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PROPOSED HIGH-RISE MIXED-USE DEVELOPMENT

1950 Scott Street and 312 & 314 Clifton Road

Development Servicing Study and
Stormwater Management Report

PROPOSED HIGH-RISE MIXED-USE DEVELOPMENT
1950 Scott Street and 312 & 314 Clifton Road

DEVELOPMENT SERVICING STUDY
AND STORMWATER MANAGMENT REPORT

Prepared by:

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Suite 200, 240 Michael Cowpland Drive
Kanata, Ontario
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July 31, 2024
Revised: November 1, 2024
Revised: December 13, 2024
Revised: March 20, 2025
Revised: April 17, 2025

Ref: R-2024-087
Novatech File No. 121301

NOVATECH
Engineers, Planners & Landscape Architects

April 17, 2025

EMAIL: khoppner@morleyhopner.com

Granite Private Equity Limited Partnership.
16 Concourse Gate, Suite 200
Ottawa, Ontario
K2E 7S8

Attention: Ken Hoppner

Re: Development Servicing Study & Stormwater Management Report
Proposed High-Rise Mixed-Use Development
1950 Scott Street and 312 & 314 Clifton Road, Ottawa, ON
Novatech File No.: 121301

Enclosed is a copy of the revised 'Development Servicing Study & Stormwater Management Report' for the proposed mixed-use development located on the 1950 Scott Street, 312 & 314 Clifton Road properties in the City of Ottawa. This report addresses the approach to site servicing, grading, and stormwater management and is being submitted in support of a Zoning By-Law Amendment and a Site Plan Control application.

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

NOVATECH

François Thauvette, P. Eng.
Senior Project Manager

cc: Shawn Wessel (City of Ottawa)
Pat Bisson (Hobin)

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1.0 INTRODUCTION

Novatech has been retained by Granite Private Equity to complete the site servicing, grading, and stormwater management design related to the proposed re-development of the properties at 1950 Scott Street and 312 & 314 Clifton Road. This report is being submitted in support of a Zoning By-Law Amendment and a Site Plan Control application.

1.1 Location and Site Description

The 0.217-hectare site currently consists of three (3) properties that will be merged, including the International Buddhist Progress Society of Ottawa building and associated parking lots (1950 Scott Street) as well as two residential properties immediately to the south (312 and 314 Clifton Road). The subject site is located on the south side of Scott Street, west of Clifton Road, and is bordered by other residential properties to the south, east, and west. The OC Transpo transitway runs parallel to Scott Street to the north. The legal description of the site is designated as Lots 24 and 25 and Part of Lots 45, 46, 47 and 48, Registered Plan 369, City of Ottawa.

Figure 1: Aerial View of the Subject Site

Image Source: geoOttawa (City of Ottawa)

1.2 Pre-Consultation Information

An initial pre-consultation meeting was held with the City of Ottawa on December 21, 2021, at which time the client was advised of the general submission requirements. The project was subsequently put on hold but re-started, requiring an updated pre-consultation meeting, which was held on March 6, 2024. The Rideau Valley Conservation Authority (RVCA) was also consulted regarding the proposed development. Based on a review of **O. Reg. 525/98: Approval Exemptions**, a Ministry of the Environment, Conservation and Parks (MECP) Environmental

Compliance Approval (ECA) will not be required for the proposed development. Refer to **Appendix A** for a summary of the correspondence related to the proposed development.

1.3 Proposed Development

The proposed development will consist of a 22-storey tower with a podium ranging from 4 to 6-stories, containing residential apartments above at-grade commercial units, outdoor amenity space and associated underground parking. The development will include a single site entrance off Clifton Road.

1.4 Reference Material

The following reports and studies were prepared and/or reviewed as part of the design process:

[1] Assessment of Adequacy of Public Services Report (Ref. No. R-2022-162), prepared by Novatech, dated March 6th, 2024.

[2] The Geotechnical Investigation Report PG4394-1 Revision 1, prepared by Paterson Group Inc., dated November 26, 2024.

[3] The Geotechnical Memorandum – Foundation Drainage Flow Rate, prepared by Paterson Group Inc., dated December 5, 2024.

2.0 SITE SERVICING

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

The City of Ottawa Servicing Study Guidelines for Development Applications requires that a Development Servicing Study Checklist be included to confirm that each applicable item is deemed complete and ready for review by City of Ottawa Infrastructure Approvals. A completed checklist is enclosed in **Appendix B** of the report.

2.1 Sanitary Servicing

The existing buildings are currently being serviced by the 225mm dia. concrete sewer in Clifton Road and 250mm dia. PVC sanitary sewer in Scott Street. The local sanitary sewer flows west along Scott Street and discharges into the 1500mm dia. West Nepean Collector sewer, east of Tweedsmuir Avenue on the north side of Scott Street.

Under post-development conditions, the proposed development will continue to be serviced by the local municipal sanitary sewer in Scott Street. The City of Ottawa Sewer design criteria were used to calculate the total theoretical peak sanitary flow from the proposed development. The following design criteria were taken from Section 4 of the City of Ottawa Sewer Design Guidelines and subsequent Technical Bulletins:

- Residential Units (1-Bedroom or Studio): 1.4 people per unit
- Residential Units (2-Bedroom): 2.1 people per unit
- Average Daily Residential Sewage Flow: 280 L/person/day (ISTB-2018-01)
- Residential Peaking Factor = 3.43 (Harmon Equation)

- Average Commercial Sewage Flow: 2.8 L/m^2/day
- Commercial Peaking Factor = 1.5
- Infiltration Allowance: 0.33 L/s/ha (ISTB-2018-01)

Table 1 identifies the theoretical sanitary flows for the proposed development based on the above design criteria and information provided by the architect.

Table 1: Theoretical Post-Development Sanitary Flows

Proposed Development	Unit Count	Design Population	Average Flow (L/s) *	Peaking Factor	Sanitary Peak Flow (L/s) *
1-Bedroom / 2-Bedroom	183 / 59	381	1.23	3.43	4.23
Commercial	-	-	<0.01	1.5	0.01
Infiltration Allowance	-	-	-	-	0.07
Total	**242**	**-**	**1.24**	**-**	**4.31**

*Represents rounded values

A PVC sanitary service lateral having a size of 200mm dia. at a minimum slope of 1.0% has a full flow conveyance capacity of 34.2 L/s and will have enough capacity to convey the theoretical sanitary flows from the proposed development. Refer to the enclosed **General Plan of Services** (121301-GP) and to **Appendix C** for detailed sanitary sewage calculations. Sanitary site flows will travel approximately 175m within the local municipal sanitary sewer in Scott Street before being discharged into the 1500mm dia. West Nepean Collector on the north side of Scott Street.

2.2 Water Supply for Domestic Use and Firefighting

The existing buildings on site are currently being serviced by the local 203mm dia. PVC watermains in Scott Street and/or Clifton Road. A 1067mm dia. (backbone) watermain is also running along the north side of Scott Street, however the proposed development will not be allowed to connect into this large diameter feeder main. The subject site is located within the City of Ottawa 1W pressure zone.

Under post-development conditions, the proposed site will be serviced by twin 150mm dia. PVC watermain laterals fed off the 203mm dia. watermain in Scott Street. The anticipated daily water demands will be greater than 50m^3/day (~0.58 L/s), therefore, the proposed development will require two (2) water supplies for redundancy purposes. The proposed tower will be sprinklered and the water meter will be located within the water entry room, with the remote meter and siamese connection on the exterior face of the building.

2.2.1 Water Demands and Watermain Analysis

The theoretical water demand and fire flow calculations are based on criteria in the City of Ottawa Design Guidelines – Water Distribution. The fire flow requirements were calculated per the Fire Underwriters Survey (FUS) as indicated in City of Ottawa Technical Bulletin ISTB-2021-03, based on information provided by the architect. The following design criteria were taken from City of Ottawa Sewer Design Guidelines and subsequent Technical Bulletins:

- Residential Units (1-Bedroom or Studio): 1.4 people per unit
- Residential Units (2-Bedroom): 2.1 people per unit
- Average Daily Residential Water Demand: 280 L/person/day (ISTB-2021-03)
- Maximum Day Demand Peaking Factor = 2.5 x Avg. Day Demand (City Water Table 4.2)
- Peak Hour Demand Peaking Factor = 2.2 x Max. Day Demand (City Water Table 4.2)
- Average Commercial Water Demand: 2.8 L/m^2/day
- Maximum Day Demand Peaking Factor = 1.5 x Avg. Day Demand (City Water Table 4.2)
- Peak Hour Demand Peaking Factor = 1.8 x Max. Day Demand (City Water Table 4.2)

Table 2 identifies the theoretical domestic water demands and fire flow requirements for the development based on the above design criteria. Refer to **Appendix D** for detailed calculations.

Table 2: **Theoretical Water Demand for Proposed Development**

Proposed Development	Unit Count	Design Population	Avg. Daily Demand (L/s)*	Max. Daily Demand (L/s)*	Peak Hour Demand (L/s)*
1-Bedroom / 2-Bedroom	183 / 59	381	1.23	3.09	6.79
Commercial	-	-	<0.01	0.01	0.02
Total	**242**	**-**	**1.24**	**3.10**	**6.81**

*Represents rounded values

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

- Normal operating pressures are to range between 345 kPa (50 psi) and 483 kPa (70 psi) under Max Day demands.
- Minimum system pressures are to be 276 kPa (40 psi) under Peak Hour demands.
- Minimum system pressures are to be 140 kPa (20 psi) under Max Day + Fire Flow demands.

Preliminary domestic water demands, and fire flow requirements were provided to the City of Ottawa to generate the municipal watermain network boundary conditions assuming two (2) water supplies. **Table 2.1** summarizes the municipal watermain boundary conditions and the preliminary hydraulic analysis results based on the information provided by the City of Ottawa.

Table 2.1: Hydraulic Boundary Conditions Provided by the City

Municipal Watermain Boundary Condition	Boundary Condition Head of Water (m)	Normal Operating Pressure Range (psi)	Anticipated WM Pressure (psi)*
2 x 150mm dia. Services at Connection #1 (203mm dia. WM in Scott Street)			
Minimum HGL (Peak Hour Demand)	108.6 m	40 psi (min.)	~ 72 psi
Maximum HGL (Max Day Demand)	115.1 m	50-70 psi	~ 63 psi
HGL Max Day + Fire Flow	105.4 m	20 psi (min.)	~ 58 psi

*Based on an approximate elevation of 64.30m at WM connection. Design pressure = (HGL – watermain elevation) x 1.42197 PSI/m.
**A multi-hydrant approach to firefighting will be necessary.

Based on preliminary calculations and correspondence received from the City of Ottawa, it is anticipated that the pressure within the municipal watermain network will be adequate. Pressure reducing valves (PRV) may be required given the relatively high system pressures. Given the height of the proposed buildings, booster pumps will be required to provide adequate water pressure to the upper floors.

As discussed with the City of Ottawa, a multi-hydrant approach to firefighting will be required to supply adequate fire flow to the proposed development. There is currently one (1) Class AA (blue bonnet) municipal fire hydrant within 75m of the subject site and at least two (2) additional hydrants within 150m of the site, on Clifton Road and McRae Avenue. Based on the City of Ottawa Technical Bulletin ISTB-2018-02, Class AA (blue bonnet) hydrants within 75m of the building should provide a maximum capacity 95 L/s each (at a pressure of 20 PSI) while hydrants between 75m and 150m should provide at least 63 L/s (at a pressure of 20 PSI). **Table 2.2** summarizes the theoretical combined fire flow available from the nearby municipal fire hydrants and compares it to the fire flow demands based on the FUS calculations.

Table 2.2: **Theoretical Fire Protection Summary Table**

Building	(FUS) Fire Flow Demand (L/s)	Fire Hydrant(s) within 75m (~ 95 L/s each)	Fire Hydrant(s) within 150m (~ 63 L/s each)	Theoretical Combined Available Fire Flow (L/s)
22-Storey Tower	167	1	2	**>167**

The combined maximum flow from the nearby municipal hydrants will exceed the Max Day + Fire Flow requirement (167 L/s) of the proposed development. This multi-hydrant approach to firefighting is in accordance with the City of Ottawa Technical Bulletin ISTB-2018-02. Refer to the enclosed **General Plan of Services** (121301-GP) and to **Appendix D** for detailed calculations, correspondence from the City of Ottawa, a letter from the architect supporting the FUS fire flow

calculations, a fire hydrant sketch showing the existing fire hydrant locations and the dimensions confirming the appropriate site coverage.

2.3 Storm Drainage and Stormwater Management

Storm drainage from the existing properties is currently being directed towards the local storm sewers in Scott Street and Clifton Road. The local storm sewers discharge into the West Transit Way Storm Trunk Sewer and outlet into the Ottawa River (just west of Onigam Street) approximately 3.2 km downstream of the subject site.

Under post-development conditions, storm flows from most of the site (0.192 ha) will be controlled prior to being directed to the 600mm dia. storm sewer in Scott Street via a new 200mm dia. storm service lateral. Stormwater runoff from the northern and eastern edges of the site (0.025 ha) will be directed to the adjacent municipal rights-of-ways in Scott Street and Clifton Road. The total allowable flow will be a combination of the anticipated groundwater flows (150,000 L/day or 1.7 L/s per Geotechnical Memorandum[3]) and the total stormwater flow components.

2.3.1 Stormwater Management Criteria and Objectives

The stormwater management (SWM) quantity control criteria have been provided during a pre-consultation meeting with the City of Ottawa and the objectives are as follows:

- Provide a dual drainage system (i.e., minor, and major system flows).
- Control post-development storm flows, up to and including the 100-year design event, to the maximum allowable release rate calculated using the Rational Method, with a runoff coefficient equivalent to existing conditions, but in no case greater than C=0.5, a time of concentration no less than 10 minutes and a 2-year rainfall intensity from City of Ottawa IDF curves).
- Maintain existing drainage patterns and major overland flow paths as much as possible.
- Provide guidelines to ensure that site preparation and construction is in accordance with the current Best Management Practices for Erosion and Sediment Control.

The subject site is located within the jurisdiction of the Rideau Valley Conservation Authority (RCVA). Based on correspondence from the RVCA, on-site stormwater quality control measures will not be required due to the nature of the development, the fact that parking will be underground, and that the distance to the stormwater outlet is >2km downstream. Refer to **Appendix A** for correspondence from the City of Ottawa and RCVA.

2.3.2 Pre-Development Conditions and Allowable Release Rate

Although unknown, it is assumed that site flows are currently not being controlled prior to being released into the municipal storm sewer system. As specified by the City of Ottawa, the maximum allowable release rate from the subject site is to be calculated using the Rational Method, with a runoff coefficient equivalent to existing conditions, but in no case greater than C=0.5, a time of concentration of 10 minutes and a 2-year rainfall intensity from City of Ottawa IDF curves. The maximum allowable release rate for the proposed development is calculated as follows:

T_c = 10 min C =0.50
I_{2yr} = 76.81 mm/hr A = 0.217 ha

Q_{allow} = 2.78 CIA

= 2.78 (0.50) (76.81) (0.217)
= 23.1 L/s

Refer to the **Stormwater Management Plan** (121301-SWM) and to **Appendix E** for detailed SWM calculations.

2.3.3 Post-Development Conditions

The post-development conditions will include both uncontrolled direct runoff and controlled site flows. The uncontrolled direct runoff includes areas on the north and east sides of the site. These areas will sheet drain uncontrolled towards the adjacent streets as there is no practical way to capture this drainage. The flows from the tower roofs and outdoor amenity space (above the underground parking structure) will be sent to an internal SWM storage tank and controlled prior to being discharged (pumped) into the municipal storm sewer in Scott Street.

2.3.3.1 Area A-1: Direct Runoff

The uncontrolled post-development flow from this sub-catchment area was calculated using the Rational Method to be approximately 4.7 L/s during the 5-year design event and 9.1 L/s during the 100-year design event. Refer to the **Stormwater Management Plan** (121301-SWM) and to **Appendix E** for detailed SWM calculations.

2.3.3.2 Area A-2: Controlled Site Flow

Stormwater runoff from this larger sub-catchment area will be captured by the tower roofs and site drains and directed to an internal SWM storage tank. Stormwater collected within the storage tank will be pumped up to a new 200mm dia. storm service lateral and discharged into the existing 600mm dia. storm sewer in Scott Street. A pump (designed by the mechanical consultant) is required to control flow from the tank to a maximum rate of 12.1 L/s (192 USGPM). A "stand-by" pump will be provided for emergency and/or maintenance purposes. A generator will provide emergency power supply for the SWM storage tank pump(s). CBMH 1 will provide access to the SWM storage tank as well as act as the emergency overflow from the tank to the surface. The internal plumbing is to be pressure rated piping specified by the mechanical engineer. The pump will act as the backflow prevention device to protect the building from any potential sewer back-ups. **Table 3** summarizes the controlled post-development design flows and approximate storage volumes during the 5-year and 100-year design events.

Table 3: Internal Stormwater Storage Tank and Pumped Flow

Design Event	Post-Development Conditions		
	Pumped Design Flow (L/s)	Volume Required (m^3)	Volume Provided (m^3)
5-Year	12.1 L/s	23.8 m^3	> 63 m^3
100-Year		62.4 m^3	

As indicated in **Table 3** above, the internal stormwater storage tank will provide sufficient storage for the 100-year design event. Refer to **Appendix E** for detailed SWM calculations.

2.3.3.3 Foundation Drainage System Flow

Flows from the weeping tile and sub-slab drainage system will be pumped directly to the new 200mm dia. storm service lateral, by-passing the internal SWM storage tank. The maximum flow rate for the foundation drainage system is anticipated to be 150,000 L/day (1.7 L/s), as per the Geotechnical Memorandum[3]. A "stand-by" pump will be available for emergency and/or maintenance purposes. The same generator will also provide emergency power supply for the sump pump.

2.3.3.4 Summary of Total Flow to Municipal Stormwater Sewer

Table 3.1 provides a summary of the total post-development flows from the site and compares them to the uncontrolled pre-development flows and to the respective allowable release rates specified by the City of Ottawa.

Table 3.1: Site Flows Summary and Comparison Table

Design Event	Pre-Development Conditions		Post-Development Conditions				
	Uncontrolled Flow (L/s)	Allowable Release Rate (L/s)	A-1: Direct Runoff (L/s)	A-2: Controlled Site Flow (L/s)	Ground Water Flow (L/s)**	Total Flow (L/s)	Reduction in Flow (L/s or %)*
5-Yr	52.2	23.1	4.7	12.1	1.7	18.5	33.7 or 65%
100-Yr	99.7		9.1			22.9	76.8 or 77%

*Reduced flow compared to pre-development uncontrolled conditions.
**Per Geotech Memo[3]

As indicated in the table above, the post-development flows from the site will not exceed the allowable release rate specified by the City of Ottawa. Furthermore, this represents significant reductions in total site flow rate when compared to the uncontrolled pre-development conditions. Most of the flows are being directed towards the storm sewer in Scott Street, however a small portion is being directed to the Clifton Road municipal Right-of-Way.

2.3.4 Stormwater Quality Control

The subject site is located within the jurisdiction of the Rideau Valley Conservation Authority (RVCA) and is tributary to the Ottawa River. Based on preliminary feedback from the RVCA, landscaped areas and roof tops are considered clean for the purpose of protecting water quality for aquatic habitat. In this case, since parking will be provided underground and the distance to the stormwater outlet is > 2 km downstream, on-site stormwater quality control will not be required. Refer to **Appendix A** for correspondence from the RVCA and City of Ottawa.

3.0 SITE GRADING

The existing site is relatively flat, and generally slopes in a northeastern direction. Along the north of the site, the newly constructed sidewalk slopes from 64.50m to 64.36 m. The proposed finished floor elevation (FFE) will be set at 64.70m to provide barrier-free access to the proposed building at the main commercial and residential entrances. The existing grades around the perimeter of the site will generally be maintained, however a small retaining wall will be required along the

western property line and a portion of the southern property line to ensure that major overland flow does not impact the adjacent neighbouring properties. Refer to the enclosed **Grading and Erosion & Sediment Control Plan** (121301-GR) for details.

4.0 GEOTECHNICAL INVESTIGATIONS

A Geotechnical Investigation Report[2] (PG4394-1 Revision 1, dated November 26, 2024) was prepared by Paterson Group Inc. for the proposed development. Additionally, the Geotechnical Memorandum[3] (Dated December 5, 2024) was prepared to confirm that the revised anticipated maximum flow rate for the foundation drainage system is 150,000 L/day. Refer to the Geotechnical Report and Memo for subsurface conditions, construction recommendations and geotechnical inspection requirements.

5.0 EROSION AND SEDIMENT CONTROL

To mitigate erosion and to prevent sediment from entering the storm drainage system, temporary erosion and sediment control measures will be implemented on-site during construction in accordance with Best Management Practices for Erosion and Sediment Control. Details are provided on the **Grading and Erosion & Sediment Control Plan** (121301-GR). This includes the following measures:

- Filter bags / catch basin inserts (sediment sacks) will be placed under the grates of nearby catch basins and manholes, and they will remain in place until vegetation has been established and construction is completed.
- Silt fencing will be placed per OPSS 577 and OPSD 219.110 along the surrounding construction limits.
- Mud mats will be installed at the site entrances.
- Street sweeping and cleaning will be performed, as required, to suppress dust and to provide safe and clean roadways adjacent to the construction site.
- On-site dewatering is to be directed to a sediment trap and/or gravel splash pad and discharged safely to an approved outlet as directed by the engineer.
- Any stockpiled material will be properly managed to prevent those materials from entering the sewer system and/or the downstream ditch or watercourse.

The temporary erosion and sediment control measures will be implemented prior to construction and will remain in place during all phases of construction. Regular inspection and maintenance of the erosion control measures will be undertaken.

6.0 CONCLUSION

This report has been prepared in support of a Site Plan Control application for the proposed development located at 1950 Scott Street and 312 & 314 Clifton Road. The conclusions are as follows:

- The proposed development will be serviced by the municipal infrastructure in Scott Street.
    - Sanitary flows from the building will be directed to the 250mm dia. municipal sanitary sewer in Scott Street.
    - The proposed development will continue to be serviced by the municipal watermain network via two (2) water service laterals connecting to the existing 203mm dia. watermain in Scott Street. Adequate water supply and system

pressures will exist throughout the watermain network under the specified 'Max Day + Fire Flow' and 'Peak Hour' conditions.

- Storm flows from the main portion of the site, including the building roofs and outdoor amenity areas (above the underground parking structure) will be sent to an internal SWM tank, then pumped to the 600mm dia. municipal storm sewer in Scott Street. Runoff from the small, landscaped areas along the northern and eastern edges of the existing property will drain uncontrolled towards the adjacent streets.

- The proposed building will be sprinklered. The municipal watermain network, including the nearby municipal fire hydrants will provide the necessary water for domestic use and firefighting purposes.
- The total post-development flow directed to the municipal storm sewer in Scott Street will be approximately 18.5 L/s during the 5-year design event and 22.9 L/s during the 100-year event, all less than the allowable release rate for the site (23.1 L/s) specified by the City of Ottawa.
- Regular inspection and maintenance of the building services, roof drains, deck drains, internal SWM tank and associated pumps is recommended to ensure that the storm drainage system is clean and operational.
- Erosion and sediment controls are to be provided during construction.

It is recommended that the proposed site servicing and stormwater management design be approved for implementation.

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Prepared by:

François Thauvette, P. Eng.
Senior Project Manager

APPENDIX A

Project Correspondence

File No.: PC2024-0039

March 14, 2024

Ken Hoppner
Morley Hoppner Ltd.
Via email: khoppner@morleyhoppner.com

Subject: Pre-Consultation: Meeting Feedback
Proposed Zoning By-law Amendment & Site Plan Control Applications – 1950 Scott Street, 312 & 314 Clifton Road

Please find below information regarding next steps as well as consolidated comments from the above-noted pre-consultation meeting held on March 6, 2024.

Pre-Consultation Preliminary Assessment

1 ☐	**2** ☐	**3** ☒	**4** ☐	**5** ☐

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

Next Steps

1. A review of the proposal and materials submitted for the above-noted pre-consultation has been undertaken. Please proceed to complete a Phase 2 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.

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.

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.

Planning

Official Plan

1) Inner Urban Transect Area (Section 5.2)
2) Evolving Neighbourhood Overlay (Section 5.6.1)
3) Mainstreet Corridor (Section 6.2)

Richmond Road/Westboro Secondary Plan

4) Sector 5 - Scott Street / Westboro O-Train Station Area Sector (Schedule A)
    a. Refer to Section 5.5 for Area Sector policies.
5) Maximum Building Height – 4 to 6 storeys (Schedule C)
    a. Refer to Section 4.2 of the Secondary Plan for further policy direction pertaining to the development of the Richmond Road and Scott Street corridors.

Zoning By-law

6) The property is currently zoned "TM [2581] S400-h" within the City's Zoning By-law 2008-250, as amended.

Comments:

1. The proposal is generally consistent with the policies of the Official Plan and Secondary Plan. A planning rationale will be required to form part of a complete Zoning By-law Amendment submission.

Section 37

2. The terms of a Section 37 contribution are included within the Site-Specific Exception [2581], as well as Part 19 of the Zoning By-law. As such, Staff are not in a position to remove the Holding Symbol without a Section 37 Agreement in Place. Although the intent is to renegotiate these terms in order to reflect the proposed added density, staff are willing to forego any need for indexing of the current or future amounts contained within Section 19 of the Zoning By-law.

Policy

3. Table 3A of the Official Plan sets a target large-household dwelling unit proportion of 10% along Mainstreets.

Development

4. Please ensure a 1:1 bicycle parking per unit ratio – The site is in close proximity to transit and should be supportive of other modes of transportation to be consistent with the policy direction of the Official Plan and Secondary Plan. This is also consistent with the existing site-specific provision on the subject property which already requires a 1:1 ratio.

5. Staff would appreciate the implementation of commercial at-grade units along Scott Street to provide for a mixed-use pedestrian friendly environment along a Mainstreet Corridor, as per the policy direction of the Official Plan. Staff would have strong concerns should mixed-uses, or flexible spaces at-grade not be provided.

6. Residential units at-grade along Clifton Rd are to have active entrances to enhance the streetscape.

7. Staff will require future iterations of the plans to show where entrances are located along Scott St and Clifton Rd. This will include the location of any commercial entrances, as well as the main residential access and any supplementary entrances for at-grade residential units along Clifton as requested. Active entrances should be prioritized along the mainstreet corridor as per the applicable policies and regulations applying to the site.

8. Ensure that the proposal is designed to the City's Urban Design Guidelines for High-Rise Buildings.

9. Transition to the neighbourhood to the south will need to be looked at closely to ensure the appropriate sensitivity. Consider bringing the Clifton façade closer to the southernmost property line in order to make better use of this street façade, as well as to mask some of the impacts of the parking ramp. This may allow redistribution of some of the height within the podium at the rear of the tower. Perhaps a walkway leading to the interior of the site may be considered.

    a. Elevations will be required to review the facades, as well as better visualize the transition that will be provided through step-backs.

Other

10. Please include all addresses on the future application forms to encapsulate 312 and 314 Clifton Rd. Only 1950 Scott St was included on the form.

11. Staff can confirm that a Minor Variance application can be submitted to vary the existing zoning schedule relating to podium heights, however the Applicant is to justify the four tests and Staff cannot confirm how this variance will be perceived by Committee of Adjustment members.

Feel free to contact Jack Smith, Planner I, or Jean-Charles Renaud – Planner III, for follow-up questions.

Urban Design

Comments:

Submission Requirements

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

    a. The Urban Design Brief should be structured by generally following the headings highlighted under **Section 3 – Contents of these Terms of Reference**.
    b. The following elements are particularly important for this development application:
        i. Transition to adjacent low-rise neighbourhood.
    c. Please note that the Urban Design Brief will also serve as the submission to the Urban Design Review Panel (see notes below).

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

    a. Include neighbouring developments (to the south and west) in your design analysis drawings.

Urban Design Review Panel Review and Report

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

15. 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

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

    a. Six-storey podium facing Scott Street.
    b. Large outdoor amenity space in the rear yard.

17. The following element of the preliminary design are of concern:

    a. Exposed ramp.
    b. Six-storey extending toward the south (Transition to the south).
    c. Need to understand the ground floor and the choice for location of the main entrance.
    d. Plantings on the concrete deck.
    e. Providing grade related units along Clifton Street.

Recommendations

18. We recommend the ramp to parking be captured within the building on Clifton Street.

19. We recommend reducing some of the six-storey built form extending to the south with any additional extension of the three-storey built form to the south.

20. We recommend providing grade related units in the podium facing Clifton Street.

21. We recommend providing soil volumes suitable for sizable plantings and trees in the rear yard amenity, even on top of the parking deck.

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

Engineering

Comments:

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

    a. The **2-yr storm event** using the IDF information derived from the Meteorological Services of Canada rainfall data, taken from the MacDonald Cartier Airport, collected 1966 to 1997.

    b. The pre-development runoff coefficient or a maximum equivalent 'C' of 0.5, whichever is less (§ 8.3.7.3).

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

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

e. For a combined sewer system the maximum C= 0.4 or the pre-development C value, whichever is less.

23. Deep Services (Storm, Sanitary & Water Supply)

a. Provide existing servicing information and the recommended location for the proposed connections. Services should ideally be grouped in a common trench to minimize the number of road cuts.

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

c. Provide information on the monitoring manhole requirements – should be located in an accessible location on private property near the property line (ie. Not in a parking area). Sewer Use (By-law No. 2003-514)

d. Review provision of a high-level sewer.

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

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

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

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

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

v. No submerged outlet connections.

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

a. Location of service

b. Type of development and the amount of fire flow required (as per FUS).

c. Average daily demand: ___ l/s.

d. Maximum daily demand: ___l/s.

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

25. Water

A 203 mm dia. PVC watermain (1994) is available within Scott Street**.**

A 203 mm dia. PVC watermain (1994) is available within Clifton Road**.**

A 152 mm dia**.** UCI watermain (1946) is available within Clifton Road**.**

a. Water Supply Redundancy: Residential buildings with a basic day demand greater than 50m3/day (0.57 L/s) and residential areas serving 50 or more dwellings are required to be connected to a minimum of two water services separated by an isolation valve to avoid a vulnerable service area as per the Ottawa Design Guidelines - Water Distribution, WDG001, July 2010 Clause 4.3.1 Configuration.

b. Please review Technical Bulletin ISTB-2018-02, maximum fire flow hydrant capacity is provided in Section 3 Table 1 of Appendix I. A hydrant coverage figure shall be provided and demonstrate there is adequate fire protection for the proposal. Two or more public hydrants are anticipated to be required to handle fire flow.

c. Existing residential service(s) to be blanked at the main.

26. Sewer (sanitary and storm)

A 600 mm dia. CONC Storm sewer (1972) is available within Scott Street**.**

A 375 mm dia. CONC Storm sewer (1972) is available within Clifton Road.

A 250 mm dia. CONC Sanitary sewer (2021) is available within Scott Street**.**

A 225 mm dia. CONC Sanitary sewer (1946) is available within Clifton Road.

Please see below for additional sewer and stormwater requirements:

a. The proposed flow rate of **4.9 L/s** for sanitary is acceptable for this development. There is capacity for this amount of effluent discharging into our system

b. A storm sewer monitoring maintenance hole is required to be installed at the property line (on the private side of the property) as per City of Ottawa Sewer-Use By-Law 2003-514 (14) Monitoring Devices.

c. Sanitary sewer monitoring maintenance hole is required to be installed at the property line (on the private side of the property) as per City of Ottawa Sewer-Use By-Law 2003-514 (14) Monitoring Devices.

d. Document how any foundation drainage system will be integrated into the servicing design and show the positive outlet on the plan. Foundation drainage is to be independently connected to sewer main unless being pumped with appropriate back up power, sufficient sized pump and back flow prevention. It is recommended that the foundation drainage system be drained by a sump pump connection to the storm sewer to minimize risk of basement flooding as it will provide the best protection from the uncontrolled sewer system compared to relying on the backwater valve.

e. Please note that the minimum orifice dia. for a plug style ICD is 83mm and the minimum flow rate from a vortex ICD is 6 L/s in order to reduce the likelihood of plugging.

f. Please provide a Pre-Development Drainage Area Plan to define the pre-development drainage areas/patterns. Existing drainage patterns shall be maintained and discussed as part of the proposed SWM solution.

g. Post-development site grading shall match existing property line grades to minimize disruption to the adjacent residential properties. A **topographical plan of survey** shall be provided as part of the submission and a note provided on the plans.

h. There must be at least **15cm of vertical clearance** between the spill elevation and the ground elevation at the building envelope that is in proximity of the flow route or ponding area. The exception in this case would be at reverse sloped loading dock locations. At these locations, a minimum of 15cm of vertical clearance must be provided below loading dock openings. Ensure to provide discussion in report and ensure grading plan matches if applicable.

i. **Underground Storage:** Please note that the Modified Rational Method for storage computation in the Sewer Design Guidelines was originally intended to be used for above ground storage (i.e., parking lot) where the change in head over the orifice varied from 1.5 m to 1.2 m (assuming a 1.2 m deep CB and a max ponding depth of 0.3 m). This change in head was small and hence the release rate fluctuated little, therefore there was no need to use an average release rate.

j. When underground storage is used, the release rate fluctuates from a maximum peak flow based on maximum head down to a release rate of zero. This difference is large and has a significant impact on storage requirements. **We therefore require that an average release rate equal**

to 50% of the peak allowable rate shall be applied to estimate the required volume. Alternatively, the consultant may choose to use a submersible pump in the design to ensure a constant release rate.

k. If there is a disagreement from the designer regarding the required storage, the City will require that the designer demonstrate their rationale utilizing dynamic modelling, that will then be reviewed by City modellers in the Water Resources Group.

l. Provide information on type of underground storage system including product name and model, number of chambers, chamber configuration, confirm invert of chamber system, top of chamber system, required cover over system and details, interior bottom slope (for self-cleansing), chart of storage values, length, width and height, capacity, entry ports (maintenance) etc. UG storage to provide actual 2- and 100-year event storage requirements.

m. Regarding all proposed UG storage, ground water levels (and in particular HGW levels) will need to be reviewed to ensure that the proposed system does not become surcharged and thereby ineffective.

n. Modeling can be provided to ensure capacity for both storm and sanitary sewers for the proposed development by City's Water Distribution Dept. – Modeling Group, through PM and upon request.

o. If rooftop control and storage is proposed as part of the SWM solutions sufficient details (Cl. 8.3.8.4) shall be discussed and document in the report and on the plans. Roof drains are to be connected downstream of any incorporated ICDs within the SWM system and not to the foundation drain system. Provide a Roof Drain Plan as part of the submission.

p. Street catch basins are not to be located at any proposed entrances.

q. If window wells are proposed, they are to be indirectly connected to the footing drains. A detail of window well with indirect connection is required, as is a note at window well location speaking to indirect connection.

r. If applicable, existing buildings require a CCTV inspection and report to ensure existing services to be re-used are in good working order and meet current minimum size requirements. Located services to be placed on site servicing plans.

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

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

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

Std Dwg S11.2 (for rigid main sewers using bell end insert method) – for larger diameter laterals where manufactured inserts are not

available; lateral must be less that 50% the diameter of the sewermain,

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

No submerged outlet connections.

27. Grading

Post-development site grading shall match existing property line grades to minimize disruption to the adjacent residential properties. A **topographical plan of survey** shall be provided as part of the submission and a note provided on the plans.

28. Geotechnical Study

Geotechnical study shall be consistent with the Geotechnical Investigation and Reporting Guidelines for Development Applications. Geotechnical Study

29. Snow Storage

Any portion of the subject property which is intended to be used for permanent or temporary snow storage shall be as shown on the approved site plan and grading plan. Snow storage shall not interfere with approved grading and drainage patters or servicing. Snow storage areas shall be setback from the property lines, foundations, fencing or landscaping a minimum of 1.5m. Snow storage areas shall not occupy driveways, aisles, required parking spaces or any portion of a road allowance. If snow is to be removed from the site please indicate this on the plan(s).

30. Road Reinstatement

Where servicing involves three or more service trenches, either a full road width or full lane width 40 mm asphalt overlay will be required, as per amended Road Activity By- Law 2003-445 and City Standard Detail Drawing R10. The amount of overlay will depend on condition of roadway and width of roadway(s).

31. Gas pressure regulating station

A gas pressure regulating station may be required depending on HVAC needs (typically for 12+ units). Be sure to include this on the Grading, Site Servicing, SWM and Landscape plans. This is to ensure that there are no barriers for overland flow routes (SWM) or conflicts with any proposed grading or landscape features with installed structures and has nothing to do with supply and demand of any product.

32. Phase One Environmental Site Assessment

a. A Phase I ESA is required to be completed in accordance with Ontario Regulation 153/04 in support of this development proposal to determine the potential for site contamination. Depending on the Phase I recommendations a Phase II ESA may be required.
b. The Phase I ESA shall provide all the required Environmental Source Information as required by O. Reg. 153/04. ERIS records are available to public at a reasonable cost and need to be included in the ESA report to comply with O.Reg. 153/04 and the Official Plan. The City will not be in a position to approve the Phase I ESA without the inclusion of the ERIS reports.
c. Official Plan Section 10.1.6
d. Record of Site Condition (RSC) will be required due to the change in land use to a more sensitive use.

City of Ottawa - Historical Land Use Inventory (HLUI) – Required

Rationale:

The HLUI database is currently undergoing an update. The updated HLUI will include additional sources beyond those included in the current database, making the inclusion of this record search even more important.

Although a municipal historic land use database is not specifically listed as required environmental record in O. Reg 153/04, Schedule D, Part II states the following:

The following are the specific objectives of a records review:

a. To obtain and review records that relate to the Phase I (One) property and to the current and past uses of and activities at or affecting the Phase I (One) property to determine if an area of potential environmental concern exists and to interpret any area of potential environmental concern.

b. To obtain and review records that relate to properties in the Phase I (One) study area other than the Phase I (One) property, in order to determine if an area of potential environmental concern exists and to interpret any area of potential environmental concern.

It is therefore reasonable to request that the HLUI search be included in the Phase I ESA to meet the above objectives.

33. Exterior Site Lighting

Any proposed light fixtures (both pole-mounted and wall mounted) must be part of the approved Site Plan. All external light fixtures must meet the criteria for Full Cut-off Classification as recognized by the Illuminating Engineering Society of North America (IESNA or IES), and must result in minimal light spillage onto adjacent properties (as a guideline, 0.5 fc is normally the maximum allowable spillage). In order to satisfy these criteria, the please provide the City with a **Certification (Statement) Letter** from an acceptable professional engineer stating that the design is compliant.

34. Capital Works

-Work by others on Scott Street from Clifton Road to West Village Private targeted to start in 1-2 years.

-Transitway structural renewal targeted to start this season

-New Transit targeted to start this year

-Intersection Modifications at Scott Street and Lanark Ave targeted to start this year.

35. Vibration Monitoring

Vibration monitoring will be required for all backbone watermains within 15m proximity of footings/foundation for this site or where rock removal and/or shoring and rock anchor installations would cause ground borne vibration that could affect these critical mains. Conditions for Vibration will be applied to agreements.

For example:

Vibration Monitoring

Prior to the issuance of a building permit, the Owner shall, at its expense:

(i) provide the General Manager, Planning, Infrastructure and Economic Development with an engineering memorandum from a Professional Engineer, licensed in the Province of Ontario, which shall outline the centreline location and overt elevation of the existing 1.067m diameter STC City owned Feeder Watermain (FWM), located on the north side of Scott Street, and its measured proximity to the frontage property boundary limits of 1950 Scott Street in order to evaluate the impact on said FWM from the proposed building's footing and foundation walls proposed for this development.

(ii) obtain a legal survey acceptable to the General Manager, Planning, Infrastructure and Economic Development and the City's Surveyor, showing the existing location of the 1.067m diameter Steel reinforced concrete ("STC") City owned Feeder Watermain ("FWM") within Scott Street Right-of-Way ("ROW") between Clifton Road and McRae Avenue and identify the location of the proposed building and its footings in relation the said FWM;

(iii) provide the General Manager, Planning, Infrastructure and Economic Development with a Vibration Monitoring Plan from a Professional Engineer, specializing in vibration and monitoring, licensed in the Province of Ontario, which shall outline applicable recommendations for continuous monitoring of the existing 1067 mm dia. STC FWM during all stages of the Work, including, but not limited to, the boundary area in the ROW between East side of Clifton Rd. intersection and the West side of McRae Avenue intersection. This monitoring will also as provide a Work Plan speaking to Work in Vicinity of Large Diameter WM & Monitoring for site development as well as an extensive Emergency Contingency Plan, to be pre-approved by City Infrastructure Services Department (ISD).

(iv) provide, during the construction process and upon completion of construction on the private & City lands, at the Owner's expense and to the satisfaction of the General Manager, Planning, Infrastructure and Economic Development, all daily and hourly data reports (as applicable) of completed monitoring works

(v) assume all liability for any damages caused to the City Water & Sewer Systems within West Village Private and Clifton Road and compensate the City for the full amount of any required repairs to the City Water & Sewer Systems.

Note: In addition to requirement of a vibration specialist engineer required to design and monitor vibration, a certificate of liability insurance shall be submitted to the City wherein the Owner is the named insured and the City of Ottawa is an additional insured. The limits of the policy shall be in the amount of ***$25,000,000*** and shall be kept in full force and effect for the term of the construction work.

36. Excavation

Pre-Construction Survey (Piling/Hoe Ramming, Rock Anchors, Shoring and/or close proximity to City Assets) or *Pre-Blasting Survey* will be required for any buildings/dwellings within proximity of 75m of the site. Circulation of notice of vibration/noise is required to residents within 150 m of site. Conditions for Pre-Construction/ Pre-Blast Survey & Use of Explosives will be applied to agreements. Refer to City's Standard S.P. No. F-1201 entitled *Use of Explosives,* as amended.

37. Proximity to Transitway

Due to proximity of site to Transit Way and Westboro Transit Station, applicant to contact City LRT Group regarding required building offset from transitway. Noise study to review vibration conditions within 75m of Transitway. See Rail Guidelines and CPCS Report as well as OP Annex 17, Zones of Influence and Guidelines for Proximity Study.


2013_05_29_Guidelines_NewDevelopment_E


CPCS Report Appendix_F.pdf


annex_17_en.pdf


Trillium ZOI.pdf


Confederation East ZOI.pdf


Confederation West ZOI.pdf


Confed Railway Line Prox. Guidelines.pdf

38. Depressed Driveways

For proposed depressed driveways or developments with private lanes, parking areas or with entrances etc. lower than roadway…


S18.pdf


S18.1.pdf

Rear yard on grade parking to be permeable pavement. Refer to City Standard Detail Drawings SC26 (maintenance/temp parking areas), SC27 or permeable asphalt materials. No gravel or stone dust parking areas permitted.

39. Severance

If severance is planned, this needs to be addressed in servicing to satisfy severance requirements. Where a large parcel with multiple buildings is planned, City will require an ultimate servicing plan so as to appropriately understand how severance requirements are being met.

40. General

a. It is the sole responsibility of the consultant to investigate the location of existing underground utilities in the proposed servicing area and submit a request for locates to avoid conflict(s). The location of existing utilities and services shall be documented on an **Existing Conditions Plan**.

b. Any easements on the subject site shall be identified and respected by any development proposal and shall adhere to the conditions identified in the easement agreement. A **legal survey plan** shall be provided, and all easements shall be shown on the engineering plans.

c. All underground and above ground building footprints and permanent walls need to be shown on the plans to confirm that any permanent structure does not extend either above or below into the existing property lines and sight triangles.

d. **Construction approach** – Please contact the Right-of-Ways Permit Office TMconstruction@ottawa.ca early in the Site Plan process to determine the ability to construct site and copy File Lead on this request.

41. Noise

a. A **Transportation Noise Assessment** is required as the subject development within 100m of an arterial road and a collector road.

b. A **Stationary Noise Assessment** is required to assess the noise impact of the proposed sources of stationary noise (mechanical HVAC system/equipment) of the development onto the surrounding residential area to ensure the noise levels do not exceed allowable limits specified in the City Environmental Noise Control Guidelines. This study is also required for any noise sources generated from industrial or commercial (drive thru, large parking lots/centres, etc.) facilities that may affect this development. Please refer to the City ENCG and MECP NPC 300 documents.

c. **Vibration Study** within 75 meters of an existing or proposed light rail transit corridor.

Feel free to contact Shawn Wessel, Infrastructure Project Manager or Amy Whelan, Infrastructure Project Manager, for follow-up questions.

Transportation

Comments:

General Comments

42. The proposed development is in the Design Priority Area.

43. The Screening Form has indicated that the TIA Trip Generation and Location Triggers have been met. Please proceed with the TIA Step 2 – Scoping Report. The consultant is to address how they plan to enable and encourage travel by sustainable modes (i.e. to make walking, cycling, transit, carpooling and telework more convenient, accessible, safe and comfortable). Please complete the City of Ottawa's *TDM Measures Checklist*.

44. Transitway structure renewal targeted to start this season.

LN53882

Forecast ID	LN53882
Type of Work	Transitway Structure Renewal
Project Type	Renewal
STATUS	In Progress
Construction Year	This Year
Delivered By	O-Train
CLIENT	Asset Management Service - Transportation Assessment Unit (IWSD)
Construction Contract	

45. Clifton Road is classified as a Local Road. There are no additional protected ROW limits identified in the OP.

46. Scott Street is designated as an Arterial Road within the City's Official Plan with a ROW protection limit of 26.0 metres. A Certified Ontario Land Surveyor is to confirm the ROW protected limits and any portion that may fall within the private property to be conveyed to the City. Ensure that the development proposal complies with the Right-of-Way protection requirements of the Official Plan's Schedule C16.

47. ROW Offset Distance

    The ultimate centreline represents the new centreline based on the reconstruction of Scott Street. This is a relatively unique case where the post-reconstruction centreline should be taken as the centreline for the purposes of road widening because the current centreline is part of a Stage 2 detour where the centreline has been temporarily shifted north to accommodate the eastbound bus stop while Westboro Station is under construction. This falls under a provision of policy 2.1.1 (a) of Schedule C16.

    Please contact Emmett Proulx (emmett.proulx@ottawa.ca) and Mary-Ellen Gleeson to obtain further informaion (mary-ellen.gleeson@ottawa.ca).

48. ROW interpretation

    Land for a road widening will be taken equally from both sides of a road, measured from the ultimate centreline at the time of the widening if required by the city. The centreline is a line running down the middle of a road surface, equidistant from both edges of the pavement. In determining the centreline, paved shoulders, bus lay-bys, auxiliary lanes, turning lanes and other special circumstances are not included in the road surface.

49. A **3.0** metres (along Clifton Road) x **9.0** metres (along Scott Street) corner triangle is required at the intersection of Scott Street and Clifton Road based on Schedule C16 of the Official Plan. Note that the 3.0m x 9.0m corner triangle shape better accommodates cycle track bend-out and taper requirements compared to a more-typical 5.0m x 5.0m corner triangle. The 3.0m x 9.0m corner triangle area is to be conveyed to the city and is to be shown on all drawings. The corner triangle dimensions are to be measured from the ROW protected limits.

50. Ensure that potential tenants who are not assigned a parking space are aware that on street parking is not a viable option for tenants.

51. All underground and above ground building footprints and permanent walls need to be shown on the plan to confirm that any permanent structure does not extend either above or below into the sight triangles and/or future road widening protection limits.

52. Permanent structures such as curbing, stairs, retaining walls, and underground parking foundation also bicycle parking racks are not to extend into the City's right-of-way limits.

53. The consultant should review the sight distance to the access and any obstructions that may hinder the view of the driver.

54. The concrete sidewalk should be 2.0 metres in width and be continuous and depressed through the proposed access.

55. The closure of an existing private approach shall reinstate the sidewalk, shoulder, curb, and boulevard to City standards.

56. The Owner acknowledges and agrees that all private accesses to Roads shall comply with the City's Private Approach By-Law being By-Law No. 2003-447 as amended, or as approved through the Site Plan control process.

57. Ensure that the driveway grade does not exceed 2% within the private property for a distance of 9.0 metres from the ROW limit; see Section 25 (u) of the Private Approach By-Law #2003-447. Any grade exceeding 6% will require a subsurface melting device.

58. The Owner shall be required to enter into maintenance and liability agreement for all pavers, plant and landscaping material placed in the City right-of-way and the Owner shall assume all maintenance and replacement responsibilities in perpetuity.

59. Bicycle parking spaces are required as per Section 111 of the Ottawa Comprehensive Zoning By-law. Bicycle parking spaces should be in safe, secure places near main entrances and preferably protected from the weather.

60. Should the property Owner wish to use a portion of the city's road allowance for construction staging, prior to obtaining a building permit, the property Owner must obtain an approved Traffic Management Plan from the Manager, Traffic Management, Transportation Services Department. The city has the right for any reason to deny use of the Road Allowance and to amend the approved Traffic Management Plan as required.

Feel free to contact Wally Dubyk, Transportation Project Manager, for follow-up questions.

Environment

Comments:

61. There are no significant natural features adjacent or on this property. No EIS is required.

62. Species at risk – there are no known species at risk. Prior to any demolition of the existing structures, please review for species at risk and other wildlife in accordance with the wildlife protocol. Protocol for Wildlife Protection during Construction (ottawa.ca)

63. Bird-Safe Design Guidelines - Please review and incorporate bird safe design elements. Some of the risk factors include glass and related design traps such as corner glass and fly-through conditions, ventilation grates and open pipes, landscaping, light pollution. More guidance and solutions are available in the guidelines which can be found here: https://documents.ottawa.ca/sites/documents/files/birdsafedesign_guidelines_en.pdf.

Feel free to contact Matthew Hayley, Environmental Planner, for follow-up questions.

Forestry

Comments:

64. **Planning Forester TCR requirements -** The following Tree Conservation Report (TCR) requirements have been adapted from the Schedule E of the Urban Tree Protection Guidelines – for more information on these requirements please contact mark.richardson@ottawa.ca
    a. A Tree Conservation Report (TCR) must be supplied for review along with the suite of other plans/reports required by the City
        a. An approved TCR is a requirement of Site Plan approval.
    b. Any removal of privately-owned trees 10cm or larger in diameter, or city-owned trees of any diameter requires a tree permit issued under the Tree Protection Bylaw (Bylaw 2020 – 340); the permit will be based on an approved TCR and made available at or near plan approval.
    c. The TCR must contain 2 separate plans:
        a. Plan/Map 1 - show existing conditions with tree cover information
        b. Plan/Map 2 - show proposed development with tree cover information
    d. The TCR must list all trees on site, as well as off-site trees if the CRZ (critical root zone) extends into the developed area, by species, diameter and health condition
        a. For ease of review, the Planning Forester suggests that all trees be numbered and referenced in an inventory table
    e. Please identify trees by ownership – private onsite, private on adjoining site, city owned, co-owned (trees on a property line)
    f. If trees are to be removed, the TCR must clearly show where they are, and document the reason they cannot be retained
        a. Compensation may be required for the removal of city owned trees.
        b. The removal of trees on a property line will require the permission of both property owners
    g. All retained trees must be shown, and all retained trees within the area impacted by the development process must be protected as per City guidelines available at Tree Protection Specification or by searching Ottawa.ca
    h. The location of tree protection fencing must be shown on the plan
    i. Show the critical root zone of the retained trees
    j. The City encourages the retention of healthy trees; if possible, please seek opportunities for retention of trees that will contribute to the design/function of the site.

65. **Planning Forester LP tree planting requirements:** The following Tree Conservation Report (TCR) requirements have been adapted from the Schedule E of the Urban Tree Protection Guidelines – for more information on these requirements please contact mark.richardson@ottawa.ca.

    a. Please ensure any retained trees are shown on the LP
    b. Minimum Setbacks
        a. Maintain 1.5m from sidewalk or MUP/cycle track or water service laterals.
        b. Maintain 2.5m from curb
        c. Coniferous species require a minimum 4.5m setback from curb, sidewalk, or MUP/cycle track/pathway.
    c. Maintain 7.5m between large growing trees, and 4m between small growing trees. Park or open space planting should consider 10m spacing, except where otherwise approved in naturalization / afforestation areas.
    d. Adhere to Ottawa Hydro's planting guidelines (species and setbacks) when planting around overhead primary conductors.
    e. Tree specifications
        a. Minimum stock size: 50mm tree caliper for deciduous, 200cm height for coniferous.
        b. Maximize the use of large deciduous species wherever possible to maximize future canopy coverage
    f. Tree planting on city property shall be in accordance with the City of Ottawa's Tree Planting Specification; and if possible include watering and warranty as described in the specification.
    g. No root barriers, dead-man anchor systems, or planters are permitted.
    h. No tree stakes unless necessary (and only 1 on the prevailing winds side of the tree)
    i. Hard surface planting
        a. If there are hard surface plantings, a planting detail must be provided
        b. Curb style planter is highly recommended
        c. No grates are to be used and if guards are required, City of Ottawa standard (which can be provided) shall be used.
    j. Trees are to be planted at grade
    k. Soil Volume - Please demonstrate as per the **Landscape Plan Terms of Reference** that the available soil volumes for new plantings will meet or exceed the following:

Tree Type/Size	Single Tree Soil Volume (m3)	Multiple Tree Soil Volume (m3/tree)
Ornamental	15	9
Columnar	15	9
Small	20	12
Medium	25	15
Large	30	18
Conifer	25	15

l. Sensitive Marine Clay - Please follow the City's 2017 Tree Planting in Sensitive Marine Clay guidelines

m. The City requests that consideration be given to planting native species where ever there is a high probability of survival to maturity.

66. Efforts shall be made to provide as much future canopy cover as possible at a site level, through tree planting and tree retention. The Landscape Plan shall show/document that the proposed tree planting and retention will contribute to the City's overall canopy cover over time. Please provide a projection of the future canopy cover for the site to 40 years.

Feel free to contact Mark Richardson, Forester, for follow-up questions.

Parkland

Comments:

67. Cash-in-lieu of parkland (CILP) will be required, at the rate specified in the Parkland Dedication By-law No. 2022-280 (as amended).

    a. CILP rate for residential uses > 18 units/net ha = one hectare per 1,000 net residential units but shall not exceed a maximum of 10% of the gross land area where the land is less than of equal to five hectares.

    b. Where the land is developed for a mix of uses within a building, the conveyance requirement shall be the cumulative sum for each use, as calculated using the applicable rate prorated proportionally to the gross floor area allocated to each use.

68. For all future submissions, PFP requests the following information to confirm and calculate the CILP:

a. Gross land area subject to development, in square metres;
b. Number of proposed residential units;
c. Total Gross Floor Area;
d. Gross Floor Area of residential;
e. Gross Floor Area of commercial/retail uses.

69. CILP payment will be due prior to registration of a Site Plan Agreement, including applicable land appraisal fees.

70. Subject to confirmation, the applicant may be eligible for parkland conveyance credit, if it can be shown that the applicable parkland conveyance has been previously provided for the property(s).

Feel free to contact Mike Russett, Parks Planner, for follow-up questions.

Community issues

Comments:

71. Parking:

    Ensure city demands a unit to parking space ratio that does not further increase the congestion on local streets. Growing families need to have a car - bikes do not carry family sized groceries or take kids to school and sports activities!

72. Units structure, size, cost and impact on demographics:

    Bedrooms: There are no 3-bedroom units - not surprising, since 3-bedroom units in most new rental or condo builds are financially prohibitive for young families. Not only is our birth rate cratering… our new homes policies further dictate one or no children is supported in central Ottawa.

    Square footage: Again, with the dominance of studio, one bedroom and small square footage units further exacerbate the growing dominance of single-family households or couples with no children. Although the proponent has 1100 sq foot units, I assume the cost will be prohibitive to young families.

73. Setting:

    Warmth & streetscape: Ensure façade colours and materials are not obtrusive but inviting. The building should help enhance the already stark streetscape of Scott Street both day and night. Ensure glass is warm in scale, colour and reduces impacts on wildlife, such as birds.

Lighting: ensure lighting is not overwhelming at night, especially to adjacent neighbours – minimize cumulative brightness in the neighbourhood. It should however provide warmth, a sense of security and space.

Ground level units: Agree with city on this requirement.

74. Trees:

    Survival is a problem with current selection due to numerous factors…but Barry Hobin's recent project on Kenwood Avenue at Melbourne have deciduous tall trees that have fared exceptionally well.

Other

75. 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. The HPDS was passed by Council on April 13, 2022.

    a. At this time, the HPDS is not in effect and Council has referred the 2023 HPDS Update Report back to staff with direction to bring forward an updated report to Committee with recommendations for revised phasing timelines, resource requirements and associated amendments to the Site Plan Control By-law by no later than Q1 2024.

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

Submission Requirements and Fees

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

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

Yours Truly,

Jean-Charles Renaud, Planner III

c.c. Jack Smith, Planner
Christopher Moise, Urban Designer
Amy Whelan, Infrastructure Project Manager
Shawn Wessel, Infrastructure Project Manager
Wally Dubyk, Transportation Project Manager
Mark Richardson, Forester
Matthew Hayley, Environmental Planner
Mike Russett, Parks Planner

APPLICANT'S STUDY AND PLAN IDENTIFICATION LIST

Proposed Zoning By-law Amendment & Site Plan Control Application – 1950 Scott St, 312, 314 Clifton Rd – PC2024-0039

Legend: **R** = Required, the study or plan is required with application submission
A = Advised, the study or plan is advised to evaluate the application or satisfy a condition of approval/draft approval
1 - OPA, **2** - ZBA, **3** - Plan of Subdivision, **4** - Plan of Condominium, **5** - SPC

Core studies required for certain applications all the time (Remaining studies are site specific)

For information and guidance on preparing required studies and plans refer here:

ENGINEERING										
R	**A**	**Study/ Plan Name**	**Description**	**When Required**					**Applicable Study Components & Other Comments**
				1	**2**	**3**	**4**	**5**	
☒	☐	1. Environmental Site Assessment (Phase 1 & Phase 2)	Ensures development only takes place on sites where the environmental conditions are suitable for the proposed use	☒	☒	☒	☒	☒	Record of Site Condition Yes ☒ No ☐
				Study Trigger Details: All cases					
☒	☐	2. Geotechnical Study	Geotechnical design requirements for the subsurface conditions	☒	☒	☒	☒	☒	
				Study Trigger Details: All cases					
☒	☐	3. Grading and Drainage Plan	Grading relationships between connecting (or abutting) properties and surface runoff control	☐	☐	☒	☐	☒	
				Study Trigger Details: All cases					
☐	☐	4. Hydrogeological and Terrain Analysis	A scientific study or evaluation that includes a description of the ground and surface hydrology, geology, terrain, affected landform and its susceptibility	☐	☐	☒	☒	☒	Reasonable Use Study Yes ☐ No ☐ Groundwater Impact Study Yes ☐ No ☐
				Study Trigger Details: When developing on private services or when urban development is in close proximity to existing private serviced development					
☒	☐	5. Noise Control Study	Potential impacts of noise on a development	☒	☒	☒	☒	☒	Vibration Study Yes ☒ No ☐ ** within 75 metres of an existing or proposed light rail transit corridor**
				Study Trigger Details: See Terms of Reference for full details.					

☐	☐	6. Rail Proximity Study	Development on land adjacent to all Protected Transportation Corridors and facilities shown on Schedule C2 of the Official Plan, to follow rail safety and risk mitigation best practices	☐	☒	☒	☒	☒	Rail Safety Report Yes ☐ No ☐ O-Train Network Proximity Study Yes ☐ No ☐
				Study Trigger Details: Within the Development Zone of Influence for existing and future rapid transit stations and corridors, as shown on Annex 2 of the OP OR on land adjacent to all Protected Transportation Corridors and facilities shown on Schedule C2 of the Official Plan					
☒	☐	7. Site Servicing Study	Provides servicing details based on proposed scale of development with an engineering overview taking into consideration surrounding developments and connections.	☐	☒	☒	☒	☒	Fluvial Geomorphological Report Yes ☐ No ☐ Assessment of Adequacy of Public Services Yes ☐ No ☐ Servicing Options Report Yes ☐ No ☐ Erosion and Sediment Control Plan / Brief Yes ☒ No ☐ Hydraulic Water Main Analysis Yes ☒ No ☐ **Dependent upon available fire flow and demands** Stormwater Management Report and Detailed Design Brief Yes ☒ No ☐
				Study Trigger Details: All cases					
☐	☐	8. Slope Stability Study	Assessment of slope stability and measures to provide safe set-back.	☐	☒	☒	☒	☒	Retrogressive Landslide Analysis Yes ☐ No ☐
				Study Trigger Details: Where the potential for Hazard Lands exists on a site.					
☒	☐	9. Transportation Impact Assessment		☐	☒	☒	☒	☒	Roadway Modification Functional Design

			Identify on and off-site measures to align a development with City transportation objectives.	Study Trigger Details: If the development generates 60 person-trips or more; or if the development is located in a Location Trigger; or if the development has a Safety Trigger.						Yes ☐ No ☐
☐	☐	10. Water Budget Assessment	Identify impact of land use changes on the hydrologic cycle and post-development mitigation targets.	☐	☒	☒	☒	☒	Study Trigger Details: May be required for site plan control applications for sites with private servicing and / or proximity to hydrogeologically-sensitive areas. Draft plans of subdivision are required to integrate water budget assessments into supporting stormwater management plans and analysis for the study area.	
☐	☐	11. Wellhead Protection Study	Delineate a Wellhead Protection Area (WHPA) and characterize vulnerability for new communal residential drinking water well systems, in accordance with Technical Rules under *Clean Water Act.*	☐	☒	☒	☒	☒	Study Trigger Details: Required for all new communal residential drinking water well systems; including new municipal wells, new private communal wells (small water works) that require a Municipal Responsibility Agreement (MRA), expansions or increased water takings from an existing municipal well or existing private communal well and new private communal wells.	

PLANNING									
R	**A**	**Study/Plan Name**	**Description**	**When Required**					**Applicable Study Components & Other Comments**
				1	**2**	**3**	**4**	**5**	
☐	☐	12. Agrology and Soil Capability Study	Confirm or recommend alterations to mapping of agricultural lands in the City.	☒	☐	☐	☐	☐	
				Study Trigger Details: For the expansion of a settlement area or identification of a new settlement area through a comprehensive review; or where it is demonstrated that the land does not meet the requirements for an Agricultural Resource Area.					
☐	☐	13. Archaeological Assessment	Discover any archaeological resources on site, evaluate cultural heritage value and conservation strategies	☒	☒	☒	☒	☒	
				Study Trigger Details: When the land has either: a known archaeological site; or the potential to have archaeological sites; or where the City's Archaeological Resource Potential Mapping Study indicates archaeological potential, outside of the historic core; or upon discovery of any archaeological resource during construction in the City's historic core area.					
☒	☐	14. Building Elevations	Visual of proposed development to understand	☒	☒	☐	☐	☒	

			facing of building including direction of sunlight, height, doors, and windows.	Study Trigger Details: Site Plan: for residential buildings with 25 or more residential units; or for residential buildings with less than 25 residential units, if the units are within the Urban area or the High-performance Development Standard threshold in the rural area. Official Plan or Zoning By-law: if staff deem it necessary to determine compliance with OP policies, the Zoning By-law or City of Ottawa Urban Design Guidelines.					
☐	☐	15. Heritage Impact Assessment	Determine impacts of proposed development on cultural heritage resources.	☒	☒	☒	☒	☒	Study Trigger Details: Where development or an application under the Ontario Heritage Act is proposed on, adjacent to, across the street from or within 30 metres of a protected heritage property; or for any development adjacent to the Rideau Canal UNESCO World Heritage Site and its landscaped buffer.	Conservation Plan Yes ☐ No ☐
☐	☐	16. Heritage Act Acknowledgement Report	A submission requirement to demonstrate that the *Ontario Heritage Act* requirements have been satisfied, to ensure that multiple applications are considered currently.	☐	☒	☒	☒	☒	Study Trigger Details: Where the subject property is listed on the Heritage Register and the applicant must submit a Heritage Permit Application (designated heritage property listed on the Heritage Register) or provide notice of intent to demolish or remove a building (non-designated property listed on the Heritage Register).	Heritage Permit Application Yes ☐ No ☐ Notice of Intent to Demolish Yes ☐ No ☐
☐	☐	17. Impact Assessment Study – Mineral Aggregate	Mineral aggregate extraction activities; and to protect known high quality mineral aggregate resources from development and activities that would preclude or hinder their existence (ability to be extracted) or expansion.	☒	☒	☒	☒	☒	Study Trigger Details: New Development within 500 metres of lands within the Bedrock Overlay , or within 300 metres of lands within the Sand and Gravel Resource Area Overlay.	

☐	☐	18. Impact Assessment Study – Mining Hazards	To identify or confirm known mineral deposits or petroleum resources and significant areas of mineral potential. To protect mineral and petroleum resources from development and activities which would preclude or hinder the establishment of new operations or access to the resources.	☒	☒	☒	☒	☒	Study Trigger Details: For all applications in proximity to mining operations.	
☐	☐	19. Impact Assessment Study – Waste Disposal Sites / Former Landfill Sites	To identify or confirm known proximity of existing or former waste disposal sites. To ensure issues of public health, public safety and environmental impact are addressed.	☒	☒	☒	☒	☒	Study Trigger Details: For the establishment of any new Solid Waste Disposal Site or for a footprint expansion of an operating Solid Waste Disposal Site; or development within three kilometers of an operating or non-operating Waste Disposal Site.	
☒	☐	20. Landscape Plan	A plan to demonstrate how the canopy cover, urban design, health, and climate change objectives of Official Plan will be met through tree planting and other site design elements.	☒	☒	☒	☒	☒	Study Trigger Details: Site Plan, Plan of Subdivision, and Plan of Condominium: always required, except where it is demonstrated that the landscape component of a project is not relevant to the review of the application. A high-level conceptual Landscape Plan may be required to support Zoning By-law and Official Plan Amendment applications.	
☐	☐	21. Mature Neighbourhood Streetscape Character Analysis	In the Mature Neighbourhoods a Streetscape Character Analysis is required to determine the applicable zoning requirements.	☐	☒	☐	☐	☐	Study Trigger Details: Zoning By-law amendment application in areas covered by the Mature Neighbourhoods zoning overlay for applications of residential development of four storeys or less located in a R1, R2, R3, or R4 zone.	

☐	☐	22. Minimum Distance Separation	Provincial land use planning tool that determines setback distances between livestock barns, manure storages or anaerobic digesters and surrounding land uses, with the objective of minimizing land use conflicts and nuisance complaints related to odour.	☒	☒	☒	☒	☒	
				Study Trigger Details: Applications in the Rural Area, outside of a village.					
☐	☐	23. Parking Plan	A tool to assess the sufficiency of on-street parking in plans of subdivision.	☐	☐	☒	☒	☐	
				Study Trigger Details: For new or revised plans of subdivision with public streets.					
☒	☐	24. Plan of Survey	A Plan of Survey depicts legal boundaries and is a specialized map of a parcel of land and it delineates boundary locations, building locations, physical features and other items of spatial importance.	☒	☒	☒	☒	☒	
				Study Trigger Details: Required for all *Planning Act* applications.					
☐	☐	25. Plan of Subdivision	Proposed subdivision layout to be used for application approval	☐	☒	☒	☐	☐	
				Study Trigger Details: Always required with the submission of plan of subdivision application. Only required with a Zoning By-law Amendment application, where such ZBLA is in response to enable a subdivision.					
☐	☐	26. Plan of Condominium	Proposed condominium layout to be used for application approval	☐	☐	☐	☒	☐	
				Study Trigger Details: With the submission of plan of condominium application.					
☒	☐	27. Planning Rationale	Provides the planning justification in support of the	☒	☒	☒	☐	☐	Integrated Environmental Review Summary

			Planning Act application and to assist staff and the public in the review of the proposal.	Study Trigger Details: For all Official Plan amendment, Zoning By-law amendment, or plan of subdivision applications.						Yes ☐ No ☐
☒	☐	28. Preliminary Construction Management Plan	A checklist that shows a development proposal's anticipated impacts to all modes of transportation and all elements in the right of way during construction.	☐	☐	☒	☐	☒	Study Trigger Details: For all Site Plan and plan of subdivision applications.	
☒	☐	29. Public Consultation Strategy	Proposal to reach and collect public input as part of development application.	☒	☒	☒	☒	☒	Study Trigger Details: Official Plan Amendment, Zoning By-law Amendment and Subdivision: Always required. Condominium: Vacant Land only Site Plan: At the discretion of the City's file lead in consultation with the Business and Technical Support Services Manager.	
☒	☐	30. Shadow Analysis		☐	☒	☐	☐	☐		

			A visual model of how the proposed development will cast its shadow.	Study Trigger Details: When there is an increase in height or massing proposed for a residential, commercial or office use. Two triggers: 1. Inside the Greenbelt: proposed development is over 5 storeys in height (≤15 meters). If a development proposal is 5 storeys or less, but is proposing an increase in height and/or massing and is in close proximity to a shadow sensitive area, a shadow analysis may be requested. 2. Outside the Greenbelt: proposed development is over 3 storeys in height (≤9 meters) and is in close proximity to a shadow sensitive area. Where a proposed development is not in close proximity to a shadow sensitive area (e.g. industrial development) the trigger for a shadow analysis is over 5 storeys in height (≤15 meters).					
☒	☐	31. Site Plan	A Site Plan is a visual drawing that illustrates the proposed development of a site in two dimensions.	☒	☒	☒	☒	☒	Site Plan Yes ☒ No ☐ Concept Plan Yes ☐ No ☐ Facility Fit Plan Yes ☐ No ☐
				Study Trigger Details: Site Plan: All Other applications: where a layout of the public realm, building massing, heights, densities or massing of the proposal provides changes to the planned context; sites proposing multiple land uses; sites with multiple landowners; sites with two or more buildings, on-site park dedication, and/or a new public or private street(s); sites with proposed changes to connectivity (such as active transportation networks, vehicular circulation or access to transit); sites where the development potential on adjacent properties may be impacted by or could be integrated into the proposed site.					
☒	☐	32. Urban Design Brief	Illustrate how a development proposal represents high-	☒	☒	☒	☐	☒	

			quality and context sensitive design that implements policies of the Official Plan, relevant secondary plans, and Council approved plans and guidelines.	Study Trigger Details: For all Official Plan amendment, Zoning By-law amendment, and plan of subdivision applications. For SPC applications: proposals for residential buildings with 25 or more residential units, or for proposals for residential buildings with less than 25 residential units, if the units are within the Urban area or the High-performance Development Standard threshold in the rural area where OP Policy 11.3 (3) is relevant; for non-residential and mixed-use proposals.	
☒	☐	33. Urban Design Review Panel Report	Demonstrates that a development proposal has attended an Urban Design Review Panel formal review meeting, received, and responded to the associated recommendations, if applicable	☒ ☒ ☒ ☒ ☒ Study Trigger Details: Required for all planning act applications subject to UDRP review, in accordance with the UDRP Panel Terms of Reference.	
☒	☐	34. Wind Analysis	A visual model and a written evaluation of how a proposed development will impact pedestrian-level wind conditions.	☐ ☒ ☐ ☐ ☒ Study Trigger Details: Applications seeking an increase in height and/or massing which is either: a tall building(s), 10 storeys or more or a proposed building that is more than twice the height of adjacent existing buildings and is greater than five storeys in height and is adjacent to existing or planned low rise development, open spaces, water bodies and large public amenity areas.	
☒	☐	35. Zoning Confirmation Report	The purpose of the Zoning Confirmation Report (ZCR) is to identify all zoning compliance issues, if any, at the outset of a planning application.	☐ ☒ ☐ ☐ ☒ Study Trigger Details: Required for all SPC and ZBLA applications.	

ENVIRONMENTAL

R	A	Study / Plan Name	Description	When Required					Applicable Study Components & Other Comments
				1	2	3	4	5	
☐	☐	36. Community Energy Plan	Includes a community energy analysis, alongside mitigation measures, and other associated information. The community energy analysis refers to the overall assessment process to identify on and off-site measures to align the design of the development with City climate objectives.	☐	☐	☐	☐	☐	
				NOT IMPLEMENTED & NOT REQUIRED					
☐	☐	37. Energy Modelling Report	The Energy Modeling Report is a Site Plan Control application submission requirement to show how climate change mitigation, and energy objectives will be met through exterior building design elements.	☐	☐	☐	☐	☐	
				NOT IMPLEMENTED & NOT REQUIRED					
☐	☐	38. Environmental Impact Study	Assessment of environmental impacts of a project and documents the existing natural features, identifies the potential environmental impacts, recommends ways to avoid and reduce the negative impacts, and proposes ways to enhance natural features and functions.	☒	☒	☒	☐	☒	Assessment of Landform Features Yes ☐ No ☐ Integrated Environmental Review Yes ☐ No ☐ Protocol for Wildlife Protection during Construction Yes ☐ No ☐ Significant Woodlands Guidelines for Identification, Evaluation, and Impact Assessment Yes ☐ No ☐
				<u>Study Trigger Details</u>: Is required when development or site alteration is proposed in or within a specified distance of environmentally designated lands, natural heritage features, the City's Natural Heritage System, or hazardous forest types for wildland fire. The EIS Decision Tool (Appendix 2 of the Environmental Impact Study Guidelines) provides a checklist of the natural heritage features and adjacent areas within which an EIS is required to support development applications under the *Planning Act.*					
☐	☐	39. Environmental Management Plan	A comprehensive environmental planning	☒	☐	☐	☐	☐	

			document that identifies, evaluates, and mitigates the potential impacts of proposed development on the natural environment and its ecological functions at local planning stage.	Study Trigger Details: Official Plan amendments for local plans (area-specific policy or secondary plan, where: there is significant change in the conditions upon which the original study was based; there are proposed changes to planned infrastructure needed to service a subdivision that would have a significant impact on the infrastructure needs of another subdivision within the EMP study area, or the applicable Class Environmental Assessment approval has expired.					
☒	☐	40. High-performance Development Standard	A collection of voluntary and required standards that raise performance of new building projects to achieve sustainable and resilient design	☐	☐	☐	☐	☐	NOT IMPLEMENTED & NOT REQUIRED	
☒	☐	41. Tree Conservation Report	Demonstrates how tree cover will be retained and protected on the site, including mature trees, stands of trees, and hedgerows.	☐	☐	☒	☒	☒	Study Trigger Details: Where there is a tree of 10 centimeters in diameter or greater on the site and/or if there is a tree on an adjacent site that has a Critical Root Zone (CRZ) extending onto the development site.	

Ben Barkley

From: Jamie Batchelor <jamie.batchelor@rvca.ca>
Sent: Tuesday, December 7, 2021 12:54 PM
To: Francois Thauvette
Cc: Steve Matthews
Subject: RE: 1950 Scott St - Pre-Consultation with the RVCA

Good Afternoon Francois,

I can confirm that as long as there is no surface parking or drive aisles proposed (save and except the access ramps as shown on the plans), then water quality measures would not be requires similar to the previous design.

Jamie Batchelor, MCIP, RPP
Planner, ext. 1191
Jamie.batchelor@rvca.ca

Rideau Valley Conservation Authority
3889 Rideau Valley Drive
PO Box 599, Manotick ON K4M 1A5
T 613-692-3571 | 1-800-267-3504 **F** 613-692-0831 | www.rvca.ca

From: Francois Thauvette <f.thauvette@novatech-eng.com>
Sent: Friday, November 19, 2021 9:16 AM
To: Jamie Batchelor <jamie.batchelor@rvca.ca>
Cc: Steve Matthews <S.Matthews@novatech-eng.com>
Subject: 1950 Scott St - Pre-Consultation with the RVCA

Hi Jamie,

We are working on a proposed residential development located at 1950 Scott Street in Ottawa (see attached conceptual Site Plan). The proposed development will include a 30-storey tower, exterior amenity space and underground parking. We are sending this e-mail to ask the RVCA to confirm if there are any stormwater management (quality control criteria) requirements for this site. Based on RVCA correspondence (on a previous DSEL design) stormwater quality control measures were not required for this site due to the nature of the development, the fact that all parking will be underground (i.e. no surface parking) and that the distance to the stormwater outlet is >2km downstream. Please confirm if this is still correct.

Regards,

François Thauvette, P. Eng., Senior Project Manager | Land Development & Public Sector Engineering
NOVATECH Engineers, Planners & Landscape Architects

APPENDIX B

Development Servicing Study Checklist

Servicing study guidelines for development applications

4. Development Servicing Study Checklist

The following section describes the checklist of the required content of servicing studies. It is expected that the proponent will address each one of the following items for the study to be deemed complete and ready for review by City of Ottawa Infrastructure Approvals staff.

The level of required detail in the Servicing Study will increase depending on the type of application. For example, for Official Plan amendments and re-zoning applications, the main issues will be to determine the capacity requirements for the proposed change in land use and confirm this against the existing capacity constraint, and to define the solutions, phasing of works and the financing of works to address the capacity constraint. For subdivisions and site plans, the above will be required with additional detailed information supporting the servicing within the development boundary.

4.1 General Content

- ☐ Executive Summary (for larger reports only).
- ☒ Date and revision number of the report.
- ☒ Location map and plan showing municipal address, boundary, and layout of proposed development.
- ☒ Plan showing the site and location of all existing services.
- ☒ Development statistics, land use, density, adherence to zoning and official plan, and reference to applicable subwatershed and watershed plans that provide context to which individual developments must adhere.
- ☒ Summary of Pre-consultation Meetings with City and other approval agencies.
- ☐ Reference and confirm conformance to higher level studies and reports (Master Servicing Studies, Environmental Assessments, Community Design Plans), or in the case where it is not in conformance, the proponent must provide justification and develop a defendable design criteria.
- ☒ Statement of objectives and servicing criteria.
- ☒ Identification of existing and proposed infrastructure available in the immediate area.
- ☐ Identification of Environmentally Significant Areas, watercourses and Municipal Drains potentially impacted by the proposed development (Reference can be made to the Natural Heritage Studies, if available).
- ☒ Concept level master grading plan to confirm existing and proposed grades in the development. This is required to confirm the feasibility of proposed stormwater management and drainage, soil removal and fill constraints, and potential impacts to neighbouring properties. This is also required to confirm that the proposed grading will not impede existing major system flow paths.
- ☐ Identification of potential impacts of proposed piped services on private services (such as wells and septic fields on adjacent lands) and mitigation required to address potential impacts.
- ☐ Proposed phasing of the development, if applicable.

☒ Reference to geotechnical studies and recommendations concerning servicing.

☒ All preliminary and formal site plan submissions should have the following information:
- Metric scale
- North arrow (including construction North)
- Key plan
- Name and contact information of applicant and property owner
- Property limits including bearings and dimensions
- Existing and proposed structures and parking areas
- Easements, road widening and rights-of-way
- Adjacent street names

4.2 Development Servicing Report: Water

☐ Confirm consistency with Master Servicing Study, if available
☒ Availability of public infrastructure to service proposed development
☒ Identification of system constraints
☒ Identify boundary conditions
☒ Confirmation of adequate domestic supply and pressure
☒ Confirmation of adequate fire flow protection and confirmation that fire flow is calculated as per the Fire Underwriter's Survey. Output should show available fire flow at locations throughout the development.
☒ Provide a check of high pressures. If pressure is found to be high, an assessment is required to confirm the application of pressure reducing valves.
☐ Definition of phasing constraints. Hydraulic modeling is required to confirm servicing for all defined phases of the project including the ultimate design
☒ Address reliability requirements such as appropriate location of shut-off valves
☐ Check on the necessity of a pressure zone boundary modification.
☒ Reference to water supply analysis to show that major infrastructure is capable of delivering sufficient water for the proposed land use. This includes data that shows that the expected demands under average day, peak hour and fire flow conditions provide water within the required pressure range

- ☒ Description of the proposed water distribution network, including locations of proposed connections to the existing system, provisions for necessary looping, and appurtenances (valves, pressure reducing valves, valve chambers, and fire hydrants) including special metering provisions.
- ☐ Description of off-site required feedermains, booster pumping stations, and other water infrastructure that will be ultimately required to service proposed development, including financing, interim facilities, and timing of implementation.
- ☒ Confirmation that water demands are calculated based on the City of Ottawa Design Guidelines.
- ☒ Provision of a model schematic showing the boundary conditions locations, streets, parcels, and building locations for reference.

4.3 Development Servicing Report: Wastewater

- ☒ Summary of proposed design criteria (Note: Wet-weather flow criteria should not deviate from the City of Ottawa Sewer Design Guidelines. Monitored flow data from relatively new infrastructure cannot be used to justify capacity requirements for proposed infrastructure).
- ☐ Confirm consistency with Master Servicing Study and/or justifications for deviations.
- ☒ Consideration of local conditions that may contribute to extraneous flows that are higher than the recommended flows in the guidelines. This includes groundwater and soil conditions, and age and condition of sewers.
- ☒ Description of existing sanitary sewer available for discharge of wastewater from proposed development.
- ☐ Verify available capacity in downstream sanitary sewer and/or identification of upgrades necessary to service the proposed development. (Reference can be made to previously completed Master Servicing Study if applicable)
- ☐ Calculations related to dry-weather and wet-weather flow rates from the development in standard MOE sanitary sewer design table (Appendix ‘C’) format.
- ☒ Description of proposed sewer network including sewers, pumping stations, and forcemains.
- ☐ Discussion of previously identified environmental constraints and impact on servicing (environmental constraints are related to limitations imposed on the development in order to preserve the physical condition of watercourses, vegetation, soil cover, as well as protecting against water quantity and quality).
- ☐ Pumping stations: impacts of proposed development on existing pumping stations or requirements for new pumping station to service development.
- ☐ Forcemain capacity in terms of operational redundancy, surge pressure and maximum flow velocity.
- ☐ Identification and implementation of the emergency overflow from sanitary pumping stations in relation to the hydraulic grade line to protect against basement flooding.
- ☐ Special considerations such as contamination, corrosive environment etc.

4.4 Development Servicing Report: Stormwater Checklist

- ☒ Description of drainage outlets and downstream constraints including legality of outlets (i.e. municipal drain, right-of-way, watercourse, or private property)
- ☐ Analysis of available capacity in existing public infrastructure.
- ☒ A drawing showing the subject lands, its surroundings, the receiving watercourse, existing drainage patterns, and proposed drainage pattern.
- ☒ Water quantity control objective (e.g. controlling post-development peak flows to pre-development level for storm events ranging from the 2 or 5 year event (dependent on the receiving sewer design) to 100 year return period); if other objectives are being applied, a rationale must be included with reference to hydrologic analyses of the potentially affected subwatersheds, taking into account long-term cumulative effects.
- ☐ Water Quality control objective (basic, normal or enhanced level of protection based on the sensitivities of the receiving watercourse) and storage requirements.
- ☒ Description of the stormwater management concept with facility locations and descriptions with references and supporting information.
- ☐ Set-back from private sewage disposal systems.
- ☐ Watercourse and hazard lands setbacks.
- ☐ Record of pre-consultation with the Ontario Ministry of Environment and the Conservation Authority that has jurisdiction on the affected watershed.
- ☐ Confirm consistency with sub-watershed and Master Servicing Study, if applicable study exists.
- ☒ Storage requirements (complete with calculations) and conveyance capacity for minor events (1:5 year return period) and major events (1:100 year return period).
- ☐ Identification of watercourses within the proposed development and how watercourses will be protected, or, if necessary, altered by the proposed development with applicable approvals.
- ☒ Calculate pre and post development peak flow rates including a description of existing site conditions and proposed impervious areas and drainage catchments in comparison to existing conditions.
- ☐ Any proposed diversion of drainage catchment areas from one outlet to another.
- ☒ Proposed minor and major systems including locations and sizes of stormwater trunk sewers, and stormwater management facilities.
- ☐ If quantity control is not proposed, demonstration that downstream system has adequate capacity for the post-development flows up to and including the 100 year return period storm event.
- ☐ Identification of potential impacts to receiving watercourses
- ☐ Identification of municipal drains and related approval requirements.
- ☒ Descriptions of how the conveyance and storage capacity will be achieved for the development.
- ☐ 100 year flood levels and major flow routing to protect proposed development from flooding for establishing minimum building elevations (MBE) and overall grading.

- ☐ Inclusion of hydraulic analysis including hydraulic grade line elevations.
- ☒ Description of approach to erosion and sediment control during construction for the protection of receiving watercourse or drainage corridors.
- ☐ Identification of floodplains – proponent to obtain relevant floodplain information from the appropriate Conservation Authority. The proponent may be required to delineate floodplain elevations to the satisfaction of the Conservation Authority if such information is not available or if information does not match current conditions.
- ☐ Identification of fill constraints related to floodplain and geotechnical investigation.

4.5 Approval and Permit Requirements: Checklist

The Servicing Study shall provide a list of applicable permits and regulatory approvals necessary for the proposed development as well as the relevant issues affecting each approval. The approval and permitting shall include but not be limited to the following:

- ☐ Conservation Authority as the designated approval agency for modification of floodplain, potential impact on fish habitat, proposed works in or adjacent to a watercourse, cut/fill permits and Approval under Lakes and Rivers Improvement Act. The Conservation Authority is not the approval authority for the Lakes and Rivers Improvement Act. Where there are Conservation Authority regulations in place, approval under the Lakes and Rivers Improvement Act is not required, except in cases of dams as defined in the Act.
- ☐ Application for Certificate of Approval (CofA) under the Ontario Water Resources Act.
- ☐ Changes to Municipal Drains.
- ☐ Other permits (National Capital Commission, Parks Canada, Public Works and Government Services Canada, Ministry of Transportation etc.)

4.6 Conclusion Checklist

- ☒ Clearly stated conclusions and recommendations
- ☐ Comments received from review agencies including the City of Ottawa and information on how the comments were addressed. Final sign-off from the responsible reviewing agency.
- ☒ All draft and final reports shall be signed and stamped by a professional Engineer registered in Ontario

APPENDIX C

Sanitary Sewage Calculations

NOVATECH
Engineers, Planners & Landscape Architects

1950 SCOTT STREET - 22-Storey Tower and Podium
POST-DEVELOPMENT SANITARY FLOWS

Residential Flows	**Post-Development**	
Number of Studio / 1-Bedroom Units	183	
Persons per Studio / 1-Bedroom Unit	1.4	
Number of 2-Bedroom Units	59	
Persons per 2-Bedroom Unit	2.1	
Total Number of Units	242	
Design Population	381	
Average Daily Flow per Resident	280	L/c/day
Peak Factor (Harmon Formula)	3.43	
Peak Residential Flow	**4.23**	**L/s**
Commercial Flows		
Ground Floor Area	148	m^2
Average Commercial Sewage Flow	2.8	$L/m^2/day$
Peaking Factor	1.5	
Peak Commercial Flows	**0.01**	**L/s**
Extraneous Flow		
Site Area	0.22	ha
Infiltration Allowance	0.33	L/s/ha
Peak Extraneous Flow	**0.07**	**L/s**
Total Peak Sanitary Flow	**4.31**	**L/s**

APPENDIX D

Water Demands, FUS Calculations, Watermain Boundary Conditions, E-mail Correspondence from the City of Ottawa, E-mail correspondence from Architect to support FUS Calculations

1950 SCOTT STREET - 22-Storey Tower and Podium
POST-DEVELOPMENT WATER DEMANDS

DOMESTIC WATER DEMAND

Residential Water Demands	Post-Development	
Number of Studio / 1-Bedroom Units	183	
Persons per Studio / 1-Bedroom Unit	1.4	
Number of 2-Bedroom Units	59	
Persons per 2-Bedroom Unit	2.1	
Total Number of Units	242	
Design Population	381	
Average Daily Flow per resident	280	L/c/day
Average Day Demand	**1.23**	**L/s**
Maximum Day Demand (2.5 x avg. day)	**3.09**	**L/s**
Peak Hour Demand (2.2 x max. day)	**6.79**	**L/s**
Commercial Water Demands		
Ground Floor Area	148	m^2
Average Commercial Daily Demand	2.8	$L/m^2/day$
Average Day Demand	**0.01**	**L/s**
Maximum Day Demand (1.5 x avg. day)	**0.01**	**L/s**
Peak Hour Demand (1.8 x max. day)	**0.01**	**L/s**
TOTALS		
Average Day Demand	**1.2**	**L/s**
Maximum Day Demand	**3.1**	**L/s**
Peak Hour Demand	**6.8**	**L/s**

BOUNDAY CONDITIONS (Values provided by the City of Ottawa)

Minimum HGL = 108.6 m
Maximum HGL = 115.1 m
Max Day + Fire Flow (167 L/s) = 105.4 m

PRESSURE TESTS

Average Ground Elevation (Scott) 64.3 m

Low Pressure Test = (Min. HGL - Avg. Ground Elev.) x 1.42197 PSI/m > 40 PSI

63.0 PSI

High Pressure Test = (Max HGL - Avg.Ground Elev.) x 1.42197 PSI/m < 80 PSI

72.2 PSI

Max Day + Fire Flow Test = (Max Day + Fire Flow - Avg. Ground Elev.) x 1.42197 PSI/m > 20 PSI

Max Day + Fire Flow Pressure = **58.4** PSI

FUS - Fire Flow Calculations

NOVATECH
Engineers, Planners & Landscape Architects

Novatech Project #: 121301
Project Name: 1950 Scott Street
Date: 7/5/2024
Input By: K. D'sa
Reviewed By: F. Thauvette
Drawing Reference:

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

Building Description: 22 Storey building with 4 and 6 storey podiums
Type II - Non-combustible construction

Step			Choose		Value Used	Total Fire Flow (L/min)
Base Fire Flow						
1	**Construction Material**			**Multiplier**		
	Coefficient related to type of construction **C**	Type V - Wood frame		1.5	0.8	
		Type IV - Mass Timber		Varies		
		Type III - Ordinary construction		1		
		Type II - Non-combustible construction	Yes	0.8		
		Type I - Fire resistive construction (2 hrs)		0.6		
2	**Floor Area**					
	A	Podium Level Footprint (m^2)	1221			
		Total Floors/Storeys (Podium)	6			
		Tower Footprint (m^2)	708			
		Total Floors/Storeys (Tower)	16			
		Protected Openings (1 hr)				
		A, Total Effective Floor Area (m^2)			**6,300**	
	F	**Base fire flow without reductions**				**14,000**
		$F = 220\ C\ (A)^{0.5}$				
Reductions or Surcharges						
3	**Occupancy hazard reduction or surcharge**		**FUS Table 3**	**Reduction/Surcharge**		
	(1)	Non-combustible		-25%	-15%	**11,900**
		Limited combustible	Yes	-15%		
		Combustible		0%		
		Free burning		15%		
		Rapid burning		25%		
4	**Sprinkler Reduction**		**FUS Table 4**	**Reduction**		
	(2)	Adequately Designed System (NFPA 13)	Yes	-30%	-30%	**-4,760**
		Standard Water Supply	Yes	-10%	-10%	
		Fully Supervised System		-10%		
				Cumulative Sub-Total	**-40%**	
		Area of Sprinklered Coverage (m^2)	18654	100%		
				Cumulative Total	**-40%**	
5	**Exposure Surcharge per**		**FUS Table 6**		**Surcharge**	
	(3)	North Side	>30m		0%	**2,856**
		East Side	20.1 - 30 m		4%	
		South Side	3.1 - 10 m		16%	
		West Side	3.1 - 10 m		4%	
				Cumulative Total	**24%**	
Results						
6	**(1) + (2) + (3)**	**Total Required Fire Flow, rounded to nearest 1000L/min**			**L/min**	**10,000**
		(2,000 L/min < Fire Flow < 45,000 L/min)		or	L/s	**167**
				or	USGPM	2,642

HOBIN
ARCHITECTURE

July 31, 2023

To: Jean-Charles Renaud, MCIP/MICU, RPP/UPC Planner III
110 Laurier Avenue West
Ottawa, ON
K1P 1J1

Partners

Barry J. Hobin
OAA, FRAIC, Hon. Fellow AIA
Founding Partner

Wendy Brawley
OAA, MRAIC, Associate AIA

Douglas Brooks
Arch. Tech.

Marc Thivierge
OAA, MRAIC

Reinhard Vogel
Arch. Tech.

Rheal Labelle
M. Arch.

Dan Henhoeffer
Arch. Tech.

Melanie Lamontagne
OAA, MRAIC

Patrick Bisson
OAA, OAQ, MRAIC

Please find this letter as a formal confirmation that the drawings pertaining to the Site Plan Control Application – 1950 Scott Street & 312, 314 Clifton Road meet the required parameters resulting in a reduction in fire flow. The development, comprised of one 22 storey building and a two storey below grade parking garage will be constructed to ensure:

- The development is fully sprinklered, fully supervised, and designed as per NFPA 13,
- All structural elements have a minimum 2-hour fire rating,
- The development will be comprised of noncombustible materials as per the Ontario Building Code,
- The construction coefficient will equal 0.8 for Type II Noncombustible Construction

Sincerely,

Patrick Bisson
Hobin Architecture Inc.

ONTARIO ASSOCIATION OF ARCHITECTS
BARRY J. HOBIN
LICENCE
3049

Hobin Architecture Incorporated

63 Pamilla Street
Ottawa, Ontario
Canada K1S 3K7

t 613-238-7200
f 613-235-2005

hobinarc.com

Watermain Boundary Conditions Request
1950 Scott Street

City Fire Hydrant ID:
362028H084 approximately
9m from Proposed Building

Option 1
Proposed twin 150mm dia.
Service Connection to 203mm dia.
watermain in Scott Street

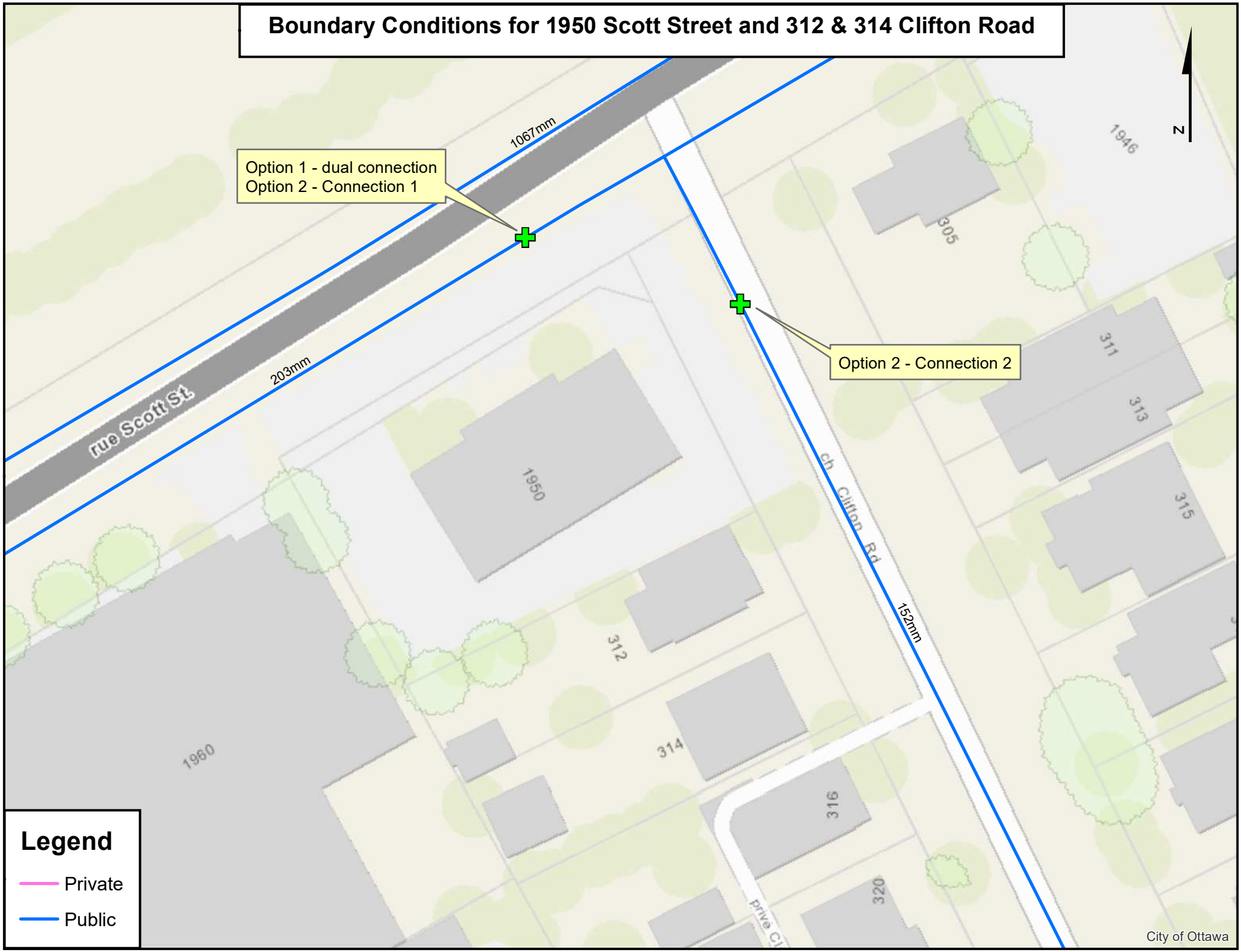
Option 2
Proposed 150mm dia. Service
Connections to 203mm dia. watermains
in Scott Street and Clifton Road

City Fire Hydrant ID:
362028H190 approximately
100m from Proposed Building

City Fire Hydrant ID:
362028H085 approximately
85m from Proposed Building

Site

1067mmØ - STC
203mmØ - PVC
1220mmØ - C00
152mmØ - PVC
1067mmØ - UCI
152mmØ - UCI
VB
rue Scott St
av. McRae Ave
av. Tweedsmuir Ave
av. Wilber Ave
ch. Clifton Rd
Transitway


Boundary Conditions for 1950 Scott Street and 312 & 314 Clifton Road
Option 1 - dual connection
Option 2 - Connection 1
Option 2 - Connection 2
1067mm
203mm
152mm
rue Scott St
ch Clifton Rd
1950
1960
312
314
316
320
305
311
313
315
1946
N
Legend
Private
Public
City of Ottawa

Kynan Dsa

From: Wessel, Shawn <shawn.wessel@ottawa.ca>
Sent: Tuesday, July 30, 2024 10:38 AM
To: Francois Thauvette
Cc: Kynan Dsa
Subject: RE: 1950 Scott Street and 312 & 314 Clifton Road - WM Boundary Conditions Request (121301)
Attachments: 1950 Scott Street & 312 - 314 Clifton Road July 2024.pdf

Good news Francois

Here you are:

The following are boundary conditions, HGL, for hydraulic analysis at 1950 Scott Street and Clifton Road (zone 1W) assumed to be **(Option 1)** a dual connection connected to the 203mm watermain on Scott Street **OR (Option2)** two connections to the 203mm watermain on Scott Street and 152mm watermain on Clifton Road (see attached PDF for location).

Option 1 (a Dual connection):

Minimum HGL: 108.6 m

Maximum HGL: 115.1 m

Max Day + Fire Flow (167 L/s): 105.4 m

Option 2 (Both connections):

Minimum HGL: 108.6 m

Maximum HGL: 115.1 m

Max Day + Fire Flow (167 L/s): 105.4 m (Connection 1), 94.6 (Connection 2)

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.

Gestionnaire de projet – Approbation des demandes d'infrastructures

Development Review Central Branch | Direction de l'examen des projets d'aménagement, Centrale
Planning, Development & Building Services Department (PDBS) | Direction générale des services de la planification, de l'aménagement et du bâtiment (DGSPAB)
City of Ottawa | Ville d'Ottawa
110 Laurier Ave. W. | 110, avenue Laurier Ouest, Ottawa ON K1P 1J1
(613) 580 2424 Ext. | Poste 33017
Int. Mail Code | Code de Courrier Interne 01-14
shawn.wessel@ottawa.ca

Please consider the environment before printing this email

Please note that I will be away August 9-11th, returning the 12th. For all urgent matters, please contact the project File Lead and/or Sr. Engineer.

*****Please also note that, while my work hours may be affected by the current situation and am working from home, I still have access to email, video conferencing and telephone. Feel free to schedule video conferences and/or telephone calls, as necessary.*****

From: Francois Thauvette <f.thauvette@novatech-eng.com>
Sent: Monday, July 8, 2024 3:28 PM
To: Wessel, Shawn <shawn.wessel@ottawa.ca>
Cc: Kynan Dsa <k.dsa@novatech-eng.com>
Subject: FW: 1950 Scott Street and 312 & 314 Clifton Road - WM Boundary Conditions Request (121301)

Hi Shawn,

We are sending you this e-mail to request municipal watermain boundary conditions for the proposed re-development of the 1950 Scott Street and 312 & 314 Clifton Road properties. Please see e-mail below and attachments for details.

Regards,

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

From: Kynan Dsa <k.dsa@novatech-eng.com>
Sent: Monday, July 8, 2024 11:20 AM

To: Francois Thauvette <f.thauvette@novatech-eng.com>
Subject: 1950 Scott Street and 312 & 314 Clifton Road - WM Boundary Conditions Request (121301)

Hi François,

The proposed re-development of 1950 Scott Street and 312 & 314 Clifton Road will seek to demolish the three (3) existing buildings and merge the properties, followed by the construction of a 22-storey tower with a podium ranging from 4-6 stories containing at-grade commercial units below residential development.

The purpose of this email is to request watermain boundary conditions for both 203 dia. PVC watermains in Scott Street and Clifton Road (as shown on geoOttawa). We anticipate requiring two (2) water service connections due to the high domestic demands. The anticipated water demands for the proposed development are as follows:

- Average Day Demand = 1.2 L/s
- Maximum Day Demand = 2.9 L/s
- Peak Hour Demand = 6.3 L/s
- Maximum Fire Flow Demand Range = 167 L/s

See attached calculation sheets for details.

Two options are provided for service connections to the proposed building. **Option 1** proposes a twin connection to the existing 203mm dia. watermain in Scott Street with an isolation valve installed between the two connections. **Option 2** proposes two (2) separate connections to the existing 203mm dia. watermains in Scott Street and Clifton Road. See attached **WM Boundary Conditions Sketch** for details.

A multi-hydrant approach to firefighting is anticipated to be required. As indicated on the geoOttawa website, there is a single blue bonnet municipal hydrant within 75m of the subject as well as two (2) blue bonnet municipal hydrants within 150m of the subject site. See attached **WM Boundary Conditions Sketch** for details.

Please review and let me know if you require any additional information.

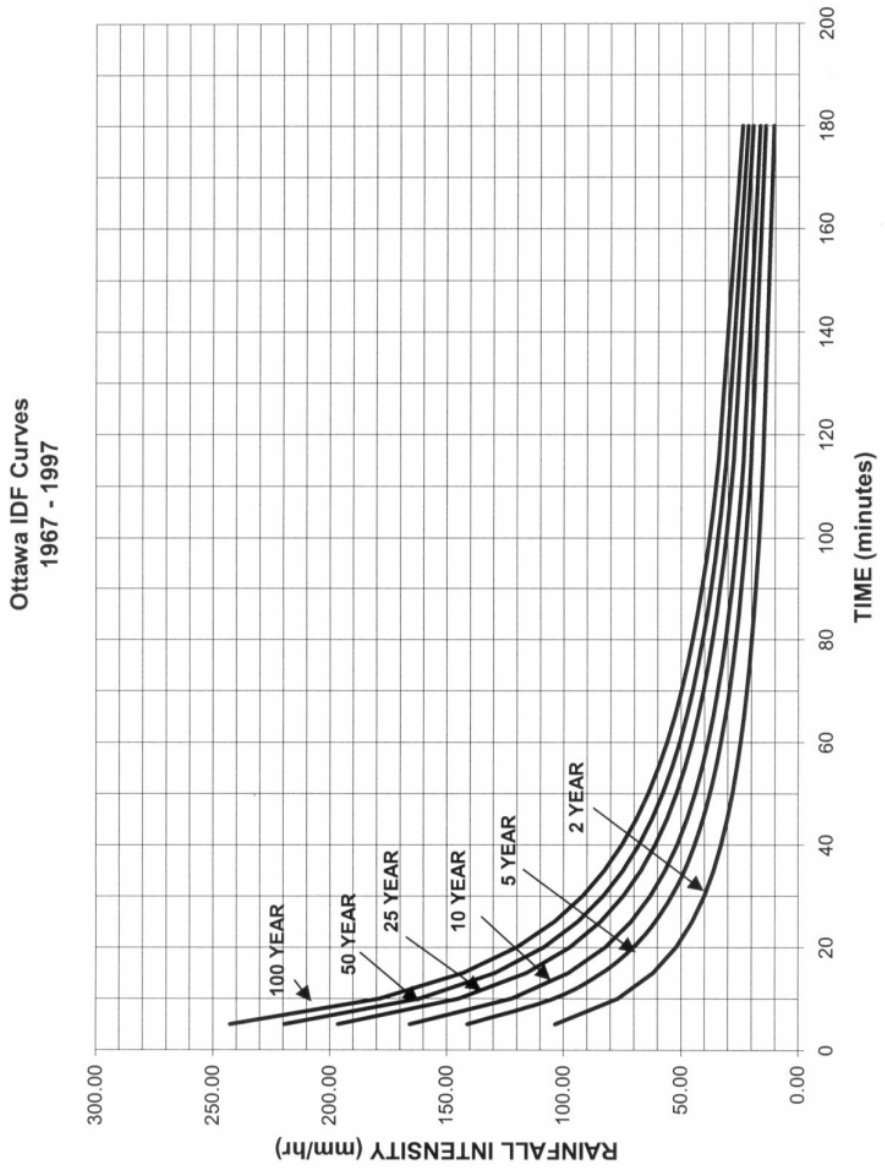
Thanks,

Kynan D'sa, B.A.Sc. (Engineering) (He/Him)
NOVATECH
Engineers, Planners & Landscape Architects
240 Michael Cowpland Drive, Suite 200, Ottawa, ON, K2M 1P6
Tel: 613.254.9643

APPENDIX E

IDF Curves and SWM Calculations

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



Proposed High-Rise Mixed-Use Development
1950 Scott Street and 312 & 314 Clifton Road

Pre - Development Site Flows										
Description	Area (ha)	$A_{impervious}$ (ha) C=0.9	A_{gravel} (ha) C=0.6	$A_{pervious}$ (ha) C=0.2	Weighted C_{w5}	Weighted C_{w100}	5-Year Flow (L/s)	100-Year Flow (L/s)	Allowable C_w=0.5 Max	Allowable Flow 2-year (L/s)
Site to be Developed	0.217	0.195	0.000	0.022	0.83	0.93	52.2	99.7	0.50	23.1
									C=0.5 (Max.)	T_c = 10mins

Post - Development Site Flows													
Area	Description	Area (ha)	A_{imp} (ha) C=0.9	A_{gravel} (ha) C=0.6	A_{perv} (ha) C=0.2	C_5	C_{100}	Uncontrolled Flow (L/s) 5-year	Uncontrolled Flow (L/s) 100-year	Controlled Flow (L/s) 5-year	Controlled Flow (L/s) 100-year	Storage Required (m^3) 5-year	Storage Required (m^3) 100-year
A-1	Direct Runoff	0.023	0.017	0.000	0.007	0.70	0.79	4.7	9.1	-	-	-	-
A-2	Controlled Site Flow (Pumped)	0.194	0.178	0.000	0.016	0.84	0.94	-	-	12.1	12.1	23.8	62.4
		0.217					Total Site Flows :	16.8	21.2				
						T_c = 10mins	Overcontrolled=	6.3	1.9				

Excess flow restriction required for groundwater contribution (150,000 L/day per Geotech) to municipal storm sewer

Proposed Residential Development
Novatech Project No. 121301
REQUIRED STORAGE - 1:2 YEAR EVENT
AREA A-1 Direct Runoff

OTTAWA IDF CURVE

Area =	0.023	ha	Qallow =	3.5	L/s
C =	0.70		Vol(max) =	0.0	m^3

Time (min)	Intensity (mm/hr)	Q (L/s)	Qnet (L/s)	Vol (m^3)
5	103.57	4.70	1.21	0.36
10	76.81	3.48	0.00	0.00
15	61.77	2.80	-0.68	-0.61
20	52.03	2.36	-1.12	-1.35
25	45.17	2.05	-1.43	-2.15
30	40.04	1.82	-1.67	-3.00
35	36.06	1.64	-1.85	-3.88
40	32.86	1.49	-1.99	-4.78
45	30.24	1.37	-2.11	-5.70
50	28.04	1.27	-2.21	-6.63
55	26.17	1.19	-2.30	-7.58
60	24.56	1.11	-2.37	-8.53
65	23.15	1.05	-2.43	-9.49
70	21.91	0.99	-2.49	-10.46
75	20.81	0.94	-2.54	-11.43
80	19.83	0.90	-2.58	-12.40
85	18.94	0.86	-2.62	-13.38
90	18.14	0.82	-2.66	-14.37

Proposed Residential Development
Novatech Project No. 121301
REQUIRED STORAGE - 1:5 YEAR EVENT
AREA A-1 Direct Runoff

OTTAWA IDF CURVE

Area =	0.023	ha	Qallow =	4.7	L/s
C =	0.70		Vol(max) =	0.0	m^3

Time (min)	Intensity (mm/hr)	Q (L/s)	Qnet (L/s)	Vol (m^3)
5	141.18	6.40	2.92	0.88
10	104.19	4.73	1.24	0.75
15	83.56	3.79	0.31	0.28
20	70.25	3.19	-0.30	-0.36
25	60.90	2.76	-0.72	-1.08
30	53.93	2.45	-1.04	-1.87
35	48.52	2.20	-1.28	-2.69
40	44.18	2.00	-1.48	-3.55
45	40.63	1.84	-1.64	-4.43
50	37.65	1.71	-1.78	-5.33
55	35.12	1.59	-1.89	-6.24
60	32.94	1.49	-1.99	-7.16
65	31.04	1.41	-2.08	-8.09
70	29.37	1.33	-2.15	-9.03
75	27.89	1.26	-2.22	-9.98
80	26.56	1.20	-2.28	-10.94
85	25.37	1.15	-2.33	-11.90
90	24.29	1.10	-2.38	-12.86

Proposed Residential Development
Novatech Project No. 121301
REQUIRED STORAGE - 1:100 YEAR EVENT
AREA A-1 Direct Runoff

OTTAWA IDF CURVE

Area =	0.023	ha	Qallow =	9.1	L/s
C =	0.79		Vol(max) =	0.0	m^3

Time (min)	Intensity (mm/hr)	Q (L/s)	Qnet (L/s)	Vol (m^3)
5	242.70	12.35	3.26	0.98
10	178.56	9.09	0.00	0.00
15	142.89	7.27	-1.82	-1.63
20	119.95	6.10	-2.98	-3.58
25	103.85	5.29	-3.80	-5.70
30	91.87	4.68	-4.41	-7.94
35	82.58	4.20	-4.88	-10.26
40	75.15	3.82	-5.26	-12.63
45	69.05	3.51	-5.57	-15.05
50	63.95	3.25	-5.83	-17.50
55	59.62	3.03	-6.05	-19.98
60	55.89	2.84	-6.24	-22.47
65	52.65	2.68	-6.41	-24.99
70	49.79	2.53	-6.55	-27.53
75	47.26	2.41	-6.68	-30.07
80	44.99	2.29	-6.80	-32.63
85	42.95	2.19	-6.90	-35.20
90	41.11	2.09	-7.00	-37.77

Proposed Residential Development
Novatech Project No. 121301
REQUIRED STORAGE - 1:100 YR + 20% IDF Increase
AREA A-1 Direct Runoff

OTTAWA IDF CURVE

Area =	0.023	ha	Qallow =	10.9	L/s
C =	0.79		Vol(max) =	0.0	m^3

Time (min)	Intensity (mm/hr)	Q (L/s)	Qnet (L/s)	Vol (m^3)
5	291.24	14.82	5.74	1.72
10	214.27	10.91	1.82	1.09
15	171.47	8.73	-0.36	-0.32
20	143.94	7.33	-1.76	-2.11
25	124.62	6.34	-2.75	-4.12
30	110.24	5.61	-3.48	-6.26
35	99.09	5.04	-4.04	-8.49
40	90.17	4.59	-4.50	-10.80
45	82.86	4.22	-4.87	-13.15
50	76.74	3.91	-5.18	-15.55
55	71.55	3.64	-5.45	-17.97
60	67.07	3.41	-5.67	-20.43
65	63.18	3.22	-5.87	-22.90
70	59.75	3.04	-6.05	-25.40
75	56.71	2.89	-6.20	-27.91
80	53.99	2.75	-6.34	-30.43
85	51.54	2.62	-6.46	-32.97
90	49.33	2.51	-6.58	-35.52

Proposed Residential Development
Novatech Project No. 121301
REQUIRED STORAGE - 1:2 YEAR EVENT
AREA A-2 Controlled Site Flow (Pumped)

OTTAWA IDF CURVE

Area =	0.194	ha	Qallow =	12.1	L/s
C =	0.84		Vol(max) =	14.4	m^3

Time (min)	Intensity (mm/hr)	Q (L/s)	Qnet (L/s)	Vol (m^3)
5	103.57	47.09	34.99	10.50
10	76.81	34.92	22.82	13.69
15	61.77	28.09	15.99	14.39
20	52.03	23.66	11.56	13.87
25	45.17	20.54	8.44	12.66
30	40.04	18.21	6.11	10.99
35	36.06	16.40	4.30	9.02
40	32.86	14.94	2.84	6.82
45	30.24	13.75	1.65	4.45
50	28.04	12.75	0.65	1.95
55	26.17	11.90	-0.20	-0.66
60	24.56	11.17	-0.93	-3.36
65	23.15	10.53	-1.57	-6.14
70	21.91	9.96	-2.14	-8.97
75	20.81	9.46	-2.64	-11.86
80	19.83	9.02	-3.08	-14.80
85	18.94	8.61	-3.49	-17.78
90	18.14	8.25	-3.85	-20.79

Proposed Residential Development
Novatech Project No. 121301
REQUIRED STORAGE - 1:5 YEAR EVENT
AREA A-2 Controlled Site Flow (Pumped)

OTTAWA IDF CURVE

Area =	0.194	ha	Qallow =	12.1	L/s
C =	0.84		Vol(max) =	23.8	m^3

Time (min)	Intensity (mm/hr)	Q (L/s)	Qnet (L/s)	Vol (m^3)
5	141.18	64.19	52.09	15.63
10	104.19	47.38	35.28	21.17
15	83.56	37.99	25.89	23.30
20	70.25	31.94	19.84	23.81
25	60.90	27.69	15.59	23.38
30	53.93	24.52	12.42	22.36
35	48.52	22.06	9.96	20.92
40	44.18	20.09	7.99	19.18
45	40.63	18.47	6.37	17.21
50	37.65	17.12	5.02	15.06
55	35.12	15.97	3.87	12.77
60	32.94	14.98	2.88	10.37
65	31.04	14.12	2.02	7.86
70	29.37	13.36	1.26	5.27
75	27.89	12.68	0.58	2.61
80	26.56	12.08	-0.02	-0.11
85	25.37	11.53	-0.57	-2.88
90	24.29	11.04	-1.06	-5.70

Proposed Residential Development
Novatech Project No. 121301
REQUIRED STORAGE - 1:100 YEAR EVENT
AREA A-2 Controlled Site Flow (Pumped)

OTTAWA IDF CURVE

Area =	0.194	ha	Qallow =	12.1	L/s
C =	0.94		Vol(max) =	62.4	m^3

Time (min)	Intensity (mm/hr)	Q (L/s)	Qnet (L/s)	Vol (m^3)
5	242.70	122.91	110.81	33.24
10	178.56	90.43	78.33	47.00
15	142.89	72.36	60.26	54.24
20	119.95	60.74	48.64	58.37
25	103.85	52.59	40.49	60.73
30	91.87	46.52	34.42	61.96
35	82.58	41.82	29.72	62.41
40	75.15	38.05	25.95	62.29
45	69.05	34.97	22.87	61.74
50	63.95	32.39	20.29	60.86
55	59.62	30.19	18.09	59.71
60	55.89	28.31	16.21	58.34
65	52.65	26.66	14.56	56.79
70	49.79	25.21	13.11	55.08
75	47.26	23.93	11.83	53.24
80	44.99	22.78	10.68	51.28
85	42.95	21.75	9.65	49.23
90	41.11	20.82	8.72	47.08

Proposed Residential Development
Novatech Project No. 121301
REQUIRED STORAGE - 1:100 YR + 20% IDF Increase
AREA A-2 Controlled Site Flow (Pumped)

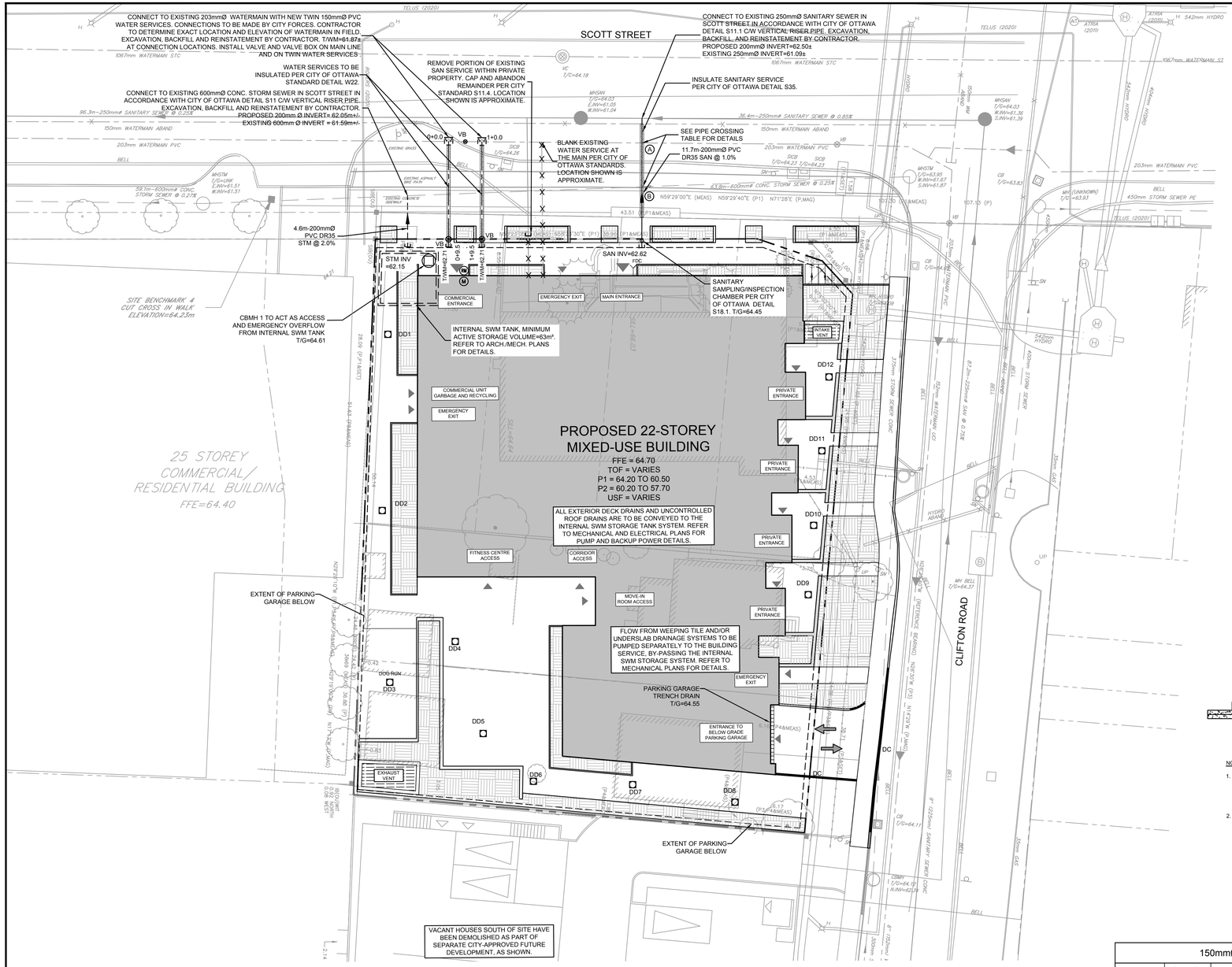
OTTAWA IDF CURVE

Area =	0.194	ha	Qallow =	12.1	L/s
C =	0.94		Vol(max) =	80.6	m^3

Time (min)	Intensity (mm/hr)	Q (L/s)	Qnet (L/s)	Vol (m^3)
5	291.24	147.49	135.39	40.62
10	214.27	108.51	96.41	57.85
15	171.47	86.84	74.74	67.26
20	143.94	72.89	60.79	72.95
25	124.62	63.11	51.01	76.51
30	110.24	55.83	43.73	78.71
35	99.09	50.18	38.08	79.97
40	90.17	45.67	33.57	80.56
45	82.86	41.96	29.86	80.63
50	76.74	38.86	26.76	80.29
55	71.55	36.23	24.13	79.64
60	67.07	33.97	21.87	78.72
65	63.18	31.99	19.89	77.58
70	59.75	30.26	18.16	76.26
75	56.71	28.72	16.62	74.78
80	53.99	27.34	15.24	73.16
85	51.54	26.10	14.00	71.42
90	49.33	24.98	12.88	69.57

APPENDIX F

Engineering Drawings

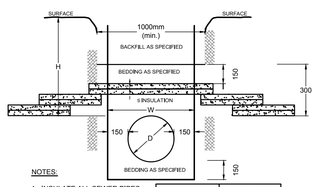


LEGEND

- PROPERTY LINE
- SAN MH 201 — PROPOSED SANITARY MH & SEWER
- CBMH 102 — PROPOSED CATCHBASIN MH & SEWER
- STMMH 101 — PROPOSED STORM MH & SEWER
- DD — MECHANICAL DECK DRAIN
- HYD — VB — PROPOSED HYDRANT C/w VALVE & VALVE BOX
- M — IR — PROPOSED WATER METER AND REMOTE METER
- PROPOSED BARRIER CURB
- DC — PROPOSED DEPRESSED CURB
- 150mmØ — PROPOSED WATER SERVICE AND DIAMETER
- VB — PROPOSED VALVE & VALVE BOX
- BEND — PROPOSED BEND AND THRUSTBLOCK 11.25°, 22.5°, 45° or TEE
- PROPOSED CAP
- PROPOSED FIRE DEPARTMENT CONNECTION
- PROPOSED BUILDING ENTRANCE
- THERMAL INSULATION FOR SHALLOW SEWERS
- PROPOSED LANDSCAPE AREA
- REMOVALS
- FFE — FINISHED FLOOR ELEVATION
- TOF — TOP OF FOUNDATION ELEVATION
- USF — UNDERSIDE OF FOOTING
- EXISTING CONCRETE CURB
- SANMH — EXISTING SANITARY MANHOLE & SEWER
- CBMH — EXISTING CATCHBASIN MANHOLE
- STMMH — EXISTING STORM MANHOLE & SEWER
- CB — EXISTING CATCHBASIN C/W CATCHBASIN LEAD
- 300mmØ WM — EXISTING WATERMAIN
- HYD — EXISTING HYDRANT C/W VALVE & LEAD
- EXISTING TREES / VEGETATION
- EX UP — EXISTING UTILITY POLE
- EXISTING OVERHEAD UTILITY WIRES

PROPOSED STEPPED INSULATION DETAIL FOR SHALLOW SEWERS ONLY

N.T.S.

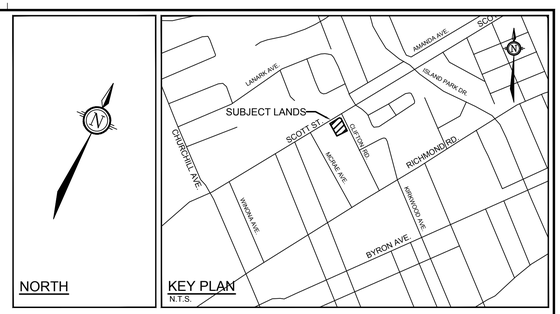


NOTES:

1. INSULATE ALL SEWER PIPES THAT HAVE LESS THAN 1.8m COVER WITH EXPANDED POLYSTYRENE INSULATION AS SHOWN.
2. THE THICKNESS OF INSULATION SHALL BE THE EQUIVALENT OF 25mm FOR EVERY 300mm REDUCTION IN THE REQUIRED DEPTH OF COVER (SEE TABLE)

COVER (mm)	INSULATION THICKNESS (mm)
1800-1500	50
1500-1200	75
1200-900	100
900-600	125

ti = THICKNESS OF INSULATION (mm)
h = DEPTH OF COVER
W = D + 300 (1000 min.)
W = WIDTH OF INSULATION (mm)
D = O.D OF PIPE (mm)



GENERAL NOTES:

1. COORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
2. DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. PROTECT AND ASSUME RESPONSIBILITY FOR ALL EXISTING UTILITIES WHETHER OR NOT SHOWN ON THIS DRAWING.
3. OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF OTTAWA BEFORE COMMENCING CONSTRUCTION.
4. BEFORE COMMENCING CONSTRUCTION OBTAIN AND PROVIDE PROOF OF COMPREHENSIVE, ALL RISK AND OPERATIONAL LIABILITY INSURANCE FOR $5,000,000.00. INSURANCE POLICY TO NAME OWNERS, ENGINEERS AND ARCHITECTS AS CO-INSURED.
5. COMPLETE ALL WORKS IN ACCORDANCE WITH THE MOST CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS USING THE CURRENT GUIDELINES, BYLAWS AND STANDARDS INCLUDING MATERIALS OF CONSTRUCTION, DISINFECTION AND ALL RELEVANT REFERENCES TO OPSS, OPSD & AWWA GUIDELINES - ALL CURRENT VERSIONS AND 'AS AMENDED'.
6. RESTORE ALL DISTURBED AREAS ON-SITE AND OFF-SITE, INCLUDING TRENCHES AND SURFACES ON PUBLIC ROAD ALLOWANCES TO EXISTING CONDITIONS OR BETTER TO THE SATISFACTION OF THE CITY OF OTTAWA AND ENGINEER.
7. REMOVE FROM SITE ALL EXCESS EXCAVATED MATERIAL, ORGANIC MATERIAL AND DEBRIS UNLESS OTHERWISE INSTRUCTED BY ENGINEER. EXCAVATE AND REMOVE FROM SITE ANY CONTAMINATED MATERIAL. ALL CONTAMINATED MATERIAL SHALL BE DISPOSED OF AT A LICENSED LANDFILL FACILITY.
8. ALL ELEVATIONS ARE GEODETIC.
9. REFER TO GEOTECHNICAL INVESTIGATION REPORT (PG4394-1 REVISION 1, DATED NOVEMBER 26, 2024) AND ASSOCIATED MEMORANDUM (DATED DECEMBER 5, 2024), PREPARED BY PATERSON GROUP INC., FOR SUBSURFACE CONDITIONS, CONSTRUCTION RECOMMENDATIONS, AND GEOTECHNICAL INSPECTION REQUIREMENTS. THE GEOTECHNICAL CONSULTANT IS TO REVIEW ON-SITE CONDITIONS AFTER EXCAVATION PRIOR TO PLACEMENT OF THE GRANULAR MATERIAL.
10. REFER TO ARCHITECT'S AND LANDSCAPE ARCHITECT'S DRAWINGS FOR BUILDING AND HARD SURFACE AREAS AND DIMENSIONS.
11. REFER TO THE DEVELOPMENT SERVICING STUDY & STORMWATER MANAGEMENT REPORT (R-2024-087) PREPARED BY NOVATECH.
12. SAW CUT AND KEY GRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE IN POINTS AS PER CITY OF OTTAWA STANDARDS (R10).
13. PROVIDE LINE / PARKING PAINTING AS REQUIRED PER THE ARCHITECTURAL SITE PLAN.

SEWER NOTES:

1. SUPPLY AND CONSTRUCT ALL SEWERS AND APPURTENANCES IN ACCORDANCE WITH THE MOST CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS - ALL CURRENT VERSIONS AND 'AS AMENDED'.
2. SPECIFICATIONS:

ITEM	SPEC. No.	REFERENCE
CATCHBASIN (600x600mm)	705.010	OPSD
STORM / SANITARY MANHOLE (1200mmØ)	701.010	OPSD
CB, FRAME & COVER	400.020	OPSD
SANITARY MH FRAME & COVER	401.010 - TYPE "A"	OPSD
STORM / CBMH MANHOLE FRAME AND COVER	401.010 - TYPE "B"	OPSD
WATERTIGHT MH FRAME AND COVER	401.030	OPSD
LANDSCAPE DRAIN (ELBOW, COVER & PIPE)	S29 / S31	CITY OF OTTAWA
SEWER TRENCH	S6	CITY OF OTTAWA
STORM SEWER	PVC DR 35	
SANITARY SEWER	PVC DR 35	
CATCHBASIN LEAD	PVC DR 35	

3. ALL STORM AND SANITARY SERVICE LATERALS SHALL BE EQUIPPED WITH BACKFLOW PREVENTION DEVICES AS PER THE CITY OF OTTAWA STANDARD DETAILS S14 AND S14.1 OR S14.2.
4. INSULATE ALL PIPES (SANISTM) THAT HAVE LESS THAN 1.8m COVER WITH HI-40 INSULATION PER INSULATION DETAIL FOR SHALLOW SEWERS. PROVIDE 150mm CLEARANCE BETWEEN PIPE AND INSULATION.
5. SERVICES ARE TO BE CONSTRUCTED TO 1.0m FROM FACE OF BUILDING AT A MINIMUM SLOPE OF 1.0%.
6. PIPE BEDDING, COVER AND BACKFILL ARE TO BE COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY. THE USE OF CLEAR CRUSHED STONE AS A BEDDING LAYER SHALL NOT BE PERMITTED.
7. FLEXIBLE CONNECTIONS ARE REQUIRED FOR CONNECTING PIPES TO MANHOLES (FOR EXAMPLE KOR-N-SEAL, PSX: POSITIVE SEAL AND DURASEAL). THE CONCRETE CRADLE FOR THE PIPE CAN BE ELIMINATED.
8. THE OWNER SHALL REQUIRE THAT THE SITE SERVICING CONTRACTOR PERFORM FIELD TESTS FOR QUALITY CONTROL OF ALL SANITARY SEWERS. LEAKAGE TESTING SHALL BE COMPLETED IN ACCORDANCE WITH OPSS 410.07.16, 410.07.16.04 AND 407.07.24. DYE TESTING IS TO BE COMPLETED ON ALL SANITARY SERVICES TO CONFIRM PROPER CONNECTION TO THE SANITARY SEWER MAIN. THE FIELD TESTS SHALL BE PERFORMED IN THE PRESENCE OF A CERTIFIED PROFESSIONAL ENGINEER WHO SHALL SUBMIT A CERTIFIED COPY OF THE TEST RESULTS.
9. ALL STORM MANHOLES AND CATCHBASIN MANHOLES ARE TO HAVE 300mm SUMPS UNLESS OTHERWISE INDICATED. ALL CATCHBASINS ARE TO HAVE 600mm SUMPS.
10. ALL CATCHBASINS, MANHOLES AND/OR CATCHBASIN MANHOLES THAT ARE TO HAVE ICD'S INSTALLED WITHIN THEM ARE TO HAVE 600mm SUMPS.
11. ALL WEEPING TILE SYSTEMS ARE TO BE PUMPED SEPARATELY TO THE BUILDING SERVICE AS INDICATED ON THE GENERAL PLAN OF SERVICES DRAWING. REFER TO MECHANICAL PLANS FOR DETAILS.
12. CONTRACTOR TO TELEVISE (CCTV) ALL PROPOSED SEWERS, 200mmØ OR GREATER PRIOR TO BASE COURSE ASPHALT. UPON COMPLETION OF CONTRACT, THE CONTRACTOR IS RESPONSIBLE TO FLUSH AND CLEAN ALL SEWERS & APPURTENANCES.
13. CONTRACTOR TO PROVIDE THE CONSULTANT WITH A GENERAL PLAN OF SERVICES INDICATING ALL SERVICING AS-BUILT INFORMATION SHOWN ON THIS PLAN. AS-BUILT INFORMATION MUST INCLUDE: PIPE MATERIAL, SIZES, LENGTHS, SLOPES, INVERT AND T/G ELEVATIONS, STRUCTURE LOCATIONS, VALVE AND HYDRANT LOCATIONS; T/WM ELEVATIONS AND ANY ALIGNMENT CHANGES, ETC.

WATERMAIN NOTES:

1. SUPPLY AND CONSTRUCT ALL WATERMAINS AND APPURTENANCES IN ACCORDANCE WITH THE CITY OF OTTAWA STANDARDS AND SPECIFICATIONS - ALL CURRENT VERSIONS AND 'AS AMENDED'. EXCAVATION, INSTALLATION, BACKFILL AND RESTORATION OF ALL WATERMAINS BY THE CONTRACTOR. CONNECTIONS AND SHUT-OFFS AT THE MAIN AND CHLORINATION OF THE WATER SYSTEM SHALL BE PERFORMED BY THE CONTRACTOR IN THE PRESENCE CITY OF OTTAWA FORCES.
2. SPECIFICATIONS:

ITEM	SPEC. No.	REFERENCE
WATERMAIN TRENCHING	W17	CITY OF OTTAWA
THERMAL INSULATION IN SHALLOW TRENCHES	W22	CITY OF OTTAWA
VALVE BOX ASSEMBLY	W24	CITY OF OTTAWA
WATERMAIN CROSSING OVER SEWER	W25.2	CITY OF OTTAWA
WATERMAIN	PVC DR 18	

3. WATERMAIN SHALL BE MINIMUM 2.4m DEPTH BELOW GRADE, UNLESS OTHERWISE INDICATED.
4. PROVIDE MINIMUM 0.5m CLEARANCE BETWEEN OUTSIDE OF PIPES AT ALL CROSSINGS, UNLESS OTHERWISE INDICATED.
5. WATER SERVICE IS TO BE CONSTRUCTED TO FOUNDATION WALL AND CAPPED.

150mmØ WATER SERVICE TABLE (WEST)

STATION	SURFACE ELEVATION	T/WM ELEVATION	COMMENTS
0+0.0	64.31±	61.87± ✱	150mmØ TEE CONNECTION TO EX. 203mmØ PVC WM
0+2.1 ✱✱	64.36	62.71	22.5° VERTICAL BEND
0+4.7 ✱✱	64.42	62.71	CROSS ABOVE EX.600mm STORM SEWER (CLEARANCE = ±0.25m)
0+8.8 ✱✱	64.57	62.71	150mmØ V&VB
0+9.5 ✱✱	64.60	62.71	CAP AT FOUNDATION WALL

150mmØ WATER SERVICE TABLE (EAST)

STATION	SURFACE ELEVATION	T/WM ELEVATION	COMMENTS
1+0.0 ✱✱	64.17±	61.87± ✱	150mmØ TEE CONNECTION TO EX. 203mmØ PVC WM
1+2.1 ✱✱	64.31	62.71	22.5° VERTICAL BEND
1+4.6 ✱✱	64.40	62.71	CROSS ABOVE EX.600mm STORM SEWER (CLEARANCE = ±0.25m)
1+8.8 ✱✱	64.55	62.71	150mmØ V&VB
1+9.5 ✱✱	64.58	62.71	CAP AT FOUNDATION WALL

✱ CONNECTIONS TO EXISTING 200mmØ WATERMAIN. EXACT ELEVATIONS TO BE FIELD DETERMINED.
✱✱ PROVIDE THERMAL INSULATION AS PER CITY OF OTTAWA DETAIL W22 IN SHALLOW TRENCHES AND/OR CITY OF OTTAWA DETAIL W23 ADJACENT TO OPEN STRUCTURES.

INTERNAL SWM STORAGE SYSTEM

DESIGN EVENT	STORAGE SYSTEM CONTROLLED FLOW	STORAGE VOLUMES REQUIRED	STORAGE VOLUMES PROVIDED
1:2 YR	PUMPED FLOW RATE = 12.1 L/s	14.4m³	>63 m³
1:5 YR		23.8 m³	
1:100 YR		62.4 m³	

NOTES:
1. ALL DRAINAGE FROM AREA A-2 (PROPOSED AMENITY AREA DECK DRAINS AND ALL ROOF DRAINS) TO BE DIRECTED TO THE INTERNAL STORMWATER STORAGE SYSTEM. REFER TO ARCHITECTURAL AND MECHANICAL PLANS FOR DETAILS.
2. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS FOR EXACT SIZE AND DETAILS OF INTERNAL STORMWATER STORAGE SYSTEM.
3. REFER TO ARCHITECTURAL AND MECHANICAL PLANS FOR LOCATION AND CONNECTIONS AND DETAILS OF THE INTERNAL STORMWATER STORAGE SYSTEM AND EMERGENCY OVERFLOW PIPING.

CRITICAL SEWER PIPE CROSSING TABLE

CROSSING	LOWER PIPE	HIGHER PIPE	CLEARANCE	SURFACE ELEVATION
Ⓐ	200mmØ WM T/P=61.78	200mmØ SAN INV=62.52	± 0.74m	64.15 m
Ⓑ	600mmØ STM T/P=62.31	200mmØ SAN INV=62.56	± 0.25m	64.36 m

BENCHMARK NOTES:

1. ELEVATIONS SHOWN ARE GEODETIC AND ARE REFERRED TO THE CGVD28 GEODETIC DATUM, AND ARE DERIVED FROM THE CAN-NET VRS NETWORK MONUMENT: OTTAWA WITH AN ELEVATION OF 95.230.
2. IT IS THE RESPONSIBILITY OF THE USER OF THIS INFORMATION TO VERIFY THAT THE JOB BENCHMARK HAS NOT BEEN ALTERED OR DISTURBED AND THAT ITS RELATIVE ELEVATION AND DESCRIPTION AGREES WITH THE INFORMATION SHOWN ON THIS DRAWING.
3. BENCHMARK WAS PROVIDED ON PLAN OF SURVEY OF ALL OF LOTS 24 AND 25, AND PART OF LOTS 45, 46, 47, AND 48, REGISTERED PLAN 369, SURVEYED BY STANTEC GEOMATICS LTD (PROJECT NO 161613828-110).

NOTE:
THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

OWNER INFORMATION
GRANITE PRIVATE EQUITY LIMITED PARTNERSHIP
16 CONCOURSE GATE, SUITE 200
OTTAWA, ONTARIO K2E 7S8
KEN HOPPNER
613-831-5490 EXT 208
khoppner@morleyhoppner.com

No.	REVISION	DATE	BY
5.	REISSUED FOR SPC	APR 17/25	FST
4.	REVISED PER CITY COMMENTS	MAR 20/25	FST
3.	REISSUED FOR ZBLA AND SPC	DEC 13/24	FST
2.	REVISED PER CITY COMMENTS	NOV 01/24	FST
1.	ISSUED FOR SPC	JUL 31/24	FST

SCALE
1:200
1:200
0 2 4 6 8

DESIGN BB/KD
CHECKED FST
DRAWN BB/KD
CHECKED FST
APPROVED FST

FOR REVIEW ONLY

LICENSED PROFESSIONAL ENGINEER F.S. THAUVETTE 100041399 April 17, 2025 PROVINCE OF ONTARIO

NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

LOCATION
CITY OF OTTAWA
1950 SCOTT STREET AND 312 & 314 CLIFTON ROAD

DRAWING NAME
GENERAL PLAN OF SERVICES

PROJECT No. 121301
REV REV # 5
DRAWING No. 121301-GP

PLANNING PARTITION
PLAN #19152

ZBA# D02-02-24-0054 & SPC# D07-12-24-0072

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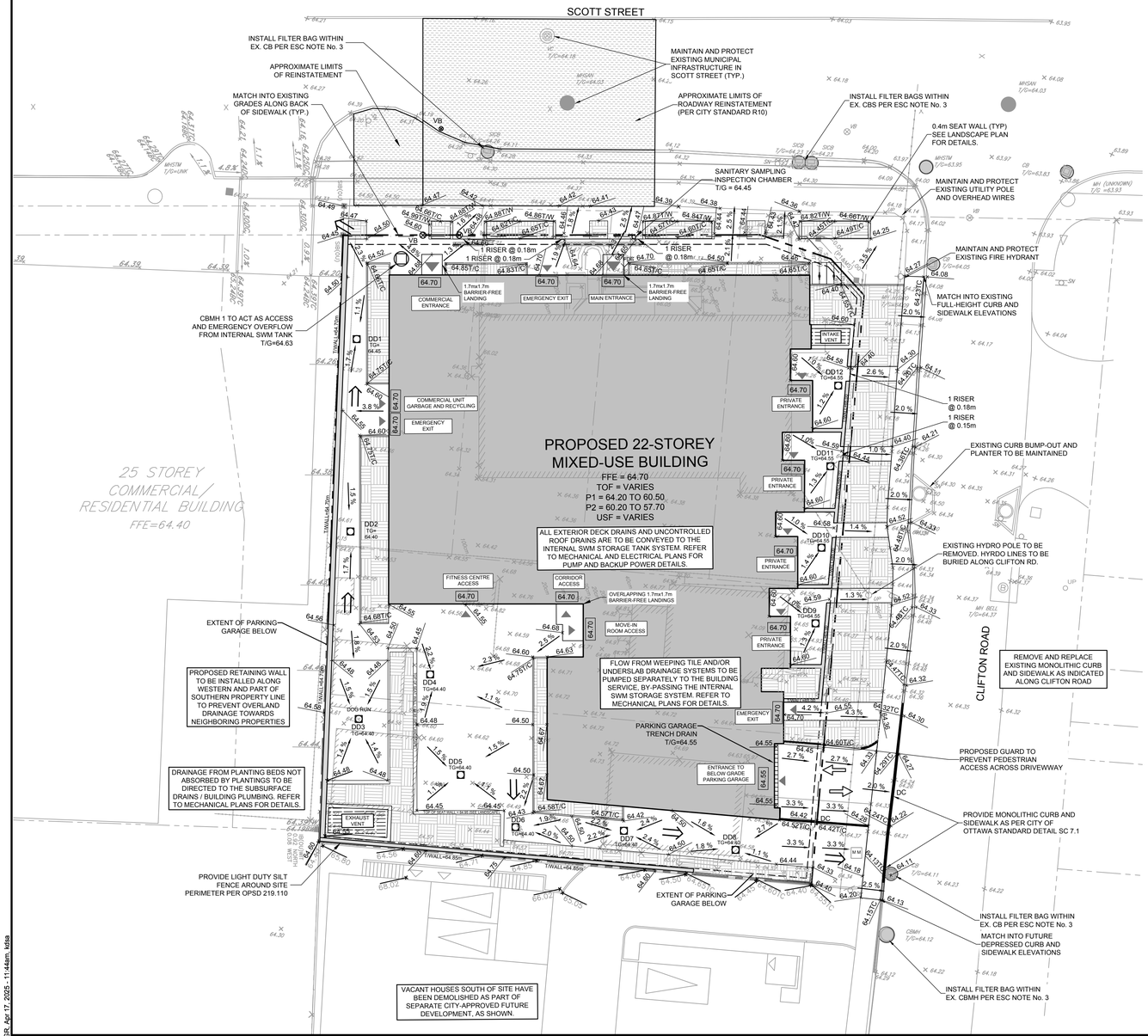
BENCHMARK NOTES:

1. ELEVATIONS SHOWN ARE GEODETIC AND ARE REFERRED TO THE CGVD28 GEODETIC DATUM, AND ARE DERIVED FROM THE CAN-NET VRS NETWORK MONUMENT: OTTAWA WITH AN ELEVATION OF 95.230.
2. IT IS THE RESPONSIBILITY OF THE USER OF THIS INFORMATION TO VERIFY THAT THE JOB BENCHMARK HAS NOT BEEN ALTERED OR DISTURBED AND THAT ITS RELATIVE ELEVATION AND DESCRIPTION AGREES WITH THE INFORMATION SHOWN ON THIS DRAWING.
3. BENCHMARK WAS PROVIDED ON PLAN OF SURVEY OF ALL OF LOTS 24 AND 25, AND PART OF LOTS 45, 46, 47, AND 48, REGISTERED PLAN 369, SURVEYED BY STANTEC GEOMATICS LTD (PROJECT NO 161613828-110).

Erosion and Sediment Control Responsibilities:

				During Construction			After Construction Prior to Final Acceptance		After Final Acceptance
	ESC Measure	Symbol	Specification	Installation Responsibility	Inspection/Maintenance Responsibility	Inspection Frequency	Approval to Remove	Removal Responsibility	Inspection/Maintenance Responsibility
Temporary Measures	Silt Fence	— — —	OPSD 219.110	Developer's Contractor	Developer's Contractor	Weekly (as a minimum)	Consultant	Developer's Contractor	N/A
	Filter Fabric	Location as Indicated in ESC Note #3	Erosion and Sediment Control Notes	Developer's Contractor	Developer's Contractor	Weekly (as a minimum)	Consultant	Developer's Contractor	N/A
	Mud Mat	M M	Drawing Details	Developer's Contractor	Developer's Contractor	Weekly (as a minimum)	Developer's Contractor	Developer's Contractor	N/A
	Dust Control	Location as Required Around Site	Erosion and Sediment Control Notes	Developer's Contractor	Developer's Contractor	Weekly (as a minimum)	Consultant	Developer's Contractor	N/A
	Stabilized Material Stockpiling	Location as Required by Contractor	Erosion and Sediment Control Notes	Developer's Contractor	Developer's Contractor	Weekly (as a minimum)	Developer's Contractor	Developer's Contractor	N/A
	Sediment Basin (for flows being pumped out of excavations)	Location as Required by Contractor	...	Developer's Contractor	Developer's Contractor	After Every Rainstorm	Developer's Contractor	Developer's Contractor	N/A



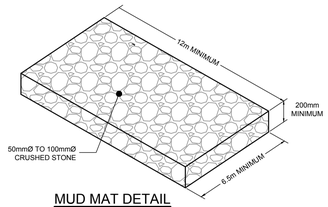
LEGEND

- PROPOSED ELEVATION
- PROPOSED TOP OF CURB ELEVATION
- PROPOSED TOP OF WALL ELEVATION
- MATCH INTO EXISTING GRADES
- EXISTING ELEVATION
- GRADE AND DIRECTION
- PROPOSED SILT FENCING (OPSD 219.110)
- PROPOSED BUILDING ELEVATION
- PROPOSED FILTER BAG
- PROPERTY LINE
- FFE — FINISHED FLOOR ELEVATION
- TOF — TOP OF FOUNDATION
- USF — UNDERSIDE OF FOOTING
- DD — MECHANICAL DECK DRAINS
- VB — PROPOSED VALVE & VALVE BOX
- CBMH 1 — PROPOSED CATCHBASIN MANHOLE
- PROPOSED FIRE DEPARTMENT CONNECTION
- EMERGENCY OVERLAND FLOW ROUTE
- BUILDING ENTRANCE / EXIT
- APPROXIMATE LIMIT OF REINSTATEMENT AREA
- PROPOSED LANDSCAPE AREA
- DC — PROPOSED BARRIER CURB
- PROPOSED DEPRESSED CURB
- PROPOSED RETAINING WALL
- PROPOSED TACTILE WALKING SURFACE INDICATOR (TWSI)
- EXISTING VALVE & VALVE BOX
- EXISTING HYDRANT
- EXISTING CONCRETE CURB
- EXISTING CATCHBASIN
- EXISTING CATCHBASIN MH
- EXISTING UTILITY POLE C/W GUY WIRES
- EXISTING FENCE
- EXISTING OVERHEAD WIRES
- EXISTING AS-BUILT ELEVATION
- EXISTING AS-BUILT GRADE
- APPROVED DESIGN ELEVATION FOR ADJACENT PROPERTY

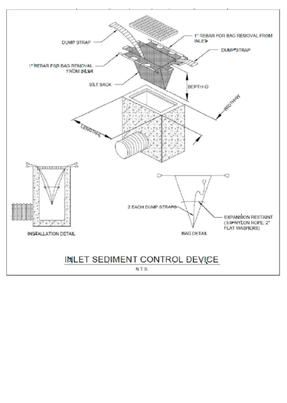
PAVEMENT STRUCTURE:

NEW LIGHT DUTY PAVEMENT
40mm HL3 OR SUPERPAVE 12.5
50mm HL8 OR SUPERPAVE 19.0
150mm GRANULAR "A"
450mm GRANULAR "B" TYPE II
ASPHALT GRADE PG 58-34

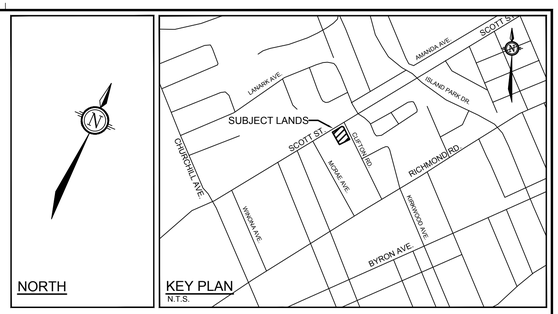
HEAVY DUTY PAVEMENT - ROADWAY RE-INSTATEMENT
MATCH EXISTING GRANULAR STRUCTURE OF ROADWAY
MATCH EXISTING ASPHALT THICKNESSES AS PER DETAIL R10.
NEW ASPHALT GRADE: PG 58-34



MUD MAT DETAIL
N.T.S.



INLET SEDIMENT CONTROL DEVICE
N.T.S.



GENERAL NOTES:

1. COORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
2. DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. PROTECT AND ASSUME RESPONSIBILITY FOR ALL EXISTING UTILITIES WHETHER OR NOT SHOWN ON THIS DRAWING.
3. OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF OTTAWA BEFORE COMMENCING CONSTRUCTION.
4. BEFORE COMMENCING CONSTRUCTION OBTAIN AND PROVIDE PROOF OF COMPREHENSIVE, ALL RISK AND OPERATIONAL LIABILITY INSURANCE FOR $5,000,000.00. INSURANCE POLICY TO NAME OWNERS, ENGINEERS AND ARCHITECTS AS CO-INSURED.
5. COMPLETE ALL WORKS IN ACCORDANCE WITH THE MOST CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS USING THE CURRENT GUIDELINES, BYLAWS AND STANDARDS INCLUDING MATERIALS OF CONSTRUCTION, DISINFECTION AND ALL RELEVANT REFERENCES TO OPSS, OPSD & AWWA GUIDELINES - ALL CURRENT VERSIONS AND 'AS AMENDED'.
6. RESTORE ALL DISTURBED AREAS ON-SITE AND OFF-SITE, INCLUDING TRENCHES AND SURFACES ON PUBLIC ROAD ALLOWANCES TO EXISTING CONDITIONS OR BETTER TO THE SATISFACTION OF THE CITY OF OTTAWA AND ENGINEER.
7. REMOVE FROM SITE ALL EXCESS EXCAVATED MATERIAL, ORGANIC MATERIAL AND DEBRIS UNLESS OTHERWISE INSTRUCTED BY ENGINEER. EXCAVATE AND REMOVE FROM SITE ANY CONTAMINATED MATERIAL. ALL CONTAMINATED MATERIAL SHALL BE DISPOSED OF AT A LICENSED LANDFILL FACILITY.
8. ALL ELEVATIONS ARE GEODETIC.
9. REFER TO GEOTECHNICAL INVESTIGATION REPORT (PG4394-1 REVISION 1, DATED NOVEMBER 26, 2024) AND ASSOCIATED MEMORANDUM (DATED DECEMBER 5, 2024), PREPARED BY PATERSON GROUP INC., FOR SUBSURFACE CONDITIONS, CONSTRUCTION RECOMMENDATIONS AND GEOTECHNICAL INSPECTION REQUIREMENTS. THE GEOTECHNICAL CONSULTANT IS TO REVIEW ON-SITE CONDITIONS AFTER EXCAVATION PRIOR TO PLACEMENT OF THE GRANULAR MATERIAL.
10. REFER TO ARCHITECT'S AND LANDSCAPE ARCHITECT'S DRAWINGS FOR BUILDING AND HARD SURFACE AREAS AND DIMENSIONS.
11. REFER TO DEVELOPMENT SERVICING STUDY & STORMWATER MANAGEMENT REPORT(R-2024-087) PREPARED BY NOVATECH.
12. SAW CUT AND KEY GRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE IN POINTS AS PER CITY OF OTTAWA STANDARDS (R10).
13. PROVIDE LINE / PARKING PAINTING AS REQUIRED PER THE ARCHITECTURAL SITE PLAN.

GRADING NOTES:

1. ALL TOPSOIL, ORGANIC OR DELETERIOUS MATERIAL MUST BE ENTIRELY REMOVED FROM BENEATH THE PROPOSED PAVED AREAS AS DIRECTED BY THE SITE ENGINEER OR GEOTECHNICAL ENGINEER.
2. EXPOSED SUBGRADES IN PROPOSED PAVED AREAS SHOULD BE PROOF ROLLED WITH A LARGE STEEL DRUM ROLLER AND INSPECTED BY THE GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF GRANULARS.
3. ANY SOFT AREAS EVIDENT FROM THE PROOF ROLLING SHOULD BE SUB-EXCAVATED AND REPLACED WITH SUITABLE MATERIAL THAT IS FROST COMPATIBLE WITH THE EXISTING SOILS AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.
4. THE GRANULAR BASE SHOULD BE COMPACTED TO AT LEAST 99% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY VALUE. ANY ADDITIONAL GRANULAR FILL USED BELOW THE PROPOSED PAVEMENT SHOULD BE COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY VALUE.
5. MINIMUM OF 2% GRADE FOR ALL GRASS AREAS UNLESS OTHERWISE NOTED.
6. MAXIMUM TERRACING GRADE TO BE 3:1 UNLESS OTHERWISE NOTED.
7. ALL GRADES BY CURBS ARE EDGE OF PAVEMENT GRADES UNLESS OTHERWISE INDICATED.
8. ALL CURBS SHALL BE BARRIER CURB (150mm) UNLESS OTHERWISE NOTED AND CONSTRUCTED AS PER CITY OF OTTAWA STANDARDS (SC1.1).
9. CONCRETE CURB AND SIDEWALK SHALL BE AS PER CITY OF OTTAWA STANDARD SC1.4.
10. REFER TO LANDSCAPE PLAN FOR PLANTING AND OTHER LANDSCAPE FEATURE DETAILS.
11. CONTRACTOR TO PROVIDE THE CONSULTANT WITH A GRADING PLAN INDICATING AS-BUILT ELEVATIONS OF ALL DESIGN GRADES SHOWN ON THIS PLAN.

EROSION AND SEDIMENT CONTROL NOTES :

1. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES, TO PROVIDE FOR PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE RECEIVING WATERCOURSE, DURING CONSTRUCTION ACTIVITIES. THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY.
2. ALL EROSION AND SEDIMENT CONTROLS ARE TO BE INSTALLED TO THE SATISFACTION OF THE ENGINEER AND THE CITY OF OTTAWA. THEY ARE TO BE APPROPRIATE TO THE SITE CONDITIONS, PRIOR TO UNDERTAKING ANY SITE ALTERATIONS (FILLING, GRADING, REMOVAL OF VEGETATION, ETC.) AND DURING ALL PHASES OF SITE PREPARATION AND CONSTRUCTION. THESE PRACTICES ARE TO BE IMPLEMENTED IN ACCORDANCE WITH THE CURRENT BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROL AND SHOULD INCLUDE AS A MINIMUM THOSE MEASURES INDICATED ON THE PLAN.
3. EROSION AND SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED DURING CONSTRUCTION IN ACCORDANCE WITH THE "GUIDELINES ON EROSION AND SEDIMENT CONTROL FOR URBAN CONSTRUCTION SITES" (GOVERNMENT OF ONTARIO, MAY 1987). THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR MEETING ALL REGULATORY AGENCY REQUIREMENTS.
4. TO PREVENT SURFACE EROSION FROM ENTERING ANY STORM SEWER SYSTEM DURING CONSTRUCTION, FILTER BAGS WILL BE PLACED UNDER GRATES OF NEARBY CATCHBASINS AND STRUCTURES. A LIGHT DUTY SILT FENCE BARRIER WILL ALSO BE INSTALLED AROUND THE CONSTRUCTION AREA (WHERE APPLICABLE).
5. TO LIMIT EROSION: MINIMIZE THE AMOUNT OF EXPOSED SOILS AT ANY GIVEN TIME, RE-VEGETATE EXPOSED AREAS AND SLOPES AS SOON AS POSSIBLE AND PROTECT EXPOSED SLOPES WITH NATURAL OR SYNTHETIC MULCHES.
6. FOR MATERIAL STOCKPILING: MINIMIZE THE AMOUNT OF EXPOSED MATERIALS AT ANY GIVEN TIME; APPLY TEMPORARY SEEDING, TARPS, COMPACTION AND/OR SURFACE ROUGHENING AS REQUIRED TO STABILIZE STOCKPILED MATERIALS THAT WILL NOT BE USED WITHIN 14 DAYS.
7. THE SEDIMENT CONTROL MEASURES SHALL ONLY BE REMOVED WHEN, IN THE OPINION OF THE ENGINEER, THE MEASURES ARE NO LONGER REQUIRED. NO CONTROL MEASURES MAY BE PERMANENTLY REMOVED WITHOUT PRIOR AUTHORIZATION FROM THE ENGINEER.
8. THE CONTRACTOR SHALL IMMEDIATELY REPORT TO THE ENGINEER ANY ACCIDENTAL DISCHARGES OF SEDIMENT MATERIAL INTO ANY STORM SEWER SYSTEM. APPROPRIATE RESPONSE MEASURES, INCLUDING ANY REPAIRS TO EXISTING CONTROL MEASURES OR THE IMPLEMENTATION OF ADDITIONAL CONTROL MEASURES, SHALL BE CARRIED OUT BY THE CONTRACTOR WITHOUT DELAY.
9. THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY.
10. ROADWAYS ARE TO BE SWEPT AS REQUIRED OR AS DIRECTED BY THE ENGINEER AND/OR THE MUNICIPALITY.
11. THE CONTRACTOR SHALL ENSURE PROPER DUST CONTROL IS PROVIDED WITH THE APPLICATION OF WATER (AND IF REQUIRED, CALCIUM CHLORIDE) DURING DRY PERIODS. MONITOR DUST LEVELS DURING SITE PREPARATION/EXCAVATION, AND CONSTRUCTION ACTIVITIES, AND WHEN DUST LEVELS BECOME VISUALLY APPARENT SPRAY WATER TO MINIMIZE THE RELEASE OF DUST FROM GRAVEL, PAVED AREAS AND EXPOSED SOILS. USE CHEMICAL DUST SUPPRESSANTS ONLY WHERE NECESSARY ON PROBLEM AREAS.

NOTE:
THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

OWNER INFORMATION
GRANITE PRIVATE EQUITY LIMITED PARTNERSHIP
16 CONCOURSE GATE, SUITE 200
OTTAWA, ONTARIO K2E 7S8
KEN HOPPNER
PHONE: 613-831-5490 EXT 208
khoppner@morleyhoppner.com

No.	REVISION	DATE	BY
7.	REISSUED FOR SPC	APR 17/25	FST
6.	REVISED PER CITY COMMENTS	MAR 20/25	FST
5.	REVISED PER CITY COMMENTS	FEB 14/25	FST
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3.	REISSUED FOR ZBLA AND SPC	DEC 13/24	FST
2.	REVISED PER CITY COMMENTS	NOV 01/24	FST
1.	ISSUED FOR SPC	JUL 31/24	FST

SCALE
1:200
1:200
0 2 4 6 8

DESIGN BB/KD
CHECKED FST
DRAWN BB/KD
CHECKED FST
APPROVED FST

FOR REVIEW ONLY

LICENSED PROFESSIONAL ENGINEER — F.S. THAUVETTE — 100041399 — April 17, 2025 — PROVINCE OF ONTARIO

NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

LOCATION
CITY OF OTTAWA
1950 SCOTT STREET AND 312 & 314 CLIFTON ROAD

DRAWING NAME
GRADING AND EROSION AND SEDIMENT CONTROL PLAN

PROJECT No. 121301
REV REV # 7
DRAWING No. 121301-GR

PLAN #19152

ZBA# D02-02-24-0054 & SPC# D07-12-24-0072

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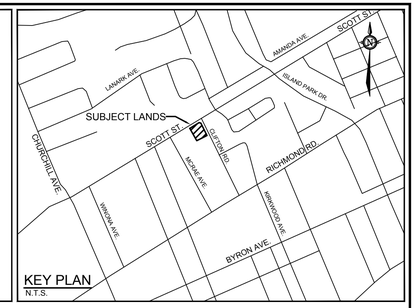
LEGEND

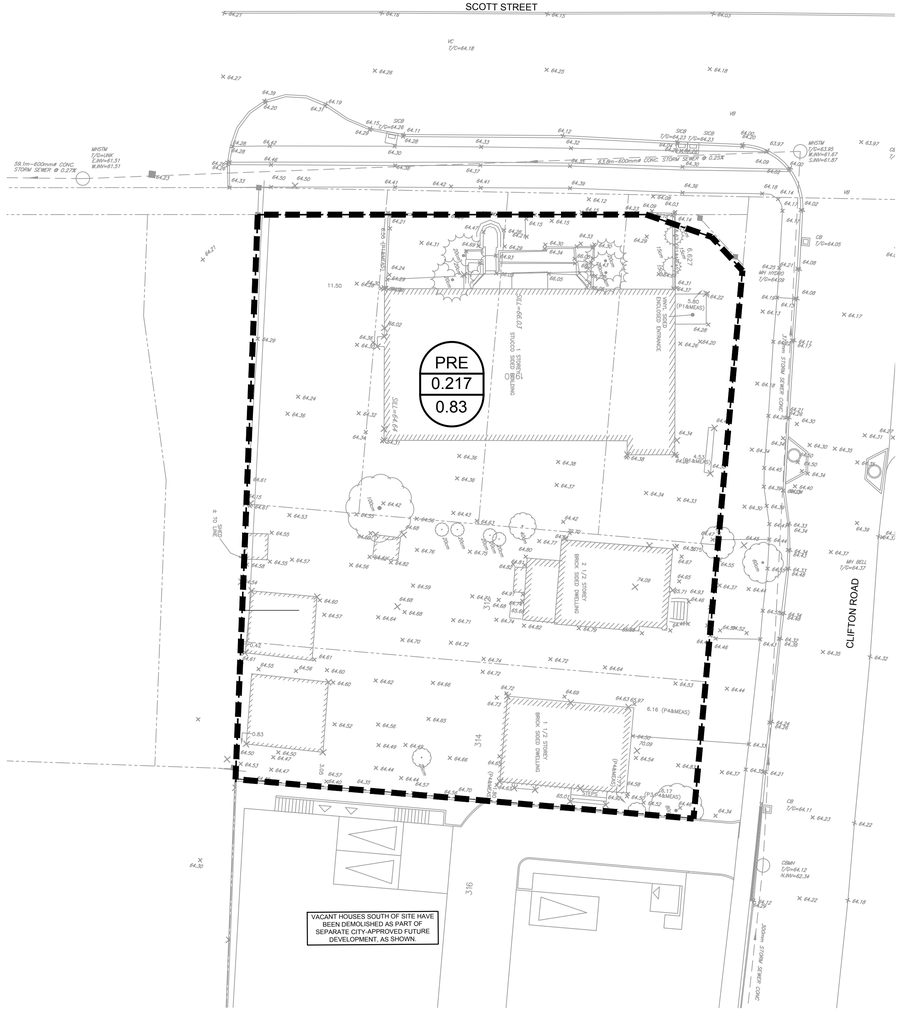
- PROPOSED BARRIER CURB
- DC — PROPOSED DEPRESSED CURB
- DRAINAGE AREA LIMITS
- DD3 — DECK DRAIN
- PRE / 0.217 / 0.83 — PRE-DEVELOPMENT AREA ID / PRE-DEVELOPMENT DRAINAGE AREA (ha) / 1:5 YEAR WEIGHTED RUNOFF COEFICIENT
- PROPOSED LANDSCAPE AREA
- CBMH 102 — PROPOSED CATCHBASIN MH & SEWER
- PROPOSED RETAINING WALL
- A-2 / 0.194 / 0.84 — POST-DEVELOPMENT AREA ID / POST-DEVELOPMENT DRAINAGE AREA (ha) / 1:5 YEAR WEIGHTED RUNOFF COEFICIENT
- EXISTING CONCRETE CURB
- VALVE — EXISTING VALVE & VALVE BOX
- SP — EXISTING SERVICE POST
- HYD — EXISTING HYDRANT
- CB — EXISTING CATCHBASIN
- CBMH — EXISTING CATCHBASIN MH
- EX UP — EXISTING UTILITY POLE C/W GUY WIRES

NORTH

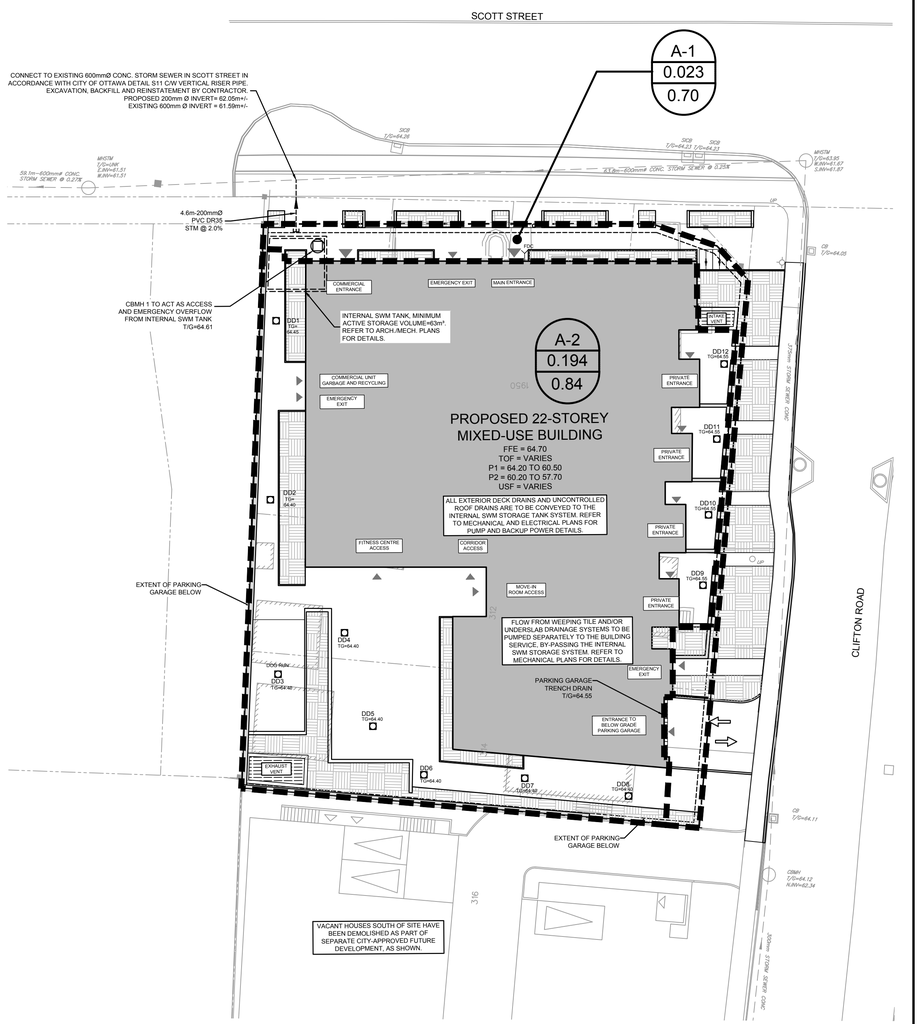


KEY PLAN
N.T.S.

PRE-DEVELOPMENT CONDITIONS



POST-DEVELOPMENT CONDITIONS



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13. PROVIDE LINE / PARKING PAINTING AS REQUIRED PER THE ARCHITECTURAL SITE PLAN.

BENCHMARK NOTES:

1. ELEVATIONS SHOWN ARE GEODETIC AND ARE REFERRED TO THE CGVD28 GEODETIC DATUM, AND ARE DERIVED FROM THE CAN-NET VRS NETWORK MONUMENT: OTTAWA WITH AN ELEVATION OF 95.230.
2. IT IS THE RESPONSIBILITY OF THE USER OF THIS INFORMATION TO VERIFY THAT THE JOB BENCHMARK HAS NOT BEEN ALTERED OR DISTURBED AND THAT ITS RELATIVE ELEVATION AND DESCRIPTION AGREES WITH THE INFORMATION SHOWN ON THIS DRAWING.
3. BENCHMARK WAS PROVIDED ON PLAN OF SURVEY OF ALL OF LOTS 24 AND 25, AND PART OF LOTS 45, 46, 47, AND 48, REGISTERED PLAN 369, SURVEYED BY STANTEC GEOMATICS LTD (PROJECT NO 161613828-110).

INTERNAL SWM STORAGE SYSTEM

DESIGN EVENT	STORAGE SYSTEM CONTROLLED FLOW	STORAGE VOLUMES	
		REQUIRED	PROVIDED
1:2 YR	PUMPED FLOW RATE = 12.1 L/s	14.4m³	>63 m³
1:5 YR		23.8 m³	
1:100 YR		62.4 m³	

NOTES:

1. ALL DRAINAGE FROM AREA A-2 (PROPOSED AMENITY AREA DECK DRAINS AND ALL ROOF DRAINS) TO BE DIRECTED TO THE INTERNAL STORMWATER STORAGE SYSTEM. REFER TO ARCHITECTURAL AND MECHANICAL PLANS FOR DETAILS.
2. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS FOR EXACT SIZE AND DETAILS OF INTERNAL STORMWATER STORAGE SYSTEM.
3. REFER TO ARCHITECTURAL AND MECHANICAL PLANS FOR LOCATION AND CONNECTIONS AND DETAILS OF THE INTERNAL STORMWATER STORAGE SYSTEM AND EMERGENCY OVERFLOW PIPING.

NOTE:
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SCALE 1:250 (1:250 0 2 4 6 8 10)

DESIGN BB/KD
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1950 SCOTT STREET AND 312 & 314 CLIFTON ROAD

DRAWING NAME
STORMWATER MANAGEMENT PLAN

PROJECT No. 121301
REV REV # 5
DRAWING No. 121301-SWM

PLAN #19152

ZBA# D02-02-24-0054 & SPC# D07-12-24-0072

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