1144 St. Pierre Street, Ottawa, ON

Client:
12542340 Canada Limited

Project Number:
OTT-25011125-A0

Application Stage:
Site Plan Control

EXP Services Inc.
100-2650 Queensview Drive
Ottawa, ON K2B 8H6

Date Submitted:

December 23, 2025

Revised: May 25, 2026

1144 St. Pierre Street, Ottawa, ON

Type of Document:
Stormwater Management & Site Servicing Report

Client:
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Site Plan Control

Prepared By:
EXP Services Inc.
100-2650 Queensview Drive
Ottawa, Ontario K2B 8H6
Canada
T: 613 688-1899
F: 613 225-7337
www.**exp**.com

Prepared By:

Nikhil Parmar, E.I.T.
Engineering Designer
Infrastructure Services

Reviewed By:

Aaditya Jariwala, M.Eng, P.Eng.
Project Manager
Infrastructure Services

Date Submitted:

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Legal Notification

This report was prepared by **EXP** Services Inc. for the account of the Client (12542340 Canada Limited). Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. **EXP** Services Inc. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this project.

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List of Appendices

1 Introduction

EXP Services Inc. (EXP) was retained by 12542340 Canada Limited to provide site grading, servicing and Stormwater Management report for the proposed four (4) storey, twenty (20) unit residential apartment building located at 1144 St. Pierre Street Avenue in the City of Ottawa.

The property is approximately 0.08 hectare in size and is bound by St. Pierre Street along the northeast property line, a surface parking along the southwest property line, and 1 storey existing residential dwelling units to the eastern and western property lines. Refer to **Figure A1** in **Appendix A** for the site location.

This Stormwater Management & Site Servicing Report will address the Servicing requirements for the proposed development including the domestic and fire water, sanitary and storm servicing. The report will also cover the stormwater management requirements and the proposed methods to meet those requirements.

2 Existing Conditions

The subject property is currently vacant and consisting of some trees and pasture lands. The topography of the site slopes from the rear towards St. Pierre Street via overland which drains to the existing storm sewer system located within St. Pierre Street.

- Existing infrastructure within the St. Pierre Street right of way:
    - Storm:
        - 300 mm diameter storm sewer as noted in the legal and topographical plan of survey prepared by Annis, O'sullivan, Vollebekk Ltd. and dated November 9, 2025 (See **Appendix F**).
    - Sanitary
        - 250 mm diameter sanitary sewer
    - Water
        - 152 mm diameter watermain
    - Other
        - Gas
        - Bell
        - Hydro

3 References

Various documents were referred to in preparing the current report including:

Sewer Design Guidelines, Second Edition, Document SDG002, October 2012, City of Ottawa (Guidelines) including:

- Technical Bulletin ISDTB-2012-4 (20 June 2012)
- Technical Bulletin ISDTB-2014-01 (05 February 2014)
- Technical Bulletin PIEDTB-2016-01 (September 6, 2016)
- Technical Bulletin ISDTB-2018-01 (21 March 2018)
- Technical Bulletin ISDTB-2018-04 (27 June 2018)
- Technical Bulletin ISDTB-2019-02 (08 July 2019)

Ottawa Design Guidelines – Water Distribution, July 2010 (WDG001), including:

- Technical Bulletin ISDTB-2014-02 (May 27, 2014)
- Technical Bulletin ISTB-2018-02 (21 March 2018)
- Technical Bulletin ISTB-2021-03 (18 August 2021)

Stormwater Management Planning and Design Manual, Ontario Ministry of the Environment and Climate Change, March 2003 (SMPDM).

Design Guidelines for Drinking-Water Systems, Ontario Ministry of the Environment and Climate Change, 2008 (GDWS).

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

Ontario Building Code 2012, Ministry of Municipal Affairs and Housing.

Draft Geotechnical Investigation Report prepared by EXP Services Inc, Dated December 19, 2025.

4 Watermain Design

4.1 Required Fire Flow

The fire flow demand calculations were prepared based on the Fire Underwriters Survey (FUS, 2020) criteria. The following inputs were considered based on the response and documentation received from the Architect (Included in **Appendix B**).

- Ordinary Construction
- Limited Combustible Building Contents
- Adequate Sprinkler Conforms to NFPA13
- Standard Water Supply for Fire Department Hose Line and for Sprinkler System
- Fully Supervised Sprinkler System
- Exposures Measured from satellite imagery

The required fire flow calculated per FUS-2020 was 83.3 L/s (5,000 L/min). Refer to **Table B2** in **Appendix B** for detailed fire flow demand calculations.

4.2 Water Service Design

The domestic water demands for the proposed apartment building were calculated per the City of Ottawa Water Design Guidelines (July 2010).

The following inputs were used for water demand calculations:

- Residential demands = 280 L/person/day
- 1.4 persons per 1-bedroom apartment
- 2.1 persons per 2-bedroom apartment
- Max. Day Peaking Factor (Residential) = 9.36
- Peak Hour Peaking Factor (Residential) = 14.09

Residential peaking factors were taken from MOE Table 3-3. Refer to **Table B1** in **Appendix B** for detailed calculations. The proposed building's domestic demands were calculated as follows.

Water Demands:

Average daily demand = 0.11 L/s

Maximum daily demand = 1.02 L/s

Maximum hourly daily demand = 1.53 L/s

The estimated average daily demand of the proposed development is less than 50 m^3/day. Therefore, one – 100 mm diameter DR18 PVC water service is proposed for domestic and fire flow demands by connecting to the existing 152 mm diameter municipal watermain on St. Pierre Street to meet water demand requirements for the site. Refer to Site Servicing Drawing (C100) – included in **Appendix F**.

4.3 Pressure Check

The City of Ottawa provided boundary conditions based on the domestic and fire flow demands as shown in the table below:

Scenario	Demand	
	L/min	L/s
Average Daily Demand	7	0.11
Maximum Daily Demand	61	1.02
Peak Hour	92	1.53
Fire Flow Demand	5,000	83.3

The boundary conditions provided by the City are as follows:

152 mm Municipal Watermain on St. Pierre Street		
Demand Scenario	Head (m)	Pressure[1] (psi)
Min HGL	109.9	62.4
Max HGL	115.1	69.8
Max Day plus Fire Flow	99.1	47.0
[1] Ground Elevation =	66.0	m

Based on the above noted boundary conditions, estimated residual pressure at the building basement FFE during domestic demands will range between 64.2 psi to 71.7 psi. The residual pressures at building basement FFE will be between 50 psi and 80 psi. Pressure reducing measures are not necessary for the proposed development. Pressure boosting measures may be necessary to maintain sufficient pressure for upper floors. Mechanical engineer will confirm adequate system pressure within the building and propose pressure boosting measures as necessary.

Typical sprinkler demands for a building of this size is ±30 L/sec. Proposed 100 mm dia. Water service can supply the sprinkler demands with ±1.7 psi pressure loss. Anticipated residual pressure at the building basement FFE during sprinkler demands will be ±45.4 psi. Mechanical engineer will have to propose pressure boosting measures for the sprinkler system, as necessary.

The residual pressure in the municipal watermain along St. Pierre Street during max Day + Fire Flow demand was noted as 47.1 which is more than the minimum required pressure of 20 psi.

Based on the above noted analysis, the existing water supply system and the proposed services will have adequate capacity to meet the domestic, and fire demands for the proposed building. Refer to **Table B3** in **Appendix B** for detailed pressure calculations and correspondence with the City of Ottawa indicating boundary conditions.

4.4 Review of Hydrant Spacing

A review of the hydrant spacing was completed to ensure compliance with Appendix I of Technical Bulletin ISTB-2018-02. As per Section 3 of Appendix I, hydrants within 150 meters were reviewed to assess the total possible contribution of flow from these contributing hydrants. For each hydrant, the distance along a fire route was measured and assigned contributing flows. A review of the available fire hydrants within 150 m distance along the fire route from the building was carried out which is summarized in the table below.

Table 4-1: Summary of Nearby Municipal Hydrants

Hydrant #	Location	City / Private	Color Code	Distance from the Building (m)	Fire Flow Contribution for Class AA Hydrant (L/min)
380037H045	St. Pierre Street	City	Blue	50	5,700
Future Hydrant at 1132 St. Pierre Street	St. Pierre Street.	City	Blue	38	5,700
				Total:	11,400

As noted in the table above, there is an existing fire hydrant approximately 50 m to the south of the project site and a future hydrant at 1132 St. Pierre Street providing accessible fire flow of 11,400 L/min. This is well above the required fire flow of 5,000 L/min, meeting the fire flow requirements for the site. Refer to **Figure A2** in **Appendix A** for the hydrant location plan.

Based on the boundary conditions received from the city and review of the available municipal hydrants as noted above, the proposed development can be serviced for the required fire flow.

5 Sanitary Sewer Design

5.1 Peak Design Flow

The anticipated peak sanitary flows from the site have been calculated as per the City of Ottawa Sewer Design Guidelines (October 2012).

The following inputs were used for sanitary demand calculations:

- Residential Avg. Daily Sewage Flow = 280 L/person/day
- 1.4 persons per 1-bedroom apartment
- 2.1 persons per 2-bedroom apartment
- Peaking Factor (Residential) per Harmon equation (K=0.8) = 3.68
- Peak Extraneous flow =0.33 l/s/ha
- Site area = 0.05 ha

The anticipated peak sanitary flows (including infiltration) for the proposed development were calculated to be **0.426 L/s**. The proposed 200 mm diameter PVC sanitary service at 2.0% slope having a full flow capacity of 47.1 L/sec will be connected to the existing 250 mm dia. municipal sanitary sewer on St. Pierre Street. Refer to drawing C100 - Site Servicing plan in **Appendix F** and the sanitary sewer design sheet **Table C1** in **Appendix C** for further details.

6 Stormwater Management

6.1 Storm Design Criteria

The storm sewer system and stormwater management for the proposed development were designed in conformance with the City of Ottawa Sewer Design Guidelines (October 2012). The stormwater servicing design criteria stipulated in the Pre-Consultation meeting feedback form provided by the City of Ottawa for the proposed development are as follows:

- Control stormwater runoff from building roof to 2-year pre-development levels. Direct stormwater runoff from rest of the site uncontrolled towards the municipal ROW on St. Pierre Street.
- Time of concentration of min 10 mins.
- No drainage towards the neighboring properties.
- Foundation drainage (weeping tile system) shall have its own separate STM lateral independent from all other STM drains.
- Water Quality Control is not required if there will be no surface drainage capture/control infrastructure such as a catch basin, catch basin with ICD.

See the Pre-Consultation meeting feedback form provided by the City of Ottawa in **Appendix E.**

6.2 Pre-Development Conditions

The 0.08-hectare site at 1144 St. Pierre Street is currently vacant and consisting of some trees, pasture lands and a gravel driveway. Storm runoff from the project site drains via overland from the rear towards St. Pierre Street which ultimately drains into Bilberry Creek. The calculated time of concentration under pre-development conditions was 1.97 minutes, therefore, a standard minimum time of concentration of 10 minutes was used.

Runoff coefficient for hard surfaces such as building roof, asphalt, concrete was taken as 0.90, for semi-pervious surfaces such as gravel were considered as 0.70 and for soft landscaped surfaces were considered as 0.20. The average runoff coefficient for the site was calculated using the area weighted method in excel. The existing land cover areas were taken from the topographical plan of survey. The pre-development weighted average runoff coefficient was calculated as **0.20**.

The pre-development peak runoff rates for the site were calculated for the 2, 5, and 100-year storm events to be 3**.4 L/s**, **4.6 L/s**, and **9.8 L/s,** respectively.

See **Table D1-D3** in **Appendix D**.

6.3 Allowable Release Rate

As per the stormwater management criteria noted above, the allowable release rates for the proposed buildings roof drains will be governed by the 2-year pre-development peak flowrate for the site with a calculated runoff coefficient of 0.20.

The allowable release rates for the proposed development from the proposed buildings roof drains is summarized as follows:

- 2-year: 3.4 L/s
- 5-year: 3.4 L/s
- 100-year: 3.4 L/s

See **Table D3** in **Appendix D**.

6.4 Post-Development Conditions

Under post-development conditions the site is considered as three catchments. Catchments PR-01, and PR-02 correspond to the front and rear portions of the roof of the proposed building, respectively. Roof catchments are controlled to the allowable release rates noted in **Section 6.3** above. Runoff generated on the rooftops will be attenuated by Watts Accutrol flow control weirs mounted on the roof drains with adequate storage provided for the 100-year storm event. Scuppers are provided on the east perimeter of the proposed building which will discharge the runoff onto the ground surface if roof drains are plugged or overwhelmed by exceptional rainfall events in excess of the 100-year storm. Excess runoff from the scuppers will flow overland towards St.Pierre Street.

Catchment P-0 corresponds to the remainder of the site which will flow uncontrolled towards St. Pierre Street Right of Way. The post-development average runoff coefficient is calculated as **0.72.** Post-development average runoff coefficient is higher than pre-development average runoff coefficient due to the added hardscape and building added to the site as part of the proposed development.

Therefore, in post-development conditions, controlled runoff from the building roof during 2-year, 5-year and 100-year storm events is calculated as 1.52 L/sec, 1.65 L/sec and 1.84 L/sec respectively. These rates are less than the allowable release rate of 3.4 L/sec as noted in **Section 6.3** above.

Uncontrolled release rate from rest of the site under post-development conditions are calculated as 6.13 L/sec, 8.32 L/sec and 17.82 L/sec during 2-year, 5-year and 100-year storm events, respectively.

Therefore, the total post development stormwater release rates from the proposed development during 2-year, 5-year and 100-year storm events are calculated as 7.7 L/sec, 10.0 L/sec and 19.7 L/sec, respectively.

Refer to **Table D4** and **Table D5** in **Appendix D** for post-development average runoff coefficient calculations and post-development stormwater discharge rates calculations.

6.4.1 Storage Requirements

Storage is provided in roof catchments PR-01, and PR-02 such that the combined roof discharge is less than the allowable discharge rates noted in section 6.3.

Surface ponding volumes over roof drains were determined by the conic volume method. Roof ponding depths must be less than or equal to 150 mm during a 100-year storm event.

Maximum calculated ponding depth during 100-year storm event in roof area PR-01 is 145 mm and in roof area PR-02 is 138 mm.

No ground surface storage is provided.

Refer to **Table D6, Table D7 and Table D8** in **Appendix D** for detailed roof drain control and storage calculations.

6.4.2 Flow Controlled Roof Drains Sizing

Catchments PR-01, and PR-02 corresponds to the front and rear roof portions, respectively. Roof drains in each roof area will be equipped with WATTS Accutrol single weir roof drain with flow control weir set at the quarter open position. The drains were specified based on the required storage volume and associated head of water during 100-year storm event.

See the discharge characteristics published by the manufacturer in **Appendix D.** Detailed drain sizing calculations are shown in **Tables D6** in **Appendix D.** For 5-year and 100-year ponding limits refer to drawing C500 in **Appendix F.** Flow rates, storage requirements, and ponding depths are summarize below in **Section 6.4.3**.

6.4.3 Summary of SWM Storage Requirements

The proposed flow-controlled roof drains are summarized in the table below.

Area No	Area (ha)	C_{AVG100}	100-Year Release Rate (Controlled) (L/s)	100-Year Ponding Depth (mm)	100-Year Storage Requirement (m3)	Max Storage Provided (m3)	ICD Control
PR-01	0.0165	1.00	**0.93**	145	6.04	6.65	RD1 Watts Roof Drains - 1/4 open position
PR-02	0.0135	1.00	**0.91**	138	4.60	5.85	RD1 Watts Roof Drains - 1/4 open position

*__Bold__ flows are controlled.

6.5 Storm Sewer Design

Building roof drain will discharge at surface via 100mm dia. PVC Schedule 40 service lateral at the east side of the building. Additionally, Geotech investigation report prepared by EXP Services Inc. proposes foundation and underslab drainage system for the proposed building. Which will be discharged at grade

from a sump-pump in the mechanical room via 100mm dia. PVC Schedule 40 at the east side of the building. The proposed service laterals will discharge into the swale on the east side of the building which drains into the existing catchbasin at the front of the property along St. Pierre Street.

7 Erosion and Sediment Control

During all construction activities, erosion and sedimentation shall be controlled by the following techniques:

- Extent of exposed soils shall be limited at any given time;
- Exposed areas shall be re-vegetated as soon as possible;
- Minimize the area to be cleared and disruption of adjacent areas;
- Siltsack or approved equivalent shall be installed inside all catch basins, catch basin manholes, and storm manholes as identified on the erosion and sediment control plan;
- Visual inspection shall be completed daily on sediment control barriers and any damage will be repaired immediately. Care will be taken to prevent damage during construction operations;
- In some cases, barriers may be removed temporarily to accommodate the construction operations. The affected barriers will be reinstated at night when construction is completed;
- Sediment control devices will be cleaned of accumulated silt as required. The deposits will be disposed of as per the requirements of the contract;
- During construction, if the engineer believes that additional prevention methods are required to control erosion and sedimentation, the contractor will install additional silt fences or other methods as required to the satisfaction of the engineer; and,
- Construction and maintenance requirements for erosion and sediment controls are to comply with Ontario Provincial Standard Specification (OPSS) 805.

8 Conclusions

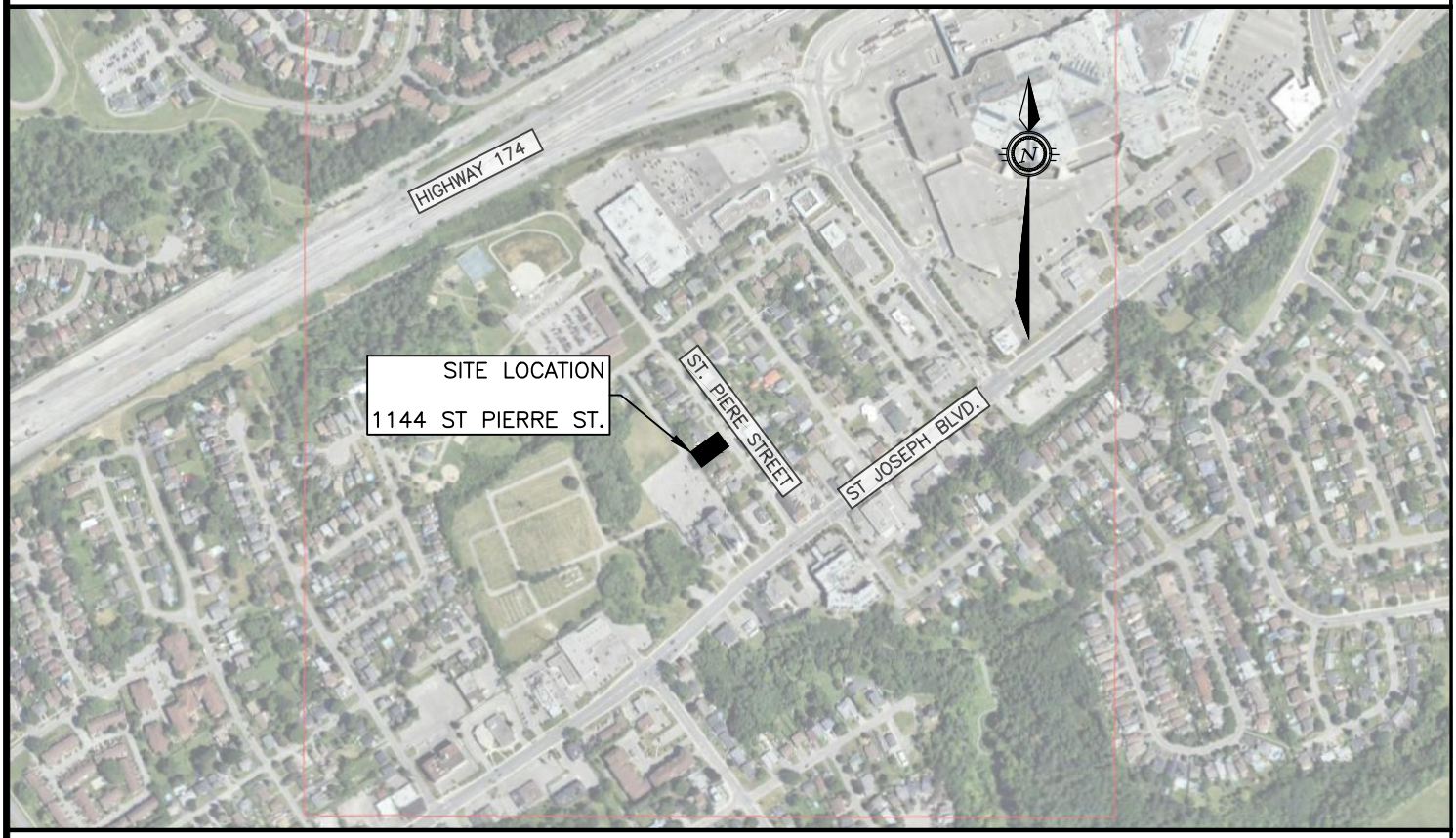
This report addresses the site servicing and stormwater management requirements for the site plan control application for the proposed development at 1144 St. Pierre Street. Based on the analysis provided in this report, the conclusions are as follows:

- The proposed apartment building will be serviced by a 100 mm diameter water service connection, which will adequately service the proposed development for the domestic and fire flow demands. Additionally, water boundary conditions from the City suggests sufficient flow and pressure availability in the 152 mm diameter municipal watermain on St. Pierre Street for domestic and fire demands.
- The proposed building's sanitary demand will be serviced by a 200 mm diameter sanitary pipe. No capacity constraints were noted in the existing 250 mm diameter municipal sanitary sewer on St. Pierre Street by the City. Sanitary service will be completed with backflow prevention.
- Stormwater Management criteria for the proposed development will be achieved by restricting the post-development stormwater discharge rates from the roof only to the 2-year pre-development flowrate for the site with a runoff coefficient of 0.20.
- Required on-site SWM storage volumes will be achieved using surface storage in roof areas using the specified flow-controlled roof drains. Overflow scuppers are provided and will discharge to ground surface.
- Building roof drains and foundation/underslab drains will be serviced by two separate 100 mm diameter storm service laterals discharging into proposed swale located along the eastern property line.
- No stormwater quality controls are proposed.
- Temporary erosion and sediment control measures for the subject site have been identified.

Appendix A – Figures

Figure A1 – Site Location Plan

Figure A2 – Hydrant Location Plan



exp Services Inc.
100-2650 Queensview Drive
Ottawa, ON K2B 8H6

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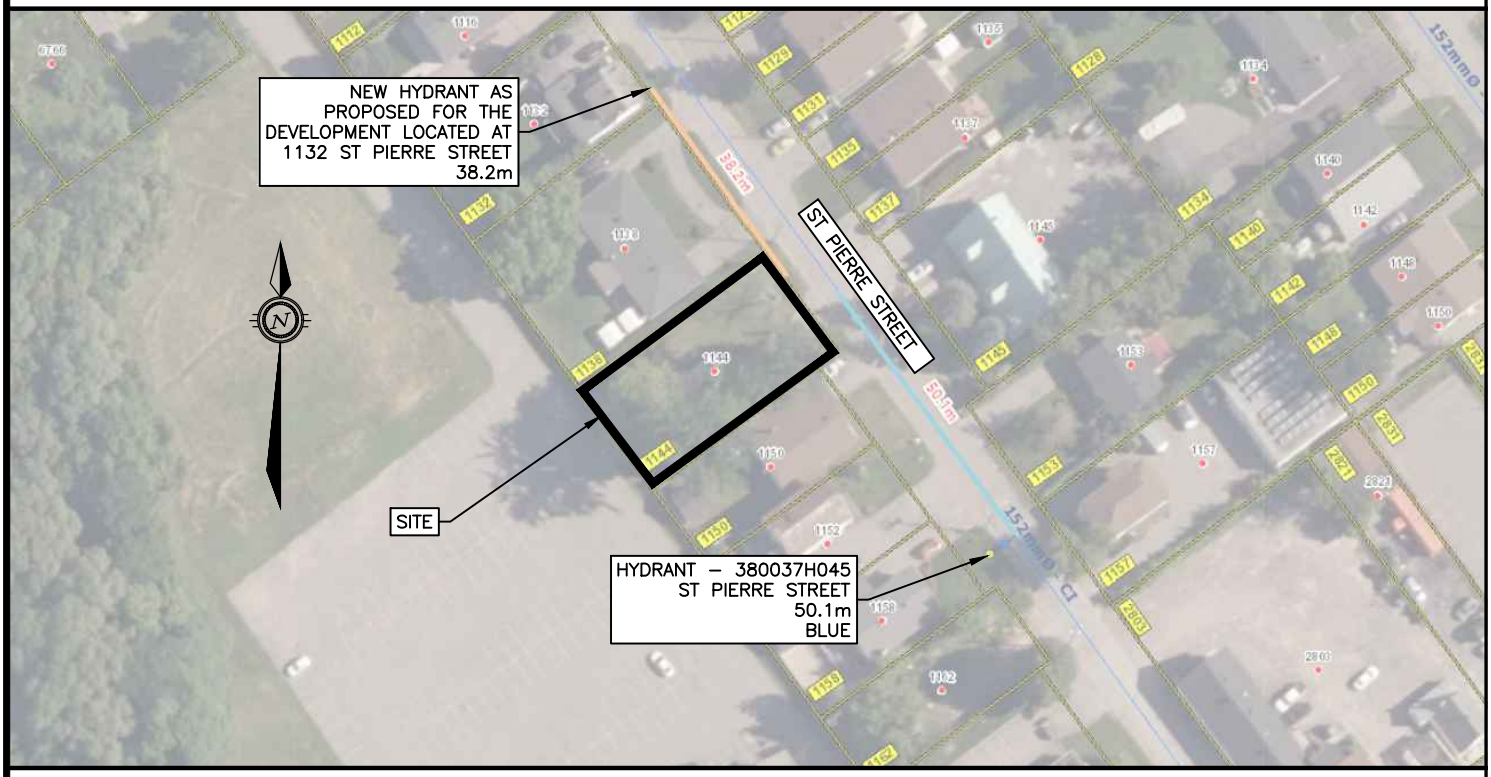
DRAWN	AGJ
DATE	25/12/22
FILE NO	OTT-25011125-A0

1144 ST. PIERRE

SITE LOCATION PLAN

SCALE: N.T.S

SKETCH NO: FIG A1



exp Services Inc.
100-2650 Queensview Drive
Ottawa, ON K2B 8H6

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DRAWN	AGJ
DATE	25/12/22
FILE NO	OTT–25011125–A0

1144 ST. PIERRE

HYDRANT LOCATION PLAN

SCALE: N.T.S

SKETCH NO: FIG A2

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References:

EXP Services Inc.
12542340 Canada Limited
1144 St. Pierre Street, Ottawa, ON
OTT-25011125-A0
May 25, 2026

Appendix B – Water Servicing

Table B1 - Water Demand Chart

Table B2 - FUS Fire Flow Demand Calculations

Table B3 - Estimated Water Pressure at Proposed Building FFE

Correspondence from Architect Re Fire Flow Requirements

Water Boundary Conditions from the City

TABLE B-1: Water Demand Chart

Location: 1144 St. Pierre Street
Project No: OTT-25011125-A0
Designed by: A. Johnson
Checked By: A. Jariwala
Date Revised: December 4, 2025

Water Consumption
Residential = **280** L/cap/day
Commercial = 5.0 L/m^2/day

Population Densities

Single Family	3.4	person/unit
Semi-Detahced	2.7	person/unit
Duplex	2.3	person/unit
Townhome (Row)	2.7	person/unit
Bachelor Apartment	1.4	person/unit
1 Bedroom Apartment	1.4	person/unit
2 Bedroom Apartment	2.1	person/unit
3 Bedroom Apartment	3.1	person/unit
4 Bedroom Apartment	4.1	person/unit
Avg. Apartment	1.8	person/unit

	No. of Residential Units											Residential Demands in (L/sec)					Commercial						Total Demands (L/sec)		
	Singles/Semis/Towns				Apartments								Peaking Factors (x Avg Day)					Peaking Factors (x Avg Day)							
Proposed Buildings	Single Family	Semi-Detached	Duplex	Townhome	Studio	1 Bedroom	2 Bedroom	3 Bedroom	4 Bedroom	Avg Apt.	Total Persons (pop)	Avg. Day Demand (L/day)	Max Day	Peak Hour	Max Day Demand (L/day)	Peak Hour Demand (L/day)	Area (m^2)	Avg Demand (L/day)	Max Day	Peak Hour	Max Day Demand (L/day)	Peak Hour Demand (L/day)	Avg Day (L/s)	Max Day (L/s)	Max Hour (L/s)
Appartment Building					7	5	8				33.6	9,408	9.36	14.09	88,078	132,587							0.109	1.019	1.535
Total =					7	5	8				33.6	9,408			88,078	132,587							0.11	1.02	1.53

PEAKING FACTORS FROM MOECC TABLE 3-3 (Peaking Factors for Water Systems Servicing Fewer Than 500 persons)

Dwelling Units Serviced	Equiv Pop	Night Min Factor	Maximum Day Factor	Peak Hour Factor
10	30	0.10	9.50	14.30
50	150	0.10	4.90	7.40
100	300	0.20	3.60	5.40
150	450	0.30	3.00	4.50
167	500	0.40	2.90	4.30

TABLE B2: FIRE FLOW REQURIEMENTS BASED ON FIRE UNDERWRITERS SURVEY(FUS) 2020
PROJECT: OTT-25011125-A0
Building: **1144 St. Pierre Street**

An estimate of the Fire Flow required for a given fire area may be estimated by:

F = 220 * C * SQRT(A)

where: F = required fire flow in litres per minute
A = total floor area in m^2 (including all storeys, but excluding basements at least 50% below grade)
C = coefficient related to the type of construction

Task	Options	Multiplier	Input	Value Used	Fire Flow Total (L/min)
Choose Building Frame (C)	Wood Frame	1.5	Ordinary Construction	1	
	Ordinary Construction	1			
	Non-combustible Construction	0.8			
	Fire Resistive Construction	0.6			
	Fourth Floor		275	1100.0 m²	
	Third Floor		275		
	Second Floor		275		
	First Floor		275		
	Basement (At least 50% below grade, not included)		0		
Fire Flow (F)	F = 220 * C * SQRT(A)				7,297
Fire Flow (F)	Rounded to nearest 1,000				**7,000**

Reductions/Increases Due to Factors Effecting Burning

Task	Options	Multiplier	Input	Value Used	Fire Flow Change (L/min)	Fire Flow Total (L/min)
Choose Combustibility of Building Contents	Non-combustible	-25%	Limited Combustible	-15%	-1,050	5,950
	Limited Combustible	-15%				
	Combustible	0%				
	Free Burning	15%				
	Rapid Burning	25%				
Choose Reduction Due to Sprinkler System	**Adequate** Sprinkler Conforms to NFPA13	-30%	Adequate Sprinkler Conforms to NFPA13	-30%	-1,785	4,165
	No Sprinkler	0%				
	Standard Water Supply for Fire Department Hose Line and for Sprinkler System	-10%	Standard Water Supply for Fire Department Hose Line and for Sprinkler System	-10%	-595	3,570
	Not Standard Water Supply or Unavailable	0%				
	Fully Supervised Sprinkler System	-10%	Fully Supervised Sprinkler System	-10%	-595	2,975
	Not Fully Supervised or N/A	0%				

Choose Structure Exposure Distance	Exposures	Separation Dist (m)	Cond	Separation Conditon	Exposed Wall type	Exposed Wall Length: Length (m)	No of Storeys	Length-Height Factor	Sub-Conditon	Charge (%)	Total Charge (%)	Total Exposure Charge (L/min)	
	West	6.2	2	3.1 to 10	Type V	11.0	1	11	2A	15%	30%	1,785	4,760
	East	3.9	2	3.1 to 10	Type V	15.5	1	15.5	2A	15%			
	South	45	5	30.1 to 45	Type V	0.0	1	0	6	0%			
	North	30.1	5	30.1 to 45	Type V	20.8	2	41.6	6	0%			
Obtain Required Fire Flow											Total Required Fire Flow, Rounded to the Nearest 1,000 L/min =		**5,000**
											Total Required Fire Flow, L/s =		**83.3**

Exposure Charges for Exposing Walls of Wood Frame Construciton (from Table G5)

Type V	Wood Frame
Type IV-III (U)	Mass Timber or Ordinary with Unprotected Openings
Type IV-III (P)	Mass Timber or Ordinary with Protected Openings
Type II-I (U)	Noncombustible or Fire Resistive with Unprotected Openings
Type II-I (P)	Noncombustible or Fire Resistive with Protected Openings

Conditons for Separation

Separation Dist	Condition
0m to 3m	1
3.1m to 10m	2
10.1m to 20m	3
20.1m to 30m	4
> 30.1m	5

TABLE B3

ESTIMATED WATER PRESSURE AT PROPOSED BUILDING FFE

Description	From	To	Demand (L/sec)	Pipe Length (m)	Pipe Dia (mm)	Dia (m)	Q (m3/sec)	Area (m2)	C	Vel (m/s)	Slope of HGL (m/m)	Head Loss (m)	Elev From (m)	Elev To (m)	*Elev Diff (m)	Pressure From kPa	(psi)	Pressure To kPa	(psi)	Pressure Drop (psi)
Avg Day Conditons																				
Single 100mm water service	Main	Building	0.11	12 m	100	0.100	0.0001	0.007854	110	0.0139	6E-06	7E-05	66.00	64.74	1.3	481.7	(69.9)	494.0	(71.7)	-1.8
Max Day Conditons																				
Single 100mm watermain	Main	Building	1.02	12 m	100	0.100	0.0010	0.007854	110	0.1298	0.00038	0.0043	66.00	64.74	1.3	430.7	(62.5)	443.0	(64.2)	-1.8
Peak Hour Conditons																				
Single 100mm watermain	Main	Building	1.53	12 m	100	0.100	0.0015	0.007854	110	0.1954	0.00081	0.0093	66.00	64.74	1.3	430.7	(62.5)	442.9	(64.2)	-1.8
Max Day plus Sprinkler Demands																				
Single 100mm watermain	Main	Building	30.00	12 m	100	0.100	0.0310	0.007854	110	3.9495	0.21081	2.4243	66.00	64.74	1.3	324.7	(47.1)	313.3	(45.4)	1.7

Water Demand Info

Average Demand =	0.11	L/sec
Max Day Demand =	1.02	L/sec
Peak Hr Demand =	1.53	L/sec
Fireflow Requriement =	83.3	L/sec
Max Day Plus FF Demand =	84.4	L/sec
Assumed Sprinkler Demands =	30.0	L/sec

Pipe Lengths

From watermain to buildinq =	12 m
Hazen Williams C Factor for Friction Loss in Pipe, C=	110

Boundary Conditon

	Min HGL	Max HGL	Max Day + Fireflow	
HGL (m)	109.9	115.1	99.1	(From City of Ottawa)
Approx Ground Elev (m) =	66.00	66.00	66.00	
Approx Bldg FF Elev (m) =	64.74	64.74	64.74	(basement FFE)
Pressure (m) =	43.90	49.1	33.1	
Pressure (Pa) =	430,659	481,671	324,711	
Pressure (psi) =	62.5	69.9	47.1	

Alexander Johnson

From: Luciana Traldi <luciana@nemoringroup.ca>
Sent: Tuesday, December 9, 2025 2:31 PM
To: Alexander Johnson; Louise Lalande
Cc: Aaditya Jariwala; Leah Arsenault
Subject: RE: 1144 St Pierre

Follow Up Flag: Follow up
Flag Status: Completed

Hi Alex,

You are correct we are following the same specs from 1132 St Pierre.

25.12.08 Email

Yes, the side entrance will be on the east facing 1150 St Pierre and driveway to the 1138 St Pierre. @Louise Lalande Please revise the plans as they look they were mirrored.
Regarding the roof we will repeat 1132 solution so your assumption is correct.

25.12.04 Email

1. 4-storey, 20-unit, (7) studio apartments, (5) 1-bedroom apartments, and (8) 2-bedroom apartments Correct
2. 305 sqm gross floor area for each storey – Corrected to 275sqm as per Site Plan
3. Ordinary construction with exterior walls having a minimum 1-hr fire resistance rating Correct
4. The building will have an Adequate Sprinkler system Conforming to NFPA13 Correct
5. Sprinkler system will be fully supervised Correct
6. Please confirm that the roof layout will be the same as 1132 St. Pierre Correct
7. Please confirm that the location of the accessible entrances is the same as St. Pierre Correct The project has a level entrance and elevator inside to accommodate the accessible entrances.
8. Please confirm the desired width of the private approach. It appears to not match the distance shown between the building and retaining wall in the attached preliminary site plan. 3.35m

Let us know if you need any additional information.

What is the ETA to provide the plans. We already received all complementary plans and reports we are only waiting for Civil to be able to submit the site plan.

Best regards

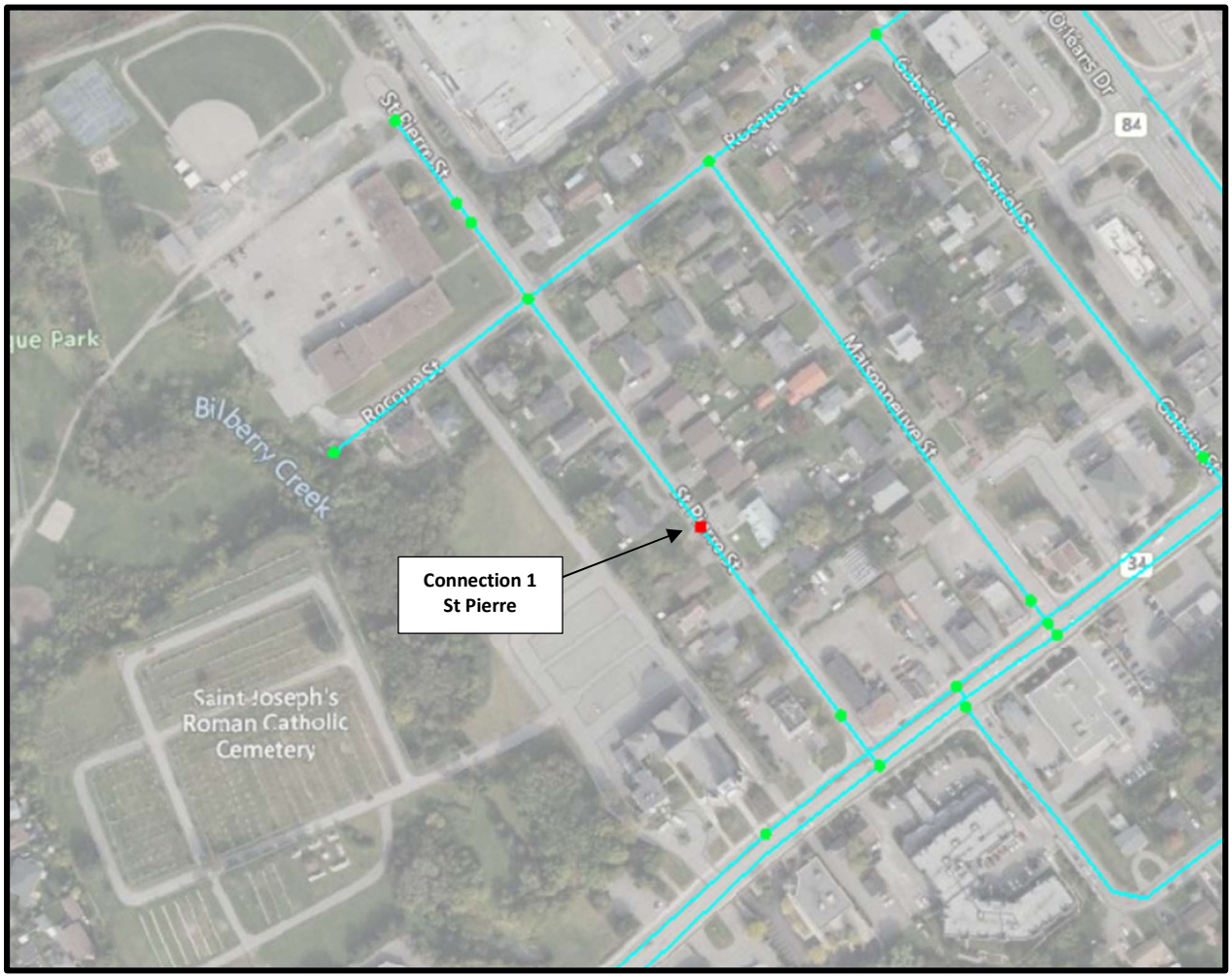
nemorin
Luciana Traldi Nachtschatt
Project Manager
613-304-4597

Boundary Conditions
1144 St Pierre

Provided Information

Scenario	Demand	
	L/min	L/s
Average Daily Demand	7	0.11
Maximum Daily Demand	61	1.02
Peak Hour	92	1.53
Fire Flow Demand #1	5,000	83.33

Location



Results

Connection 1 – St Pierre

Demand Scenario	Head (m)	Pressure[1] (psi)
Maximum HGL	115.1	69.8
Peak Hour	109.9	62.4
Max Day plus Fire Flow #1	99.1	47.0

[1] Ground Elevation = 66.0 m

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. Fire Flow analysis is a reflection of available flow in the watermain; there may be additional restrictions that occur between the watermain and the hydrant that the model cannot take into account.

Alexander Johnson

From: Giovannitti, Terenzo <terenzo.giovannitti@ottawa.ca>
Sent: Thursday, December 11, 2025 1:37 PM
To: Alexander Johnson
Cc: Aaditya Jariwala
Subject: RE: Water Boundary Conditions Request - 1144 St Pierre Street -File No.: PC2025-0294
Attachments: 1144 St Pierre Boundary Condition(05Dec2025).docx

Hi Alex,

See attached results of the boundary condition request at the above noted site.

Regards,
Terenzo Giovannitti, *P.Eng*
Project Manager
Development Review
Planning, Development and Building Services Department
City of Ottawa
110 Laurier Ave W. Ottawa, ON
613-580-2424 (ext. 23436)
terenzo.giovannitti@ottawa.ca

From: Alexander Johnson <Alexander.Johnson@exp.com>
Sent: December 05, 2025 1:29 PM
To: Giovannitti, Terenzo <terenzo.giovannitti@ottawa.ca>
Cc: Aaditya Jariwala <aaditya.jariwala@exp.com>
Subject: RE: Water Boundary Conditions Request - 1144 St Pierre Street -File No.: PC2025-0294

Great. Thank you Terenzo.

No questions or concerns currently.

Have a nice weekend,
Alex

Alexander Johnson, E.I.T.
EXP | Engineering Designer
t : +1.613.688.1899, 63222 | e : alexander.johnson@exp.com

From: Giovannitti, Terenzo <terenzo.giovannitti@ottawa.ca>
Sent: Friday, December 5, 2025 1:21 PM
To: Alexander Johnson <Alexander.Johnson@exp.com>
Cc: Hughes, Brett <brett.hughes@ottawa.ca>; Aaditya Jariwala <Aaditya.Jariwala@exp.com>; Rohan, Fayaz <fayaz.rohan@ottawa.ca>
Subject: RE: Water Boundary Conditions Request - 1144 St Pierre Street -File No.: PC2025-0294

Hi Alexander,

I've sent your request off internally and will get back to you with the results.
If you have any further engineering questions about this application, feel free to contact me directly.

Regards,
Terenzo Giovannitti, *P.Eng*
Project Manager
Development Review
Planning, Development and Building Services Department
City of Ottawa
110 Laurier Ave W. Ottawa, ON
613-580-2424 (ext. 23436)
terenzo.giovannitti@ottawa.ca

From: Alexander Johnson <Alexander.Johnson@exp.com>
Sent: December 05, 2025 11:28 AM
To: Rohan, Fayaz <fayaz.rohan@ottawa.ca>
Cc: Hughes, Brett <brett.hughes@ottawa.ca>; Aaditya Jariwala <aaditya.jariwala@exp.com>; Giovannitti, Terenzo <terenzo.giovannitti@ottawa.ca>
Subject: RE: Water Boundary Conditions Request - 1144 St Pierre Street -File No.: PC2025-0294

Apologies for any confusion Rohan. I could not locate Terenzo's email in the feedback form.

Thank you for passing this along.

Regards,
Alex

Alexander Johnson, E.I.T.
EXP | Engineering Designer
t : +1.613.688.1899, 63222 | e : alexander.johnson@exp.com

From: Rohan, Fayaz <fayaz.rohan@ottawa.ca>
Sent: Friday, December 5, 2025 11:22 AM
To: Alexander Johnson <Alexander.Johnson@exp.com>
Cc: Hughes, Brett <brett.hughes@ottawa.ca>; Aaditya Jariwala <Aaditya.Jariwala@exp.com>; Giovannitti, Terenzo <terenzo.giovannitti@ottawa.ca>
Subject: FW: Water Boundary Conditions Request - 1144 St Pierre Street -File No.: PC2025-0294

Good morning, Alexander,

For future submissions, please make sure to reach out to the correct project manager to avoid delays. Their contact information is listed in the feedback form.

I have cc'ed Terenzo, who completed the Pre-Con on November 17.

Thanks,
Fayaz Rohan, Engineering Graduate
Development Review – Central Branch | Examen du développement - Branche centrale
Planning, Development and Building Services Department
City of Ottawa | Ville d'Ottawa
110 Laurier Avenue West Ottawa, ON | 110, avenue Laurier Ouest. Ottawa (Ontario) K1P 1J1
613-580-2424 ext. 16967, fayaz.rohan@ottawa.ca

From: Alexander Johnson <Alexander.Johnson@exp.com>
Sent: December 05, 2025 11:09 AM
To: Rohan, Fayaz <fayaz.rohan@ottawa.ca>
Cc: Hughes, Brett <brett.hughes@ottawa.ca>; Aaditya Jariwala <aaditya.jariwala@exp.com>
Subject: Water Boundary Conditions Request - 1144 St Pierre Street -File No.: PC2025-0294

Hello Brett and Fayaz,

EXP has been retained by the proponent of a 4-storey, 20-unit apartment building located at 1144 St Pierre Street - **File No.: PC2025-0294**

I kindly request that you provide water boundary conditions based on the estimated demands summarized below:

Water Demands:

Avg. Day: **0.11** L/sec
Max. Day Demands: **1.02** L/sec
Peak Hourly Demands: **1.53** L/sec
RFF per FUS (2020): **83.3** L/sec

Additionally requesting confirmation of capacity in the existing **250mm** diameter sanitary sewer on St Pierre Street adjacent to the subject property.

Sanitary Demands:
Sanitary Demands (incl. Infiltration): **0.426** L/sec

Supporting calculations and boundary condition request location plan are attached to this email.

Thank you,
Alex

Alexander Johnson, E.I.T.
EXP | Engineering Designer
t : +1.613.688.1899, 63222 | e : alexander.johnson@exp.com
2650 Queensview Drive
Suite 100
Ottawa, ON K2B 8H6
CANADA

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EXP Services Inc.
12542340 Canada Limited
1144 St. Pierre Street, Ottawa, ON
OTT-25011125-A0
May 25, 2026

Appendix C – Sanitary Sewer Design Sheet

C1 - Sanitary Sewer Design Sheet

TABLE C1 : SANITARY DEMAND CHART

LOCATION				RESEDENTIAL AREAS AND POPULAITONS												INFILTRATION		TOTAL FLOW (L/s)	SEWER DATA					
Street	U/S MH	D/S MH	Desc	Area (ha)	NUMBER OF UNITS							POPULATION		Peak Factor	Peak Flow (L/sec)	AREA (ha)			Nom Dia (mm)	Actual Dia (mm)	Slope (%)	Length (m)	Capacity (L/sec)	Q/Q_{CAP} (%)	Full Velocity (m/s)
					Singles	Semis	Towns	1-Bed Apt.	2-Bed Apt.	3-Bed Apt.	4-Bed Apt.	INDIV	ACCU			INDIV	ACCU								
1144 St. Pierre	BLDG	SANMH 2		0.079				12	8			33.6	33.6	3.68	0.400	0.077	0.077	***0.426***	200	201.16	2.00	12.58	47.1	0.9%	1.7
				0.079				**12**	**8**			**34**				**0.077**									

Residential Avg. Daily Flow, q (L/p/day) =	280	Peak Population Flow, (L/sec) =	P*q*M/86.4	Unti Type	Persons/Unit	Designed:	Project:
Residential Correction Factor, K =	0.80	Peak Extraneous Flow, (L/sec) =	I*Ac	Singles	3.0	A. Johnson B.Eng, E.I.T.	OTT-25011125-A0
Manning N =	0.013	Residential Peaking Factor, M =	1 + (14/(4+P^0.5)) * K	Semi-Detached	2.7	Checked:	Location:
Peak extraneous flow, I (L/s/ha) =	0.33	A_c = Cumulative Area (hectares)		Townhomes	2.7	A. Jariwala M.Eng, P.Eng	1144 St. Pierre Street, Ottawa, Ontario
		P = Population (thousands)		Single Apt. Unit	1.4	File Reference:	Page No:
				2-bed Apt. Unit	2.1	OTT-25011125-A0 - 1144 St.Pierre - SAN Design Sheet.xlsx	**1 of 1**
		Sewer Capacity, Qcap (L/sec) =	$1/N \; S^{1/2} \; R^{2/3} \; A_c$	3-bed Apt. Unit	3.1		
		(Manning's Equation)		4-bed Apt. Unit	3.8		

Appendix D – Stormwater Management Design Sheet

Table D1 - Calculation of Average Runoff Coefficients for Pre-Development Conditions

Table D2 - Calculation of Catchment Time of Concentration for Pre-Development Conditions

Table D3 - Calculation of Peak Runoff for Pre-Development Conditions

Table D4 - Average Runoff Coefficients for Post-Development Conditions

Table D5 - Summary of Post-Development Peak Flows (Uncontrolled and Controlled)

Table D6 - 2-Year, 5-Year & 100-Year Roof Drains Design Sheet - Using Flow Controlled Roof Drains

Table D7 - Storage Volumes Roof Area #PR-01 (2 Year, 5 Year And 100 Year Storms) (MRM)

Table D8 - Storage Volumes Roof Area #PR-02 (2 Year, 5 Year And 100 Year Storms) (MRM)

Watts Adjustable Flow Control for Roof Dains

TABLE D1

CALCULATION OF AVERAGE RUNOFF COEFFICIENTS FOR PRE-DEVELOPMENT CONDITIONS

Area No.	Roof Areas		Mixed Gravel Concret & Broken Asphalt		Grass		Reserved		Reserved		Sum AC	Total Area (m^2)	C_{AVG}
	C=0.90		C=0.70		C=0.20								
	Area (m^2)	A * C	Area (m^2)	A * C	Area (m^2)	A * C	Area (m^2)	A * C	Area (m^2)	A * C			
E1 (SITE)			7.00	4.9	765.00	153.0					**157.9**	**772.00**	**0.20**

TABLE D2

CALCULATION OF CATCHMENT TIME OF CONCENTRATION FOR PRE-DEVELOPMENT CONDITIONS

Catchment No.	Area (ha)	High Elev (m)	Low Elev (m)	Flow Path Length (m)	Indiv Slope	Avg. C	Time of Conc. Tc (mins)	Description
E1 (SITE)	0.0772	66.19	65.82	28.2	1.3	0.20	1.97	10 minutes

Notes

1) For Catchments with Runoff Coefficient less than C=0.40, Time of Concentration Based on Federal Aviation Formula (Airport Method), from MTO Drainage Manual Equation 8.16, where: $T_C = 3.26 * (1.1-C) * L^{0.5} / S_W^{0.33}$

2) For Catchments with Runoff Coefficient greater than C=0.40, Time of Concentration Based on Bransby Williams Equation, from MTO Drainage Manual Equation 8.15, where: $T_c = 0.057 * L / (S_W^{0.2} * A^{0.1})$

3) The standard minimium Time of Concentraion of 10 minutes was used, rather then the calaculted time, since calcualted time was less than 10 minutes.

TABLE D3

CALCULATION OF PEAK RUNOFF FOR PRE-DEVELOPMENT CONDITIONS

Area No	Outlet Location	Area (ha)	Time of Conc, Tc (min)	Storm = 2 yr			Storm = 5 yr			Storm = 100 yr		
				I_2 (mm/hr)	Cavg	Q_2 (L/sec)	I_5 (mm/hr)	C_{avg}	Q_5 (L/sec)	I_{100} (mm/hr)	C_{avg}	Q_{100} (L/sec)
E1 (SITE)	OFFSITE	0.0772	10	76.81	0.20	3.4	104.19	0.20	**4.6**	178.56	0.26	**9.8**

Notes

1) Intensity, $I = 732.951/(Tc+6.199)^{0.810}$ (2-year)

2) Intensity, $I = 998.071/(Tc+6.053)^{0.814}$ (5-year)

3) Intensity, $I = 1735.688/(Tc+6.014)^{0.820}$ (100-year)

4) C_{avg} for 100-year is increased by 25% to a maximum of 1.0

5) The standard minimium Time of Concentraion of 10 minutes was used, rather then the calaculted time, since calcualted time was less than 10 minutes.

TABLE D4
AVERAGE RUNOFF COEFFICIENTS FOR POST-DEVELOPMENT CONDITIONS

Area No.	Roof Areas C=0.90		Concrete/Asphalt C=0.90		Grass C=0.20		River Stone C=0.20		Pavers C=0.70		Sum AC	Total Area (m^2)	C_{AVG}	Comment
	Area (m^2)	A * C	Area (m^2)	A * C	Area (m^2)	A * C	Area (m^2)	A * C	Area (m^2)	A * C				
P-0			222.23	200.0	175.26	35.1			74.52	52.2	287.2	472.00	0.61	Ground surface (Uncontrolled)
PR-1	165.0	148.5									148.5	165.00	0.90	Front Roof
PR-2	135.0	121.5									121.5	135.00	0.90	Rear Roof
											557.2	**772.00**	**0.72**	

TABLE D5
SUMMARY OF POST-DEVELOPMENT PEAK FLOWS (Uncontrolled and controlled)

Area No	Area (ha)	Time of Conc, Tc (min)	Storm = 2 yr C_{AVG}	I_2 (mm/hr)	Q (L/sec)	Q_{CAP} (L/sec)	Storm = 5 yr C_{AVG}	I_5 (mm/hr)	Q (L/sec)	Q_{CAP} (L/sec)	Storm = 100 yr C_{AVG}	I_{100} (mm/hr)	Q (L/sec)	Q_{CAP} (L/sec)	ICD
P-0	0.0472	10	0.61	76.81	6.13	6.13	0.61	104.19	8.32	8.32	0.76	178.56	17.82	17.82	**Uncontrolled**
PR-1	0.0165	10	0.90	76.81	3.17	**(0.77)**	0.90	104.19	4.30	**(0.83)**	1.00	178.56	8.19	**(0.93)**	**WATTS ACCUTROL RD1 WEIR - 1/4 OPEN**
PR-2	0.0135	10	0.90	76.81	2.59	**(0.75)**	0.90	104.19	3.52	**(0.81)**	1.00	178.56	6.70	**(0.91)**	**WATTS ACCUTROL RD1 WEIR - 1/4 OPEN**
Post-Dev Site	**0.0772**				11.90	**(7.7)**			16.14	**(10.0)**			32.71	**(19.7)**	
Pre-Dev Site						*3.4*				*4.6*				*9.8*	

Notes
1) Intensity, I = 732.951/(Tc+6.199) $^{0.810}$ (2-year)
2) Intensity, I = 998.071/(Tc+6.053) $^{0.814}$ (5-year)
3) Intensity, I = 1735.688/(Tc+6.014) $^{0.820}$ (100-year)
4) Cavg for 100-year is increased by 25% to a maximum of 1.0
5) Time of Concentration, Tc = ***10 mins***
5) Controlled release rate (Q_{CAP}) is denoted by **(1.03)**

Table D6: 2-year, 5-year & 100-year Roof Drains Design Sheet - Using Flow Controlled Roof Drains

Project: OTT-25002871-A0
Location: 1144 St. Pierre Street
Date: December 2025

Area #	Roof Drain Type	No Drains per Area	No of Weirs per Drain	Weir Position	Runoff Coeff (C_{avg})		Drainage Area		2-year Event						5-year Event						100-year Event						Storage Required *(MRM)*			Maximum Storage Provided at Spill Elevation					
					2-year & 5-year	100-year	m^2	ha	Runoff Rate (L/sec)	2yr Ponding Depth (mm)	Roof Drain Capacity Per Weir (gpm)	Roof Drain Capacity Per Drain per weir (gpm)	Roof Drain Capacity Per Drain (L/sec)	Total Flow From Roof Drains (L/sec)	Runoff Rate (L/sec)	5yr Ponding Depth (mm)	Roof Drain Capacity Per Weir (gpm)	Roof Drain Capacity Per Drain per weir (gpm)	Roof Drain Capacity Per Drain (L/sec)	Total Flow From Roof Drains (L/sec)	Runoff Rate (L/sec)	100yr Ponding Depth (mm)	Roof Drain Capacity Per Weir (gpm)	Roof Drain Capacity Per Drain per weir (gpm)	Roof Drain Capacity Per Drain (L/sec)	Total Flow From Roof Drains (L/sec)	2-year (m^3)	5-year (m^3)	100-year (m^3)	Area Available for Storage (m^2)	Max Prism Depth (mm)	Max Prisim Volume (m^3)	% Volume Used for Ponding		
																																	2-year	5-year	100-year
PR-01	RD1	1	1	1/4 open	0.90	1.00	165.00	0.0165	3.171	94	12.2	12.2	0.770	0.770	4.301	114	13.2	13.2	0.833	0.833	8.191	145	14.8	14.8	0.931	0.931	1.65	2.95	6.04	133.0	150	6.65	25%	44%	91%
PR-02	RD1	1	1	1/4 open	0.90	1.00	135.00	0.0135	2.594	89	12.0	12.0	0.754	0.754	3.519	108	12.9	12.9	0.814	0.814	6.701	138	14.4	14.4	0.908	0.908	1.20	2.21	4.60	117.0	150	5.85	21%	38%	79%
Totals							**300.0**	**0.0300**	**5.76**		**24.15**		**1.52**	**1.52**	**7.82**		**26.10**		**1.65**	**1.65**	**14.89**		**29.15**		**1.84**	**1.84**	**2.86**	**5.16**	**10.64**	**250**		**12.5**			
Min										**89**						**108**						**138**													
Max										**94**						**114**						**145**													

Runoff Based on the Following:

Storm Frequency (years) =	2	5	100
Time of Conc (mins) =	10	10	10
Storm Intensity (mm/hr) =	76.8	104.2	178.6

Roof Drains have Following Flow Rates per weir: WATTS Flow Controlled Drain

Weir Position	Flow (gpm) per depth							Max Flow Rate per Weir @150mm (L/s)
	0	25	50	75	100	125	150	
	0	0.025	0.05	0.075	0.1	0.125	0.15	
None	0	0	0	0	0	0	0	0.000
Closed	0	5	5	5	5	5	5	0.315
1/4 open	0	5	10	11	13	14	15	0.946
1/2 open	0	5	10	12	15	18	20	1.262
3/4 open	0	5	10	14	18	21	25	1.577
Full	0	5	10	15	20	25	30	1.890

Roof Drain Types

Drain Type =	RD1	RD2	RD3
Max Overflow Depth (mm)	150 mm	150 mm	150 mm
Flow Controlled (Yes/No)	Yes	Yes	Yes
Ponding	Yes	Yes	Yes
Weir Desc	Accutrol	Accutrol	Accutrol
No. Weirs	1	2	3

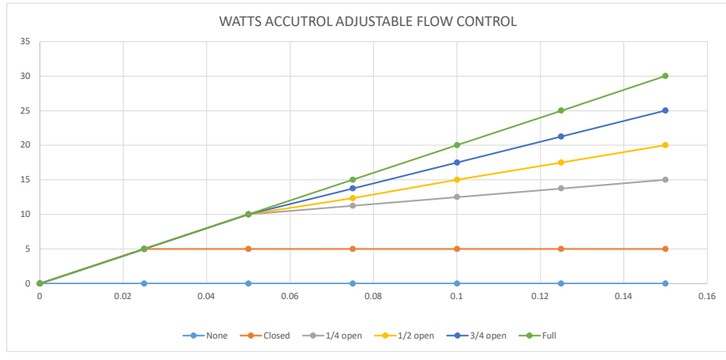


Table D7 Storage Volumes Roof Area #PR-1 (2 Year, 5 Year and 100 Year Storms) (MRM)

C_{AVG} = 0.90 (dimmensionless)
C_{100} = 1.00
Time Interval = 5 (mins)
Drainage Area = 0.01650 (hectares)

	Release Rate = 0.770 (L/sec) Return Period = 2 (years) IDF Parameters, A = 732.951, B = 0.810 (I = A/(T_c+C), C = 6.199					Release Rate = 0.8328 (L/sec) Return Period = 5 (years) IDF Parameters, A = 998.071, B = 0.814 (I = A/(T_c+C), C = 6.053					Release Rate = 0.9306 (L/sec) Return Period = 100 (years) IDF Parameters, A = 1735.69, B = 0.820 (I = A/(T_c+C), C = 6.014				
Duration (min)	Rainfall Intensity, I (mm/hr)	Peak Flow (L/sec)	Release Rate (L/sec)	Storage Rate (L/sec)	Storage (m^3)	Rainfall Intensity, I (mm/hr)	Peak Flow (L/sec)	Release Rate (L/sec)	Storage Rate (L/sec)	Storage (m^3)	Rainfall Intensity, I (mm/hr)	Peak Flow (L/sec)	Release Rate (L/sec)	Storage Rate (L/sec)	Storage (m^3)
0	167.2	6.9	0.77	6.1	0.00	230.5	10.6	0.833	9.7	0.00	398.6	18.3	0.9	17.4	0.00
5	103.6	4.3	0.77	3.5	1.05	141.2	6.5	0.833	5.6	1.69	242.7	11.1	0.9	10.2	3.06
10	76.8	3.2	0.77	2.4	1.44	104.2	4.8	0.833	3.9	2.37	178.6	8.2	0.9	7.3	4.36
15	61.8	2.5	0.77	1.8	1.60	83.6	3.8	0.833	3.0	2.70	142.9	6.6	0.9	5.6	5.06
20	52.0	2.1	0.77	1.4	1.65	70.3	3.2	0.833	2.4	2.87	120.0	5.5	0.9	4.6	5.49
25	45.2	1.9	0.77	1.1	1.64	60.9	2.8	0.833	2.0	2.94	103.8	4.8	0.9	3.8	5.75
30	40.0	1.7	0.77	0.9	1.59	53.9	2.5	0.833	1.6	2.95	91.9	4.2	0.9	3.3	5.91
35	36.1	1.5	0.77	0.7	1.51	48.5	2.2	0.833	1.4	2.92	82.6	3.8	0.9	2.9	6.00
40	32.9	1.4	0.77	0.6	1.41	44.2	2.0	0.833	1.2	2.87	75.1	3.4	0.9	2.5	6.04
45	30.2	1.2	0.77	0.5	1.29	40.6	1.9	0.833	1.0	2.78	69.1	3.2	0.9	2.2	6.04
50	28.0	1.2	0.77	0.4	1.16	37.7	1.7	0.833	0.9	2.68	64.0	2.9	0.9	2.0	6.01
55	26.2	1.1	0.77	0.3	1.03	35.1	1.6	0.833	0.8	2.57	59.6	2.7	0.9	1.8	5.95
60	24.6	1.0	0.77	0.2	0.88	32.9	1.5	0.833	0.7	2.44	55.9	2.6	0.9	1.6	5.88
65	23.2	1.0	0.77	0.2	0.73	31.0	1.4	0.833	0.6	2.31	52.6	2.4	0.9	1.5	5.79
70	21.9	0.9	0.77	0.1	0.57	29.4	1.3	0.833	0.5	2.16	49.8	2.3	0.9	1.4	5.68
75	20.8	0.9	0.77	0.1	0.40	27.9	1.3	0.833	0.4	2.01	47.3	2.2	0.9	1.2	5.57
80	19.8	0.8	0.77	0.0	0.23	26.6	1.2	0.833	0.4	1.85	45.0	2.1	0.9	1.1	5.44
85	18.9	0.8	0.77	0.0	0.06	25.4	1.2	0.833	0.3	1.69	43.0	2.0	0.9	1.0	5.30
90	18.1	0.7	0.77	0.0	-0.11	24.3	1.1	0.833	0.3	1.52	41.1	1.9	0.9	1.0	5.16
95	17.4	0.7	0.77	-0.1	-0.29	23.3	1.1	0.833	0.2	1.35	39.4	1.8	0.9	0.9	5.01
100	16.7	0.7	0.77	-0.1	-0.47	22.4	1.0	0.833	0.2	1.17	37.9	1.7	0.9	0.8	4.85
105	16.1	0.7	0.77	-0.1	-0.65	21.6	1.0	0.833	0.2	0.99	36.5	1.7	0.9	0.7	4.68
110	15.6	0.6	0.77	-0.1	-0.84	20.8	1.0	0.833	0.1	0.81	35.2	1.6	0.9	0.7	4.52
115	15.0	0.6	0.77	-0.1	-1.02	20.1	0.9	0.833	0.1	0.62	34.0	1.6	0.9	0.6	4.34
120	14.6	0.6	0.77	-0.2	-1.21	19.5	0.9	0.833	0.1	0.43	32.9	1.5	0.9	0.6	4.16
Max =					**1.65**					**2.95**					**6.04**

Notes

1) Peak flow is equal to the product of 2.78 x C x I x A
2) Rainfall Intensity, I = $A/(Tc+C)^B$
3) Release Rate = Min (Release Rate, Peak Flow)
4) Storage Rate = Peak Flow - Release Rate
5) Storage = Duration x Storage Rate
6) Maximium Storage = Max Storage Over Duration

Table D8 Storage Volumes Roof Area #PR-2 (2 Year, 5 Year and 100 Year Storms) (MRM)

C_{AVG} = 0.90 (dimmensionless)
C_{100} = 1.00
Time Interval = 5 (mins)
Drainage Area = 0.01350 (hectares)

	Release Rate = 0.754 (L/sec) Return Period = 2 (years) IDF Parameters, A = 732.951, B = 0.810 (I = A/(T_c+C), C = 6.199					Release Rate = 0.8139 (L/sec) Return Period = 5 (years) IDF Parameters, A = 998.071, B = 0.814 (I = A/(T_c+C), C = 6.053					Release Rate = 0.9085 (L/sec) Return Period = 100 (years) IDF Parameters, A = 1735.69, B = 0.820 (I = A/(T_c+C), C = 6.014				
Duration (min)	Rainfall Intensity, I (mm/hr)	Peak Flow (L/sec)	Release Rate (L/sec)	Storage Rate (L/sec)	Storage (m^3)	Rainfall Intensity, I (mm/hr)	Peak Flow (L/sec)	Release Rate (L/sec)	Storage Rate (L/sec)	Storage (m^3)	Rainfall Intensity, I (mm/hr)	Peak Flow (L/sec)	Release Rate (L/sec)	Storage Rate (L/sec)	Storage (m^3)
0	167.2	5.6	0.75	4.9	0.00	230.5	8.6	0.814	7.8	0.00	398.6	15.0	0.9	14.1	0.00
5	103.6	3.5	0.75	2.7	0.82	141.2	5.3	0.814	4.5	1.35	242.7	9.1	0.9	8.2	2.46
10	76.8	2.6	0.75	1.8	1.10	104.2	3.9	0.814	3.1	1.86	178.6	6.7	0.9	5.8	3.48
15	61.8	2.1	0.75	1.3	1.20	83.6	3.1	0.814	2.3	2.09	142.9	5.4	0.9	4.5	4.01
20	52.0	1.8	0.75	1.0	1.20	70.3	2.6	0.814	1.8	2.19	120.0	4.5	0.9	3.6	4.31
25	45.2	1.5	0.75	0.8	1.16	60.9	2.3	0.814	1.5	2.21	103.8	3.9	0.9	3.0	4.48
30	40.0	1.4	0.75	0.6	1.08	53.9	2.0	0.814	1.2	2.18	91.9	3.4	0.9	2.5	4.57
35	36.1	1.2	0.75	0.5	0.97	48.5	1.8	0.814	1.0	2.11	82.6	3.1	0.9	2.2	4.60
40	32.9	1.1	0.75	0.4	0.85	44.2	1.7	0.814	0.8	2.03	75.1	2.8	0.9	1.9	4.59
45	30.2	1.0	0.75	0.3	0.72	40.6	1.5	0.814	0.7	1.92	69.1	2.6	0.9	1.7	4.54
50	28.0	0.9	0.75	0.2	0.58	37.7	1.4	0.814	0.6	1.80	64.0	2.4	0.9	1.5	4.48
55	26.2	0.9	0.75	0.1	0.43	35.1	1.3	0.814	0.5	1.66	59.6	2.2	0.9	1.3	4.39
60	24.6	0.8	0.75	0.1	0.27	32.9	1.2	0.814	0.4	1.52	55.9	2.1	0.9	1.2	4.28
65	23.2	0.8	0.75	0.0	0.11	31.0	1.2	0.814	0.4	1.37	52.6	2.0	0.9	1.1	4.16
70	21.9	0.7	0.75	0.0	-0.06	29.4	1.1	0.814	0.3	1.21	49.8	1.9	0.9	1.0	4.03
75	20.8	0.7	0.75	-0.1	-0.23	27.9	1.0	0.814	0.2	1.05	47.3	1.8	0.9	0.9	3.89
80	19.8	0.7	0.75	-0.1	-0.40	26.6	1.0	0.814	0.2	0.88	45.0	1.7	0.9	0.8	3.74
85	18.9	0.6	0.75	-0.1	-0.58	25.4	1.0	0.814	0.1	0.70	43.0	1.6	0.9	0.7	3.59
90	18.1	0.6	0.75	-0.1	-0.76	24.3	0.9	0.814	0.1	0.53	41.1	1.5	0.9	0.6	3.43
95	17.4	0.6	0.75	-0.2	-0.94	23.3	0.9	0.814	0.1	0.35	39.4	1.5	0.9	0.6	3.26
100	16.7	0.6	0.75	-0.2	-1.13	22.4	0.8	0.814	0.0	0.16	37.9	1.4	0.9	0.5	3.08
105	16.1	0.5	0.75	-0.2	-1.32	21.6	0.8	0.814	0.0	-0.02	36.5	1.4	0.9	0.5	2.91
110	15.6	0.5	0.75	-0.2	-1.51	20.8	0.8	0.814	0.0	-0.21	35.2	1.3	0.9	0.4	2.72
115	15.0	0.5	0.75	-0.2	-1.70	20.1	0.8	0.814	-0.1	-0.41	34.0	1.3	0.9	0.4	2.54
120	14.6	0.5	0.75	-0.3	-1.89	19.5	0.7	0.814	-0.1	-0.60	32.9	1.2	0.9	0.3	2.35
Max =					**1.20**					**2.21**					**4.60**

Notes

1) Peak flow is equal to the product of 2.78 x C x I x A
2) Rainfall Intensity, I = $A/(Tc+C)^B$
3) Release Rate = Min (Release Rate, Peak Flow)
4) Storage Rate = Peak Flow - Release Rate
5) Storage = Duration x Storage Rate
6) Maximium Storage = Max Storage Over Duration

WATTS®	Adjustable Accutrol Weir Tag: _____	Adjustable Flow Control for Roof Drains

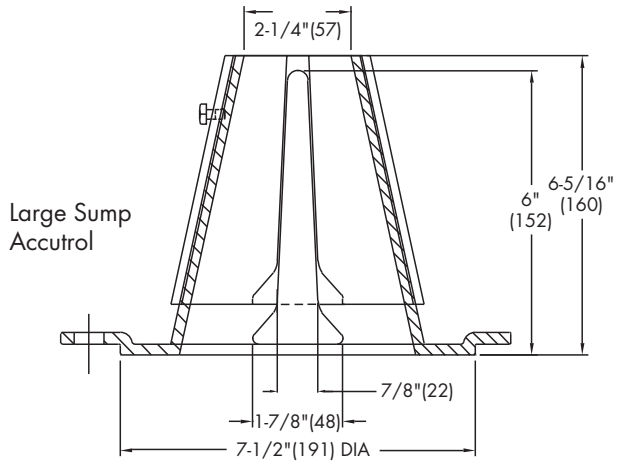
ADJUSTABLE ACCUTROL (for Large Sump Roof Drains only)

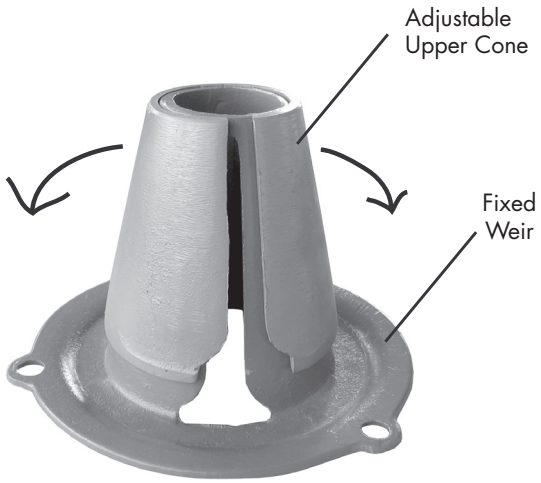
For more flexibility in controlling flow with heads deeper than 2", Watts Drainage offers the Adjustable Accutrol. The Adjustable Accutrol Weir is designed with a single parabolic opening that can be covered to restrict flow above 2" of head to less than 5 gpm per inch, up to 6" of head. To adjust the flow rate for depths over 2" of head, set the slot in the adjustable upper cone according to the flow rate required. Refer to Table 1 below.
Note: Flow rates are directly proportional to the amount of weir opening that is exposed.

EXAMPLE:

For example, if the adjustable upper cone is set to cover 1/2 of the weir opening, flow rates above 2"of head will be restricted to 2-1/2 gpm per inch of head.

Therefore, at 3"of head, the flow rate through the Accutrol Weir that has 1/2 the slot exposed will be:
[5 gpm (per inch of head) x 2 inches of head] + 2-1/2 gpm (for the third inch of head) = 12-1/2 gpm.





1/2 Weir Opening Exposed Shown Above

TABLE 1. Adjustable Accutrol Flow Rate Settings

Weir Opening Exposed	1"	2"	3"	4"	5"	6"
	Flow Rate (gallons per minute)					
Fully Exposed	5	10	15	20	25	30
3/4	5	10	13.75	17.5	21.25	25
1/2	5	10	12.5	15	17.5	20
1/4	5	10	11.25	12.5	13.75	15
Closed	5	5	5	5	5	5

Job Name _____ Contractor _____

Job Location _____ Contractor's P.O. No. _____

Engineer _____ Representative _____

USA: Tel: (800) 338-2581 • Fax: (828) 248-3929 • Watts.com
Canada: Tel: (905) 332-4090 • Fax: (905) 332-7068 • Watts.ca
Latin America: Tel: (52) 81-1001-8600 • Fax: (52) 81-8000-7091 • Watts.com

WATTS®
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EXP Services Inc.
12542340 Canada Limited
1144 St. Pierre Street, Ottawa, ON
OTT-25011125-A0
May 25, 2026

Appendix E – Additional Information

Pre-Consultation: Meeting Feedback

File No.: PC2025-0294

November 25, 2025

Alison Clarke / Peter Hume
HP Urban Inc.
Via email: alison@tsgdi.ca

Subject: Pre-Consultation: Meeting Feedback
Proposed Site Plan Control Application – 1144 St. Pierre Street

Please find below information regarding next steps as well as consolidated comments from the above-noted pre-consultation meeting held on November 17, 2025.

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

Comments:

1. The site is zoned R5A[2179]H(40), "Residential Fifth Density Subzone A with exception 2179, and a maximum building height of 40metres" of the City's Zoning By-law. As per the Urban Exception 2179 (By-law 2015-49), a minimum 4-storey building height for residential and/or office development is required on any lot greater than 600 m^2.

2. Per the Official Plan (2022) the subject property is in the Suburban Transect and is designated Neighbourhood with an Evolving Neighbourhood Overlay. The site is designated Station Periphery in the Orléans Corridor Secondary Plan.

3. The site is situated within the 'Residential' designation of the St. Joseph Street Corridor Study Area (2003) with the goal of building a compact city by infilling

already developed areas, adding more housing options, including medium density housing in proximity to shopping facilities, and reducing minimum parking requirements.

4. Staff note that the submitted materials are same as the recently approved plans of 1132 St. Pierre. Therefore, there is no functional issues with the proposal or the proposed use.

5. Planning staff appreciate the developer's intent to make 30% of the residential units affordable. The City of Ottawa's 10-Year Housing and Homelessness Plan aims to create 5,700 to 8,500 affordable housing options throughout Ottawa through partnerships with not-for-profit and private housing providers.

6. A Planning Rationale is required that demonstrates how the new development will be consistent with the vision, goals, and objectives of both the Official Plan and Secondary Plan. This report is triggered by Section 4.1.1 of the Secondary Plan.

7. S.4.12(1) of the Secondary Plan provides a minimum bicycle parking rate of 1 bike parking space per dwelling unit. Please ensure that 20 total bike parking spaces are provided on the site in accordance with Section 111 of the Zoning By-law and the Secondary Plan.

8. A minimum of 50% of the bicycle parking spaces required by the Zoning By-law must be horizontal spaces at ground level.

9. The minimum vehicle parking space dimensions should be compliant with the Section 106. (By-law 2021-215)

10. The minimum visitor parking space rate is 0.1 per dwelling unit. No visitor parking spaces are required for the first twelve dwelling units on a lot as per Section 102.2. of the Zoning by-law.

11. Building Elevations must be clearly shown in metric as per City's Terms of Reference.

12. The amenity area requirements should comply with the Section 137. Based on 20 units, minimum of 120 m^2 of amenity area is required in total for the site, with 50% of the required total amenity area provided as communal amenity area.

13. Please note that Permitted Projections (s.65) does not apply to accessory structures. Eaves attached to the accessory structure in the rear yard cannot project within the required setbacks from the lot lines. The accessory structure, including its eaves, must be setback from the rear lot line in accordance with Section 55(3)(e)(ii).

Feel free to contact Sera Celebi, Planner and/or Phil Castro, Senior Planner, for follow-up questions.

Urban Design

Comments:

Submission Requirements

14. No Urban Design Brief is required for this application as an identical proposal has already received Site Plan approval.

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

a. Site Plan

b. Landscape Plan

Other Comments

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

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

Engineering

Comments:

1. The Stormwater Management Criteria, for the subject site, is to be based on the following:
    a. **Water Quality Control**:
        i. Characterize the water quality to be protected and Stormwater Contaminants (e.g., suspended solids, nutrients, bacteria, water Page 7 of 22 temperature) for potential impact on the Natural Environment, and control as necessary.
        ii. Provide Enhanced level of protection (80%) for suspended solids removal.
        iii. If an Oil/Grit Separator will be required the OGS unit sizing shall be as per ISO 14034 Environmental Technology Verification.
    b. **Water Quantity Control**: Control post-development runoff from the subject site, up to and including the 100-year storm event, to the pre-development level.

i. All post development flows shall be directed towards the street. Absolutely no drainage to neighbouring properties will be accepted.

ii. Considering the size of the site, it would be acceptable to control the roof area to a 2-year pre-development level and leave the remainder of the site uncontrolled, as long as all runoff from the site flows towards the right of way. Ensure that the storm water does not flows towards the neighboring properties. Please note this is a site-specific criterion and should not set precedence on other sites.

iii. The pre-development runoff coefficient will need to be determined as per existing conditions but in no case more than 0.5. [If 0.5 applies it needs to be clearly demonstrated in the report that the pre-development runoff coefficient is greater than 0.5].

iv. The time of concentration (Tc) used to determine the pre-development condition should be calculated. Tc should not be less than 10 min. since IDF curves become unrealistic at less than 10 min; Tc of 10 minutes shall be used for all post-development calculations.

c. 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.

d. Ponding Notes:
   i. 100-year spill elevation must be 300mm lower than any building opening or ramp.
   ii. Demonstrate that the stress test spill elevation (100-year +20% event) does not spill onto any permanent structures.
   iii. The maximum permissible ponding depth for the 100-year storm event is 350mm. No spilling to adjacent sites.
   iv. Please note that as per Technical Bulletin PIEDTB-2016-01 section 8.3.11.1 (p.12 of 14) there shall be no surface ponding on private parking areas during the 2-year storm rainfall event. 100-year spill elevation must be 300mm lower than any building opening or ramp

e. 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.

f. 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.

g. If rooftop control and storage is proposed as part of the SWM solutions, sufficient details (Cl. 8.3.8.4) shall be discussed and documented 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.

2. Sanitary Sewer

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

    b. Include correspondence from the Architect within the Appendix of the report confirming the number of residential units per building and a unit type breakdown for each of the buildings to support the calculated building populations.

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

    d. 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.

3. Water:

    a. Water Supply Redundancy: Residential buildings with a basic day demand greater than 50m3/day (0.57 L/s) or with 50+ units are required to be connected to a minimum of two water services, with each their own meter, separated by an isolation valve to avoid a vulnerable service area.

    b. District Metering Area (DMA) Chamber(s) are required for private developments serviced by a connection 150 mm or larger or when there are two or more private connections to the public watermain

    c. The note below regarding the water boundary condition request should be completed as soon as possible as this area has limited water capacity which may affect the feasibility of this development.

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

        i. Plan showing the proposed location of service(s).

ii. Type of development and the amount of fire flow required (L/min). Note: The OBC method can be used if the fire demand for the private property is less than 9,000 L/min. If the OBC fire demand reaches 9000 L/min, then the FUS method is to be used.

iii. Average daily demand: __L/s.

iv. Maximum daily demand: __L/s.

v. Maximum hourly daily demand: __L/s.

vi. Note: Use Table 3-3 of the MOE Design Guidelines for Drinking-Water System to determine Maximum Day and Maximum Hour peaking factors for 0 to 500 persons and use Table 4.2 of the Ottawa Design Guidelines, Water Distribution for 501 to 3,000 persons.

e. 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.**

f. A Water Data Card will have to be submitted to size the water meter.

g. Any proposed emergency route is to be to the satisfaction of Fire Services. Please note that a siamese connection needs to be within 45m from an existing fire hydrant as per (OBC 2024 – 3.2.5.15 Fire Department Connections).

4. General Servicing

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. 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 extent of the overlay must be shown on the grading plan or a road reinstatement plan.

c. CCTV sewer inspection of city infrastructure is required to record pre and post construction conditions and ensure there is no damage to City Assets.

d. Connections to trunk sewers, easement sewers and backbone watermains are typically not permitted.

e. Sewer connections to be made above the springline of the sewer main 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 (For rigid main sewers) – lateral must be less that 50% the diameter of the sewermain.

   iv. No submerged outlet connections.

f. See Terms of Reference for Site Servicing Study: https://documents.ottawa.ca/sites/default/files/site_servicing_tor_en.pdf

g. See Servicing study guidelines for development applications: https://documents.ottawa.ca/sites/default/files/service_guide_dev_apps_en.pdf

h. See Servicing and Grading Plan Requirements: https://documents.ottawa.ca/sites/default/files/servicing_grading_require_en-AODA.pdf

5. Grading and Erosion

   a. 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 making reference to the survey and noting the geodetic datums used.

   b. Erosion and sediment control plan must be provided.

   c. 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).

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

e. Depressed driveways are discouraged and are not allowed in sag locations. For other locations, the builder must ensure that the maximum depth of flow on the street during the 100-year and stress test events will not spill onto the depressed driveway.

f. 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.

g. Rear yard at 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.

h. See Terms of Reference for Grading and Drainage Plan Submission: https://documents.ottawa.ca/sites/default/files/grading_drainage_plan_tor_en.pdf

6. Environmental

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. A remediation plan may be required as per the outcome of the Phase one study. If required, a complete Phase Two study with the remediation activities will need to be submitted for our review.

d. See Terms of Reference for ESA (1 & 2) submission: https://documents.ottawa.ca/sites/default/files/environmental_assess_1and2_en.pdf

e. See section 10.1.6 within the official plan for more information. Official Plan: Section 10. Protection of Health and Safety (ottawa.ca)

7. Environmental Compliance Approval

a. The consultant shall determine if this project will be subject to an Environmental Compliance Approval (ECA) for Private Sewage Works. It shall be determined if the exemptions set out under Ontario Regulation

525/98: *Approval Exemptions* are satisfied. All regulatory approvals shall be documented and discussed in the report.

8. Geotechnical

    a. A Geotechnical Study/Investigation shall be prepared in support of this development proposal.

    b. Reducing the groundwater level in this area can lead to potential damages to surrounding structures due to excessive differential settlements of the ground. The impact of groundwater lowering on adjacent properties needs to be discussed and investigated to ensure there will be no short term and long-term damages associated with lowering the groundwater in this area.

    c. Geotechnical Study shall be consistent with the Geotechnical Investigation and Reporting Guidelines for Development Applications. Geotechnical Investigation and Reporting (ottawa.ca)

    d. If Sensitive marine clay soils are present in this area that are susceptible to soil shrinkage that can lead to foundation and building damages. All six (6) conditions listed in the Tree Planting in Sensitive Marine Clay Soils-2017 Guidelines are required to be satisfied. Note that if the plasticity index of the soil is determined to be less than 40% a minimum separation between a street tree and the proposed building foundations of 4.5m will need to be achieved. A memorandum addressing the Tree in Clay Soil Guidelines prepared by a geotechnical engineer is required to be provided to the City. Tree Planting in Sensitive Marine Clay Soils - 2017 Guidelines (ottawa.ca)

9. Slope Stability Assessment Reports

    a. A report addressing the stability of slopes, prepared by a qualified geotechnical engineer licensed in the Province of Ontario, should be provided wherever a site has slopes (existing or proposed) steeper than 5 horizontal to 1 vertical (i.e., 11 degree inclination from horizontal) and/or more than 2 meter in height.

    b. A report is also required for sites having retaining walls greater than 1 meter high, that addresses the global stability of the proposed retaining walls.

    c. See Terms of Reference for Slope Stability Submission: https://documents.ottawa.ca/sites/default/files/slope_stability_tor_en.pdf

10. Exterior Site Lighting

    a. Any proposed light fixtures (both pole-mounted and wall mounted) must be part of the approved Site Plan. All external light fixtures must be designed

using only fixtures that meet the criteria for full cut-off (sharp cut-off) classification, as recognized by the Illuminating Engineering Society of North America (IESNA or IES); and it 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.

11. Regarding Quantity Estimates

    a. Please note that external Garbage and/or bicycle storage structures are to be added to QE under Landscaping as it is subject to securities. In addition, sump pumps for Sanitary and Storm laterals and/or cisterns are to be added to QE under Hard items as it is subject to securities, even though it is internal and is spoken to under SWM and Site Servicing Report and Plan.

    b. Quantity estimate dollar values are to be consistent with the most up to date Master Spec Code List provided by the City of Ottawa.

12. 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. As-built plans (if available) can be requested for a fee by contacting geoinformation@ottawa.ca.

    d. 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.

    e. **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.

Please refer to the City of Ottawa Guide to Preparing Studies and Plans [Engineering]: Planning application submission information and materials. The guide outlines the requirement for a statement to be provided on the plan about where the property boundaries have been derived from.

Feel free to contact Terenzo Giovannitti, Infrastructure Project Manager, for follow-up questions.

Noise

Comments:

17. Noise study is not required.

Transportation

Comments:

18. Follow Transportation Impact Assessment Guidelines:

a. A Transportation Impact Assessment (TIA) is not required.

b. Complete and submit the Transportation Demand Management Measures Checklist and the Transportation Demand Management Supportive Development Design and Infrastructure Checklist in support of the application.

19. ROW Protection:

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

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

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

20. Existing Road Network Features

a. The site is within proximity of the following arterials/collectors, as per the OP:

    i. Arterial (6 UAU)

21. Planned Improvements

a. Transportation Master Plan includes:

    i. St Joseph Boulevard Road Urbanization and Main Street Improvement

    ii. St Joseph Boulevard Cycling

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

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

b. Clearly define accessible parking stalls and ensure they meet AODA standards (include an access aisle next to the parking stall and a pedestrian curb ramp at the end of the access aisle, as required). Ensure a clear path of travel (defined in AODA standards) is provided from the parking stalls to an access door.

c. It is strongly advised to use the City's Accessibility Design Standards, which provide a summary of AODA requirements.

23. On site/concept plan:

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

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

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

d. Parking stalls at the end of dead-end parking aisles require adequate turning around space and should meet the City's Zoning Bylaw Aisle and Driveway Provisions (Section 107).

e. Grey out any area that will not be impacted by this application.

24. Turning Movement Diagrams

a. Turning movement diagrams required for all accesses showing the largest vehicle to access/egress the site and using the parking spaces.

Feel free to contact Becca Conrod, Transportation Project Manager, for follow-up questions.

Environment

Comments:

25. No Environmental Impact Statement (EIS) is required.

26. The addition of trees, where feasible is encouraged. As per Section 4.8.2 of the Official Plan, the city has a long-term urban forest canopy target of forty percent (40%) to help with climate resiliency, health and well-being, and other

environmental benefits. The undersigned looks forward to reviewing a Landscape Plan with any future development submission. Please refer to the City of Ottawa, Landscape Terms of Reference.

27. Please be aware, that based on the Natural Heritage Information Centre (NHIC) information, Butternut trees and Black Ash trees may be present within the general area (i.e., species at risk). The Landscape Plan will help staff determine the relevance of this item.

Feel free to contact Kim Macdonald, Environmental Planner, for follow-up questions.

Forestry

Comments:

28. A Landscape Plan (LP) and Tree Conservation Report (TCR) are submission requirements for a Site Plan Control application.

29. Adjacent and boundary own trees are protected under the By-law. Design your site to not impact trees of this description. Keep excavation, grading and engineering features away from these trees. If removal is unavoidable, written consent from the adjacent neighbour would need to be provided for the City to release a tree removal permit. If written permission is not provided, the tree removal permit will not be released, and the project therefore cannot be completed as shown.

30. The secondary plan notes most of the area is underlain with Sensitive Marine Clay (SMC) soils. Complete geotechnical investigations as early as possible to ensure adequate space and soil volume is provided for tree planting, as required by the Official Plan. Prepare the LP in conjunction with the Geotechnical Report.

31. Ensure there is enough space for tree planting in the front yard as required by the OP Section 4.1.3 to incorporate tree planting along street frontages. The SMCs present will have implications so plan accordingly. The tree should be 2.5m for the curb if possible. Dimension the distance of proposed trees from foundation and curb.

32. Reduce hardscaping/paving in the rear yard. Consider Plannings suggestion to move the parking space to the side yard. Move bike parking so that it does not conflict with suitable areas for tree planting.

33. If terracing can be used in place of retaining walls, it will improve permeability of site and rooting space for trees proposed and trees of the future.

Tree Conservation Report 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 hayley.murray@ottawa.ca

34. A Tree Conservation Report (TCR) must be supplied for review along with the suite of other plans/reports required by the City

35. Any tree 10 cm in diameter or greater and 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.

36. The TCR must contain 2 separate plans/maps:

37. Plan/Map 1 - show existing conditions with tree cover information.

38. Plan/Map 2 - show proposed development with tree cover information.

39. 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. Please note that averages can be used if there are forested areas.

40. Please identify trees by ownership – private onsite, private on adjoining site, city owned, co-owned (trees on a property line)

41. If trees are to be removed, the TCR must clearly show where they are, and document the reason they cannot be retained.

42. The removal of trees on a property line will require the permission of both property owners.

43. 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

44. 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.

45. Removal of a City tree is not permitted unless justified. If justified, monetary compensation for the value of the tree must be paid before a tree removal permit is issued.

Landscape Plan (LP) requirements.

46. Landscape Plan Terms of Reference must be adhered to for all tree planting: Click Here. For more information on these requirements please contact hayley.murray@ottawa.ca

Additional Elements for Tree Planting in the Right of Way:

47. Please ensure any retained trees are shown on the LP

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

49. 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 minimum soil volumes requested.

50. The city requests that consideration be given to planting native species wherever there is a high probability of survival to maturity.

51. 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

Minimum Setbacks

52. Maintain 1.5m from sidewalk or MUP/cycle track or water service laterals.

53. Maintain 2.5m from curb

54. Coniferous species require a minimum 4.5m setback from curb, sidewalk, or MUP/cycle track/pathway.

55. 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.

56. Adhere to Ottawa Hydro's planting guidelines (species and setbacks) when planting around overhead primary conductors.

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.

c. 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.

d. No root barriers, dead-man anchor systems, or planters are permitted.

e. No tree stakes unless necessary (and only 1 on the prevailing winds side of the tree)

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

Parkland

Comments:

57. Cash-in-lieu of Parkland (CILP) will apply to this application, at the rate specified in the Parkland Dedication By-law No.2022-280 (as amended):

a. This proposal is for a residential development of greater than 18 units per net hectare.

b. Where the property is less than or equal to five hectares, the rate for residential uses > 18 units/net ha = the land value of the area determined by the following calculation:

    i. The lesser of:

        1. 1 hectare per 1,000 net residential units; or

        2. 10% of the gross land area.

c. Cash in lieu of parkland amount will then be calculated using the appraised value of the land per square metre.

58. CILP payment will be due prior to the issuance of a Building Permit.

59. Please note that the parkland dedication calculation provided is preliminary and is subject to change upon receipt of the development application and supporting documentation. The parkland dedication requirement will also be re-evaluated should any of the details of the proposal be modified.

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

Other

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

    a. The HPDS was passed by Council on April 13, 2022, but is not in effect at this time, as Council has referred the 2023 HPDS Update Report back to staff with the direction to bring forward an updated report to Committee at

a later date. The timing of an updated report to Committee is unknown at this time, and updates will be shared when they are available.

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

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

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

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

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

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

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

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

Submission Requirements and Fees

1. Outlines the application type/subtype required and the associated fees
   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,
Sera Celebi

c.c. Phil Castro, Senior Planner
Christopher Moise, Urban Design
Becca Conrod, Transportation Project Manager
Terenzo Giovannitti, Senior Infrastructure Project Manager
Kris Haynes, Senior Infrastructure Project Manager
Hayley Murray, Forester, Planning
Kim Macdonald, Environmental Planner

EXP Services Inc.
12542340 Canada Limited
1144 St. Pierre Street, Ottawa, ON
OTT-25011125-A0
May 25, 2026

Appendix F – Drawings

Topographical Survey

Architectural Plans

C000 - Notes & Details

C001 - Existing Conditions and Removals Plan

C100 - Site Servicing Plan

C200 - Site Grading Plan

C300 - Erosion and Sediment Control Plan

C400 – Pre-Development Site Catchments

C500 - Post-Development Site Catchments

TOPOGRAPHIC PLAN OF SURVEY OF

LOT 27
WEST SIDE ST. PIERRE STREET
REGISTERED PLAN 86
CITY OF OTTAWA

Surveyed by Annis, O'Sullivan, Vollebekk Ltd.

Scale 1 : 150

6 4.5 3.0 1.5 0 3 6 Metres

Metric

DISTANCES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048

Surveyor's Certificate

I CERTIFY THAT :

1. This survey and plan are correct and in accordance with the Surveys Act, the Surveyors Act and the regulations made under them.
2. The survey was completed on the 12th day of November, 2025.

Nov. 13, 2025
Date

T. Hartwick
Ontario Land Surveyor

Notes & Legend

Denotes		Survey Monument Planted
"		Survey Monument Found
SIB	"	Standard Iron Bar
SSIB	"	Short Standard Iron Bar
IB	"	Iron Bar
IBø	"	Round Iron Bar
IP	"	Iron Pipe
(WIT)	"	Witness
Meas.	"	Measured
(AOG)	"	Annis, O'Sullivan, Vollebekk Ltd.
(PI)	"	Registered Plan 86
(P2)	"	Plan 5R-951
(P3)	"	Plan 5R-2318
(P4)	"	(AOG) Plan dated May 26, 1987
(P5)	"	(AOG) Plan dated June 21, 2023
(P6)	"	(990) Plan dated May 4, 1976
(DI)	"	Inst. N620745
C/L	"	Centreline
CLF	"	Chain Link Fence
BF	"	Board Fence
RWC	"	Concrete Retaining Wall
EOA	"	Edge of Asphalt
Inv.	"	Invert
T/G	"	Top of Grate
CB	"	Catch Basin
MH-ST	"	Maintenance Hole (Storm Sewer)
MH-S	"	Maintenance Hole (Sanitary)
ST	"	Underground Storm Sewer
S	"	Underground Sanitary Sewer
W	"	Underground Water
G	"	Underground Gas
OHW	"	Overhead Wires
UP	"	Utility Pole
AN	"	Anchor
	"	Deciduous Tree
	"	Coniferous Tree
ø	"	Diameter
65.00	"	Location of Elevations
+65.00	"	Location of Top of Wall Elevations

ASSOCIATION OF ONTARIO LAND SURVEYORS
PLAN SUBMISSION FORM
V-117340

THIS PLAN IS NOT VALID UNLESS IT IS AN EMBOSSED ORIGINAL COPY ISSUED BY THE SURVEYOR In accordance with Regulation 1026, Section 29 (3).

Bearings are grid, derived from Can-Net 2016 Real Time Network GPS observations and are referenced to Specified Control Points 01919680184 and 01919834761, MTM Zone 9 (76°30' West Longitude) NAD-83 (original).

For bearing comparisons, a rotation of 0°00'50" clockwise was applied to bearings on plan (P2), (P3) and (P4).

ELEVATION NOTES

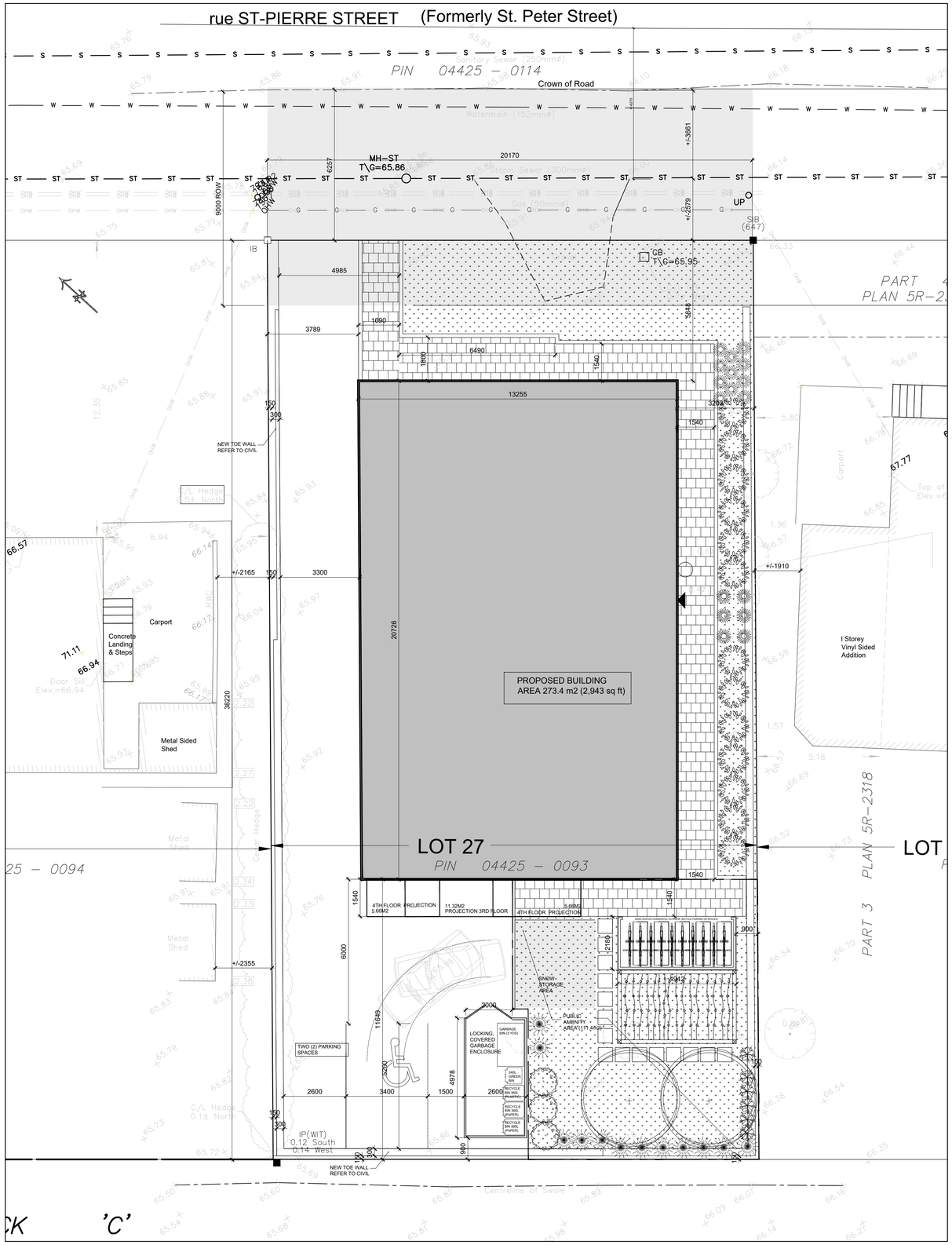
1. Elevations shown are geodetic, derived from City of Ottawa Control Monument No. 2016-0027, having a published elevation of 61.165 metres, and are referred to the CGVD28 geodetic datum.
2. It is the responsibility of the user of this information to verify that the job benchmark has not been altered or disturbed and that it's relative elevation and description agrees with the information shown on this drawing.

UTILITY NOTES

1. This drawing cannot be accepted as acknowledging all of the utilities and it will be the responsibility of the user to contact the respective utility authorities for confirmation.
2. Only visible surface utilities were located.
3. Underground utility data derived from City of Ottawa Utility Coordination Committee sheet no. C-31-23
4. Sanitary and storm sewer grades and inverts were derived from City of Ottawa Utility drawing No. 70.1677-01-11. and from City of Ottawa's geoOttawa interactive map tool (November 10, 2025).
5. A field location of underground plant by the pertinent utility authority is mandatory before any work involving breaking ground, probing, excavating etc.

ANNIS, O'SULLIVAN, VOLLEBEKK LTD.
14 Concourse Gate, Suite 500
Nepean, Ont. K2E 7S6
Phone: (613) 727-0850 / Fax: (613) 727-1079
Email: Nepean@aovltd.com
Ontario Land Surveyors

Job No. 25595-25 Nemorin Lt27 RP86 O F | ISW



1 A-100 SITE PLAN
SCALE = 1 : 100

ZONE MECHANISM	ZONE PROVISION DEVELOPMENT	PROPOSED	IN COMPLIANCE (YES/NO)
MINIMUM LOT AREA (M²)	540 M²	779.77m2	YES
MINIMUM LOT WIDTH	18 M	20.17M	YES
MINIMUM FRONT YARD SETBACK	6 M	6.224 M	YES
MINIMUM PERCENTAGE OF LANDSCAPED AREA FOR LOT THAT CONTAINS PARTMENT DWELLING - MID-RISE, HIGH-RISE OR LOW-RISE, STACKED DWELLING, RETIREMENT HOME, OR PLANNED UNIT DEVELOPMENT	30%	OVER 30%	YES (38%)
MINIMUM CORNER SIDE YARD SETBACK (NOT APPLICABLE)	4.5 M	N/A	N/A
MINIMUM REAR YARD SETBACK	6M	11.73 M	YES
MINIMUM INTERIOR SIDE YARD SETBACK	3 M	3 M	YES
MAXIMUM BUILDING HEIGHT	15 M	14.8 M	YES
MAXIMUM FLOOR SPACE INDEX	NONE	N/A	N/A
MINIMUM WIDTH OF LANDSCAPED AREA AROUND A PARKING LOT (SECTION 110)	NONE (NOT ABUTTING A STREET)	NONE	YES
MINIMUM PARKING	ONE VISITOR PARKING SPACE	2 SPACES (1 ACCESSIBLE)	YES
MINIMUM BICYCLE PARKING (SECTION 111)	1.0 PER DWELLING UNIT (20 REQUIRED)	20 OUTDOOR-COVERED	YES

GENERAL NOTES:

1. REFER TO SURVEY BY ANNIS, O'SULLIVAN, VOLLEBEKK LTD.
2. PROPERTY BOUNDARIES HAVE BEEN ESTABLISHED FROM SURVEY PREPARED BY ANNIS, O'SULLIVAN, VOLLEBEKK LTD. JUNE 7, 2024.
1. ALL GRADES TO MATCH EXISTING UNLESS OTHERWISE INDICATED ON NEW CONSTRUCTION CIVIL PLANS. NEW GRADES TO TIE INTO EXISTING GRADES. REFER TO CIVIL DRAWINGS.
2. CURBS AND LANDSCAPING SHOWN OUTSIDE OF PROPERTY LINE AND IN EXISTING NATURAL ZONE ARE SHOWN FOR INFORMATION PURPOSES ONLY. SITE VERIFICATION OF ALL CONDITIONS REQUIRED.
3. REFER TO LANDSCAPE ARCHITECT'S DRAWINGS FOR ALL NEW LANDSCAPING AND ANY REQUIRED TREE PRESERVATION.
4. ALL NOTES ARE AS PER CITY/ PROVINCIAL STANDARDS, GUIDELINES, BY-LAWS AND DETAIL DRAWINGS.
5. REFER TO DEMOLITION SITE PLAN FOR ADDITIONAL INFORMATION.

LOT DESCRIPTION:

PIN: 04425 - 0093
LOT 27; AS IN N620745; GLOUCESTER
REGISTERED PLAN 86
CITY OF OTTAWA

AMENITIES

	AREA	QUANTITIES	AREAS (m²)	REQUIRED (m²)	PROPOSED (m²)
AMENITIES	6.0	20		120.0	124.74
BALCONY 3RD	5.66	2	11.32		11.32
BALCONY 4TH	5.66	2	11.32		11.32
OUTDOOR	62	1	111.4	60.00	111.4

PROJECT INFORMATION

PROJECT: NEW LOW RISE STACKED APARTMENT DWELLING

MUNICIPAL ADDRESS: 1144 ST-PIERRE ST, ORLEANS (OTTAWA), ON K1C 1L5

PIN:

ZONING USE: R5A -R5A[2179]H(40), RESIDENTIAL ZONE 5, APARTMENT DWELLING, LOW RISE, STACKED

PROPOSED CONSTRUCTION: NEW 4 - STOREY BUILDING

PROPOSED USE: APARTMENT DWELLING, LOW RISE, STACKED

BUILDING HEIGHT: ± 14980m (± 491.5')

GROSS FLOOR AREA: : 1,042m² (11,214.51 SQ FT)

SITE AREA: 8,392.6 SQ FT (779.7m²)

PARKING STATISTICS:

STANDARD PARKING:
1 SPACE OF 2.6m W x 5.2m L
(8' - 7" W x 17' - 0" L)

ACCESSIBLE PARKING:
1 SPACE OF 3.66m W X 5.2m L
(12' - 0" W x 17' - 0" L)

TOTAL PARKING SPACES: 2

BICYCLE PARKING: 20 COVERED, HORIZONTAL

LANDSCAPING:
REQUIRED 15% OF PARKING AREA

TOTAL PARKING AREA: 123.2 m²
15% LANDSCAPING REQUIRED: 18.48 m²

AMENITY AREA PROVIDED: 111.4m²

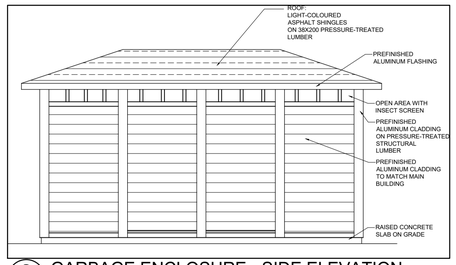
TOTAL LANDSCAPED AREAS PROVIDED: 283.8 m²

LEGEND

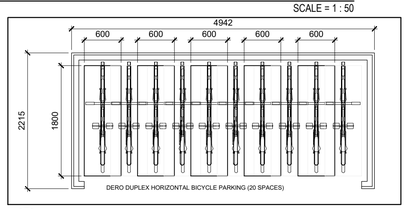
INTERLOCKING PAVERS

LAWN

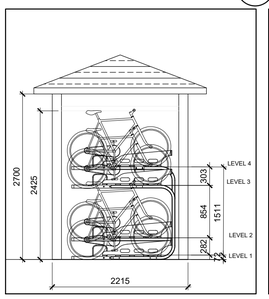
DENOTES THE EXTENT FOR THE AMENITY AREA



2 A-100 GARBAGE ENCLOSURE - SIDE ELEVATION
SCALE = 1 : 50



6 A-100 BICYCLE PARKING PLAN
SCALE = 1 : 50



8 A-100 BICYCLE PARKING CROSS SECTION
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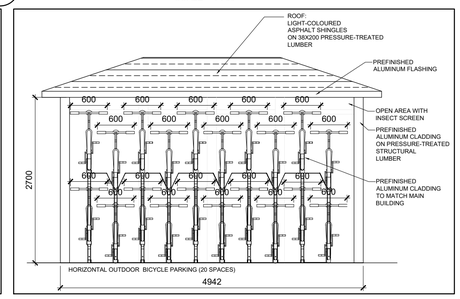
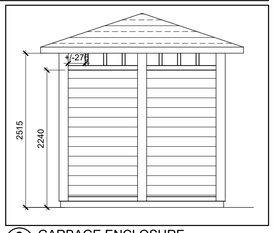
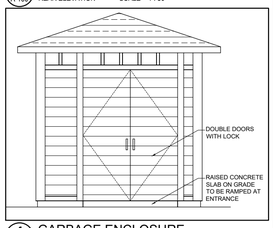


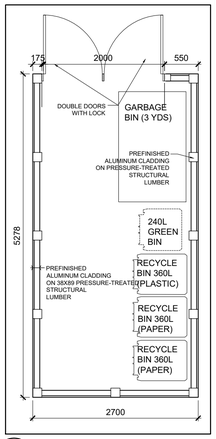
7 A-100 BICYCLE PARKING INTERIOR ELEVATION
SCALE = 1 : 50



3 A-100 GARBAGE ENCLOSURE
REAR ELEVATION SCALE = 1 : 50



4 A-100 GARBAGE ENCLOSURE
FRONT ELEVATION SCALE = 1 : 50



5 A-100 GARBAGE ENCLOSURE - PLAN
SCALE = 1 : 50

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Ottawa, Ontario K1Y 0Y2

MECHANICAL + ELECTRICAL

STRUCTURAL

CIVIL

DATE	DESCRIPTION	ISSUE. REV.
2026-04-01	ISSUED FOR REVIEW	4
2026-03-17	ISSUED FOR REVIEW	3
2026-03-10	ISSUED FOR REVIEW	2
2025-12-10	ISSUED FOR REVIEW	1

PROJECT NAME

NEMORIN

1144 St. Pierre St, Ottawa, ON

DRAWING TITLE

SITE PLAN

DATE 25.11.2025

PROJECT NO. 25.019

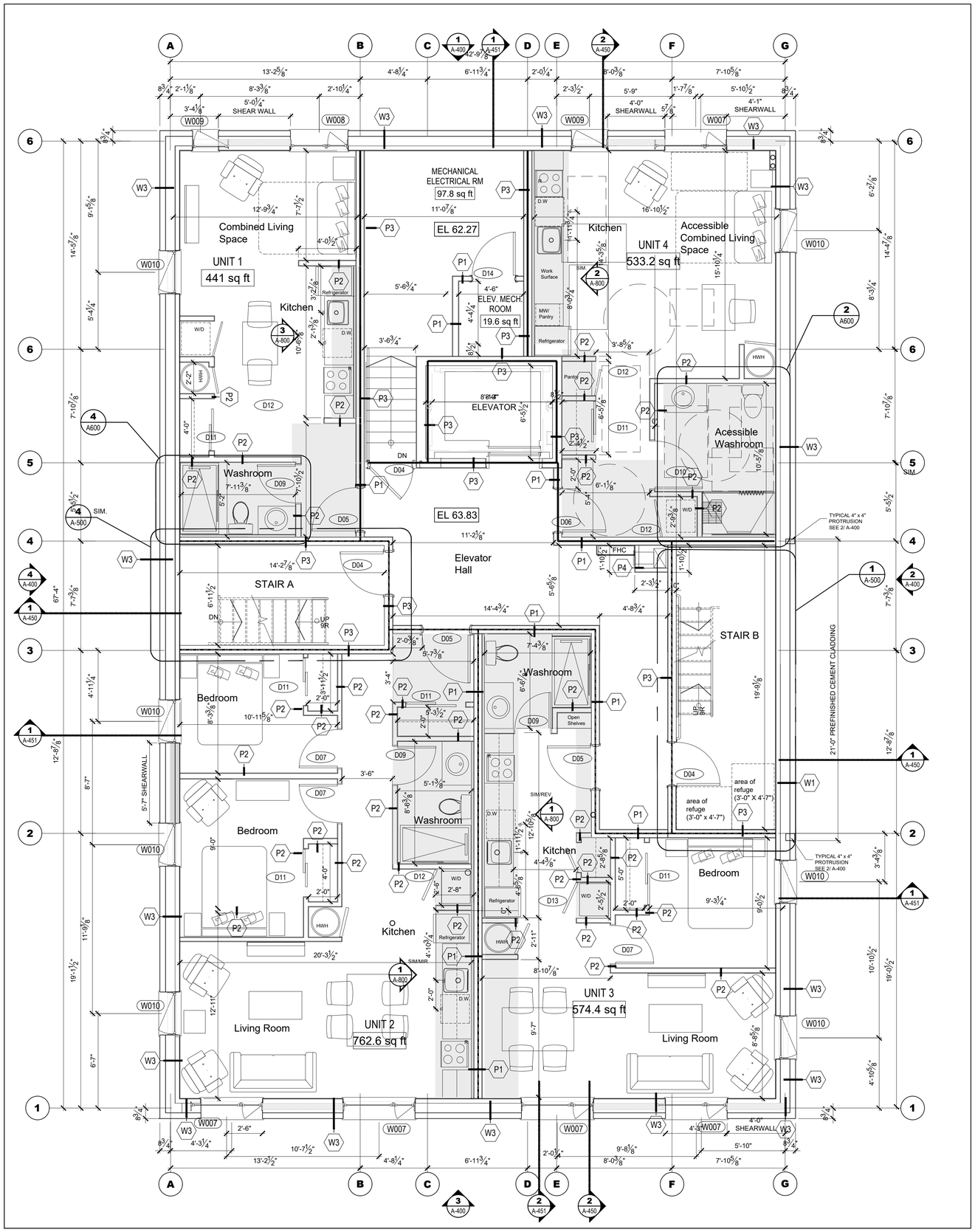
SCALE AS NOTED

DRAWN BY MD

DRAWING NO. A-100

REVIEWED BY LCL

FILE NUMBER ???? / PLAN NUMBER # ???



1 BASEMENT FLOOR PLAN
A-200
SCALE = 1/4" = 1'-0"

GENERAL NOTES :

1. FOR ALL TECHNICAL ISSUE OR QUESTIONS, CONTACT THE ARCHITECT BEFORE CONTINUING THE WORK
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LEGEND

- DENOTES 1-HOUR FIRE-RATED PARTITION
- DENOTES STRUCTURAL MEMBERS - REFER TO STRUCTURAL
- DENOTES BULKHEAD TO ACCOMMODATE MECHANICAL DUCTING. UNDERSIDE OF BULKHEADS TO BE AT 8'-0" ABOVE FINISHED FLOOR

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STRUCTURAL

CIVIL

DATE	DESCRIPTION	ISSUE	REV.
2026-01-20	ISSUED FOR REVIEW		2
2025-12-11	ISSUED FOR REVIEW		1

PROJECT NAME

NEMORIN

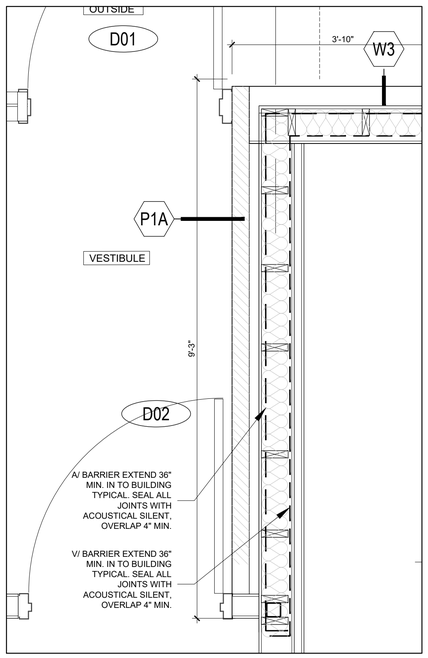
ORLEANS DEVELOPMENT - PRR2

1144 St. Pierre, Orleans, ON

DRAWING TITLE

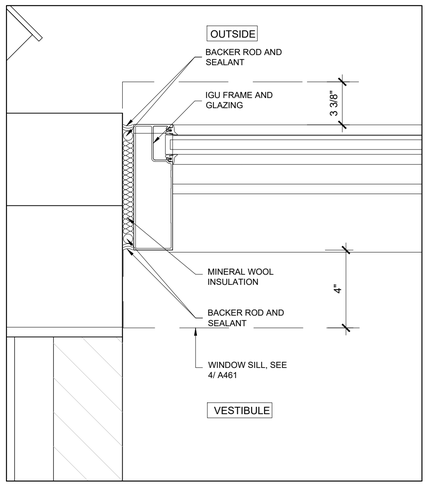
BASEMENT FLOOR PLAN

DATE	PROJECT NO.
2025-12-11	25.019
SCALE: AS NOTED	
DRAWN BY: MD	DRAWING NO. A-200
REVIEWED BY: LCL	



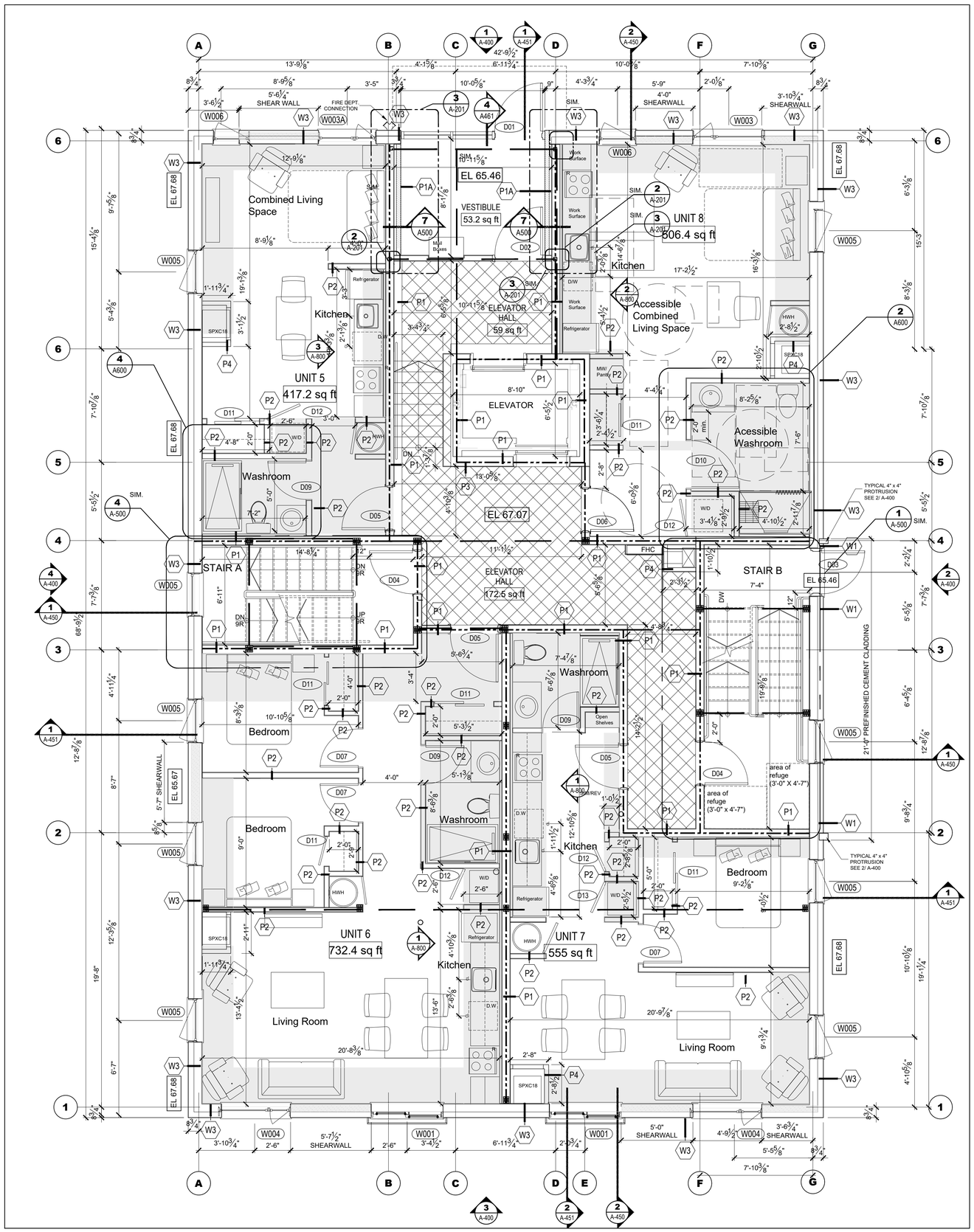
2 A-201 PLAN DETAIL

SCALE = 3/4" = 1'-0"



3 A-201 PLAN DETAIL

SCALE = 3" = 1'-0"



1 A-201 FIRST FLOOR PLAN

SCALE = 1/4" = 1'-0"

GENERAL NOTES :

1. FOR ALL TECHNICAL ISSUE OR QUESTIONS, CONTACT THE ARCHITECT BEFORE CONTINUING THE WORK
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11. REFER TO STRUCTURAL DRAWINGS FOR ALL FOUNDATION, FOOTINGS, COLUMNS, BEAMS, ETC.
12. REFER TO THE MECHANICAL AND ELECTRICAL DRAWINGS FOR ALL MECHANICAL AND ELECTRICAL ELEMENTS.

LEGEND

- DENOTES 1-HOUR FIRE-RATED PARTITION
- DENOTES STRUCTURAL MEMBERS - REFER TO STRUCTURAL
- DENOTES BULKHEAD TO ACCOMMODATE MECHANICAL DUCTING. UNDERSIDE OF BULKHEADS TO BE AT 8'-0" ABOVE FINISHED FLOOR
- DENOTE ADDITIONAL FIRE-RATING TO CEILING - REFER TO F1A ON DWG A003

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PROJECT NORTH

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Tel 613.233.2900
Fax 613.233.1008
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MECHANICAL + ELECTRICAL

STRUCTURAL

CIVIL

DATE	DESCRIPTION	ISSUE. REV.
2026-01-20	ISSUED FOR REVIEW	2
2025-12-11	ISSUED FOR REVIEW	1

PROJECT NAME

NEMORIN

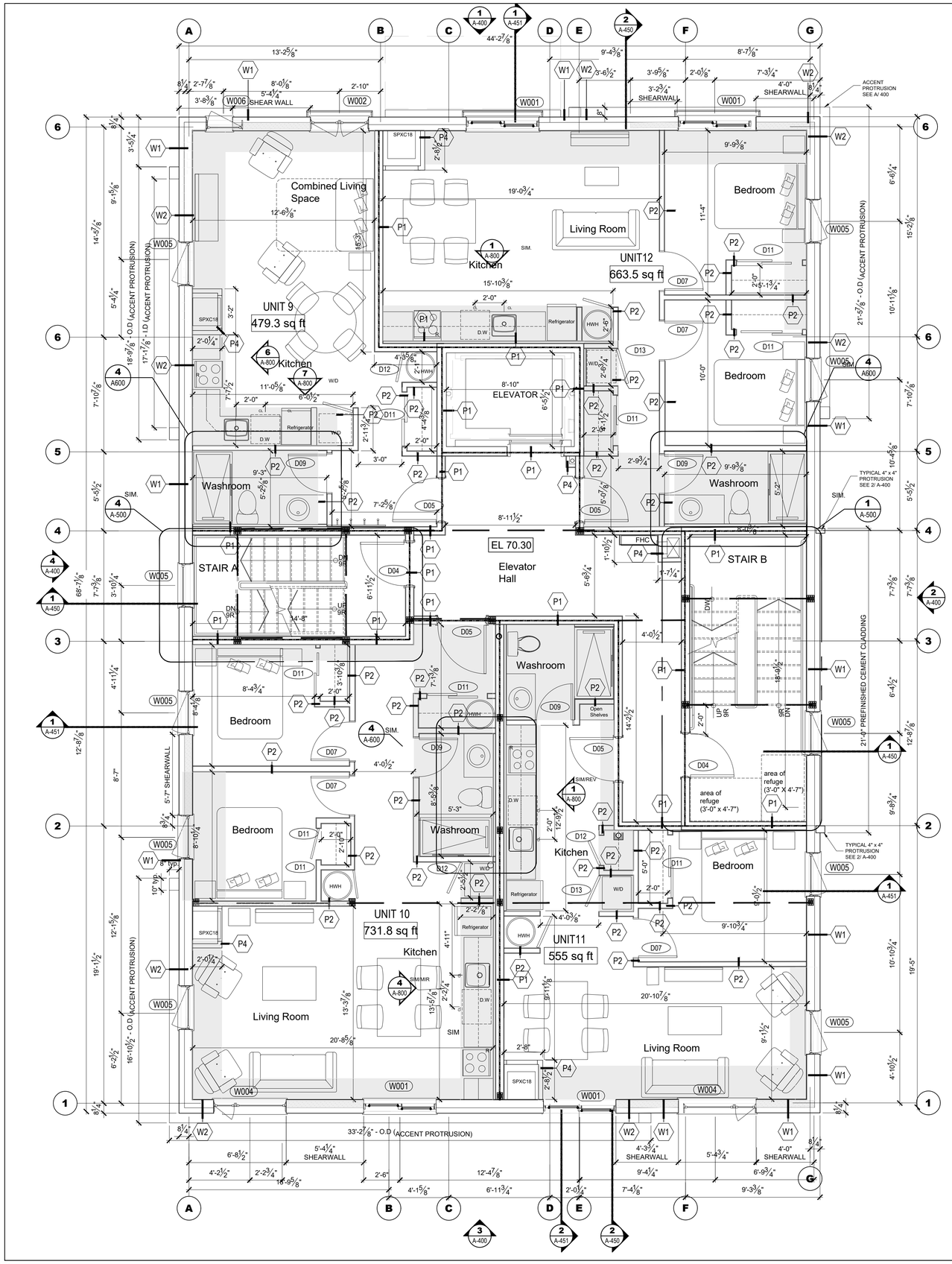
ORLEANS DEVELOPMENT - PRR2

1144 St. Pierre Street, Orleans, ON

DRAWING TITLE

FIRST FLOOR PLAN

DATE 2025-12-11	PROJECT NO. 25.019
SCALE AS NOTED	
DRAWN BY MD	DRAWING NO. A-201
REVIEWED BY LCL	



1 SECOND FLOOR PLAN
A-202
SCALE = 1/4" = 1'-0"

GENERAL NOTES :

1. FOR ALL TECHNICAL ISSUE OR QUESTIONS, CONTACT THE ARCHITECT BEFORE CONTINUING THE WORK
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LEGEND

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- DENOTES STRUCTURAL MEMBERS - REFER TO STRUCTURAL
- DENOTES BULKHEAD TO ACCOMMODATE MECHANICAL DUCTING. UNDERSIDE OF BULKHEADS TO BE AT 8'-0" ABOVE FINISHED FLOOR

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STRUCTURAL

CIVIL

DATE	DESCRIPTION	ISSUE. REV.
2026-01-20	ISSUED FOR REVIEW	2
2025-12-11	ISSUED FOR REVIEW	1

PROJECT NAME

NEMORIN

ORLEANS DEVELOPMENT - PRR2

1144 St. Pierre Street, Orleans, ON

DRAWING TITLE

SECOND FLOOR PLAN

DATE 2025-12-02

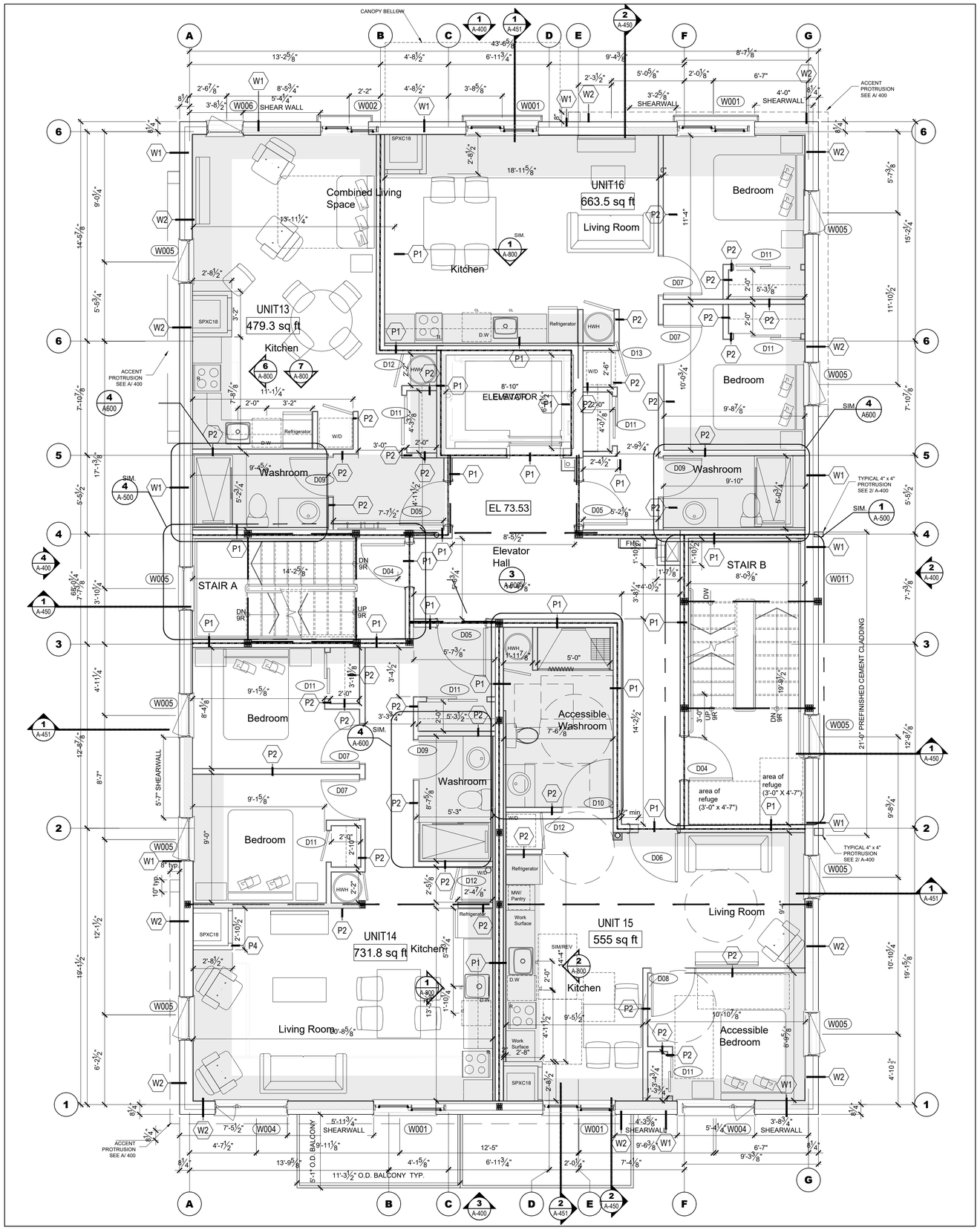
SCALE AS NOTED

PROJECT NO. 25.019

DRAWN BY MD

REVIEWED BY LCL

DRAWING NO. A-202



1 THIRD FLOOR PLAN
A-203
SCALE = 1/4" = 1'-0"

GENERAL NOTES :

1. FOR ALL TECHNICAL ISSUE OR QUESTIONS, CONTACT THE ARCHITECT BEFORE CONTINUING THE WORK
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- DENOTES BULKHEAD TO ACCOMMODATE MECHANICAL DUCTING. UNDERSIDE OF BULKHEADS TO BE AT 8'-0" ABOVE FINISHED FLOOR

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CIVIL

DATE	DESCRIPTION	ISSUE	REV.
2026-01-20	ISSUED FOR REVIEW	2	
2025-12-11	ISSUED FOR REVIEW	1	

PROJECT NAME

NEMORIN

ORLEANS DEVELOPMENT - PRR2

1144 St. Pierre Street, Orleans ON

DRAWING TITLE

THIRD FLOOR PLAN

DATE 2025-12-02

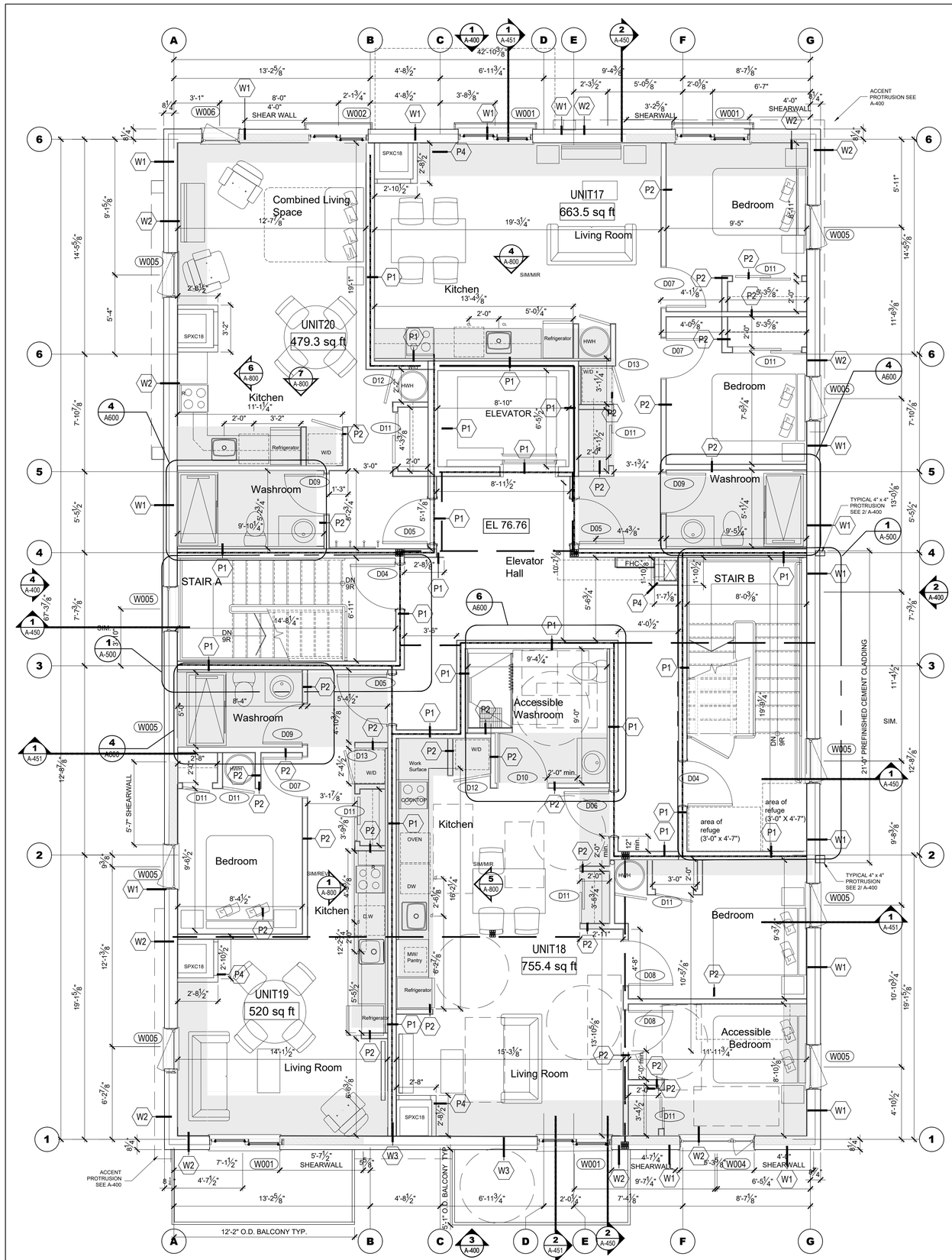
PROJECT NO. 25.019

SCALE AS NOTED

DRAWN BY MD

REVIEWED BY LCL

DRAWING NO. A-203



1 FOURTH FLOOR PLAN
A-204
SCALE = 1/4" = 1'-0"

GENERAL NOTES :

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LEGEND

- DENOTES 1-HOUR FIRE-RATED PARTITION
- DENOTES STRUCTURAL MEMBERS - REFER TO STRUCTURAL
- DENOTES BULKHEAD TO ACCOMMODATE MECHANICAL DUCTING. UNDERSIDE OF BULKHEADS TO BE AT 8'-0" ABOVE FINISHED FLOOR

CLIENT

PROJECT NORTH

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Ottawa, Ontario K1Y 0Y2

MECHANICAL + ELECTRICAL

STRUCTURAL

CIVIL

DATE	DESCRIPTION	ISSUE. REV.
2026-01-20	ISSUED FOR REVIEW	2
2025-12-11	ISSUED FOR REVIEW	1

PROJECT NAME

NEMORIN

ORLEANS DEVELOPMENT PRR2

1144 St. Pierre Street, Orleans, ON

DRAWING TITLE

FOURTH FLOOR PLAN

DATE 2025-12-02

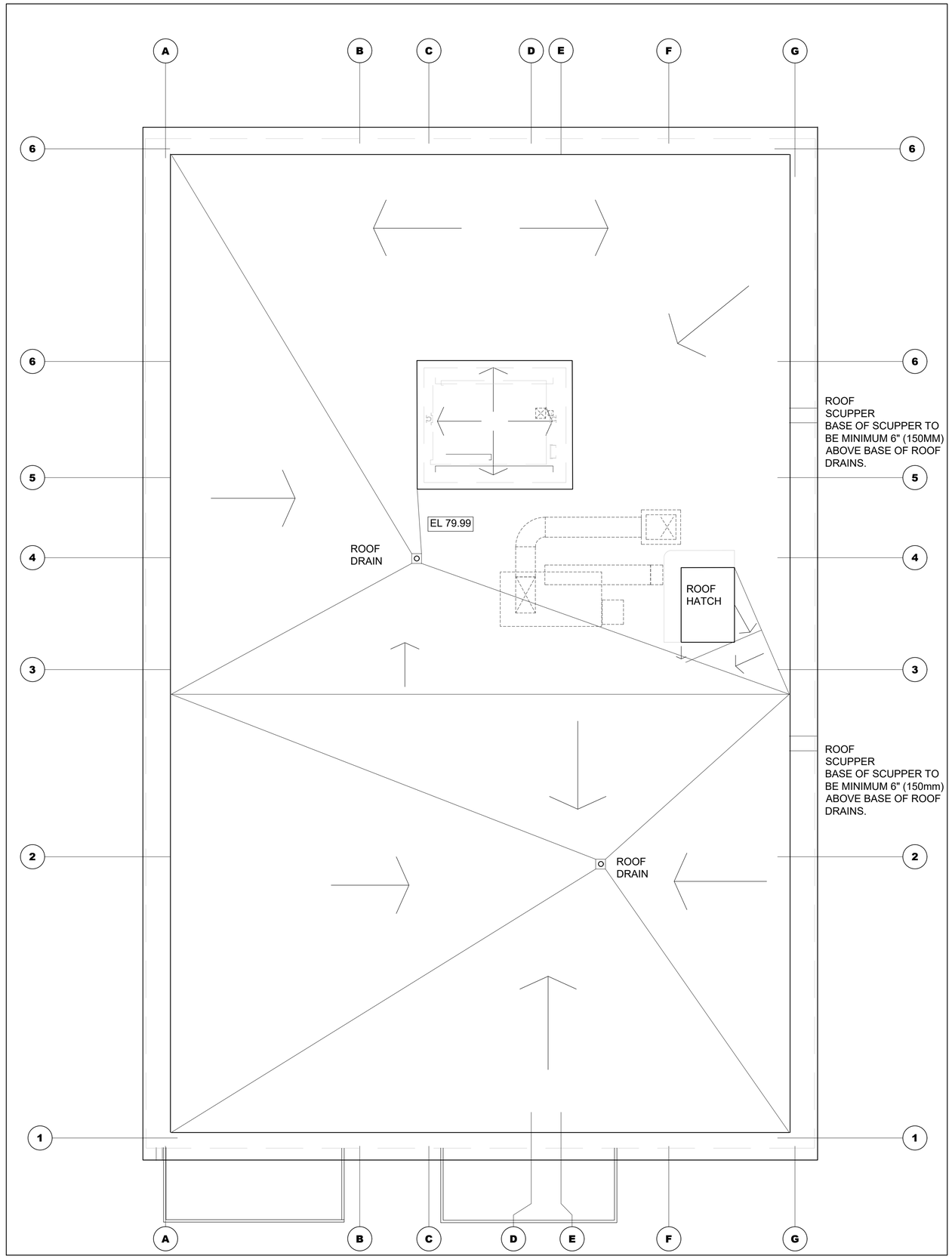
SCALE AS NOTED

PROJECT NO. 25-019

DRAWN BY md

REVIEWED BY LCL

DRAWING NO. A-204



1 A-250 ROOF PLAN

SCALE = 1/4" = 1'-0"

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MECHANICAL + ELECTRICAL

STRUCTURAL

CIVIL

DATE	DESCRIPTION	ISSUE. REV.
2025-12-11	ISSUED FOR REVIEW	1

PROJECT NAME

NEMORIN

ORLEANS DEVELOPMENT - PRR2

1144 St. Pierre Street, Orleans, ON

DRAWING TITLE

ROOF PLAN

DATE 2025-12-02

PROJECT NO. 25.019

SCALE AS NOTED

DRAWN BY MD

REVIEWED BY LCL

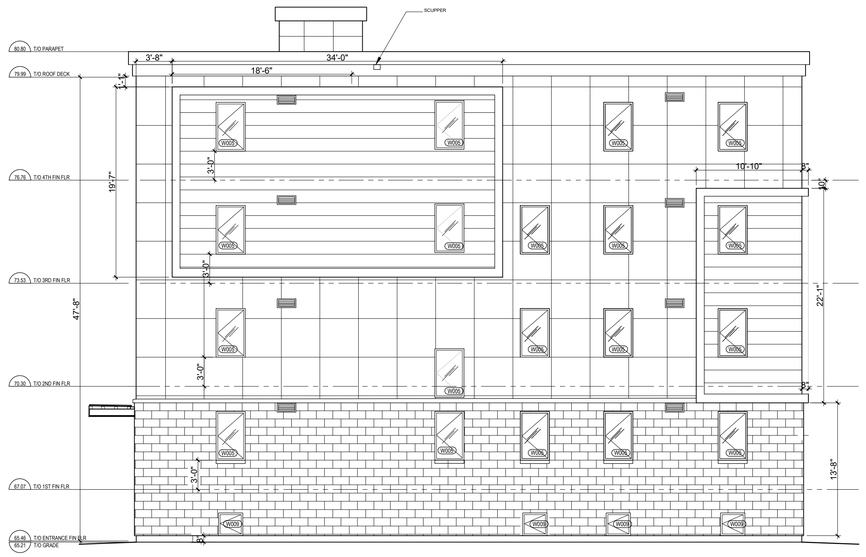
DRAWING NO. A-250

EAST FACADE

2 EAST FACADE
A-400
SCALE = 1/8" = 1'-0"

NORTH FACADE

1 NORTH FACADE
A-400
SCALE = 1/8" = 1'-0"



WEST FACADE

4 WEST FACADE
A-400
SCALE = 1/8" = 1'-0"

SOUTH FACADE

3 SOUTH FACADE
A-400
SCALE = 1/8" = 1'-0"

LEGEND:

BRICK

PREFINISHED ALUMINUM CLADDING

PREFINISHED CEMENT CLADDING

CLIENT

PROJECT NORTH

TRUE NORTH

SEAL

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Ottawa, Ontario K1Y 0Y2

MECHANICAL + ELECTRICAL

STRUCTURAL

CIVIL

DATE	DESCRIPTION	ISSUE. REV.
2025-12-11	ISSUED FOR REVIEW	1

PROJECT NAME

NEMORIN

ORLEANS DEVELOPMENT - PRR2

1144 St. Pierre Street, Orleans (Ottawa)

DRAWING TITLE

ELEVATIONS

DATE 2025-12-11

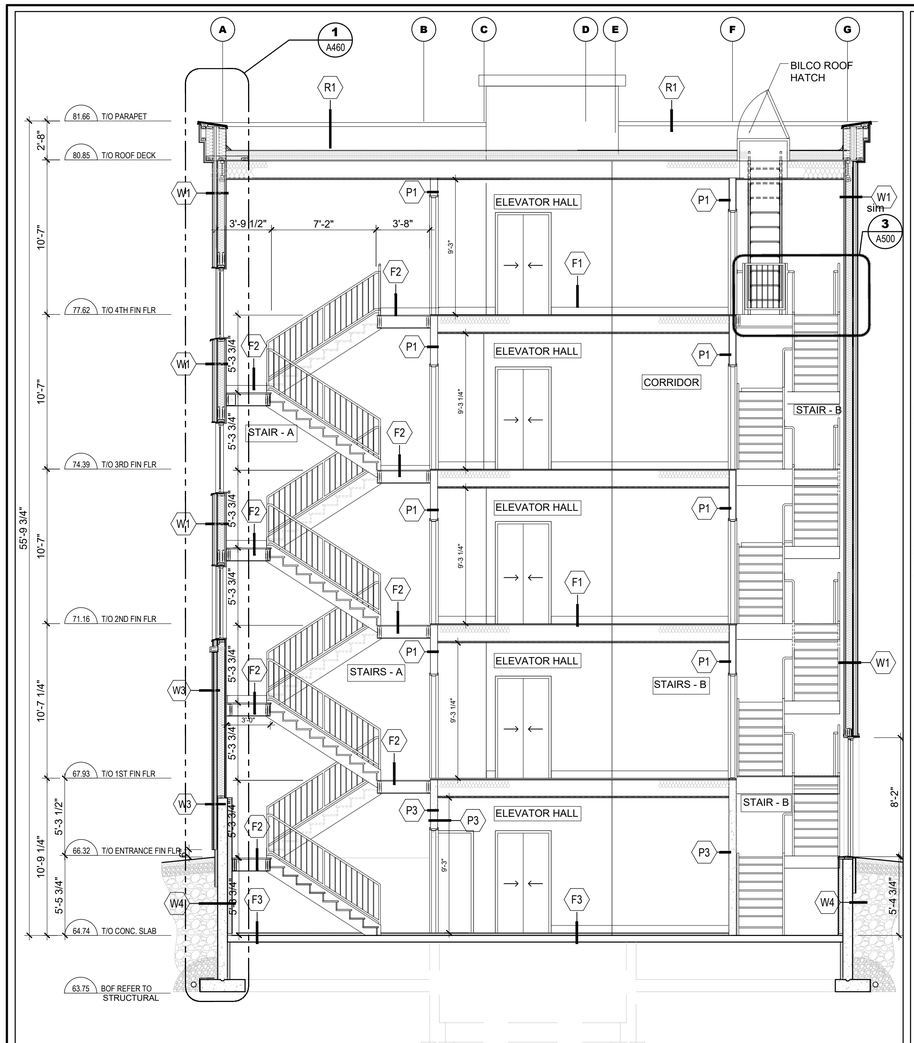
SCALE AS NOTED

DRAWN BY MD

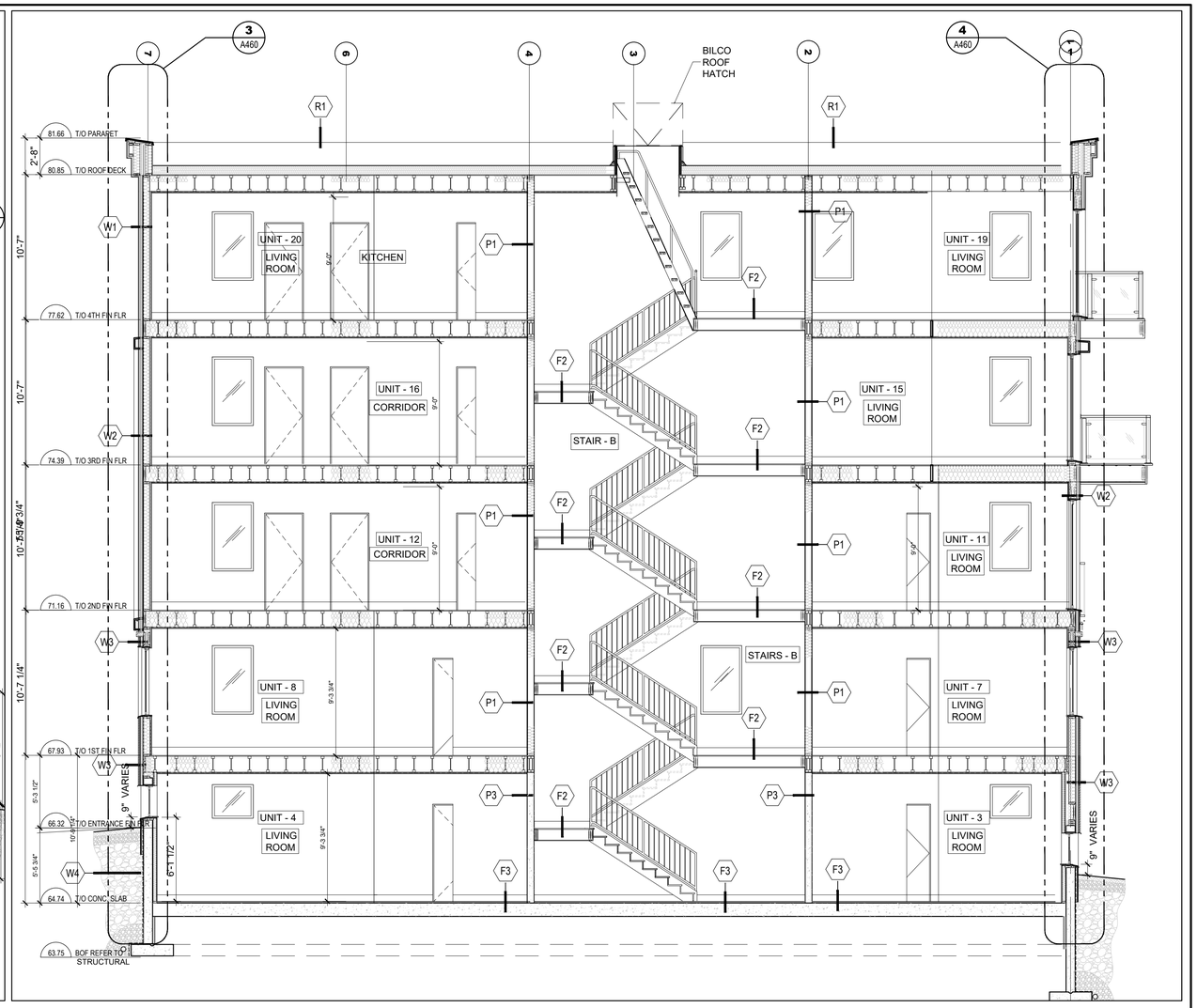
REVIEWED BY LCL

PROJECT NO. 25-019

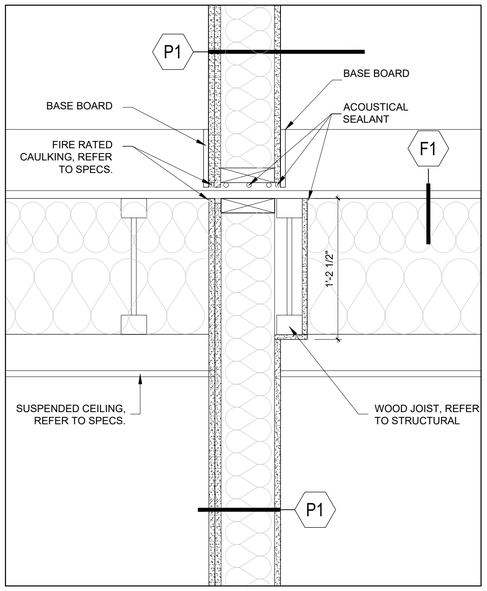
DRAWING NO. A-400



1 A-450 CROSS-SECTION
SCALE = 3/16" = 1'-0"



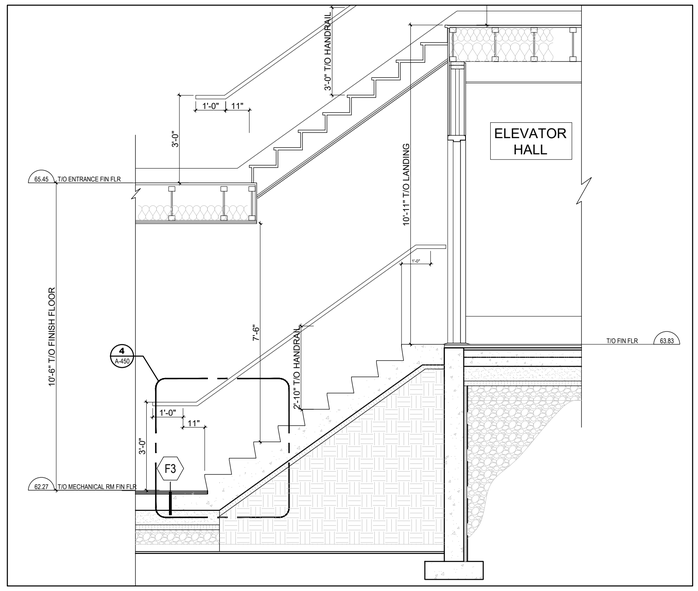
2 A-450 LONGITUDINAL SECTION
SCALE = 3/16" = 1'-0"



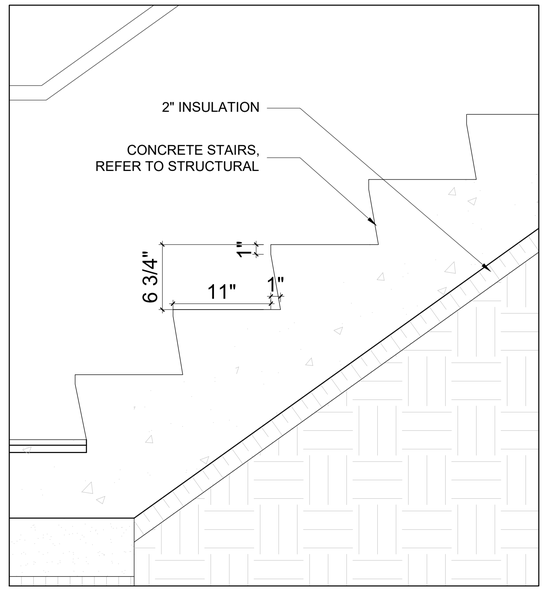
5 A-450 PARTITION/FLOOR - FIRE RATING DETAIL
SCALE = 3/8" = 1'-0"

NOTES:

- STAIRS, HAND RAILS AND GUARDS SHALL COMPLY TO 3.3.4.7 OF THE LATEST EDITION OF THE ONTARIO BUILDING CODE (OBC)
- THREADS SHALL HAVE A RUN NOT LESS THAN 280 (11") AND NOT MORE THAN 355 (14") EXCLUDING NOSING TYPICAL
- RISERS SHALL HAVE A HEIGHT OF NOT LESS THAN 125mm (4 15/16") AND NOT MORE THAN 180mm (7 1/16") BETWEEN SUCCESSIVE TREADS
- GUARDS SHALL BE CONTINUOUS AND HAVE A HEIGHT OF NOT LESS THAN 1070mm (42 1/8")
- HANDRAIL SHALL BE CONTINUOUS AND HAVE A HEIGHT OF NOT LESS THAN 915 (36")



3 A-450 SECTION DETAIL
SCALE = 3/8" = 1'-0"



4 A-450 STAIR SECTION DETAIL
REFER TO STRUCTURAL
SCALE = 1-1/2" = 1'-0"

CLIENT

PROJECT NORTH

TRUE NORTH

SEAL

ARCHITECTURAL

(L+D) LALANDE + DOYLE ARCHITECTS INC.
www.lpland.com
Tel 613.233.2900
Fax 613.233.1008
159 Holland Ave
Ottawa, Ontario K1Y 0Y2

MECHANICAL + ELECTRICAL

STRUCTURAL

CIVIL

DATE	DESCRIPTION	ISSUE. REV.
2026-03-10	ISSUED FOR COORDINATION	2
2025-12-11	ISSUED FOR REVIEW	1

PROJECT NAME

NEMORIN

ORLEANS DEVELOPMENT - PRR2

1144 St. Pierre Street, Orleans (Ottawa)

DRAWING TITLE

BUILDING SECTIONS AND DETAILS

DATE 2025-12-11

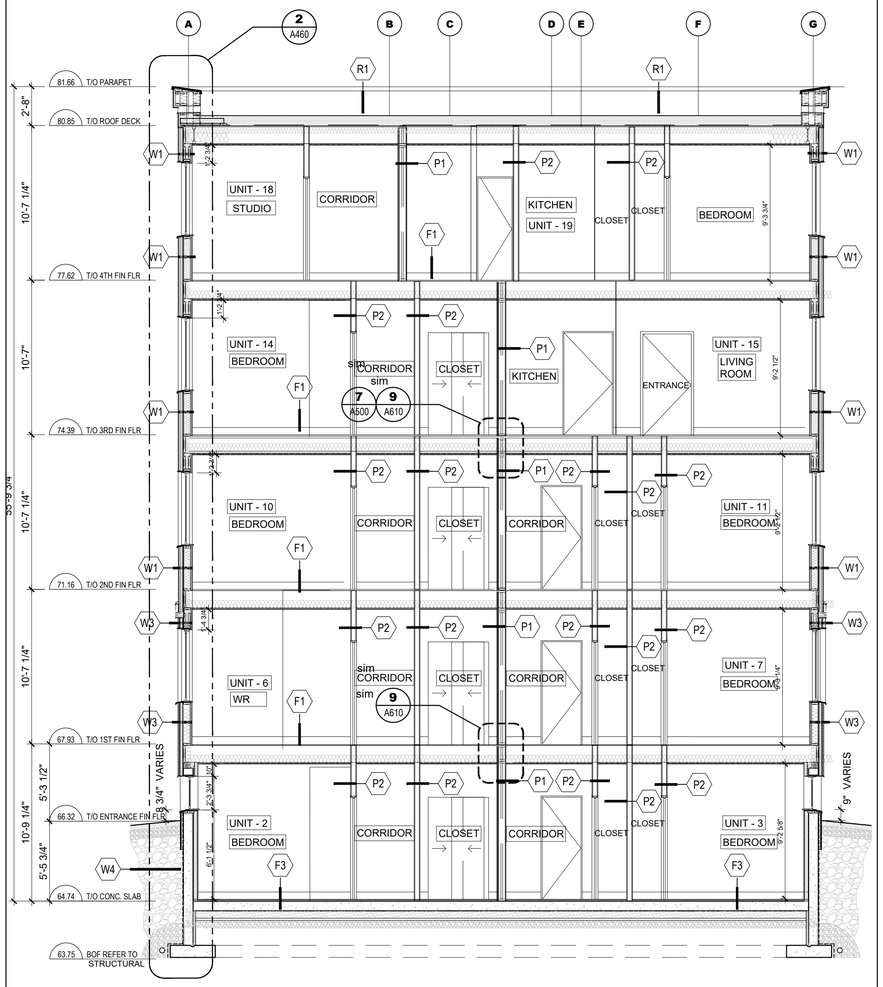
PROJECT NO. 25.019

SCALE AS NOTED

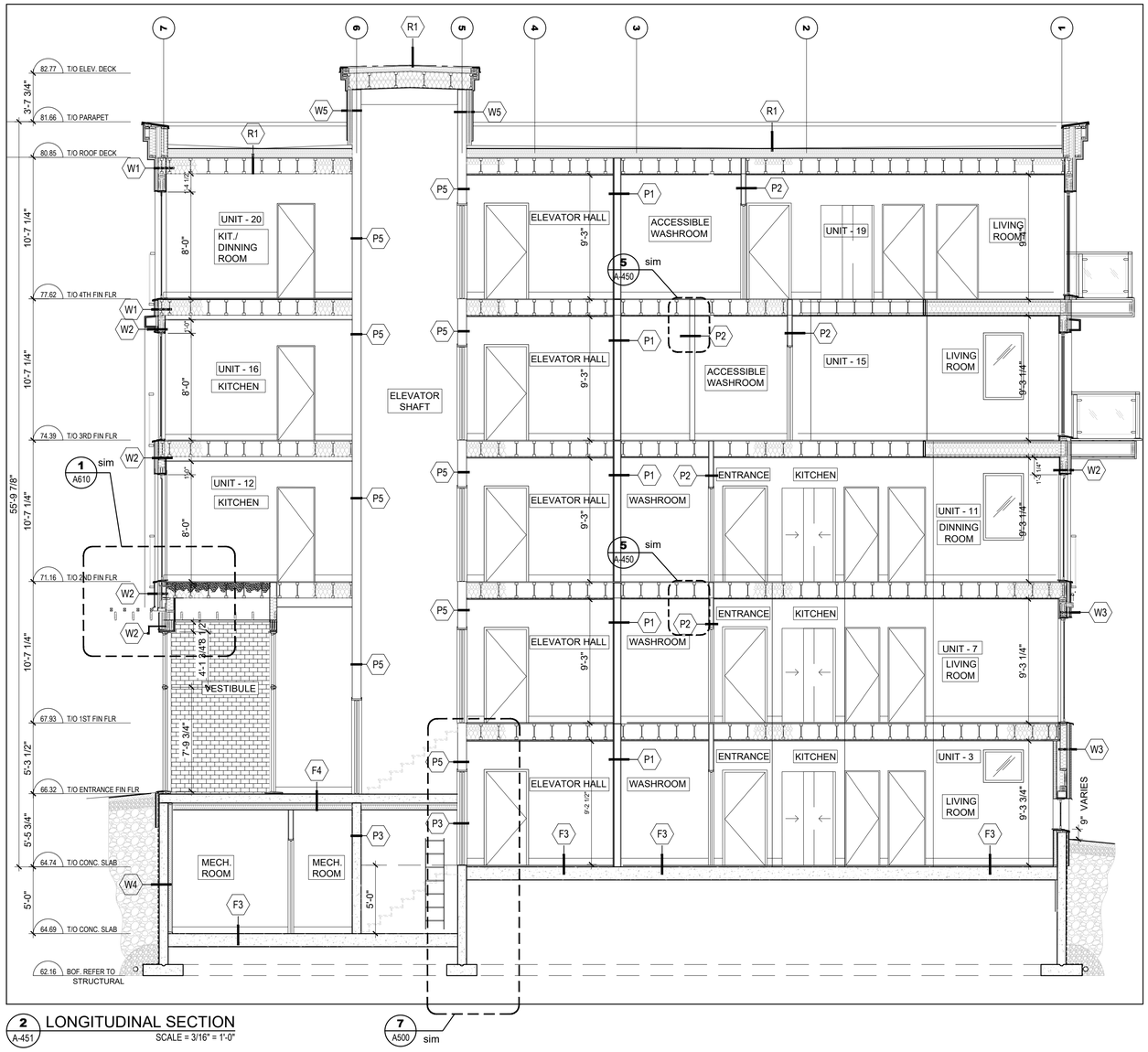
DRAWN BY MD

DRAWING NO. A-450

REVIEWED BY LCL

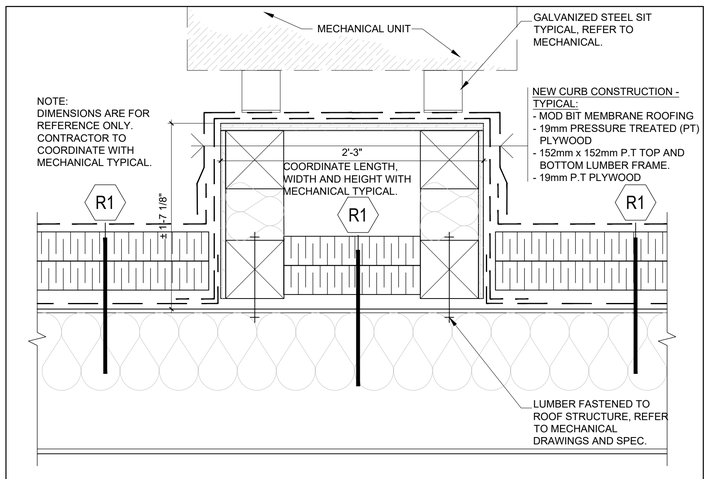


1 A-451 CROSS SECTION
SCALE = 3/16" = 1'-0"

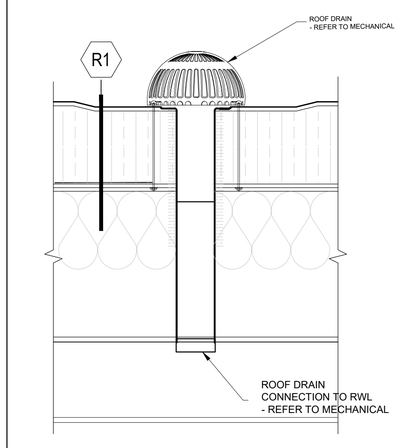


2 A-451 LONGITUDINAL SECTION
SCALE = 3/16" = 1'-0"

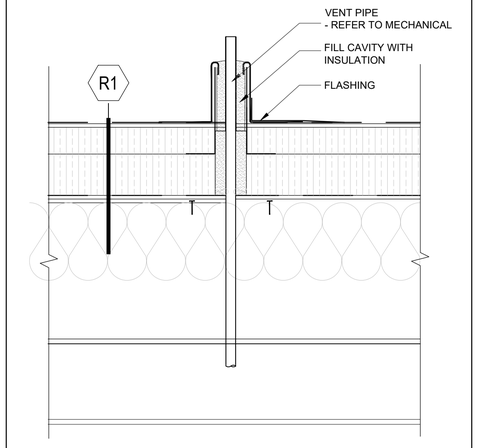
7 A500 sim



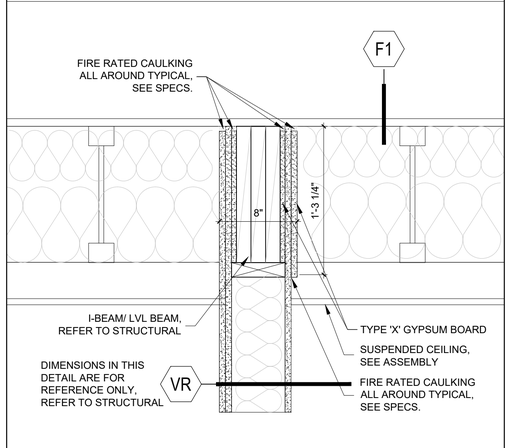
3 A-451 DETAIL -ROOF TOP UNIT
SCALE = 1 1/2" = 1'-0"



4 A-451 DETAIL - ROOF DRAIN
SCALE = 1 1/2"= 1'-0"



5 A-451 ROOF DETAIL - PLUMBING VENT
SCALE = 1 1/2" = 1'-0"



6 A-451 TYPICAL - FIRE RATED BEAM AND WALL DETAIL
SCALE = 1 1/2" = 1'-0"

CLIENT

PROJECT NORTH

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PROJECT NAME

NEMORIN

ORLEANS DEVELOPMENT - PRR2

1144 St. Pierre Street, Orleans (Ottawa)

DRAWING TITLE

BUILDING SECTIONS AND DETAILS

DATE 2025-12-11

PROJECT NO. 25.019

SCALE AS NOTED

DRAWN BY MD

DRAWING NO. A-451

REVIEWED BY LCL

GENERAL NOTES:

1. ALL WORKS AND MATERIALS SHALL CONFORM TO THE LATEST REVISIONS OF THE STANDARDS AND SPECIFICATIONS OF THE CITY OF OTTAWA, ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) AND SPECIFICATIONS (OPSS), WHERE APPLICABLE.
2. THE LOCATION OF UTILITIES IS APPROXIMATE ONLY, AND THE EXACT LOCATION SHOULD BE DETERMINED BY CONSULTING THE MUNICIPAL AUTHORITIES AND UTILITY COMPANIES CONCERNED. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE THE LOCATION AND STATUS OF UTILITIES AND SHALL BE RESPONSIBLE FOR ADEQUATE PROTECTION OF PLANT AND EQUIPMENT FROM DAMAGE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ANY SERVICES OR UTILITIES DISTURBED DURING CONSTRUCTION, TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION.
3. THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF EXISTING SERVICES PRIOR TO ANY CONSTRUCTION. THE CONTRACTOR SHALL CONFIRM LOCATIONS AND ELEVATIONS OF EXISTING SERVICES AND STRUCTURES TO BE CONNECTED TO AND EXISTING SERVICES THAT MAY BE DAMAGED OR CAUSE CONFLICTS PRIOR TO CONSTRUCTION OF ANY NEW SEWER, WATER AND/OR STORM WATER WORKS. ALL DIMENSIONS SHALL BE CHECKED AND VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES, INTERPRETATIONS, CHANGES AND ADDITIONS TO THESE DRAWINGS MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER, WHEN NOTED AND BEFORE PROCEEDING WITH CONSTRUCTION WORKS. DO NOT CONTINUE CONSTRUCTION IN AREAS WHERE DISCREPANCIES APPEAR UNTIL SUCH DISCREPANCIES HAVE BEEN RESOLVED.
4. ALL ELEVATIONS ARE GEODETIC AND UTILIZE METRIC UNITS. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE SPECIFIED. ALL DRAWINGS SHOULD NOT BE SCALED BY THE CONTRACTOR. ANY MISSING OR QUESTIONABLE DIMENSIONS ARE TO BE CONFIRMED WITH THE ENGINEER IN WRITING.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL CONSTRUCTION RELATED PERMITS REQUIRED AND BEAR COST OF THE SAME.
6. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE "OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS", THE GENERAL CONTRACTOR SHALL BE DEEMED TO BE THE CONSTRUCTOR AS DEFINED IN THE ACT.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXCAVATION, BACKFILL AND REINSTATEMENT OF ALL AREAS DISTURBED DURING CONSTRUCTION TO THE SATISFACTION OF THE ENGINEER, THE CITY OF OTTAWA AND THE AUTHORITY HAVING JURISDICTION.
8. ANY AREAS BEYOND THE LIMIT OF THE SITE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION AT THE CONTRACTOR'S EXPENSE.
9. THE CONTRACTOR SHALL COMPLY WITH THE CITY OF OTTAWA REQUIREMENTS FOR TRAFFIC CONTROL WHEN WORKING ON CITY STREETS. ALL CONSTRUCTION SIGNAGE MUST CONFORM TO THE M.T.O. BOOK 7 AND T.A.C MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (LATEST AMENDMENT).
10. THE SUPPORT OF ALL UTILITIES WITHIN THE CONSTRUCTION AREA SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION.
11. THERE WILL BE NO SUBSTITUTION OF MATERIALS UNLESS WRITTEN APPROVAL BY THE ENGINEER HAS BEEN OBTAINED.
12. EXCESS EXCAVATED MATERIAL SHALL BE REMOVED FROM THE SITE.
13. THE SITE LAYOUT IS THE RESPONSIBILITY OF THE CONTRACTOR. AS-BUILT SITE SERVICING & GRADING DRAWINGS SHALL BE MAINTAINED ON SITE BY THE CONTRACTOR.
14. THE CONTRACTOR WILL BE RESPONSIBLE FOR ADDITIONAL BEDDING OR ADDITIONAL STRENGTH PIPE IF THE MAXIMUM TRENCH WIDTH, AS SPECIFIED BY OPSD, IS EXCEEDED.
15. ALL NECESSARY CLEARING AND GRUBBING SHALL BE COMPLETED AY THE CONTRACTOR. REVIEW WITH ENGINEER AND THE CITY OF OTTAWA PRIOR TO ANY TREE CUTTING.
16. ALL EDGES OF DISTURBED PAVEMENT SHALL BE SAW CUT TO FORM A NEAT AND STRAIGHT LINE PRIOR TO PLACING NEW PAVEMENT.
17. FOR GEOTECHNICAL INFORMATION REFER TO GEOTECHNICAL INVESTIGATION REPORT PREPARED BY EXP SERVICES INC., DATED APRIL 17, 2026.
18. THE CONTRACTOR SHALL APPRAISE HIS/HER SELF OF ALL SURFACE AND SUBSURFACE CONDITIONS TO BE ENCOUNTERED AND SHALL CARRY OUT THEIR OWN TEST PITS AS REQUIRED TO MAKE THEIR OWN INDEPENDENT ASSESSMENT OF GROUND CONDITIONS. THE CONTRACTOR SHALL NOT MAKE ANY CLAIM FOR ANY EXTRA COST DUE TO ANY SUCH GROUND CONDITIONS VARYING FROM THOSE ANTICIPATED BY THE CONTRACTOR.
19. DO NOT CONSTRUCT USING DRAWINGS THAT ARE NOT MARKED "ISSUED FOR CONSTRUCTION".
20. FOR TOPOGRAPHICAL INFORMATION REFER TO PLAN PREPARED BY ANNIS, O'SULLIVAN, VOLLEBEKK LTD. SURVEY DATED NOVEMBER 13, 2025.
21. CIVIL DRAWINGS TO BE READ IN CONJUNCTION WITH ARCHITECTURAL, LANDSCAPE AND LEGAL DRAWINGS.

SANITARY SEWER NOTES

1. ALL SANITARY SEWER MATERIALS AND INSTALLATION SHALL CONFORM TO THE LATEST REVISIONS OF THE STANDARDS AND SPECIFICATIONS OF THE CITY OF OTTAWA, ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) AND SPECIFICATIONS (OPSS).
2. ALL SANITARY SEWERS SHALL BE PVC SDR 35, IPEX "RING-TITE" (OR EQUIVALENT), AS PER CSA STANDARD 8182.2 OR LATEST AMENDMENT, UNLESS OTHERWISE NOTED.
3. SANITARY SEWER TRENCH AND BEDDING SHALL BE AS PER CITY OF OTTAWA STD. S6 AND S7, CLASS 'B BEDDING UNLESS OTHERWISE NOTED.
4. ALL SANITARY LATERALS ARE TO BE PVC SDR 28, IPEX "RING-TITE" (OR EQUIVALENT), ANY COLOR EXCEPT WHITE AND MARKED WITH A 5OMM X 100MM WOODEN MARKER, EXTENDING FROM THE INVERT TO 1.0 M ABOVE GRADE PAINTED RED.
5. SEWER BEDDING AS PER CITY STANDARD S6 & S7. GRANULAR 'A' BEDDING TO BE INCREASED TO 300MM WHERE SEWERS ARE BELOW THE GROUNDWATER TABLE.
6. SANITARY SEWER MANHOLES SHALL BE BENCHED AS PER OPSD 701.021. SANITARY MANHOLE FRAME AND COVERS SHALL BE AS PER CITY OF OTTAWA STD. S24 AND S25. SAFETY PLATFORMS SHALL BE AS PER OPSD 404.02. DROP STRUCTURES SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA SPECIFICATIONS AND OPSD 1003.01.
7. THE CONTRACTOR SHALL CONDUCT INFILTRATION/EXFILTRATION (AS PER CURRENT OPSS) TESTING ON ALL NEWLY INSTALLED SANITARY SEWERS. THE TEST SHALL BE PERFORMED IMMEDIATELY AFTER SEWER INSTALLATION AND VIEWED BY THE ENGINEER.
8. THE CONTRACTOR SHALL CONDUCT CCTV INSPECTION OF ALL NEWLY INSTALLED SANITARY SEWERS AND EXISTING SEWERS CONNECTED TO. THE TEST SHALL BE PERFORMED IMMEDIATELY AFTER SEWERS INSTALLED.
9. ALL SERVICE CONNECTIONS TO BE CONSTRUCTED AS PER CITY STANDARD S11 & S11.1.
10. THE CONTRACTOR SHALL CONSTRUCT FLEXIBLE SANITARY SEWERS IN ACCORDANCE WITH OPSD 802.010 AND 802.013. DURING CONSTRUCTION, THE CONTRACTOR SHALL PROTECT THE PIPES FROM HEAVY CONSTRUCTION EQUIPMENT. BEDDING AND BACKFILL SHALL BE COMPACTED TO A MINIMUM OF 95% SPMDD.
11. ALL SANITARY BUILDING DRAINS TO BE EQUIPPED WITH SANITARY BACKWATER VALVES INSTALLED PER CITY OF OTTAWA STANDARD DRAWING S14.1.
12. WITHIN THE FROST ZONE, THE BACKFILL IN THE SERVICE TRENCHES SHOULD MATCH THE SOIL ON SIDES TO MINIMIZE DIFFERENTIAL FROST HEAVING IN THE SUBGRADE.
13. MINIMUM SOIL COVER TO BE 2.1m TO PROTECT SEWERS FROM FROST DAMAGE. IN AREAS WHERE ADEQUATE FROST COVER CANNOT BE ACHIEVED, EQUIVALENT THERMAL INSULATION TO BE INSTALLED ON ALL THREE SIDES AS PER CITY OF OTTAWA STD. S35.

STORM SEWER NOTES

1. ALL STORM SEWER MATERIALS AND INSTALLATION SHALL CONFORM TO THE LATEST REVISIONS OF THE STANDARDS AND SPECIFICATIONS OF THE CITY OF OTTAWA, ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) AND SPECIFICATIONS (OPSS).
2. ALL REINFORCED CONCRETE STORM SEWER PIPE SHALL BE IN ACCORDANCE WITH CSA A257.2 (LATEST AMENDMENT). ALL NON-REINFORCED CONCRETE STORM SEWER PIPE SHALL BE IN ACCORDANCE WITH CSA A257.L (LATEST AMENDMENT). PIPE SHALL BE JOINTED WITH STD. RUBBER GASKETS AS PER CSA A257.3 (LATEST AMENDMENT).
3. ALL PVC STORM SEWERS ARE TO BE SDR 35 APPROVED PER C.S.A. 8182.2 OR LATEST AMENDMENT, UNLESS OTHERWISE SPECIFIED.
4. THE CONTRACTOR SHALL CONSTRUCT FLEXIBLE STORM SEWERS IN ACCORDANCE WITH OPSD 802.010 AND 802.013. RIGID STORM PIPE SHALL BE CONSTRUCTED IN ACCORDANCE WITH OPSD 802.030. DURING CONSTRUCTION THE CONTRACTOR SHALL PROTECT THE PIPES FROM HEAVY CONSTRUCTION EQUIPMENT. BEDDING AND BACKFILL SHALL BE COMPACTED TO A MINIMUM OF 95% SPMDD.
5. SEWER BEDDING AS PER CITY STANDARD S6 & S7.
6. ALL STORM LATERALS SHALL BE PVC SDR 28, WHITE IN COLOR AND MARKED WITH A 50mm X I00mm WOODEN MARKER EXTENDING FROM THE INVERT TO 1.0M ABOVE GRADE PAINTED GREEN.
7. ALL SERVICE CONNECTIONS TO BE CONSTRUCTED AS PER CITY STANDARD S11 & S11.1.
8. WITHIN THE FROST ZONE, THE BACKFILL IN THE SERVICE TRENCHES SHOULD MATCH THE SOIL ON SIDES TO MINIMIZE DIFFERENTIAL FROST HEAVING IN THE SUBGRADE.
9. MINIMUM SOIL COVER TO BE 2.1m TO PROTECT SEWERS FROM FROST DAMAGE. IN AREAS WHERE ADEQUATE FROST COVER CANNOT BE ACHIEVED, EQUIVALENT THERMAL INSULATION TO BE INSTALLED ON ALL THREE SIDES AS PER CITY OF OTTAWA STD. S35.
10. FOUNDATION DRAIN SERVICE LATERAL TO BE EQUIPPED WITH APPROVED BACKWATER VALVE AS PER CITY OF OTTAWA STD.S14.
11. STORM MANHOLE FRAME AND COVERS SHALL BE AS PER CITY OF OTTAWA STD. S24, S24.1 AND S25.
12. SAFETY PLATFORMS SHALL BE IN ACCORDANCE WITH OPSD 404.02.
13. DROP STRUCTURES SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA SPECIFICATIONS AND OPSD 1003.01.
14. STORM SEWER MANHOLES SERVING LOCAL SEWERS LESS THAN 900mm SHALL BE CONSTRUCTED WITH A 300mm SUMP. FOR STORM SEWERS 900mm AND OVER USE BENCHING IN ACCORDANCE WITH OPSD 701 .021.
15. THE STORM SEWER CLASSES HAVE BEEN DESIGNED BASED ON BEDDING CONDITIONS SPECIFIED. WHERE THE SPECIFIED TRENCH WIDTH IS EXCEEDED, THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ADDITIONAL BEDDING, A DIFFERENT TYPE OF BEDDING OR A HIGHER PIPE STRENGTH AT HIS OWN EXPENSE AND SHALL ALSO BE RESPONSIBLE FOR EXTRA TEMPORARY AND/OR PERMANENT REPAIRS MADE NECESSARY BY THE WIDENED TRENCH.
16. THE CONTRACTOR SHALL CONDUCT CCTV INSPECTION OF ALL NEWLY INSTALLED STORM SEWERS AND EXISTING SEWERS CONNECTED TO. THE TEST SHALL BE PERFORMED IMMEDIATELY AFTER THE SEWERS ARE INSTALLED.

WATERMAIN NOTES

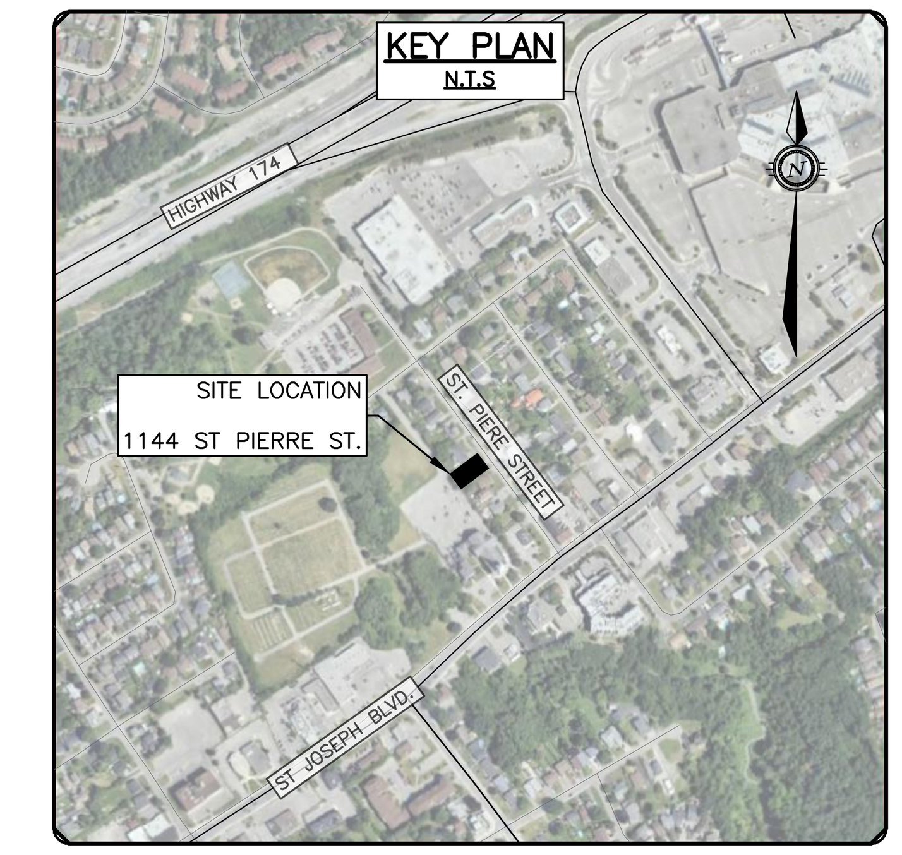
1. ALL WATERMAIN MATERIALS AND INSTALLATION SHALL CONFORM TO THE LATEST REVISIONS OF THE STANDARDS AND SPECIFICATIONS OF THE CITY OF OTTAWA, ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) AND SPECIFICATIONS (OPSS).
2. NO WORK SHALL COMMENCE UNLESS A CITY WATER WORKS INSPECTOR IS ON SITE. WATERMAIN CONNECTIONS BY CITY OF OTTAWA FORCES WITH ALL EXCAVATION BACKFILL AND ROAD REINSTATEMENT BY CONTRACTOR.
3. ALL PVC WATERMAINS SHALL BE EQUAL TO AWWA C-900 CLASS 150, SDR 18, OR APPROVED EQUAL.
4. WATERMAINS TRENCH AND BEDDING SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD W17, UNLESS OTHERWISE SPECIFIED. BEDDING AND COVER MATERIAL SHALL BE SPECIFIED BY PROJECT GEOTECHNICAL ENGINEER.
5. ALL PVC WATERMAINS SHALL BE INSTALLED WITH A 10 GAUGE STRANDED COPPER TWU OR RWU TRACER WIRE IN ACCORDANCE WITH CITY OF OTTAWA STD. W36.
6. WATER SERVICES SHALL BE MARKED WITH A "50mm X I00mm", EXTENDING FROM THE INVERT T0 1.0m ABOVE GRADE PAINTED BLUE. STAND POSTS/SHUT-OFFS SHALL BE INSTALLED AT THE PROPERTY LINE.
7. CATHODIC PROTECTION IS REQUIRED ON ALL METALLIC FITTINGS AS PER CITY OF OTTAWA STD. W40 AND W42.
8. VALVE BOXES SHALL BE INSTALLED AS PER CITY OF OTTAWA DETAIL W24.
9. ALL WATERMAINS TO BE INSTALLED AT MINIMUM COVER OF 2.4m. WHERE MINIMUM FROST COVER CAN NOT BE ACHIEVED, PROVIDE RIGID INSULATION ON ALL THREE SIDES AS PER CITY OF OTTAWA STD. W22.
10. THRUST BLOCKS AND RESTRAINT AS PER CITY OF OTTAWA DWGS: W25.3 AND W25.4, W25.5 AND W25.6.
11. IF WATERMAIN MUST BE DEFLECTED TO MEET ALIGNMENT, ENSURE THAT THE AMOUNT OF DEFLECTION USED IS LESS THAN HALF THAT RECOMMENDED BY THE MANUFACTURER.
12. DISINFECTION AND TESTING OF WATERMAIN TO BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARDS.
13. WATER METERS TO BE INSTALLED AS PER W30 FOR WATER SERVICES.
14. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY CAPS, PLUGS AND BLOW-OFFS AND NOZZLES REQUIRED FOR TESTING AND DISINFECTION OF THE WATERMAN.
15. WATERMAINS CROSSING ABOVE OR BELOW SEWERS TO BE INSTALLED AS PER CITY STED. W25 AND W25.2.
16. WHERE THE SEPARATION BETWEEN SERVICES AND MANHOLES IS LESS THAN 1.2m, WATER SERVICES ARE TO BE INSULATED AS PER CITY OF OTTAWA STD. W23.
17. AS PER CITY GUIDELINE, THE MINIMUM VERTICAL CLEARANCE BETWEEN WATERMAIN AND SEWER / UTILITY IS 0.25M FOR CROSSING OVER THE SEWER, AS PER CITY STD W25.2. FOR CROSSING UNDER SEWER, THE MINIMUM VERTICAL CLEARANCE IS 0.50M AS PER CITY STD. W25. FOR CROSSING UNDER SEWER, ADEQUATE STRUCTURAL SUPPORT FOR THE SEWERS IS REQUIRED TO PREVENT EXCESSIVE DEFLECTION OF JOINTS AND SETTLING. THE LENGTH OF WATER PIPE SHALL BE CENTERED AT THE POINT OF CROSSING SO THAT THE JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE SEWER.

ROADWAY SPECIFICATIONS

1. ALL TOPSOIL AND ORGANIC MATERIAL SHALL BE STRIPPED WITHIN THE ROAD ALLOWANCE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
2. CONCRETE CURB SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. SCI.1.1(BARRIER CURB) AND SC1.3 (MOUNTABLE CURB), AS NOTED. PROVISION SHALL BE MADE FOR CURB DEPRESSIONS AT SIDEWALKS AND DRIVEWAYS.
3. PAVEMENT REINSTATEMENT FOR SERVICE AND UTILITY CUTS SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. R10 AND OPSD 509.010, OPSS 310.
4. GRANULAR "A" SHALL BE PLACED TO A MINIMUM THICKNESS OF 300mm AROUND ALL STRUCTURES WITHIN PAVEMENT AREA.
5. ALL GRANULAR FOR ROADS SHALL BE COMPACTED TO A MINIMUM OF 98% STANDARD PROCTOR DENSITY.
6. ASPHALT WEAR COURSE SHALL NOT BE PLACED UNTIL THE VIDEO INSPECTION OF SEWERS & NECESSARY REPAIRS HAVE BEEN CARRIED OUT TO THE SATISFACTION OF THE ENGINEER.
7. SUB- EXCAVATE SOFT AREAS AND FILL WITH GRANULAR 'B' COMPACTED IN MAXIMUM 300mm LIFTS.
8. PAVEMENT STRUCTURE AS PER DRAFT GEOTECHNICAL INVESTIGATION REPORT PREPARED BY EXP SERVICES INC. DATED DECEMBER 19, 2025
   ASPHALTIC CONCRETE (PG 58-34), COMPACTED TO 92-97% MRD, 65MM THICKNESS HL3/SP12.5MM/CAT. B
   OPSS 1010 GRAN A BASE (CRUSHED LIMESTONE), COMPACTED TO 100% SPMDD, 150MM THICKNESS OPSD 1010 GRANULAR B TYPE II SUB BASE, COMPACTED TO 100% SPMDD, 450MM THICKNESS

GENERAL NOTES FOR GRADING

1. IT SHALL BE THE BUILDER'S RESPONSIBILITY TO ENSURE THAT GRADING AROUND HYDRANTS, TRANSFORMERS, AND UTILITY PEDESTALS, ETC., MEET CURRENT CITY OF OTTAWA, HYDRO AND UTILITY COMPANY REQUIREMENTS.
2. ALL GROUND SURFACES SHALL BE EVENLY GRADED WITHOUT PONDING AREAS AND WITHOUT LOW POINTS EXCEPT WHERE APPROVED SWALE OR CATCH BASIN OUTLETS ARE PROVIDED.
3. CONTRACTOR TO ADJUST EXISTING CATCH BASINS, MANHOLES, FIRE HYDRANTS, VALVE CHAMBERS AND VALVE BOXES TO FINAL GRADE AS REQUIRED.
4. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING FOUNDATIONS OF ADJACENT BUILDINGS DURING EXCAVATION AND CONSTRUCTION PERIOD.
5. GRADING IN GRASSED AREAS WILL BE BETWEEN 2% TO 7%. GRADES IN EXCESS OF 7% WILL REQUIRE A MAXIMUM 3:1 TERRACING.



CAUTION
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.

JOB BENCH MARK
SPIKE IN UTILITY POLE ELEVATION = 65.84
TOPOGRAPHIC INFORMATION
LOT 27 WEST SIDE ST. PIERRE STREET REGISTERED PLAN 86 CITY OF OTTAWA
TOPOGRAPHIC INFORMATION PROVIDED BY ANNIS, O'SULLIVAN, VOLLEBEKK LTD.
SURVEY DATED NOVEMBER 13, 2025.
–BEARINGS ARE GRID, DERIVED FROM CAN–NET 2016 REAL TIME NETWORK GPS OBSERVATIONS AND ARE REFERENCED TO SPECIFIED CONTROL POINTS 01919680184 AND 019198434761, MTM ZONE 9 (76°30' WEST LONGITUDE) NAD–83 (ORIGINAL).
–ELEVATIONS SHOWN ARE GEODETIC, DERIVED FROM CITY OF OTTAWA CONTROL MONUMENT NO. 2016–0027, HAVING A PUBLISHED ELEVATION OF 61.165 METRES, AND ARE REFERRED TO THE CGVD28 GEODETIC DATUM. IT IS THE RESPONSIBILITY OF THE USER OF THIS INFORMATION TO VERIFY THAT THE JOB BENCHMARK HAS NOT BEEN ALTERED OR DISTURBED AND THAT IT'S RELATIVE ELEVATION AND DESCRIPTION AGREES WITH THE INFORMATION SHOWN ON THIS DRAWING.

REV	REVISION DESCRIPTION	DATE	BY	APPD	REV	REVISION DESCRIPTION	DATE	BY	APPD
2	RE–ISSUED FOR SPA	25/05/26	AGJ	AKJ					
1	ISSUED FOR SPA	23/12/25	AGJ	AKJ					

SCALE
NORTH
DESIGNED BY
REVIEWED BY
LICENSED PROFESSIONAL ENGINEER
A. K. JARIWALA
100562090
2026/05/26
PROVINCE OF ONTARIO

CLIENT
12542340 CANADA LIMITED
135 LAURIER AVE W, SUITE 100
OTTAWA, ON, 1KP 5J2
613.612.3288

exp.
exp Services Inc.
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BASEPLAN	AGJ
DESIGN	AGJ
CHECKED	AKJ
CAD	AGJ
PROJECT MANAGER	AKJ
APPROVED	AKJ

PROJECT
1144 ST PIERRE
1144 ST PIERRE STREET
OTTAWA, ONTARIO.

TITLE
NOTES

PROJECT No.	OTT–25011125–A0
SURVEY	AOV LTD.
DATE	2025–11–13
DRAWING No.	C000

DO7-??-??-????

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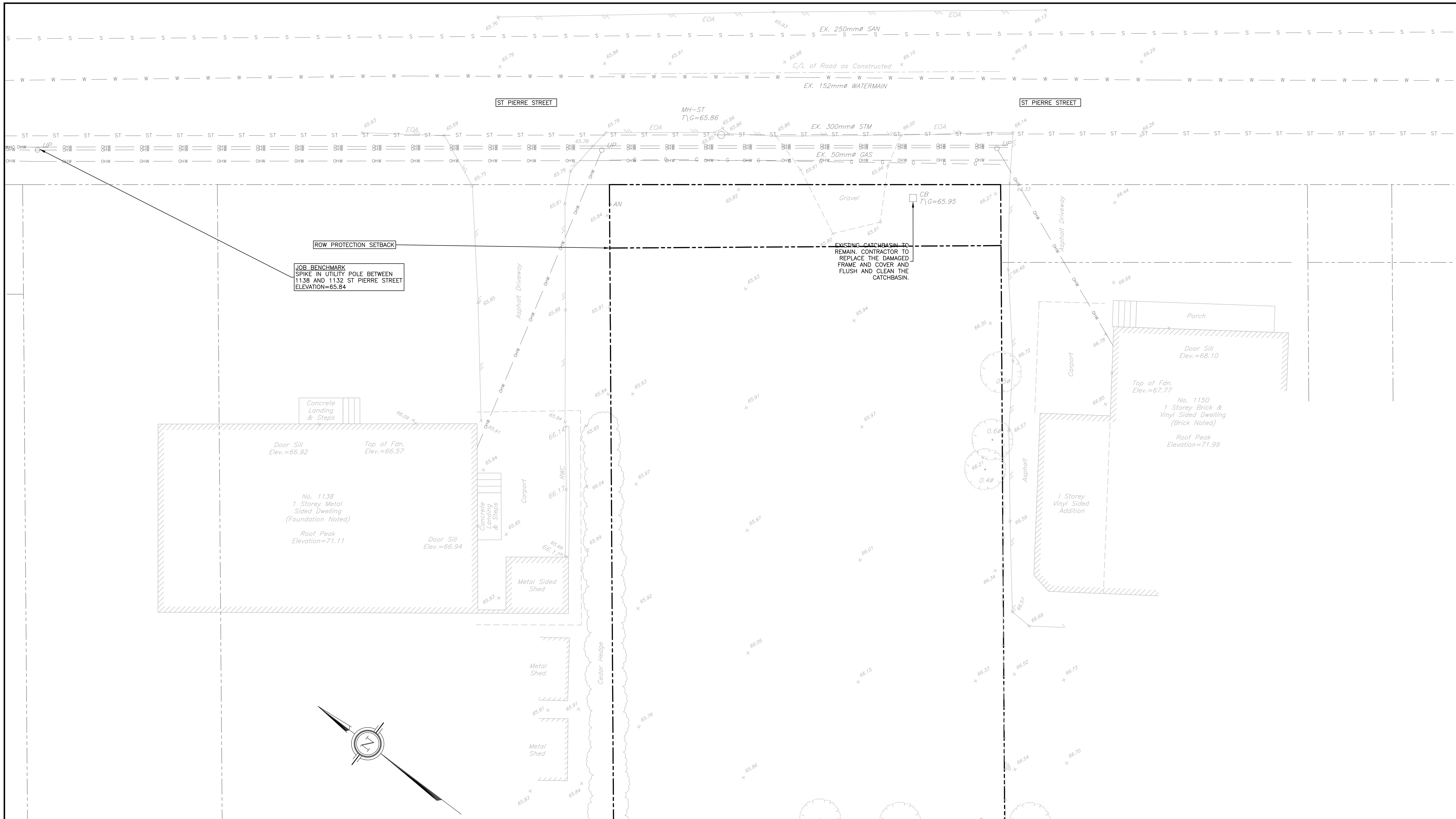

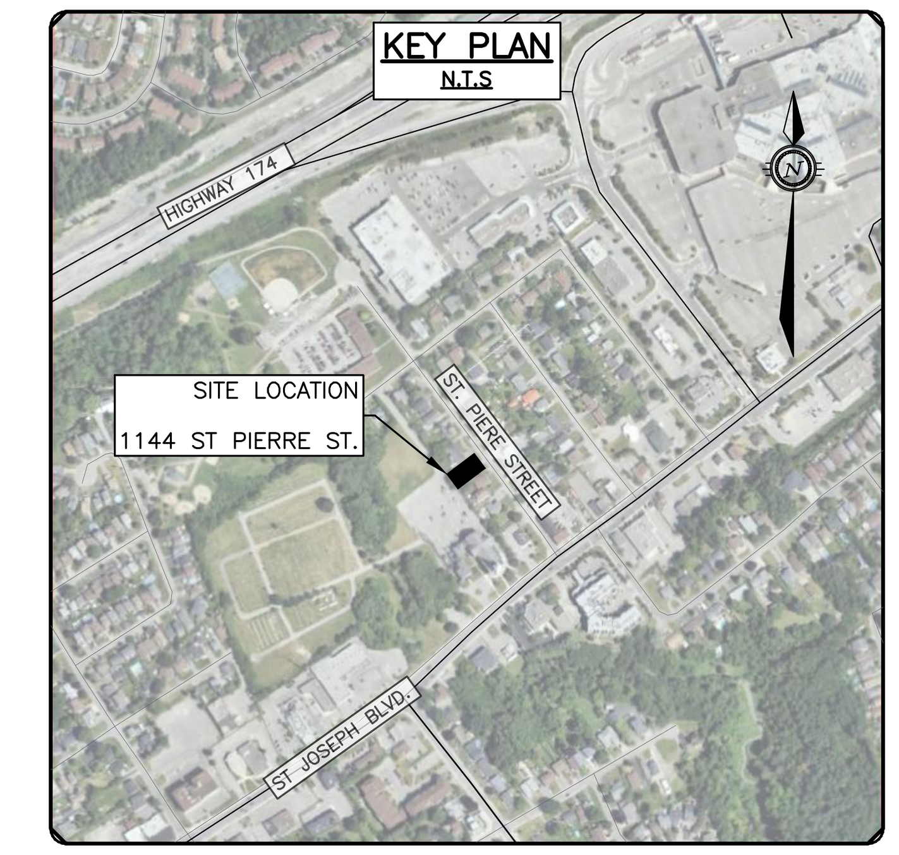

LEGEND

- PROPERTY LINE
- ABUTTING PROPERTY LINE
- EX. ℄ OF ROAD
- EX. RETAINING WALL
- EX. FENCE
- EX. ELEVATION
- EX. OVERHEAD WIRE
- EX. UTILITY POLE AND ANCHOR
- EX. GAS
- EX. CATCHBASIN
- EX. STORM MANHOLE
- EX. SANITARY MANHOLE
- EX. STORM SEWER
- EX. SANITARY SEWER
- EX. WATER MAIN

NOTES:

1. THE LOCATION OF UTILITIES IS APPROXIMATE ONLY, AND THE EXACT LOCATION SHOULD BE DETERMINED BY CONSULTING THE MUNICIPAL AUTHORITIES AND UTILITY COMPANIES CONCERNED. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE THE LOCATION AND STATUS OF UTILITIES AND SHALL BE RESPONSIBLE FOR ADEQUATE PROTECTION OF PLANT AND EQUIPMENT FROM DAMAGE UNTIL SUCH TIME AS THE SERVICE PROVIDER HAS CONFIRMED IN WRITING THE SERVICE IS ABANDONED AND CAN BE REMOVED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ANY SERVICES OR UTILITIES DISTURBED DURING CONSTRUCTION, TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION.
2. THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF EXISTING SERVICES PRIOR TO ANY CONSTRUCTION. THE CONTRACTOR SHALL CONFIRM LOCATIONS AND ELEVATIONS OF EXISTING SERVICES PRIOR TO COMMENCING CONSTRUCTION. ALL DIMENSIONS SHALL BE CHECKED AND VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES, INTERPRETATIONS, CHANGES AND ADDITIONS TO THESE DRAWINGS MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER, WHEN NOTED AND BEFORE PROCEEDING WITH CONSTRUCTION WORKS. DO NOT CONTINUE CONSTRUCTION IN AREAS WHERE DISCREPANCIES APPEAR UNTIL SUCH DISCREPANCIES HAVE BEEN RESOLVED.
3. EXISTING WATER SERVICES TO BE BLANKED AT MAIN BY CITY OF OTTAWA FORCES. EXCAVATION, BACKFILL AND REINSTATEMENT BY CONTRACTOR.
4. ALL EXISTING SANITARY AND STORM SERVICES TO BE CAPPED/GROUTED AT THE PROPERTY TO THE SATISFACTION OF THE CITY'S SEWER OPERATIONS.
5. ALL REMOVALS OF UTILITIES INCLUDING BUT NOT LIMITED TO HYDRO POLES, OVERHEAD/UNDERGROUND WIRES, TELECOM, GAS, ETC TO BE REMOVED BY THE CONTRACTOR IN COORDINATION WITH THE RELEVANT AUTHORITIES HAVING JURISDICTION.

CAUTION

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.

JOB BENCH MARK

SPIKE IN UTILITY POLE ELEVATION = 65.84

TOPOGRAPHIC INFORMATION

LOT 27 WEST SIDE ST. PIERRE STREET REGISTERED PLAN 86 CITY OF OTTAWA

TOPOGRAPHIC INFORMATION PROVIDED BY ANNIS, O'SULLIVAN, VOLLEBEKK LTD.
SURVEY DATED NOVEMBER 13, 2025.
–BEARINGS ARE GRID, DERIVED FROM CAN–NET 2016 REAL TIME NETWORK GPS OBSERVATIONS AND ARE REFERENCED TO SPECIFIED CONTROL POINTS 01919680184 AND 019198434761, MTM ZONE 9 (76°30' WEST LONGITUDE) NAD–83 (ORIGINAL).
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REV	REVISION DESCRIPTION	DATE	BY	APPD
2	RE-ISSUED FOR SPA	25/05/26	AGJ	AKJ
1	ISSUED FOR SPA	23/12/25	AGJ	AKJ

SCALE: HORIZONTAL 1:100 (0, 1m, 2m, 4m)

NORTH

DESIGNED BY

REVIEWED BY: LICENSED PROFESSIONAL ENGINEER — A. K. JARIWALA — 100562090 — 2026/05/26 — PROVINCE OF ONTARIO

CLIENT: 12542340 CANADA LIMITED
135 LAURIER AVE W, SUITE 100
OTTAWA, ON, 1KP 5J2
613.612.3288

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BASEPLAN	AGJ
DESIGN	AGJ
CHECKED	AKJ
CAD	AGJ
PROJECT MANAGER	AKJ
APPROVED	AKJ

PROJECT: 1144 ST PIERRE
1144 ST PIERRE STREET
OTTAWA, ONTARIO.

TITLE: EXISTING CONDITIONS AND REMOVALS PLAN

PROJECT No.	OTT-25011125-A0
SURVEY	AOV LTD.
DATE	2025-11-13
DRAWING No.	C001

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Filename: \\exp\data\ott\ott-25011125-a0\60 execution\65 drawings\ott-25011125-a0 - 1144 st pierre - civil - 2026-05-06 - lowered ffe.dwg
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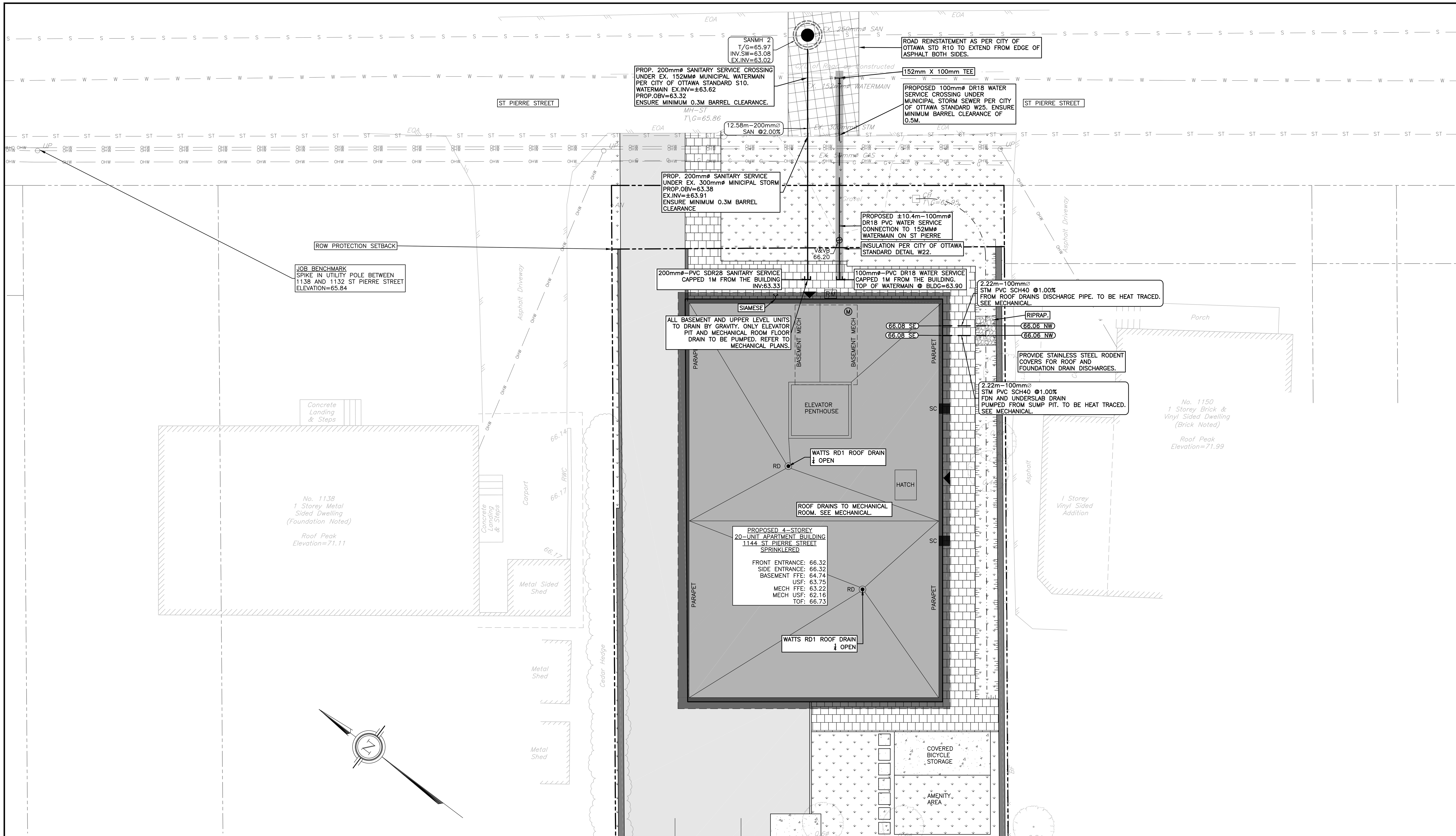
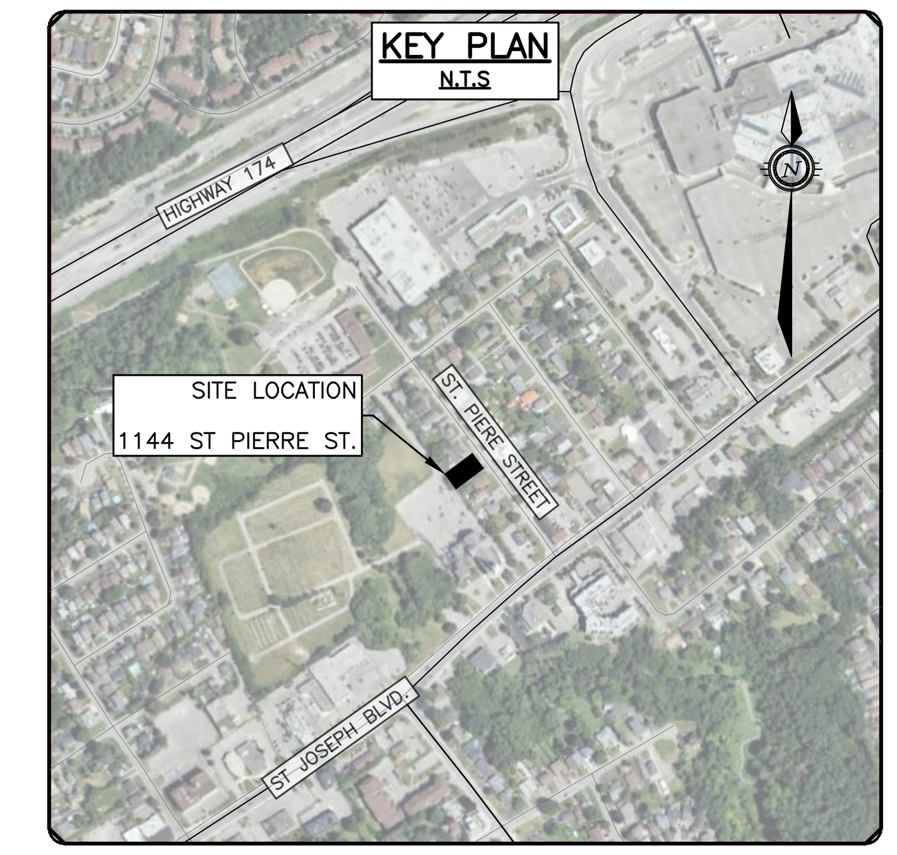
References: Keyplan-MTM-NAD83.dwg; XREF - TOPO.dwg; XREF - SITE PLAN.dwg



STRUCTURE TABLE									
STRUCTURE NUMBER	TYPE	LID ELEV (m)	INVERT IN (m) and DIA (mm)		INVERT OUT (m) and DIA (mm)		STRUCTURE			
							SIZE	REFERENCE	FRAME	COVER
SANMH 2	SAN	65.97	63.08	(200)	±63.02	(250)	1200 DIA	OPSD 701.010	Ottawa S25	Ottawa S24

PROPOSED SEWER TABLE

STRUCTURE		TYPE	INVERT ELEV (m)		NOMINAL DIA. (mm)	LENGT H (m)	Type	Class	Slope (%)
U/S	D/S		U/S	D/S					
BUILDING	ON-SITE DITCH	STORM	66.13	66.11	100	2.22	PVC	SCH40	1.0%
BUILDING	ON-SITE DITCH	STORM	66.13	66.11	100	2.22	PVC	SCH40	1.0%
BUILDING	SANMH 2	SANITARY	63.33	63.08	200	12.58	PVC	SDR28	2.0%



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- EX. OVERHEAD WIRE
- EX. UTILITY POLE AND ANCHOR
- EX. GAS
- EX. CATCHBASIN
- EX. STORM MANHOLE
- EX. SANITARY MANHOLE
- EX. STORM SEWER
- EX. SANITARY SEWER
- EX. WATER MAIN
- PROP. STORM
- PROP. SANITARY
- PROP. WATER
- PROP. STORM/SANITARY MANHOLE
- PROP. VALVE AND VALVEBOX
- W.W. PROP. WINDOW WELL
- PROPOSED ROAD REINSTATEMENT FOR SERVICE TRENCH
- RD PROPOSED ROOF DRAIN
- SC PROPOSED SCUPPER
- PROPOSED INSULATION AS NOTED
- PROPOSED WATER METER
- PROPOSED SIAMESE CONNECTION
- RM PROPOSED WATER REMOTE METER

CAUTION
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JOB BENCH MARK
SPIKE IN UTILITY POLE ELEVATION = 65.84
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SCALE 1:100 HORIZONTAL

REVIEWED BY: LICENSED PROFESSIONAL ENGINEER A. K. JARIWALA 100562090 2026/05/26 PROVINCE OF ONTARIO

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12542340 CANADA LIMITED
135 LAURIER AVE W, SUITE 100
OTTAWA, ON, 1KP 5J2
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BASEPLAN	AGJ
DESIGN	AGJ
CHECKED	AKJ
CAD	AGJ
PROJECT MANAGER	AKJ
APPROVED	AKJ

PROJECT
1144 ST PIERRE
1144 ST PIERRE STREET
OTTAWA, ONTARIO.

TITLE
SITE SERVICING PLAN

PROJECT No.	OTT–25011125–A0
SURVEY	AOV LTD.
DATE	2025–11–13
DRAWING No.	C100

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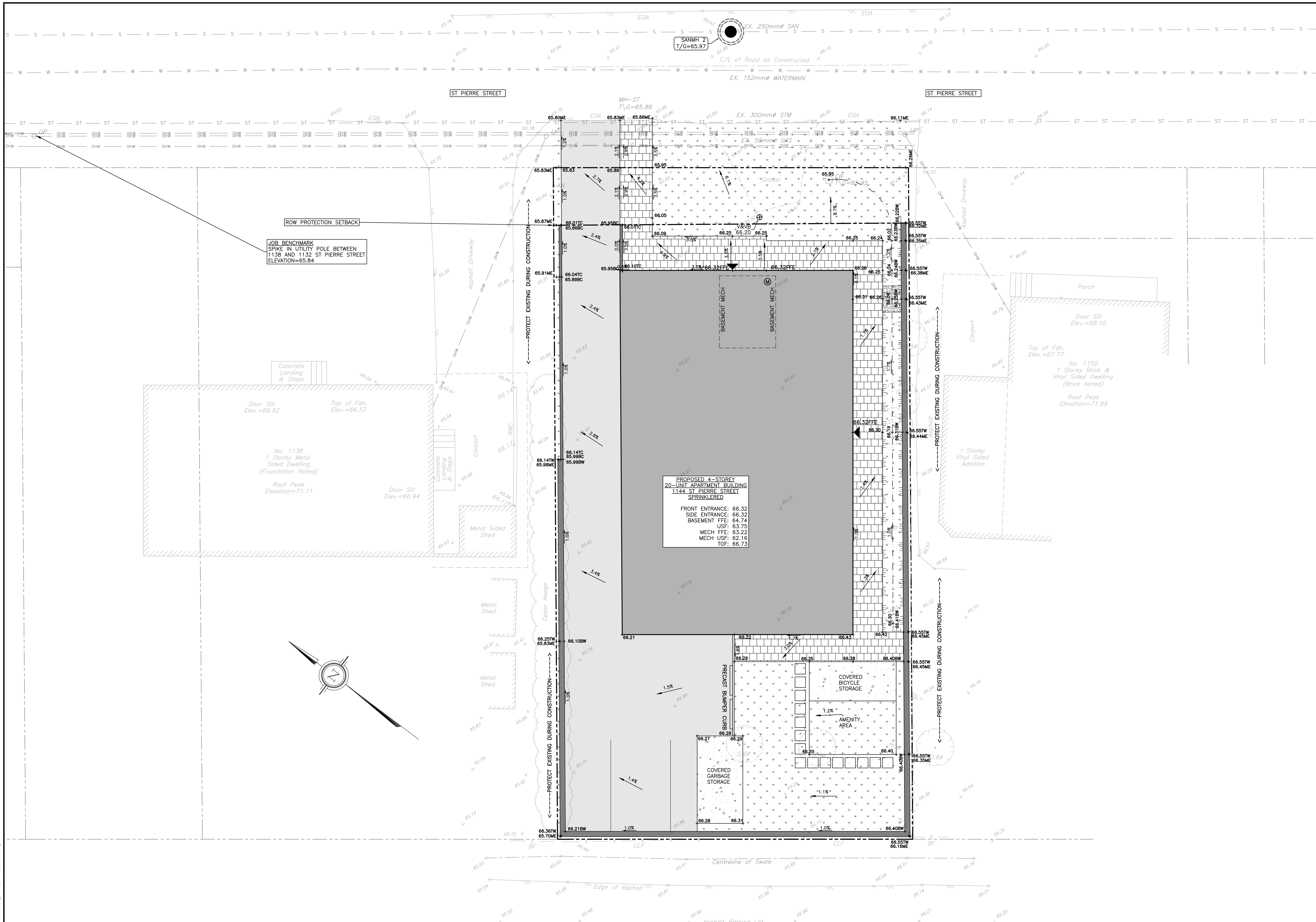

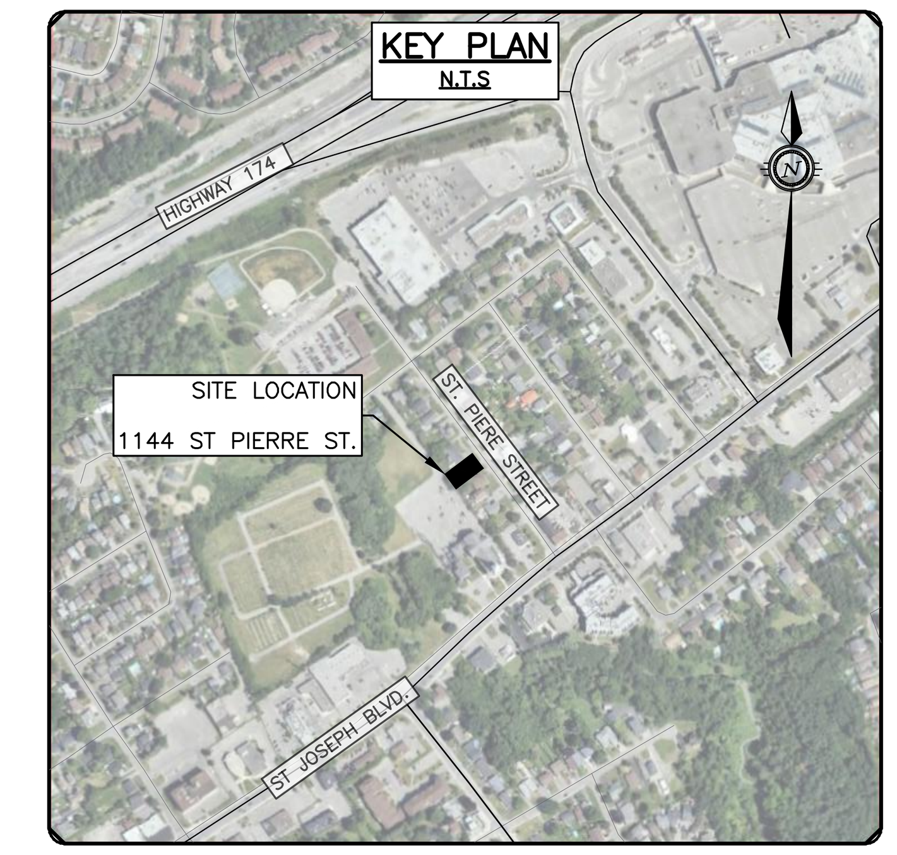

LEGEND

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- EX. RETAINING WALL
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- EX. GAS
- EX. CATCHBASIN
- EX. STORM MANHOLE
- EX. SANITARY MANHOLE
- EX. STORM SEWER
- EX. SANITARY SEWER
- EX. WATER MAIN
- 2.0% PROP. GRADE (%)
- × 92.39 PROP. ELEVATION
- × 92.39TC PROP. ELEVATION (TOP OF CURB)
- × 92.39BC PROP. ELEVATION (BOTTOM OF CURB)
- × 92.39ME PROP. ELEVATION (MATCH EX. ELEV.)
- × 66.37FFE PROP. FINISHED FLOOR ELEVATION
- × 92.10TW PROP. TOP OF WALL
- × 92.10BW PROP. BOTTOM OF WALL
- PROP. BUILDING AT GRADE
- PROP. SC1.1 BARRIER CURB
- PROP. OPSD 3120.100 TOE WALL
- PROP. GRASS/SOFT LANDSCAPING AS PER LANDSCAPE PLANS
- PROP. CONCRETE SURFACE
- PROP. INTERLOCK
- PROP. ASPHALT
- PROP. STORM/SANITARY MANHOLE
- W.W. PROP. WINDOW WELL
- PROP. VALVE AND VALVEBOX
- PROP. SWALE/FLOW PATH
- PROP. TERRACING @3:1 MAX.
- PROP. RIPRAP
- PROP. PRECAST CURB OPSD 603.020

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JOB BENCH MARK

SPIKE IN UTILITY POLE ELEVATION = 65.84

TOPOGRAPHIC INFORMATION

LOT 27 WEST SIDE ST. PIERRE STREET REGISTERED PLAN 86 CITY OF OTTAWA

TOPOGRAPHIC INFORMATION PROVIDED BY ANNIS, O'SULLIVAN, VOLLEBEKK LTD.
SURVEY DATED NOVEMBER 13, 2025.
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REV	REVISION DESCRIPTION	DATE	BY	APPD
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1	ISSUED FOR SPA	23/12/25	AGJ	AKJ

SCALE: 0 1m 2m 4m HORIZONTAL 1:100

NORTH

DESIGNED BY

REVIEWED BY

LICENSED PROFESSIONAL ENGINEER
A. K. JARIWALA
100562090
2026/05/26
PROVINCE OF ONTARIO

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BASEPLAN	AGJ
DESIGN	AGJ
CHECKED	AKJ
CAD	AGJ
PROJECT MANAGER	AKJ
APPROVED	AKJ

PROJECT
1144 ST PIERRE
1144 ST PIERRE STREET
OTTAWA, ONTARIO.

TITLE
SITE GRADING PLAN

PROJECT No.	OTT-25011125-A0
SURVEY	AOV LTD.
DATE	2025-11-13
DRAWING No.	C200

DO7-??-??-????

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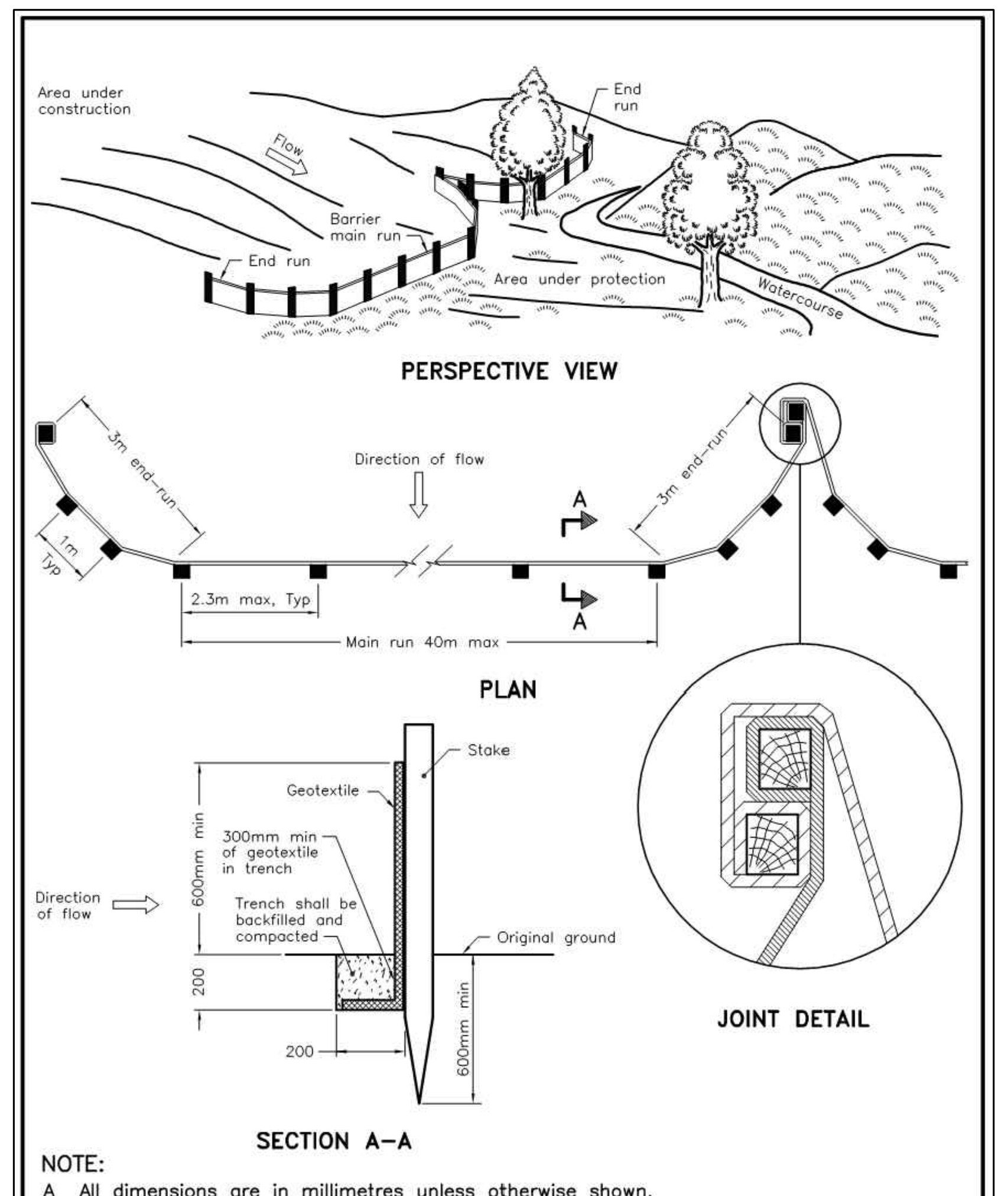
EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION.

DURING ALL CONSTRUCTION ACTIVITIES, EROSION AND SEDIMENTATION SHALL BE CONTROLLED BY THE FOLLOWING TECHNIQUES:

1. LIMITING THE EXTENT OF EXPOSED SOILS AT ANY GIVEN TIME.
2. REVEGETATION OF EXPOSED AREAS AS SOON AS POSSIBLE.
3. MINIMIZATION OF AREA TO BE CLEARED AND DISRUPTION TO ADJACENT AREAS.
4. INSTALLATION OF FILTER CLOTH BETWEEN FRAME AND COVER ON ALL PROPOSED CATCH BASINS AND CATCH BASIN MANHOLES.
5. A SILT FENCE TO BE INSTALLED 0.3m INSIDE THE SITE PROPERTY LINE TO LOCATIONS SHOWN ON THIS DRAWING.
6. A VISUAL INSPECTION SHALL BE COMPLETED DAILY ON SEDIMENT CONTROL BARRIERS AND ANY DAMAGE REPAIRED IMMEDIATELY. CARE WILL BE TAKEN TO PREVENT DAMAGE DURING CONSTRUCTION OPERATIONS.
7. IN SOME CASES SOME BARRIERS MAY BE REMOVED TEMPORARILY TO ACCOMODATE THE CONSTRUCTION OPERATIONS. THE AFFECTED BARRIERS WILL BE REINSTATED AT NIGHT WHEN CONSTRUCTION IS COMPLETED.
8. THE SEDIMENT CONTROL DEVICES WILL BE CLEANED OF ACCUMULATED SILT AS REQUIRED. THE DEPOSITS WILL BE DISPOSED OF AS PER THE REQUIREMENTS OF THE CONTRACT.
9. DURING THE COURSE OF CONSTRUCTION IF THE ENGINEER BELIEVES THAT ADDITIONAL PREVENTION METHODS ARE REQUIRED TO CONTROL EROSION AND SEDIMENTATION, THE CONTRACTOR WILL INSTALL ADDITONAL SILT FENCES OR OTHER METHODS AS REQUIRED TO THE SATISFACTION OF THE ENGINEER.
10. CONSTRUCTION AND MAINTENANCE REQUIRMENTS FOR EROSION AND SEDIMENT CONTROLS TO COMPLY WITH ONTARIO PROVINCIAL STANDARD SPECIFICATION (OPSS) OPSS 805, AND CITY OF OTTAWA SPECIFICATIONS.
11. SEDIMENT AND EROSION CONTROL MEASURES MAY BE MODIFIED IN THE FIELD AT THE DISCRETION OF THE CITY OF OTTAWA SITE INSPECTOR OR CONSERVATION AUTHORITY.

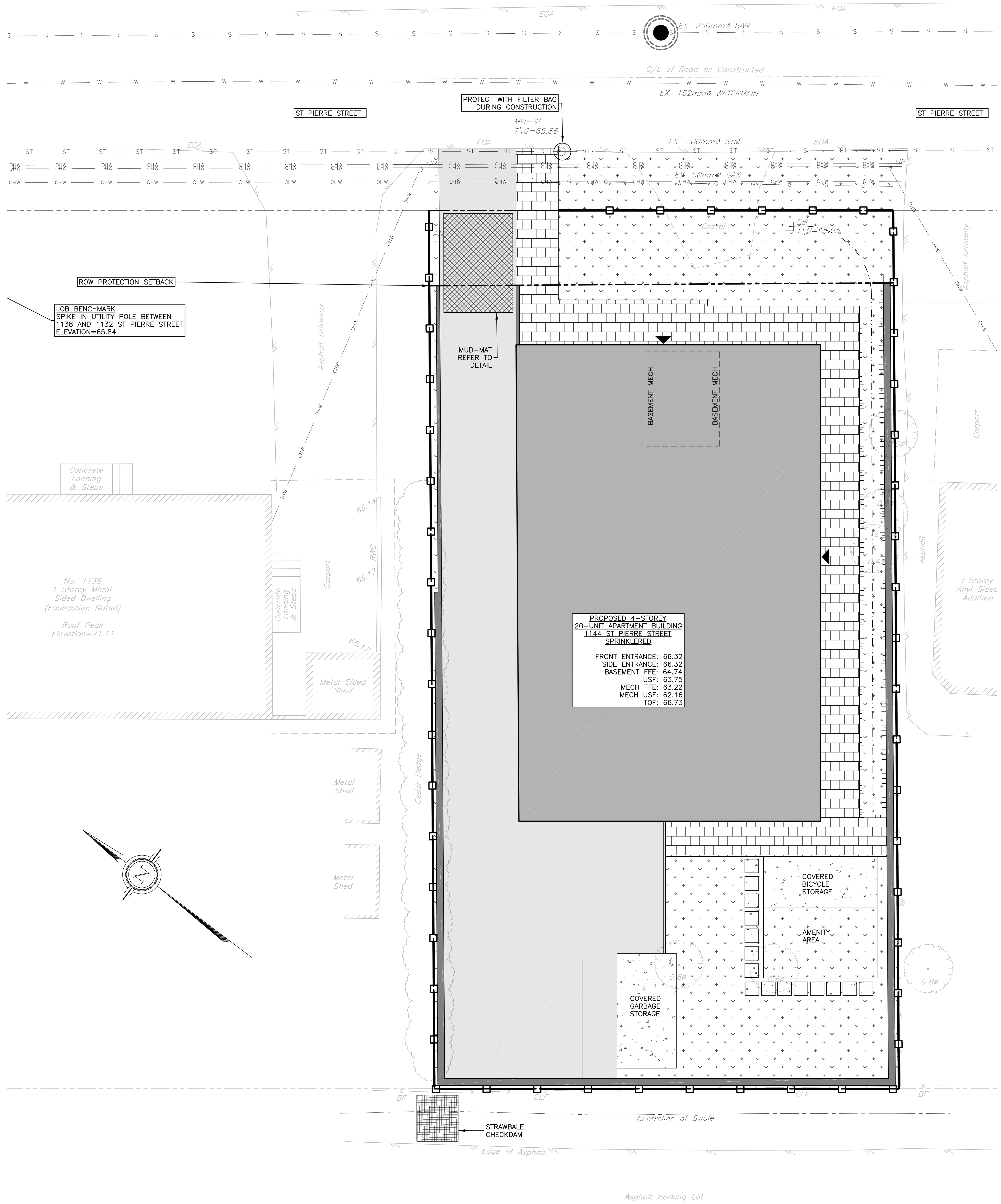


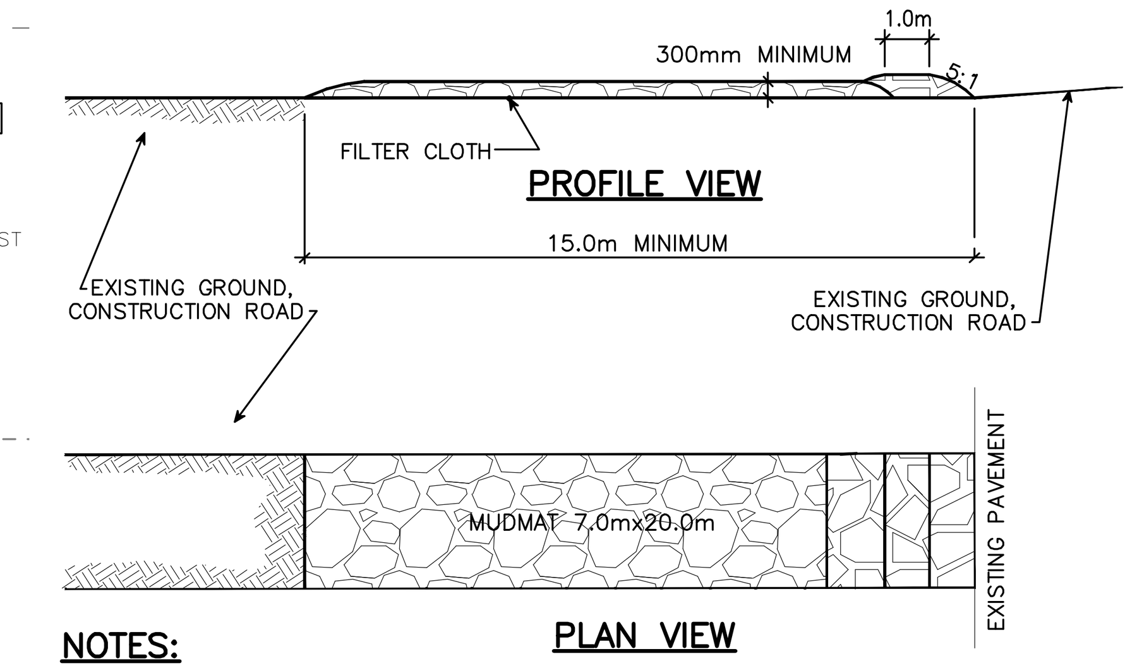
NOTE:
A All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2015	Rev 2
LIGHT-DUTY SILT FENCE BARRIER	OPSD 219.110	

NOTES:

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO WOOD POSTS WITH WIRE TIES OR STAPLES.
2. POSTS TO BE SPACED AT 2.3 METRES CENTRE TO CENTRE.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY A MINIMUM OF 500mm.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.
5. WOOD POSTS TO BE HARDWOOD TYPE (50mm x 50mm).
6. GEOTEXTILE TO BE EMBEDDED 200mm INTO GROUND.
7. GEOTEXTILE TO CONFORM TO OPSS 805 STANDARDS.
8. SILT FENCE MUST BE INSTALLED BEFORE COMMENCEMENT OF CONSTRUCTION AND IN ACCORDANCE WITH DETAIL. SILT FENCE CAN BE REMOVED AFTER LANDSCAPING IS COMPLETE.
9. SEDIMENTS MUST BE CLEARED AWAY WHEN THEY REACH HALF THE HEIGHT OF THE FENCE.



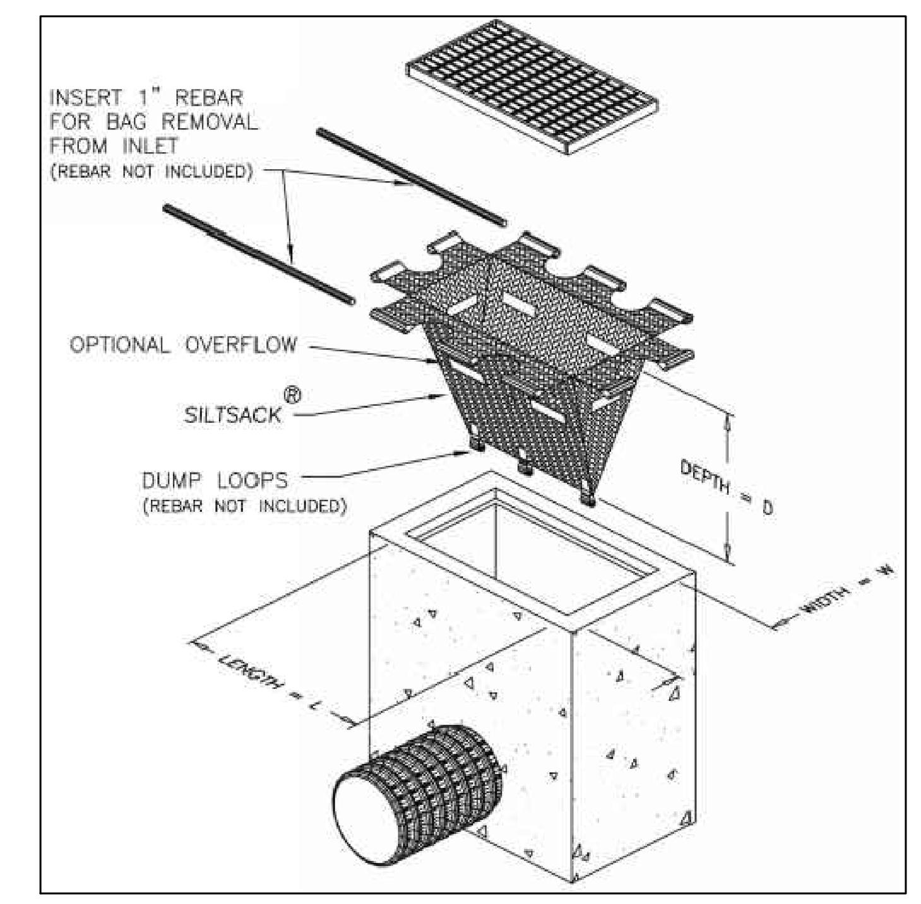


NOTES:

1. STONE – USE CLEAR CRUSHED 100mm STONE.
2. LENGTH – AS REQUIRED BUT NOT LESS THAN 15.0m.
3. THICKNESS – NOT LESS THAN 300mm.
4. WIDTH – 7.0m MINIMUM, NOT LESS THAN THE WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. FILTER CLOTH – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING STONE.
6. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRED PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED OR TRACKED ONTO THE PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.
7. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

MUD MAT DETAIL

N.T.S



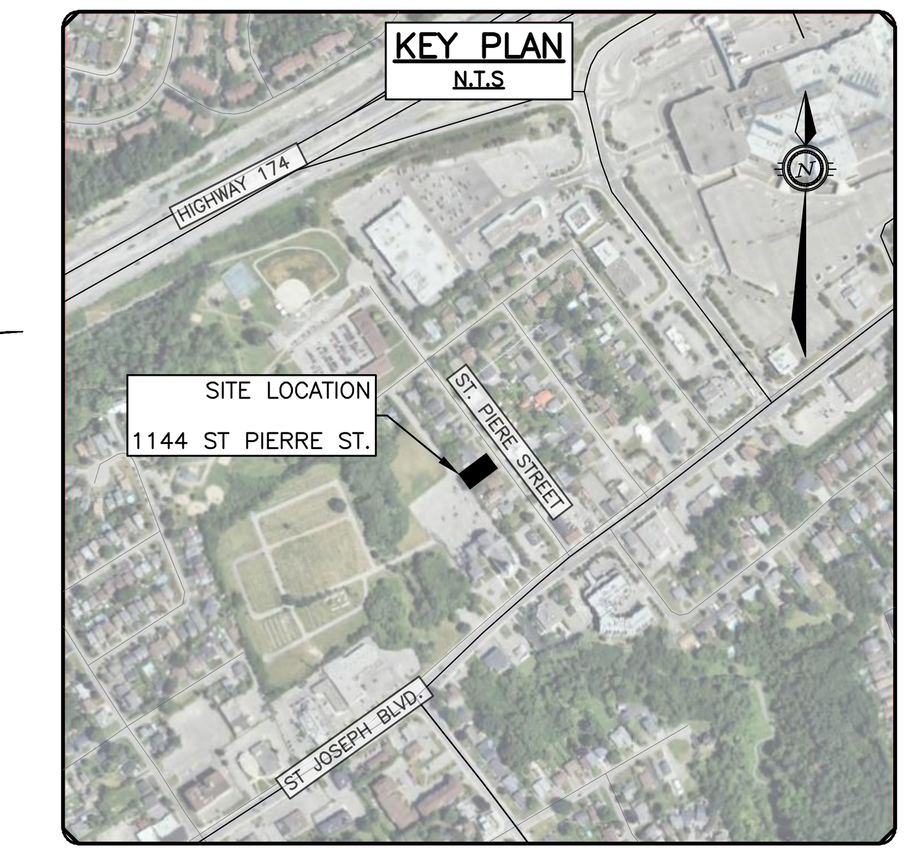
PROVIDE FILTER BAGS AS SHOWN (GEO-SYNTHETICS MANUFACTURER OR APPROVED EQUIVALENT)

FILTER BAG DETAIL

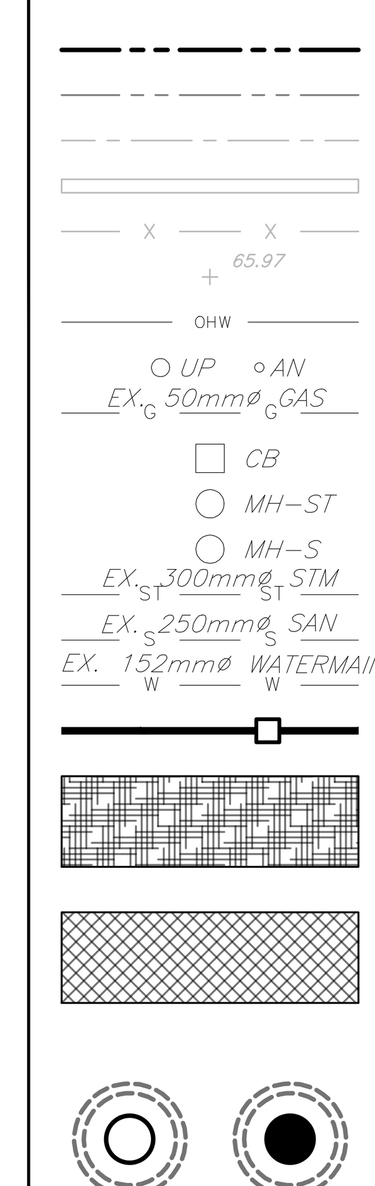
N.T.S

KEY PLAN

N.T.S



LEGEND



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SPIKE IN UTILITY POLE ELEVATION = 65.84
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1	ISSUED FOR SPA	23/12/25	AGJ	AKJ					

SCALE: 0 1m 2m 4m HORIZONTAL 1:100
NORTH
DESIGNED BY
REVIEWED BY: LICENSED PROFESSIONAL ENGINEER A. K. JARIWALA 100562090 2026/05/26 PROVINCE OF ONTARIO

CLIENT: 12542340 CANADA LIMITED
135 LAURIER AVE W, SUITE 100
OTTAWA, ON, 1KP 5J2
613.612.3288

exp.
exp Services Inc.
t: +1.613.688.1899 | f: +1.613.225.7330
2650 Queensview Drive, Unit 100
Ottawa, ON K2B 8H6
Canada
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BASEPLAN	AGJ
DESIGN	AGJ
CHECKED	AKJ
CAD	AGJ
PROJECT MANAGER	AKJ
APPROVED	AKJ

PROJECT: 1144 ST PIERRE
1144 ST PIERRE STREET
OTTAWA, ONTARIO.

TITLE: EROSION AND SEDIMENT CONTROL PLAN

PROJECT No. OTT-25011125-A0
SURVEY AOV LTD.
DATE 2025-11-13
DRAWING No. C300

DO7-??-??-????
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Filename: \\exp\data\ott\ott-25011125-a0\60 execution\65 drawings
Last Saved: 5/22/2026 2:36:54 PM Last Plotted: 5/25/2026 4:18:36
Pen Table: exp-ott-pens.ctb Plotted by: ParmarN
References: Keyplan-MTM-NAD83.dwg; XREF - TOPO.dwg; XREF - SITE

CAUTION

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.

JOB BENCH MARK

SPIKE IN UTILITY POLE ELEVATION = 65.84

TOPOGRAPHIC INFORMATION

LOT 27 WEST SIDE ST. PIERRE STREET REGISTERED PLAN 86 CITY OF OTTAWA

TOPOGRAPHIC INFORMATION PROVIDED BY ANNIS, O'SULLIVAN, VOLLEBEKK LTD.
SURVEY DATED NOVEMBER 13, 2025.
-BEARINGS ARE GRID, DERIVED FROM CAN-NET 2016 REAL TIME NETWORK GPS OBSERVATIONS AND ARE REFERENCED TO SPECIFIED CONTROL POINTS 01919680184 AND 019198434761, MTM ZONE 9 (76°30' WEST LONGITUDE) NAD-83 (ORIGINAL).
-ELEVATIONS SHOWN ARE GEODETIC, DERIVED FROM CITY OF OTTAWA CONTROL MONUMENT NO. 2016-0027, HAVING A PUBLISHED ELEVATION OF 61.165 METRES, AND ARE REFERRED TO THE CGVD28 GEODETIC DATUM. IT IS THE RESPONSIBILITY OF THE USER OF THIS INFORMATION TO VERIFY THAT THE JOB BENCHMARK HAS NOT BEEN ALTERED OR DISTURBED AND THAT IT'S RELATIVE ELEVATION AND DESCRIPTION AGREES WITH THE INFORMATION SHOWN ON THIS DRAWING.

REV	REVISION DESCRIPTION	DATE	BY	APPD
2	RE-ISSUED FOR SPA	25/05/26	AGJ	AKJ
1	ISSUED FOR SPA	23/12/25	AGJ	AKJ

REV	REVISION DESCRIPTION	DATE	BY	APPD

SCALE 0 1m 2m 4m HORIZONTAL 1:100

NORTH

DESIGNED BY

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100562090
2026/05/26
PROVINCE OF ONTARIO

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PROJECT
1144 ST PIERRE
1144 ST PIERRE STREET
OTTAWA, ONTARIO.

TITLE
PRE-DEVELOPMENT CATCHMENTS

PROJECT No.	OTT-25011125-A0
SURVEY	AOV LTD.
DATE	2025-11-13
DRAWING No.	C400

DO7-??-??-????

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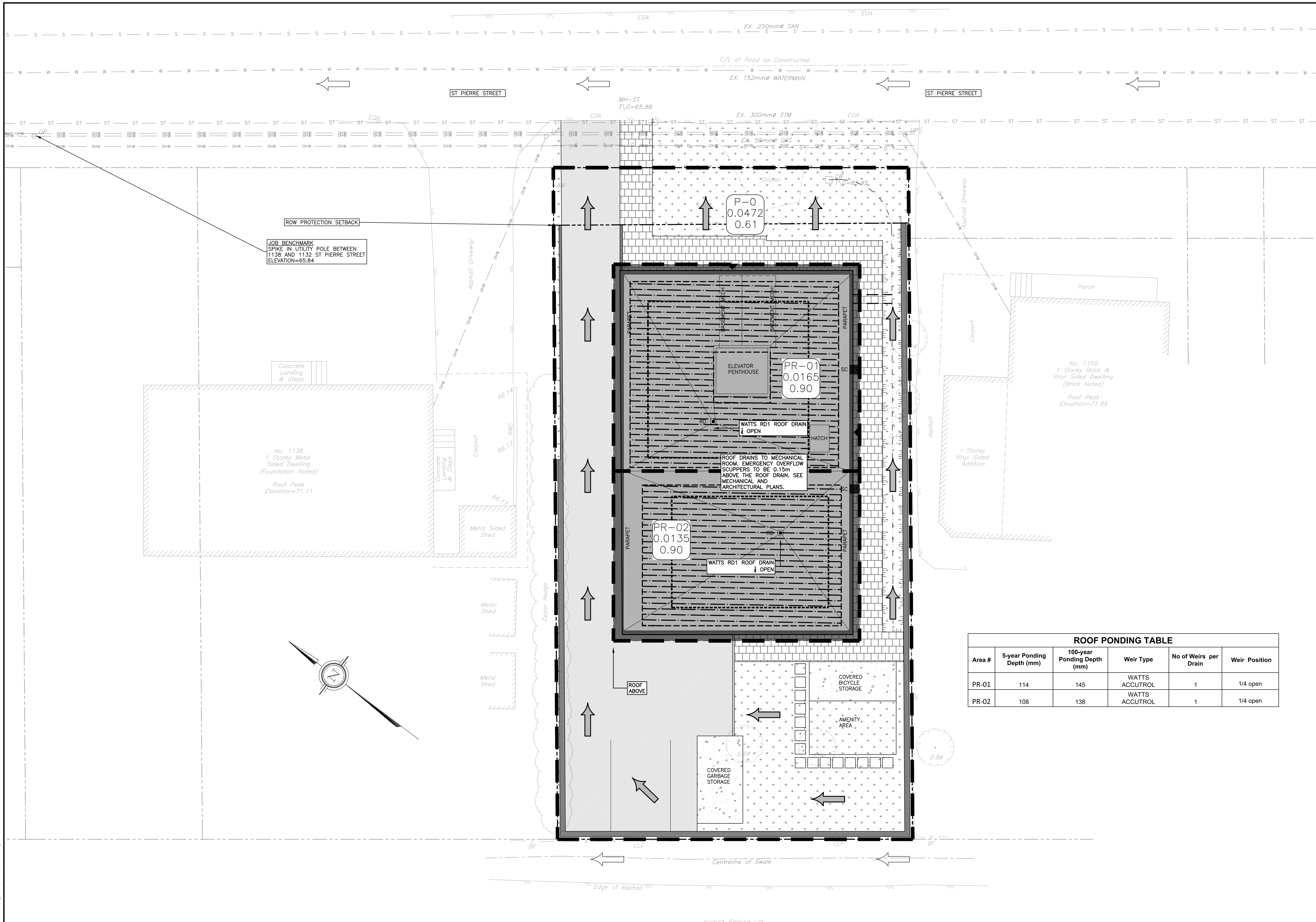
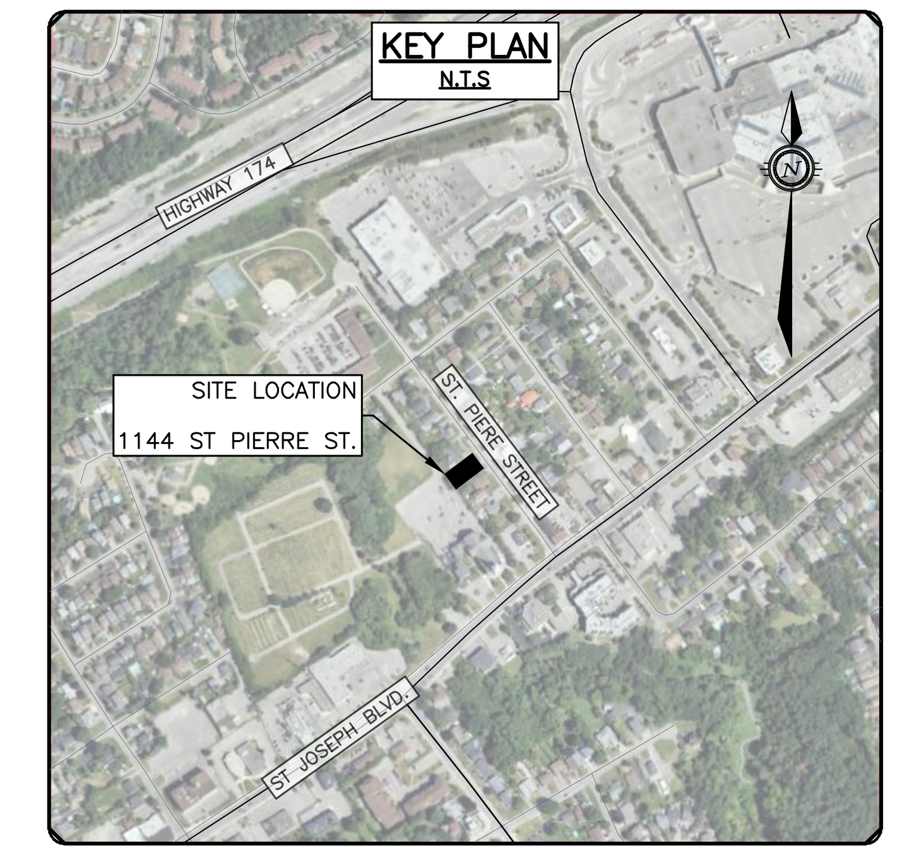


ROOF PONDING TABLE

Area #	5-year Ponding Depth (mm)	100-year Ponding Depth (mm)	Weir Type	No of Weirs per Drain	Weir Position
PR-01	114	145	WATTS ACCUTROL	1	1/4 open
PR-02	108	138	WATTS ACCUTROL	1	1/4 open

KEY PLAN

N.T.S



LEGEND

- PROPERTY LINE
- ABUTTING PROPERTY LINE
- EX. ℄ OF ROAD
- EX. RETAINING WALL
- EX. FENCE
- EX. ELEVATION
- EX. OVERHEAD WIRE
- EX. UTILITY POLE AND ANCHOR
- EX. GAS
- EX. CATCHBASIN
- EX. STORM MANHOLE
- EX. SANITARY MANHOLE
- EX. STORM SEWER
- EX. SANITARY SEWER
- EX. WATER MAIN
- ON-SITE OVERLAND FLOW ROUTE
- OFF-SITE OVERLAND FLOW ROUTE
- POST-DEVELOPMENT CATCHMENTS
- CATCHMENTS LABEL (ID / AREA / "C")
- PROP. GRASS
- PROP. CONCRETE
- PROP. INTERLOCK
- PROP. ASPHALT
- PROP. STORM MANHOLE
- PROP. STORM
- PROP. ROOF DRAINS (RD)
- PROP. SCUPPERS (SC)
- PROP. WINDOW WELL (W.W.)
- 5 YEAR PONDING
- 100 YEAR PONDING
- PROP. SWALE/FLOW PATH
- PROP. TERRACING @3:1 MAX.

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PROJECT: **1144 ST PIERRE**
1144 ST PIERRE STREET
OTTAWA, ONTARIO.

TITLE: **POST-DEVELOPMENT CATCHMENTS**

PROJECT No. OTT-25011125-A0
SURVEY: AOV LTD.
DATE: 2025-11-13
DRAWING No. C500

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