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39 Years

PROPOSED 28-STOREY MIXED-USE DEVELOPMENT
1296 & 1300 Carling Avenue

Assessment of Adequacy of Public Services Report

PROPOSED 28-STOREY MIXED-USE DEVELOPMENT
1296 & 1300 CARLING AVENUE

ASSESSMENT OF ADEQUACY OF PUBLIC SERVICES REPORT

Prepared by:

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

December 8, 2025

Ref: R-2025-074
Novatech File No. 124206

December 8, 2025

Ambassador Realty Inc.
185 Somerset Street W. Suite 200
Ottawa, Ontario
K2P 0J2

Attention: Mr. Arthur Loeb

Re: Assessment of Adequacy of Public Services Report
Proposed 28-Storey Mixed-Use Development
1296 & 1300 Carling Avenue, Ottawa, ON
Novatech File No.: 124206

Enclosed is a copy of the 'Assessment of Adequacy of Public Services Report' for the proposed 28-storey, mixed-use development located at 1296 & 1300 Carling Avenue, in the City of Ottawa. The purpose of this report is to demonstrate that the proposed development can be serviced by the nearby existing municipal infrastructure. This report is being submitted in support of a Zoning By-Law Amendment (ZBLA) application.

Please contact the undersigned, should you have any questions or require additional information.

NOVATECH

François Thauvette, P. Eng.
Senior Project Manager

cc: Tyler Cassidy (City of Ottawa)
Toon Dreessen (Architects DCA)

Suite 200, 240 Michael Cowpland Drive, Ottawa ON K2M 1P6 Tel: 613.254.9643 Fax: 613.254.5867 www.novatech-eng.com

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1.0 INTRODUCTION

Novatech has been retained by Ambassador Realty Inc. to assess the adequacy of the existing public services related to the proposed re-development of the 1296 & 1300 Carling Avenue properties. The purpose of this report is to demonstrate that the proposed development can be serviced by the nearby existing municipal infrastructure. This report is being submitted in support of a Zoning By-Law Amendment (ZBLA) application.

1.1 Location and Site Description

The 0.381-hectare site to be re-developed currently consists of two existing commercial buildings and associated surface parking lots located on the south side of Carling Avenue, just east of the Highway 417 overpass. The subject site is bordered by other commercial properties to the north, east, and west, as well as residential properties to the south. The legal description of the site is designated as Part of Lots 20, 21, 22 & 23 and Part of Block 8, Registered Plan 221, City of Ottawa.

Figure 1: Aerial View of the Subject Site

Image Source: geoOttawa (City of Ottawa)

1.2 Pre-Consultation Information

An initial pre-consultation meeting was held with the City of Ottawa on March 28, 2025, at which time the client was advised of the general submission requirements. Subsequent discussions were held with City of Ottawa staff related to site servicing options and constraints. Refer to **Appendix A** for a summary of the correspondence related to the proposed development.

1.3 Proposed Development

The proposed development will consist of a 28-storey tower, closer to Carling Avenue, as well as an 8-storey residential building at the back of the property, with a shared podium. The conceptual

plan also includes access to underground parking and outdoor amenity space for the proposed café. The development will include an eastbound (right-in, right-out) site entrance off Carling Avenue.

2.0 SITE SERVICING

The objective of this report is to demonstrate that proper sewage outlets (sanitary and storm) as well as a suitable domestic water supply and appropriate fire protection are available for the proposed development. The servicing criteria, the expected sewage flows, and water demands are to conform to the requirements of the City of Ottawa municipal design guidelines for sewer and water distribution systems.

2.1 Sanitary Servicing

The existing buildings are currently being serviced by the local 250mm dia. sanitary sewer, which flows into the 900mm dia. Cave Creek Collector in Carling Avenue. Under post-development conditions, the proposed development will continue to be serviced by the local sanitary sewer as a direct connection to the Cave Creek Collector will not be allowed. A backflow preventor will be required per OBC and Ottawa Sewer Design Guidelines to ensure the proposed building is protected from any potential backflow from the municipal sanitary sewer system. Based on criteria in Section 4 of the City of Ottawa Sewer Design Guidelines, the total theoretical peak sanitary flow from the proposed development will be approximately 6.09 L/s, including infiltration. Refer to **Table 1** for a summary of the preliminary post-development sanitary sewage flows and to **Appendix B** for detailed calculations.

Table 1: Theoretical Post-Development Sanitary Flows

Proposed Development	Unit Count	Design Population / Area	Average Flow (L/s) *	Peaking Factor	Sanitary Peak Flow (L/s) *
1-Bdrm / 2-Bdrm / 3-Bdrm	239 / 62 / 26	546	1.77	3.36	5.95
Commercial	-	287 m²	<0.01	1.5	0.01
Infiltration Allowance	-	0.381 ha.	-	-	0.13
Total	**327**	**-**	**1.78**	**-**	**6.09**

*Represents rounded values

The existing 250mm dia. PVC sanitary sewer in Carling Avenue is approximately 3.0m deep, with an invert elevation of 71.03±. The roadway elevation is approximately 74.03± at the anticipated service connection location. The theoretical sewage flow from the proposed site will drain into the existing 250mm dia. sanitary sewer, before flowing approximately 27m west into the 900mm dia. trunk sewer. Refer to **Figure 2** showing the existing sanitary sewer infrastructure and conceptual servicing layout.

Figure 2: Conceptual Sanitary Servicing Layout

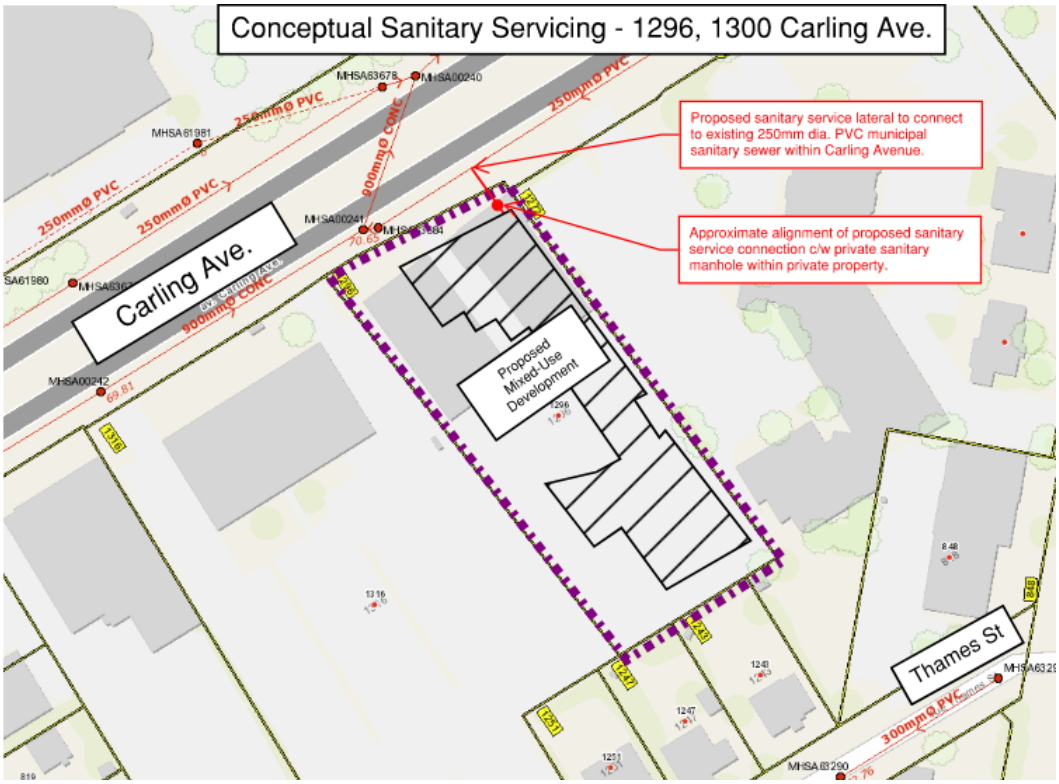


Image Source: geoOttawa (City of Ottawa)

The sanitary sewage calculations and servicing design will be refined as part of the Site Plan Control application to the City of Ottawa.

2.2 Water Supply for Domestic Use and Firefighting

The subject site is located within the City of Ottawa 2W2C pressure zone. It is assumed that the existing buildings are currently being serviced by the 400mm dia. PVC watermain in the eastbound lanes of Carling Avenue. There is also a 1220mm dia. concrete-lined steel pipe feedermain in the westbound lanes of Carling Avenue, however based on feedback from City staff, the proposed development will not be allowed to connect to this large diameter feedermain.

Under post-development conditions, the proposed site will continue to be serviced by the 400mm dia. watermain in Carling Avenue. The anticipated daily water demands are expected to be greater than 50m^3/day (~0.58 L/s), therefore the proposed development will require two (2) water supplies for redundancy purposes, as well as a new isolation valve installed on the municipal watermain between the service laterals. As discussed with the City of Ottawa, the water servicing configuration will be determined at the Site Plan Control application stage. Refer to **Figure 3** showing the existing watermain infrastructure and conceptual servicing layout.

Figure 3: Conceptual Water Servicing Layout

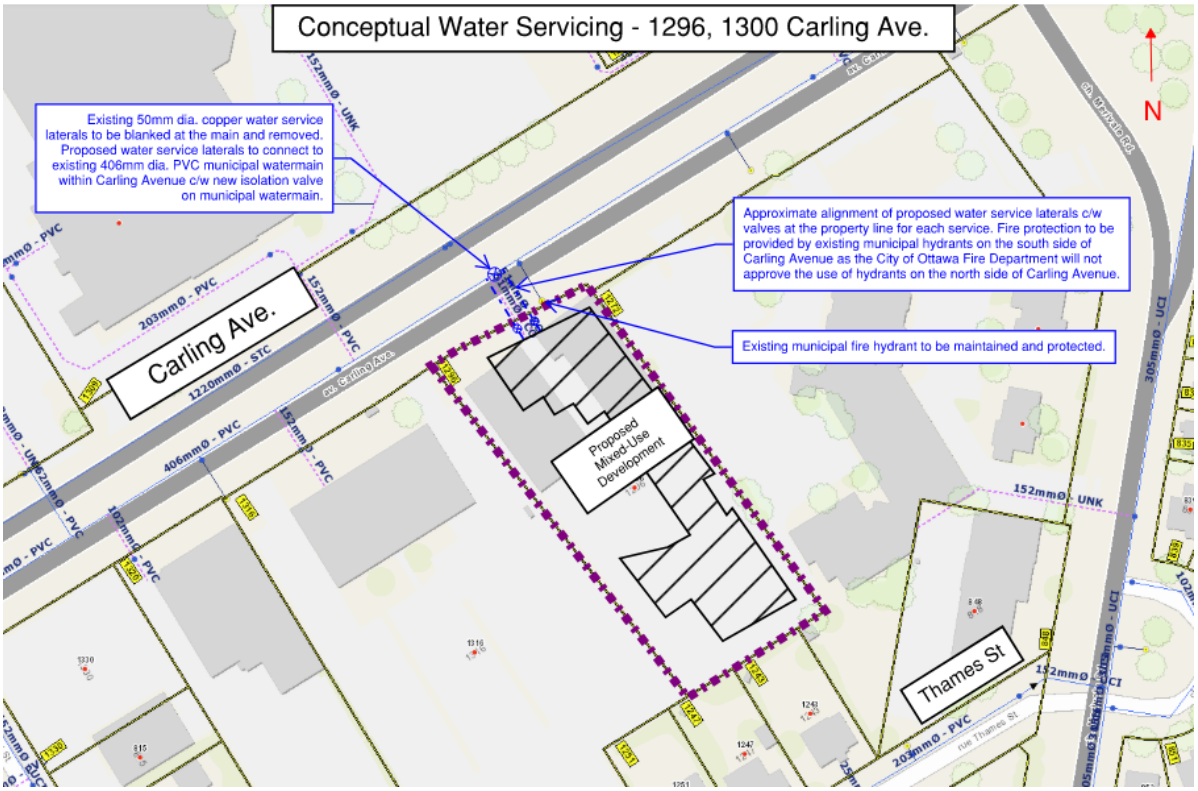


Image Source: geoOttawa (City of Ottawa)

Preliminary water demand and fire flow calculations have been prepared for the proposed development based on criteria in Section 4 of the City of Ottawa Design Guidelines for Water Distribution Systems. The fire flows are calculated using the Fire Underwriters Survey (FUS) method, based on general building assumptions, including building footprint, construction materials and a fully sprinklered building. Refer to **Table 2** for a summary of the water demands and fire flows and to **Appendix C** for detailed calculations.

Table 2: Theoretical Post-Development Water Demands

Proposed Development	Unit Count	Design Population/Area	Avg. Daily Demand (L/s)	Max. Daily Demand (L/s)*	Peak Hour Demand (L/s)*	FUS Fire Flow (L/s)
1-Bdrm / 2-Bdrm / 3-Bdrm	239 / 62 / 26	546	1.77	4.42	9.73	183
Commercial	-	287 m²	0.01	0.02	0.03	
Total	**327**	**-**	**1.78**	**4.44**	**9.76**	**-**

*Represents rounded values

The following design criteria were taken from Section 4.2.2 – 'Watermain Pressure and Demand Objectives' of the City of Ottawa Design Guidelines for Water Distribution:

- Normal operating pressures are to range between 345 kPa (50 psi) and 483 kPa (70 psi) under Max Day demands
- Minimum system pressures are to be 276 kPa (40 psi) under Peak Hour demands

- Minimum system pressures are to be 140 kPa (20 psi) under Max Day + Fire Flow demands

Table 3 summarizes preliminary hydraulic analysis results based on municipal watermain boundary conditions provided by the City as indicated in the correspondence from the City of Ottawa.

Table 3: Hydraulic Boundary Conditions Provided by the City

Municipal Watermain Boundary Condition	Boundary Condition Head of Water (m)	Normal Operating Pressure Range (psi)	Anticipated WM Pressure (psi)*
Twin connections to 400mm dia. WM in Carling Avenue			
Minimum HGL (Peak Hour Demand)	125.0 m	40 psi (min.)	~ 76 psi
Maximum HGL (Max Day Demand)	132.0 m	50-70 psi	~ 86 psi
HGL Max Day + Fire Flow (183 L/s)**	119.7 m	20 psi (min.)	~ 68 psi

*Based on an approximate roadway elevation of 73.95m in Carling Avenue. Design pressure = (HGL – watermain elevation) x 1.42197 PSI/m
**A multi-hydrant approach to firefighting will be necessary.

Based on preliminary calculations and correspondence received from the City of Ottawa, it is anticipated that the pressure within the municipal watermain network will be adequate. Pressure reducing valves (PRV) may be required given the relatively high system pressures. Furthermore, given the height of the proposed towers, it is anticipated that a booster pump(s) will be required to provide adequate water pressure to the upper floors; however, this will be determined by the mechanical consultant as part of the detailed design of the building.

A multi-hydrant approach to firefighting will be required to supply the fire flow calculated above. Additionally, the City of Ottawa Fire Department will not approve the use of fire hydrants on the north side of Carling Ave. to service the proposed development located on the south side. Based on a review of the geoOttawa website, there are two (2) Class AA (blue bonnet) municipal fire hydrants within 75m of the subject site, and two (2) available additional hydrants within a 150m proximity radius of the site along the south side of Carling Avenue. Based on the City of Ottawa Technical Bulletin ISTB-2018-02, Class AA (blue bonnet) hydrants within 75m of the building should provide a capacity 95 L/s each (at a pressure of 20 PSI) while hydrants between 75m and 150m should provide at least 63 L/s (at a pressure of 20 PSI). The combined maximum fire flow from these hydrants should exceed the Fire Flow requirement (183 L/s) of the proposed development. This multi-hydrant approach to firefighting is in accordance with the City of Ottawa Technical Bulletin ISTB-2018-02.

Refer to **Appendix C** for preliminary domestic water demand, FUS fire flow calculations and correspondence with the City of Ottawa related to the municipal watermain network and fire flow available for the proposed development. An updated analysis will need to be provided as part of the Site Plan Control application to the City of Ottawa.

2.3 Storm Drainage and Stormwater Management

Storm drainage from the site is currently being directed towards the 1800mm dia. West Hintonburg municipal storm sewer in Carling Avenue. The trunk sewer system flows east along Carling Avenue, north along Merivale Road, and ultimately discharges into the Ottawa River, ~3km downstream of the subject site. Under post-development conditions, stormwater runoff from the site will continue to be directed to the municipal storm sewer in Carling Avenue. On-site stormwater management will be implemented to meet the requirements of the City of Ottawa. Refer to **Figure 4** showing the existing storm sewer infrastructure and conceptual servicing layout.

Figure 4: Conceptual Storm Servicing Layout

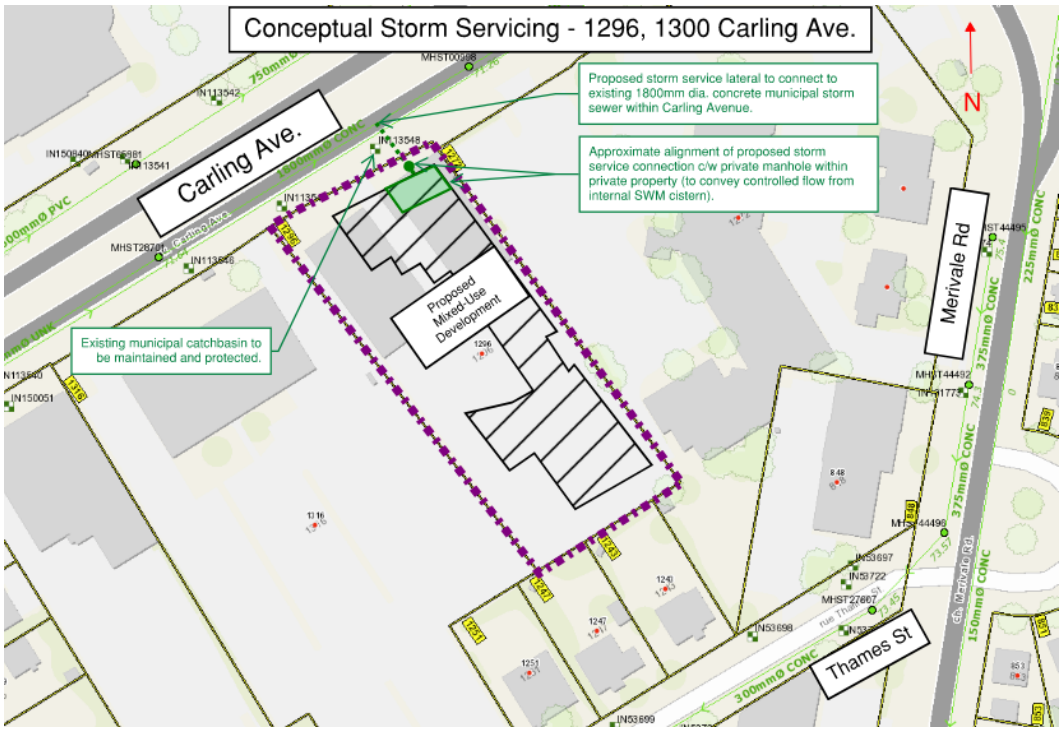


Image Source: geoOttawa (City of Ottawa)

The 1800mm dia. storm sewer in Carling Avenue is approximately 2.55m deep, with an approximate invert elevation of 71.48m±. The roadway elevation is approximately 74.03m± at the proposed service connection location. If a gravity outlet is not possible, post-development stormwater flows from the site will need to be pumped to the municipal outlet sewer, however this will need to be determined at the detailed design stage. A backflow preventor will be required per OBC and Ottawa Sewer Design Guidelines to ensure the proposed building is protected from any potential backflow from the municipal storm sewer system.

On-site stormwater management (SWM) will be required and provided in the form of quantity control measures; however, stormwater quality control measures will not be required due to the fact that most of the on-site parking will be provided underground and that the distance to the stormwater outlet is ~3km downstream. The SWM criteria have been provided during a pre-consultation meeting and subsequent discussions with the City of Ottawa. The allowable release rate from the site has been calculated using the Rational Method, with a maximum allowable runoff coefficient equivalent to existing conditions, but in no case greater than C=0.5, a time of concentration of 10 minutes and a 2-year rainfall intensity from City of Ottawa IDF curves. Based on a weighted runoff coefficient (C_w=0.5), which is less than the pre-development of C_w=0.89, and a time of concentration of 10 mins., the allowable release rate for the site was calculated using the Rational Method to be approximately 40.6 L/s. The portion of the total allowable release rate

will have to be allotted to the various catchment areas on site, depending on the relative size and imperviousness as well as the potential storage available within the sub-catchment areas. For the purpose of this report (and preliminary calculations), the total site area (0.381 ha.) was divided into the following sub-catchment areas with an estimated allotted allowable release rate:

- A-1: Direct Runoff (~0.015 ha.) – Allotted 100-year release rate = 6.5 L/s
- A-2: Controlled Site Flow (~0.366 ha.) – Allotted 100-year release rate = 33.0 L/s

Refer to **Figure 5** showing the conceptual stormwater management plan and approach to on-site stormwater management.

Figure 5: Conceptual Stormwater Management Plan

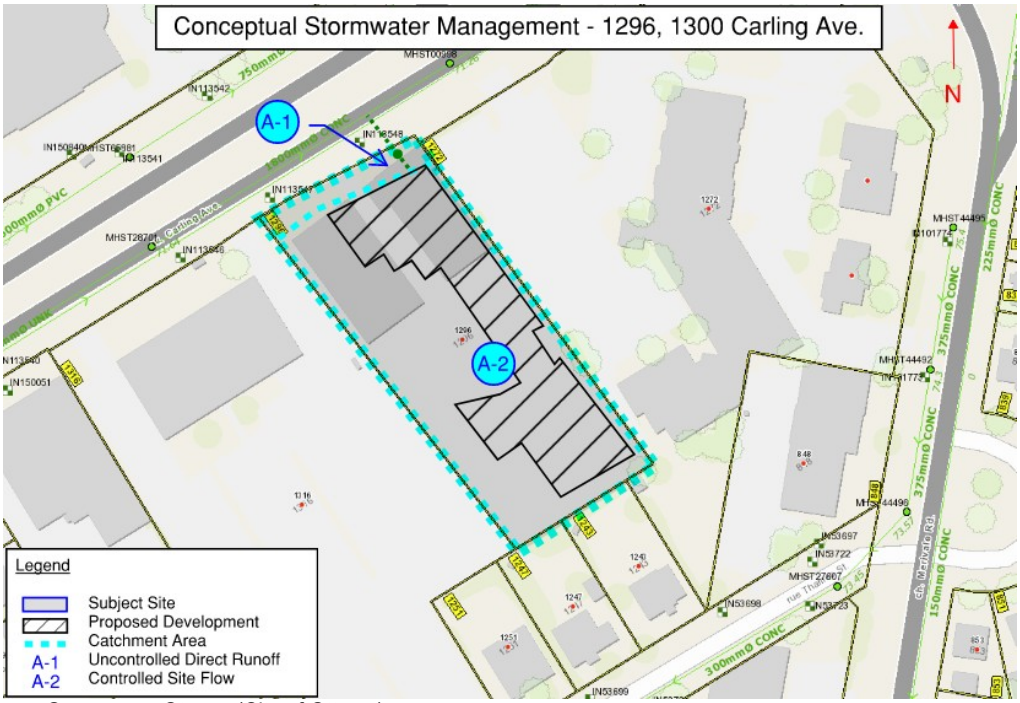


Image Source: geoOttawa (City of Ottawa)

Table 4 compares the post-development flows from the proposed development to both the uncontrolled pre-development flows and to the allowable release rate specified by the City of Ottawa, for the 2-year, 5-year and 100-year design events. Refer to **Appendix D** for preliminary SWM calculations and to **Appendix A** for a copy of the correspondence from the City of Ottawa.

Table 4: Preliminary Stormwater Flow Comparison Table

Design Event	Drainage Areas				
	Pre-Development Conditions		Post-Development Conditions		
	Uncontrolled Flow (L/s)	Allowable Release Rate (L/s)	A-1 Flow (L/s)	A-2 Flow (L/s)	Total Flow (L/s)*
2-Yr	72.0	40.6	2.5	33.0	35.5
5-Yr	97.7		3.4		36.4
100-Yr	186.2		6.5		39.5

*Reduced flow compared to pre-development uncontrolled conditions

It is anticipated that the flows from area A-2, whether from roof drains, deck drains, or landscape area drains, will be directed to an internal SWM storage tank, then pumped out to the existing 1800mm dia. storm sewer in Carling Avenue via the storm service lateral.

Table 5 summarizes the approximate storage volume requirements for the various sub-catchment areas, based on the allotted release rates.

Table 5: Preliminary Stormwater Storage Requirements Table

Design Event	Post-Development Storage Volume Requirements	
	A-1 Direct Runoff (m^3)	A-2 Controlled Site Flow (m^3)*
2-Yr	-	~20
5-Yr	-	~36
100-Yr	-	~101

*Represents preliminary calculations only.

Refer to **Appendix D** for preliminary SWM calculations and to **Figure 5** showing the conceptual stormwater management plan.

The subject site is located within the jurisdiction of the Rideau Valley Conservation Authority (RVCA) and is tributary to the Ottawa River. Conservation authorities typically consider runoff from landscaped areas and roof tops as clean for the purpose of protecting water quality for aquatic habitat. Additionally, as most of the site parking will be provided within the underground parking levels, and the distance to the stormwater outlet is ~3 km downstream, on-site stormwater quality control will not be provided.

A complete stormwater management (SWM) analysis of the development will be included as part of the Site Plan Control submission to the City of Ottawa.

3.0 CONCLUSION

Based on our analysis of the information available, the existing municipal watermain, sanitary and storm sewers should have adequate capacity to service the proposed development. On-site stormwater management will be implemented to meet the requirements of the City of Ottawa and the Rideau Valley Conservation Authority (RVCA). A complete servicing, grading and SWM design will be included as part of the Site Plan Control submission to the City.

NOVATECH

Prepared by:

François Thauvette, P. Eng.
Senior Project Manager

APPENDIX A

Project Correspondence

File No.: PC2025-0079

April 7, 2025

Jeff Kelly
NOVATECH
Via email: j.kelly@novatech-eng.com

Subject: **Pre-Consultation: Meeting Feedback**
Proposed Zoning By-law Amendment Application – 1296-1300 Carling Avenue

Please find below information regarding next steps as well as consolidated comments from the above-noted pre-consultation meeting held on March 28, 2025.

Pre-Consultation Preliminary Assessment

1 ☐	**2** ☐	**3** ☒	**4** ☐	**5** ☐

One (1) indicates that considerable major revisions are required while five (5) suggests that the proposal appears to meet the City's key land use policies and guidelines. This assessment is purely advisory and does not consider technical aspects of the proposal or in any way guarantee application approval.

Next Steps

1. If the Urban Design Review Panel (UDRP) Report is listed as a required submission material in the Study and Plan Identification List, the applicant must attend the UDRP prior to formally submitting the planning application(s). The UDRP report and confirmation of attendance is required for the application to be considered complete.

Planning

Comments:

1. The Official Plan designates the site Hub in the Inner Urban Transect.

    a) The Inner Urban Transect is generally planned for mid-to high density development subject to proximity to transit, limits on building height as per the designation and area-specific policy, separation of tower elements, and urban design policies in Section 4.6.

    b) The Official Plan requires a minimum building height of 3 storeys and up to High-rise, where the parcel is of sufficient size to allow for a transition in built form. Area Specific Policy 31 and Section 4.6.6 provides additional direction on building height and transition (see comment 2 and 4 below)

c) The residential density and large-household dwelling targets for Hubs are shown in Table 3a. The table does not include a “Hub” for Westgate therefore, the Mainstreet targets apply:

Table 3a

Hubs, Mainstreets, and Protected Major Transit Station Area (PMTSA) Density and Large Dwelling Requirements			
Designation	**Minimum Area-wide Density Requirement, People and Jobs per Gross Hectare[1]**	**Minimum Residential Density Requirement for Intensification, Dwellings per Net Hectare[2]**	**Minimum Proportion of Large-household Dwellings within Intensification**
Mainstreets			Minimum: 5 per cent Target: 10 per cent
Mainstreet	120	120	

[1] Gross hectares refers to the area within the designation including non-developable lands such as roads and parks.
[2] Net hectares refers to privately owned lands prior to any potential severance or division and excludes private road areas that provide the same function of a public right-of-way. The expressed densities are for new developments on a per-parcel basis.
[3]All Hub areas, unless noted, are PMTSAs. All PMTSAs, including those which are not Hubs are illustrated on Schedule C1.

2. The site is subject to Area Specific Policy 31 and identified as West-gate Carling South Transition Area. Key policies include but are not limited to:

Policy 1: …. Building heights will range between 15 and 36 storeys

Policy 13: Tower portions of high-rise buildings should:

a) Have a floor plate size that is limited. Proposals for residential floor plates larger than 750 square metres or commercial floor plates larger than 1,500 square metres shall:

i. Demonstrate that the relevant objectives of this policy area are met through the use of such measures as building orientation, building shape, design and use of materials;

ii. Provide greater setbacks and setbacks where necessary to mitigate impacts of adjacent buildings and properties; and

b) Be appropriately separated from adjacent towers, either on the same site or on an abutting property. A high-rise tower should have a minimum separation distance of 20 metres from another high-rise tower. Reduced tower separation is acceptable if proposals can demonstrate:

i. That the relevant objectives of this policy are area generally met through building layout and design, including but not limited to, the use of a smaller floor plate, building orientation, balconies or window treatment, step backs, setbacks, and/or building shape; and

ii. That the potential for future high-rise buildings on abutting lots can be developed and generally meet the separation distances or mitigation measures provided above; and
iii. That towers of different land uses require special consideration (i.e., residential tower abutting an office tower); and

c) Where a proposal cannot demonstrate that the above requirements can be met, the site may not be considered appropriate for high-rise buildings or may require lot consolidation before they may be accommodated.

Policy 15: Development in the Westgate-Carling Transition Area shall demonstrate that the area south of the Neighbourhood Line provides an appropriate transition in terms of building height and use, setbacks, and landscaping, to protect the lower-profile character of the area

3. The site is also located within a Design Priority Area and subject to policies contained in Section 4.6.1 of the Official Plan.

4. Section 4.6.6 of the Official Plan provides policy direction to enable the sensitive integration of mid-rise and high-rise buildings. Key policies include but are not limited to:

Policy 3: Where two or more High-rise buildings exist within the immediate context, new High-rise buildings shall relate to the surrounding buildings and provide a variation in height, with progressively lower heights on the edge of the cluster of taller buildings or Hub.

Policy 8: High-rise buildings shall be designed to respond to context and transect area policies, and should be composed of a well-defined base, middle and top. Floorplate size should generally be limited to 750 square metres for residential buildings and 2000 square metres for commercial buildings with larger floorplates permitted with increased separation distances. Space at-grade should be provided for soft landscaping and trees.

Policy 9: High-rise buildings shall require separation distances between towers to ensure privacy, light and sky views for residents and workers. Responsibilities for providing separation distances shall be shared equally between owners of all properties where High-rise buildings are permitted. Maximum separation distances shall be achieved through appropriate floorplate sizes and tower orientation, with a 23-metre separation distance desired, however less distance may be permitted in accordance with Council approved design guidelines.

5. The site is zoned Arterial Mainstreet Subzone 10, Schedule 126 (AM10 S126). Some AM10 zoning (Section 186) provisions to make note of:

a. Provision 10(b)(i) states that “the minimum front and corner side yard setback for all buildings is 0 metres, and at least 50% of the frontage along the front lot line and corner side lot line must be occupied by building walls located within 4.5 metres of the frontage for a Residential use building, and within 3.0 metres for Non-residential and Mixed use buildings”.

b. Provision 10(e)(i) states that the ground floor must be a minimum height of 4.5 metres for mixed-use buildings where any portion of the building is located within 10 metres of the front lot line.

c. Provision 10(h) speaks to minimum glazing of the ground floor façade (50% minimum required).

6. Some additional zoning provisions to make note of:

   a. Section 77 – Provisions for High-Rise Buildings.

   b. Part 4 – Parking, Queuing and Loading Provisions (Sections 100-114). Ensure the minimum required residential, commercial, and visitor parking spaces are provided.

   c. Section 137 – Amenity Area. The residential component of the building must meet the amenity area requirements laid out in Table 137.

7. Clearly outline the relief being sought in Annex 2 of the Zoning Confirmation Report.

8. Staff have concerns with the location and access to the waste storage room. Please consider where the garbage truck will stop and how it will navigate through the site.

9. Are there requirements for a fire route to the back of the building with building code?

10. Please consider providing on-site short term parking. For example, people dropping off packages and dropping off/picking up people should not stop on Carling Avenue.

11. Section 37 requirements / Community Benefits Charge

    The former Section 37 regime has been replaced with a “Community Benefits Charge”, By-law No. 2022-307, of 4% of the land value. This charge will be required for ALL buildings that are 5 or more storeys and 10 or more units and will be required at the time of building permit unless the development is subject to an existing registered Section 37 agreement. Questions regarding this change can be directed to Ranbir.Singh@ottawa.ca.

12. Staff encourage you to reach out to Councillor Brockington early in the process.

13. You are encouraged to consult with technical agencies early in the development process and throughout the development of your project concept. A list of technical agencies and their contact information is enclosed.

Feel free to contact Wendy Tse, Planner, for follow-up questions.

Urban Design

Submission Requirements:

14. An Urban Design Brief is required. Please see attached customized Terms of Reference to guide the preparation of the submission

    a. The Urban Design Brief should be structured by generally following the headings highlighted under Section 3 – Contents of these Terms of Reference.

    b. The following elements are particularly important for this development application: This includes massing analysis of all the areas indicated in areas of concern below.

    c. Please note that the Urban Design Brief will also serve as the submission to the Urban Design Review Panel (see notes below).

15. Additional drawings and studies are required as shown on the SPIL. Please follow the terms of reference (Planning application submission information and materials | City of Ottawa) to prepare these drawings and studies. These include (ie. The UDRP drawings):

    a. See drawings indicated in the Urban Design Brief TOR for a list of drawings.

Urban Design Review Panel Review and Report:

16. The site is located within a Design Priority Area and is subject to review by the Urban Design Review Panel. UDRP review occurs within the Preconsultation stage. To proceed with a UDRP review, please contact udrp@ottawa.ca.

17. The submission of a UDRP report is a requirement for deeming an application complete. Please follow the instructions provided in the Terms of Reference available here: Urban Design Review Panel Report (ottawa.ca)

Comments on Preliminary Design:

18. The following elements of the preliminary design are appreciated:

    a. Building design does a good job with podium design facing Carling and its transition to the tower portion of the proposal.

19. The following elements of the preliminary design are of concern:

    a. Transition to the low-rise community to the south and how to draw it more accurately.

    b. Tower design in relation to the high-rise guidelines

    c. Pinch point between the tower and the mid-rise needs more analysis.

    d. Side yard relationship neighbouring properties.

Recommendations:

20. Consider increasing the internal space between the tower and the mid-rise building or alternatively, removing the pinch point and connecting the two together.

Other Comments:

21. This is an exciting project in an area full of potential. Staff look forward to helping you achieve its goals with the highest level of design resolution and are happy to assist and answer any questions regarding the above.

Feel free to contact Christopher Moise, Planner, for follow-up questions.

Engineering

Comments:

22. The Stormwater Management Criteria, for the subject site, is to be based on the following:

    a. Application of the IDF information derived from the Meteorological Services of Canada rainfall data, taken from the MacDonald Cartier Airport, collected 1966 to 1997.

    b. In separated areas, the pre-development runoff shall be the lower of the existing coefficient or a maximum equivalent ‘C’ of 0.5, whichever is less (§ 8.3.7.3).

    c. A calculated time of concentration (cannot be less than 10 minutes).

    d. Flows to the storm sewer in excess of the 2-year storm release rate, up to and including the 100-year storm event, must be detained on site.

    e. The quantity control criteria is to control all storms up to and including the 100-year event to the 2-year pre-development flow rate.

f. Quality control is not required for this application; however, best-management practices are recommended for this application.

23. Deep Services (Storm, Sanitary and/or Water Supply)

Water

a. 406mm dia. PVC watermain on Carling Avenue.

Sanitary

b. 250mm dia. PVC sanitary sewer on Carling Avenue.

   A connection to the Cave Creek Trunk Collector sewer will not be permitted. In the event the wastewater flows generated from this proposed development are greater than the capacity of the 250 mm dia. sewer, contact the Project Manager for additional permission requirements.

c. Provide the anticipated sanitary demands (L/s) to the project manager at your earliest convenience to determine if there are any capacity issues

Storm

d. 1800mm dia. Conc. West Hintonburg Storm sewer. A stamped shop drawing of the connection detail will be required and approved by Asset Management before a Commence Work Notice will be granted.

e. Note that a Utility Circulation will be required for the service connections to the municipal infrastructure on Carling Avenue during the Site Plan Control application. The Utility Circulation should be initiated after detailed design is approved and prior to obtaining a Commence Work Notification. Reach out to the project manager to initiate the Utility Circulation process and obtain design drawing requirements.

f. Connections to trunk sewers and easement sewers are typically not permitted.

g. A monitoring maintenance hole will be required. It should be located in an accessible location on private property near the property line (ie. Not in a parking area).

h. Review provision of a high-level sewer.

i. Sewer connections to be made above the springline of the sewermain as per:

   i. Std Dwg S11.1 for flexible main sewers – connections made using approved tee or wye fittings.

ii. Std Dwg S11 (For rigid main sewers) – lateral must be less that 50% the diameter of the sewermain,

iii. Std Dwg S11.2 (for rigid main sewers using bell end insert method) – for larger diameter laterals where manufactured inserts are not available; lateral must be less that 50% the diameter of the sewermain,

iv. Connections to manholes permitted when the connection is to rigid main sewers where the lateral exceeds 50% the diameter of the sewermain. – Connect obvert to obvert with the outlet pipe unless pipes are a similar size.

24. An MECP Environmental Compliance Approval **Private Sewage Works** may be required for the proposed development during a Site Plan Control application. A Ministry contact has been provided below but please work with City staff on the need (or not) of an application.

    a. Patrick Lalonde at (613) 521-3450 or Patrick.Lalonde@ontario.ca

25. Water

    a. A Water Data Card will be need to be completed and returned to the project manager in order to determine the appropriate water meter size for this development. The Water Data Card should be submitted several weeks before requesting the water permit for the development.

    b. Water Boundary condition requests must include the location of the service (map or plan with connection location(s) indicated) and the expected loads required by the proposed development, including calculations. Please provide the following information:

        i. Location of service

        ii. Type of development

        iii. The amount of fire flow required (per OBC or FUS).

        iv. Average daily demand: ___ l/s.

        v. Maximum daily demand: ___l/s.

        vi. Maximum hourly daily demand: ___ l/s.

26. The Required Fire Flow for the building should be calculated using FUS2020 methodology.

27. A Geotechnical investigation is required for this application. If any excavation or shoring is anticipated to encroach into the public right-of-way or adjacent private

properties, a Municipal Consent circulation and encroachment agreements will be required. This comment applies to a subsequent Site Plan Control application, and any reference to Municipal Consent or encroachment agreements does not apply to the rezoning application.

28. Frontage Charges do not apply to this property.

Feel free to contact Tyler Cassidy, P.Eng., Project Manager, for follow-up questions.

Noise

Comments:

29. Noise study is not required as part of the ZBLA.

30. Noise Impact Studies will be required at the time of Site Plan to address the following:

    a. Road, as the site is within proximity to Carling, Merivale and Hwy 417.

    b. Rail, as LRT is identified along Carling Ave on the TMP's Ultimate Network.

    c. Stationary, due to the proximity to neighboring exposed mechanical equipment and/or if there will be any exposed mechanical equipment due to the proximity to neighboring noise sensitive land uses.

Feel free to contact Josiane Gervais, TPM, for follow-up questions.

Transportation

Comments:

31. Follow Transportation Impact Assessment Guidelines:

    a. Note that the TIA Guidelines have been updated, the changes are available on the City's website.

    b. A Transportation Impact Assessment is required. Please submit the Scoping/Forecasting report to josiane.gervais@ottawa.ca at your earliest convenience. The applicant is responsible to submit the Scoping/Forecasting Report prior to application and must allow for a 14 day circulation period.

    c. The Strategy Report (including Synchro files) must be submitted with the formal submission to deem complete. The applicant is strongly encouraged to submit the Strategy Report to the TPM prior to formal submission and allow for a 14 day circulation period.

32. Ensure that the development proposal complies with the Right-of-Way protection requirements of the Official Plan's Schedule C16. There is ROW protection listed along the site frontage. It is acknowledged that ROW conveyance does not take place at rezoning, but the concept plan and setbacks must account for the future conveyance.

33. Transportation Master Plan includes:

    a. LRT, at-grade crossings, along Carling (2031 Network Concept)

    b. Transit Priority Measures (Continuous) along Carling (Affordable Network)

    c. Transit Priority Isolated Measures along Merivale (Affordable Network)

    d. Transit Priority Measures (Continuous) along Merivale (2031 Network Concept)

34. The following comments are provided and would be applicable at the time of site plan:

    a. Ensure site access meets the City's Private Approach Bylaw.

    b. Clear throat requirements for >200 units on an arterial road is 40m. Ensure this length is provided. The clear throat length is measured from the ends of the driveway curb return radii at the roadway and the point of first conflict on-site. Note the minimum throat length provided to be maintained with the future ROW protection (as applicable).

    c. As the proposed site is mixed use, AODA legislation applies.

        i. Ensure all crosswalks located internally on the site provide a TWSI at the depressed curb, per requirements of the Integrated Accessibility Standards Regulation under the AODA.

        ii. Clearly define accessible parking stalls and ensure they meet AODA standards (include an access aisle next to the parking stall and a pedestrian curb ramp at the end of the access aisle, as required).

        iii. Please consider using the City's Accessibility Design Standards, which provide a summary of AODA requirements.

    d. Show all details of the roads abutting the site; include such items as pavement markings, signage, accesses, on-street parking, and/or sidewalks.

    e. Turning movement diagrams required for all accesses showing the largest vehicle to access/egress the site.

f. Turning movement diagrams required for internal movements (loading areas, garbage).

g. Show all curb radii measurements; ensure that all curb radii are reduced as much as possible and fall within TAC guidelines (Figure 8.5.1).

h. Show dimensions for site elements (i.e. lane/aisle widths, access width and throat length, parking stalls, sidewalks, pedestrian pathways, etc.)

i. Sidewalk is to be continuous across access as per City Specification 7.1.

j. Show slope of garage ramp on site plan. Note that underground ramps should be limited to a 12% grade and must contain a subsurface melting device when exceeding 6%. Ramp grades greater than 15% can be psychological barriers to some drivers. When the underground parking ramp's break over slope exceeds 8%, a vertical-curve transition or a transition slope of half the ramp slope should be used. Without this transition, bottoming out of vehicles may occur.

Feel free to contact Josiane Gervais, Transportation Project Manager, for follow-up questions.

Environment

Comments:

35. There are no natural heritage features, surface water features, or species at risk habitat on or near the site that would require further environmental review through an Environmental Impact Statement (EIS).

    An EIS is not required for this application.

36. The City's Bird Safe Design Guidelines apply to all residential buildings taller than four storeys. Of particular note is Guideline 2, requiring treatment of 90% of all glazing below 16m in height.

37. Additional tree plantings are always welcomed to help meet the City's Urban Forest Canopy Goals as well as to reduce the impacts of climate change and the urban heat island effect.

    Staff recognize that space on site is limited and encourage the applicant to consider alternative methods such as green roofs to help find space for plantings.

    Please note that the City prefers that all plantings be of native and non-invasive species.

Feel free to contact Mark Elliott, Environmental Planner, for follow-up questions.

Forestry

Comments:

38. It is recommended a Tree Conservation Report be provided to show the anticipated tree impacts based on the allowable building footprint. Any impact to boundary or adjacently owned trees would require written consent from the adjacent landowner before a tree removal permit would be issued. This would have a significant influence on the building design if consent were not granted.

39. Planning Forestry has concerns with the ability to fit trees within the proposed site design. To provide a livable space for future residents and contribute to the urban forest canopy, suitable soil volume must be provided. While a detailed landscape plan is not required, please provide the following:

    a. Dimensions of the soft landscaped area available

    b. Estimated soil volume, based on at least 1 m depth

    c. The number and size class of tree that could feasibly be planted (table for reference).

Tree Type/Size	Single Tree Soil Volume (m^3)	Multiple Tree Soil Volume (m^3/tree)
Ornamental	15	9
Columnar	15	9
Small	20	12
Medium	25	15
Large	30	18
Conifer	25	15

    These minimums do not apply where sensitive marine clay soils are present. Please refer to the "Tree Planting in Sensitive Marine Clay Soils - 2017 Guidelines Background: Existing" for soil volumes related to tree planting in the right of way*

40. The Official Plan states that early consideration of trees must be prioritized with planning and development applications (OP Section 4.8.2 policy 3(e)). Adequate space and soil volume for tree planting must be provided on site. Planning Forestry is looking for appropriate setbacks through the proposed zone to accommodate tree planting throughout the site. This must also take into consideration the presence of sensitive soils if relevant to this site. Please address any tree planting restrictions in the Geotechnical Investigation and account for this requirement when establishing setbacks for the building.

41. If an underground parking garage will be constructed, ensure it does not extend lot line to lot line as this will eliminate space for tree planting.

42. The OP directs developments to incorporate trees along street frontages (Section 4.1.3), throughout the development site (4.8.2) and regularly within and around surface parking lots (4.1.4).

Feel free to contact Hayley Murray, Planning Forester, for follow-up questions.

Parkland

Comments:

43. The potential for parkland conveyance was considered for the proposed redevelopment. According to the geoOttawa property report, the lot area is 3,956 m^2. A road widening will also be required for Carling Avenue, which will reduce the gross land area. The maximum parkland conveyance for the proposed development is less than the minimum 400 m^2 threshold for parkland conveyance as described in subsection 4.4.1.2 in the Official Plan.

44. Cash-in-lieu of parkland will be required as a condition of approval for the future site plan application in accordance with the *Planning Act* and Parkland Dedication By-law No. 2022-280.

45. The parkland dedication rate for cash-in-lieu of parkland dedication for the residential component of the redevelopment is 1 hectare per 1,000 net residential units up to a maximum of 10% of the gross land area. As per subsection 11(3) of Parkland Dedication By-law No. 2022-280, no conveyance of land or payment of cash-in-lieu is required for a change of use from a commercial use to another commercial use. As the existing land use is commercial, the proposed commercial component of the redevelopment is exempt from cash-in-lieu of parkland dedication.

46. The Parkland Dedication By-law No. 2022-280 has been appealed to the Ontario Land Tribunal. As part of the resolution process, it is anticipated that City Council will pass a new Parkland Dedication By-law in 2025. Provisions in the new By-law will differ from the current By-law. The cash-in-lieu of parkland dedication requirement for the proposed redevelopment will be determined in accordance with the By-law that is in force at the time of the review and evaluation of the future site plan application and the preparation of the site plan agreement.

Feel free to contact Burl Walker, Parks Planner, for follow-up questions.

Other

47. Under the Affordable Housing Community Improvement Plan, a Tax Increment Equivalent Grant (TIEG) program was created to incentivize the development of affordable rental units. It provides a yearly fixed grant for 20 years. The grant helps offset the revenue loss housing providers experience when incorporating affordable units in their developments.

a. To be eligible for the TIEG program you must meet the following criteria:

   i. the greater of five units OR 15 per cent of the total number of units within the development must be made affordable

   ii. provide a minimum of 15 per cent of each unit type in the development as affordable

   iii. enter into an agreement with the city to ensure the units maintain affordable for a minimum period of 20 years at or below the city-wide average market rent for the entire housing stock based on building form and unit type, as defined by the Canada Mortgage and Housing Corporation

   iv. must apply after a formal Site Plan Control submission, or Building Permit submission for projects not requiring Site Plan Control, and prior to Occupancy Permit issuance

b. Please refer to the TIEG information *at Affordable housing community improvement plan / Plan d'améliorations communautaires pour le logement abordable for more details or contact the TIEG coordinator via email at affordablehousingcip@ottawa.ca.*

Submission Requirements and Fees

1. A Major Zoning By-law Amendment application is required.
   a. Additional information regarding fees related to planning applications can be found here.
2. The attached **Study and Plan Identification List** outlines the information and material that has been identified as either required (R) or advised (A) as part of a future complete application submission.
   a. The required plans and studies must meet the City's Terms of Reference (ToR) and/or Guidelines, as available on Ottawa.ca. These ToR and Guidelines outline the specific requirements that must be met for each plan or study to be deemed adequate.
3. All of the above comments or issues should be addressed to ensure the effectiveness of the application submission review.

Should there be any questions, please do not hesitate to contact myself or the contact identified for the above areas / disciplines.

Yours Truly,
Wendy Tse

Encl. List Applicable Information

c.c. Siobhan Kelly, Planner, DR South
Tess Peterman, Planner, DR South,
Christopher Moise, Urban Design
Tyler Cassidy, Infrastructure Project Manager
Josiane Gervais, Transportation Project Manager
Mark Elliott, Enviornmental Planner
Hayley Murray, Planning Forester
Burl Walker, Parks Planner

APPENDIX B

Preliminary Sanitary Sewage Calculations

NOVATECH
Engineers, Planners & Landscape Architects

1296 - 1300 CARLING AVE - 28-Storey Tower and Podium
POST-DEVELOPMENT SANITARY FLOWS

Residential Flows	**Post-Development**	
Number of Studio / 1-Bedroom Units	239	
Persons per Studio / 1-Bedroom Unit	1.4	
Number of 2-Bedroom Units	62	
Persons per 2-Bedroom Unit	2.1	
Number of 3-Bedroom Units	26	
Persons per 3-Bedroom Unit	3.1	
Total Number of Units	327	
Design Population	546	
Average Daily Flow (280 L/c/day)	1.77	L/s
Peak Factor (Harmon Formula)	3.36	
Peak Residential Flow	**5.95**	**L/s**
Commercial Flows		
Ground Floor Area	287	m^2
Average Commercial Sewage Flow	2.8	$L/m^2/day$
Peaking Factor	1.5	
Peak Commercial Flows	**0.01**	**L/s**
Extraneous Flow		
Site Area	0.381	ha
Infiltration Allowance	0.33	L/s/ha
Peak Extraneous Flow	**0.13**	**L/s**
Total Peak Sanitary Flow	**6.09**	**L/s**

APPENDIX C

Preliminary Water Demands, FUS Calculations, Watermain Boundary Conditions and E-mail Correspondence from the City of Ottawa

1296 - 1300 CARLING AVE - 28-Storey Tower and Podium
POST-DEVELOPMENT WATER DEMANDS

DOMESTIC WATER DEMAND

Residential Water Demands	Post-Development	
Number of Studio / 1-Bedroom Units	239	
Persons per Studio / 1-Bedroom Unit	1.4	
Number of 2-Bedroom Units	62	
Persons per 2-Bedroom Unit	2.1	
Number of 3-Bedroom Units	26	
Persons per 3-Bedroom Unit	3.1	
Total Number of Units	327	
Design Population	546	
Average Day Demand (280 L/c/day)	**1.77**	**L/s**
Maximum Day Demand (2.5 x avg. day)	**4.42**	**L/s**
Peak Hour Demand (2.2 x max. day)	**9.73**	**L/s**
Commercial Water Demands		
Ground Floor Area	287	m^2
Average Commercial Daily Demand	2.8	$L/m^2/day$
Average Day Demand	**0.01**	**L/s**
Maximum Day Demand (1.5 x avg. day)	**0.02**	**L/s**
Peak Hour Demand (1.8 x max. day)	**0.03**	**L/s**
TOTALS		
Average Day Demand	**1.78**	**L/s**
Maximum Day Demand	**4.44**	**L/s**
Peak Hour Demand	**9.76**	**L/s**

BOUNDAY CONDITIONS (Values provided by the City of Ottawa)

Minimum HGL =	125.0	m
Maximum HGL =	132.0	m
Max Day + Fire Flow (183 L/s) =	119.7	m

PRESSURE TESTS

Average Ground Elevation (Carling) 73.95 m

Low Pressure Test = (Min. HGL - Watermain Elevation) x 1.42197 PSI/m > 40 PSI

76.0 PSI

High Pressure Test = (Max HGL - Watermain Elevation) x 1.42197 PSI/m < 80 PSI

86.0 PSI

Max Day + Fire Flow Test = (Max Day + Fire Flow - Watermain Elevation) x 1.42197 PSI/m > 20 PSI

Max Day + Fire Flow Pressure = **68.5** PSI

FUS - Fire Flow Calculations

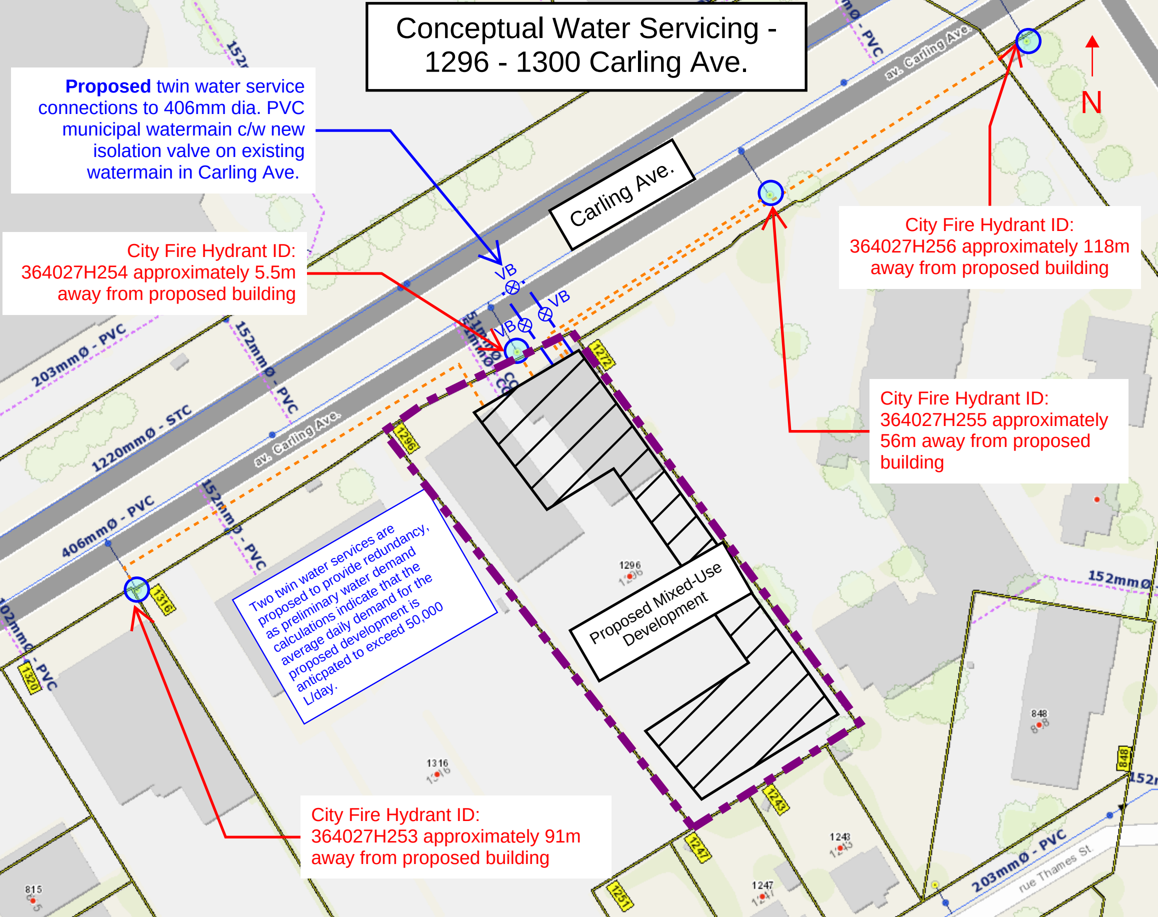
Engineers, Planners & Landscape Architects

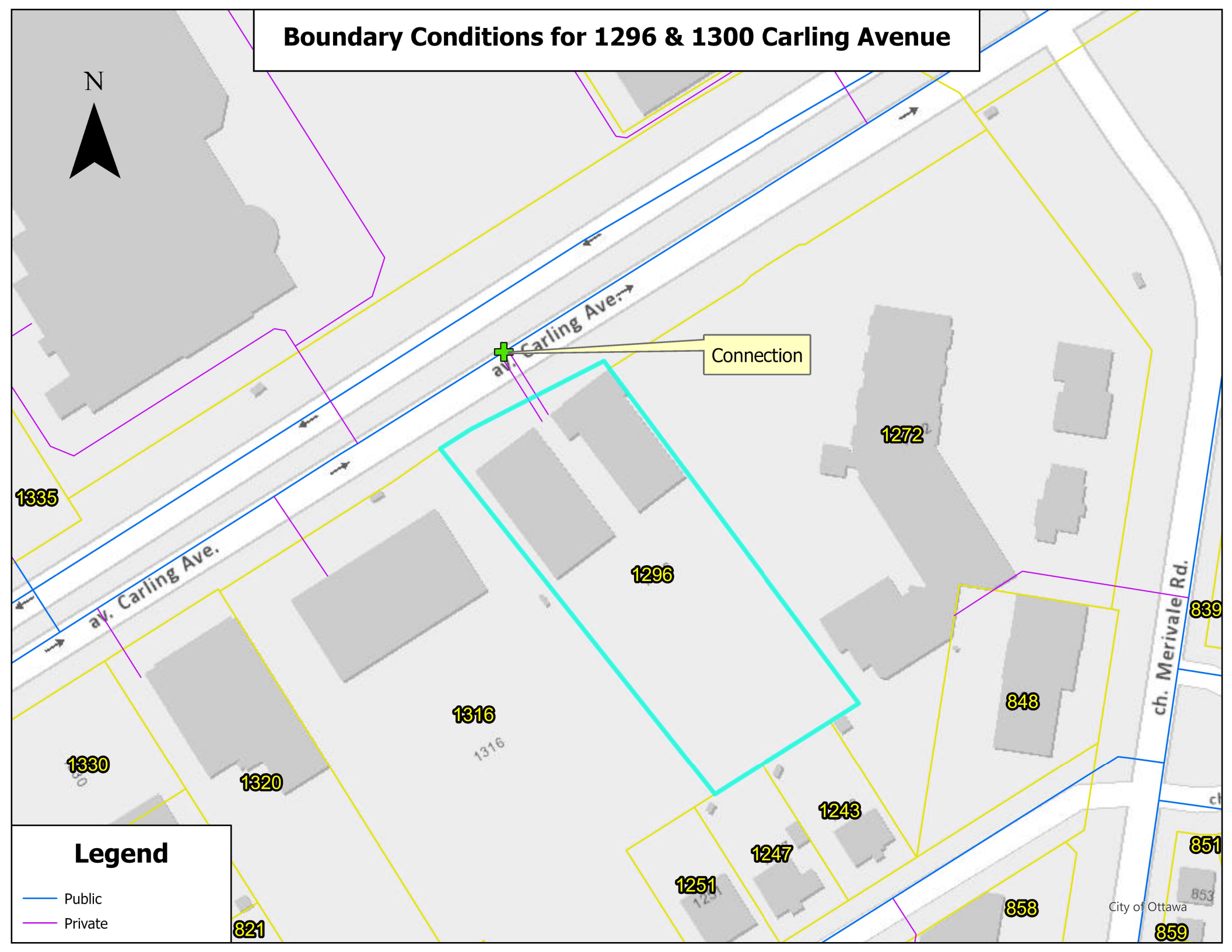
Novatech Project #: 124206
Project Name: 1296 - 1300 Carling
Date: 8/15/2025
Input By: B. Nichols
Reviewed By: F. Thauvette
Drawing Reference:

Legend: Input by User / No Input Required
Reference: Fire Underwriter's Survey Guideline (2020) Formula Method

Building Description: 28-Storey Building with varying height podiums
Type II - Non-combustible construction

Step			Choose		Value Used	Total Fire Flow (L/min)
Base Fire Flow						
1	**Construction Material**			**Multiplier**		
	Coefficient related to type of construction C	Type V - Wood frame		1.5	0.8	
		Type IV - Mass Timber		Varies		
		Type III - Ordinary construction		1		
		Type II - Non-combustible construction	Yes	0.8		
		Type I - Fire resistive construction (2 hrs)		0.6		
2	**Floor Area**					
	A	Podium Level Footprint (m^2)	2242			
		Total Floors/Storeys (Podium)	8			
		Tower Footprint (m^2)	938			
		Total Floors/Storeys (Tower)	20			
		Protected Openings (1 hr)				
		A, Total Effective Floor Area (m^2)			**12,148**	
	F	**Base fire flow without reductions**				**19,000**
		$F = 220\ C\ (A)^{0.5}$				
Reductions or Surcharges						
3	**Occupancy hazard reduction or surcharge**		**FUS Table 3**	**Reduction/Surcharge**		
	(1)	Non-combustible		-25%	-15%	**16,150**
		Limited combustible	Yes	-15%		
		Combustible		0%		
		Free burning		15%		
		Rapid burning		25%		
4	**Sprinkler Reduction**		**FUS Table 4**	**Reduction**		
	(2)	Adequately Designed System (NFPA 13)	Yes	-30%	-30%	**-8,075**
		Standard Water Supply	Yes	-10%	-10%	
		Fully Supervised System	Yes	-10%	-10%	
				Cumulative Sub-Total	**-50%**	
		Area of Sprinklered Coverage (m^2)	36696	100%		
				Cumulative Total	**-50%**	
5	**Exposure Surcharge per**		**FUS Table 6**		**Surcharge**	
	(3)	North Side	>30m		0%	**3,230**
		East Side	3.1 - 10 m		11%	
		South Side	20.1 - 30 m		4%	
		West Side	20.1 - 30 m		5%	
				Cumulative Total	**20%**	
Results						
6	**(1) + (2) + (3)**	**Total Required Fire Flow, rounded to nearest 1000L/min**			**L/min**	**11,000**
		(2,000 L/min < Fire Flow < 45,000 L/min)		or	L/s	**183**
				or	USGPM	2,906


Conceptual Water Servicing - 1296 - 1300 Carling Ave.
Proposed twin water service connections to 406mm dia. PVC municipal watermain c/w new isolation valve on existing watermain in Carling Ave.
City Fire Hydrant ID: 364027H254 approximately 5.5m away from proposed building
Carling Ave.
City Fire Hydrant ID: 364027H256 approximately 118m away from proposed building
City Fire Hydrant ID: 364027H255 approximately 56m away from proposed building
Two twin water services are proposed to provide redundancy, as preliminary water demand calculations indicate that the average daily demand for the proposed development is anticpated to exceed 50,000 L/day.
Proposed Mixed-Use Development
City Fire Hydrant ID: 364027H253 approximately 91m away from proposed building
N
VB
VB
VB
203mmØ - PVC
1220mmØ - STC
406mmØ - PVC
152mmØ - PVC
152mmØ - PVC
av. Carling Ave.
av. Carling Ave.
203mmØ - PVC
rue Thames St.
1296
1316
1320
1272
1243
1247
1251
848
815


Boundary Conditions for 1296 & 1300 Carling Avenue
N
av. Carling Ave.
av. Carling Ave.
Connection
1335
1296
1272
1316
1316
1330
1320
1243
1247
1251
848
839
851
858
859
821
ch. Merivale Rd.
Legend
Public
Private
City of Ottawa

Kynan Dsa

From: Cassidy, Tyler <tyler.cassidy@ottawa.ca>
Sent: Tuesday, October 21, 2025 3:17 PM
To: Francois Thauvette
Cc: Kynan Dsa; Baird, Natasha
Subject: RE: 1296 & 1300 Carling Avenue - WM Boundary Conditions Request (124206)
Attachments: 1296 & 1300 Carling Ave October 2025.pdf

Hi François,

Please find the boundary conditions below for the development at 1296/1300 Carling Avenue.

The following are boundary conditions, HGL, for hydraulic analysis at 1296 & 1300 Carling Avenue (zone 2W2C) assumed to be dually connected via the 406 mm watermain on Carling Avenue. (see attached PDF for location).

Minimum HGL = 125.0 m
Maximum HGL = 132.0 m
Max Day + Fire Flow (183 L/s) = 119.7 m

These are for current conditions and are based on computer model simulation.

Disclaimer: The boundary condition information is based on current operation of the city water distribution system. The computer model simulation is based on the best information available at the time. The operation of the water distribution system can change on a regular basis, resulting in a variation in boundary conditions. The physical properties of watermains deteriorate over time, as such must be assumed in the absence of actual field test data. The variation in physical watermain properties can therefore alter the results of the computer model simulation.

Thank you,

Tyler Cassidy, P.Eng
Infrastructure Project Manager,
Planning, Development and Building Services department (PDBS)/ Direction générale des services de la planification, de l'aménagement et du bâtiment (DGSPAB) - South Branch
City of Ottawa | Ville d'Ottawa
110 Laurier Avenue West Ottawa, ON | 110, avenue. Laurier Ouest. Ottawa (Ontario) K1P 1J1
613.580.2424 ext./poste 12977, Tyler.Cassidy@ottawa.ca

From: Baird, Natasha <Natasha.Baird@ottawa.ca>
Sent: October 07, 2025 11:59 AM
To: Francois Thauvette <f.thauvette@novatech-eng.com>
Cc: Kynan Dsa <k.dsa@novatech-eng.com>; Cassidy, Tyler <tyler.cassidy@ottawa.ca>
Subject: RE: 1296 & 1300 Carling Avenue - WM Boundary Conditions Request (124206)

Hi François,

Yes, I will circulate.

Thanks, Natasha

Classified as City of Ottawa - Internal / Ville d'Ottawa - classé interne

From: Francois Thauvette <f.thauvette@novatech-eng.com>
Sent: Tuesday, October 7, 2025 11:15 AM
To: Baird, Natasha <Natasha.Baird@ottawa.ca>
Cc: Kynan Dsa <k.dsa@novatech-eng.com>; Cassidy, Tyler <tyler.cassidy@ottawa.ca>
Subject: RE: 1296 & 1300 Carling Avenue - WM Boundary Conditions Request (124206)

Hi Natasha,

I received an automatic out-of-office e-mail from Tyler. Apparently, he is off until October 14, 2025. To avoid delays, would you be able to forward our municipal watermain boundary condition request to the City's Water Modelling Department while he is away? Please refer to the e-mail below and attachments for further details.

Regards,

François Thauvette, P. Eng., Sr. Project Manager | Land Development & Public-Sector Engineering
NOVATECH
Engineers, Planners & Landscape Architects
240 Michael Cowpland Drive, Suite 200, Ottawa, ON, K2M 1P6 | T: 613.254.9643 Ext: 219 | C: 613.276.0310

From: Francois Thauvette
Sent: Tuesday, October 7, 2025 11:05 AM
To: 'tyler.cassidy@ottawa.ca' <tyler.cassidy@ottawa.ca>
Cc: Kynan Dsa <k.dsa@novatech-eng.com>
Subject: FW: 1296 & 1300 Carling Avenue - WM Boundary Conditions Request (124206)

Hi Tyler,

We are sending this e-mail to request municipal watermain boundary conditions for the proposed re-development of the 1296 & 1300 Carling Avenue property. Please refer to the e-mail below and attachments for further details.

Regards,

François Thauvette, P. Eng., Sr. Project Manager | Land Development & Public-Sector Engineering
NOVATECH
Engineers, Planners & Landscape Architects
240 Michael Cowpland Drive, Suite 200, Ottawa, ON, K2M 1P6 | T: 613.254.9643 Ext: 219 | C: 613.276.0310

From: Brendan Nichols <b.nichols@novatech-eng.com>
Sent: Monday, October 6, 2025 3:51 PM
To: Francois Thauvette <f.thauvette@novatech-eng.com>
Subject: 1296 - 1300 Carling Avenue - WM Boundary Conditions Request

Hi François,

The proposed development of 1296 – 1300 Carling Avenue will seek to demolish the two (2) existing buildings and merge the properties. The development to be constructed will be a mixed-use property, with commercial units at grade, and residential units above. The building shall be a 28-storey tower fronting Carling Avenue and an 8-storey tower at the back, which will be connected by a 2-storey podium. Parking will mainly be provided within an underground parking structure, with a few at-grade visitor spots.

The purpose of this email is to request watermain boundary conditions for the existing 406mm dia. PVC watermain in Carling Avenue, (as shown on geoOttawa). We anticipate requiring two (2) water service connections as the average daily demand for the proposed development is anticipated to exceed 50,000 L/day. The anticipated water demands of the proposed development are as follows:

- Average Day Demand = **1.57 L/s**
- Maximum Day Demand = **3.92 L/s**
- Peak Hour Demand = **8.62 L/s**
- Maximum Fire Flow Demand Range = **183 L/s**

Refer to the attached **Water Demand** and **FUS Fire Flow** calculation sheets for details.

The service connection proposes a twin connection to the existing 406mm dia. PVC watermain in Carling Avenue, complete with an isolation valve installed at the watermain between the two connections. See attached file **WM Boundary Condition Request Sketch** for details.

A multi-hydrant approach to firefighting is required. As indicated on the geoOttawa website, there are two (2) blue bonnet municipal hydrants within a 75m radius of the subject site, as well as two (2) available additional blue bonnet municipal hydrants within 150m radius of the subject site. See attached file **WM Boundary Conditions Request Sketch** for details.
Please review and let us know if you require any additional information.

Thank you,

Brendan Nichols, CAD Technologist
NOVATECH
Engineers, Planners & Landscape Architects
240 Michael Cowpland Drive, Suite 200, Ottawa, ON, K2M 1P6
Tel: 613.254.9643

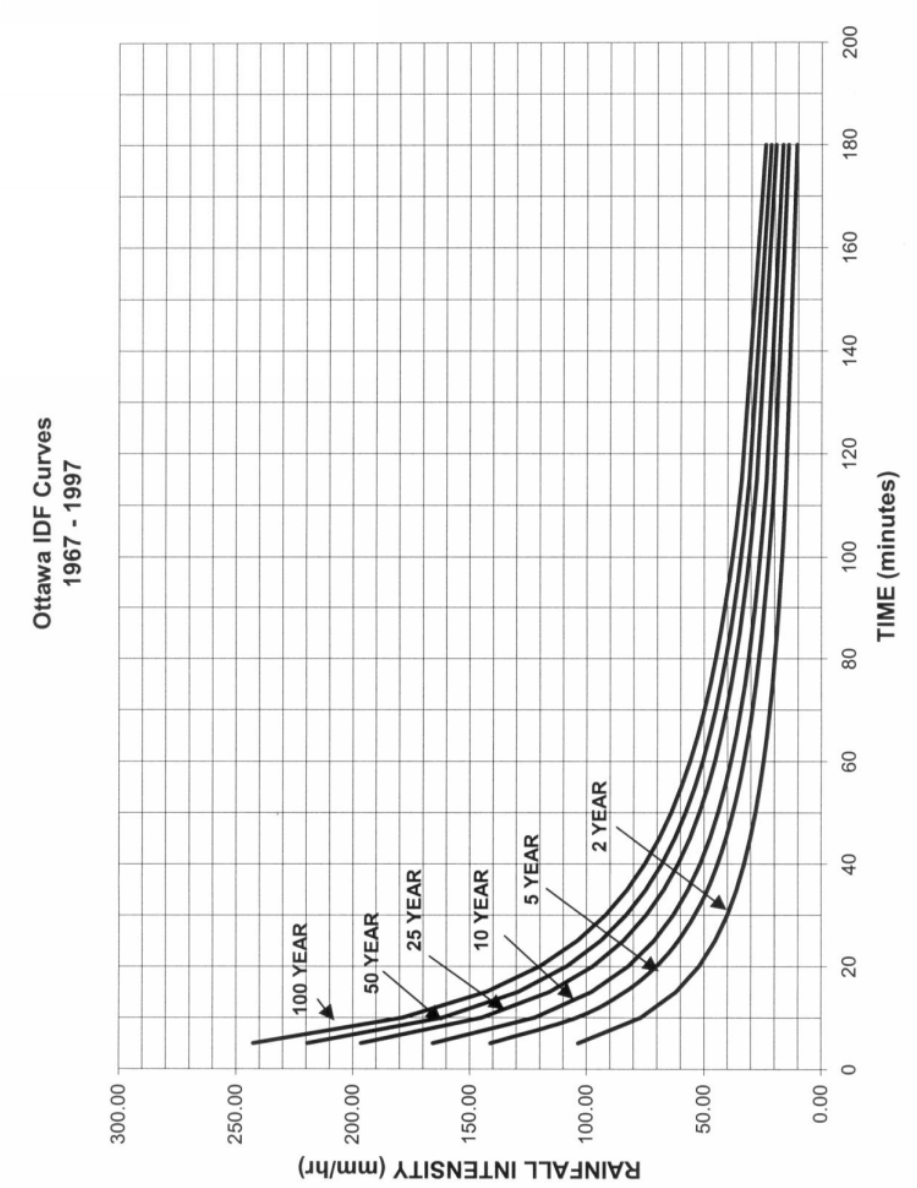
'

'

APPENDIX D

IDF Curves and Preliminary SWM Calculations

APPENDIX 5-A OTTAWA INTENSITY DURATION FREQUENCY (IDF) CURVE



Proposed Mixed-Use Development
1296 - 1300 Carling Avenue

Pre - Development Site Flows

Description	Area (ha)	$A_{impervious}$ (ha) C=0.9	A_{gravel} (ha) C=0.6	$A_{pervious}$ (ha) C=0.2	Weighted C_{w5}	Weighted C_{w100}	2-Year Flow (L/s)	5-Year Flow (L/s)	100-Year Flow (L/s)	Allowable C_w=0.5 Max	Allowable Flow 2-year (L/s)
Site to be Developed	0.381	0.373	0.000	0.008	0.89	0.99	72.0	97.7	186.2	0.50	40.6

T_c = 10mins

Post - Development Site Flows

Area	Description	Area (ha)	A_{imp} (ha) C=0.9	A_{gravel} (ha) C=0.6	A_{perv} (ha) C=0.2	C_5	C_{100}	Uncontrolled Flow (L/s)			Controlled Flow (L/s)			Storage Required (m^3)		
								2-year	5-year	100-year	2-year	5-year	100-year	2-year	5-year	100-year
A-1	Direct Runoff	0.015	0.012	0.000	0.003	0.76	0.85	2.5	3.4	6.5	-	-	-	-	-	-
A-2	Controlled Site Flow (Pumped)	0.366	0.339	0.000	0.027	0.85	0.95	-	-	-	33.0	33.0	33.0	20.0	35.3	100.4
							Total Site Flows :	35.5	36.4	39.5						
						T_c = 10mins	Overcontrolled=	5.2	4.3	1.2						

Proposed Mixed-Use Development
Novatech Project No. 124206
REQUIRED STORAGE - 1:2 YEAR EVENT
AREA A-1 Direct Runoff

OTTAWA IDF CURVE

Area =	0.015	ha	Qallow =	2.5	L/s
C =	0.76		Vol(max) =	0.0	m^3

Time (min)	Intensity (mm/hr)	Q (L/s)	Qnet (L/s)	Vol (m^3)
5	103.57	3.36	0.87	0.26
10	76.81	2.49	0.00	0.00
15	61.77	2.00	-0.49	-0.44
20	52.03	1.69	-0.80	-0.96
25	45.17	1.46	-1.03	-1.54
30	40.04	1.30	-1.19	-2.14
35	36.06	1.17	-1.32	-2.77
40	32.86	1.07	-1.42	-3.42
45	30.24	0.98	-1.51	-4.08
50	28.04	0.91	-1.58	-4.74
55	26.17	0.85	-1.64	-5.42
60	24.56	0.80	-1.69	-6.10
65	23.15	0.75	-1.74	-6.78
70	21.91	0.71	-1.78	-7.47
75	20.81	0.67	-1.81	-8.17
80	19.83	0.64	-1.85	-8.86
85	18.94	0.61	-1.88	-9.56
90	18.14	0.59	-1.90	-10.27

Proposed Mixed-Use Development
Novatech Project No. 124206
REQUIRED STORAGE - 1:5 YEAR EVENT
AREA A-1 Direct Runoff

OTTAWA IDF CURVE

Area =	0.015	ha	Qallow =	3.4	L/s
C =	0.76		Vol(max) =	0.0	m^3

Time (min)	Intensity (mm/hr)	Q (L/s)	Qnet (L/s)	Vol (m^3)
5	141.18	4.58	2.09	0.63
10	104.19	3.38	0.89	0.53
15	83.56	2.71	0.22	0.20
20	70.25	2.28	-0.21	-0.25
25	60.90	1.97	-0.52	-0.77
30	53.93	1.75	-0.74	-1.33
35	48.52	1.57	-0.92	-1.93
40	44.18	1.43	-1.06	-2.54
45	40.63	1.32	-1.17	-3.17
50	37.65	1.22	-1.27	-3.81
55	35.12	1.14	-1.35	-4.46
60	32.94	1.07	-1.42	-5.12
65	31.04	1.01	-1.48	-5.78
70	29.37	0.95	-1.54	-6.46
75	27.89	0.90	-1.59	-7.13
80	26.56	0.86	-1.63	-7.82
85	25.37	0.82	-1.67	-8.50
90	24.29	0.79	-1.70	-9.19

Proposed Mixed-Use Development
Novatech Project No. 124206
REQUIRED STORAGE - 1:100 YEAR EVENT
AREA A-1 Direct Runoff

OTTAWA IDF CURVE

Area =	0.015	ha	Qallow =	6.5	L/s
C =	0.85		Vol(max) =	0.0	m^3

Time (min)	Intensity (mm/hr)	Q (L/s)	Qnet (L/s)	Vol (m^3)
5	242.70	8.80	2.33	0.70
10	178.56	6.47	0.00	0.00
15	142.89	5.18	-1.29	-1.16
20	119.95	4.35	-2.13	-2.55
25	103.85	3.77	-2.71	-4.06
30	91.87	3.33	-3.14	-5.66
35	82.58	2.99	-3.48	-7.31
40	75.15	2.72	-3.75	-9.00
45	69.05	2.50	-3.97	-10.72
50	63.95	2.32	-4.16	-12.47
55	59.62	2.16	-4.31	-14.23
60	55.89	2.03	-4.45	-16.01
65	52.65	1.91	-4.57	-17.80
70	49.79	1.81	-4.67	-19.61
75	47.26	1.71	-4.76	-21.42
80	44.99	1.63	-4.84	-23.25
85	42.95	1.56	-4.92	-25.08
90	41.11	1.49	-4.98	-26.91

Proposed Mixed-Use Development
Novatech Project No. 124206
REQUIRED STORAGE - 1:100 YR + 20% IDF Increase
AREA A-1 Direct Runoff

OTTAWA IDF CURVE

Area =	0.015	ha	Qallow =	7.8	L/s
C =	0.85		Vol(max) =	0.0	m^3

Time (min)	Intensity (mm/hr)	Q (L/s)	Qnet (L/s)	Vol (m^3)
5	291.24	10.56	4.09	1.23
10	214.27	7.77	1.29	0.78
15	171.47	6.22	-0.26	-0.23
20	143.94	5.22	-1.26	-1.51
25	124.62	4.52	-1.96	-2.93
30	110.24	4.00	-2.48	-4.46
35	99.09	3.59	-2.88	-6.05
40	90.17	3.27	-3.20	-7.69
45	82.86	3.00	-3.47	-9.37
50	76.74	2.78	-3.69	-11.07
55	71.55	2.59	-3.88	-12.80
60	67.07	2.43	-4.04	-14.55
65	63.18	2.29	-4.18	-16.32
70	59.75	2.17	-4.31	-18.09
75	56.71	2.06	-4.42	-19.88
80	53.99	1.96	-4.52	-21.68
85	51.54	1.87	-4.61	-23.49
90	49.33	1.79	-4.69	-25.30

Proposed Mixed-Use Development
Novatech Project No. 124206
REQUIRED STORAGE - 1:2 YEAR EVENT
AREA A-2 Controlled Site Flow (Pumped)

OTTAWA IDF CURVE

Area =	0.366	ha	Qallow =	33.0	L/s
C =	0.85		Vol(max) =	20.0	m^3

Time (min)	Intensity (mm/hr)	Q (L/s)	Qnet (L/s)	Vol (m^3)
5	103.57	89.49	56.49	16.95
10	76.81	66.36	33.36	20.02
15	61.77	53.37	20.37	18.33
20	52.03	44.96	11.96	14.35
25	45.17	39.03	6.03	9.04
30	40.04	34.60	1.60	2.88
35	36.06	31.16	-1.84	-3.87
40	32.86	28.40	-4.60	-11.05
45	30.24	26.13	-6.87	-18.55
50	28.04	24.23	-8.77	-26.31
55	26.17	22.61	-10.39	-34.28
60	24.56	21.22	-11.78	-42.41
65	23.15	20.00	-13.00	-50.68
70	21.91	18.93	-14.07	-59.08
75	20.81	17.98	-15.02	-67.57
80	19.83	17.13	-15.87	-76.16
85	18.94	16.37	-16.63	-84.82
90	18.14	15.68	-17.32	-93.55

Proposed Mixed-Use Development
Novatech Project No. 124206
REQUIRED STORAGE - 1:5 YEAR EVENT
AREA A-2 Controlled Site Flow (Pumped)

OTTAWA IDF CURVE

Area =	0.366	ha	Qallow =	33.0	L/s
C =	0.85		Vol(max) =	35.3	m^3

Time (min)	Intensity (mm/hr)	Q (L/s)	Qnet (L/s)	Vol (m^3)
5	141.18	121.99	88.99	26.70
10	104.19	90.03	57.03	34.22
15	83.56	72.20	39.20	35.28
20	70.25	60.70	27.70	33.24
25	60.90	52.62	19.62	29.43
30	53.93	46.60	13.60	24.47
35	48.52	41.92	8.92	18.74
40	44.18	38.18	5.18	12.43
45	40.63	35.11	2.11	5.69
50	37.65	32.53	-0.47	-1.40
55	35.12	30.35	-2.65	-8.75
60	32.94	28.47	-4.53	-16.32
65	31.04	26.82	-6.18	-24.09
70	29.37	25.38	-7.62	-32.01
75	27.89	24.10	-8.90	-40.06
80	26.56	22.95	-10.05	-48.23
85	25.37	21.92	-11.08	-56.51
90	24.29	20.99	-12.01	-64.87

Proposed Mixed-Use Development
Novatech Project No. 124206
REQUIRED STORAGE - 1:100 YEAR EVENT
AREA A-2 Controlled Site Flow (Pumped)

OTTAWA IDF CURVE

Area =	0.366	ha	Qallow =	33.0	L/s
C =	0.95		Vol(max) =	100.4	m^3

Time (min)	Intensity (mm/hr)	Q (L/s)	Qnet (L/s)	Vol (m^3)
5	242.70	233.51	200.51	60.15
10	178.56	171.80	138.80	83.28
15	142.89	137.48	104.48	94.03
20	119.95	115.41	82.41	98.89
25	103.85	99.91	66.91	100.37
30	91.87	88.39	55.39	99.70
35	82.58	79.45	46.45	97.55
40	75.15	72.30	39.30	94.32
45	69.05	66.44	33.44	90.27
50	63.95	61.53	28.53	85.60
55	59.62	57.37	24.37	80.41
60	55.89	53.78	20.78	74.80
65	52.65	50.65	17.65	68.84
70	49.79	47.90	14.90	62.60
75	47.26	45.47	12.47	56.10
80	44.99	43.29	10.29	49.38
85	42.95	41.33	8.33	42.47
90	41.11	39.55	6.55	35.39

Proposed Mixed-Use Development
Novatech Project No. 124206
REQUIRED STORAGE - 1:100 YR + 20% IDF Increase
AREA A-2 Controlled Site Flow (Pumped)

OTTAWA IDF CURVE

Area =	0.366	ha	Qallow =	33.0	L/s
C =	0.95		Vol(max) =	131.5	m^3

Time (min)	Intensity (mm/hr)	Q (L/s)	Qnet (L/s)	Vol (m^3)
5	291.24	280.21	247.21	74.16
10	214.27	206.16	173.16	103.89
15	171.47	164.98	131.98	118.78
20	143.94	138.49	105.49	126.59
25	124.62	119.90	86.90	130.35
30	110.24	106.07	73.07	131.52
35	99.09	95.34	62.34	130.92
40	90.17	86.76	53.76	129.02
45	82.86	79.72	46.72	126.15
50	76.74	73.84	40.84	122.51
55	71.55	68.84	35.84	118.27
60	67.07	64.53	31.53	113.52
65	63.18	60.78	27.78	108.35
70	59.75	57.48	24.48	102.84
75	56.71	54.56	21.56	97.01
80	53.99	51.94	18.94	90.93
85	51.54	49.59	16.59	84.62
90	49.33	47.46	14.46	78.11