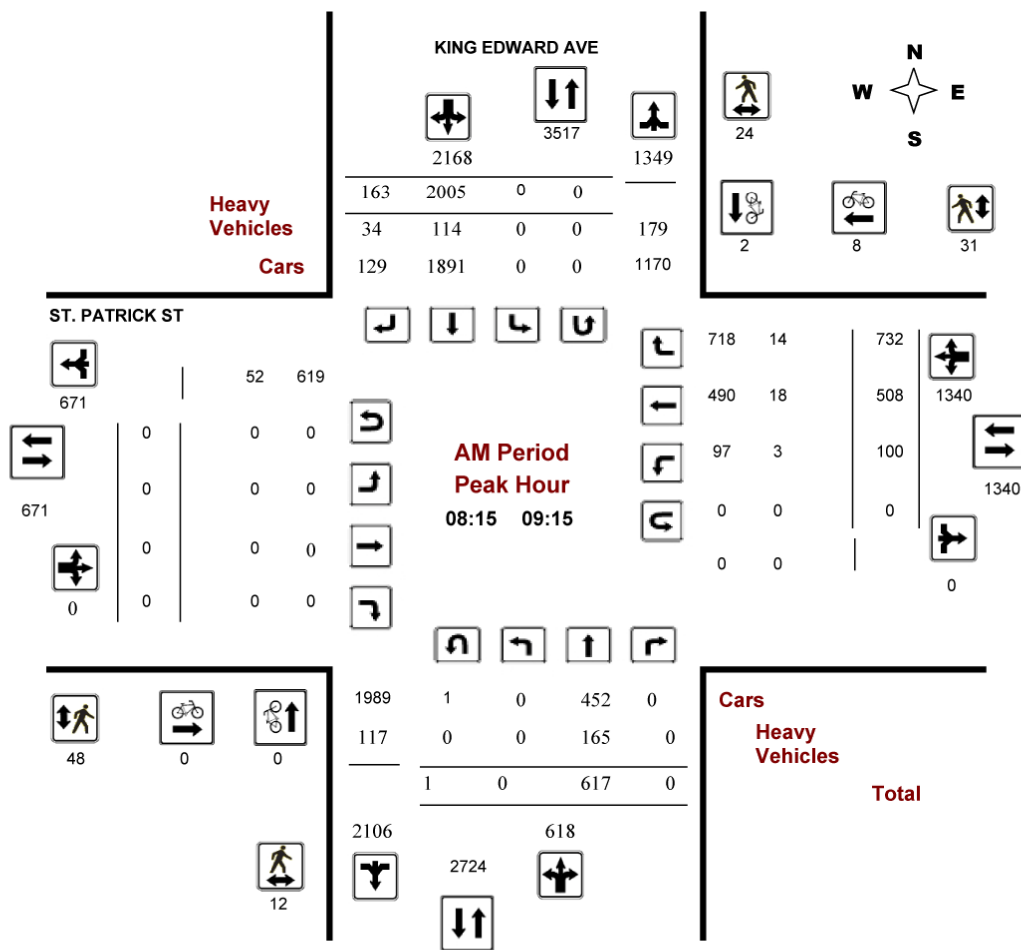
EXHIBIT 2.3
2020 PEAK AM HOUR TRAFFIC COUNTS - St. Patrick/King Edward



Transportation Services - Traffic Services
Turning Movement Count - Peak Hour Diagram
KING EDWARD AVE @ ST. PATRICK ST

Survey Date: Thursday, January 16, 2020
Start Time: 07:00

WO No: 39336
Device: Miovision



Comments 5470821 - THU JAN 16, 2020 - 8HRS - LORETTA

2020 PEAK PM HOUR TRAFFIC COUNTS - St. Patrick/King Edward



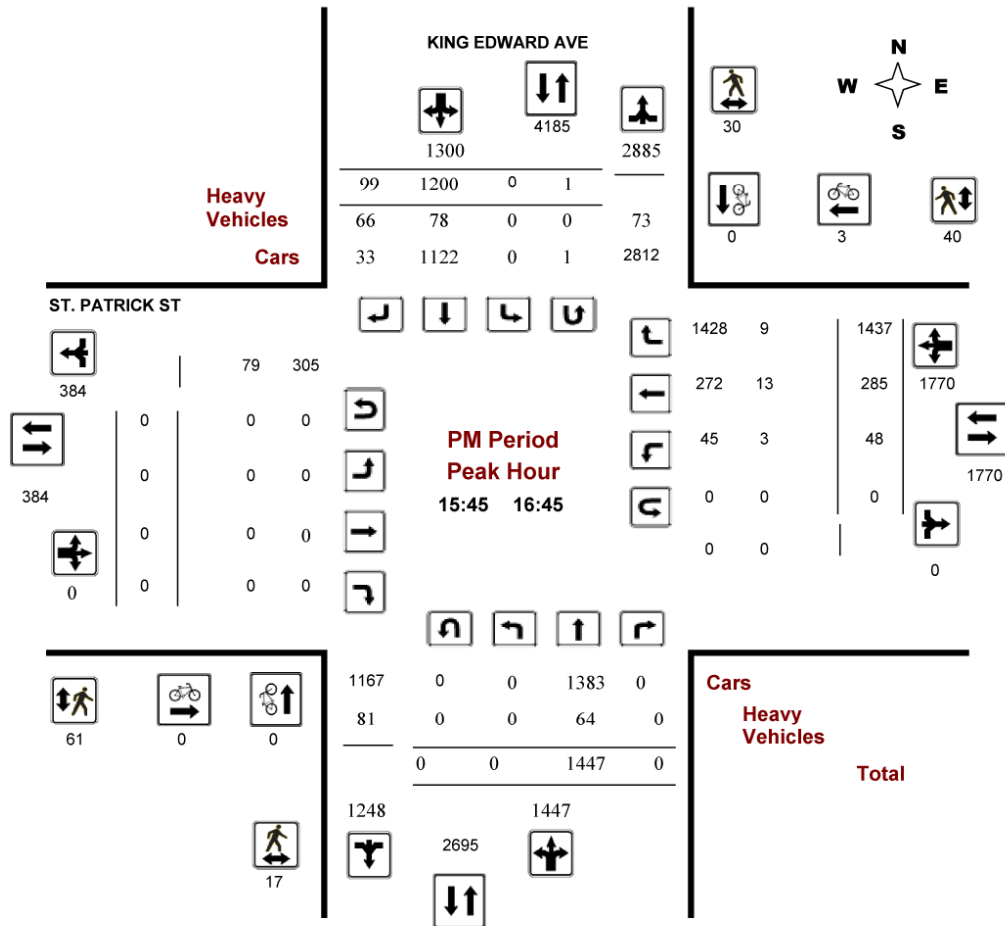
Transportation Services - Traffic Services

Turning Movement Count - Peak Hour Diagram

KING EDWARD AVE @ ST. PATRICK ST

Survey Date: Thursday, January 16, 2020
Start Time: 07:00

WO No: 39336
Device: Miovision



Comments 5470821 - THU JAN 16, 2020 - 8HRS - LORETTA

EXHIBIT 2.4 OC TRANSPO BUS ROUTES

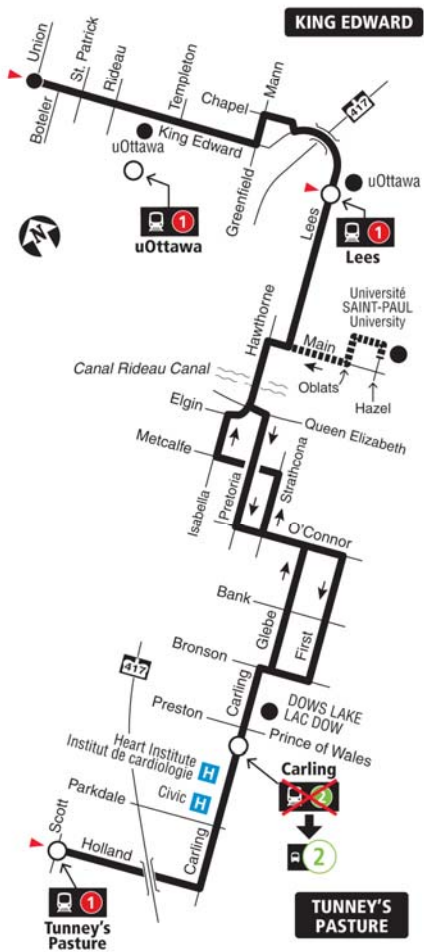
ROUTE 56

56

**KING EDWARD
 TUNNEY'S PASTURE**

Local

Monday to Friday / Lundi au vendredi
 Peak periods only
 Périodes de pointe seulement



ROUTE 6

