



229-247 Beechwood Traffic Impact Assessment

City of Ottawa

Type of Document:

Final Draft

Project Name:

229-247 Beechwood Traffic Impact Assessment

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EXP Quality System Checks		
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1. Introduction

EXP was retained by Novatech Architects on behalf of the Smart Living Properties to prepare a Traffic Impact Assessment (TIA) in support of the development of two new apartment buildings at 229 and 247 Beechwood Avenue. The developer is proposing mid-rise apartment buildings with a total number of 94 units and a total gross floor area of 3,773 m². According to discussion with the City¹, a full traffic impact assessment will not be required for this proposed development.

2. Screening

A TIA screening form for the proposed development was completed to identify the needs of the traffic impact report. A copy of the completed screening form is attached to this report as **Appendix A** and the findings are as follow:

Trip Generation Trigger The development has a residential apartment land use and a total of 94 units which exceeds the minimum development size (90 units); thus it does trigger the trip generation component of the TIA.

Location Trigger No Location triggers are satisfied.

Safety Trigger No Safety triggers are satisfied.

Upon review of the Screening assessment by the City, the development has been exempted from the completion of a full traffic impact assessment. The documentation from the City confirming the exemptions of vehicular analysis in this report is attached in the **Appendix B**. The City did however confirm the need for a multi-modal level of service analysis, and this has been addressed in Section 4.

3. Site Evaluation

3.1 Proposed Development

The proposed development will consist of two (2) multiple family residential buildings - 229 Beechwood and 241 Beechwood. 229 Beechwood is three stories tall with a basement level and will be comprised of 42 total living units. 241 Beechwood is four stories tall with a basement level and will be comprised of 52 total living units. A concept site plan is shown in **Figure 1** below, full size site plan is provided in **Appendix C**.

¹ Meeting with Neeti Paudel, January 11, 2022

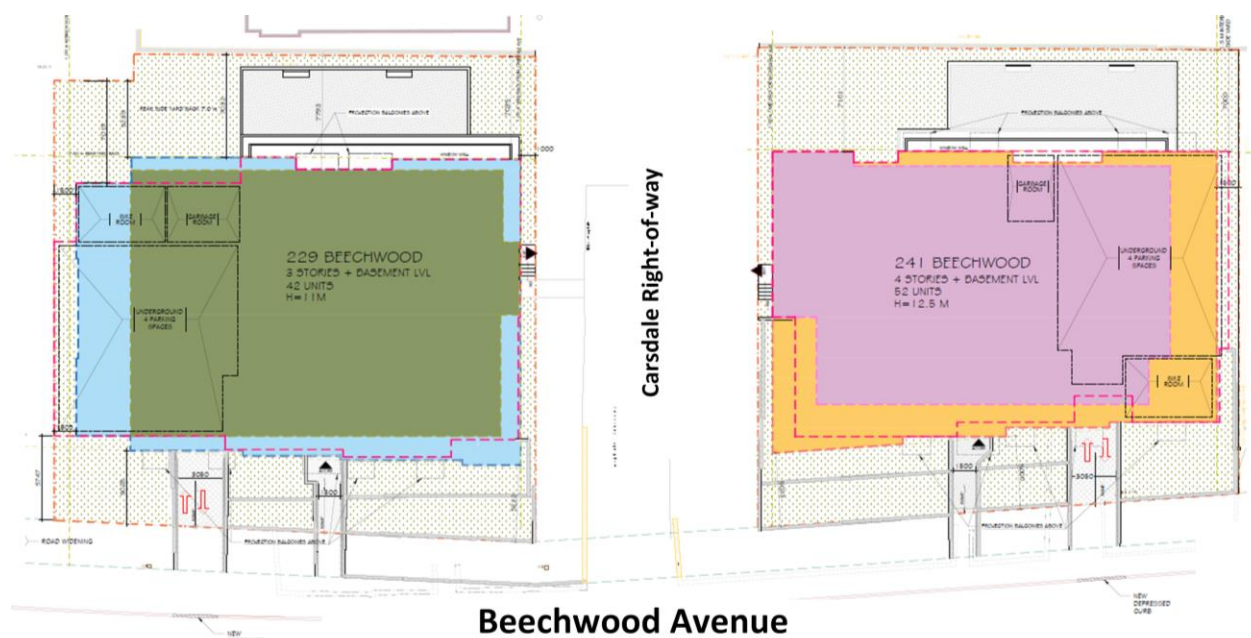


Figure 1: Site Plan

The proposed development is in a General Urban Area² and is zone as residential 4th density subzone (R4). The existing property has five (5) buildings which will be demolished and replaced by the proposed building. The proposed development is to be constructed in a single phase and will be completed by 2024. It is noted that there is a right of way between these two buildings, however, it has no dedicated vehicular transportation functions for the development at this time.

3.2 Existing Conditions

3.2.1 Roadways

Beechwood Avenue is an east-west, City-owned, 2 lane arterial roadway which extends from the Vanier Parkway/Crichton Street intersection to approximately 120 m east of Oakhill Road after which it becomes Hemlock Road. It has been identified as a 'Spine Route' and designated as part of the "Cross-Town Bikeway" in Schedule C (Primary Urban Cycling Network) of the City Official Plan. There is a designated off-road cycle track on the south side of Beechwood Avenue within the study location. On the north side, there is a painted cycle lane. There will be room for a cycle track in the future as a result of a development set back, however, it is not being considered for construction at this time. The unposted speed limit of 50 km/h.

Birch Avenue is a north-south, City-owned, local road that intersects with Hemlock Road. It is the first signalized intersection east of the development site. It has a two-way undivided cross section, with parking permitted on the east side and no bike lanes. There are flexible center markers from Laval Street to Ste. Monique Street. The posted speed limit is 40 km/hr reinforced with select centerline flexible markers.

Marier Avenue is a north-south, City-owned, local road that extends north of Beechwood Avenue. It is the first signalized intersection west of the development site. It has a two-way undivided cross section, with parking permitted on the east side and no bike lanes. There are flexible center markers from Laval Street to Ste. Monique Street.

Putman Avenue is a north-south, City-owned, local road that extends south of Beechwood Avenue. It is the first signalized intersection west of the development site. It has a two-way undivided cross section, with parking permitted on alternating sides of the street. There are no designated bike lanes.

² Section 3.6.1 of the Official Plan

3.2.2 Intersections

Beechwood Avenue and Putman Avenue/Marier Avenue The Beechwood Avenue and Putman Avenue/Marier Avenue is a signalized four-way intersection. All approaches consist of one through lane. Eastbound and westbound Beechwood Avenue have dedicated cycling lanes, and there is on-street parking on westbound Beechwood west of the intersection.

Hemlock Road and Birch Avenue The Hemlock Road and Birch Avenue intersection is a signalized three-way intersection. The eastbound approach consists of through lanes and one auxiliary left-turn lane. The westbound approach consists of one lane. The southbound tee-approach consists of a right turn lane and an auxiliary left turn lane. The eastbound and westbound approaches provide cycle lanes.

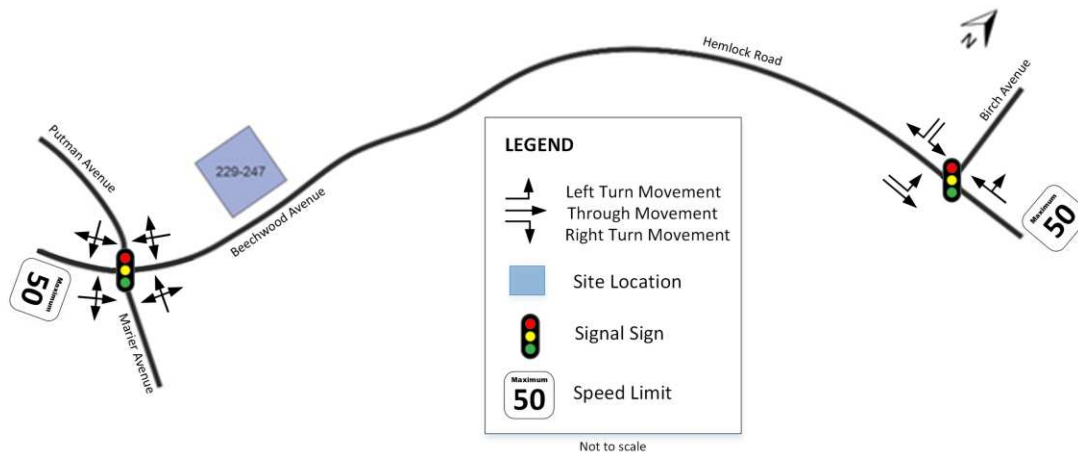


Figure 2: Existing Traffic Control and Lane Configuration

3.2.3 Existing Driveways to Adjacent Developments

There are existing commercial and residential driveways along Beechwood Avenue throughout the study area.

3.2.4 Pedestrian/Cycling Network

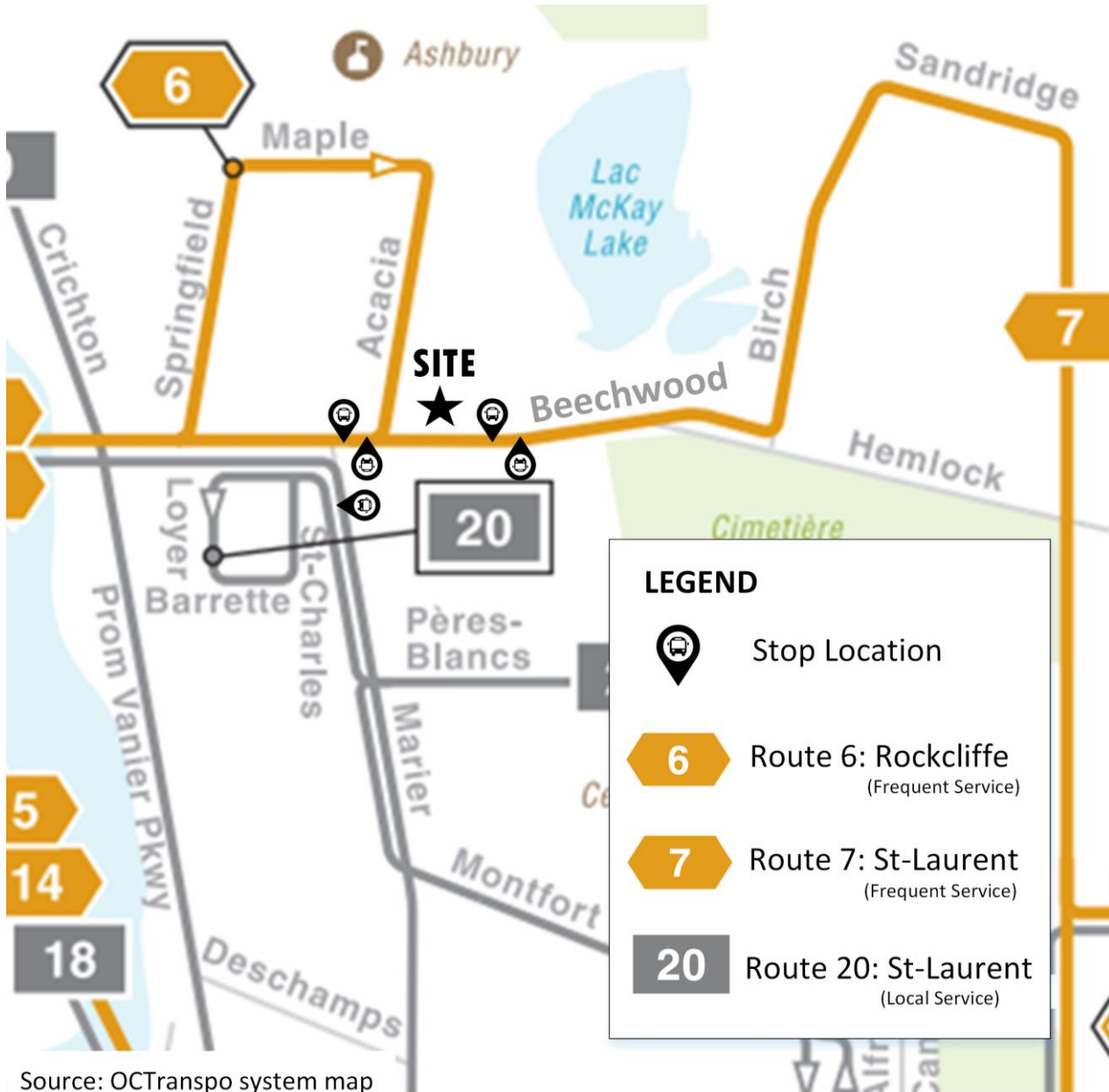
The pedestrian and cycling infrastructure within the study area is outlined in **Figure 3**.



Figure 3: Pedestrian and Cycling Infrastructure

3.2.5 Transit Network

Transit service within the vicinity of the site is currently provided by OC Transpo Routes #6, #7 and #20. The latest updated detailed map of the approximate stop locations has been provided below in **Figure 4** for reference.



Source: OTranspo system map

Figure 4: Existing OC Transpo Area Network

4. Analysis

4.1 Development Design

The development buildings will have two access points, front and side of each building that connect with Beechwood Avenue. Currently, there is an existing sidewalk on both north and south sides of Beechwood Avenue. Pedestrian facilities will be provided between the building entrances and the parking garage accesses. These pedestrian facilities will connect the building to the existing city sidewalks. Driveways will have depressed curbs for access to the site garages. It is noted that PXO crossing is provided immediately east of the site to assist pedestrians moving to the other side of the street, this would encourage local transit users to gain safe access to transit bus routes.

Currently, there is an existing cycle track on south side of Beechwood Avenue. On the north side, there is a cycle lane. There will be room for a cycle track in the future with the required building set back. Bicycle parking will be provided at a rate that satisfies the minimum City By-Law requirements of 47 bicycle parking spaces for a Mid-Rise Apartment land use. All bicycle parking will be provided indoors in a secure area located in the underground parking garage.

The subject site is located less than 400 m walking distance from existing OC Transpo routes, including stops for OC Transpo routes #6, #7 and #20. Both #6 and #7 are frequent transit services routes, #20 is local transit service route. The average headways of these available bus routes are 10 minutes during weekdays.

A review of the Transportation Demand Management (TDM) Checklist has been conducted with a copy of the TDM checklist included in provided in Section 4.5. All required TDM-supportive design and infrastructure measures in the TDM checklist are met.

4.2 Parking

The subject site is located in Area B on Schedule 1 and in both Area X and Area Y on Schedule 1A of the City of Ottawa's Zoning By-Law (ZBL). Minimum vehicular and bicycle parking rates for the proposed development are illustrated in the ZBL and are summarized in the **Table 1**.

Table 1: Parking Requirements

Land Use	Minimum Parking Rate	Units	Required	Provided
Vehicle Parking (Visitor)				
Mid-Rise Apartments	0.1 per unit	94-12=82 ³	8	8
Bicycle Parking				
Mid-Rise Apartments	0.5 per unit	94	47	64

Part 4 - Section 101 (3) and (4) of the General Provisions for Motor Vehicle Parking identifies no off-street motor vehicle parking is required for the first twelve dwelling units in the case of four or fewer storeys building containing residential uses. As shown above, minimum requirement for visitor parking rate has been reduced and is accommodated by the provided 8 parking spaces. Section 101 (4) (a) identifies that no off-street vehicle parking is required for the residential use in this zoning area. As such, this site does not provide any residents owned parking spaces. The proposed 64 bicycle parking spaces will be located in the underground parking garage and exceeds the requirements of the City's Zoning By-law.

This building focuses on sustainable modes of travel for its residents and its generated vehicle trips will be facilitated by other modes of travel given no parking is provided and that the existing pedestrian, cycling and transit facilities adjacent to the building are adequate to support these trips.

³ Part 4 - Section 101 (3) (a) applies

4.3 Boundary Streets

This section provides a review of the boundary streets using complete street principles. The Multi-Modal Level of Service (MMLOS) guidelines provided by IBI Group in 2015 were used to evaluate the LOS of the boundary roadways for each mode of transportation. Schedule B of the City of Ottawa's Official Plan indicates that the sole boundary road for this development, Beechwood Avenue, is located within the General Urban Area.

Targets for PLOS, BLOS, TLOS, and TkLOS for Beechwood Ave as the boundary road adhere to those outlined in Exhibit 22 of the MMLOS Guidelines. The boundary street review evaluates the MMLOS for all boundary roadways based on existing conditions. The worst-case scenarios for each location were assumed during the analysis. The pedestrian, bicycle, transit and truck LOS are summarized in **Table 2**, **Table 3**, **Table 4**, and **Table 5** respectively.

4.3.1. Pedestrian Level of Service (PLOS)

Exhibit 4 of the MMLOS guidelines has been used to evaluate the segment PLOS for Beechwood Avenue. Exhibit 22 of the MMLOS guidelines suggests a target PLOS 'C' for arterial main streets. Based on the foregoing, the results indicate that Beechwood Avenue segment is worse than the targeted LOS of C. Although south side of Beechwood Avenue has a sidewalk wider than a 2.0 m, north side of the road is shown to be less than 1.5 m width, designating the segment to fall below the target LOS. Implementing a rebuilt sidewalk to City standards at 2m on the north side of Beechwood Avenue is required to bring the PLOS to C. The results of the segment PLOS analysis are summarized in **Table 2**.

Table 2: Pedestrian Multimodal Level of Service

Street	Segment	PLOS	Target LOS
Beechwood Avenue	Between Marquette Avenue and Joliet Avenue	D	C
Beechwood Avenue	Between Marquette Avenue and Joliet Avenue (with rebuilt sidewalk to City Standards, 2m)	C	C

4.3.2. Bicycle Level of Service (BLOS)

Exhibit 11 of the MMLOS guidelines has been used to evaluate the segment BLOS of the boundary roadways. Exhibit 22 of the MMLOS guidelines suggests a target BLOS 'C' for spine cycling routes on arterial main street. The segment's bicycle LOS is met on Beechwood Avenue as it has a single vehicular travel lane in each direction, a designated off road cycle track on the south side, a dedicated on road bike lane on the north side and a 50 km/h posted speed limit, designating the segment to meet the target with a BLOS B. The results of the segment BLOS analysis are summarized in **Table 3**.

Table 3: Bicycle Multimodal Level of Service

Street	Segment	BLOS	Target LOS
Beechwood Avenue	Between Marquette Avenue and Joliet Avenue	B	C

4.3.3. Transit Level of Service (TLOS)

Exhibit 15 of the MMLOS guidelines has been used to evaluate the segment TLOS of the boundary roadways. Exhibit 22 of the MMLOS guidelines suggests a target TLOS 'D' for transit priority corridors with isolated measures on the arterial main street. Both north and south directions along Beechwood Avenue were evaluated since both directions have the same facility. As Beechwood Avenue would be considered as a mixed traffic facility type with the limited parking friction, this designates the segment to meet the target LOS. The results of the segment TLOS analysis are summarized in **Table 4**.

Table 4: Transit Multimodal Level of Service

Street	Segment	TLOS	Target LOS
Beechwood Avenue	Between Marquette Avenue and Joliet Avenue	D	D

4.3.4. Truck Level of Service (TkLOS)

Exhibit 20 of the MMLOS guidelines has been used to evaluate the segment TkLOS of the boundary roadways. Exhibit 22 of the MMLOS guidelines suggests a target TkLOS ‘C’ for truck routes along an arterial main street. However, Beechwood Avenue and has not been evaluated for TkLOS as the roadway is not part of the truck route as identified in the City’s Official plan. The results of the segment TkLOS analysis are summarized in **Table 5**.

Table 5: Truck Multimodal Level of Service

Street	Segment	TkLOS	Target LOS
Beechwood Avenue	Between Marquette Avenue and Joliet Avenue	N/A	C

4.3.5. Segment MMLOS Summary

A summary of the results of the segment MMLOS analysis for the boundary roadways is provided in **Table 6** below.

Table 6: Segment MMLOS Summary

	Segment	Beechwood Avenue
Pedestrian	Sidewalk Width	1.5 m
	Boulevard Width	0.5 to 2 m
	Average Daily Curb Lane Traffic Volume	> 3000 vpd
	On-Street Parking	No (north side of street) Yes (south side of the street, 1hr adjacent to the off road cycle track)
	Operating Speed	50 km/h
	Level of Service	D
	Target	C
Cyclist	Road Classification	Arterial
	Bike Route Classification	Spine Route
	Type of Bikeway	Mixed Traffic on the north side Off-street Designated Cycle Track on the south side
	Travel Lanes	2
	Centerline Markings	Yes
	Segment Classification	Residential
	Operating Speed	50 km/h
	Level of Service	B
Target	C	
Transit	Facility Type	Mixed Traffic
	Friction/Congestion/Incident Potential	Limited
	Level of Service	D
	Target	D
Truck	Lane Width	3.3m to 3.5m
	Travel Lanes (per direction)	1
	Level of Service	N/A
	Target	C

4.4 Access Intersection Design

The existing property accesses along Beechwood Avenue will be removed as part of the proposed redevelopment, and full-height curb and sidewalks will be reinstated as per City's standards.

Section 25 (l) of the Private Approach By-Law identifies a requirement to provide a minimum distance of 30 m at the street line between the private approach and the nearest intersecting street line. The access along Beechwood Avenue is approximately 25 m from the existing ROW.

Section 25 (o) of the Private Approach By-Law identifies a requirement to provide a minimum spacing of 3.0 m between the nearest edge of the private approach and the property line, as measured at the street line. The spacing between the nearest edge of the access along Beechwood Avenue and the property line is 3.0 m.

4.5 Transportation Demand Management

A review of the Transportation Demand Management (TDM) Checklist has been conducted. TDM refers to a variety of methods that are undertaken to encourage non-auto modes of travel and to reduce single-occupant vehicle traffic to and from a specific site. Given the nature of the development, a variety of TDM measures are considered for implementation. The City's TDM measure checklist categorizes many of these measures in the following list:

- TDM Program Management
- Walking & Cycling
- Transit
- Carsharing & Bike sharing
- Parking
- TDM Marketing & Communications

There are specific measures that would be appropriate for residential sites. The applicable TDM measures checklist⁴ to be implemented are provided in **Table 7**.

Table 7: TDM Checklist

Category	TDM Measure	Description	Check if Proposed
1. TDM Program Management	Program coordinator	It is recommended that a TDM Coordinator be designated to manage the implementation and ongoing support of TDM measures.	Yes
	Travel surveys	It is recommended that a travel survey be conducted when the site reaches a minimum of 50 % occupancy to establish a baseline. Following this, a follow-up survey should be conducted on a periodic basis to measure the success of the recommended TDM measures and to identify areas for improvement.	Yes
2. Walking and Cycling	Information on walking/cycling routes & destinations	Information on nearby walking / cycling routes should be prepared in a TDM information package and provided for all residents.	Yes
	Bicycle skills training	If there is an appropriate level of interest in training, a bicycle training session could be made available. Services are made available from organizations such as CAN-BIKE which offer both online and in-person training sessions. The provision of these sessions would be subject to the owner's discretion.	Yes

⁴ https://documents.ottawa.ca/sites/documents/files/tdm_measures_checklist_en.pdf

3. Transit	Transit information	Information on nearby transit routes should be made available in the TDM information package.	Yes
4. Carsharing & Bikesharing	Bikeshare stations & memberships	A bike share station should be considered based on appropriateness and consultation with a local bikeshare company. A bike share network should also be made available within the area, subsidized memberships, or provision of a bikeshare location could be considered for residents.	Yes
5. Parking	Priced parking	If provided all visitor parking should be charged for either short-term or long-term.	Yes
6. TDM Marketing & Communications	Multimodal travel information	A TDM information package should be prepared for both residential and non-residential uses. Each information package should be tailored to explaining the available TDM measures. The package should provide information on available active transportation networks and programs, transit networks and TDM programs.	Yes
	Personalized trip planning	A TDM specialist could be invited to offer personalized trip planning to new residents. This would help them to explore their options on the available travel modes to best select one that would suit their lifestyle.	Yes

The following additional measures should be implemented upon opening of the proposed development:

- Exhibit local area maps with walking/cycling access routes and key destinations
- Exhibit relevant transit schedules and route maps
- Provide a multi-modal travel option information package to new residents

The proposed development will provide bicycle parking spaces at a rate above 0.5 per unit, exceeding the requirement of the ZBL. The provision of additional bicycle parking spaces will encourage residents to use alternative modal shares and help achieve the efficient target of non-auto modal shares.

4.6 Neighborhood Traffic Management

Site traffic will be accommodated by Beechwood Avenue. No modifications are required on either to limit impact on surrounding roadways.

4.7 Transit

Within the study area, the site could be serviced by OC Transpo bus routes #6, #7 and #20. Based on discussions with the City and the vehicular nature of the site, it is unlikely that the site would have any significant impact on the existing transit network.

4.8 Network Concept

As per the City of Ottawa's Transportation Master Plan, Map 11, Beechwood Avenue has not been identified as requiring a roadway widening prior to the 2031 horizon year.

5. Conclusion

The proposed mid-rise apartment development is situated on Beechwood Avenue between Joliet Avenue and Marquette Avenue. It sits well with the area's urban environment with the corridor supporting residential communities. At its size of 3,773 m² of gross floor area, such a site would typically generate an impact to the adjacent road network. However only a small number of vehicle trips are expected to be generated within the network, as there will be no residential parking spaces available at the site. This will result in increases in the use of sustainable modes to and from the site including walking, cycling, and transit trips. No significant impact to adjacent road network is forecasted. The proposed development is expected to integrate well with adjacent transportation system. The existing area infrastructure has the capacity and ability to facilitate all modes of travel to and from the site.

An analysis of the site's access configuration concludes there are no operational issues to be expected and that no off-site improvements to the adjacent transportation network will be required to accommodate the multi-modal demands of the proposed development. Overall, the proposed development will integrate well and can be safely accommodated by the adjacent transportation network.

Appendix A: TIA Screening Form

City of Ottawa 2017 TIA Guidelines Screening Form

1. Description of Proposed Development

Municipal Address	229-241 Beechwood Avenue
Description of Location	Existing lots on the north side of Beechwood Avenue
Land Use Classification	General Urban Area, Residential Fourth Density
Development Size (units)	94 units apartments
Development Size (m ²)	3,773
Number of Accesses and Locations	Two(2) site accesses along Beechwood Avenue
Phase of Development	Single phase
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
Single-family homes	40 units
Townhomes or apartments	90 units
Office	3,500 m ²
Industrial	5,000 m ²
Fast-food restaurant or coffee shop	100 m ²
Destination retail	1,000 m ²
Gas station or convenience market	75 m ²

** 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 is 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).

Appendix B: Proof of Exemption

SITE PLAN CONTROL CONSOLIDATED REVIEW COMMENTS

File No. D07-12-21-0001

Date: March 26, 2021

To / Destinataire: Kayla Blakely
Planner
Novatech

From / Expéditeur: Simon M. Deiaco, MCIP, RPP
Planner III
Development Review, Central Branch

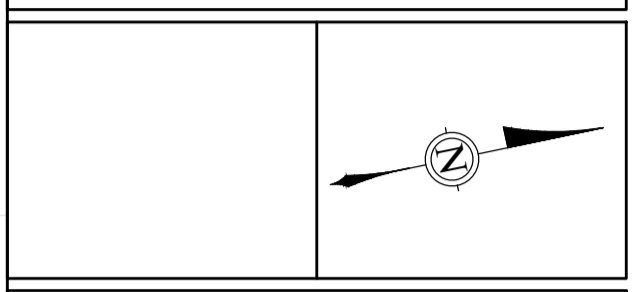
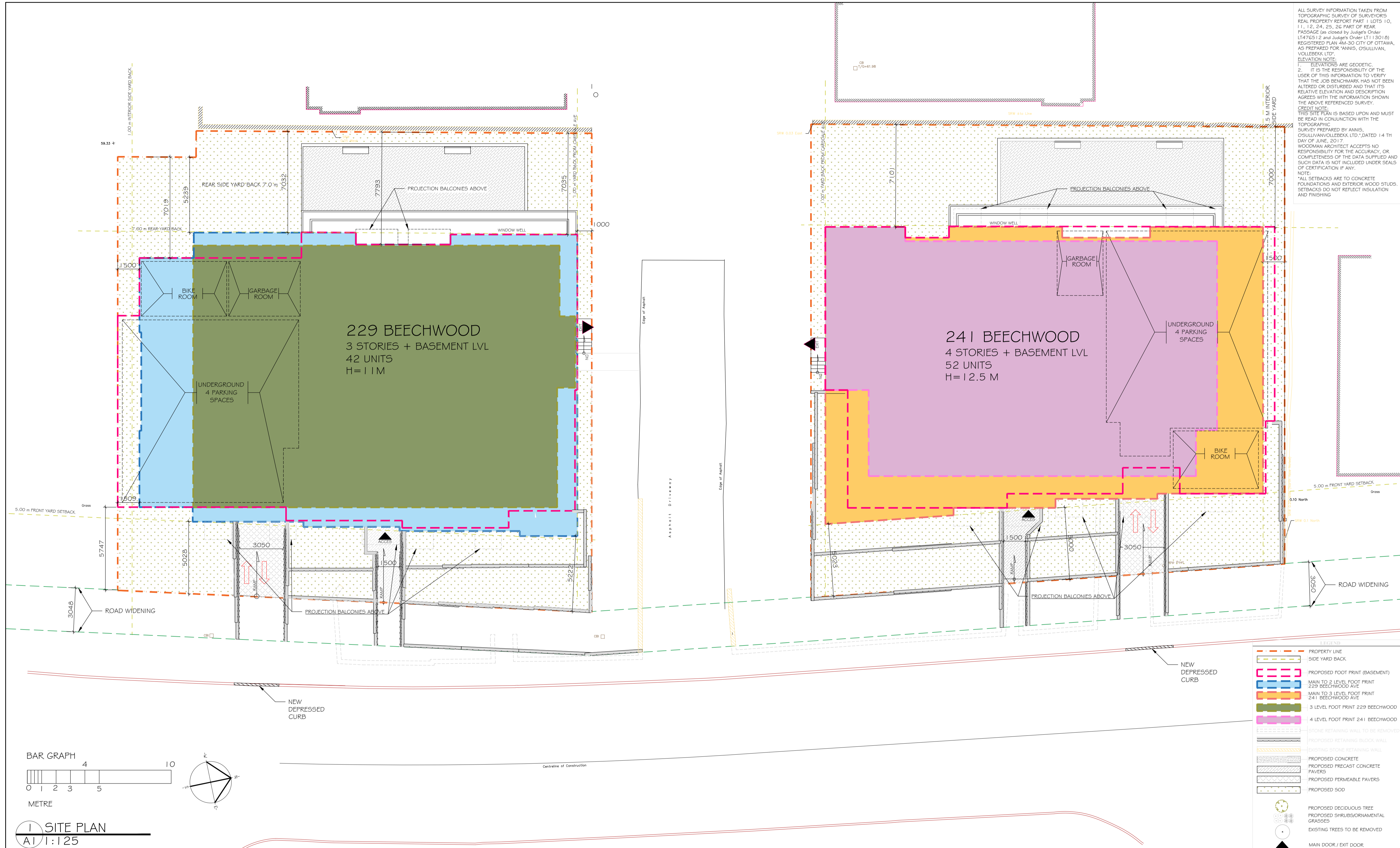
Subject / Objet: 1st Consolidation Development Review Comments
229-247 Beechwood Avenue
Ward 13 - Rideau-Rockcliffe, Councillor Rawlson King

TIA

17. Existing conditions- There is a cycle track on the east side of Beechwood at this location. Please update. **Revised.**
18. The scope of this TIA may be reduced when it comes to VLOS and vehicle-related trips. However, all the active modes/transit LOS will have to be provided to show the network is in place to accommodate. Considering this development will generate higher transit/ non modal targets, Module 4.5- Transportation Demand Management will be important. **Revised.**



Appendix C: Site Plan



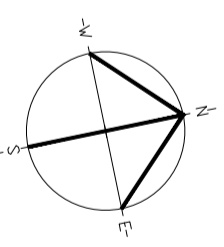
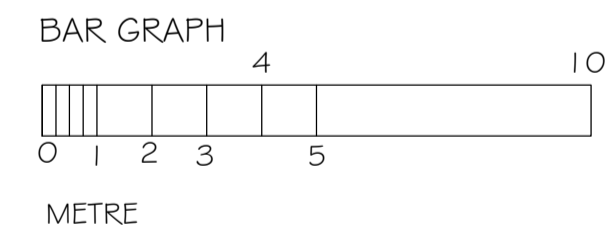
ALL CONTRACTORS TO VERIFY ALL DIMENSIONS ON SITE AND TO REPORT ALL ERRORS AND/OR OMISSIONS TO THE ARCHITECT.

ALL CONTRACTORS MUST COMPLY WITH ALL CODES AND BYLAWS AND OTHER AUTHORITIES HAVING JURISDICTION OVER THE WORK.

DO NOT SCALE DRAWINGS.

THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION UNTIL SIGNED BY THE ARCHITECT. COPYRIGHT RESERVED.

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06	ISSUED FOR REVIEW	10/01/2022
05	ISSUED FOR REVIEW	11/04/2021
04	ISSUED FOR REVIEW	05/25/2021
03	ISSUED FOR REVIEW	03/10/2021
02	ISSUED FOR REVIEW	11/13/2020
01	ISSUED FOR REVIEW	08/04/2020
NO.	REVISION	MM/DD/YY DATE



① SITE PLAN
A1/1:125

ZONING INFORMATION:		
229-233-235-241-245-247 BEECHWOOD AVE, WARD 13 IDEAL-ROCKLIFE		
MUC (1321)(12.5)		
SCHEDULE 342 "NOT IN AREA" A"		
PROJECT INFORMATION 229 BEECHWOOD AVE (47 UNITS)		
MIN. ZONING STANDARD	REQUIRED	PROVIDED
LOT AREA	540.00 m ²	1 041.20 m ²
MAX BUILDING HEIGHT	11.00 m	11.00 m
SETBACKS		
FROM CARSDALE AVE	1.00 m	1.00 m
FRONT YARD SETBACK	5.00 m	5.00 m
REAR SIDE YARD SETBACK	7.00 m	7.00 m
INTERIOR SIDE YARD SETBACK	1.00 m	1.50 m
SOFT LANDSCAPED AREA IN REAR YARD	50.00 %	50.00 %
SOFT LANDSCAPED AREA IN FRONT YARD	40.00 %	53.00 %
30% OF LOT TO BE LANDSCAPED	312.36 m ²	635.00 m ²
AMENITY AREA		
MIN. ZONING STANDARD	REQUIRED	PROVIDED
NO MINIMUM AMENITY AREA REQUIRED		360.00 m ²
SOFT LANDSCAPE	280.00 m ²	
ROOF AMENITY	55.00 m ²	
BALCONIES	133.00 m ²	182.92 m ²
TOTAL	0.00 m ²	468.00 m ²
BICYCLE PARKING		
MIN. ZONING STANDARD	REQUIRED	PROVIDED
3/DWELLING = 3K42	21 un	32 un

PROJECT INFORMATION 229 BEECHWOOD AVE (47 UNITS)		
PARKING SPACES		
MIN. ZONING STANDARD	REQUIRED	PROVIDED
ALONG AREA "Y" - NO PARKING REQUIRED FOR RESIDENTIAL BUILDINGS OF FOUR OR FEWER STOREYS	0 un	0 un
VISITOR PARKING SPACES		
MIN. 0.1 SPACES PER DWELLING UNIT IN EXCESS OF 12	4 un	4 un
TOTAL PARKING PROVIDED		4 un

PROJECT INFORMATION 247 BEECHWOOD AVE (64 UNITS)		
PARKING SPACES		
MIN. ZONING STANDARD	REQUIRED	PROVIDED
ALONG AREA "Y" - NO PARKING REQUIRED FOR RESIDENTIAL BUILDINGS OF FOUR OR FEWER STOREYS	0 un	0 un
VISITOR PARKING SPACES		
MIN. 0.1 SPACES PER DWELLING UNIT IN EXCESS OF 12	4 un	4 un
TOTAL PARKING PROVIDED		4 un



NUMBER OF UNITS 229 BEECHWOOD				
LEVEL	STUDIO	ONE BEDROOM	TWO BEDROOMS	TOTAL BY LEVEL
BASEMENT	9			9
1	6	1	4	11
2	6	1	4	11
3	8	1	2	11
TOTAL	29	3	10	42

NUMBER OF UNITS 247 BEECHWOOD				
LEVEL	STUDIO	ONE BEDROOM	TWO BEDROOMS	TOTAL BY LEVEL
BASEMENT	6			6
1	8	1	3	12
2	8	1	3	12
3	8	1	3	12
4	6			6
TOTAL	36	3	13	52

NUMBER OF UNITS 229+247 BEECHWOOD				
LEVEL	STUDIO	ONE BEDROOM	TWO BEDROOMS	TOTAL BY LEVEL
BASEMENT	15	0	1	16
1	14	2	7	23
2	14	2	7	23
3	16	2	5	23
4	6	0	3	9
TOTAL	65	6	23	94

CONSULTANTS:
STRUCTURAL -
MECHANICAL -
ELECTRICAL -

PROJECT
ROCK GARDENS
229 + 247 BEECHWOOD AVE
OTTAWA
FOR SMART LIVING PROPERTIES

DATE: SEPT. 2020
SCALE: AS NOTED
DRAWN BY: R.J.W.
REVIEWED BY: R.J.W.

JOB NO.: 1971
DRAWING NO.:
A1

WOODMAN ARCHITECT ASSOCIATES LTD.
201-4 BEECHWOOD AVENUE, OTTAWA, ONTARIO, CANADA K1L8L9
TEL: 613 228 9850, FAX: 613 228 9848, mail@woodmanarchitect.com

Appendix D: Certification Form for TIA Study PM



Certification Form for TIA Study PM

TIA Plan Reports

On 14 June 2017, the Council of the City of Ottawa adopted new Transportation Impact Assessment (TIA) Guidelines. In adopting the guidelines, Council established a requirement for those preparing and delivering transportation impact assessments and reports to sign a letter of certification.

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 s/he meets 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;
- 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
- I am either a licensed¹ or registered² professional in good standing, whose field of expertise
 - is either transportation engineering
 - or transportation planning .

^{1,2} 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.

Dated at Ottawa this 16 day of February, 2022.
(City)

Name: Dan Kang
(Please Print)

Professional Title: Traffic Engineer

Signature of Individual certifier that s/he meets the above four criteria

Office Contact Information (Please Print)
Address: 2650 Queensview Drive, Suite 100 Ottawa, ON
City / Postal Code: K2B 8H6
Telephone / Extension: 437 237 5969
E-Mail Address: dan.kang@exp.com

Stamp

