Phoenix Homes

Design Brief

1773 & 1767 Baseline

October 2026

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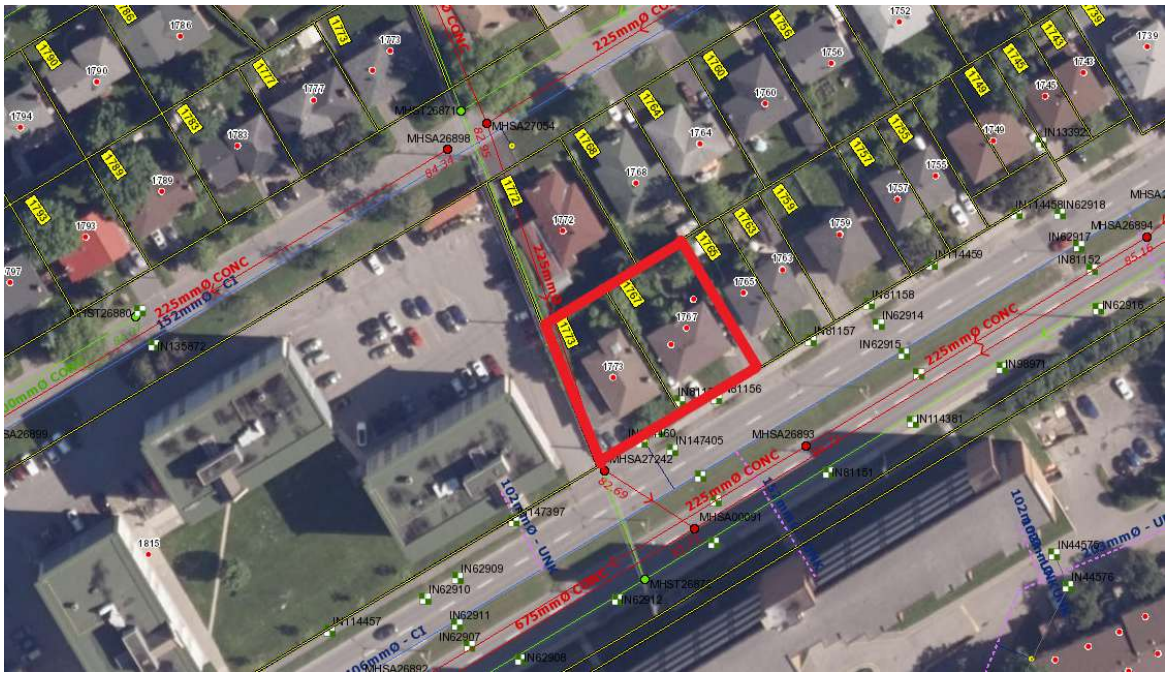
1 INTRODUCTION

1773 & 1767 Baseline Road is located on the north side of Baseline Road, between the intersection with Navaho Drive to the west and Ferguson Street to the east, in Ottawa, Ontario. This proposed site is abutted by an apartment complex to the west, residential to the east and north, and Baseline Road to the south. Arcadis Professional Services (Canada) Inc. (formerly IBI Group) has been retained by Phoenix Homes to provide professional engineering services for 1773 & 1767 Baseline Road. The subject site is approximately 0.11 ha and consists of one 5-storey apartment building to be completed in one phase. Refer to key plan on **Figure 1.1** for Site location.

Figure 1.1 Site Location



1.1 Geotechnical Concerns

A separate geotechnical report will be completed for the site by others.

The objective of the investigation report will include:

- Determination of the subsoil and groundwater conditions;
- Provision of geotechnical recommendations pertaining to the design and development of the subject site including construction considerations.

Among other items, the report will comment on the following:

- Site grading;
- Foundation design;
- Pavement structure;
- Infrastructure construction;
- Groundwater control;

The report will conclude if the subject site is considered suitable for the proposed development.

1.2 Easements

There is an existing storm and sanitary sewer running through the west portion of the site. These sewers are in a 6.1m subject agreement easement NST. CR375146E. Sewers and other underground infrastructure will not be proposed inside the easement.

Easement lines are shown on drawing C-001 General Plan of Services as well as on the Topographic Plan of Survey prepared by AOV, both included in **Appendix A**.

2 WATER DISTRIBUTION

2.1 Existing Conditions

1773 & 1767 Baseline Road will be serviced with potable water from the City of Ottawa's existing watermains. There is an existing 400 mm diameter watermain inside Baseline Road adjacent to the site. This watermain falls within the City of Ottawa's pressure district Pressure Zone 2W which will provide the water supply to the site.

2.2 Design Criteria

2.2.1 Water Demands

The proposed development plan includes 46 residential units. The population for apartment buildings is assumed at 1.4 persons per unit for 1-bedroom units, and 2.1 persons per unit for 2-bedroom units as found in Table 4.1 of the Design Guidelines. Per unit population density and consumption rates are taken from Tables 4.1 and 4.2 at the Ottawa Design Guidelines – Water Distribution and are summarized as follows:

- Residential Average Day Demand 280 l/cap/day
- Residential Peak Daily Demand 700 l/cap/day
- Residential Peak Hour Demand 1540 l/cap/day

A water demand calculation sheet is included in **Appendix B** and the total water demands are summarized as follows:

- Average Day 0.26 l/s
- Maximum Day 0.65 l/s
- Peak Hour 1.42 l/s

2.2.2 System Pressures

The 2010 City of Ottawa Water Distribution Guidelines states that the preferred practice for the design of a new distribution system is to have normal operating pressures range between 345 kPa (50 psi) and 552 kPa (80 psi) under maximum daily flow conditions. Other pressure criteria identified in the guidelines are as follows:

Minimum Pressure	Minimum system pressure under peak hour demand conditions shall not be less than 276 kPa (40 psi).
Fire Flow	During the period of maximum day demand, the system pressure shall not be less than 150 kPa (21 psi) during a fire flow event.

Maximum Pressure	Maximum pressure at any point in the distribution system in unoccupied areas shall not exceed 689 kPa (100 psi). In accordance with the Ontario Building/Plumbing Code the maximum pressure should not exceed 552 kPa (80 psi) in occupied areas. Pressure reduction controls may be required for buildings when it is not possible/feasible to maintain the system pressure below 552 kPa.

2.2.3 Fire Flow Rate

The 2020 Canada Fire underwriter's Survey was used to determine the fireflow for the site per City of Ottawa technical bulletin 2024-05. The calculations result in a fire flow of 14,000 L/min (233.3 L/s) based on wood-frame construction. A copy of the FUS calculation is included in **Appendix B**.

2.2.4 Boundary Conditions

The City of Ottawa has provided updated hydraulic boundary conditions for the connection to Baseline Road. The boundary conditions are based on the water demand and fire flow rates provided. A copy of the boundary conditions received July 22, 2026 is included in **Appendix B** and is summarized as follows:

SCENARIO	HYDRAULIC HEAD (M)
Maximum HGL	133.4
Peak Hour	125.6
Max Day + Fire Flow (233.3 l/s)	127.2

2.3 Proposed Water Plan

The site will be serviced by one 150mm diameter watermain from Baseline Road. There are two existing small-diameter water services for the existing buildings onsite that will need to be abandoned. There is sufficient hydrant coverage for the site, including one directly in front of the building, therefore no new hydrants are proposed.

Per Section 2.2.4, the building will need a fire flow of up to 14,000 L/min. With at least one hydrant within 75m of the building and three additional within 300m, the capacity needed to deliver the required fire flow to the structures are being provided in accordance with Technical Bulletin ISTB-2018-02 dated March 21, 2018. Furthermore, the fire dept. connection for each building is also located within 45m of a hydrant.

HYDRANT AVAILABILITY				
BUILDING ID	FIRE FLOW DEMAND (L/MIN)	FIRE HYDRANT(S) WITHIN 75M (5,700 L/MIN)	FIRE HYDRANT(S) WITHIN 300M (2,800 L/MIN)	AVAILABLE FLOW (L/MIN)
Apartment	14,000	1	3	14,100

For the purposes of this report, assuming a minimal loss within the service connection the pressures within the site can be estimated as follows:

Minimum Pressure (Peak Hour) – The minimum peak hour pressure on the site can be estimated as HGL 125.6m – meter elevation of 88.5m = 37.1m or 364.0 kPa which exceeds the minimum requirement of 276 kPa. The pressure on the top floor can be estimated as 125.6m – 104.62m = 20.98m or 205.8 KPa which is below the minimum of 276 kPa and will require a water pump.

Fire Flow – The max day plus fire flow can be estimated as HGL 127.2 – ground floor elevation plus 0.4m 88.5 = 38.7m or 379.6 KPa which exceeds the minimum of 150kPa.

Max HGL (High Pressure Check) – The high-pressure check can be estimated as HGL 132.4 – (lowest level) 88.1 = 44.3m or 434.6 KPa which is below the maximum of 552 kPa, therefore a pressure reducing valve is not required.

The above results indicate the municipal infrastructure can support the proposed development.

3 WASTEWATER

3.1 Existing Conditions

There is an existing 225mm concrete sanitary sewer in an easement on the west side of the subject site, as well as an existing 225mm and 675mm concrete sanitary in Baseline Road. There is currently 0.12 L/s of residential wastewater flow offsite from the two existing residential houses.

3.2 Design Criteria

The sanitary sewers for the subject site will be based on the City of Ottawa design criteria. It should be noted that the sanitary sewer design for this study incorporates the latest City of Ottawa design parameters identified in Technical Bulletin ISTB-2018-01. Some of the key criteria will include the following:

- Commercial/Institutional flow — 28,000 l/ha/d
- Residential flow — 280 l/c/d
- Peaking factor — 1.5 if ICI in contributing area >20%
1.0 if ICI in contributing area <20%
- Infiltration allowance — 0.33 l/s/ha
- Velocities — 0.60 m/s min. to 3.0 m/s max.

3.3 Recommended Wastewater Plan

Wastewater flows have been calculated for the subject site, see detailed Sanitary Sewer Design Sheet in **Appendix C**.

As discussed in Section 3.1, there is an existing 225mm sanitary sewer located through an easement on the subject site. As shown in the sanitary sewer design sheet (included in **Appendix C**), the residential wastewater effluent will increase from 0.12 L/s to 0.97L/s. The City of Ottawa is asked to comment on if the existing 225mm sanitary sewer has sufficient capacity for the proposed redevelopment.

4 SITE STORMWATER MANAGEMENT

4.1 Existing Conditions

There is an existing 750mm concrete storm sewer in an easement on the west side of the subject site, as well as an existing 1500mm concrete sanitary in Baseline Road. There are currently two catchbasins onsite, one in the driveway of 1767 Baseline Road and the other on the front lawn.

The front of the site currently drains towards a series of catchbasins in drive aisles and front lawns, as well as Heron Road ROW. The rear of the site flows to an informal swale near the back property line and offsite to the western private property. Stormwater from private properties to the north and east also enter this swale. Currently, no known flow control measures have been implemented.

4.2 Design Criteria

The stormwater management infrastructure was designed per the City of Ottawa 2012 Sewer Design Guidelines. Previous consultation with the City has also confirmed water quantity and quality requirements for this site, as summarized below,

- Design Storm — 1:5-year return (Ottawa)
- Rational Method Sewer Sizing
- Initial Time of Concentration — 10 minutes
- Runoff Coefficients
  - Softscape Areas — C = 0.20
  - Hardscape Areas — C = 0.90
- Pipe Velocities — 0.80 m/s to 3.0 m/s
- Minimum Pipe Size — 250 mm diameter (200 mm CB Leads)

4.3 Stormwater Management

The subject site is identified on the City of Ottawa's official Plan (OP) Schedule C15, classified as lands within the urban boundary and is subject to development. This site is designed to have minimal impact on adjacent properties grading, drainage, access, circulation, and privacy. This will be achieved by means of Water Quantity Controls.

4.3.1 Stormwater Quantity Control

Stormwater effluent from the subject site is proposed to be limited to a 5-year design storm with a runoff coefficient of 0.5 and a time of concentration of 10 minutes for all storm events up to and including the 100-year event.

The release rate can be therefore calculated as follows,

$\mathbf{Q_{restricted}}$ = **2.78** x **C** x $\mathbf{i_{5yr}}$ x **A** where:
C = Runoff coefficient = 0.50
$\mathbf{i_{5yr}}$ = Intensity of 5-year storm event (mm/hr)
= 998.071 x $(T_c + 6.053)^{0.814}$ =104.19 mm/hr; where T_c = 10 minutes
A = 0.11 Ha

$Q_{restricted}$ = **2.78** x **C** x i_{5yr} x **A**
= 2.78 x 0.50 x 104.19 x 0.11
= 15.93 L/s

It is therefore proposed to restrict the 100-year stormwater outflow from the subject site to 15.93 L/s. This will be achieved through a combination of inlet control devices (ICD's), surface storage where possible, and roof storage.

Surface flows in excess of the site's allowable release rate will be stored on site and gradually released into the minor system to respect the site's allowable release rate. The average rooftop retention depth located within the building area will be limited to 75mm during a 1:100-year event as shown on the ponding plan located in **Appendix D** and grading plans located in **Appendix E**.

Some stormwater from adjacent lands currently flow through the subject site as part of an overland flow route. The overland flow route has been maintained as part of the proposed grading. Any water over and above the 100-year storm event storage volume will continue to flow overland along the existing flow route, while quantities below the 100-year level of storage provided will be captured and released into the municipal storm sewer at a restricted rate.

It should be noted that the reason for maintaining this overland flow route is that:

- There is an existing private-to-private drainage route traversing the rear of the site
- Baseline Road ROW is notably higher than the rear of the site
- Should the rear of the site be raised and the existing overland flow route blocked via a retaining wall/etc, it could cause flooding on private lands upstream of the subject site.
- The addition of a catchbasin and swale is improving the existing conditions while capturing up to and including the 100-year post-development stormwater event flow for the site.
- In case of high HGL in the mainline storm sewer, a backflow preventor to be added to CB1 in addition to the building outlets. The overland flow route will ensure that if the city's mainline storm sewer is beyond capacity, water will not back up to residents' houses and instead flow overland to Gage Crescent ROW through the adjacent parking lot, mirroring current conditions.
- In case of high HGL in the mainline storm sewer, an emergency roof overflow outlet is to be installed near the front of the building, allowing rooftop stormwater to outlet overland towards Baseline ROW when the city storm sewer is beyond capacity. The flow restriction for the roof is at the rooftop level, therefore even if the storm sewer is beyond capacity, the roof stormwater is still restricted during a 100-year storm event.

Along the perimeter of the site, the opportunity to capture and store runoff is limited due to grading constraints and building geometry. These areas will discharge uncontrolled to Heron Road and existing catchbasins. These areas are located at the perimeter of the site where it is necessary to tie into public boulevards and adjacent properties or in areas where ponding stormwater is undesirable.

Based on the proposed site plan, the total uncontrolled area has been calculated to be 0.0151 Ha. For the detailed storm drainage area plan for the site, refer to Drawing 500 in **Appendix D**.

Based on a 1:100-year event, the flow from the 0.0151 Ha uncontrolled area to the west can be determined as:

$Q_{uncontrolled}$ = **2.78** x **C** x i_{100yr} x **A** where:
C = Average runoff coefficient = 0.71 x 1.25 = 0.8875 (100 year C-value)
i_{100yr} = Intensity of 100-year storm event (mm/hr)
= 1735.688 x $(T_c + 6.014)^{0.820}$ =178.56 mm/hr; where T_c = 10 minutes

A = Uncontrolled Area = 0.0151 Ha

Therefore, the uncontrolled release rate can be determined as:

$Q_{uncontrolled1}$ = **2.78** x **C** x $\mathbf{i_{100yr}}$ x **A**
= 2.78 x 0.8875 x 178.56 x 0.0151
= 6.65 L/s

Similarly, a ramp to the underground parking garage is also present onsite and will be unrestricted:

$Q_{uncontrolled2}$ = **2.78** x **C** x $\mathbf{i_{100yr}}$ x **A**
= 2.78 x 1.00 x 178.56 x 0.0015
= 0.74 L/s

The Maximum allowable release rate from the site can be determined by subtracting the Uncontrolled release rate from the minor system restricted flow rate

$Q_{max} = Q_{restricted} - Q_{uncontrolled1} - Q_{uncontrolled2}$

Q_{max} = 15.93 L/s – 6.65 L/s – 0.74 L/s

Q_{max} = 8.53 L/s

Therefore, the total restricted flow rate through the minor system will be the design flow rate of **8.53 L/s**. This will be achieved using Inlet Control Devices and surface ponding. A summary of the ICD's, their corresponding storage requirements, storage availability, and associated drainage areas has been provided below.

DRAINAGE AREA	ICD RESTRICTED FLOW (L/s)	100 YEAR STORAGE REQUIRED (m^3)	2 YEAR STORAGE REQUIRED (m^3)	STORAGE PROVIDED (m^3)
ROOF	2.00	20.77	5.48	28.13
CB1	6.00	2.57	0.05	4.34
TOTAL	**8.00**	**23.34**	**5.53**	**32.47**

Detailed stormwater management calculations for the 2-year event, 100-year event, and stress test (100-year plus 20%) event can be found in **Appendix D**.

There will be no 2-year surface ponding per the modified rational method calculations.

A 0.3m freeboard from downstream high points/maximum ponding elevations to first floor building opening is maintained in all scenarios including emergency overflow conditions.

Refer to the geotechnical report for information regarding foundation drainage. Foundation drainage systems are to be independent and connected to the storm service downstream of any stormwater management control device.

A backwater valve is required on the building storm outlet due to high HGL in downstream storm sewer. The rear catchbasin system will overflow along the existing overland flow route in case of high HGL conditions during a major storm event.

Detailed roof design to be completed by others at a later date. Roof design is to adhere to the requirements of this report (notably, the stormwater capacity and release rate) as well as any requirements in the Ontario Building Code (scupper details, emergency overflow, etc). Roof drain flow controls to be Watts Adjustable Accutrol Weir or equivalent (specification sheet found in **Appendix D**). A ground-level emergency overflow outlet is required in front of the building outletting to Heron Road ROW in case storm sewer is at capacity during a major storm event (note shown on drawing C-001 General Plan of Services in **Appendix A**).

5 SEDIMENT AND EROSION CONTROL PLAN

5.1 General

During construction, existing stream and conveyance systems can be exposed to significant sediment loadings. Although construction is only a temporary situation, it is proposed to introduce a number of mitigative construction techniques to reduce unnecessary construction sediment loadings. These will include:

- groundwater in trench will be pumped into a filter mechanism prior to release to the environment;
- bulkhead barriers will be installed at the nearest downstream manhole in each sewer which connects to an existing downstream sewer;
- seepage barriers will be constructed in any temporary drainage ditches; and
- silt sacks will remain on open surface structure such as manholes and catchbasins until these structures are commissioned and put into use.
- Prior to roads having a granular base, construction traffic exiting the site to be directed to a mud mat to reduce sediment tracked offsite

5.2 Trench Dewatering

During construction of municipal services, any trench dewatering using pumps will be discharged into a filter trap made up of geotextile filters and straw bales similar in design to the OPSD 219.240 Dewatering Trap. These will be constructed in a bowl shape with the fabric forming the bottom and the straw bales forming the sides. Any pumped groundwater will be filtered prior to release to the existing surface runoff. The contractor will inspect and maintain the filters as needed including sediment removal and disposal and material replacement as needed.

5.3 Bulkhead Barriers

At the first manhole constructed immediately upstream of an existing sewer, a ½ diameter bulkhead will be constructed over the lower half of the outletting sewer. This bulkhead will trap any sediment carrying flows, thus preventing any construction –related contamination of existing sewers. The bulkheads will be inspected and maintained including periodic sediment removal as needed.

5.4 Seepage Barriers

These barriers will consist of both the Light Duty Straw Bale Barrier as per OPSD 219.100 or the Light Duty Silt Fence Barrier as per OPSD 219.110 and will be installed in accordance with the sediment and erosion control drawing. The barriers are typically made of layers of straw bales or geotextile fabric staked in place. All seepage barriers will be inspected and maintained as needed.

5.5 Surface Structure Filters

All catchbasins, and to a lesser degree manholes, convey surface water to sewers. However, until the surrounding surface has been completed these structures will be covered to prevent sediment from entering the minor storm sewer system. Until rear yards are sodded or until streets are asphalted and curbed, all catchbasins and manholes will be equipped with geotextile filter socks. These will stay in place and be maintained during construction and build until it is appropriate to remove them.

6 CONCLUSIONS & RECOMMENDATIONS

6.1 Conclusions

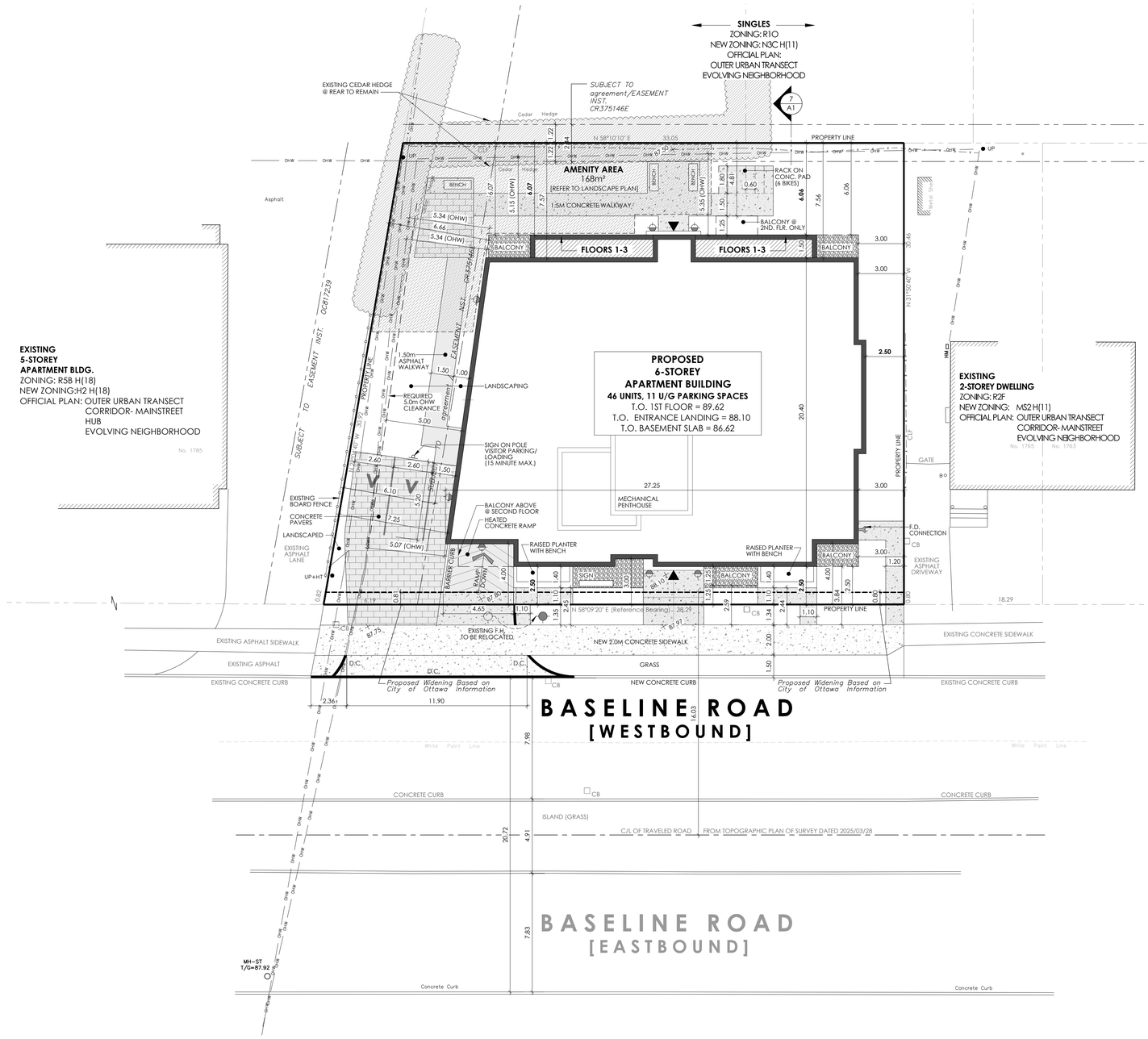
This report and the accompanying working drawings clearly indicate that the proposed development meets the requirements of the stakeholder regulators, including the City of Ottawa.

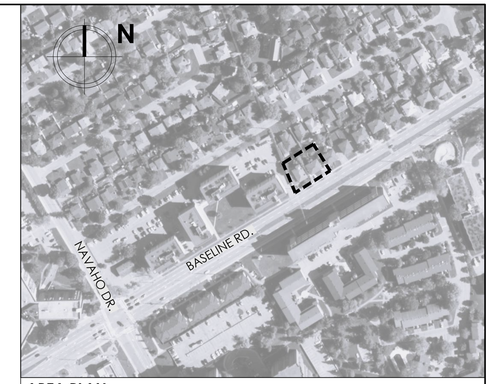
There is a reliable water supply available adjacent to the proposed development; a wastewater outlet is available adjacent to the site; local storm sewers have been installed adjacent to the site.

6.2 Recommendations

It is recommended that the regulators review this submission with an aim of providing the requisite approvals to permit the owners to proceed to the construction stage of the subject site.

Appendix A





AREA PLAN:

SCALE: NTS

SITE INFORMATION:

SITE AREA = 0.11ha (0.27 Acres.)

ZONING:	1773 BASELINE = R2A, 1767 BASELINE = R2F[555]
NEW ZONING (2026-50):	MS2 H(11)
PROPOSED ZONING:	MS2 H(21)
OFFICIAL PLAN:	OUTER URBAN TRANSECT CORRIDOR- MAINSTREET EVOLVING NEIGHBORHOOD

	REQUIRED :	PROVIDED :
LOT WIDTH (MIN.):		38.29 m
LOT AREA (MIN.):		1,086.92 m²
BUILDING HEIGHT (MAX.):		20.60 m
FRONT YARD (MIN.) :		2.50 m
REAR YARD (MIN.) :		6.06 m
INTERIOR SIDE YARD (MIN.) :		2.50 m
LANDSCAPED AREA OF LOT (MIN.):		517.60 m² (47.62%)

PARKING REQUIREMENTS: SCHEDULE A3 AREA 'B', NEW ZONING BYLAW 2026-50

MID-RISE APARTMENT BUILDING [46 UNITS]

MAXIMUM RESIDENT PARKING PERMITTED = 1.25 / D.U. (46) =	58 SPACES
VISITOR PARKING REQUIRED = 0.1 / D.U. (46-24=22) =	02 SPACES
TOTAL PARKING REQUIRED =	**02 SPACES**
TOTAL PARKING PROVIDED =	**13 SPACES** (2 VISITOR, 11 RESIDENT)

BICYCLE PARKING REQUIREMENTS: NEW ZONING BYLAW 2026-50

SHORT-TERM BICYCLE SPACES REQUIRED = 2 + 3 =	05 SPACES
LONG-TERM BICYCLE SPACES REQUIRED = 1.0 / D.U. (46)	46 SPACES
NUMBER OF SPACES REQUIRED TO BE INCLUSIVE: (5%/ 46)	3 SPACES
TOTAL BICYCLE PARKING REQUIRED =	**51 SPACES**
TOTAL BICYCLE PARKING PROVIDED =	**52 SPACES**

AMENITY SPACE REQUIREMENTS:

AMENITY SPACE REQUIRED = 6m²/ d.u. x 46 d.u. =	276m²
50% COMMUNAL AMENITY AREA REQUIRED =	138m²
COMMUNAL AMENITY AREA PROVIDED =	168m²
PRIVATE AMENITY AREA PROVIDED =	172m² (BALCONIES/ TERRACES)
TOTAL AMENITY AREA PROVIDED =	**340m²**

BUILDING INFORMATION:

6- STOREY APARTMENT BUILDING

BUILDING AREA:	550 m²	
GFA:	3,230 m²	
UNIT COUNTS:	STUDIO:	00
	1-BEDROOM:	27
	2-BEDROOM:	17
	3-BEDROOM:	02

TOTAL UNITS = 46 UNITS

LEGEND/ ABREVIATIONS:

D.C.	DEPRESSED CURB
CRW	CONCRETE RETAINING WALL
W.I.	WROUGHT IRON
TWSI	TACTILE WALKING SURFACE INDICATOR
CONC.	CONCRETE
ASPH.	ASPHALT
CLF	CHAIN LINK FENCE
OHW	OVERHEAD WIRES

GAS METERS LOCATION
BUILDING SERVICES LOCATION (IN LOWER LEVEL)
WALL MOUNTED LIGHT FIXTURE
FIRE HYDRANT
GRADE ELEVATION- FOR ARCHITECTURAL INTENT & COORDINATION ONLY. REFER TO GRADING PLAN FOR FINAL GRADES.
LIGHT STANDARD
TWSI
SIAMESE CONNECTIONS
TRANSFORMER
PRINCIPAL ENTRANCE
SECONDARY ENTRANCE

NOTE:
SITE PLAN TO BE READ IN CONJUNCTION WITH :
- SITE SERVICING AND GRADING PLANS PREPARED BY ARCADIS PROFESSIONAL SERVICES (CANADA) INC.
- LANDSCAPE PLAN PREPARED BY JAMES B. LENNOX & ASSOCIATES INC.

NOTE:
SITE BOUNDARIES DERIVED FROM:
TOPOGRAPHIC PLAN OF SURVEY OF
LOTS 351 and 352
REGISTERED PLAN 372115
CITY OF OTTAWA
Surveyed by Annis, O'Sullivan, Vollebekk Ltd.
DATED: 2025/03/28

CONSTRUCTION NORTH

SCALE 0 5m 15m 25m

M. David Blakely Architect Inc.
2200 Prince of Wales Dr. Suite 101 Ottawa, Ontario
Phone (613) 226-8811 Fax (613) 226-7942 K2E 6Z9

GENERAL NOTES:
1. THE CONTRACTOR IS RESPONSIBLE FOR CHECKING AND VERIFYING ALL DIMENSIONS. ANY DISCREPANCY MUST BE REPORTED TO M. DAVID BLAKELY ARCHITECT INC.
2. ALL WORK AND MATERIALS TO BE IN COMPLIANCE WITH ALL CODES, REGULATIONS, & BY-LAWS
3. ADDITIONAL DRAWINGS MAY BE ISSUED FOR CLARIFICATION TO ASSIST THE PROPER EXECUTION OF WORK. SUCH DRAWINGS WILL HAVE THE SAME MEANING AND INTENT AS IF THEY WERE INCLUDED WITH THE PLANS IN CONTRACT DOCUMENTS
4. DO NOT SCALE DRAWINGS.
5. THIS DRAWING SHALL NOT BE USED OR COPIED WITHOUT THE AUTHORIZATION OF THE ARCHITECT
6. THIS DRAWING SHALL NOT BE USED FOR PERMIT OR CONSTRUCTION UNLESS THE DRAWING BEARS THE ARCHITECT'S SEAL AND SIGNATURE

OWNER: 760527 ONTARIO INC.
524 TRILBY COURT
OTTAWA, ON K2R 0A4

PLANNER: FOTENN PLANNING + DESIGN
420 O'CONNOR ST.
OTTAWA, ON K2P 1W4
(613) 730-5709

ARCHITECT: M. DAVID BLAKELY ARCHITECT INC.
2200 PRINCE OF WALES DR., SUITE 101
OTTAWA, ON K2E 6Z9
(613) 226-8811

CIVIL ENGINEER: ARCADIS PROFESSIONAL SERVICES (CANADA) INC.
333 PRESTON ST SUITE 500
OTTAWA, ON K1S 5N4
(613) 721-0555

LANDSCAPE ARCHITECT: JAMES B. LENNOX & ASSOCIATES INC.
3332 CARLING AVE
NEPEAN, ON K2E 7S6
(613) 722-5168

SURVEYOR: ANNIS O'SULLIVAN VOLLEBEKK LTD.
14 CONCOURSE GATE, SUITE 500
NEPEAN, ON K2E 7S6
(613) 727-0850

SEAL
ONTARIO ASSOCIATION OF ARCHITECTS
M. DAVID BLAKELY
LICENCE 3658

No.	DATE D/M/Y	DESCRIPTION	INIT.
12.			
11.			
10.			
9.	16/07/26	VISITOR PARKING UPDATED/ FOR COORDINATION	MB
8.	13/07/26	FOR COORDINATION	MB
7.	08/07/26	FOR DISCUSSION	MB
6.	30/04/26	AS PER CITY COMMENTS ROUND #1/ FOR RESUBMISSION	MB
5.	14/04/26	SIDE YARD WALKWAY WIDENED/ FOR COORDINATION	MB
4.	09/02/26	AS PER CITY COMMENTS/ FOR RE-SUBMISSION	MB
3.	08/01/26	FOR SITE PLAN SUBMISSION	MB
2.	26/11/25	FOR REVIEW	MB
1.	10/04/25	FOR COORDINATION	MB

REVISIONS

No.	DATE	DESCRIPTION	INIT.
24.			
23.			
22.			
21.			
20.			
19.			
18.			
17.			
16.			
15.			
14.			
13.			

REVISIONS

A
B C

A - DETAIL NUMBER
B - SHEET NUMBER (DETAIL REQUIRED)
C - SHEET NUMBER (DETAIL LOCATION)

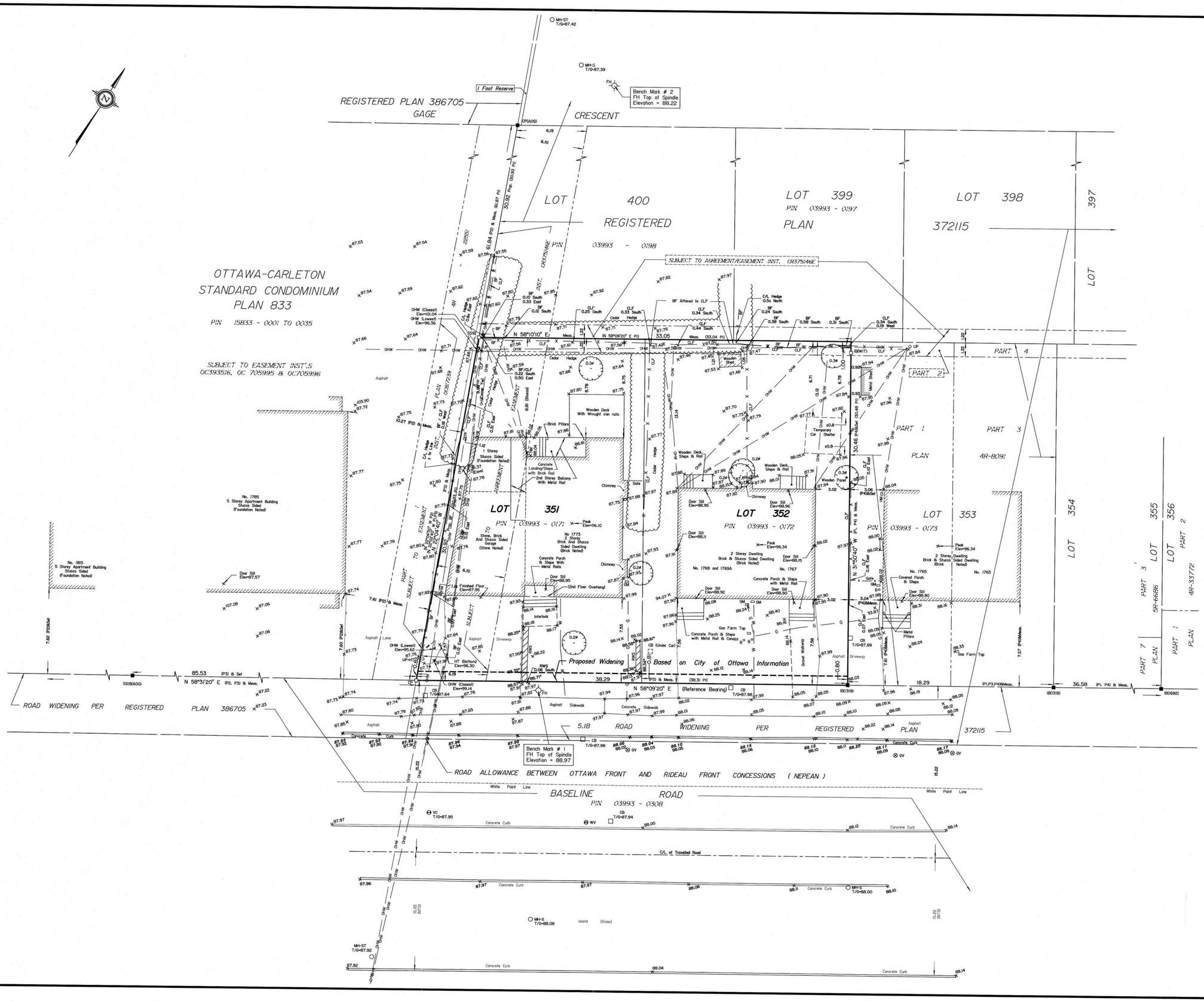
PROJECT:
1773 & 1767 BASELINE ROAD
OTTAWA, ONTARIO

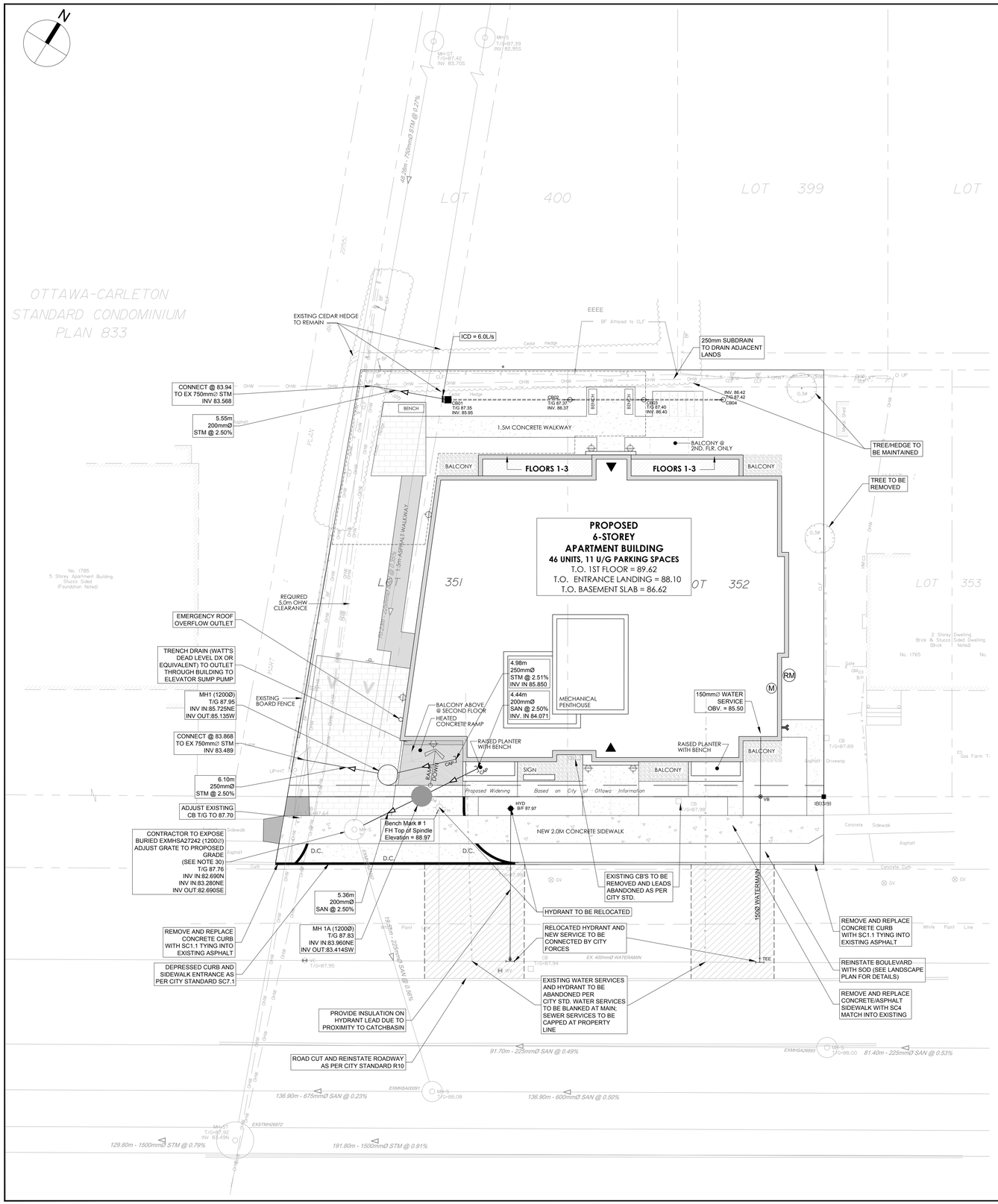
OWNER:
760527 ONTARIO INC.
524 TRILBY COURT
OTTAWA, ON K2R 0A4

DRAWING TITLE:
SITE PLAN

DATE:	SCALE:	SHEET No.:
APRIL 2025	1 : 150	SP1
DRAWN BY: mdb	CHECKED: MDB	

D07-12-25-0169


REGISTERED PLAN 386705
GAGE CRESCENT
1 Foot Reserve
Bench Mark # 2
FH Top of Spindle
Elevation = 88.22
LOT 400
REGISTERED PLAN 372115
PIN 03993 - 0198
LOT 399
PIN 03993 - 0197
LOT 398
LOT 397
OTTAWA-CARLETON STANDARD CONDOMINIUM PLAN 833
PIN 15833 - 0001 TO 0035
SUBJECT TO EASEMENT INST.'S OC393516, OC 705995 & OC705996
SUBJECT TO AGREEMENT/EASEMENT INST. CR375146E
N 58°10'10" E
N 58°09'20" E (P1)
N 58°31'20" E (P2, P3) & Meas.
N 58°09'20" E (Reference Bearing)
N 31°50'40" W
LOT 351
PIN 03993 - 0171
LOT 352
PIN 03993 - 0172
LOT 353
PIN 03993 - 0173
LOT 354
LOT 355
LOT 356
PART 1 PLAN 4R-8091
PART 2
PART 3
PART 4
PART 1 PLAN 4R-33772
PART 3 PLAN 5R-6686
PART 7 PLAN
Proposed Widening Based on City of Ottawa Information
ROAD WIDENING PER REGISTERED PLAN 386705
5.18 ROAD WIDENING PER REGISTERED PLAN 372115
Bench Mark # 1
FH Top of Spindle
Elevation = 88.97
ROAD ALLOWANCE BETWEEN OTTAWA FRONT AND RIDEAU FRONT CONCESSIONS (NEPEAN)
BASELINE ROAD
PIN 03993 - 0308
C/L of Travelled Road
No. 1785 5 Storey Apartment Building Stucco Sided (Foundation Noted)
No. 1815 5 Storey Apartment Building Stucco Sided (Foundation Noted)
No. 1769 and 1769A
No. 1767
No. 1765
No. 1763
No 1773 2 Storey Brick And Stucco Sided Dwelling (Brick Noted)
2 Storey Dwelling Brick & Stucco Sided Dwelling (Brick Noted)
Concrete Porch & Steps With Metal Rails
Wooden Deck With Wrought iron rails
Concrete Landing/Steps with Brick Rail 2nd Storey Balcony With Metal Rail
Wooden Deck, Steps & Rail
Temporary Car Shelter
Wooden Porch
Covered Porch & Steps
Concrete Porch & Steps with Metal Rail & Canopy
Gas Form Top
Metal Pillars
Brick Pillars
Stone, Brick And Stucco Sided Garage (Stone Noted)
Asphalt Lane
Asphalt Sidewalk
Concrete Sidewalk
Concrete Curb
White Point Line
Island (Grass)
Gravel Walkway
Driveway
Chimney
Cedar Hedge
Finished Floor Elev=97.95
(2nd Floor Overhang)
Door Sill Elev=67.57
Door Sill Elev=88.95
Door Sill Elev=88.11
Door Sill Elev=88.92
Door Sill Elev=88.96
Door Sill Elev=88.15
Door Sill Elev=88.90
Peak Elev=96.10
Peak Elev=96.34
Peak Elev=96.34
Peak Elev=96.34



SERVICING LEGEND

MH118A	SANITARY MANHOLE
200mmØ SAN	SANITARY SEWER
MH109	STORM MANHOLE
825mmØ STM	STORM SEWER - LESS THAN 900Ø
200Ø WATERMAIN	WATERMAIN
	BARRIER CURB
CB01 T/G 103.59	REAR YARD CATCHBASIN IN ROAD CONNECTING STRUCTURE C/W SOLID GRATE
CB02 T/G 104.35 INV 103.35	REAR YARD "TEE" CATCHBASIN (300Ø) C/W TOP OF GRATE AND INVERT OUT
CB04 T/G 104.50 INV 103.50	REAR YARD "END" CATCHBASIN (300Ø) C/W TOP OF GRATE AND INVERT OUT
	PERFORATED REAR YARD SUBDRAIN
VB	VALVE AND VALVE BOX
	SIAMESE CONNECTION (IF REQUIRED)
M	METER (IF REQUIRED)
RM	REMOTE METER (IF REQUIRED)

Notes & Legend

MH-S	Denotes	Maintenance Hole (Sanitary)
VC	"	Valve Chamber (Watermain)
G	"	Underground Gas
W	"	Underground Water
OHW	"	Overhead Wires
UP	"	Utility Pole
CB	"	Catch Basin
FH	"	Fire Hydrant
WV	"	Water Valve
GV	"	Gas Valve
GM	"	Gas Meter
HM	"	Hydro Meter
B	"	Bollard
CLF	"	Chain Link Fence
BF	"	Board Fence
RWS	"	Stone Retaining Wall
	"	Deciduous Tree

NOTES :

1. ALL MATERIALS AND CONSTRUCTION IS TO BE IN ACCORDANCE WITH THE CURRENT CITY OF OTTAWA STANDARD DRAWINGS & SPECIFICATIONS OR OPSD/OPSS IF CITY DRAWINGS AND SPECIFICATIONS DO NOT APPLY.
2. THE POSITION OF UNDERGROUND AND ABOVE GROUND SERVICE, UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH SERVICE, UTILITIES AND STRUCTURES IS NOT GUARANTEED. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING SERVICES AND UTILITIES PRIOR TO CONSTRUCTION.
3. THE CONTRACTOR SHALL REPORT ALL CONFLICTS, DISCOVERIES OF ERROR AND DISCREPANCIES TO THE ENGINEER.
4. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT AND ASSUME RESPONSIBILITY FOR ALL UTILITIES WHETHER OR NOT SHOW ON THESE DRAWINGS.
5. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT ALL LANDS BEYOND THE SITE LIMITS. ANY AREAS BEYOND THE SITE LIMITS, WHICH ARE DISTURBED DURING CONSTRUCTION, SHALL BE REPAIRED AND RESTORED TO ORIGINAL CONDITION OR BETTER, TO THE SATISFACTION OF THE ADJACENT LAND OWNER, THE OWNER, THE OWNERS REPRESENTATIVES AND/OR THE AUTHORITY HAVING JURISDICTION AT THE EXPENSE OF THE CONTRACTOR.
6. WHERE NECESSARY, THE CONTRACTOR SHALL IMPLEMENT A TRAFFIC MANAGEMENT PLAN TO THE SATISFACTION OF THE CITY OF OTTAWA. ALL CONSTRUCTION SIGNAGE MUST CONFORM TO THE LATEST VERSION OF THE M.T.O. MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. ALL TEMPORARY TRAFFIC CONTROL MEASURES MUST BE REMOVED UPON THE COMPLETION OF THE WORKS.
7. SHOULD ANY BURIED ARCHAEOLOGICAL REMAINS BE FOUND ON THE PROPERTY DURING CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL NOTIFY THE OWNER TO CONTACT THE HERITAGE OPERATIONS UNIT OF THE ONTARIO MINISTRY OF CULTURE MUST BE NOTIFIED IMMEDIATE, AND WORK WITHIN THE AREA SHALL BE CEASED UNTIL FURTHER NOTICE.
8. FOR GEOTECHNICAL INFORMATION REFER TO GEOTECHNICAL REPORT PG7446-1 PREPARED BY PATERSON GROUP.
9. FOR GEODETIC BENCHMARK AND GEOMETRIC LAYOUT OF STREET AND LOTS, REFER TO TOPOGRAPHICAL SURVEY AND PLAN OF SUBDIVISION PREPARED BY ANNIS, O'SULLIVAN, VOLLEBEKK LTD. BENCHMARK ASED ON CAN-NET VIRTUAL REFERENCE SYSTEM NETWORK.
10. FOR SITE PLAN INFORMATION, REFER TO SITE PLAN PREPARED BY M. DAVID BLAKELY ARCHITECT INC.
11. THESE DRAWINGS ARE NOT TO BE SCALED OR USED FOR LAYOUT PURPOSES
12. ROADWAY SECTIONS REQUIRING GRADE RAISE TO PROPOSED SUB GRADE LEVEL TO BE FILLED WITH ACCEPTABLE NATIVE EARTH BORROW OR IMPORTED OPSS SELECTED SUBGRADE MATERIAL IF NATIVE MATERIAL IS DEFICIENT AS PER RECOMMENDATION OF GEOTECHNICAL ENGINEER.
13. IN AREAS WHERE EXISTING GROUND IS BELOW THE PROPOSED ELEVATION OF SEWER AND WATERMAINS, GRADE RAISING AND FILLING IS TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT. AS PER CITY GUIDELINES ALL WATERMAINS IN FILL AREAS ARE TO BE TIED WITH RESTRAINING JOINTS AND THRUST BLOCKS.
14. THE CONTRACTOR SHALL IMPLEMENT THE EROSION AND SEDIMENT CONTROL PLAN PRIOR TO THE COMMENCEMENT OF ANY SITE CONSTRUCTION. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED TO THE SATISFACTION OF THE ENGINEER, OR ANY REGULATORY AGENCY. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED UNTIL VEGETATION IS ESTABLISHED OR UNTIL THE START OF A SUBSEQUENT PHASE.
15. CONTRACTORS SHALL BE RESPONSIBLE FOR KEEPING CLEAN ALL ROADS WHICH BECOME COVERED IN DUST, DEBRIS AND/OR MUD AS A RESULT OF ITS CONSTRUCTION OPERATIONS.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL BEDDING OR ADDITIONAL STRENGTH PIPE SHOULD THE MAXIMUM OPSD TRENCH WIDTH BE EXCEEDED.
17. ALL PIPE, CULVERTS, STRUCTURES REFER TO NOMINAL INSIDE DIMENSIONS.
18. UNLESS SPECIFICALLY NOTED OTHERWISE, PIPE MATERIALS SHALL BE AS FOLLOWS;
    -WATERMAINS TO BE PVC DR18
    -SANITARY SEWER TO BE PVC DR35
    -PERFORATED STORM SEWERS IN REAR YARDS AND LANDSCAPE AREAS TO BE HDPE
    -STORM SEWERS 375mm DIAMETER AND LESS TO BE PVC DR35
    -STORM SEWERS 450mm DIAMETER AND GREATER TO BE CONCRETE, CLASS AS PER OPSD 807.010 OR 807.030, OR HIGHER
    FOR SHALLOW SEWERS, REFER TO CITY STANDARD S35.
19. ALL CONNECTIONS TO EXISTING WATERMAINS ARE TO BE COMPLETED BY CITY FORCES. CONTRACTOR IS TO EXCAVATE, BACKFILL, COMPACT AND REINSTATE.
20. ANY WATERMAIN WITH LESS THAN 2.4m AND ANY SEWER WITH LESS THAN 2.0m DEPTH OF COVER REQUIRES THERMAL INSULATION AS PER CITY OF OTTAWA STANDARD W22 OR AS APPROVED BY THE ENGINEER.
21. ALL FIRE HYDRANTS AS PER CITY STANDARD W19, c/w 150mmØ LEAD UNLESS OTHERWISE SPECIFIED.
22. ALL STUBBED SEWERS SHALL HAVE PRE-MANUFACTURED CAPS INSTALLED.
23. ALL CATCHBASINS SHALL HAVE A 600mm SUMP. ALL CATCHBASIN MANHOLES, AND ALL STORM MANHOLES WITH OUTLETTING PIPE SIZES LESS THAN 900mm, SHALL HAVE A 300mm SUMP.
24. ALL SANITARY MANHOLES IN PONDING AREAS SHALL BE EQUIPPED WITH A WATERTIGHT COVER.
25. ALL SEWER SERVICE LATERALS WITH MAINLINE CONNECTIONS DEEPER THAN 5.0m REQUIRE A CONTROLLED SETTLEMENT JOINT.
26. EACH BUILDING SHALL BE EQUIPPED WITH A SANITARY AND STORM SEWER BACKWATER VALVE AND CLEAN-OUT ON ITS PRIMARY SERVICE, AS PER ONTARIO BUILDING CODE REQUIREMENTS (BY OTHERS). CB1 TO ALSO HAVE BACKFLOW PREVENTION INSTALLED IN CASE OF HIGH HGL IN STORM SEWER.
27. THE SUBGRADE OF ALL STRUCTURES, PIPE, ROADS, SIDEWALKS, WALKWAYS, AND BUILDINGS SHALL BE INSPECTED BY THE GEOTECHNICAL ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.
28. TOP COURSE ASPHALT SHALL NOT BE PLACED UNTIL THE FINAL CCTV INSPECTION AND NECESSARY REPAIRS HAVE BEEN COMPLETED TO THE SATISFACTION OF THE ENGINEER AND THE CITY OF OTTAWA.
29. SEWER SERVICE CONNECTIONS TO BE INSTALLED PER CITY STD. S11
30. EXISTING SANITARY MANHOLE EXMHSA27242 IS CURRENTLY BURIED UNDER ASPHALT. CONTRACTOR TO EXPOSE, ADJUST GRATE TO PROPOSED GRADE.
    MH TO BE REBENCHED FOR NEW SERVICE CONNECTION. CONTRACTOR TO COORDINATE WITH CITY INSPECTOR TO CONFIRM THAT THE MH IS IN GOOD CONDITION AND FREE OF DEFECTS PRIOR TO, AND UPON COMPLETION OF THE NEW CONNECTION AND REBENCHING.
31. FLOW CONTROL DEVICE ON CB1 TO BE IPEX TEMPEST LMF ICD VORTEX (OR EQUIVALENT)

CLIENT

PHOENIX HOMES
18A Bentley Ave Ottawa, ON K2E 6T8

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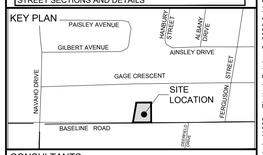
Arcadis Professional Services (Canada) Inc.
formerly IBI Group Professional Services (Canada) Inc.

ISSUES

No.	DESCRIPTION	DATE
1	ISSUED FOR SPA	2025-12-18
2	REVISED AS PER NEW SITE PLAN	2026-02-20
3	REVISED AS PER CITY COMMENTS	2026-04-30
4	REVISED AS PER NEW SITE PLAN	2026-07-29
5	REVISED AS PER CITY COMMENTS	2026-09-30

SEE 010, 011, 012 FOR NOTES, LEGEND, CB TABLE, STREET SECTIONS AND DETAILS

KEY PLAN



CONSULTANTS

1:150 0 1.5 4.5 7.5m

SEAL

LICENSED PROFESSIONAL ENGINEER
S. E. LABADIE
100214983
2026/09/30
PROVINCE OF ONTARIO

PRIME CONSULTANT

ARCADIS
333 Preston Street - Suite 500
Ottawa ON K1S 5N4 Canada
tel 613 225 1311
www.arcadis.com

PROJECT
1773 & 1767 BASELINE ROAD
OTTAWA, ONTARIO

PROJECT NO: 30297182	
DRAWN BY: **D.P.S.**	CHECKED BY: **D.G.Y.**
PROJECT MGR: **D.G.Y.**	APPROVED BY: **S.E.L.**

SHEET TITLE
SITE SERVICING PLAN

SHEET NUMBER	ISSUE
C-001	5

FILE No. D07-12-25-0169
PLAN No. 19442

File Location: C:\Users\vaghela\4623\DC\ACCDocs\Arcadis ACC US\ACA-30297182-Baseline Road Redevelopment\Project Files\10_WIP\04_CIVIL\Sheets\C-001 SITE SERVICING PLAN.dwg Last Saved: October 2, 2026, by vaghela\4623 Plotted: October 2, 2026 3:44:04 PM by Vaghela, Devalasinh

Appendix B

WATERMAIN DEMAND CALCULATION SHEET

ARCADIS IBI GROUP
500-333 Preston Street
Ottawa, Ontario K1S 5N4 Canada
arcadis.com

WATERMAIN DEMAND CALCULATION SHEET
1773 Baseline Rd | Phoenix Homes
30297182.05 | Rev #2 | 2026-07-09
Prepared By: SL | Checked By: DY

NODE	RESIDENTIAL				NON-RESIDENTIAL (ICI)			AVERAGE DAILY DEMAND (l/s)			MAXIMUM DAILY DEMAND (l/s)			MAXIMUM HOURLY DEMAND (l/s)			FIRE DEMAND (l/min)
	1 Bedroom Apartment	2 Bedroom Apartment	3 Bedroom Apartment	POPULATION	INDUST. (ha)	COMM. (m2)	INSTIT. (pp)	RESIDENTIAL	ICI	TOTAL	RESIDENTIAL	ICI	TOTAL	RESIDENTIAL	ICI	TOTAL	
1773 Baseline	27	17	2	79.7				0.26		0.26	0.65		0.65	1.42		1.42	14,000

POPULATION DENSITY		WATER DEMAND RATES		PEAKING FACTORS		FIRE DEMANDS
1 Bedroom Apartment	1.4 persons/unit	Residential	280 l/cap/day	Maximum Daily		Single Family
				Residential	2.5 x avg. day	
2 Bedroom Apartment	2.1 persons/unit	Commercial Shopping Center	2,500 L/(1000m2)/day	Commercial	1.5 x avg. day	Semi Detached & Townhouse
				Maximum Hourly		
3 Bedroom Apartment	3.1 persons/unit	Institutional	75 l/cap/day	Residential	2.2 x avg. day	
				Commercial	1.8 x avg. day	Medium Density 14,000 L/min

ARCADIS PROFESSIONAL SERVICES (CANADA) INC.
500-333 Preston Street
Ottawa, Ontario K1S 5N4 Canada
arcadis.com

FIRE UNDERWRITERS SURVEY
1773 Baseline Rd | Phoenix Homes
30297182.05 | Rev #2 | 2026-07-09
Prepared By: SL | Checked By: DY

STEP	Contents	Description		Adjustment Factor		Result	
1	**Building B** 6-storey residential	Area per Floor	520	Floors	6	3120	m2
	Total Effective Floor Area					**3120**	m2
2	**Type of Construction**	**Type V** Wood Frame **Type III** Ordinary Construction **Type II** Noncombustible Construction **Type I** Fire Resistive Construction	1.5 1.0 0.8 0.6	Type V Wood Frame	1.5		
3	**Required Fire Flow**	RFF = 220C√A, rounded to nearest 1000 L/min				**18000**	L/min
4	**Occupancy and Contents**	Noncombustible Contents Limited Conbustible Contents Combustible Contents Free Burning Contents Rapid Burning Contents	-25% -15% 0% 15% 25%	Limited Conbustible Contents	-15%	-2700	L/min
	Fire Flow					**15300**	L/min
5	**Automatic Sprinkler Protection**	Automatic Sprinkler Conforming to NFPA 13	-30%	Yes	-30%	-4590	L/min
		Standard Water Supply for both the system and Fire Department Hose Lines	-10%	No			
		Fully Supervised System	-10%	Yes	-10%	-1530	L/min
	Total Sprinkler Adjustment					**-6120**	L/min
6	**Exposure Adjustment**	Based on **Table 6** Exposure Adjustement Charges for Subject Building					
	North	Separation (m) Length X Height Factor (m.storeys) Construction Type	14.6 16.0 Type V	With unprotected opening	10%	1530	L/min
	South	Separation (m) Length X Height Factor (m.storeys) Construction Type	>30	With unprotected opening	0%	0	L/min
	East	Separation (m) Length X Height Factor (m.storeys) Construction Type	5.6 19.6 Type V	With unprotected opening	15%	2295	L/min
	West	Separation (m) Length X Height Factor (m.storeys) Construction Type	14.8 86.0 Type III	With unprotected opening	9%	1377	L/min
	Total Exposure Adjustment					**5202**	L/min
7	**Total Required Fire Flow**					**14382**	L/min
		Rounded to Nearest 1000 L/min				**14000**	L/min
						233	L/s

Notes 1. Fire flow calculation are based on Fire Underwriters Survey version 2020.

2. If any vertical opening in the building are unprotected (e.g. interconnected floor spaces, elevators etc.), consider the two largest adjoining floor area plus 50% of all floors immediately above them up to a maximum of eight.

Labadie, Sam

From: Rasool, Rubina <Rubina.Rasool@ottawa.ca>
Sent: July 22, 2026 2:17 PM
To: Labadie, Sam
Subject: RE: 1773 Baseline - Boundary Condition Request (Updated)
Attachments: 1773 Baseline Road October 2025.pdf

Follow Up Flag: Follow up
Flag Status: Completed

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Hello,

The following are boundary conditions, HGL, for hydraulic analysis at 1773 Baseline Road (zone 2W2C), assumed to be connected via the 406 mm watermain on Baseline Road (see attached PDF for location).

Minimum HGL = 125.6 m
Maximum HGL = 133.4 m
Max Day + Fire Flow (233 L/s) = 127.2 m

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

Note:
This review is based on the assumption that the development remains below the City's threshold for requiring two water connections. Should the final unit count exceed the City's criteria of 50 dwelling units, a second water connection/service will be required, in accordance with OWDG Tech Bulletin ISTB-2021-03, Section 4.3.1.
Please note that these results are based on an updated water model and fire flow window over the previously reported BC back in October 2025.

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.

Rubina

Rubina Rasool
Project Manager
Planning, Infrastructure and Economic Development Department
Development Review – West Branch
City of Ottawa
110 Laurier Avenue West Ottawa, ON K1P 1J1
613-580-2424 Ext. 24221
rubina.rasool@ottawa.ca

From: Labadie, Sam <samantha.labadie@arcadis.com>
Sent: July 09, 2026 2:36 PM
To: Rasool, Rubina <Rubina.Rasool@ottawa.ca>
Subject: RE: 1773 Baseline - Boundary Condition Request (Updated)

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ATTENTION : Ce courriel provient d'un expéditeur externe. Ne cliquez sur aucun lien et n'ouvrez pas de pièce jointe, excepté si vous connaissez l'expéditeur.

Hi Rubina,

Noted, please let us know as soon as you can.

Thanks,

Sam Labadie P.Eng
Civil Engineer
Arcadis Professional Services (Canada) Inc.
Suite 500, 333 Preston Street | Ottawa | ON | K1S 5N4 | Canada
C: +1 613 899 5717
www.arcadis.com

From: Rasool, Rubina <Rubina.Rasool@ottawa.ca>
Sent: July 9, 2026 2:28 PM
To: Labadie, Sam <samantha.labadie@arcadis.com>
Subject: RE: 1773 Baseline - Boundary Condition Request (Updated)

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Hi Sam,

I will forward your WBC request; however, please note in some cases the water department may refuse the high fire flow demands. Typically, fire flows are capped at 10,000 L/min because the City anticipates under maintenance scenario and as the area if further intensified in the future that the demand of 14,000 L/min may not be available.

Rubina

Rubina Rasool
Project Manager
Planning, Infrastructure and Economic Development Department
Development Review – West Branch
City of Ottawa
110 Laurier Avenue West Ottawa, ON K1P 1J1

613-580-2424 Ext. 24221
rubina.rasool@ottawa.ca

From: Labadie, Sam <samantha.labadie@arcadis.com>
Sent: July 09, 2026 11:43 AM
To: Rasool, Rubina <Rubina.Rasool@ottawa.ca>
Subject: RE: 1773 Baseline - Boundary Condition Request (Updated)

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ATTENTION : Ce courriel provient d'un expéditeur externe. Ne cliquez sur aucun lien et n'ouvrez pas de pièce jointe, excepté si vous connaissez l'expéditeur.

Hi Rubina,

We are working towards a solution to the easement issue. We are considering a new layout for the building that affects unit count and fire demand. Please provide updated boundary conditions per the following,

Avg Day = 0.26 l/s
Max day = 0.65 l/s
Peak Hour = 1.42 l/s
Fireflow = 14,000 L/min per FUS

Timely assistance on this would be greatly appreciated.

Thank you,

Sam Labadie P.Eng
Civil Engineer
Arcadis Professional Services (Canada) Inc.
Suite 500, 333 Preston Street | Ottawa | ON | K1S 5N4 | Canada
C: +1 613 899 5717
www.arcadis.com

From: Rasool, Rubina <Rubina.Rasool@ottawa.ca>
Sent: October 21, 2025 9:07 AM
To: Labadie, Sam <samantha.labadie@arcadis.com>
Cc: Yannoulopoulos, Demetrius <demetrius.yannoulopoulos@arcadis.com>
Subject: RE: 1773 Baseline - Boundary Condition Request

Arcadis Warning: Exercise caution with email messages from external sources such as this message. Always verify the sender and avoid clicking on links or scanning QR codes unless certain of their authenticity.

Hello,

Labadie, Sam

From: Rasool, Rubina <Rubina.Rasool@ottawa.ca>
Sent: October 21, 2025 9:07 AM
To: Labadie, Sam
Cc: Yannoulopoulos, Demetrius
Subject: RE: 1773 Baseline - Boundary Condition Request
Attachments: 1773 Baseline Road October 2025.pdf

Arcadis Warning: Exercise caution with email messages from external sources such as this message. Always verify the sender and avoid clicking on links or scanning QR codes unless certain of their authenticity.

Hello,

Please see below the WBC.

The following are boundary conditions, HGL, for hydraulic analysis at 1773 Baseline Road (zone 2W2C) assumed to be connected via the 406 mm watermain on Baseline Road. (see attached PDF for location).

Minimum HGL = 126.2 m
Maximum HGL = 132.4 m
Max Day + Fire Flow (105.0 L/s) = 125.7 m

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

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

Thank you,
Simone

Rubina

Rubina Rasool
Project Manager
Planning, Infrastructure and Economic Development Department
Development Review – West Branch
City of Ottawa
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613-580-2424 Ext. 24221
rubina.rasool@ottawa.ca

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

From: Labadie, Sam <samantha.labadie@arcadis.com>
Sent: October 06, 2025 10:17 AM
To: Rasool, Rubina <Rubina.Rasool@ottawa.ca>
Cc: demetrius.yannoulopoulos <demetrius.yannoulopoulos@arcadis.com>
Subject: RE: 1773 Baseline - Boundary Condition Request

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ATTENTION : Ce courriel provient d'un expéditeur externe. Ne cliquez sur aucun lien et n'ouvrez pas de pièce jointe, excepté si vous connaissez l'expéditeur.

Thanks Rubina. We're getting mixed requests from the city recently, some strongly prefer OBC for buildings under 9,000 L/min per tech bulletin 2024-05. If there's an issue, let us know.

Wanted to make sure this request wasn't lost.

Sam Labadie P.Eng
Civil Engineer
Arcadis Professional Services (Canada) Inc.
Suite 500, 333 Preston Street | Ottawa | ON | K1S 5N4 | Canada
C: +1 613 899 5717
www.arcadis.com

From: Rasool, Rubina <Rubina.Rasool@ottawa.ca>
Sent: October 6, 2025 10:09 AM
To: Labadie, Sam <samantha.labadie@arcadis.com>
Cc: Yannoulopoulos, Demetrius <demetrius.yannoulopoulos@arcadis.com>
Subject: RE: 1773 Baseline - Boundary Condition Request

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Hi Sam,

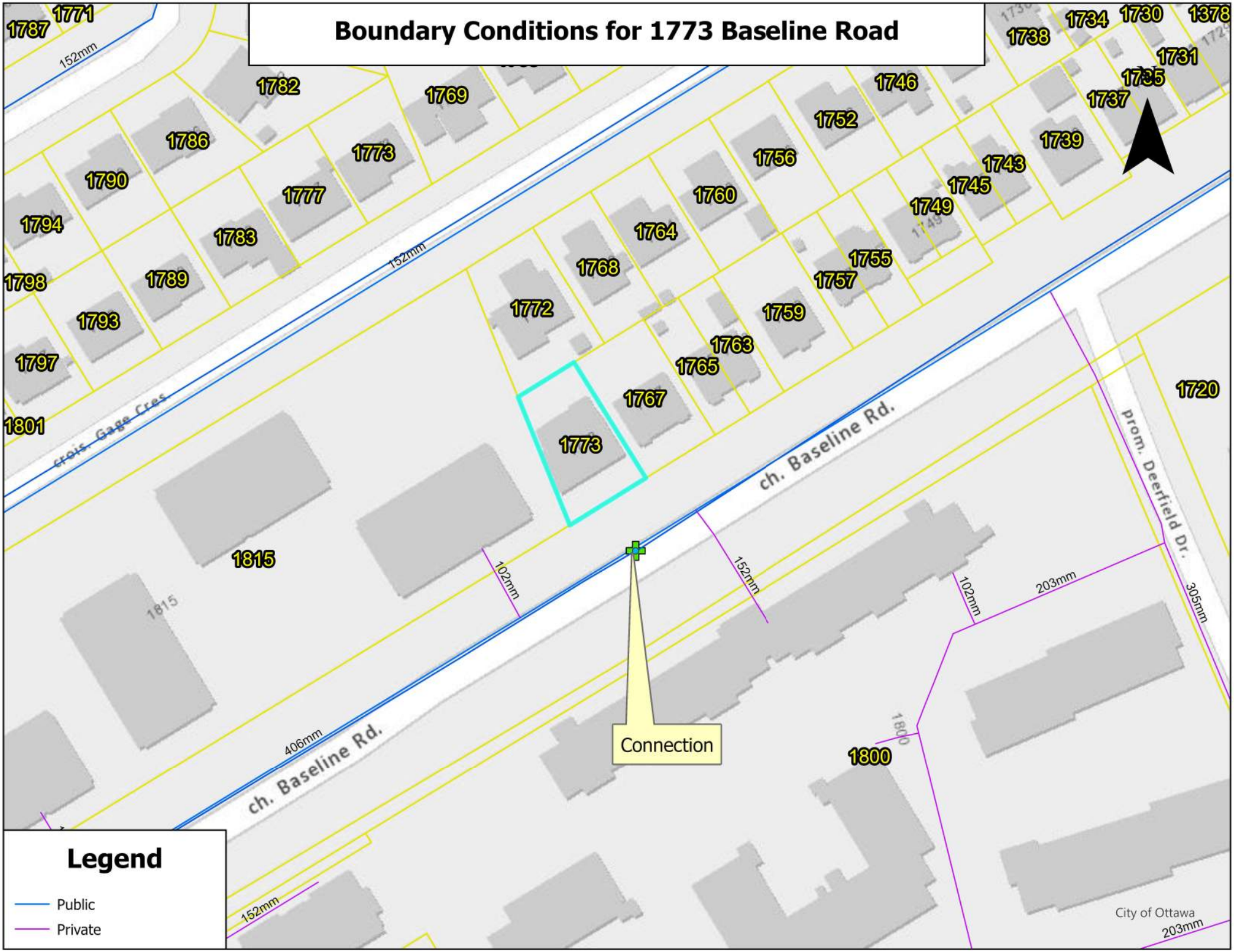
I have received your request for water boundary conditions. Typically, the Water Distribution team requires the demands in FUS for internal use; however, I am seeing if they are able to also accept the demands in OBC. OBC demands can be used for the site plan analysis provided they meet our technical memos/guidelines.

Thanks,

Rubina

Rubina Rasool
Project Manager
Planning, Infrastructure and Economic Development Department
Development Review – West Branch
City of Ottawa

Boundary Conditions for 1773 Baseline Road



Appendix C

ARCADIS
400-333 Preston Street
Ottawa, Ontario K1S 5N4 Canada
tel 613 225 1311 fax 613 225 9868
arcadis.com

SANITARY SEWER DESIGN SHEET

1773 & 1767 Baseline Road
City of Ottawa
Phoenix Homes

LOCATION				RESIDENTIAL										ICI AREAS								INFILTRATION ALLOWANCE			FIXED FLOW (L/s)		TOTAL FLOW	PROPOSED SEWER DESIGN						
				AREA w/ Units	UNIT TYPES				AREA w/o Units	POPULATION		RES PEAK FACTOR	PEAK FLOW	AREA (Ha)						ICI PEAK FACTOR	PEAK FLOW	AREA (Ha)		FLOW				CAPACITY	LENGTH	DIA	SLOPE	VELOCITY (full)	AVAILABLE CAPACITY	
														INSTITUTIONAL		COMMERCIAL		INDUSTRIAL																
STREET	AREA ID	FROM MH	TO MH	(Ha)	1 BDRM	2 BDRM	3 BDRM	SINGLE	(Ha)	IND	CUM		(L/s)	IND	CUM	IND	CUM	IND	CUM		(L/s)	IND	CUM	(L/s)	IND	CUM	(L/s)	(L/s)	(m)	(mm)	(%)	(m/s)	L/s	(%)
1773 & 1767 Baseline Road Apartment Building																																		
EXISTING		BLDG	SAN	0.11				2		6.8	6.8	3.74	0.08		0.00		0.00		0.00	1.00	0.00	0.11	0.11	0.04		0.00	0.12	54.10	57.44	200	2.50	1.668	53.98	99.78%
SITE PLAN PROPOSED		BLDG	MH 1A	0.11	27	17	2			79.7	79.7	3.62	0.93		0.00		0.00		0.00	1.00	0.00	0.11	0.11	0.04		0.00	0.97	54.10	4.44	200	2.50	1.668	53.13	98.21%
		BLDG	EX SANMH							0.0	79.7	3.62	0.93		0.00		0.00		0.00	1.00	0.00	0.00	0.00	0.00		0.00	0.93	54.10	5.38	200	2.50	1.668	53.17	98.27%

Design Parameters:

Residential			ICI Areas			
1 BDRM	1.4	p/p/u				
2BDRM	2.1	p/p/u	INST	28,000	L/Ha/day	
3BDRM	3.1	p/p/u	COM	28,000	L/Ha/day	
SINGLE	3.4	p/p/u	IND	35,000	L/Ha/day	MOE Chart
Other	60	p/p/Ha		17000	L/Ha/day	

Notes:
1. Mannings coefficient (n) = 0.013
2. Demand (per capita): 280 L/day 200 L/day
3. Infiltration allowance: 0.33 L/s/Ha
4. Residential Peaking Factor:
   Harmon Formula = 1+(14/(4+(P/1000)^0.5))0.8
   where K = 0.8 Correction Factor
5. Commercial and Institutional Peak Factors based on total area,
   1.5 if greater than 20%, otherwise 1.0

Designed: SL

Checked: DY

Dwg. Reference: 30297182-400

No.	Revision	Date
1.	Submission No. 1 for City Review	2025-12-18
2.	Submission No. 2 for City Review	2026-04-30
3.	Submission No. 3 for City Review	2026-07-31
4.	Submission No. 4 for City Review	2026-10-02

File Reference:	Date:	Sheet No:
30297182-05	2026-10-02	1 of 1

Appendix D

ARCADIS
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arcadis.com

STORM SEWER DESIGN SHEET

1773 & 1767 Baseline Road
City of Ottawa
Phoenix Homes

LOCATION				AREA (Ha)														RATIONAL DESIGN FLOW																SEWER DATA								
STREET	AREA ID	FROM	TO	C= 0.20	C= 0.41	C= 0.56	C= 0.60	C= 0.67	C= 0.48	C= 0.65	C= 0.69	C= 0.70	C= 0.77	C= 0.81	C= 0.84	C= 0.87	C= 0.88	C= 0.90	IND 2.78AC	CUM 2.78AC	INLET (min)	TIME IN PIPE	TOTAL (min)	i (2) (mm/hr)	i (5) (mm/hr)	i (10) (mm/hr)	i (100) (mm/hr)	2yr PEAK FLOW (L/s)	5yr PEAK FLOW (L/s)	10yr PEAK FLOW (L/s)	100yr PEAK FLOW (L/s)	FIXED FLOW IND	FIXED FLOW CUM	DESIGN FLOW (L/s)	CAPACITY (L/s)	LENGTH (m)	PIPE SIZE (mm) DIA	PIPE SIZE (mm) W	PIPE SIZE (mm) H	SLOPE (%)	VELOCITY (m/s)	AVAIL CAP (2yr) (L/s)	AVAIL CAP (2yr) (%)
AMENITY AREA		CB1	EX		0.04														0.05	0.05	10.00	0.06	10.06	76.81	104.19	122.14	178.56	3.50	4.75	5.57	8.14		0.00	4.75	54.10	5.55	200			2.50	1.668	49.35	91.22%
BUILDING		BLDG	MH1															0.05	0.13	0.13	10.00	0.04	10.04	76.81	104.19	122.14	178.56	9.61	13.03	15.28	22.34		0.00	13.03	98.29	4.98	250			2.51	1.940	85.25	86.74%
		MH1	EX																0.00	0.13	10.04	0.05	10.10	76.64	103.97	121.88	178.17	9.59	13.01	15.25	22.29		0.00	13.01	98.09	6.10	250			2.50	1.936	85.09	86.74%

Definitions:
Q = 2.78CiA, where:
Q = Peak Flow in Litres per Second (L/s)
A = Area in Hectares (Ha)
i = Rainfall intensity in millimeters per hour (mm/hr)
[i = 732.951 / (TC+6.199)^0.810] 2 YEAR
[i = 998.071 / (TC+6.053)^0.814] 5 YEAR
[i = 1174.184 / (TC+6.014)^0.816] 10 YEAR
[i = 1735.688 / (TC+6.014)^0.820] 100 YEAR

Notes:
1. Mannings coefficient (n) = 0.013

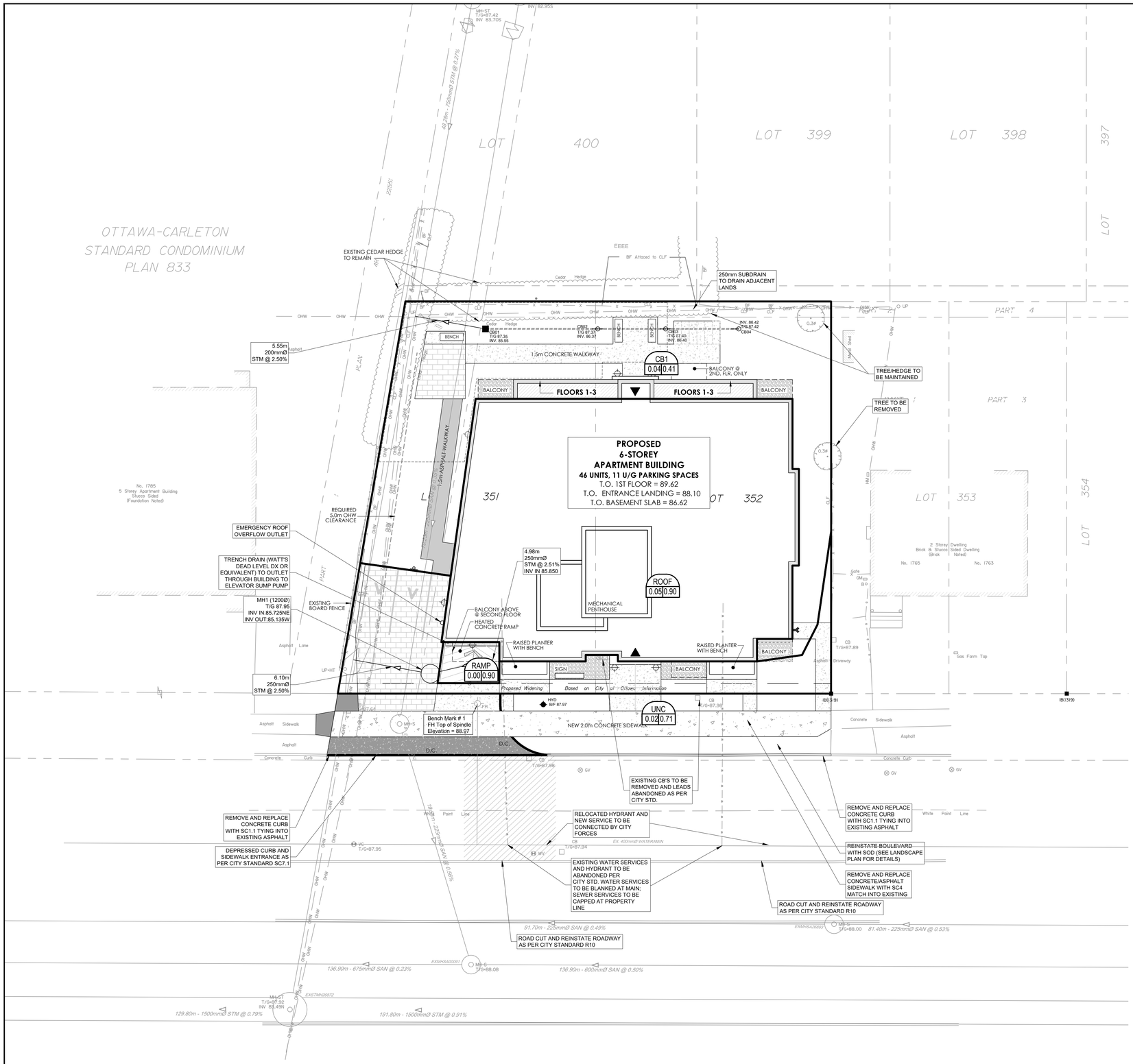
Designed: MP

Checked: SL

Dwg. Reference: 30297182-500

No.	Revision	Date
1.	Submission No. 1 for City Review	2025-12-18
2.	Submission No. 2 for City Review	2026-04-30
3.	Submission No. 3 for City Review	2026-07-31

File Reference:	Date:	Sheet No:
30297182-05	2026-07-31	1 of 1



LEGEND :

CB1 — AREA NUMBER

0.03 | 0.56 — RUNOFF COEFFICIENT

AREA IN HECTARES

CLIENT

PHOENIX HOMES
18A Bentley Ave Ottawa, ON K2E 6T8

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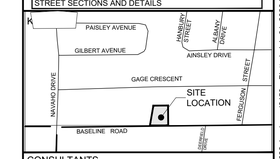
Arcadis Professional Services (Canada) Inc.
formerly IBI Group Professional Services (Canada) Inc.

ISSUES

No.	DESCRIPTION	DATE
1	ISSUED FOR SPA	2025-12-18
2	REVISED AS PER NEW SITE PLAN	2026-02-20
3	REVISED AS PER CITY COMMENTS	2026-04-30
4	REVISED AS PER NEW SITE PLAN	2026-07-29

SEE 010, 011, 012 FOR NOTES, LEGEND, CB TABLE, STREET SECTIONS AND DETAILS



CONSULTANTS

1:150 0 1.5 4.5 7.5m

SEAL

LICENSED PROFESSIONAL ENGINEER
S. E. LABADIE
100214983
2026/07/29
PROVINCE OF ONTARIO

PRIME CONSULTANT

ARCADIS
333 Preston Street - Suite 500
Ottawa ON K1S 5N4 Canada
tel 613 225 1311
www.arcadis.com

PROJECT
1773 & 1767 BASELINE ROAD
OTTAWA, ONTARIO

PROJECT NO: 30297182	
DRAWN BY: **D.P.S.**	CHECKED BY: **D.G.Y.**
PROJECT MGR: **D.G.Y.**	APPROVED BY: **S.E.L.**

SHEET TITLE
SITE STORM DRAINAGE AREA PLAN

SHEET NUMBER	ISSUE
C-500	4

File Location: C:\Users\siurma3150\DC\ACCDocs\Arcadis ACC US\ACA-30297182-Baseline Road Redevelopment\Project Files\10_WIP\04_CIVIL\Sheets\C-500 SITE STORM DRAINAGE AREA PLAN.dwg Last Saved: April 23, 2026, by siurma3150 Plotted: July 31, 2026 2:32:33 PM by Siurma, Don

FILE No. D07-12-25-0169

PLAN No. 19442

SCALE CHECK 1in

IBI GROUP
400-333 Preston Street
Ottawa, Ontario K1S 5N4 Canada
tel 613 225 1311 fax 613 225 9868
ibigroup.com

PROJECT:	1773 Baseline
DATE:	2026-07-31
FILE:	30297182.05
REV #:	3
DESIGNED BY:	SEL
CHECKED BY:	D.Y.

STORMWATER MANAGEMENT

Formulas and Descriptions

i_{2yr} = 1:2 year Intensity = 732.951 / $(T_c+6.199)^{0.810}$
i_{5yr} = 1:5 year Intensity = 998.071 / $(T_c+6.053)^{0.814}$
i_{100yr} = 1:100 year Intensity = 1735.688 / $(T_c+6.014)^{0.820}$
T_c = Time of Concentration (min)
C = Average Runoff Coefficient
A = Area (Ha)
Q = Flow = 2.78CiA (L/s)

Maximum Allowable Release Rate

Restricted Flowrate (based on C=0.50 Tc=10min)

C =	0.5
T_c =	10 min
i_{5yr} =	104.19 mm/hr
A_{site} =	0.11 Ha
$Q_{restricted}$ =	15.93 L/s

UNC Uncontrolled Release ($Q_{uncontrolled}$ = 2.78*C*i_{100yr}*$A_{uncontrolled}$)

C =	0.89
T_c =	10 min
i_{100yr} =	178.56 mm/hr
$A_{uncontrolled}$ =	0.0151 Ha
Q_{uncon} =	6.65 L/s

RAMP Uncontrolled Release ($Q_{uncontrolled}$ = 2.78*C*i_{100yr}*$A_{uncontrolled}$)

C =	1.00
T_c =	10 min
i_{100yr} =	178.56 mm/hr
$A_{uncontrolled}$ =	0.0015 Ha
Q_{uncon} =	0.74 L/s

Maximum Allowable Release Rate ($Q_{max\ allowable}$ = $Q_{restricted}$ - $Q_{uncontrolled}$)

$Q_{max\ allowable}$ =	8.53 L/s

MODIFIED RATIONAL METHOD (100-Year, & 2-Year Ponding)

Drainage Area	***ROOF***		
Area (Ha)	0.05		
C =	1.00	Restricted Flow Q_r (L/s)=	2.00

100-Year Ponding

T_c Variable (min)	***i_{100yr} (mm/hour)***	***Peak Flow Q_p=2.78xCi$_{100yr}$A (L/s)***	***Q_r (L/s)***	***Q_p-Q_r (L/s)***	***Volume 100yr (m^3)***
56	58.83	8.18	2.00	6.18	20.758
58	57.32	7.97	2.00	5.97	20.768
59	56.60	7.87	2.00	5.87	**20.770**
60	55.89	7.77	2.00	5.77	20.770
62	54.54	7.58	2.00	5.58	20.763

Storage (m^3)

Overflow	Required	Surface	Sub-surface	Balance
0.00	20.77	28.13		0.00

Drainage Area	***ROOF***		
Area (Ha)	0.05		
C =	0.90	Restricted Flow Q_r (L/s)=	2.00

2-Year Ponding

T_c Variable (min)	***i_{2yr} (mm/hour)***	***Peak Flow Q_p=2.78xCi$_{2yr}$A (L/s)***	***Q_r (L/s)***	***Q_p-Q_r (L/s)***	***Volume 2yr (m^3)***
23	47.66	5.96	2.00	3.96	5.47
24	46.37	5.80	2.00	3.80	5.47
25	45.17	5.65	2.00	3.65	**5.48**
26	44.03	5.51	2.00	3.51	5.47
27	42.95	5.37	2.00	3.37	5.46

Storage (m^3)

Overflow	Required	Surface	Sub-surface	Balance
0.00	5.48	28.13		0.00

Drainage Area	***CB1***		
Area (Ha)	0.04		
C =	0.51	Restricted Flow Q_r (L/s)=	6.00

100-Year Ponding

T_c Variable (min)	***i_{100yr} (mm/hour)***	***Peak Flow Q_p=2.78xCi$_{100yr}$A (L/s)***	***Q_r (L/s)***	***Q_p-Q_r (L/s)***	***Volume 100yr (m^3)***
5	242.70	13.83	6.00	7.83	2.350
7	211.67	12.06	6.00	6.06	2.546
8	199.20	11.35	6.00	5.35	**2.569**
9	188.25	10.73	6.00	4.73	2.553
11	169.91	9.68	6.00	3.68	2.431

Storage (m^3)

Overflow	Required	Surface	Sub-surface	Balance
0.00	2.57	4.34	0.64	0.00

*Vol of CB+TCB*2

Drainage Area	***CB1***		
Area (Ha)	0.04		
C =	0.41	Restricted Flow Q_r (L/s)=	6.00

2-Year Ponding

T_c Variable (min)	***i_{2yr} (mm/hour)***	***Peak Flow Q_p=2.78xCi$_{2yr}$A (L/s)***	***Q_r (L/s)***	***Q_p-Q_r (L/s)***	***Volume 2yr (m^3)***
-1	192.83	8.79	6.00	2.79	-0.17
0	167.22	7.62	6.00	1.62	0.00
1	148.14	6.75	6.00	0.75	**0.05**
2	133.33	6.08	6.00	0.08	0.01
3	121.46	5.54	6.00	-0.46	-0.08

Storage (m^3)

Overflow	Required	Surface	Sub-surface	Balance
0.00	0.05	4.34	0.64	0.00

RUNOFF COEFFICIENT CALCULATION SHEET

RESTRICTED

CB1	Area (m^2)	C
Softscape	280	0.20
Hardscape	120	0.90
Total	400	**0.41**

UNRESTRICTED

UNC	Area (m^2)	C
Softscape	41	0.20
Hardscape	110	0.90
Total	151	**0.71**

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

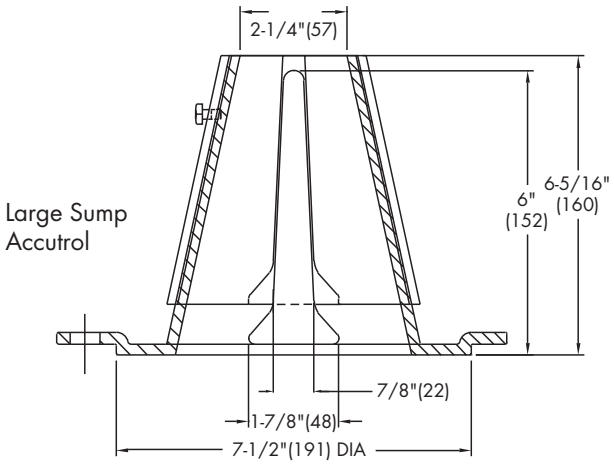
ADJUSTABLE ACCUTROL (for Large Sump Roof Drains only)

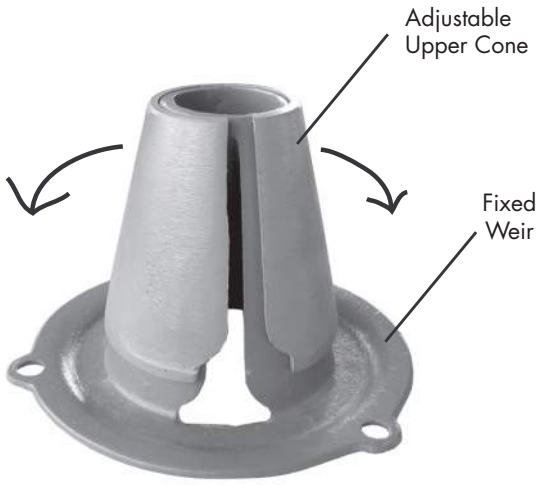
For more flexibility in controlling flow with heads deeper than 2", Watts Drainage offers the Adjustable Accutrol. The Adjustable Accutrol Weir is designed with a single parabolic opening that can be covered to restrict flow above 2" of head to less than 5 gpm per inch, up to 6" of head. To adjust the 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 _____

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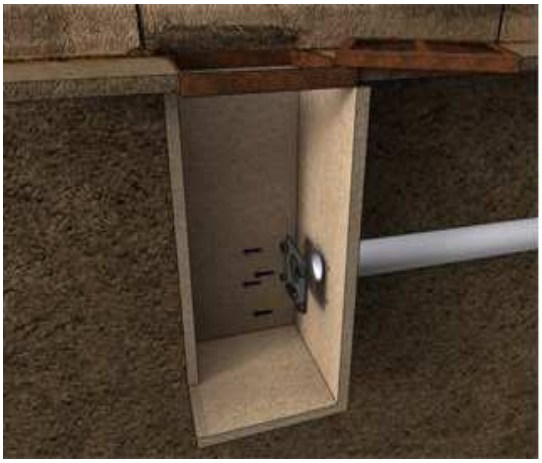
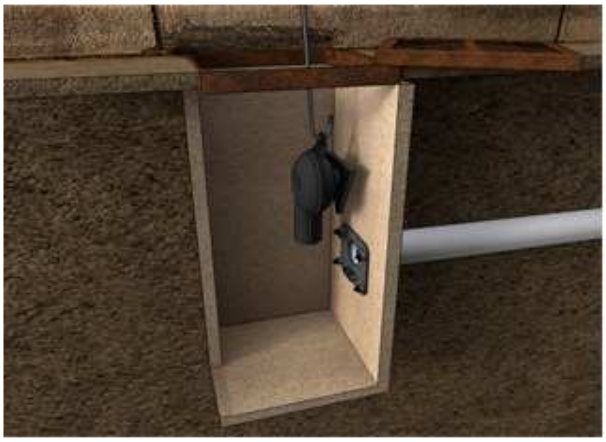
Square CB Installation Notes:

1. Materials and tooling verification:
   - Tooling: impact drill, 3/8'' concrete bit, torque wrench for 9/16''nut, hand hammer, level, and marker.
   - Material: (4) concrete anchor 3/8x3-1/2, (4) washers, (4) nuts
2. Use the mounting wall plate to locate and mark the hole (4) pattern on the catch basin wall. You should use a level to ensure that the plate is at the horizontal.
3. Use an impact drill with a 3/8'' concrete bit to make the four holes at a minimum of 1-1/2'' depth up to 2-1/2''. Clean the concrete dust from the holes.
4. Install the anchors (4) in the holes by using a hammer. Put the nuts on the top of the anchors to protect the threads when you will hit the anchors with the hammer. Remove the nuts on the ends of the anchors
5. Install the wall mounting plate on the anchors and screw the nut in place with a maximum torque of 40 N.m (30 lbf-ft). There should be no gap between the wall mounting plate and the catch basin wall.
6. From ground above using a reach bar, lower the device by hooking the end of the reach bar to the handle of the LMF device. Align the triangular plate portion into the mounting wall plate. Push down the device to be sure it has centered in to the wall mounting plate and has created a seal.

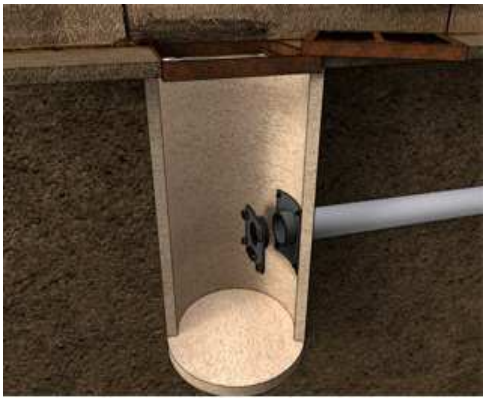




IPEX

Round CB Installation Notes: (Refer to square install notes above for steps 1 , 3, & 4)

2. Use spigot catch basin wall plate to locate and mark the hole (4) pattern on the catch basin wall. You should use a level to ensure that the plate is at the horizontal.
5. Install the CB spigot wall plate on the anchors and screw the 4 nuts in place with a maximum torque of 40 N.m (30 lb-ft). There should be no gap between the CB spigot wall plate and the catch basin wall.
6. Apply solvent cement on the hub of the universal mounting plate and the spigot of the spigot CB wall plate. Slide the hub over the spigot. Make sure the universal mounting plate is at the horizontal and its hub is completely inserted onto the spigot. Normally, the corners of the universal mounting plate hub adapter should touch the catch basin wall.
7. From ground above using a reach bar, lower the ICD device by hooking the end of the reach bar to the handle of the ICD device. Align the triangular plate portion into the mounting wall plate. Push down the device to be sure it has centered into the mounting plate and has created a seal.



CAUTION/WARNING/DISCLAIM:

- Verify that the inlet(s) pipe(s) is not protruding into the catch basin. If it is, cut it back so that the inlet pipe is flush with the catch basin wall.
- Any required cement in the installation must be approved for PVC.
- The solvent cement should not be used below 0°C (32°F) or in a high humidity environment. Please refer to the IPEX solvent cement guide to confirm required curing times or attend the IPEX **Online Solvent Cement Training Course**.
- Call your IPEX representative for more information or if you have any questions about our products.

IPEX

IPEX TEMPEST Inlet Control Devices Technical Specification

General

Inlet control devices (ICD's) are designed to provide flow control at a specified rate for a given water head level and also provide odour and floatable control where specified. All ICD's will be IPEX Tempest or approved equal.

All devices shall be removable from a universal mounting plate. An operator from street level using only a T-bar with a hook will be able to retrieve the device while leaving the universal mounting plate secured to the catch basin wall face. The removal of the TEMPEST devices listed above must not require any unbolting or special manipulation or any special tools.

High Flow (HF) Sump devices will consist of a removable threaded cap which can be accessible from street level with out entry into the catchbasin (CB). The removal of the threaded cap shall not require any special tools other than the operator's hand.

ICD's must have no moving parts.

Materials

ICD's are to be manufactured from Polyvinyl Chloride (PVC) or Polyurethane material, designed to be durable enough to withstand multiple freeze-thaw cycles and exposure to harsh elements.

The inner ring seal will be manufactured using a Buna or Nitrile material with hardness between Duro 50 and Duro 70.

The wall seal is to be comprised of a 3/8" thick Neoprene Closed Cell Sponge gasket which is attached to the back of the wall plate.

All hardware will be made from 304 stainless steel.

Dimensioning

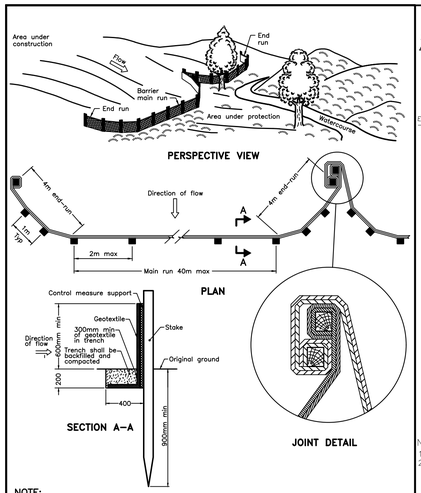
The Low Medium Flow (LMF), High Flow (HF) and the High Flow (HF) Sump shall allow for a minimum outlet pipe diameter of 200mm with a 600mm deep Catch Basin sump.

Installation

Contractor shall be responsible for securing, supporting and connecting the ICD's to the existing influent pipe and catchbasin/manhole structure as specified and designed by the Engineer.

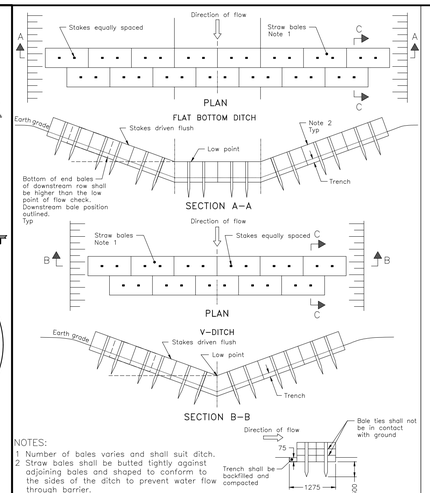
IPEX

Appendix E



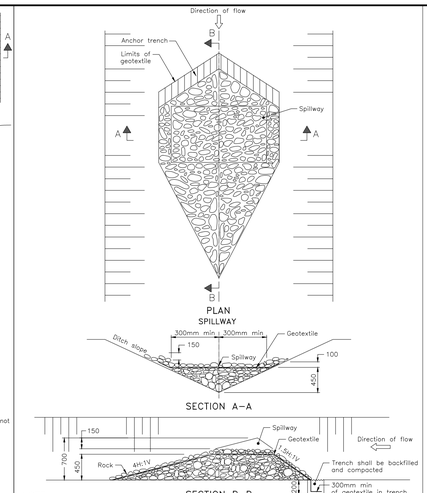
NOTE:
A All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2021	Rev 3
HEAVY–DUTY SILT FENCE BARRIER		OPSD 219.130



NOTES:
1 Number of bales varies and shall suit ditch.
2 Straw bales shall be butted tightly against adjoining bales and shaped to conform to the sides of the ditch to prevent water flow through barrier.
A Fill and compact gaps with loose straw.
B All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2021	Rev 3
STRAW BALE FLOW CHECK DAM		OPSD 219.180



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

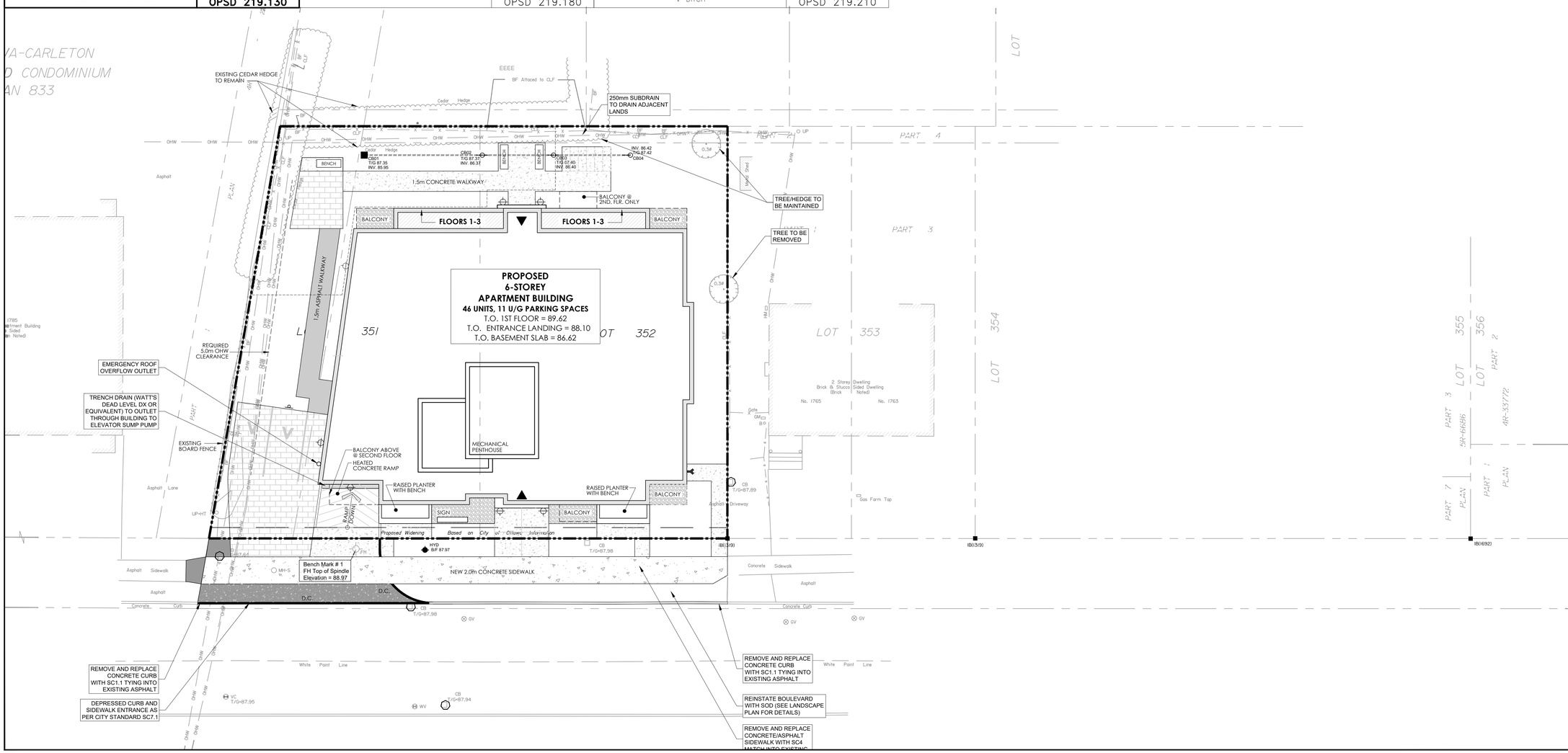
ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2022	Rev 3
TEMPORARY ROCK FLOW CHECK DAM V–DITCH		OPSD 219.210

NOTES:

1. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES, TO PROVIDE FOR PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE RECEIVING WATERCOURSE, DURING CONSTRUCTION ACTIVITIES. THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY.
2. SILT FENCE TO BE ERECTED PRIOR TO EARTH WORKS BEING COMMENCED. SILT FENCE TO BE MAINTAINED UNTIL VEGETATION IS ESTABLISHED OR UNTIL START OF SUBSEQUENT PHASE.
3. STRAW BALE SEDIMENT TRAPS TO BE CONSTRUCTED IN EXISTING ROAD SIDE DITCHES. TRAPS TO REMAIN AND BE MAINTAINED UNTIL VEGETATION IS ESTABLISHED.
4. FILTER CLOTH TO BE PLACED AND MAINTAINED UNDER COVER OF ALL PROPOSED CATCHBASINS AFTER BASE COURSE, AND EXISTING CATHBASINS IDENTIFIED OUTSIDE OF CONSTRUCTION LIMIT. FILTER CLOTH IN STREET CB'S TO REMAIN UNTIL ALL CURBS ARE CONSTRUCTED. FILTER CLOTH IN RYCB'S TO REMAIN UNTIL VEGETATION IS ESTABLISHED. ALL CATHCBASINS TO BE REGULARLY INSPECTED AND CLEANED AS NECESSARY, UNTIL SOD AND CURBS ARE CONSTRUCTED.
5. CONTRACTOR TO PROVIDE DETAILS ON LOCATION(S) AND DESIGN OF DEWATERING TRAP(S) PRIOR TO COMMENCING WORK. CONTRACTOR ALSO RESPONSIBLE FOR MAINTAINING TRAP(S) AND ADJUSTING SIZE(S) IF DEEMED REQUIRED BY THE ENGINEER DURING CONSTRUCTION.
6. WORKS NOTED ABOVE ARE TO BE INSTALLED, INSPECTED, MAINTAINED AND ULTIMATELY REMOVED BY SERVICING CONTRACTOR.
7. THIS IS A "LIVING DOCUMENT" AND MAY BE MODIFIED IN THE EVENT THE PROPOSED CONTROL MEASURES ARE INSUFFICIENT.

LEGEND:

- HEAVY DUTY SILT FENCE AS PER OPSD-219.130
- SNOW FENCE
- STRAW BALE CHECK DAM AS PER OPSD-219.180
- ROCK CHECK DAM AS PER OPSD-219.210
- FILTER CLOTH PLACED UNDER EXISTING CB COVER
- TEMPORARY MUD MAT 0.15m THICK 50mm CLEAR STONE ON NON WOVEN FILTER CLOTH (15.0m × 7.6m)



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PHOENIX HOMES
18A Bentley Ave Ottawa, ON K2E 6T8

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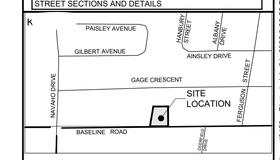
No.	DESCRIPTION	DATE
1	ISSUED FOR SPA	2025-12-18
2	REVISED AS PER NEW SITE PLAN	2026-02-20
3	REVISED AS PER CITY COMMENTS	2026-04-30
4	REVISED AS PER NEW SITE PLAN	2026-07-29

SEE 010, 011, 012 FOR NOTES, LEGEND, CB TABLE, STREET SECTIONS AND DETAILS



1:150

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LICENSED PROFESSIONAL ENGINEER
S. E. LABADIE
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2026/07/29
PROVINCE OF ONTARIO

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PROJECT
1773 & 1767 BASELINE ROAD
OTTAWA, ONTARIO

PROJECT NO: 30297182	
DRAWN BY: D.P.S.	CHECKED BY: D.G.Y.
PROJECT MGR: D.G.Y.	APPROVED BY: S.E.L.

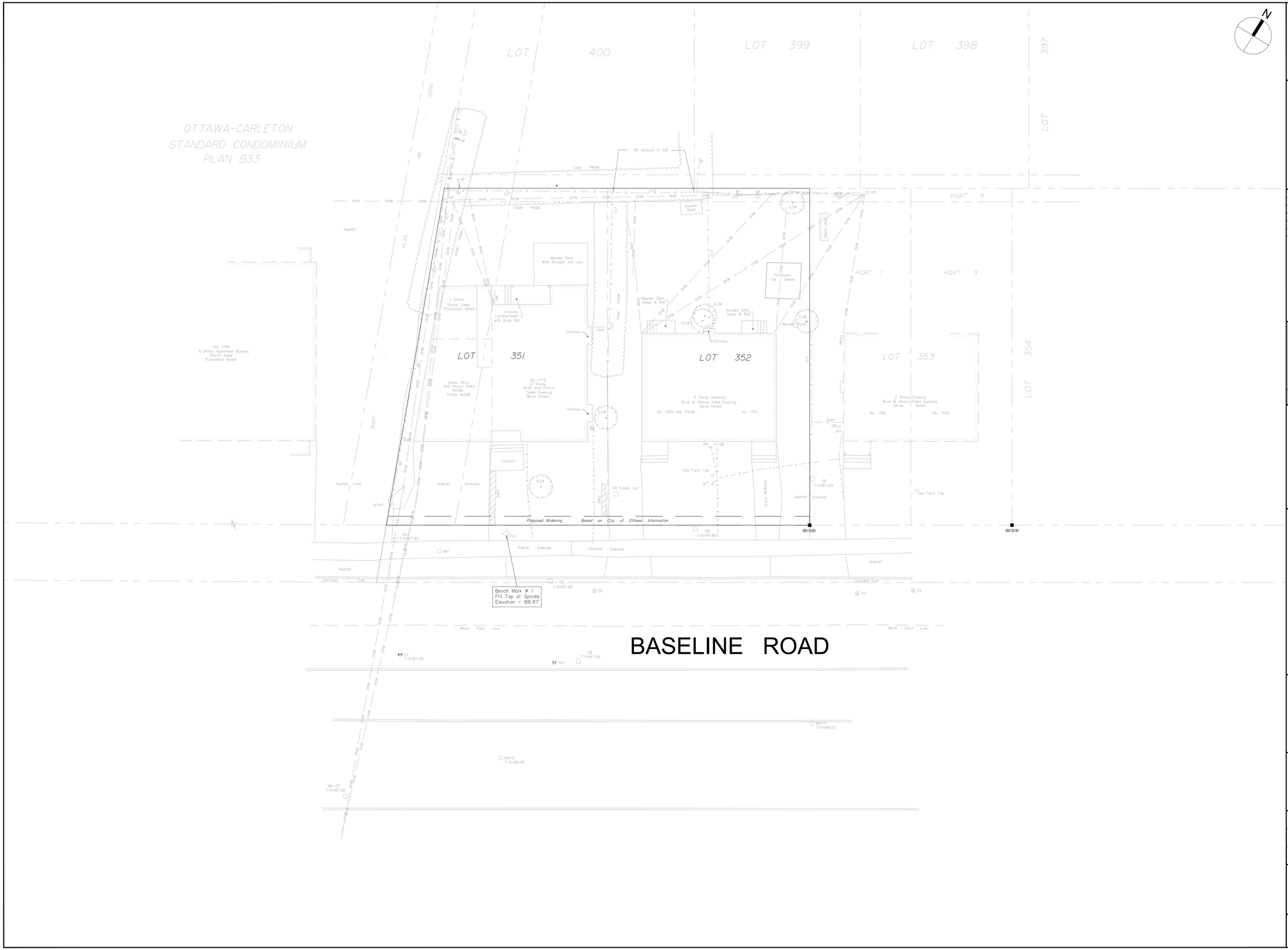
SHEET TITLE
SEDIMENT - EROSION PLAN

SHEET NUMBER	ISSUE
C-900	4

FILE No. D07-12-25-0169
PLAN No. 19442

SCALE CHECK
1mm
1cm

File Location: C:\Users\siumad3150\DC\ACCDocs\Arcadis ACC US\ACA-30297182-Baseline Road Redevelopment\Project Files\10_WIP\04_CIVIL\Sheets\C-900 SEDIMENT - EROSION PLAN.dwg Last Saved: April 23, 2026, by siumad3150 Plotted: July 31, 2026 2:32:55 PM by Siuma, Don



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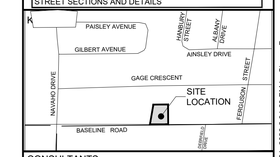

CONSULTANTS

1:150 0 1.5 4.5 7.5m

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PROJECT

1773 & 1767 BASELINE ROAD
OTTAWA, ONTARIO

PROJECT NO:
30297182

DRAWN BY:	CHECKED BY:
D.P.S.	**D.G.Y.**
PROJECT MGR:	APPROVED BY:
D.G.Y.	**S.E.L.**

SHEET TITLE

EXISTING CONDITIONS

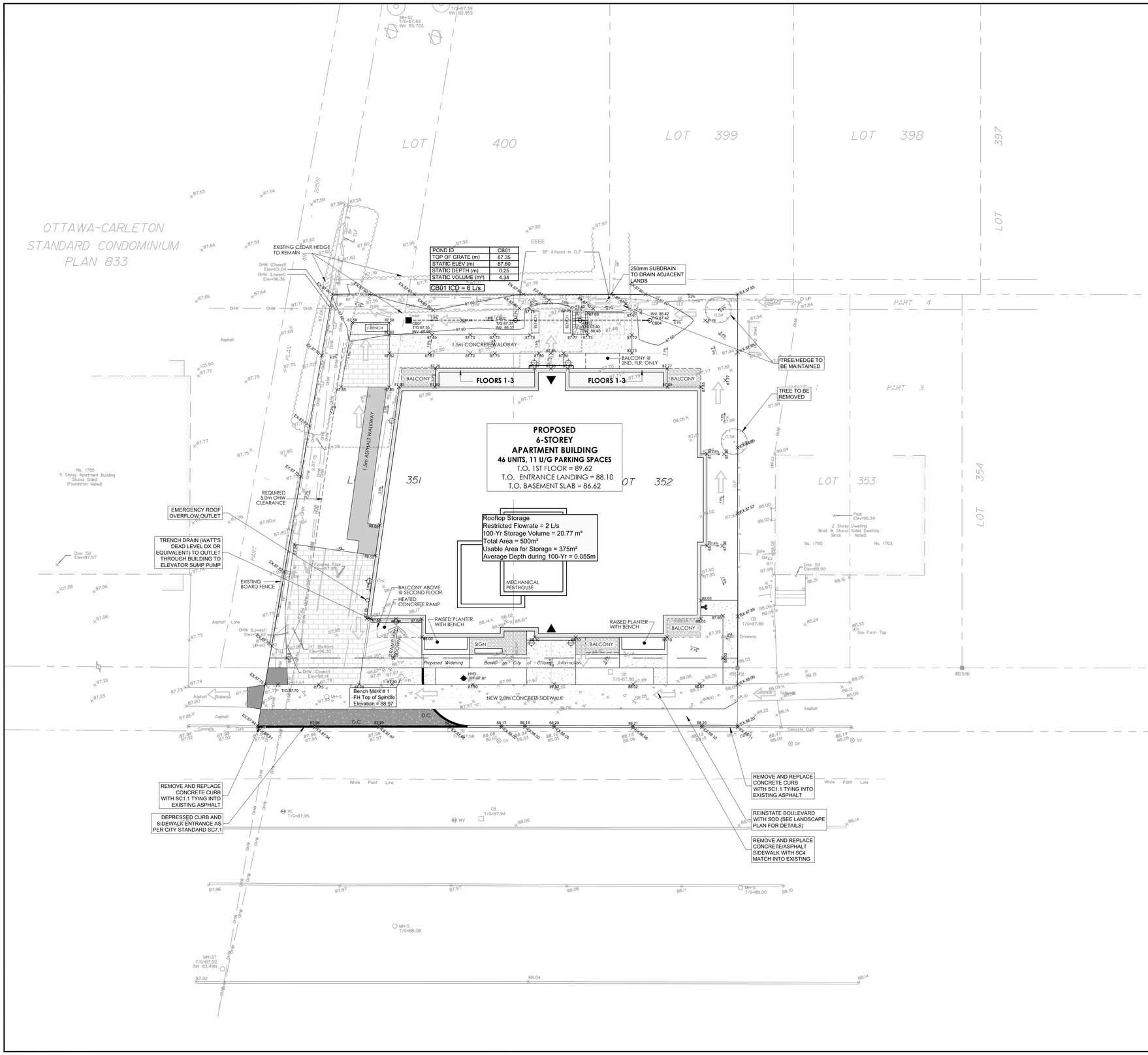
SHEET NUMBER	ISSUE
C-EXCON	4

File Location: C:\Users\siumad3150\DC\ACCDocs\Arcadis ACC US\ACA-30297182-Baseline Road Redevelopment\Project Files\10_WIP\04_CIVIL\Sheets\C-EXCON.dwg Last Saved: April 23, 2026, by siumad3150 Plotted: July 31, 2026 2:31:23 PM by Siuma, Don

SCALE CHECK 1 in 50mm

PLAN No. 19442

FILE No. D07-12-25-0169



POND ID	CB01
TOP OF GRATE (m)	87.35
STATIC ELEV (m)	87.60
STATIC DEPTH (m)	0.25
STATIC VOLUME (m³)	4.34

GRADING LEGEND

- PROPOSED DITCH C/W FLOW DIRECTION AND SLOPE
- SLOPE C/W FLOW DIRECTION
- MAJOR OVERLAND FLOW ROUTE
- PROPOSED SPOT GRADE
- PROPOSED SWALE GRADE
- PROPOSED SWALE HIGH POINT GRADE
- LOT CORNER GRADE C/W EXISTING GRADE
- FULL STATIC PONDING GRADE
- RETAINING WALL C/W TOP OF WALL AND GRASS GRADE
- TERRACING 3:1 MAXIMUM UNLESS NOTED OTHERWISE
- PRESSURE REDUCING VALVE
- FINISHED FLOOR ELEVATION
- TOP OF FOUNDATION ELEVATION
- UNDERSIDE OF FOOTING ELEVATION
- MINIMUM UNDERSIDE OF FOOTING (Based on the higher of the sewer obverts, or hydraulic grade line)
- MINIMUM GARAGE GRADE
- WU — WALKUP UNIT
- WO — WALKOUT UNIT
- NS — NON-STANDARD FOUNDATION (Frost cover not provided for standard unit)
- HB — HIGHBACK UNIT (1.5m frost cover on footings)
- NOISE BARRIER LOCATION
- NOISE BARRIER GATE
- RIP-RAP
- TOWN HOUSE SPLITS
- 2hr FIREWALL — 2 hr FIREWALL

Denotes	"	Survey Monument Planted
	"	Survey Monument Found
SIB	"	Standard Iron Bar
SSIB	"	Short Standard Iron Bar
IB	"	Iron Bar
CP	"	Concrete Pin
(WIT)	"	Witness
(AOG)	"	Annis, O'Sullivan, Vollebekk Ltd.
Meas.	"	Measured
Prop.	"	Proportioned
(P1)	"	Registered Plan 372115
(P2)	"	(AOG) Plan, November 15, 1990
(P3)	"	Plan 4R-22510
(P4)	"	Plan 4R-8091
MH-S	"	Maintenance Hole (Sanitary)
VC	"	Valve Chamber (Watermain)
G	"	Underground Gas
W	"	Underground Water
OHW	"	Overhead Wires
UP	"	Utility Pole
CB	"	Catch Basin
FH	"	Fire Hydrant
WV	"	Water Valve
GV	"	Gas Valve
GM	"	Gas Meter
HM	"	Hydro Meter
B	"	Bollard
CLF	"	Chain Link Fence
BF	"	Board Fence
RWS	"	Stone Retaining Wall
Ø	"	Diameter
65.00	"	Location of Elevations
65.00	"	Top of Concrete Curb Elevation
65.00*	"	Top of Stone Retaining Wall Elevation
C/L	"	Centreline
	"	Deciduous Tree

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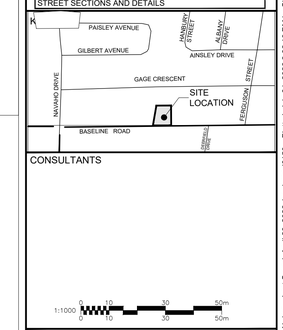

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2026/07/29
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PROJECT
1773 & 1767 BASELINE ROAD
OTTAWA, ONTARIO

PROJECT NO: 30297182	
DRAWN BY: **D.P.S.**	CHECKED BY: **D.G.Y.**
PROJECT MGR: **D.G.Y.**	APPROVED BY: **S.E.L.**

SHEET TITLE
SITE GRADING PLAN

SHEET NUMBER	ISSUE
C-200	4

File Location: C:\Users\alumsa3150\DC\ACCDocs\Arcadis ACC US\ACA-30297182-Baseline Road Redevelopment\Project Files\10_WIP\04_CIVIL\Sheets\C-200 SITE GRADING PLAN.dwg Last Saved: April 23, 2026, by alumsa3150 Plotted: July 31, 2026 2:32:19 PM by Sluma, Don

FILE No. D07-12-25-0169
PLAN No. 19442

REMOVAL	DRY GRIND EXISTING ASPHALT. AVERAGE DEPTH 50mm.
ADJUST MANHOLE, VALVES	FULL DEPTH ASPHALT REMOVAL
ADJUST CATCH BASIN	AREA TO BE CLEARED AND GRUBBED
ADJUSTMENT BY BELL OR HYDRO APPROVED CONTRACTOR	REMOVAL OF BUILDINGS, FOUNDATIONS, SEPTIC SYSTEM AND WELL
REMOVE OR ABANDON SEWER, WATERMAIN, UTILITY, CURB RETURNS	REMOVALS OF CONCRETE/ ASPHALT SIDEWALK
PLUG	

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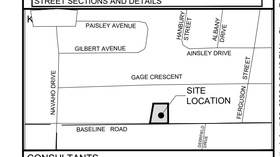

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1:1000 0 10 30 50m

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PROJECT MGR:	APPROVED BY:
D.G.Y.	**S.E.L.**

SHEET TITLE

REMOVALS DRAWING

SHEET NUMBER	ISSUE
C-REM	3

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SCALE CHECK 1 in 10mm

PLAN No. 19442

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