SERVICING & STORMWATER MANAGEMENT REPORT APARTMENT BUILDING – 1815 MONTREAL ROAD

Rendering by Roderick Lahey Architects Inc.

Project No.: CCO-25-3253

City File No.:

Prepared for:

14193679 Canada Inc.
1815 Montreal Developments LP
1606 Proulx Drive,
Ottawa, ON K4A 1T5

Prepared by:

Egis Canada
115 Walgreen Road
Carp, ON K0A 1L0

December 09, 2024

egis

Table of Content

Appendices

1.0 PROJECT DESCRIPTION

1.1 Purpose

Egis Canada (Egis) has been retained by 14193679 Canada Inc. to prepare this Servicing and Stormwater Management Report in support of the zoning bylaw amendment process for the proposed development located at 1815 Montreal Road within the City of Ottawa.

The main purpose of this report is to present a servicing design for the development in accordance with the recommendations and guidelines provided by the City of Ottawa (City), the Rideau Valley Conservation Authority (RVCA), and the Ministry of the Environment, Conservation and Parks (MECP). This report will address the water, sanitary, and storm sewer servicing for the development, ensuring that existing and proposed services will adequately service the development.

This report should be read in conjunction with the following drawings:

- CCO-25-3253, PRE – Pre-Development Drainage Area Plan (Appendix 'E'), and
- CCO-25-3253, POST – Post-Development Drainage Area Plan (Appendix 'F').

1.2 Site Description

Figure 1: Site Map

The property is located at 1815 Montreal Road within the City of Ottawa. It is described as Lot 141, Registered plan 652, City of Ottawa. The land in question covers approximately 0.44 ha and is located along Montreal Road between Beckenham Lane and Elmsmere Road.

1.3 Proposed Development and Statistics

The proposed development consists of a new 21-storey residential building complete with three levels of underground parking and 191 units. Drive aisles will be provided throughout the site along with landscaping around the perimeter of the development area. The development will be accessed via the proposed site entrance from Montreal Road.

1.4 Existing Conditions and Infrastructure

The existing site is currently developed containing a 1-storey single family home and detached garage. The existing building is assumed to be serviced via a water service connection to the existing municipal watermain within Montreal Road, and a septic tank for sanitary servicing.

Sewer and watermain mapping collected from the City of Ottawa indicate that the following services exist across the property frontages within the adjacent municipal rights-of-way(s):

- Montreal Road
  - 305 mm diameter DI watermain, and a
  - 250 mm diameter PVC storm sewer, tributary to Green's Creek approximately 2.0 km downstream.
- Servicing Easement – 41 Cedar Road
  - 200 mm diameter private PVC sanitary sewer, connected to the existing 250 mm diameter sanitary sewer within Rothwell Drive
- Rothwell Drive
  - 250 mm diameter PVC sanitary sewer, tributary to the Interceptor Outfall Sewer
  - Municipal ditch and 450mm diameter PVC storm sewer, tributary to Green's Creek approximately 2.7 km downstream.

1.5 Approvals

The proposed development is subject to the City of Ottawa site plan control approval process, subsequent the zoning bylaw amendment process. Site plan control requires the City to review, provided concurrence and approve the engineering design package. Permits to construct can be requested once the City has issued a site plan agreement.

An Environmental Compliance Approval (ECA) through the Ministry of Environment, Conservation and Parks (MECP) is not anticipated to be required since the development does not outlet to a combined sewershed and does not propose industrial usage. The requirement for an Environmental Compliance Approval will be confirmed during the site plan Control application.

2.0 BACKGROUND STUDIES, STANDARDS, AND REFERENCES

2.1 Background Reports / Reference Information

As-built drawings of existing services, provided by the City of Ottawa information centre, within the vicinity of the proposed site were reviewed to identify the infrastructure available to service the proposed development.

A topographic survey (22-10-111-00) of the site was completed by J.D. Barnes Limited and dated November 13th, 2024.

The Site Plan was prepared by Roderick Lahey Architect Inc. and dated December 6th, 2024.

The following reports have previously been completed and are available under separate cover:

- Geotechnical Investigation, Proposed Multi-Storey Building, completed by Paterson Group, dated May 16, 2023

2.2 Applicable Guidelines and Standards

City of Ottawa:

- Ottawa Sewer Design Guidelines, City of Ottawa, SDG002, October 2012. (*Ottawa Sewer Guidelines*)
  - Technical Bulletin ISTB-2014-01 City of Ottawa, February 2014. *(ISTB-2014-01)*
  - Technical Bulletin PIEDTB-2016-01 City of Ottawa, September 2016. *(PIEDTB-2016-01)*
  - Technical Bulletin ISTB-2018-01 City of Ottawa, January 2018. *(ISTB-2018-01)*
  - Technical Bulletin ISTB-2018-04 City of Ottawa, March 2018. *(ISTB-2018-04)*
  - Technical Bulletin ISTB-2019-02 City of Ottawa, February 2019. *(ISTB-2019-02)*
  - Technical Bulletin IWSTB-2024-04 City of Ottawa, September 2024*(ISTB-2024-04)*
- Ottawa Design Guidelines – Water Distribution City of Ottawa, July 2010. (*Ottawa Water Guidelines*)
  - Technical Bulletin ISD-2010-2 City of Ottawa, December 15, 2010. *(ISD-2010-2)*
  - Technical Bulletin ISDTB-2014-02 City of Ottawa, May 2014. (ISDTB-2014-02)
  - Technical Bulletin ISTB-2018-02 City of Ottawa, March 2018. *(ISTB-2018-02)*
  - Technical Bulletin ISTB-2021-03 City of Ottawa, August 2021. *(ISTB-2021-03)*
  - Technical Bulletin IWSTB-2024-05 City of Ottawa, November 2024. *(IWSTB-2024-05)*
  -

Ministry of Environment, Conservation and Parks:

- Stormwater Planning and Design Manual, Ministry of the Environment, March 2003. *(MECP Stormwater Design Manual)*

- Design Guidelines for Sewage Works, Ministry of the Environment, 2008. (*MECP Sewer Design Guidelines*)

Other:

- Water Supply for Public Fire Protection, Fire Underwriters Survey, 2020. (*FUS Guidelines*)

3.0 PRE-CONSULTATION SUMMARY

A pre-consultation meeting was conducted on September 11th, 2024, regarding the proposed site. Specific design parameters to be incorporated within this design include the following:

- Control post-development peak flows to the pre-development levels for all storms up to and including the 100-year storm event.
- All drainage should be directed to the Rothwell Drive ditch rather than Montreal Road.
- Quality control to be provided up to an enhanced level of treatment (80% TSS Removal).

The notes from the City of Ottawa can be found in *Appendix B.*

4.0 WATER SERVICING

4.1 Existing Watermain

The site is located within the MONT pressure zone, as per the Water Distribution system mapping included in *Appendix C*. There are two existing fire hydrants on Montreal Road available to service the proposed development.

4.2 Proposed Water Servicing

It is proposed to service the new building with a dual 150 mm diameter water service connection to the 305 mm diameter watermain within Montreal Road. The two connections are proposed on opposite sides of a proposed valve to provide redundancy. The existing service connection to the existing building will be blanked at the main.

Table 1, below, summarizes the water supply design criteria obtained from the *Ottawa Design Guidelines – Water Distribution* and utilized for the water analysis.

Table 1: Water Supply Design Criteria and Water Demands

Site Area	0.44 ha
Residential	280 L/person/day
Maximum Daily Peaking Factor	3.2 x avg day
Maximum Hour Peaking Factor	4.8 x avg day
Average Day Demand (L/s)	1.38
Maximum Daily Demand (L/s)	4.27
Peak Hourly Demand (L/s)	6.44
FUS Fire Flow Requirement (L/s)	116.7 (7,000 L/min)
OBC Fire Flow Requirement (L/s)	150 (9,000 L/min)

The OBC and Fire Underwriters Survey 2020 (FUS) methods were utilized to estimate the required fire flow for the proposed development. Fire flow requirements were calculated per City of Ottawa Technical Bulletin IWSTB-2024-05.

FUS:

- Type of construction – Non-Combustible Construction
- Occupancy Type – Limited Combustible
- Sprinkler Protection – Fully Supervised Sprinkler System

OBC:

- Type of construction – Noncombustible with fire separations and fire resistance ratings provided in accordance with subsection 3.2.2.
- Occupancy Type: Group C
- Water Supply Coefficient (K): 10

The results of the FUS calculation yielded a required fire flow of *7,000 L/min* (116.67 L/s), and the results of the OBC calculation yielded a required fire flow of *9,000 L/min* (150.0 L/s). The detailed calculations for the FUS and OBC fire flow demands can be found in *Appendix C*.

The City provided the estimated water pressures during average day scenario, peak hour scenario, and the max day plus fire flow scenario for the demands indicated by the correspondence in *Appendix C*. The resulting pressure for the boundary condition results are shown in *Table 2*, below.

Table 2: Boundary Conditions Results

Scenario	Proposed Demands (L/s)	Connection HGL (m H_2O)*/kPa
Average Day Demand	1.38	47.7 / 467.4
Max Daily + Fire Flow Demand (FUS)	4.27 + 116.7 = 120.97	40.6 / 397.8
Max Daily + Fire Flow Demand (OBC)	4.27 + 150 = 154.27	36.9 / 361.5
Peak Hour Demand	6.44	47.2 / 462.5
**Adjusted for an estimated watermain elevation of 95.35 m at the connection point.*		

The normal operating pressure range is anticipated to be 462.5 kPa to 467.4 kPa and will not be less than 275 kPa (40 psi) or exceed 689 kPa (100 psi). The proposed watermain will meet the minimum required 20 psi (140 kPa) from the *Ottawa Water Guidelines* at the ground level under maximum day demand and fire flow conditions.

To confirm the adequacy of fire flow to protect the proposed development, public fire hydrants within 150 m of the proposed building were analyzed per City of Ottawa *ISTB 2018-02* Appendix I Table 1. Based on City guidelines (*ISTB-2018-02*), the existing hydrants can provide adequate fire protection to the proposed development. The results are summarized in *Table 3*, below.

Table 3: Fire Protection Confirmation

Building	Fire Flow Demand (L/min)	Fire Hydrant(s) within 75m (5,700 L/min)	Fire Hydrant(s) within 150m (3,800 L/min)	Combined Fire Flow (L/min)
1815 Montreal Road	7,000 L/min – FUS 9,000 L/min – OBC	1 public	1 public	9,500

A hydrant coverage figure can be found in *Appendix C*.

5.0 SANITARY SERVICING

5.1 Existing Sanitary Sewers

The existing dwelling is assumed to be serviced by an on-site septic system. There is no existing sanitary sewer within Montreal Road; however, there is an available 200 mm diameter sanitary sewer within the existing servicing easement located along the west side of the property within 41 Cedar Road.

5.2 Proposed Sanitary Servicing

A new 200 mm diameter gravity sanitary service will be extended from the existing private sanitary 200 mm diameter sanitary sewer within the adjacent servicing easement along the west property line. The existing private sanitary main conveys flow to the existing 250 mm diameter municipal sanitary main located within Rothwell Drive.

Table 4, below, summarizes the wastewater design criteria identified by the *Ottawa Sewer Design Guidelines*.

Table 4: Sanitary Design Criteria

Design Parameter	Value
Site Area	0.44 ha
Residential	280 L/person/day
Residential Peaking Factor	3.42
Institutional/Commercial Peaking Factor	1.0
Extraneous Flow Allowance	0.33 L/s/ha

Table 5, below, summarizes the estimated wastewater flow from the proposed development. Refer to *Appendix* D for detailed calculations.

Table 5: Summary of Estimated Sanitary Flow

Design Parameter	Total Flow (L/s)
Total Estimated Average Dry Weather Flow	1.41
Total Estimated Peak Dry Weather Flow	4.55
Total Estimated Peak Wet Weather Flow	4.67

As noted above, the development is proposed to be serviced via a proposed 200 mm sanitary service connection to the existing sanitary maintenance hole within the servicing easement west of the site.

The full flowing capacity of the existing private 200 mm diameter main at 3.17% slope is estimated to be *60.92* L/s. Based on the Novatech "Development Servicing and Stormwater Management Report" for the adjacent development at 1795 Montreal Road, the existing private sanitary main has a peak wet weather flow of *0.40 L/s*, which corresponds to an available capacity of approximately *60.52* L/s. Excerpts from the Novatech report can be found in *Appendix D*. Per *Table 5*, a peak wet weather flow of *4.67 L/s* will only occupy *7.7%* of the private sanitary sewer's capacity, therefore capacity constraints are not anticipated within the existing private sewer.

City staff were contacted on November 7th, 2024, to review proposed wastewater flows from the site and advise if there were any downstream constraints. City staff confirmed on November 13th, 2024, that there were no concerns with the municipal system based on a contemplated flow of 4.69 L/s. The proposed flow has since been decreased to 4.67 L/s; therefore, the municipal system has the capacity for the proposed flows. Correspondence with City Staff is included in *Appendix D*.

6.0 STORM SEWER SERVICING

6.1 Existing Storm Sewers

The subject project is generally sloped from south to north and from west to east. Stormwater runoff from the existing site currently flows overland towards the Rothwell Drive right of way and the neighbouring properties to the east. There is no known storm infrastructure within the existing development. There is an existing 250 mm diameter storm sewer located within Montreal Road that has limited capacity based on information provided by the City.

6.2 Proposed Storm Servicing

Surface drainage within the development footprint will be collected by area drains and trench drains. Surface drainage and roof drainage will be conveyed without restriction to an internal cistern located within the P2 level parking garage. Foundation drainage and controlled runoff from the internal cistern will be directed to a proposed storm service before discharging to a proposed grass swale. The grass swale will direct runoff to the existing Rothwell Drive municipal ditch. Runoff within the ditch will be collected by an existing municipal catch basin and directed to the existing 450 mm diameter storm sewer within Rothwell Drive, tributary to Green's Creek approximately 2.7km downstream. Existing drainage patterns will be maintained outside of the development limits.

See CCO-25-3253 - *POST* in *Appendix F* of this report for more details. The Stormwater Management design for the subject property will be outlined in Section 7.0.

7.0 PROPOSED STORMWATER MANAGEMENT

7.1 Design Criteria and Methodology

Stormwater management for the proposed site will be maintained through positive drainage away from the proposed building and towards area drains and trench drains. The storm system will capture the rooftop and at-grade runoff and direct flow to an internal cistern located within the P2 parking level. The restricted flow will be released into a proposed grass swale at the established release rate. Emergency overland flow routes have been provided to ensure runoff will be directed towards the rear of the site in the event of a blockage within the storm system.

The quantitative and qualitative properties of the storm runoff for both the pre & post development flows are further detailed below. Stormwater Best Management Practices (SWM BMP's) will be implemented at the "Lot level", "Conveyance" and "End of Pipe" locations. These concepts will be explained further in Section 7.6.

In summary, the following design criteria have been employed in developing the stormwater management design for the site as directed by the City:

Quality Control

- Quality control will be required up to an enhanced level of treatment (80% TSS removal)

Quantity Control

- Post development peak flows must be controlled to the pre-development level for all storms up to and including the 100-year storm event.

7.2 Runoff Calculations

Runoff calculations presented in this report are derived using the Rational Method, given as:

$$Q = 2.78CIA \quad \text{(L/s)}$$

Where: C = Runoff coefficient
I = Rainfall intensity in mm/hr (City of Ottawa IDF curves)
A = Drainage area in hectares

It is recognized that the Rational Method tends to overestimate runoff rates. As a result, the conservative calculation of runoff ensures that any SWM facility sized using this method is expected to function as intended.

The following coefficients were used to develop an average C for each area:

Roofs/Concrete/Asphalt	0.90
Gravel	0.60
Undeveloped and Grass	0.20

As per the *City of Ottawa - Sewer Design Guidelines*, the 2/5-year balanced 'C' value must be increased by 25% for a 100-year storm event to a maximum of 1.0.

7.3 Pre-Development Drainage

The existing site drainage limits are demonstrated on the Pre-Development Drainage Area Plan included in *Appendix E*. It has been assumed that the development area contains no existing stormwater management controls for flow attenuation.

Table 6: Pre-Development Runoff Summary

Drainage Area	Area (ha)	Runoff Coefficient (5-Year)	Runoff Coefficient (100-Year)	5-Year Peak Flow (L/s)	100-Year Peak Flow (L/s)
A1	0.436	0.29	0.34	36.46	74.67
A2	0.005	0.20	0.25	0.32	0.68
Total	0.442			36.77	75.35

Area A1 consists of runoff within the property limits, while area A2 represents external drainage collected from the bottom of the existing retaining wall located west of the property within 1795 Montreal Road. Existing runoff flows northeast before discharging to a municipal catch basin located within the Rothwell Drive ditch. Runoff within the municipal storm sewer system travels approximately 2.7 km before discharging to Green's Creek.

7.4 Post-Development Drainage

The proposed site drainage limits are demonstrated on the Post-Development Drainage Area Plan. See CCO-25-3253 - *POST* in *Appendix F* of this report for more details. A summary of the Post-Development Runoff Calculations can be found below.

Table 7: Post-Development Uncontrolled Runoff Summary

Drainage Area	Area (ha)	Runoff Coefficient (2/100-Year)	Tc (min)	5-Year Peak Flow (L/s)	100-Year Peak Flow (L/s)
B1	0.302	0.77 / 0.86	10	67.69	129.65
B2	0.003	0.90 / 1.00	10	0.73	1.40
B3	0.115	0.20 / 0.25	10	6.78	14.49
B4	0.021	0.20 / 0.25	10	1.25	2.67
Total	0.442			76.45	148.20

See *Appendix G* for calculations.

Area B1 represents collected runoff within the limits of the development. Runoff from the roof and at-grade areas will be collected and conveyed to the internal cistern without restriction. Runoff from the cistern will be directed to the proposed storm service at a restricted release rate before discharging to the grass swale.

Area B2 represents unrestricted drainage directed towards Montreal Road from the proposed site entrance.

Area B3 represents unrestricted drainage that will maintain existing drainage patterns by flowing northeast.

Area B4 represents unrestricted drainage that will be collected by the proposed grass swale and directed towards the existing municipal ditch within Rothwell Drive.

Restriction of runoff from area B1 will compensate for the unrestricted flow from areas B2-B4 leaving the site.

Post development runoff for the site must be restricted to match the pre-development flow rate. These values create the following allowable release rates for the site.

Table 8: Allowable Release Rate Summary

Drainage Areas	Area (ha)	Required Restricted Flow (L/s) (5-Year)	Required Restricted Flow (L/s) (100-Year)
A1/A2	0.442	36.77	75.35

Reducing site flows will be achieved using flow restrictions and will create the need for onsite storage. Runoff from area B1 will be restricted as shown in the table below, and the onsite storage will be provided within an internal cistern located within the P2 parking level. See *Appendix G* for calculations.

Table 9: Post-Development Controlled Runoff Summary

Drainage Area	Area (ha)	5-Year Peak Flow (L/s)	100-Year Peak Flow (L/s)	100-Year Storage Required (m^3)	100-Year Storage Available (m^3)
B1	0.302	28.01	33.48	64.4	65.0
B2	0.003	0.73	1.40	-	-
B3	0.115	6.78	14.49	-	-
B4	0.021	1.25	2.67	-	-
Total (Site)	0.442	36.77	52.04	64.4	65.0

As seen in *Table 9*, above, post-development 5- and 100-year flows will be restricted to match the pre-development levels, satisfying quantity control requirements.

7.5 Quality Control

The development of this lot will employ Best Management Practices (BMP's) wherever possible. The intent of implementing stormwater BMP's is to ensure that water quality and quantity concerns are addressed at all stages of development. Lot level BMP's typically include temporary retention of the parking lot runoff, minimizing ground slopes and maximizing landscaped areas.

While the pre-consultation notes provided by the City indicated a quality control requirement of 80% TSS removal, it is requested that the City review this requirement given the distance to the outlet and the nature of the development.

The development proposes minimal surface parking, with only three temporary parking spots provided within the layby area. Drive aisles are limited in size, and all runoff collected from the drive aisles will be conveyed to an internal cistern and outlet structure, both of which contain sumps to collect sediment. Runoff leaving the outlet structure will be directed to a 63-metre long grass swale which will convey discharge from the site to the existing ditch within Rothwell Drive. The grass swale will encourage infiltration as well as filtration of suspended solids. A rip-rap barrier will be incorporated into the swale design to prevent larger debris from being conveyed to the municipal ditch.

From the municipal ditch within Rothwell Drive, the travel path to the outlet structure OUT10417, located east of Regional Road 174, is approximately 2.7 km. Based on prior consultation with the Rideau Valley Conservation Authority on similar projects, it is expected that this travel distance would have fallen outside of their typical thresholds for quality control, as runoff leaving the site will mix with a significant amount of untreated road drainage before reaching the outlet. Quality controls would therefore have a negligible impact on the effluent quality at the receiving watercourse. A drainage path figure is included in *Appendix G*.

Should the requirement for 80% TSS removal be confirmed, the outlet structure will be redesigned as a grit separator unit.

8.0 SUMMARY

- A new 21-storey residential building is proposed at 1815 Montreal Road
- Water servicing will be provided by a dual 150 mm diameter connection to the municipal 305 mm diameter watermain within Montreal Road
- Fire protection will be provided by existing municipal hydrants.
- Sanitary servicing will be provided by a new service connection to the existing private sanitary sewer located west of the site within the 41 Cedar Road servicing easement.
- Storage for the 5- through 100-year storm events will be provided by an internal cistern located within the P2 parking level. Runoff will discharge to the municipal ditch along Rothwell Drive.
- It is requested that the City review the quality control requirement given the nature of the development and the distance to the outlet.

9.0 RECOMMENDATIONS

Based on the information presented in this report, we recommend that City of Ottawa approve this Servicing and Stormwater Management Report in support of the proposed development at 1815 Montreal road.

This report is respectfully being submitted for approval.

Regards,

Egis Canada Ltd.

Alison Gosling, P.Eng.
Project Engineer, Land Development,
North America
T: 613.714.4629
E: alison-gosling@egis-group.com

Francis Valenti, EIT
Engineering Intern, North America
T: 613.714.6895
E: franics.valenti@egis-group.com

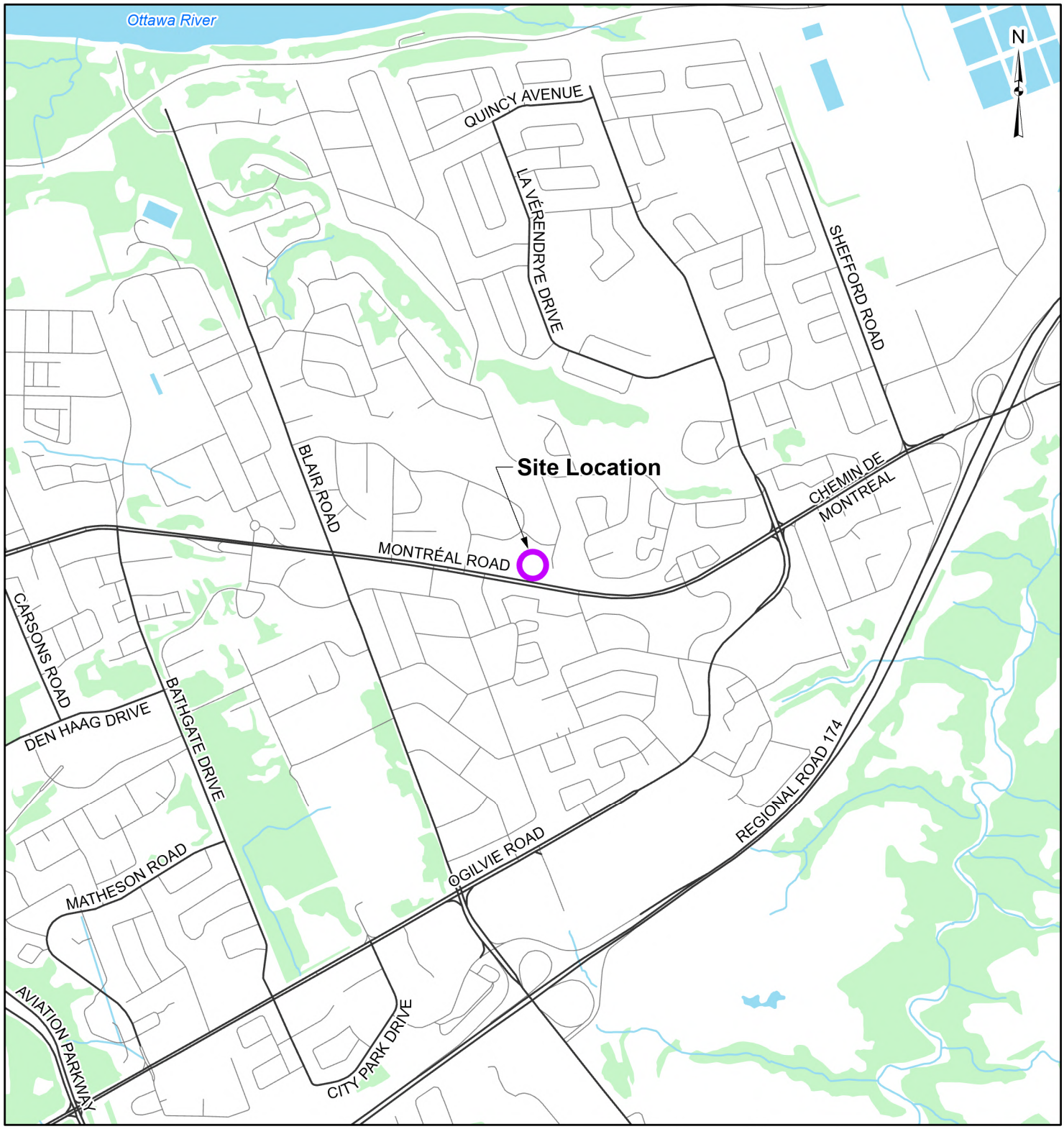
10.0 STATEMENT OF LIMITATIONS

This report was produced for the exclusive use of 14193679 Canada Inc. The purpose of the report is to assess the existing stormwater management system and provide recommendations and designs for the post-construction scenario that are in compliance with the guidelines and standards from the Ministry of the Environment, Conservation and Parks, City of Ottawa and local approval agencies. Egis Canada reviewed the site information and background documents listed in Section 2.0 of this report. While the previous data was reviewed by Egis Canada and site visits were performed, no field verification/measures of any information were conducted.

Any use of this review by a third party, or any reliance on decisions made based on it, without a reliance report is the responsibility of such third parties. Egis Canada accepts no responsibility for damages, if any, suffered by any third party as a result of decisions or actions made based on this review.

The findings, conclusions and/or recommendations of this report are only valid as of the date of this report. No assurance is made regarding any changes in conditions subsequent to this date. If additional information is discovered or becomes available at a future date, Egis Canada should be requested to re-evaluate the conclusions presented in this report, and provide amendments, if required.

APPENDIX A
KEY PLAN



600 300 0 600

Scale 1:20,000 Metres

LEGEND

- Site Location
- Local Road
- Major Road
- Watercourse
- Waterbody
- Wooded Area

REFERENCE

GIS data provided by the Ontario Ministry of Natural Resources and Forestry, 2024.

CLIENT: 14193679 CANADA INC.

PROJECT: 1815 MONTREAL ROAD

TITLE: SITE LOCATION

egis
115 Walgreen Road, RR3, Carp, ON K0A1L0
Tel: 613-836-2184 Fax: 613-836-3742

PROJECT NO:	CCO-25-3253
Date	Nov., 15, 2024
GIS	AH
Checked By	FV

FIGURE: 1

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APPENDIX B
BACKGROUND DOCUMENTS

File No.: PC2024-0307

September 11, 2024

Tamara Nahal
Fotenn Planning + Design
Via email: nahal@fotenn.com

Subject: Pre-Consultation: Meeting Feedback
Proposed Zoning By-law Amendment Application – 1815 Montreal Road

Please find below information regarding next steps as well as consolidated comments from the above-noted pre-consultation meeting held on August 29, 2024.

Attendees	Brian Casagrande, Fotenn Cam Elsby, Project Manager, City of Ottawa Carina Cuzman Dave Wallace Derek Unrau, Project Manager, City of Ottawa Hayley Murray, Forester – Planning, City of Ottawa Jane Kirchman Josiane Gervais, Transportation Project Manager, City of Ottawa Kelly Livingstone, Senior Planner, City of Ottawa Lucy Ramirez, Planner, City of Ottawa Nader Kadri, Senior Planner, City of Ottawa Phil Castro, Planner – Parks and Facilities Planning, City of Ottawa Samieh Sar Steve Belan, Planner, City of Ottawa Tamara Nahal, Planner, Fotenn Planning + Design

Regrets	Christopher Moises, Planner – Urban Design, City of Ottawa Kris Haynes, Senior Project Manager, City of Ottawa

Contents

Background

A Zoning By-law Amendment (ZBLA) [D02-02-23-0043] and a Site Plan Control [D07-12-23-0071] Applications were received mid-June 2023. After the third submission in the winter of 2024 the ZBLA application was withdrawn in late July 2024.

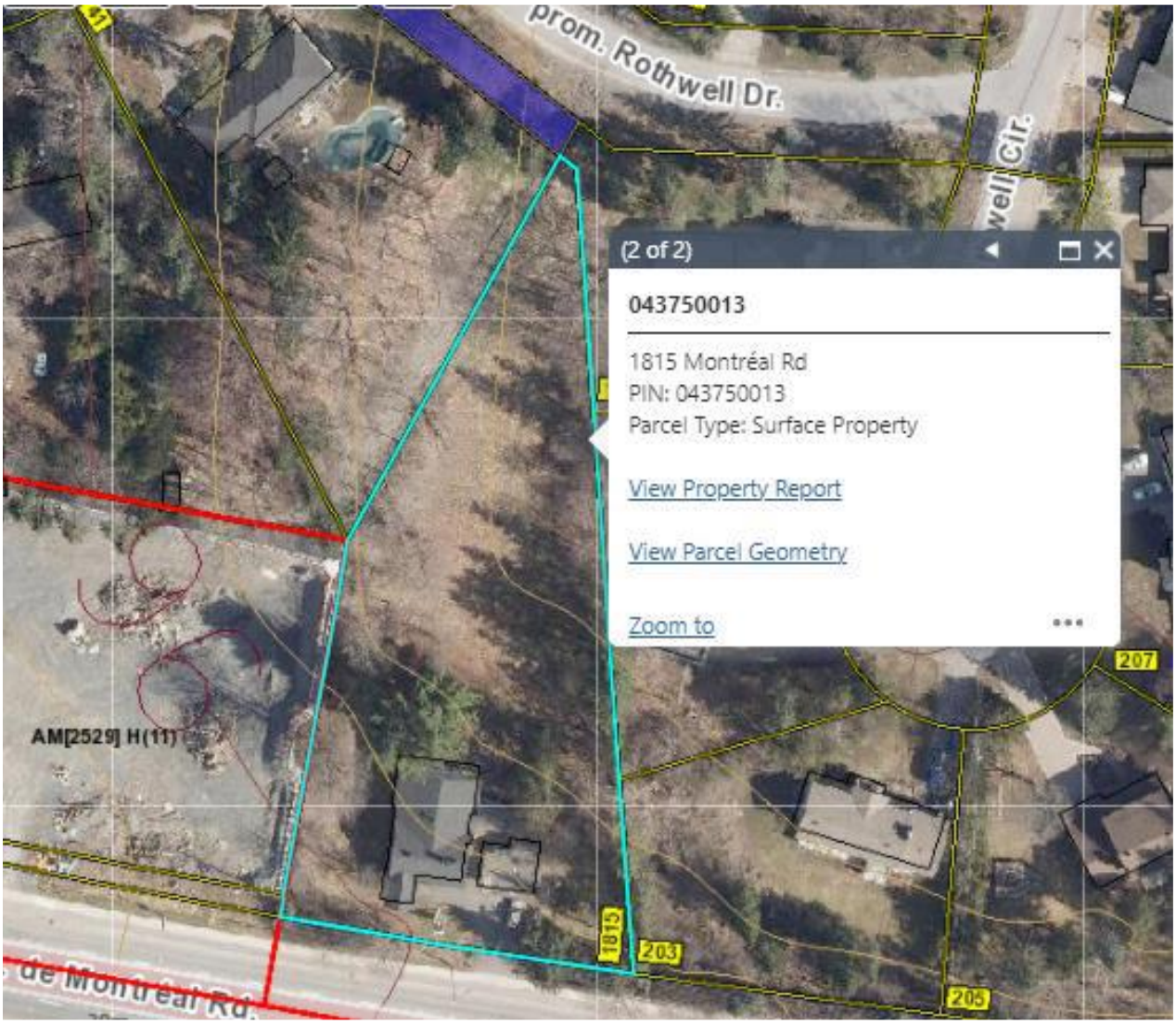


Figure 1: Capture from geoOttawa of 1815 Montréal Road with topographic layers on, the property has frontage on Montreal Road, an arterial road.

Proposal

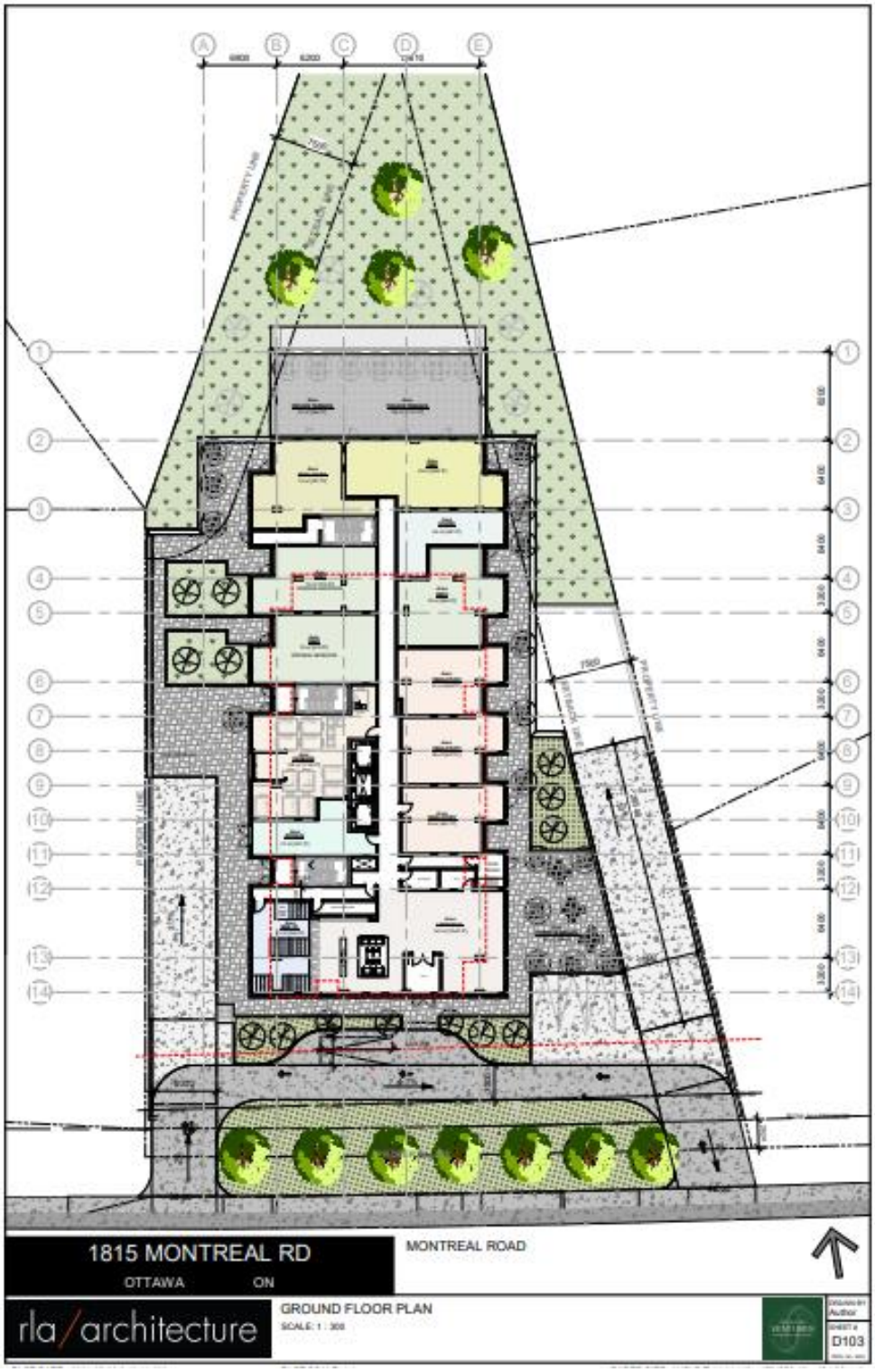


Figure 2: Ground Floor Plan, rear of the property is cutoff.

Figure 3: Proposed 19-storey high rise building.

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.

1. Next Steps

1. A review of the proposal and materials submitted for the above-noted pre-consultation has been undertaken. Please proceed to complete a Phase 2 / Phase 3 Pre-consultation Application Form and submit it together with the necessary studies and/or plans to planningcirculations@ottawa.ca.
2. In your subsequent pre-consultation submission, please ensure that all comments or issues detailed herein are addressed. A detailed cover letter stating how each issue has been addressed must be included with the submission materials. Please coordinate the numbering of your responses within the cover letter with the comment number(s) herein.
3. Please note, if your development proposal changes significantly in scope, design, or density before the Phase 3 pre-consultation, you may be required to complete or repeat the Phase 2 pre-consultation process.

2. Supporting Information and Material Requirements

1. The attached **Study and Plan Identification List** outlines the information and material that has been identified, during this phase of pre-consultation, 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. Consultation with Technical Agencies

1. 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.

4. Planning

Steve Belan, Planner | Steve.Belan@ottawa.ca

Context:

Official Plan - Designations

1. Per the Official Plan (2022) the subject property is designated Outer Urban Mainstreet Corridor (Schedule A and B3).

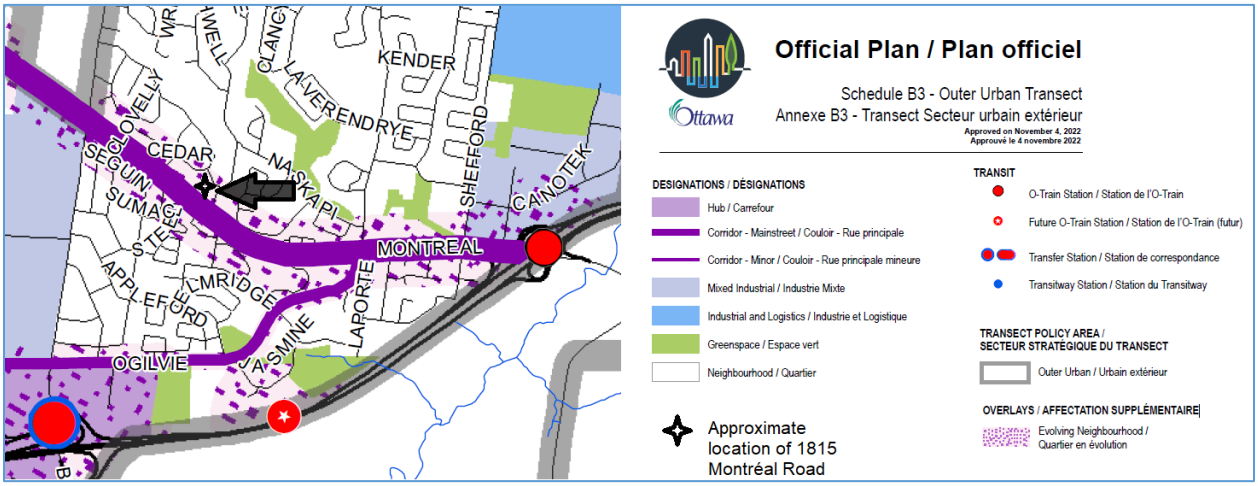


Figure 4: Capture of Schedule B3 with the location of the subject property

In the Outer Urban Transect development will be generally Mid- or High-rise along Mainstreets, except where the lot is too small to provide **a suitable transition to abutting low-rise areas**, in which case only low-rise development shall be permitted (Policy 5.3.1.2.b).

Official Plan - Urban Design Policies (Section 4. City-Wide Policies)

2. Section 4.6.6.

*1) To minimize impacts on neighbouring properties and on the public realm, transition in building heights **shall be** designed in accordance with applicable design guidelines. In addition, the Zoning By-law shall include transition*

requirements for Mid-rise and High-rise buildings, as follows: a) Between existing buildings of different heights; b) Where the planned context anticipates the adjacency of buildings of different heights;

2) Transitions between Mid-rise and High-rise buildings, and adjacent properties designated as Neighbourhood on the B-series of schedules, will be achieved by providing a gradual change in height and massing, through the stepping down of buildings, and setbacks from the Low-rise properties, generally guided by the application of an angular plane…

7) Mid-rise buildings shall be designed to respond to context, and transect area policies, and should:

> *a) Frame the street block and provide mid-block connections to break up large blocks;*
>
> *b) Include a base with active frontages, and a middle portion that relates to the scale and character of the surrounding buildings, or, planned context;*
>
> *c) Be generally proportionate in height to the width of the right of way as illustrated in the Figure below, with additional height permitted in the Downtown Core Transect; and*

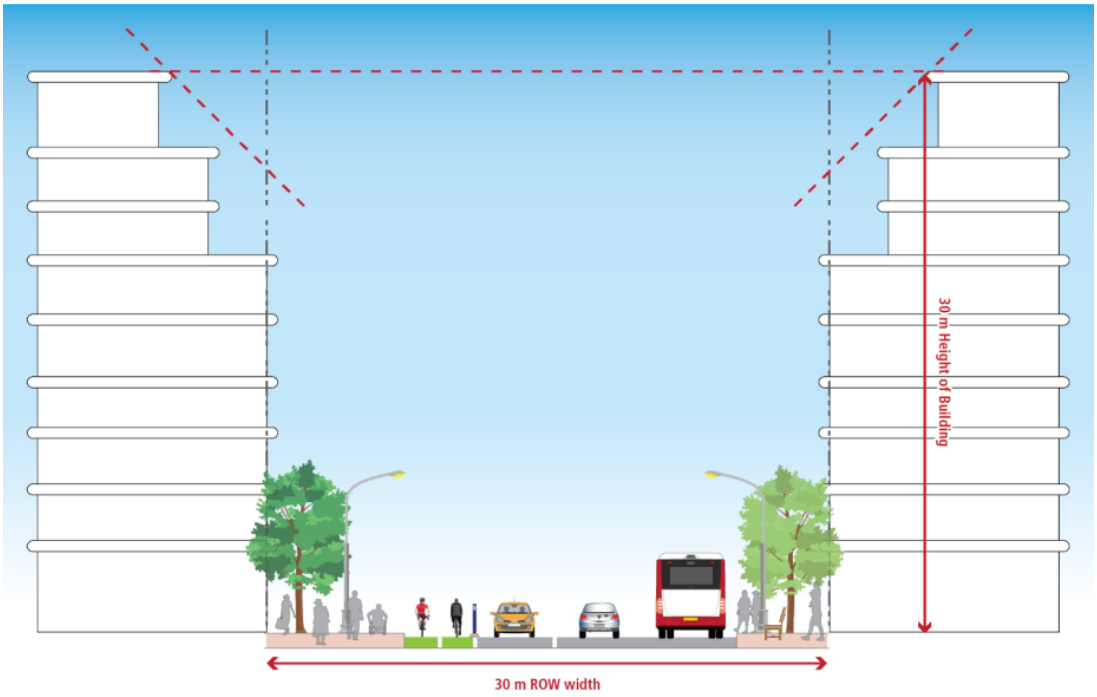


Figure 5: Capture from the Official Plan, showing that mid-rise buildings should be generally proportionate in height to the width of the right of way.

d) *Provide sufficient setbacks and step backs to:*

i. Provide landscaping and adequate space for tree planting;

ii. Avoid a street canyon effect; and

iii. Minimize microclimate impacts on the public realm and private amenity areas.

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.

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.

10) Development proposals that include High-rise buildings shall demonstrate the potential for future High-rise buildings or High-rise 41+ buildings on adjacent lots or nearby lots in accordance with the relevant policies of this Plan.

Official Plan - Corridor -Mainstreet Policies (Section 6.2)

3. The Corridor designation applies to bands of land along specified streets whose planned function combines a higher density of development, a greater degree of mixed uses and a higher level of street transit service than abutting Neighbourhoods, but lower density than nearby Hubs.

   Development within the Corridor designation shall establish buildings that locate the maximum permitted building heights and highest densities close to the Corridor, subject to building stepbacks where appropriate.

   Policy 6.2.1 3

   3) Corridors will generally permit residential uses and such non-residential uses that integrate with a dense, mixed-use urban environment. The City may require through the Zoning By-law and/or development applications to amend the Zoning By-law:

   a) Commercial and service uses on the ground floor of otherwise residential, office and institutional buildings with a strong emphasis on uses needed to contribute to 15-minute neighbourhoods;

   b) Residential and/or office uses on the upper floors of otherwise commercial buildings; and/or

   c) Minimum building heights in terms of number of storeys to ensure multi-storey structures where uses can be mixed vertically within the building.

   Policy 6.2.2 1

   1) In the Mainstreet Corridor designation, this Plan shall permit a mix of uses including offices. These uses are permitted throughout the building, however the Zoning By-law may require active commercial or service uses on the ground floor, which include those that support cultural development

in order to maintain, extend, or create a continuous stretch of active frontages along a Mainstreet.

Zoning By-law Amendment

4. The subject property is currently zoned Residential First Density Subzone AA (R1AA), there is an existing vacant home on the property. The Applicant wants to rezone the property to permit a high-rise apartment building.

Easement

5. Easements are agreements that confer on an individual, company or municipality a right to use a landowner's property. The Owner requires the Consent of the Committee for grant of a servicing easement.

Committee of Adjustment (CofA) Consent Application Required prior to ZBLA approval.

6. You need to show adequate municipal services to support the Zoning By-law Amendment. Therefore, you need to submit a consent application to the CofA.

Adequate Urban, Suburban and Rural Services (Section 56)

56. (1) No land can be used or the intensity of any use of land expanded or any building placed, erected, altered, enlarged, or used within of the City of Ottawa unless the land is serviced by municipal water, sewerage and drainage systems that have adequate capacity.(By-law 2010-307)

(2) Despite subsection (1) above, where municipal water, sewerage or drainage systems are not available, private services approved by the City of Ottawa or its delegate are permitted.

(3) Despite subsections (1) and (2) above, lands subject to unique servicing constraints or restricted connection privileges through separate municipal by-laws and through legal and servicing agreements with the City of Ottawa are considered to be in conformity with this By-law.

(4) Despite subsection (2), with the exception of wells that are required for environmental site assessment purposes as per Ontario Regulation 153/04 (Environmental Protection Act), on any land shown in Area A on Schedule 183 the following are prohibited:

(a) drilling of a new groundwater well;

(b) drilling to make an existing groundwater well any deeper; and

(c) the installation of a groundwater heat pump, except as approved by the City of Ottawa.

Figure 6: Capture of Section 56 of the Zoning By-law

7. If you come to an agreement with the Owner of 162 Rothwell Drive to purchase land from them so 1815 Montréal Road has frontage on Rothwell Drive, then

you'll need to submit a consent application to the Committee of Adjustment for a lot line adjustment.

8. The Planning Act, section 50(3) prohibits an individual or company from effecting a broad variety of transactions relating to land or interest in land, the reason is to not create or convey any long-term interest in land. You cannot create an interest in the existing servicing easement by amending an existing Joint Use and Maintenance Agreement.

   If you come to an agreement with the Owner of 162 Rothwell Drive for a servicing easement (sanitary and storm water), then you'll need to submit a consent application to the Committee of Adjustment for the easement.

Committee of Adjustment Decision D08-01-18/B-00369; D08-01-18/B-00370; D08-01-18/B-00368.

On November 21, 2018, the Committee of Adjustment granted a servicing easement over 41 Cedar Road, 45 Cedar Road, and 1795 Montreal Road for the benefit of 1777 Montreal Road. The property known municipally as 1815 Montreal Road was not a part of the arrangement. To be able to tie into this sanitary sewer you'd need to submit consent applications to the Committee of Adjustment to obtain a servicing easement over the other propertie(s). Further, the Joint Use and Maintenance Agreement (JUMA) that is registered on title would need to be amended.

Figure 7: Sanitary sewer easement highlighted, approved by Committee of Adjustment Decisions D08-01-18/B-00369; D08-01-18/B-00370; D08-01-18/B-00368.

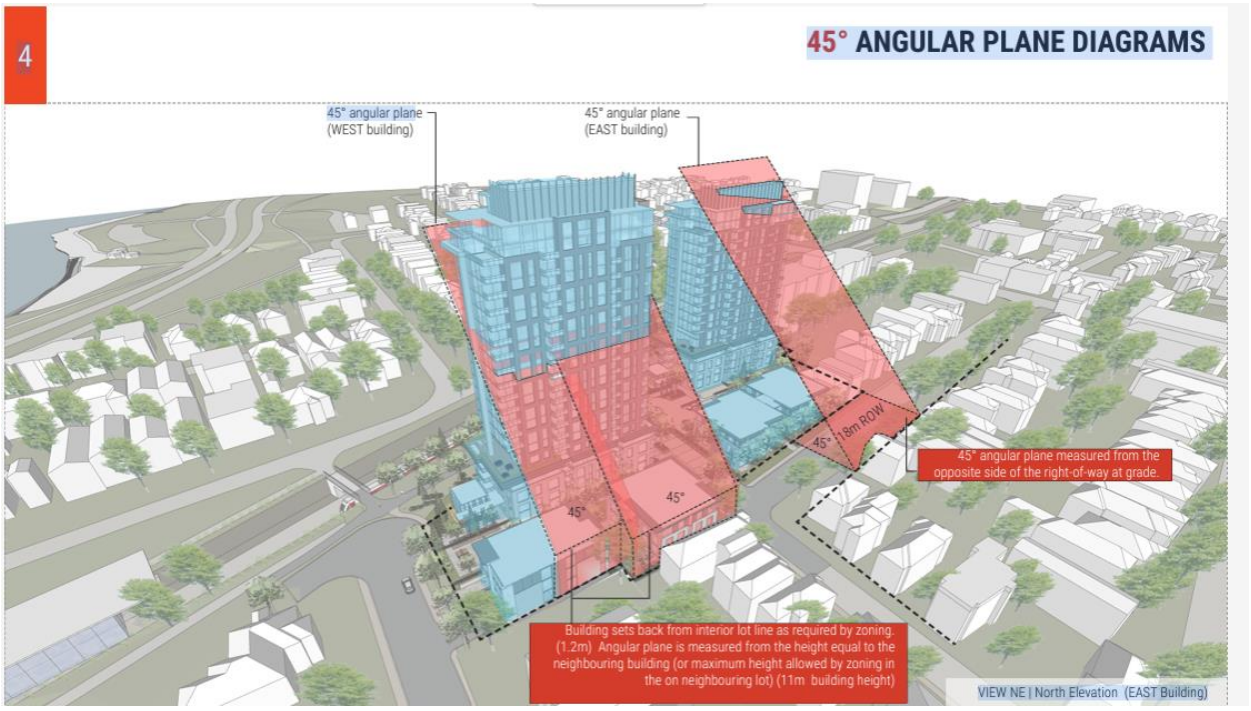
9. Section 37 requirements / Community Benefits Charge

    a. 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.

Planning Comments

10. Other than increasing the number of people living along Montreal Road, the proposed residential building does not provide any additional amenities to contribute to the evolution of a 15-minute neighbourhood. The proposal should provide ground floor commercial space that will contribute to the public realm and enhance the mainstreet.

11. Please revise your angular plane sections to be consistent with the way the City of Ottawa calculates angular planes. The plane starts at the property line from the permitted height permitted in the R1AA zone (8.5m). See the attached diagram for an example drawn correctly from an adjacent property line.



12. Tower/building setbacks are measured to the property line not from the existing low-rise buildings.

13. Stepbacks at the 5th floor are appreciated, however these exceed the standard 11m for structures within the first 20m of the property line. The stepback at the 17 storey is ineffectual in that it is so far above the angular plane to be even noticed from the ground. Typical Arterial Mainstreet (AM/AM10) zoning for properties in this area include maximum building height provisions from R1-R4 zones (Table 185(f)). The intent of these provisions are to provide meaningful height stepbacks and transition from the R1AA properties around this site.

14. Applicable policies provided herein, and further policies provided in the Official Plan (OP) and Mainstreet Corridor section state that permitted heights are to be

guided by the application of an angular plane and that transition to abutting sensitive uses shall be achieved within the parcel you are seeking to develop. The proposal presented to staff greatly exceeds the 45-degree angular plane guidance for appropriate height and demonstrates that the use of other design measures at that height cannot achieve the intent of related OP policy. Height must be reduced as a starting point.

15. The OLT decision for 1649 Montreal Road is not precedent setting. Each site will be judged on its own merits. Not only does this proposal not meet the 45° angular plane but the stepbacks designed into the tower portion provide no meaningful transition to the existing homes.

16. The evolving planning context in this area is recognized by staff. The draft new zoning by-law does permit high-rise buildings both on this site and along this corridor. The draft also contains provisions for stepping back from existing low-rise development N1-N4. The property to the east, backing onto Montreal Road is proposed to be N5. However, this is a draft document and the final by-law may differ. Your rationale should not include an evaluation of the draft new zoning by-law provisions.

17. Staff will require this proposal to pre-consult with the Urban Design Review Panel if the applicant insists on proposing a high-rise building for this site.

18. Beyond the zoning concerns there are servicing issues related to accessing local municipal services that need to be addressed.

5. Urban Design

Comments:

Submission Requirements

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

20. 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.

Urban Design Review Panel Review and Report

21. The site is located close to a Design Priority Area and is recommended for review by the Urban Design Review Panel as it proposes a high-rise tower. UDRP review occurs within the Pre-consultation stage. To proceed with a UDRP review, please contact udrp@ottawa.ca.

22. 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

23. The following elements of the preliminary design were discussed at the Pre-consultation:

    a. Tower floor plate? Apparently within 750 square metres per our floor plate definition (please show floor plate size).
    b. Separation distance? 11.5 towards adjacent tower site(s).
    c. Can the parking ramp be integrated to the building? To be explored.
    d. How does this compare to draft zoning? In keeping with per the draft release (this is problematic).
    e. 4.6 and specifically 4.6.6 need to be addressed within the PR (apparently provided to Steve).
    f. Constraints along Montreal Road? ROW taking and hydro wires.
    g. Public realm is a priority – pick-up drop off along Montreal Road not supported. Asked them to explore the burial of the hydro wires.
    h. Angular plane not calculated from the right place – they need to refer to 4.6.6.
    i. Height and density contested, and to be detailed further in our comments.
    j. Podium needs to engage with the roads – consider a T shape.
    k. Ground oriented uses needed. Please consider grade related units.

24. The following are additional design comments to consider:

    a. This section of Montreal Road is not a DPA (however, Montreal Road is designated a DPA both half a block to the west and to the east where the R1 neighbourhood intersects with Ogilvie). We can surmise that is because this stretch of Montreal was not anticipated to intensify at the scale of this proposal.
    b. The proposed site is adjacent a major corridor and surrounded by a sensitive low-rise residential context. We have the following comments to help guide how to analysis and understand the competing factors at play, while trying to find the most suitable scale of development.
    c. **Transition** from the sensitive, low-rise residential community to the east is a key metric for establishing appropriate scale and height. We recommend

the development keep the proposed height below the 45 degree angular plane drawn from the shared eastern property line.

d. **High-rise guidelines**: We recommend observing the City's high-rise guidelines and provide a separation of 11.5m to the property to the west, for any portion of the building above nine storeys.
e. **Shadow Analysis:** A shadow analysis is required for re-zonings above 5 storeys. See attached Terms of Reference and let us know if you have any questions. - note the document reads 'DRAFT' in error and was approved by Council in 2016. This will be corrected in the latest Omnibus process.
f. **Park/Pops**: The area to the north is most appropriate for use as greenspace/amenity.
g. The proposed park facing Montreal Road may be contrary to the direction of intensification along a corridor like Montreal Rd. We recommend supporting pedestrian connections, improved walk-ability and buildings that frame the street for sites seeking this scale of intensification.

6. Engineering

Comments:

25. Water:

a. Accessible Watermain: direct access to 305mm DI municipal watermain on Montreal Road.

b. Submission documents must include:

i. Boundary Conditions - civil consultant to request boundary conditions from the City’s assigned Project Manager, Development Review. Water boundary conditions request must include the location of the service and the expected loads required by the proposed development. Please provide all the following information:

ii. Location of service (show on a plan or map)

iii. Type of development

iv. Average daily demand: ___ l/s.

v. Maximum daily demand: ___l/s.

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

vii. Required fire flow and completed FUS Design Declaration if applicable

viii. Supporting Calculations for all demands listed above and required fire flow as per Ontario Building Code or Fire Underwriter Surveys (See technical Bulletin ISTB-2021-03.

ix. Watermain system analysis demonstrating adequate pressure as per section 4.2.2 of the Water Distribution Guidelines.

x. Demonstrate adequate hydrant coverage for fire protection. Please review Technical Bulletin ISTB-2018-02, Appendix I table 1 – maximum flow to be considered from a given hydrant

xi. Any proposed emergency route (to be satisfactory to Fire Services)

26. Sanitary Sewers:

a. Accessible Sanitary Sewer: no direct access; recommended solution would be to arrange a servicing easement through 162 Rothwell Drive and connect directly into the municipal sanitary sewer on Rothwell Drive. Alternatively, a private easement could be arranged through 1795 Montreal Road to connect into private sanitary main which connects to Rothwell Drive. Note that an easement would also be required for this approach. If these options cannot be arranged, a municipal infrastructure extension would be required in order to provide direct sanitary sewer connection to the site through Montreal Road.

b. Provide an analysis to demonstrate that there is adequate residual capacity in the receiving and downstream wastewater system to accommodate the proposed development.

c. Please apply the wastewater design flow parameters in Technical Bulletin PIEDTB-2018-01.

27. Stormwater Management:

a. Accessible Storm Sewer: direct access to 250mm PVC municipal storm sewer on Montreal Road, however this sewer is at capacity and should not be used as a connection for this site.

b. Quality Control:

i. 80% TSS removal is required for all runoff prior to leaving the site.

c. Quantity Control:

i. Control post-development peak flows to pre-development levels for all storms up to and including the 100-year storm event. All storm

drainage should be directed to the Rothwell Drive ditch rather than Montreal Road.

d. MECP ECA Requirements

    i. An MECP ECA may be required if a municipal infrastructure extension is pursued to provide sanitary servicing for the site through Montreal Road.

28. Additional Notes:

    a. No Capital Work Project that would impact the application has been identified at this time

    b. No road moratorium that would impact the application has been identified

    c. Any easement identified should be shown on all plans

    d. For any proposed exterior light fixtures, please provide certification from a licensed professional engineer confirming lighting has been designed only using fixtures that meet the criteria for full cut-off classification as recognized by the Illuminating Engineering Society of North America and result in minimal light spillage onto adjacent properties (maximum allowable spillage is 0.5 fc). Additionally, include in the submission the location of the fixtures, fixture type (make, model, part number and mounting height

    e. Sensitive Marine Clay (SMC) is widely found across Ottawa- geotechnical reports should include Atterberg Limits, consolidation testing, sensitivity values, and vane

    f. Note that an easement will be required for storm drainage overland through the small portion of land on 162 Rothwell Drive in order to convey drainage to the ROW ditch on Rothwell Drive, unless proof of legal outlet through 162 Rothwell Drive is provided.

Feel free to contact Cam Elsby, Project Manager, for follow-up questions.

7. Noise

Comments:

29. Noise Impact Studies are not required for the ZBLA application.

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

8. Transportation

Comments:

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

    d. If an RMA is required to support the proposed development, the functional plan and/or RMA plans must be submitted with the formal submission to deem complete. Request base mapping asap if RMA is required, contact Engineering Services

31. ROW Protection:

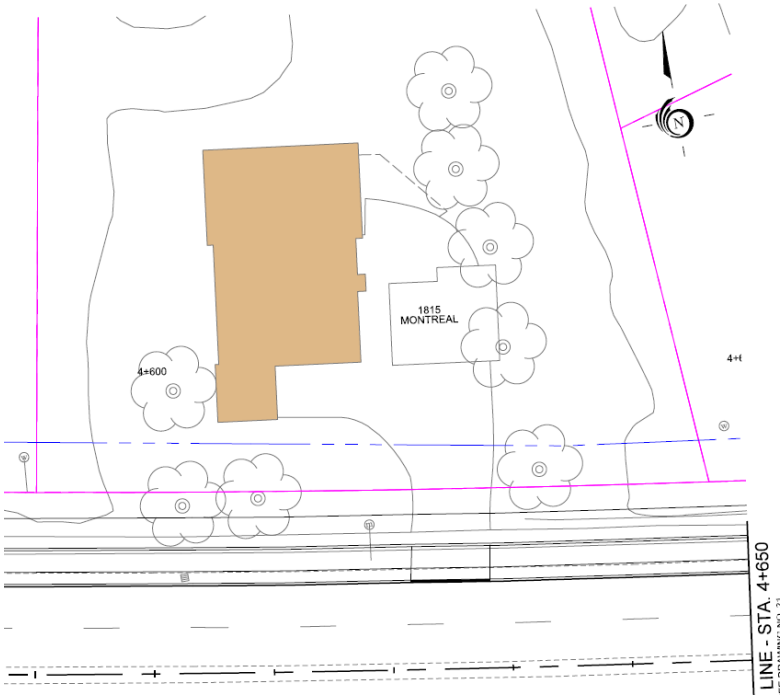
    a. Ensure that the development proposal complies with the Right-of-Way protection requirements of the Official Plan's Schedule C16.

    b. Any requests for exceptions to ROW protection requirements must be discussed with Transportation Planning and concurrence provided by Transportation Planning management.

    c. ROW must be unincumbered and conveyed at no cost to the City. Note that conveyance of the ROW/corner triangle will be required prior to registration of the SP agreement. Additional information on the conveyance process can be provided upon request.

32. Transportation Master Plan includes Transit Priority Measures (Continuous) along Montreal Road (2031 Network Concept).

33. The City has completed the Montreal-Blair Road Transit Priority Corridor EA. A screenshot is provided below, additional details and/or CAD files can be provided upon request.



34. On site plan:

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

b. Clear throat requirements for 100-200 units on an arterial is 25m. 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 must be maintained with the future ROW protection (as applicable).

c. The site plan as presented has a very short throat length and numerous conflicts at the access (parking stalls, lay-by and garage entrance) and is not supported.

d. As the site proposed is residential, AODA legislation applies for all areas accessible to the public (i.e. outdoor pathways, parking, etc.).

e. Show all details of the roads abutting the site; include such items as pavement markings, accesses and/or sidewalks.

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

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

h. 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).

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

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

k. 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.

l. Parking stalls at the end of dead-end parking aisles require adequate turning around space.

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

9. Forestry

Comments:

35. Planning Forestry will not support a site plan that forces removal of adjacently owned trees. The conceptual plans show the parking garage extending from interior lot line to lot line. This design is not feasible for tree retention along the eastern/western property boundaries. Please confirm your plans would be viable with an alternative parking configuration to allow for tree retention. On the eastern side, the original application (D07-12-23-0071) provided over 1.2m of unexcavated space, at the narrowest point, to allow for tree retention. The same expectation stands for a new application. It should be discussed whether an urban exception should be applied to this ZBA preventing underground parking within a certain distance of the interior lot line for this purpose.

    a. Removal of boundary or adjacently owned trees would require written permission from the adjacent property owner. This information is pertinent for site design decisions and it's recommended if consent for removal is received, the consent is shared with City staff as early on in the review process as possible.

36. Planning Forestry supports a reduction in the parking requirement if it means the parking garage is not expansive, from lot line to lot line.

37. Will tree planting with adequate soil volume be achievable in the front yard? Would it require hardscape planting infrastructure?

    a. Section 4.6.6. of the Official Plan Policy 8 states that space at-grade should be provided for soft landscaping and trees.

38. Dense tree planting will be provided in the rear yard. Its recommended tree locations are laid out and utilities are designed these locations to maximize planting space.

39. There are City trees along Montreal Road that are protected under the Tree Protection By-law (No. 2020-340). Removal of these trees would require justification, monetary compensation, replacement planting, and a tree removal permit. All privately owned protected trees 10 cm in diameter in greater will also require a permit for removal.

40. Review Official Plan policies under section 4.8.2 and explain how this proposal aligns with them.

41. Identify any tree planting restrictions in the Geotechnical Report.

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

10. Parkland

Comments:

42. Cash-in-lieu of parkland / parkland dedication

    a. Parkland Dedication By-law No. 2022-280

    b. If applicable, information related to the CIL cap of 8% for Office-to-Residential Conversions

Feel free to contact Phil Castro, Parks Planner, for follow-up questions.

11. Other

43. The High Performance Development Standard (HPDS) is a collection of voluntary and required standards that raise the performance of new building projects to achieve sustainable and resilient design and will be applicable to Site Plan Control and Plan of Subdivision applications.

    a. The HPDS was passed by Council on April 13, 2022, but is not in effect at this time, as Council has referred the 2023 HPDS Update Report back to

staff with the direction to bring forward an updated report to Committee at a later date. Please be advised that this is expected to occur in Q3 2024.

b. Please refer to the HPDS information at ottawa.ca/HPDS for more information.

12. Submission Requirements and Fees

1. Major Zoning Amendment $30,846.78.
    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,

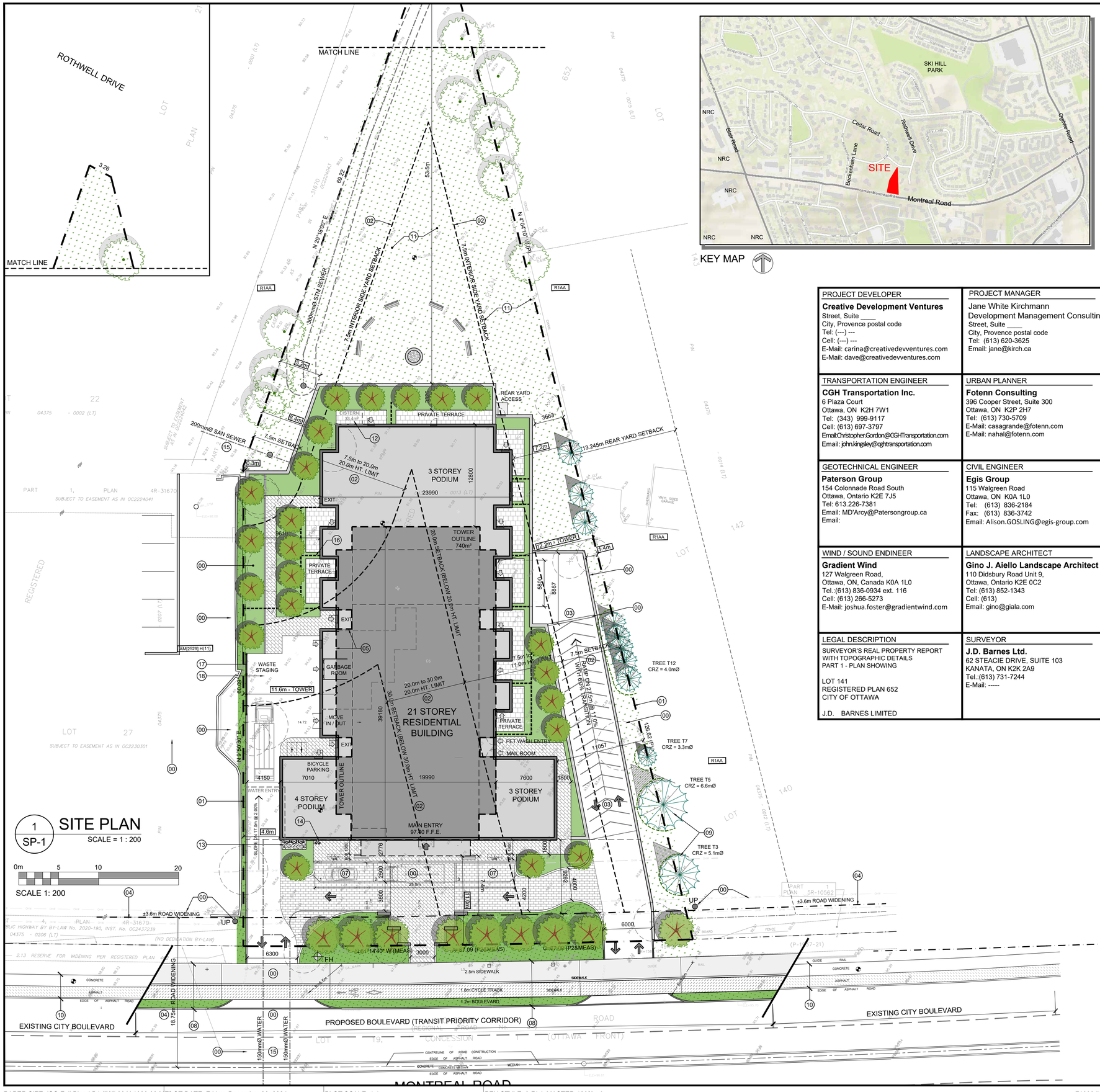
Steve Belan

c.c. Brian Casagrande, Fotenn
Cam Elsby, Project Manager, City of Ottawa
Carina Cuzman
Dave Wallace
Derek Unrau, Project Manager, City of Ottawa
Hayley Murray, Forester – Planning, City of Ottawa
Jane Kirchman
Josiane Gervais, Transportation Project Manager, City of Ottawa
Kelly Livingstone, Senior Planner, City of Ottawa

Lucy Ramirez, Planner, City of Ottawa
Nader Kadri, Senior Planner, City of Ottawa
Phil Castro, Planner – Parks and Facilities Planning, City of Ottawa
Samieh Sar
Christopher Moises, Planner – Urban Design, City of Ottawa
Kris Haynes, Senior Project Manager, City of Ottawa

13. Attachments

Urban Design Brief -Terms of Reference



1 SITE PLAN
SP-1
SCALE = 1 : 200

0m 5 10 20
SCALE 1: 200

KEY MAP

PROJECT DEVELOPER
Creative Development Ventures
Street, Suite ____
City, Provence postal code
Tel: (---) ---
Cell: (---) ---
E-Mail: carina@creativedevventures.com
E-Mail: dave@creativedevventures.com

PROJECT MANAGER
Jane White Kirchmann
Development Management Consulting
Street, Suite ____
City, Provence postal code
Tel: (613) 620-3625
Email: jane@kirch.ca

TRANSPORTATION ENGINEER
CGH Transportation Inc.
6 Plaza Court
Ottawa, ON K2H 7W1
Tel: (343) 999-9117
Cell: (613) 697-3797
Email:Christopher.Gordon@CGHTransportation.com
Email: john.kingsley@cghtransportation.com

URBAN PLANNER
Fotenn Consulting
396 Cooper Street, Suite 300
Ottawa, ON K2P 2H7
Tel: (613) 730-5709
E-Mail: casagrande@fotenn.com
E-Mail: nahal@fotenn.com

GEOTECHNICAL ENGINEER
Paterson Group
154 Colonnade Road South
Ottawa, Ontario K2E 7J5
Tel: 613.226-7381
Email: MD'Arcy@Patersongroup.ca
Email:

CIVIL ENGINEER
Egis Group
115 Walgreen Road
Ottawa, ON K0A 1L0
Tel: (613) 836-2184
Fax: (613) 836-3742
Email: Alison.GOSLING@egis-group.com

WIND / SOUND ENDINEER
Gradient Wind
127 Walgreen Road,
Ottawa, ON, Canada K0A 1L0
Tel.:(613) 836-0934 ext. 116
Cell: (613) 266-5273
E-Mail: joshua.foster@gradientwind.com

LANDSCAPE ARCHITECT
Gino J. Aiello Landscape Architect
110 Didsbury Road Unit 9,
Ottawa, Ontario K2E 0C2
Tel: (613) 852-1343
Cell: (613)
Email: gino@giala.com

LEGAL DESCRIPTION
SURVEYOR'S REAL PROPERTY REPORT
WITH TOPOGRAPHIC DETAILS
PART 1 - PLAN SHOWING

LOT 141
REGISTERED PLAN 652
CITY OF OTTAWA

J.D. BARNES LIMITED

SURVEYOR
J.D. Barnes Ltd.
62 STEACIE DRIVE, SUITE 103
KANATA, ON K2K 2A9
Tel.:(613) 731-7244
E-Mail: -----

PROJECT INFORMATION

Zoning By-law 2008-250 Consolidation R1AA SITE AREA 0.44 ha. 4,361.3 sq. m 46,945 sq. ft

ZONING	REQUIRED	PROVIDED
ZONE	AM	AM____] S____
BUILDING HEIGHT - 0m TO 20m FROM "R1, R2 & R3" ZONE	11.0m	21 STOREY'S / 68.0m
BUILDING HEIGHT - 20m TO 30m FROM "R1 to R4" ZONE	20.0m	21 STOREY'S / 68.0m
BUILDING HEIGHT - AFTER 30m FROM "R1 to R4" ZONE	9 STOREY'S / 30.0m	21 STOREY'S / 68.0m
ALLOWABLE PROJECTION - AMENITY LEVEL	0.0m @ 0.0m²	4.0m @ 200.0m²
GRADE: TAKEN FROM EXPOSED PARKING GARAGE	94.40m ASL	94.40m ASL
DENSITY - GFA	n/a	2.75
FRONT YARD SETBACK	3.0m	11.0m
INTERIOR YARD SETBACK EAST (MAIN BUILDING) - ABUTTING "R" ZONE	7.5m	7.2m
INTERIOR YARD SETBACK EAST (PARKING GARAGE) - ABUTTING "R" ZONE	7.5m	1.4m
INTERIOR YARD SETBACK WEST (MAIN BUILDING) - ABUTTING "R" ZONE	7.5m	8.4m
INTERIOR YARD SETBACK WEST (PARKING GARAGE) - ABUTTING "R" ZONE	7.5m	5.2m
INTERIOR YARD SETBACK WEST (MAIN BUILDING) - ABUTTING "AM" ZONE	0.0m	4.6m
INTERIOR YARD SETBACK WEST (PARKING GARAGE) - ABUTTING "AM" ZONE	0.0m	0.3m
REAR YARD SETBACK (PARKING GARAGE) - ABUTTING "R" ZONE	7.5m	53.5m
AMENITY AREA - TOTAL 6.0m² PER UNIT	1,146.0m²	2,420.0m²
AMENITY AREA - 50% COMMUNAL PER UNIT	573.0m²	1,410.0m²
VEHICLE PARKING: RESIDENTIAL - 1.2 PER UNIT	229	137
VEHICLE PARKING: VISITOR - 0.2 PER UNIT	38	19
BICYCLE PARKING - RESIDENTIAL - 0.5 PER UNIT	96	191
AISLE & DRIVEWAY MINIMUM / MAXIMUM WIDTH	6.0m / 6.7m	6.0m

DRAWING NOTES
1. PROPERTY LINE
2. AM ZONING BUILDING SETBACK LINES
3. HEATED RAMP TO U/G GARAGE WITH TRENCH DRAIN
4. PROPOSED 37.5m R.O.W.
5. OUTLINE OF TOWER ABOVE
6. OUTLINE OF PARKING GARAGE
7. SHORT TERM LAY-BY PARKING
8. FUTURE PROPOSED CITY SIDEWALK & CYCLE TRACK AS PER TRANSIT PRIORITY CORRIDOR DESIGN
9. EXISTING TREE TO REMAIN, PROTECT AS REQUIRED
10. EX. SIDEWALK & ASPHALT BOULEVARD TO REMAIN
11. SOFT LANDSCAPING, SEE LANDSCAPE PLAN
12. BELOW GRADE CISTERN IN PARKING GARAGE
13. 1.2 X 3.0 CONCRETE PAD FOR GAS EQUIPMENT WITH BOLLARDS AS REQUIRED (GAS BLOW OFF)
14. SIAMESE CONNECTION
15. PROPOSED UTILITIES, SEE CIVIL
16. PRIVACY SCREEN
17. 2.1m HT. SOLID WOOD PRIVACY FENCE
18. TEMPORARY SNOW STORAGE
19. CONCRETE SIDEWALK, CONTINUOUS & DEPRESSED THROUGH DRIVEWAY, SEE CIVIL
20. 150mm HT CONCRETE BARRIER CURB
21. EXISTING HYDRO POLE & OVERHEAD WIRES
22. FIRE HYDRANT
23. PRIVATE WALK
24. EXISTING TREE TO BE REMOVED
25. FLUSH CURB AROUND ENTRY AREA
26. PAINTED ISLAND
27. EXISTING UTILITY POLE
28. TREE / HEDGE PROTECTION ZONE
29. BALCONY ABOVE
30. EXISTING GRASSED AREA TO REMAIN
31. METAL GRATE - INTAKE / EXHAUST AIR SHAFT
32. PRIVATE TERRACES AT GROUND LEVEL
33. ACCESSIBLE PASSENGER LOADING AREA
34.
35.
36.
37.
38.

BUILDING STATISTICS

GROSS BUILDING - AREA (CITY OF OTTAWA'S DEFINITION)

PARKING LEVEL		0.0 sq. m. 000 sq. ft.
GROUND FLOOR		574.5 sq. m. 6,184 sq. ft.
2nd & 3rd FLOOR	2 x 1,096.6 sq. m. 2 x 11,804 sq. ft.	2,193.3 sq. m. 23,608 sq. ft.
4th FLOOR		539.8 sq. m. 5,810 sq. ft.
5th FLOOR		600.5 sq. m. 6,464 sq. ft.
6th - 16th FLOOR - TOWER	11 x 593.6 sq. m. 11 x 6,389 sq. ft.	6,529.1 sq. m. 70,279 sq. ft.
17th & 18th FLOOR	2 x 528.0 sq. m. 2 x 5,683 sq. ft.	1,056.0 sq. m. 11,366 sq. ft.
19th FLOOR		455.0 sq. m. 4,897 sq. ft.
20th AMENITY / MECHANICAL PENTHOUSE		0.0 sq. m. 000 sq. ft.
TOTAL AREA		11,948.1 sq. m. 128,608 sq. ft.
TOWER FOOTPRINT AREA (NOT INCLUDING BALCONIES / PROJECTIONS)		738.7 sq. m. 7,951 sq. ft.

UNIT STATISTICS

STUDIO UNIT	1.6%	3
1 BEDROOM UNIT	14.7%	28
1 BEDROOM + DEN UNIT	40.3%	77
2 BEDROOM UNIT	31.4%	60
2 BEDROOM + DEN UNIT	4.2%	8
3 BEDROOM	7.9%	15
TOTAL		191

CAR PARKING AREA 'C' on SCHEDULE 1A

MINIMUM REQUIRED

RESIDENCE	- 1.2 PER DWELLING UNIT	229
VISITOR	- 0.2 PER DWELLING UNIT	38
TOTAL		267

PROVIDED

RESIDENCE	- 0.72 PER UNIT	137
VISITOR	- 0.1 PER UNIT	19
TOTAL		156

LOCATION

EXTERIOR - SHORT TERM	3
P3 LEVEL PARKING GARAGE	43
P2 LEVEL PARKING GARAGE	57
P1 LEVEL PARKING GARAGE	53

BICYCLE PARKING

REQUIRED

RESIDENCE	- 0.5 PER UNIT (191 UNITS)	96

PROVIDED

EXTERIOR	8
GROUND FLOOR	183
PARKING GARAGE	0
TOTAL	191

AMENITY SPACE

REAR YARD - COMMUNAL =	600.0 sq. m.
AT GRADE TERRACE - PRIVATE =	290.0 sq. m.
4th FLOOR INTERIOR - COMMUNAL =	200.0 sq. m.
4th FLOOR TERRACE - COMMUNAL =	300.0 sq. m.
ROOF TOP AMENITY ROOM =	100.0 sq. m.
ROOF TOP AMENITY TERRACE =	100.0 sq. m.
PRIVATE TERRACE =	220.0 sq. m.
PRIVATE BALCONIES =	500.0 sq. m.
TOTAL =	2,310.0 sq. m.
TOTAL COMMUNAL =	1,200.0 sq. m.
REQUIRED - 6.0m² PER UNIT (191) =	1,146.0 sq. m.
REQUIRED COMMUNAL @ 50% =	573.0 sq. m.

WASTE REQUIREMENT (191 UNITS)

GARBAGE	- 0.11 PER UNIT	21 YARDS
RECYCLING GMP	- 0.018 PER UNIT	4 YARDS
RECYCLING FIBER	- 0.038 PER UNIT	7 YARDS
COMPOST	- 240L PER 50 UNITS	4

LOT COVERAGE

PAVED SURFACE =	622.8 sq. m.	12.8%
BUILDING FOOTPRINT =	1,749.2 sq. m.	35.8%
LANDSCAPE OPEN SPACE =	2,309.7 sq. m.	47.3%
POPS =	200.0 sq. m.	4.1%
TOTAL =	4,881.7 sq. m.	100.0%

IT IS THE RESPONSIBILITY OF THE APPROPRIATE CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS ON SITE AND TO REPORT ALL ERRORS AND/OR OMISSIONS TO THE ARCHITECT.

ALL CONTRACTORS MUST COMPLY WITH ALL PERTINENT CODES AND BY-LAWS.

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

DO NOT SCALE DRAWINGS.

NOTATION SYMBOLS:

- 00 — INDICATES DRAWING NOTES, LISTED ON EACH SHEET.
- 00 — INDICATES ASSEMBLIE TYPE; REFER TO TYPICAL ASSEMBLIES SCHEDUAL.
- 00 — INDICATES WINDOW TYPE; REFER TO WINDOW ELEVATIONS AND DETAILS ON A900 SERIES.
- 000 — INDICATES DOOR TYPE; REFER TO DOOR SCHEDULE AND DETAILS ON A900 SERIES.
- 00 TITLE / SCALE — DETAIL NUMBER; DETAIL REFERENCE PAGE; DETAIL CROSS REFERENCE PAGE

No.	DESCRIPTION	DATE
5	ISSUED FOR ZBLA APPLICATION	2024 12 06
4	ISSUED FOR OWNER / CONSULTANT REVIEW	2024 12 03
3	ISSUED FOR OWNER / CONSULTANT REVIEW	2024 10 25
2	ISSUED FOR OWNER / CONSULTANT REVIEW	2024 09 03
1	ISSUED FOR OPA / ZBLA PRE-CONSULT APP.	2024 08 20

REVISIONS:

ARCHITECT SEAL:

NORTH ARROW:

SEAL DATE: STAMP DATE

CLIENT: CREATIVE DEV VENTURES — Development with Purpose

ARCHITECT:
rla/architecture
roderick lahey architect inc.
56 beech street, ottawa, ontario K1S 3J6
t. 613.724.9932 f. 613.724.1209 rlaarchitecture.ca

PROJECT TITLE:
1815 MONTREAL ROAD
OTTAWA ONTARIO

SHEET TITLE:
SITE PLAN

DRAWN: R.V.
CHECKED: S.S.
SCALE: 1:200
SHEET No. SP-1
PROJECT No. 2405

D07-12-22-0

DWG # _____

APPENDIX C
WATERMAIN CALCULATIONS

CCO-25-3253 - 1815 Montreal Road - Water Demands

Project:	1815 Montreal Road
Project No.:	CCO-25-3253
Designed By:	FV
Checked By:	AG
Date:	December 9, 2024
Site Area:	0.44 gross ha

Residential	NUMBER OF UNITS		UNIT RATE	
Studio Apartment	3	units	1.4	persons/unit
1 Bedroom Apartment	30	units	1.4	persons/unit
1 Bedroom + Den Apartment	77	units	2.1	persons/unit
2 Bedroom Apartment	58	units	2.1	persons/unit
2 Bedroom + Den Apartment	8	units	3.1	persons/unit
3-Bedroom Apartment	15	units	3.1	persons/unit
Total Population	401	persons		
Amenity	2390	m2		

WATER DEMAND DESIGN FLOWS PER UNIT COUNT

DEMAND TYPE	AMOUNT	UNITS	
Residential	280	L/c/d	
Industrial - Light	35,000	L/gross ha/d	
Industrial - Heavy	55,000	L/gross ha/d	
Shopping Centres	2,500	L/(1000m² /d	
Hospital	900	L/(bed/day)	
Schools	70	L/(Student/d)	
Trailer Park with no Hook-Ups	340	L/(space/d)	
Trailer Park with Hook-Ups	800	L/(space/d)	
Campgrounds	225	L/(campsite/d)	
Mobile Home Parks	1,000	L/(Space/d)	
Motels	150	L/(bed-space/d)	
Hotels	225	L/(bed-space/d)	
Tourist Commercial	28,000	L/gross ha/d	
Other Commercial	28,000	L/gross ha/d	
WATER DEMAND DESIGN FLOWS PER UNIT COUNT	Residential	1.30	L/s
	Commercial/Industrial/ Institutional	0.08	L/s

MAXIMUM DAILY DEMAND

DEMAND TYPE	AMOUNT		UNITS
Residential	3.2	x avg. day	L/c/d
Industrial	1.5	x avg. day	L/gross ha/d
Commercial	1.5	x avg. day	L/gross ha/d
Institutional	1.5	x avg. day	L/gross ha/d
MAXIMUM DAILY DEMAND	Residential	4.15	L/s
	Commercial/Industrial/ Institutional	0.12	L/s

MAXIMUM HOUR DEMAND

DEMAND TYPE	AMOUNT		UNITS
Residential	4.8	x avg. day	L/c/d
Industrial	1.8	x max. day	L/gross ha/d
Commercial	1.8	x max. day	L/gross ha/d
Institutional	1.8	x max. day	L/gross ha/d
MAXIMUM HOUR DEMAND	Residential	6.23	L/s
	Commercial/Industrial/ Institutional	0.21	L/s

WATER DEMAND DESIGN FLOWS PER UNIT COUNT
CITY OF OTTAWA - WATER DISTRIBUTION GUIDELINES, JULY 2010

WATER DEMAND DESIGN FLOWS PER UNIT COUNT	1.38	L/s
MAXIMUM DAILY DEMAND	4.27	L/s
MAXIMUM HOUR DEMAND	6.44	L/s

CCO-25-3253 - 1815 Montreal Road - OBC Fire Flow Calculations

Project:	1815 Montreal Road
Project No.:	CCO-25-3253
Designed By:	FV
Checked By:	AG
Date:	December 9, 2024

Ontario 2006 Building Code Compendium (Div. B - Part 3)

Water Supply for Fire-Fighting - Apartment Building

Building is classified as Group : C - Residential (from table 3.2.2.55)

Building is of noncombustible construction with fire separations and fire-resistance ratings provided in accordance with subsections 3.2.2., including loadbearing walls, columns and arches

From Div. B A-3.2.5.7. of the Ontario Building Code - 3. Building On-Site Water Supply:

(a) Q = K x V x Stot

where:

Q = minimum supply of water in litres

K = water supply coefficient from Table 1

V = total building volume in cubic metres

Stot = total of spatial coefficient values from the property line exposures on all sides as obtained from the formula:

Stot = 1.0 + [Sside1+Sside2+Sside3+...etc.]

K	10	
V	50,618	(Total building volume in m³.)
Stot	1.8	(From figure 1 pg A-32)
Q =	911,119.57 L	

From Figure 1 (A-32)

Snorth	59	m	0.0
Seast	7	m	0.3
Ssouth	11	m	0.0
Swest	5	m	0.5

*approximate distances

From Table 2: Required Minimum Water Supply Flow Rate (L/s)

9000 L/min if Q > 270,000 L

2378 gpm

CCO-25-3253 - 1815 Montreal Road - Fire Underwriters Survey

Project:	1815 Montreal Road
Project No.:	CCO-25-3253
Designed By:	FV
Checked By:	AG
Date:	December 9, 2024

From the Fire Underwriters Survey (2020)

From Part II – Guide for Determination of Required Fire Flow Copyright I.S.O.:
City of Ottawa Technical Bulletin ISTB-2018-02 Applied Where Applicable

A. BASE REQUIREMENT (Rounded to the nearest 1000 L/min)

F = 220 x C x √A Where: F = Required fire flow in liters per minute
C = Coefficient related to the type of construction.
A = The total floor area in square meters (including all storey's, but excluding basements at least 50 percent below grade) in the building being considered.

Construction Type Non-Combustible Construction

C 0.8 A 16,073.4 m^2

Total Floor Area (per the 2020 FUS Page 20 - Total Effective Area) 5,958.5 m^2 **Unprotected Vertical Openings*

Calculated Fire Flow	13,585.7 L/min
	14,000.0 L/min

B. REDUCTION FOR OCCUPANCY TYPE (No Rounding)

From Page 24 of the Fire Underwriters Survey:

Limited Combustible	-15%
Fire Flow	11,900.0 L/min

C. REDUCTION FOR SPRINKLER TYPE (No Rounding)

Fully Supervised Sprinklered	-50%
Reduction	-5,950.0 L/min

D. INCREASE FOR EXPOSURE (No Rounding)

	Separation Distance (m)	Cons.of Exposed Wall	Length Exposed Adjacent Wall (m)	Height (Stories)	Length-Height Factor		***Exposure Fully Protected By Sprinklers
Exposure N	Over 30 m	Wood frame	N/A	N/A	0.0	0%	N/A
Exposure S	Over 30 m	Wood frame	N/A	N/A	0.0	0%	N/A
Exposure E	10.1 to 20	Wood frame	7.5	1	7.5	10%	No
Exposure W	10.1 to 20	Ordinary - Mass Timber (Unprotected)	23.4	2	46.8	0%	Yes
					% Increase*	10%	

Increase*	1,190.0 L/min

E. Total Fire Flow (Rounded to the Nearest 1000 L/min)

Fire Flow	7,140.0 L/min
Fire Flow Required**	7,000.0 L/min

*In accordance with Part II, Section 4, the Increase for separation distance is not to exceed 75%
**In accordance with Section 4 the Fire flow is not to exceed 45,000 L/min or be less than 2,000 L/min
***If both the subject building and the exposed building are fully protected with automatic sprinkler systems, no Exposure Adjustment Charge should be applied.

CCO-25-3253 - 1815 Montreal Road - Boundary Condition Unit Conversion

Project:	1815 Montreal Road
Project No.:	CCO-25-3253
Designed By:	FV
Checked By:	AG
Date:	December 9, 2024

Boundary Conditions Unit Conversion

Montreal Road

Scenario	Height (m)	Elevation (m)	m H_2O	PSI	kPa
Avg. DD	143.0	95.4	47.7	67.8	467.4
Fire Flow (116.67 L/s or 7,000 L/min)	135.9	95.4	40.6	57.7	397.8
Fire Flow (150 L/s or 9,000 L/min)	132.2	95.4	36.9	52.4	361.5
Peak Hour	142.5	95.4	47.2	67.1	462.5

VALENTI Francis

From: Elsby, Cam <Cam.Elsby@ottawa.ca>
Sent: December 6, 2024 3:56 PM
To: VALENTI Francis
Cc: GOSLING Alison; Haynes, Kris
Subject: Re: Boundary Condition Request - 1815 Montreal Road
Attachments: 1815 Montreal Road December 2024.pdf

Hi Francis,

Please find attached and below boundary conditions as requested.

The following are boundary conditions, HGL, for hydraulic analysis at 1815 Montreal Road, (zone MONT) assumed to be a dual connection to the 305 mm watermain on Montreal Road (see attached PDF for location).

Min HGL: 142.5 m

Max HGL: 143.0 m

Max Day + Fire Flow (150 L/s): 132.2 m

Max Day + Fire Flow (166.67 L/s): 135.9 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.

Kind regards,

Cam Elsby, P.Eng.
Project Manager, Infrastructure Approvals
Planning, Development and Building Services Department (PDBS) | Direction générale des services de la planification, de l'aménagement et du bâtiment (DGSPAB)
Development Review – East 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 21443
cam.elsby@ottawa.ca

From: Elsby, Cam <Cam.Elsby@ottawa.ca>
Sent: Thursday, December 5, 2024 2:32 PM
To: VALENTI Francis <Francis.VALENTI@egis-group.com>
Cc: GOSLING Alison <Alison.GOSLING@egis-group.com>; Haynes, Kris <Kris.Haynes@ottawa.ca>
Subject: Re: Boundary Condition Request - 1815 Montreal Road

Hi Francis,

I've just followed up with our water resources team for an update; I'll be sure to reach out when I hear back.

Kind regards,

Cam Elsby, P.Eng.
Project Manager, Infrastructure Approvals
Planning, Development and Building Services Department (PDBS) | Direction générale des services de la planification, de l'aménagement et du bâtiment (DGSPAB)
Development Review – East 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 21443
cam.elsby@ottawa.ca

From: VALENTI Francis <Francis.VALENTI@egis-group.com>
Sent: Thursday, December 5, 2024 1:05 PM
To: Elsby, Cam <Cam.Elsby@ottawa.ca>
Cc: GOSLING Alison <Alison.GOSLING@egis-group.com>; Haynes, Kris <Kris.Haynes@ottawa.ca>
Subject: RE: Boundary Condition Request - 1815 Montreal Road

Hi Cam,

I'm just following up on the boundary condition request for 1815 Montreal Road. Have you heard back from the water resources team on this?

Thanks,

egis
Francis Valenti, EIT
Engineering Intern, Canada
Phone: +1 613-714-6895, Mobile: +1 613-808-2123

From: Elsby, Cam <Cam.Elsby@ottawa.ca>
Sent: Friday, November 22, 2024 12:28 PM
To: VALENTI Francis <Francis.VALENTI@egis-group.com>
Cc: GOSLING Alison <Alison.GOSLING@egis-group.com>; Haynes, Kris <Kris.Haynes@ottawa.ca>
Subject: Re: Boundary Condition Request - 1815 Montreal Road

/! Courriel externe - Merci d'être prudent avec les liens et les pièces jointes **/!** External email - Please be careful with links and attachments **/!**

Hi Francis,

I've reviewed your request and found no issues, so I've forwarded the BC request to our water resources team for processing. I'll be sure to reach out as soon as I hear back.

Kind regards,

Cam Elsby, P.Eng.
Project Manager, Infrastructure Approvals
Planning, Development and Building Services Department (PDBS) | Direction générale des services de la planification, de l'aménagement et du bâtiment (DGSPAB)
Development Review – East 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 21443
cam.elsby@ottawa.ca

From: VALENTI Francis <Francis.VALENTI@egis-group.com>
Sent: Friday, November 22, 2024 12:03 PM
To: Elsby, Cam <Cam.Elsby@ottawa.ca>
Cc: GOSLING Alison <Alison.GOSLING@egis-group.com>
Subject: Boundary Condition Request - 1815 Montreal Road

Good afternoon,

We would like to request boundary conditions for the proposed development located at 1815 Montreal Road. The proposed development consists of a 19-storey residential building, complete with underground parking, landscaping, and drive aisles with street access from Montreal Road. The proposed connections (dual) will be to the existing 305 mm diameter ductile iron watermain located within Montreal Road.

- The estimated fire flow is 9,000 L/min based on the OBC method
- The estimated fire flow is 7,000 L/min based on the FUS method
- Average Daily Demand: 1.38 L/s

- Maximum Daily Demand: 4.27 L/s
- Maximum hourly daily demand: 6.44 L/s

Please find attached a map showing the proposed connection location and calculations prepared for the demands listed above.

Thank you,

egis
Francis Valenti, EIT
Engineering Intern, Canada
Phone: +1 613-714-6895, Mobile: +1 613-808-2123

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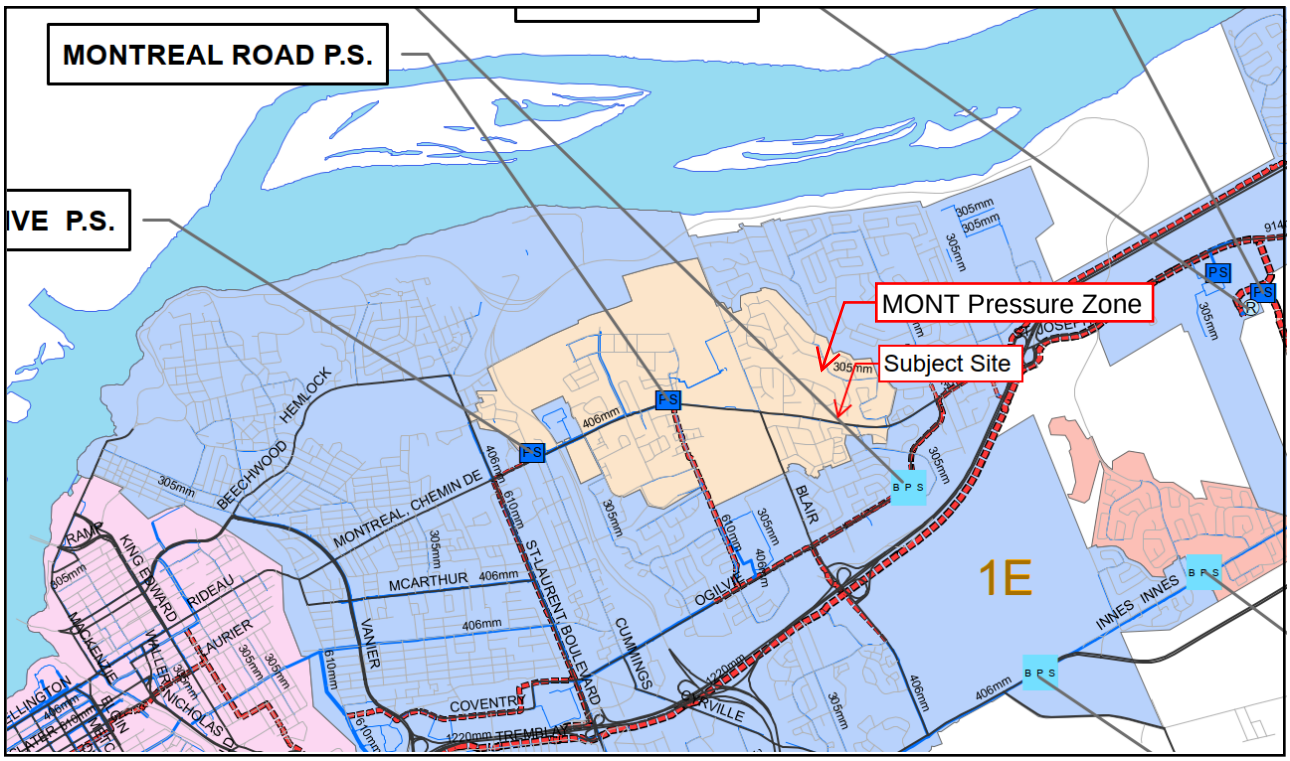
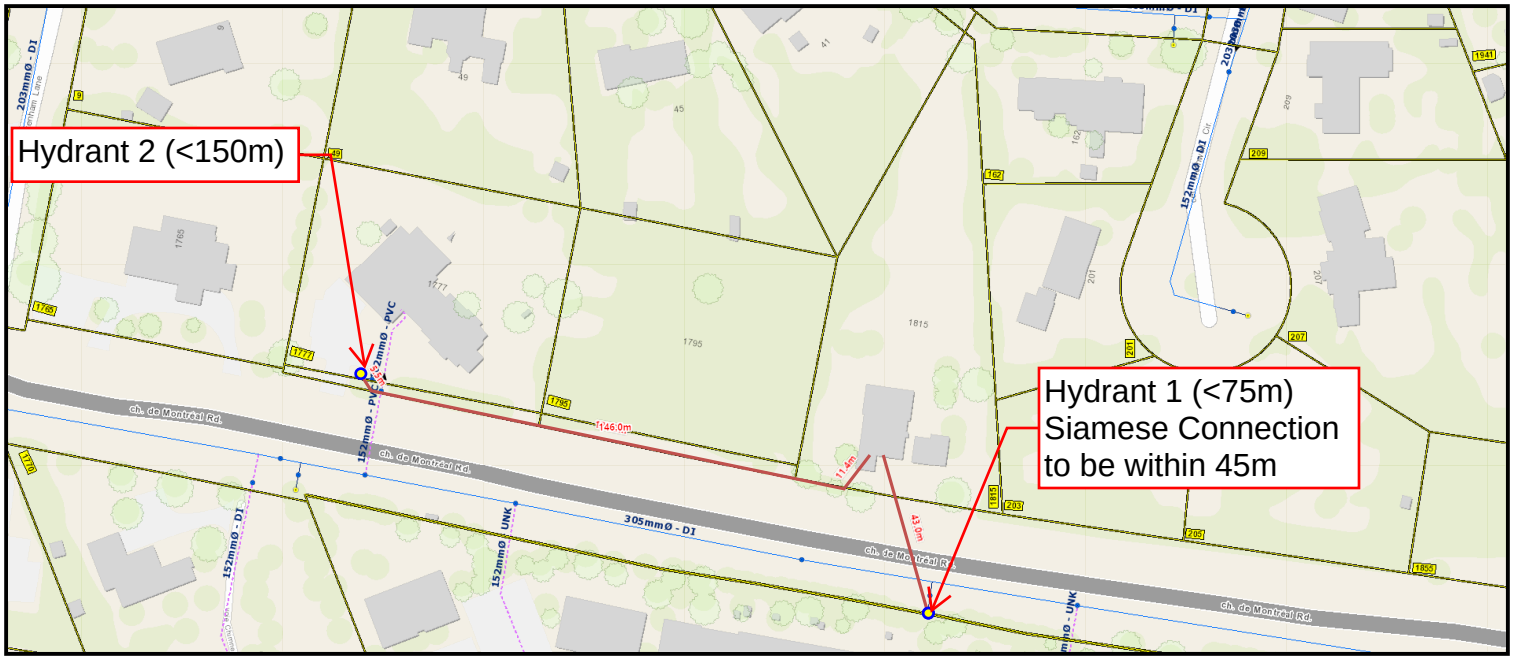
'

1815 Montreal Road
Pressure Zone Figure



1815 Montreal Road

Hydrant Coverage Figure



APPENDIX D
SANITARY CALCULATIONS

CCO-25-3253 - 1815 Montreal Road - Sanitary Demands

Project:	1815 Montreal Road
Project No.:	CCO-25-3253
Designed By:	AJG
Checked By:	AJG
Date:	November 28, 2024

Site Area	0.44	Gross ha	
Bachelor	3	1.40	Persons per unit
1 Bedroom	30	1.40	Persons per unit
2 Bedroom	135	2.10	Persons per unit
3 Bedroom	23	3.10	Persons per unit

Total Population	401	Persons
Amenity	2650	m^2

DESIGN PARAMETERS

Institutional/Commercial Peaking Factor	1.0	
Residential Peaking Factor	3.42	* *Using Harmon Formula* = 1+(14/(4+P^0.5))*0.8 *where P = population in thousands, Harmon's Correction Factor = 0.8*
Mannings coefficient (n)	0.013	
Demand (per capita)	280	L/day
Infiltration allowance	0.33	L/s/Ha

EXTRANEOUS FLOW ALLOWANCES

Infiltration / Inflow	Flow (L/s)
Dry	0.02
Wet	0.12
Total	0.14

AVERAGE DAILY DEMAND

DEMAND TYPE	AMOUNT	UNITS	POPULATION / AREA	Flow (L/s)
Residential	280	L/c/d	401	1.30
Industrial - Light**	35,000	L/gross ha/d		0
Industrial - Heavy**	55,000	L/gross ha/d		0
Commercial / Amenity	2,800	L/(1000m²/d)	2650	0.09
Restaurant	125	L/(9.2m²/d)		0
Schools	70	L/(Student/d)		0
Trailer Parks no Hook-Ups	340	L/(space/d)		0
Trailer Park with Hook-Ups	800	L/(space/d)		0
Campgrounds	225	L/(campsite/d)		0
Mobile Home Parks	1,000	L/(Space/d)		0
Motels	150	L/(bed-space/d)		0
Hotels	225	L/(bed-space/d)		0
Office	75	L/7.0m^2/d		0
Tourist Commercial	28,000	L/gross ha/d		0
Other Commercial	28,000	L/gross ha/d		0

AVERAGE RESIDENTIAL FLOW	1.30	L/s
PEAK RESIDENTIAL FLOW	4.44	L/s
AVERAGE ICI FLOW	0.09	L/s
PEAK INSTITUTIONAL/COMMERCIAL FLOW	0.09	L/s
PEAK INDUSTRIAL FLOW	0.00	L/s
TOTAL PEAK ICI FLOW	0.09	L/s

TOTAL SANITARY DEMAND

TOTAL ESTIMATED AVERAGE DRY WEATHER FLOW	1.41	L/s
TOTAL ESTIMATED PEAK DRY WEATHER FLOW	4.55	L/s
TOTAL ESTIMATED PEAK WET WEATHER FLOW	4.67	L/s

3.2 Sanitary Sewer

There is no municipal sanitary sewer in Montreal Road in front of the property. There is an existing 250mm diameter municipal sanitary sewer in Rothwell Avenue located northeast from the site. In order to service the proposed development, it is proposed to extend the 250mm diameter Rothwell Avenue sewer approximately 48m to the west and construct approximately 92m of private 200mm diameter sanitary sewer from the site and connect to the Rothwell Drive sewer. Since the development property does not front Rothwell Avenue, a portion of the new 200mm diameter sanitary sewer will have to be constructed in side and rear yards of the adjacent residential properties (41 Cedar Road and 45 Cedar Road). A 6m wide sewer easement is being proposed where the sanitary sewer crosses the adjacent private properties. In addition, the proposed 200mm diameter sanitary sewer will be extended to the west along the north property line to provide service to the Monfort Renaissance facility located at 1777 Montreal Road.

The calculated peak sanitary flow from the site, calculated as per the City of Ottawa Sewer Design Guidelines, including infiltration, is 0.14 L/s. Refer to **Appendix C** for detailed calculations.

The peak sanitary flow from the Monfort Renaissance facility, including infiltration, is calculated to be 0.26 L/s. The flow is based on previously approved *"1777 Montreal Road Ottawa Withdrawal Management Centre, Septic System Design Brief prepared by Novatech Engineering Consultants Ltd."* Detailed calculations and an excerpt from *Septic System Design Brief* are enclosed in **Appendix C**.

The proposed 200 mm dia. private sanitary sewer will be a gravity pipe at a minimum slope of 4.0% with a full flow conveyance capacity of at least 68.4 L/s. The proposed 250mm diameter sanitary sewer extension in Rothwell Avenue at a minimum slope of 1.0% slope has a full flow capacity of approximately 62.0 L/s. Therefore, the proposed sanitary sewer system has sufficient capacity to convey anticipated sanitary flows (0.40 L/s) generated from the proposed development and the existing Montfort Renaissance facility.

The existing 250mm sanitary sewer in Rothwell Avenue at a minimum slope of 0.24% has a full flow capacity of 30.4 L/s. The additional flow of 0.40 L/s to the Rothwell Avenue sewer can be considered negligible and will not negatively affect the level of service provided by the existing sewer.

3.3 Stormwater Management

The 0.415 ha site is currently wooded and overlain with grasses. The majority of the existing overland stormwater runoff is conveyed from the site to the adjacent residential properties to the north and east. A portion of the stormwater runoff for the adjacent Monfort Renaissance site (1777 Montreal Road) currently drains towards the subject site.

The stormwater management design for the proposed development will include on-site water quantity control prior to releasing flows from the site. The proposed development will be serviced by connecting a new private storm sewer to the existing 250mm diameter storm sewer in Montreal Road.

Stormwater management will be provided by rooftop storage, surface storage within the paved parking and landscaped areas as well as by underground storage pipes. Further details on the drainage sub catchment areas captured within the on-site storm sewer systems are explained in subsequent sections of the report. See the Stormwater Management Plan (116151-SWM) included in **Appendix G**, for catchment locations, areas, and runoff coefficients.

VALENTI Francis

From: Elsby, Cam <Cam.Elsby@ottawa.ca>
Sent: November 13, 2024 3:38 PM
To: VALENTI Francis
Cc: GOSLING Alison
Subject: Re: 1815 Montreal Road - Sanitary Capacity

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Francis,

Confirmed no sanitary capacity concerns with either connection option based on the proposed 4.69 L/s peak flow.

Kind regards,

Cam Elsby, P.Eng.
Project Manager, Infrastructure Approvals
Planning, Development and Building Services Department (PDBS) | Direction générale des services de la planification, de l'aménagement et du bâtiment (DGSPAB)
Development Review – East 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 21443
cam.elsby@ottawa.ca

From: Elsby, Cam <Cam.Elsby@ottawa.ca>
Sent: Friday, November 8, 2024 7:58 AM
To: VALENTI Francis <Francis.VALENTI@egis-group.com>
Cc: GOSLING Alison <Alison.GOSLING@egis-group.com>
Subject: Re: 1815 Montreal Road - Sanitary Capacity

Hi Francis,

Thanks for providing this information, I've reviewed and passed it over to our Asset Management team for confirmation of downstream municipal capacity in both options. I'll be sure to reach out as soon as I hear back.

Kind regards,

Cam Elsby, P.Eng.

Project Manager, Infrastructure Approvals
Planning, Development and Building Services Department (PDBS) | Direction générale des services de la planification, de l'aménagement et du bâtiment (DGSPAB)
Development Review – East 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 21443
cam.elsby@ottawa.ca

From: VALENTI Francis <Francis.VALENTI@egis-group.com>
Sent: Thursday, November 7, 2024 4:01 PM
To: Elsby, Cam <Cam.Elsby@ottawa.ca>
Cc: GOSLING Alison <Alison.GOSLING@egis-group.com>
Subject: 1815 Montreal Road - Sanitary Capacity

Good afternoon Cam,

We're currently reviewing two different sanitary servicing options for the proposed development at 1815 Montreal Road, and we'd like to confirm the municipal sewers have sufficient downstream capacity to accommodate the proposed flows.

Can you please review the sanitary demands listed below and let us know if there are any capacity concerns at the two contemplated locations?

- Average Dry Weather Flow: 1.41 L/s
- Peak Dry Weather Flow: 4.57 L/s
- Peak Wet Weather Flow: 4.69 L/s

  - Contemplated Connection Point 1: Connection to the existing 250mm diameter sanitary sewer located within Rothwell Drive, upstream of MHSA53281
  - Contemplated Connection Point 2: Connection to the existing maintenance structure MHSA43410 located within Elmsmere Road.

I've included a figure showing the two contemplated connection points, as well as detailed calculations for the demands listed above.

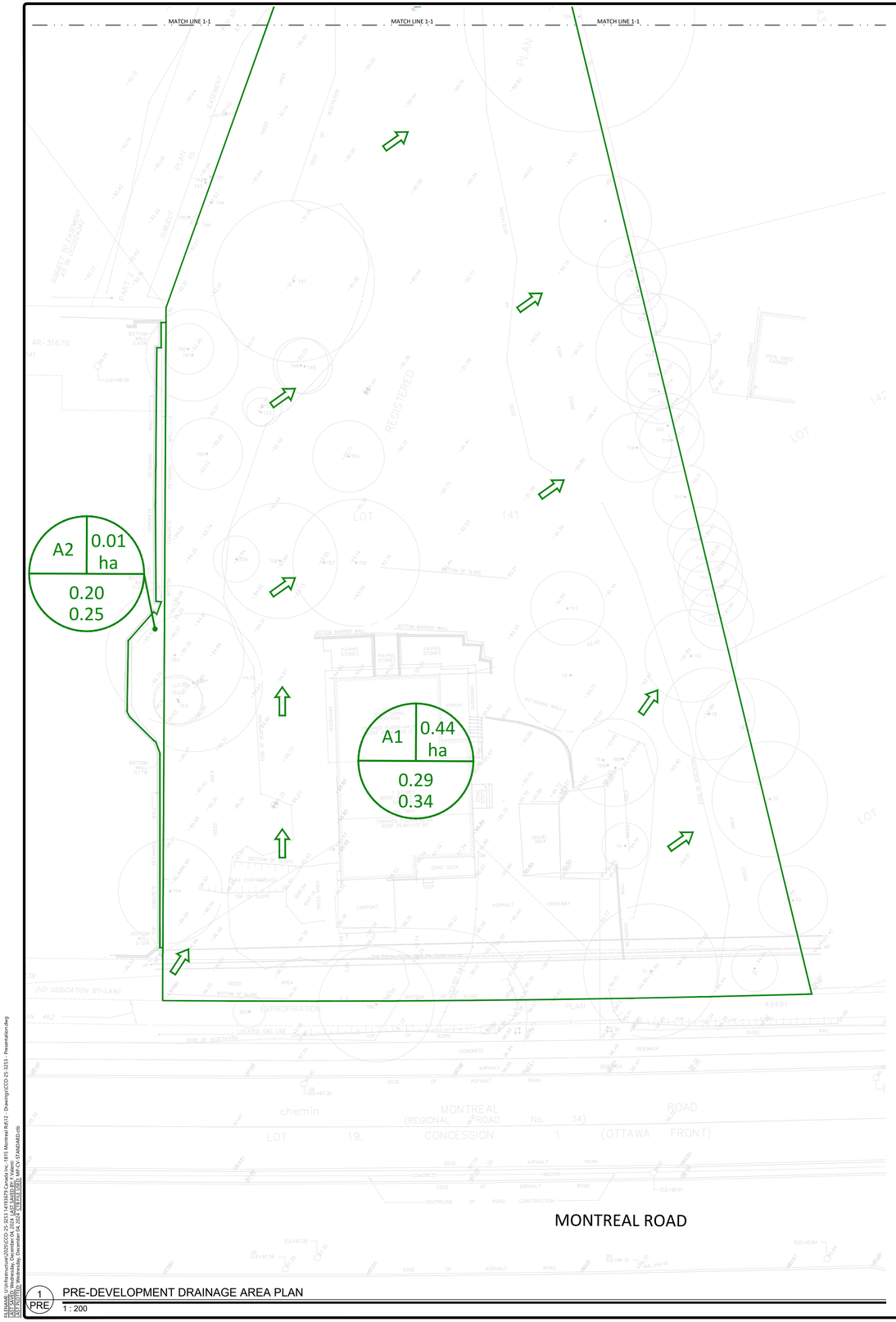
Thank you,

egis
Francis Valenti, EIT
Engineering Intern, Canada
Phone: +1 613-714-6895, Mobile: +1 613-808-2123

'

'

APPENDIX E
PRE-DEVELOPMENT DRAINAGE PLAN



1 PRE PRE-DEVELOPMENT DRAINAGE AREA PLAN

1 : 200

2 PRE PRE-DEVELOPMENT DRAINAGE AREA PLAN

1 : 200

GENERAL NOTES

1. THE ORIGINAL TOPOGRAPHY, GROUND ELEVATION AND SURVEY DATA SHOWN ARE SUPPLIED FOR INFORMATION PURPOSES ONLY, AND IMPLY NO GUARANTEE OF ACCURACY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL INFORMATION SHOWN.
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8. TOPSOIL TO BE STRIPPED AND STOCKPILED FOR REHABILITATION. CLEAN FILL TO BE PLACED IN FILL AREAS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY.
9. ALL DISTURBED AREAS TO BE RESTORED TO ORIGINAL CONDITION OR BETTER UNLESS OTHERWISE SPECIFIED.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL AND SAFETY MEASURES DURING THE CONSTRUCTION PERIOD, INCLUDING THE SUPPLY, INSTALLATION, AND REMOVAL OF ALL NECESSARY SIGNAGE, DELINEATORS, MARKERS AND BARRIERS.
11. DO NOT ALTER GRADING OF THE SITE WITHOUT PRIOR APPROVAL OF THE ENGINEER/CITY.
12. ALL ROADWAY, PARKING LOT, AND GRADING WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH CITY STANDARDS AND SPECIFICATIONS. THE CONTRACTOR IS TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE BUILDING.
13. CONTACT THE CITY FOR INSPECTION OF ROUGH GRADING OF PARKING LOTS, ROADWAYS AND LANDSCAPED AREAS PRIOR TO PLACEMENT OF ASPHALT AND TOPSOIL. ALL DEFICIENCIES NOTED SHALL BE RECTIFIED TO THE CITY'S SATISFACTION PRIOR TO PLACEMENT OF ANY ASPHALT, TOPSOIL, SEED & MULCH AND/OR SOD.
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17. CONTRACTOR TO ENSURE ALL APPLICABLE OPS SPECIFICATIONS ARE FOLLOWED DURING CONSTRUCTION
18. ALL PROPOSED CURB TO BE CONCRETE BARRIER CURB UNLESS OTHERWISE SPECIFIED.
19. THIS PLAN MUST BE READ IN CONJUNCTION WITH THE GEOTECHNICAL INVESTIGATION COMPLETED BY PATERSON GROUP, DATED MAY 16, 2023.

LOCATION PLAN

LEGEND

FOR REVIEW ONLY

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No.	Revisions	Date
1	ISSUED FOR REVIEW	DEC. 04, 2024

Check and verify all dimensions before proceeding with the work

Do not scale drawings

SCALE 1 : 200

0 10 20 Metres

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115 Walgreen Road, R.R.3
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Tel: 613-836-2184
Fax: 613-836-3742
www.egis-group.com

Stamp:

Client:

14193679 CANADA INC.
1606 PROULX DRIVE
OTTAWA, ON K4A 1T5

Project:

RESIDENTIAL BUILDING
1815 MONTREAL ROAD

Drawing Title:

PRE-DEVELOPMENT DRAINAGE AREA PLAN

Scale: 1:200

Project Number: CCO-25-3253

Drawn By: FV

Checked By: AG

Drawing Number: PRE

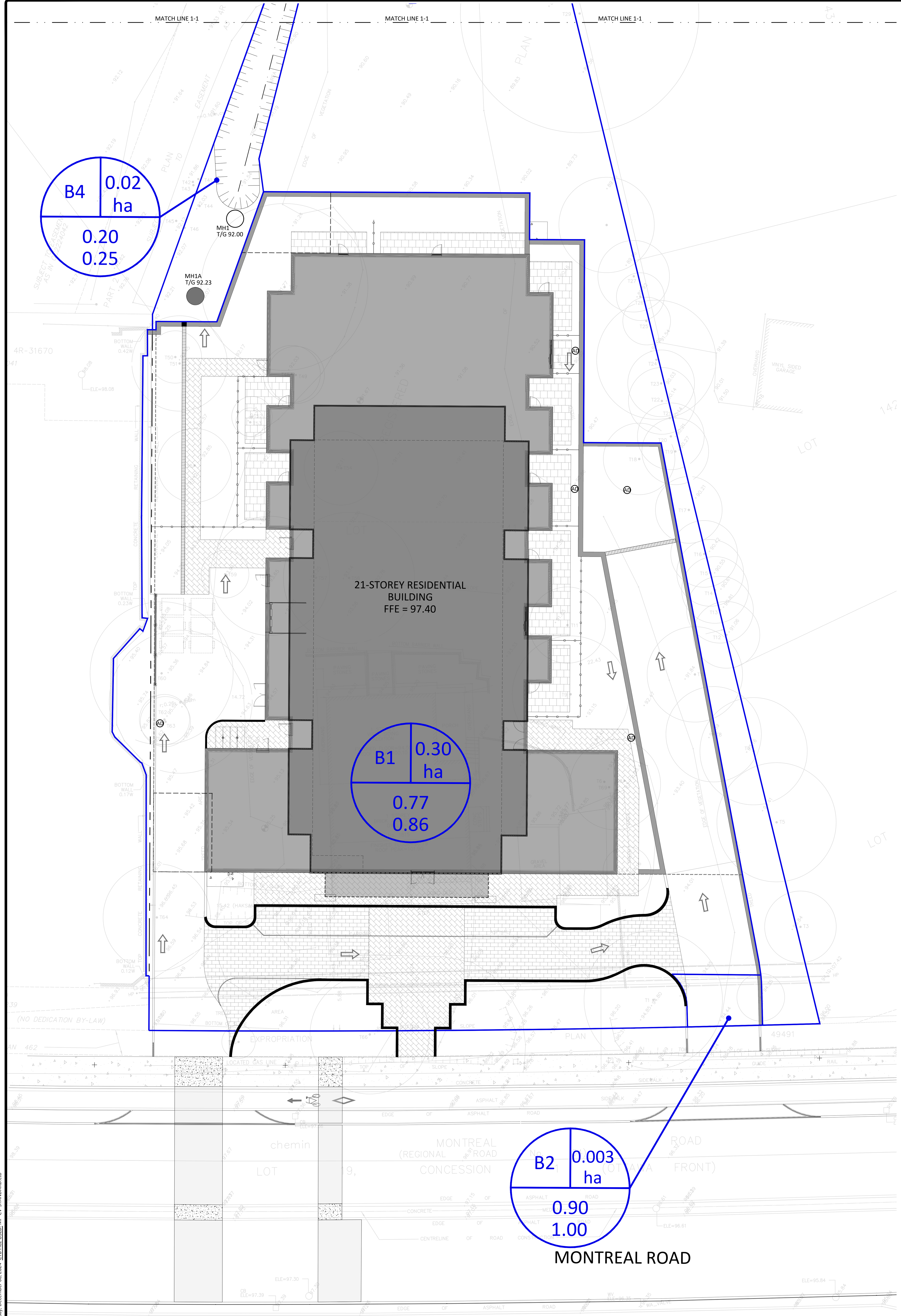
Designed By: AG

D07-12-XX-XXXX

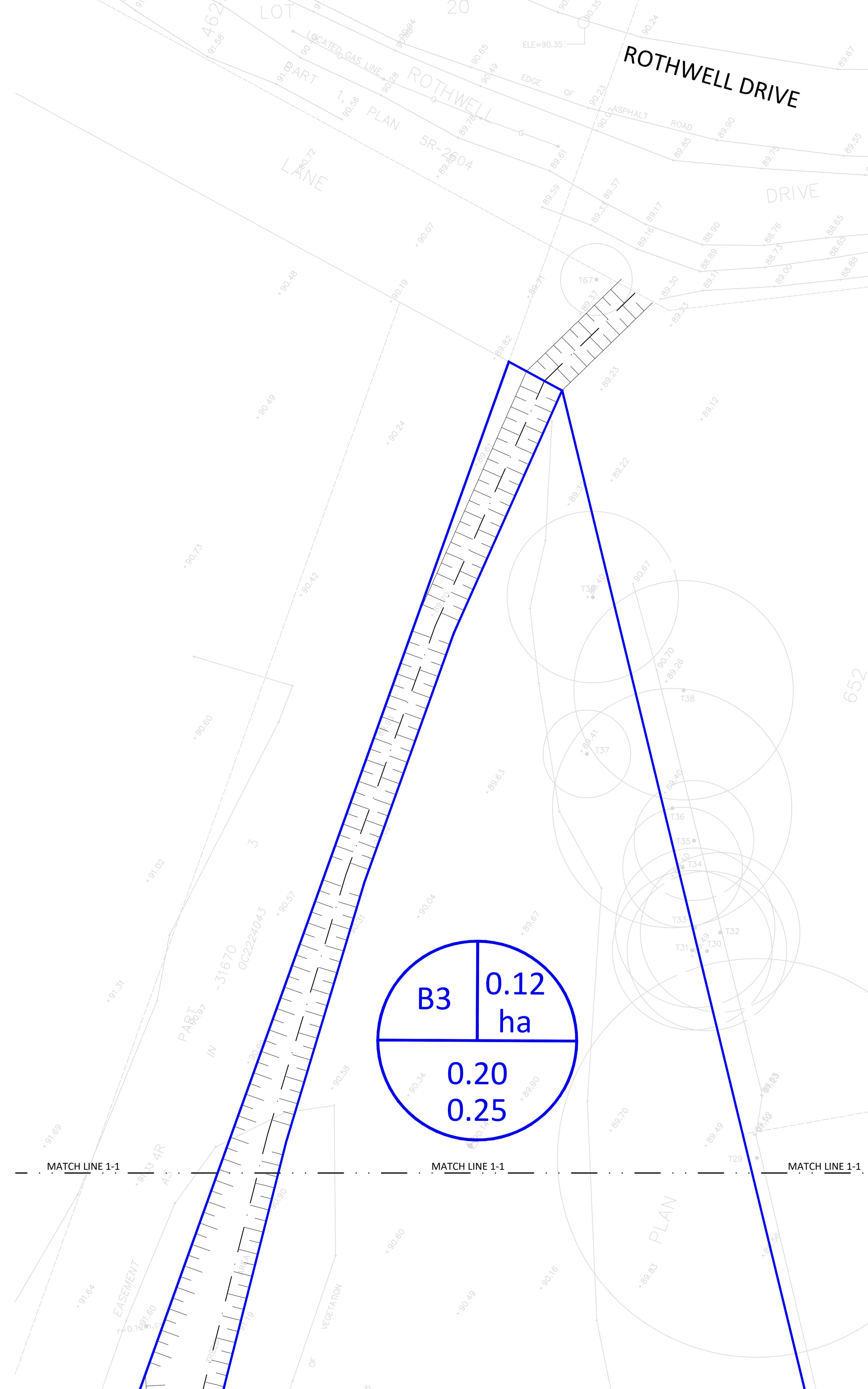
#XXXXX

FILENAME: U:\Infrastructure\2025\CCO-25-3253 14193679 Canada Inc.-1815 Montreal Rd\12 - Drawings\CCO-25-3253 - Presentation.dwg
LAST SAVED: Wednesday, December 04, 2024 LAST SAVED BY: F.Valenti
LAST PLOTTED: Wednesday, December 04, 2024 CTB FILE USED: MP-CV-STANDARD.ctb

APPENDIX F
POST-DEVELOPMENT DRAINAGE PLAN



1 POST — POST-DEVELOPMENT DRAINAGE AREA PLAN
1 : 200



2 POST — POST-DEVELOPMENT DRAINAGE AREA PLAN
1 : 200

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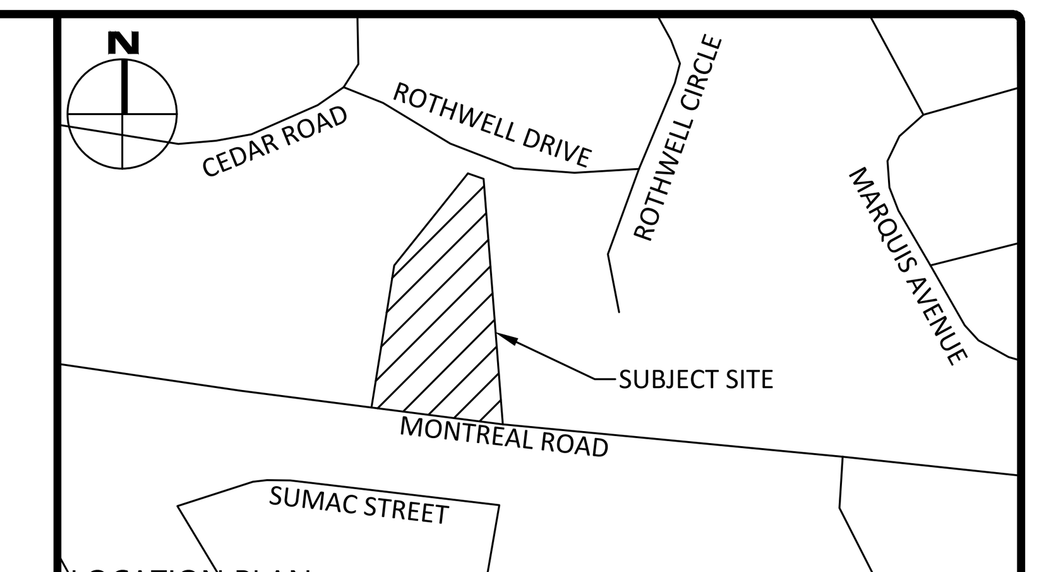
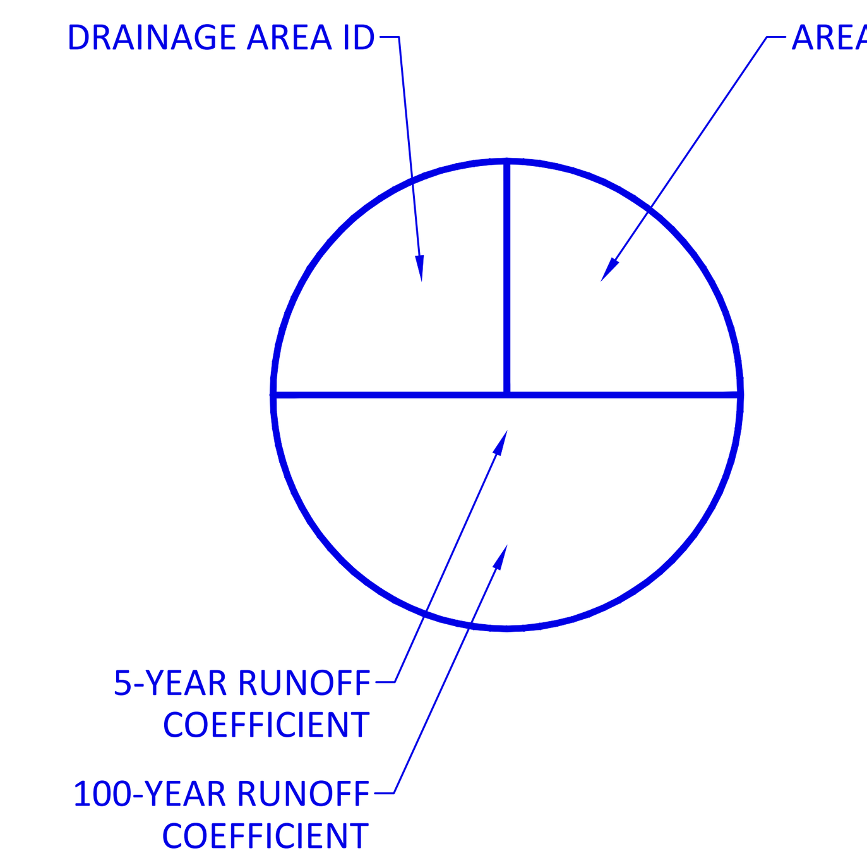


LOCATION PLAN

LEGEND



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No.	Revisions	Date
1	ISSUED FOR REVIEW	DEC. 05, 2024

Check and verify all dimensions before proceeding with the work — Do not scale drawings

SCALE 1 : 200
0 10 20 Metres

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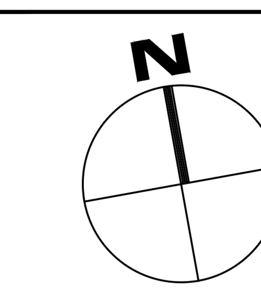

Stamp:

Client:
14193679 CANADA INC.
1606 PROULX DRIVE
OTTAWA, ON K4A 1T5

Project:
RESIDENTIAL BUILDING
1815 MONTREAL ROAD

Drawing Title:
POST-DEVELOPMENT DRAINAGE AREA PLAN

Scale:	1:200	Project Number:	CCO-25-3253
Drawn By:	FV		
Checked By:	AG	Drawing Number:	POST
Designed By:	AG		

D07-12-XX-XXXX

#XXXXX

APPENDIX G
STORMWATER MANAGEMENT CALCULATIONS

Tc (min)	Intensity (mm/hr)		
	2-Year	5-Year	100-Year
20	52.0	70.3	120.0
10	76.8	104.2	178.6

C-Values	
Impervious	0.90
Gravel	0.60
Pervious	0.20

Pre-Development Runoff Coefficient

Drainage Area	Impervious Area (m^2)	Gravel (m^2)	Pervious Area (m^2)	Average C (5-year)	Average C (100-year)	
A1	552	0	3,809	0.29	0.34	1815 Montreal Road
A2	0	0	54	0.20	0.25	External Drainage

Pre-Development Runoff Calculations

Drainage Area	Area (ha)	C 2/5-Year	C 100-Year	Tc (min)	Q (L/s)		
					5-Year	100-Year	
A1	0.436	0.29	0.34	10	36.46	74.67	1815 Montreal Road
A2	0.005	0.20	0.25	10	0.32	0.68	External Drainage
Total	0.442				36.77	75.35	

Post-Development Runoff Coefficient

Drainage Area	Impervious Area (m^2)	Gravel (m^2)	Pervious Area (m^2)	Average C (2/5-year)	Average C (100-year)	
B1	2,475	0	548	0.77	0.86	Restricted
B2	28	0	0	0.90	1.00	Unrestricted - Montreal Road
B3	6	0	1,144	0.20	0.25	Unrestricted - East
B4	0	0	215	0.20	0.25	Unrestricted - Rear

Post-Development Runoff Calculations

Drainage Area	Area (ha)	C 2/5-Year	C 100-Year	Tc (min)	Q (L/s)		
					5-Year	100-Year	
B1	0.302	0.77	0.86	10	67.69	129.65	Restricted
B2	0.003	0.90	1.00	10	0.73	1.40	Unrestricted - Montreal Road
B3	0.115	0.20	0.25	10	6.78	14.49	Unrestricted - East
B4	0.021	0.20	0.25	10	1.25	2.67	Unrestricted - Rear
Total	0.442				76.45	148.20	

Required Restricted Flow

Drainage Area	Area (ha)	C 2/5-Year	C 100-Year	Tc (min)	Q (L/s)	Q (L/s/ha)	
					5-Year	100-Year	
A1	0.436	0.29	0.34	10	36.46	74.67	1815 Montreal Road
A2	0.005	0.20	0.25	10	0.32	0.68	External Drainage
Total	0.442				36.77	75.35	

Post-Development Restricted Runoff Calculations

Drainage Area	Unrestricted Flow (L/S)		Restricted Flow (L/S)		Storage Required (m^3)		Storage Provided (m^3)	
	5-year	100-Year	5-Year	100-Year	5-Year	100-Year	5-Year	100-Year
B1	67.69	129.65	28.01	33.48	23.8	64.4	65.0	65.0
B2	0.73	1.40	0.73	1.40	-	-	-	-
B3	6.78	14.49	6.78	14.49	-	-	-	-
B4	1.25	2.67	1.25	2.67	-	-	-	-
Total	76.45	148.20	36.77	52.04	23.81	64.38	65.00	65.00

Storage Requirements for Area B1

5-Year Storm Event

Tc (min)	I (mm/hr)	Runoff (L/s)	Allowable Outflow (L/s)	Runoff to be Stored (L/s)	Storage Required (m^3)
10	104.2	67.69	28.01	39.68	23.81
20	70.3	45.67	28.01	17.66	21.19
30	53.9	35.02	28.01	7.00	12.61
40	44.2	28.72	28.01	0.70	1.69
50	37.7	24.49	28.01	-3.52	-10.56

Maximum Storage Required 5-year =	24	m^3

100-Year Storm Event

Tc (min)	I (mm/hr)	Runoff (L/s)	Allowable Outflow (L/s)	Runoff to be Stored (L/s)	Storage Required (m^3)
10	178.6	129.68	33.48	96.20	57.72
20	120.0	87.13	33.48	53.65	64.38
30	91.9	66.73	33.48	33.25	59.84
40	75.1	54.53	33.48	21.05	50.52
50	64.0	46.47	33.48	12.99	38.97

Maximum Storage Required 100-year =	64	m^3

5-Year Storm Event Storage Summary

Storage Available (m^3) =	65.0	*
Storage Required (m^3) =	23.8	

100-Year Storm Event Storage Summary

Storage Available (m^3) =	65.0	*
Storage Required (m^3) =	64.4	

*Available Storage based on preliminary cistern sizing.

STORM SEWER DESIGN SHEET

PROJECT: CCO-25-3253
LOCATION: 1815 Montreal Inc.
CLIENT: 14193679 Canada Inc.

LOCATION				CONTRIBUTING AREA (ha)				RATIONAL DESIGN FLOW										SEWER DATA								
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
STREET	AREA ID	FROM MH	TO MH	C-VALUE	AREA	INDIV AC	CUMUL AC	INLET (min)	TIME IN PIPE	TOTAL (min)	i (5) (mm/hr)	i (10) (mm/hr)	i (100) (mm/hr)	5yr PEAK FLOW (L/s)	10yr PEAK FLOW (L/s)	100yr PEAK FLOW (L/s)	FIXED FLOW (L/s)	DESIGN FLOW (L/s)	CAPACITY (L/s)	LENGTH (m)	PIPE SIZE (mm)			SLOPE (%)	VELOCITY (m/s)	AVAIL CAP (5yr)	
																					DIA	W	H			(L/s)	(%)
Montreal Road	B1	BLDG	MH1	0.77	0.30	0.23	0.23	10.00	0.01	10.01	104.19	122.14	178.56	67.36				67.36	142.67	1.00	300			2.00	1.955	75.31	52.79%
		MH1	SWALE				0.23	10.01	0.02	10.03	104.15	122.09	178.48	67.36				67.36	142.67	2.31	300			2.00	1.955	75.31	52.79%

Definitions:
Q = 2.78CiA, where:
Q = Peak Flow in Litres per Second (L/s)
A = Area in Hectares (ha)
i = Rainfall intensity in millimeters per hour (mm/hr)
[i = 998.071 / (TC+6.053)^0.814] 5 YEAR
[i = 1174.184 / (TC+6.014)^0.816] 10 YEAR
[i = 1735.688 / (TC+6.014)^0.820] 100 YEAR

Notes:
1. Mannings coefficient (n) = 0.013

Designed:
FV

Checked:
AG

Project No.:
CCO-25-3253

No.	Revision	Date
1.	Issued for Review	2024-12-05

Date:
2024-12-05

Sheet No:
1 of 1

1815 Montreal Road

Drainage Path Figure