PROPOSED OFFICE BUILDING
140 SUSSEX DRIVE, OTTAWA
BRITISH HIGH COMMISION – EARNSCLIFFE RESIDENCE

SCOPING REPORT

Presented to:

Mr. Wally Dubyk
Project Manager, Transportation Approvals
City of Ottawa
110 Laurier Avenue
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October 4, 2019

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Engineers, Project Managers & Planners

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1.0 EXISTING AND PLANNED CONDITIONS

1.1 DESCRIPTION OF PROPOSED DEVELOPMENT

Exhibit 1.1 illustrates the proposed British High Commission - Earnscliffe re-development located at 140 Sussex Drive that consists of a 1,700 m^2 office space, a guard house for vehicle and visitor screening, 3 surface visitor parking stalls, covered parking (6 spaces) for official vehicles and a parking garage for office employees (17 spaces). The new office building and parking space will replace the existing Coach House.

The Earnscliffe development proposes to use an existing vehicular access located on the NRC Driveway immediately to the west of the traffic signal-controlled Sussex Drive / NRC Driveway (SUSSEX DR @ 151 S OF KING EDWARD AVE (0008807)) intersection. This access would be controlled by a gate and guard house, both located on the Earnscliffe property. Vehicular, pedestrian and cyclist access would take place at this main entrance gate.

The current site plan also illustrates an emergency access/egress to be located at the northern section of the property which would connect the Earnscliffe development to the NRC parking lot. This gated access/egress would only be used in case of emergency or blockage at the main gate (i.e. a protest blocks access). Earnscliffe employees would be able to access this secondary entrance by utilising the King Edward Ave / Sussex Drive intersection to the north. The emergency access/egress is pending an agreement with NRC.

The proposed development would accommodate a total of twenty-six (26) vehicle parking stalls and bicycle storage space (estimated 10 spots) on-site. The proponent is also coordinating with the NRC to obtain an additional 20 stalls that would accommodate British High Commission staff off-site.

The current zoning by-law indicates an “O1L [342] – Mature Neighborhoods” designation. The “O1” designation permits parks, urban agriculture, environmental preserves and education areas while the “L” designation permits a marine facility. The [342] exception permits a diplomatic mission and an office limited to an embassy as a land use.

The proposed Earnscliffe office development would be built-out in a single phase.

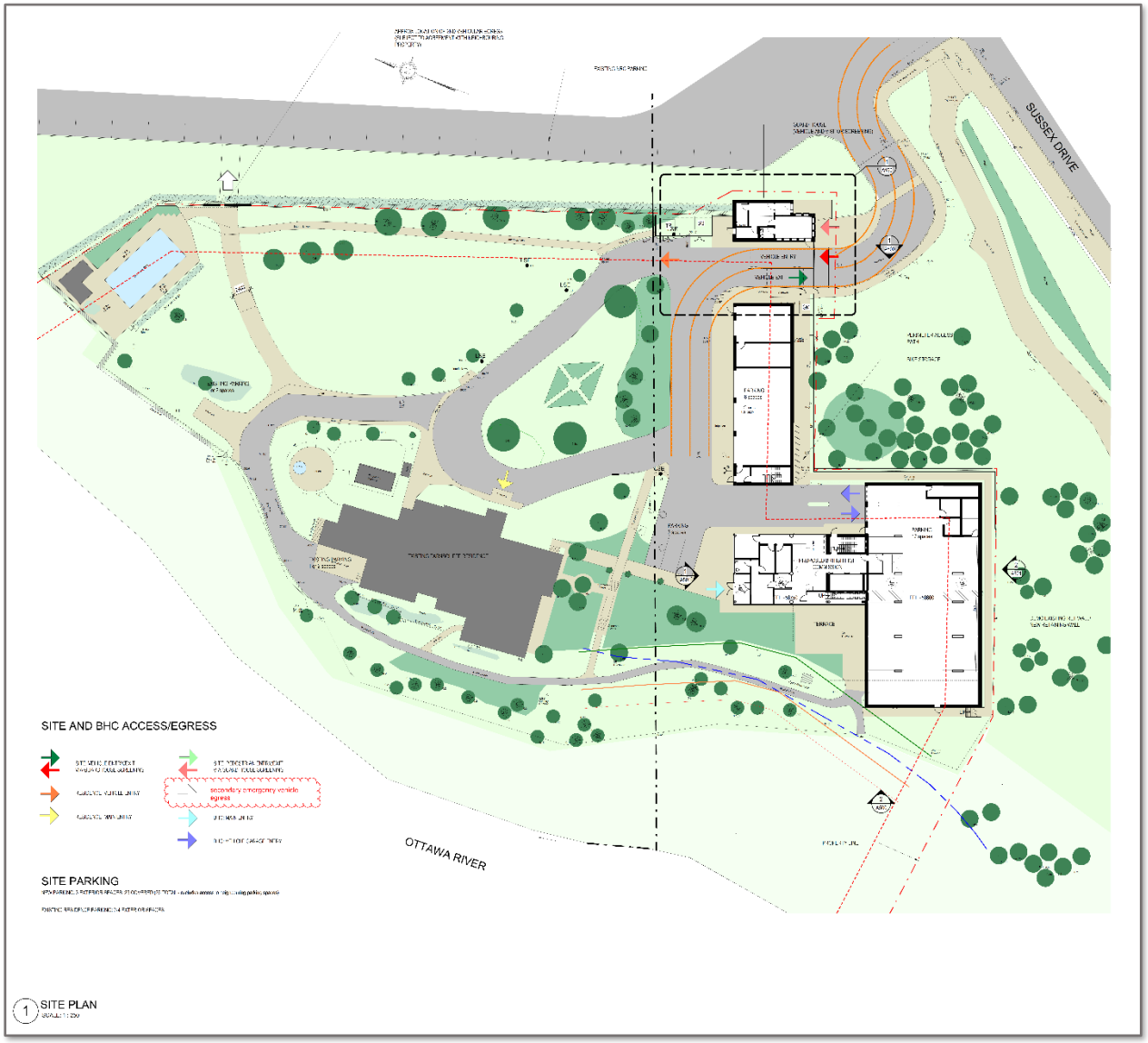

Exhibit 1-1: 140 Sussex Drive – Earnscliffe Office Re-Development Site Plan (Sept. 2019)

1.2 EXISTING CONDITIONS

Study Area Roadways

The City of Ottawa TMP (Map 6) was referenced along with a desktop review of aerial photography to document the existing roadways that would serve the proposed development and surrounding area:

- **Sussex Drive** is a north-south existing divided arterial roadway (posted speed 50 km/hr) under the jurisdiction of the City of Ottawa (in the vicinity of the proposed site) that is characterized by 4-lanes of travel (two-lanes in each direction) from St. Patrick Street in the south to Stanley Avenue north of the proposed site. Single-directional cycling lanes and paved sidewalks (>3.3m fronting site) are provided on both the east and west sides of Sussex Drive. A northbound transit priority lane is provided from the Sussex Drive / NRC Driveway intersection to the King Edward Ave / Sussex Drive intersection. Sussex Drive is part of the City of Ottawa's cycling spine route
- **The Macdonald Cartier Bridge** is a 6-lane interprovincial bridge (posted speed 50 km/hr) located immediately south of the proposed development. The bridge provides a multi-use sidewalk for pedestrians and cyclists that connects to Sussex Drive.

Existing Cycling Facilities

The City of Ottawa's Transportation Master Plan indicates that Sussex Drive is a cycling "Spine Route" that provides single-directional bike lanes fronting the proposed development. Sussex Drive also provides cycling access to/from the Macdonald Cartier Bridge (Quebec) via a paved pathway separated by a grass boulevard west of the corridor.

A traffic count undertaken on September 25th, 2019 recorded approximately 300 cyclists during the 2-hour morning peak period (130 NB / 170 SB) and approximately 400 cyclists during the 2-hour afternoon peak period (180 NB / 220 SB) along Sussex Drive.

Existing Pedestrian Facilities

Sidewalks are currently available along Sussex Drive on both the east and west sides of the corridor (>3.2m in width). The sidewalks provide a direct connection to the existing Earnscliffe vehicle access. A multi-use protected sidewalk is provided along the Macdonald Cartier Bridge that is connected to Sussex Drive by a paved multi-use pathway.

A traffic count undertaken on September 25th, 2019 recorded approximately 120 pedestrians during the 2-hour morning peak period (100 NB / 20 SB) and approximately 140 pedestrians during the 2-hour afternoon peak period (50 NB / 90 SB) along Sussex Drive.

Existing Transit Provisions

Exhibit 1.2 illustrates the new post-October 6th **Route 9** transit route that services the Earnscliffe development with two stations located less than 100m from the Earnscliffe property. **Route 9** provides service every 20 minutes on weekdays and every 30 minutes on weekends.

After October 6th, the route would end on Daly Street with eastbound trips using Sussex Drive instead of Dalhousie. This would connect the proposed development to both Rideau Station and Hurdman Station for employees to utilize the existing "Rapid Transit" OC Transpo service.

The "Rapid Transit and Transit Priority Map" for the 2031 Network Concept (Map 4) within the City of Ottawa Transportation Master Plan indicates no change to the transit priority level of Sussex Drive or the Vanier Parkway (of which Route 9 travels along).

Map 4 does indicate that King Edward Avenue, to the south of the site, would be elevated to a Transit Priority Corridor (Continuous Lanes) that would include transit signal priority for southbound bus service However, the corridor improvements along King Edward Avenue are not included within the City's 2031 Affordable Network (Map 5).

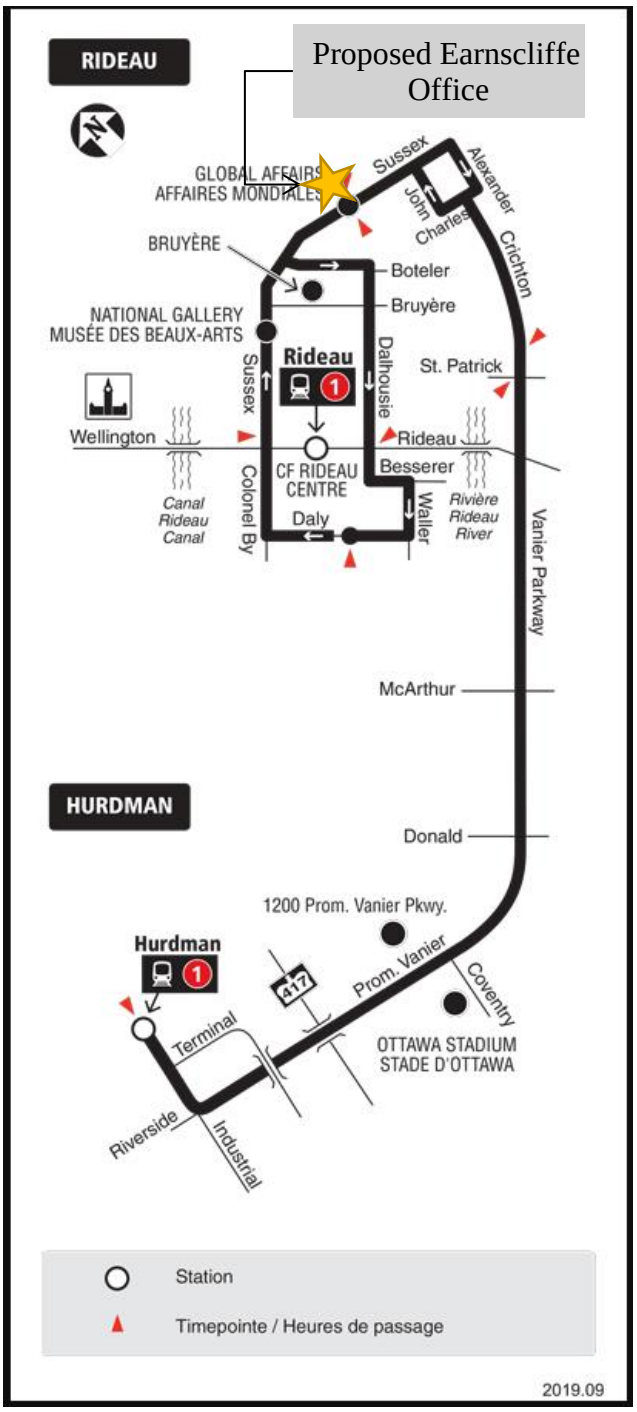

Exhibit 1-2: Post-October 6th Route 9

Existing (2019) Traffic Volumes

A manual traffic count was conducted on September 25th, 2019 for the traffic signal-controlled intersection of Sussex Drive / NRC Driveway and the existing Earnscliffe access. A review of available OpenData from the City of Ottawa indicated that Sussex Drive, fronting the site, carries between 28,000-to-33,000 vehicles per day with a heavy vehicle percentage of approximately 2%.

Qualitative observations of the vehicular traffic flow indicated that the northbound direction is capacity constrained likely due to the two-to-one lane transition north of the King Edward Avenue intersection. The inside vehicle lane was observed to back-up from North of King Edward to south of the NRC Driveway intersection.

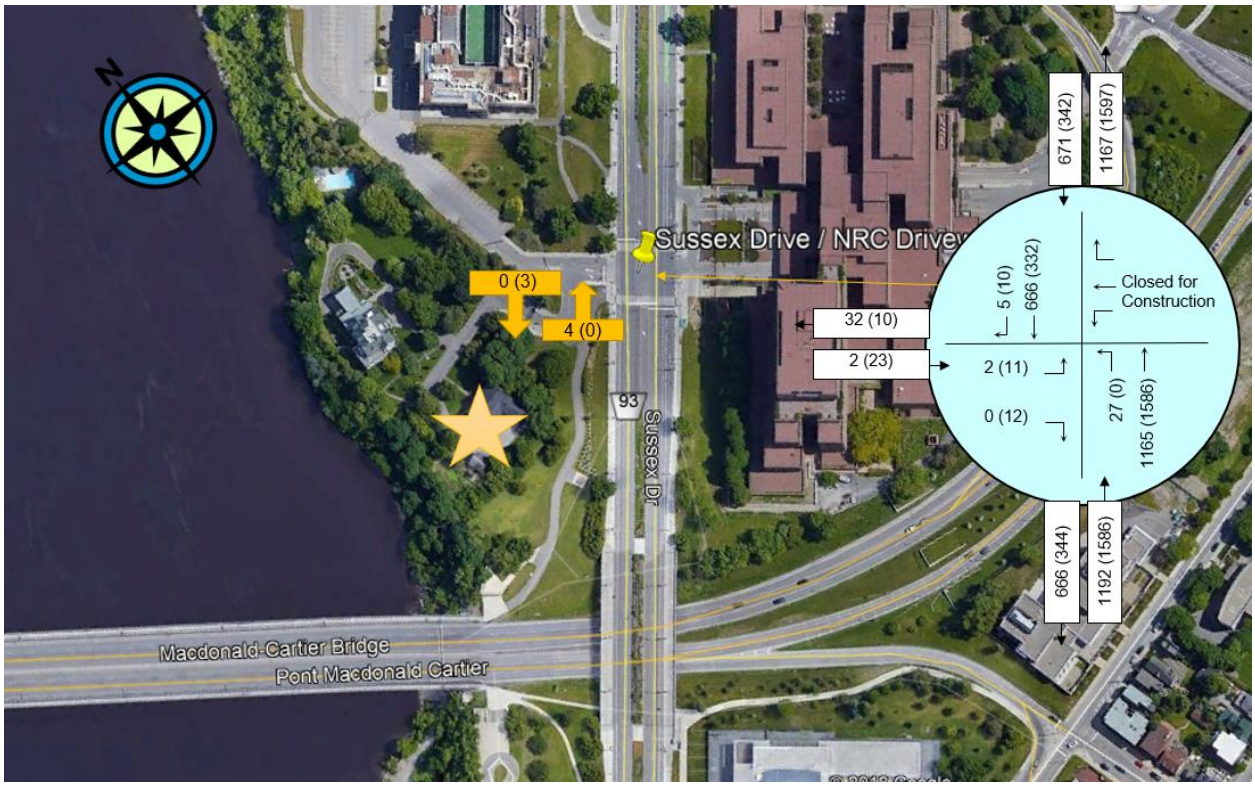

Exhibit 1-3: Existing Traffic Volumes – September 2019

Existing Collision Information

Five (5) year (January 1st, 2014 to December 31st, 2018) collision information were reviewed for the traffic signal-controlled Sussex Drive / NRC Driveway (151 S of King Edward Ave (0008807)) intersection. The collision information provides the date and time of each collision, the environmental condition at the time of the collision, the type of collision (i.e. angle collision, rear-end), the level of damage involved, vehicle details (truck, passenger vehicle, etc.), vehicle path/maneuver characteristics and the number of pedestrians involved (in the collision).

The following provides a summary of the collisions:

- A total of 5 collisions were reported over 5 years;
- One collision resulted in non-fatal injury and the remaining 4 resulted in property damage only;
- By impact type, four collisions were rear-end and one collision was from a turning movements; and
- No pedestrians were involved in the reported collisions.

There appears to be no discernible pattern given the low number of collisions over the 5 year period at this intersection.

1.3 PLANNED CONDITIONS

A review of the City of Ottawa's Transportation Master Plan (Nov. 2013), the Ottawa Cycling Plan (Nov. 2013) and the Rapid Transit and Transit Priority Development Report (Sept. 2013) indicated that Sussex Drive will not undergo any further roadway improvements.

King Edward Avenue (Table A2, Transit Priority Projects) under the Network Concept has been marked for transit signal priority improvements to complement the existing southbound bus lane between Sussex Drive and Rideau drive to improve service to the large number of STO buses preparing to turn onto Rideau Street.

Other Adjacent Development Initiatives

A review of other adjacent developments planned within the immediate study area was undertaken as part of this scoping report. In the area of the proposed development, there have been no significant Site Plan Applications approved for large developments. The following summarizes the minor adjacent developments within the immediate study area:

- *283 Sussex:* Located south of the proposed site, the existing building provides a three-level residential building with 9 beds. The proponent has applied to allow an office as a permitted use of the building and reduce the parking requirements to zero.
- *9 Rideau Gate:* Located to the north-east of the proposed site, the proponent proposed to permit the addition of an office use and reduce the parking requirements from four spaces to two spaces.

In general, the surrounding study area is a well-developed located within Ottawa's "General Urban Area" in the Ottawa Official Plan. Therefore, it is envisioned that the surrounding area would have few small-scale redevelopment projects in the immediate horizon. The TIA study would adopt an annual background traffic growth appropriate for the study area to assess the site access in a built-out horizon year.

2.0 STUDY AREA AND TIME PERIODS

2.1 STUDY AREA

The proposed development would consist of a 1,700 m^2 office building which was found to not meet the trip generation triggers (below the threshold in the TIA guidelines Table 2 page 16). The traffic study would therefore be restricted to:

- the single existing site access point on the NRC Driveway;
- Sussex Drive fronting the site; and
- the traffic signal-controlled Sussex Drive / NRC Driveway intersection to determine the traffic operations (specifically the queue on the west leg) of the intersection that is most nearest the proposed site access.

2.2 TIME PERIODS

The study will analyze two-time periods (morning and afternoon peak hours) of travel demand as they were envisioned to represent the "worst-case" scenario in terms of traffic volumes.

2.3 HORIZON YEARS

The traffic study will analyze the build-out year (assumed to be 2021 horizon year) only given that the development does not meet trip generation triggers.

3.0 EXEMPTION REVIEW

Table 3.1 is an extract from the TIA Guidelines (2017) in regards to possible reduction in scope of work of the traffic study. We would request the City to exempt:

- Element 4.1.3 – This element is not required for site plan applications;
- Element 4.2.2 – The current zoning for the site identifies a minimum number of parking stalls to be provided as 17 stalls (1 per 100m^2 of GFA of office). The site plan provides 17 parking spaces for office employees, 3 for visitors and 6 stalls for official parking; therefore the parking supply exceeds the required number of stalls.
- Modules 4.5, 4.6 and 4.8 – These modules are not required, given the Network Impact Component of this study was not triggered by site generated traffic volumes.

Table 3-1: Exemptions as per TIA Guidelines

Module	Element	Exemption Considerations	Include Module in TIA
Design Review Component			
4.1 Development Design	**4.1.2 Circulation and Access**	Required for site plan.	Yes
	4.1.3 New Street Networks	Only required for plans of subdivision	No
4.2 Parking	**4.2.1 Parking Supply**	Required for site plan.	Yes
	4.2.2 Spillover Parking	Parking supply to exceed minimum	No
Network Impact Component			
4.5 Transportation Demand Management	**All elements**	Modules are not required, given the Network Impact Component of this study was not triggered.	No
4.6 Neighbourhood Traffic Management	**4.6.1 Adjacent Neighbourhoods**		
4.8 Network Concept			

Should you have any questions or comments, please do not hesitate to contact us. We await your feedback prior to proceeding to the next step of the TIA.

Yours truly,

Mr. Arthur Gordon B.A. P.Eng
Principal Engineer
Castleglenn Consultants Inc.

Mr. Jake Berube B.Eng. EIT
Traffic Planning Specialist
Castleglenn Consultants Inc.

APPENDIX A: CERTIFICATION FORM FOR TIA STUDY PROJECT MANAGER

Dated at Ottawa this 10 day of September, 20 19.
(City)

Name: Arthur Gordon
(Please Print)

Professional Title: Principal Engineer

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

Office Contact Information (Please Print)
Address: Sutie 200 - 2460 Lancaster Road
City / Postal Code: Ottawa / K1B 4S5
Telephone / Extension: 613 - 731 - 4052
E-Mail Address: agordon@castleglenn.ca

Stamp

APPENDIX B: SCREENING FORM

Castleglenn Consultants
Engineers, Project Managers & Planners

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Ottawa, Ontario, K1B 4S5
Tel: 613-731-4052

City of Ottawa 2017 TIA Guidelines Screening Form

Mr. Wally Dubyk
Project Manager, City of Ottawa
110 Laurier Avenue West,
Ottawa, ON, K1G 6J9

September 20, 2019

Please see below the completed screening form for the proposed office development located at 140 Sussex Drive. In summary, the safety trigger was found to be met as the proposed Earnscliffe office development would primarily use an existing access located within the auxiliary lanes of the Sussex Drive / NRC Driveway intersection. The Trip Generation and Location triggers were found not to be satisfied.

1. Description of Proposed Development

Municipal Address	140 Sussex Drive, Ottawa
Description of Location	Located on the Earnscliffe National Historic Site to the west of Sussex Drive
Land Use Classification	Office
Development Size (units)	N/A
Development Size (m^2)	3,000 m^2 (gross building area) 1,700 m^2 of Office Space (gross floor area)
Number of Accesses and Locations	1 existing access, located adjacent to existing intersection
Phase of Development	Preliminary – Submission of Site Plan Application
Buildout Year	2021 (Anticipated)

2. Trip Generation Trigger

The development will consist of 1,700 m^2 of office space and a guard house for vehicle/visitor screening. The site would accommodate 26 on-site parking stalls with 20 stalls proposed to be located off-site at the adjacent NRC lot. The development would replace the existing Coach House property.

Land Use Type	Development Size
Office Building	1,700 m^2

The proposed development size is less than the minimum development threshold size (of 3,500m^2) for office developments and therefore, <u>the Trip Generation Trigger is not satisfied.</u>

Table 2: Trip Generation Trigger

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

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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).*

The site utilizes an existing access from the NRC Driveway located outside of the DPS/TOD. Therefore, the development was determined to <u>NOT</u> meet <u>the Location Trigger</u>.

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 (adjacent traffic signal)	
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

The existing driveway is within the area of influence of an adjacent traffic signal (Sussex Drive/NRC Driveway), therefore, <u>the Safety Trigger is satisfied</u>. The secondary emergency egress is proposed (pending an agreement) onto the NRC parking lot property.

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	

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Please review the above screening form information and let us know if you have any comments or questions before proceeding to Step 2: Scoping.

Yours truly,

Mr. Arthur Gordon B.A. P.Eng
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Traffic Planning Specialist
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