

TOWN OF CALEDON
PLANNING
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***SERVICING DESIGN BRIEF AND
STORMWATER MANAGEMENT REPORT***

**PROPOSED COMMON ELEMENT RESIDENTIAL
TOWNHOUSE DEVELOPMENT**

QUEENSGATE (MOSAIK) INC.

12944 QUEENSGATE BOULEVARD

TOWN OF CALEDON

REGION OF PEEL

February 25, 2026



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STORMWATER MANAGEMENT REPORT***

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DRAWINGS

DRAWING SS-1	Site Servicing Plan – Queensgate (Mosaik), Town of Caledon (Candevcon Group Inc., Project No. W25040)
DRAWING GR-1	Grading Plan – Queensgate (Mosaik), Town of Caledon (Candevcon Group Inc., Project No. W25040)
DRAWING ESC-1	Erosion and Sediment Control Plan – Queensgate (Mosaik), Town of Caledon (Candevcon Group Inc., Project No. W25040)

1 INTRODUCTION

Candevcon Group Inc. has been retained by Queensgate Mosaik Inc. to provide engineering design services related to the site servicing (storm, sanitary, watermains and roadworks) and the on-site stormwater management strategy (quantity, quality and water balance) for the proposed residential common element townhouse development in the Town of Caledon and Region of Peel.

1.1 Study Area

The property is located at the northwest corner of Albion – Vaughan Road and Queensgate Boulevard in the Town of Caledon with a municipal address of 12944 Queensgate Boulevard. The property is currently occupied by a single family home with a detached garage.

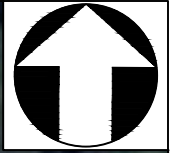
The location of the property is shown on **Figure 1 – Location Plan**.

Legal Description of the property:

Block 40, Plan 43M-1281 and Part Lot 5 Concession 7 and Part of the original Road Allowance between Lots 5 and 6, Concession 7 (Geographic Township of Albion), Town of Caledon, Regional Municipality of Peel

1.2 Objective

This Servicing Design Brief and Stormwater Management Report is intended to illustrate the proposed servicing of the subject townhouse site plan development in terms of sanitary drainage, storm drainage, water supply and road construction. The report also addresses the proposed stormwater management measures implemented to meet the overall stormwater management objective for the site including quantity control, quality control and infiltration/water balance requirements. This report will be submitted to the Town, Region and other approval authorities along with the detailed site servicing and grading design drawings for servicing design and construction approvals.



FUNCTIONAL DESIGN BRIEF

MOSAIK HOMES
PROPOSED RESIDENTIAL DEVELOPMENT

12944 QUEENSGATE BOULEVARD
TOWN OF BOLTON

LOCATION PLAN



CANDEVCON GROUP INC.
CONSULTING ENGINEERS AND PLANNERS

3038 GOREWAY DRIVE
BRAMPTON ON. L6P 0M7

TEL (905) 794-0600
FAX (905) 794-0611

DRAWN BY:
R.V.M

CHECKED BY:
S.A

SCALE:
N.T.S

DATE:
DEC 04, 2025

PROJECT No.
W25040

FIGURE No.

1

2 PROPOSED DEVELOPMENT PLAN

The property has an area of 0.98 ha and is bounded by a former road allowance (between Part of Lot 5 and 6, Concession 7 (Albion)), vacant land and existing single detached residential use lands to the north, Albion – Vaughan Road to the east, Queensgate Boulevard to the south and single detached residential lands to the west.

The proposed development comprises a 49-unit common element townhouse development consisting of 30 ‘back-to-back’ towns and 19 ‘front load’ towns. A 6.0m wide private laneway connects the townhouse condominium complex to Queensgate Boulevard. Twelve visitor parking spots are distributed throughout the site.

The proposed site plan for the subject site was prepared by RN Design dated November 6, 2025 and is included in **Appendix “A”** for reference.

3 EXISTING CONDITIONS – BACKGROUND INFORMATION

3.1 General

The proposed site was previously envisioned as a continuation of the existing residential development from the north with the extension of Esposito Drive to the site boundary complete with sanitary, storm and water services. The development direction for the proposed property has been revised, along with some recent sanitary sewer infrastructure improvements along Queensgate Boulevard by the Region of Peel and additional stormwater drainage improvements by the Town of Caledon along Queensgate Boulevard and Albion Vaughan Road. Therefore, the site servicing strategies outlined in the report form the basis to accommodate the above noted changes for the proposed site.

3.2 Existing Topography, Drainage and Natural Features

Under existing conditions, the property contains a single family residential building with a detached garage and access to Albion-Vaughan Road. A portion of the lands are tree covered however have not been classified as a woodlot.

The topography of the site is sloped south and east to existing drainage ditches (along the south and east boundaries of the site) which confluence at a 600mm diameter steel culvert which conveys stormwater beneath the Albion-Vaughan Road to the east. The average grade of the site slopes from north to south at approximately 4.8% and from west to east at approximately 1.3%.

The existing site has an average geodetic elevation of approximately 205.0m with the southeast corner of the site approximately 2m below the Albion-Vaughan Road and Queensgate Boulevard intersection. This area will require fill to provide positive drainage and cover over the proposed storm sewer system.

Existing storm drainage from a portion of the external lands to the north-east currently drain toward the subject property and is captured in the existing ditch at the east boundary within the Albion-Vaughan Road Allowance. The existing ditch will remain and serve to accommodate this external drainage. Please refer to **Figure 2 – Pre Development Drainage Area Plan** for details of the existing drainage patterns.

3.3 Geotechnical Information

A geotechnical investigation was conducted by Soil Engineers Limited dated November 2017. Based on findings from the Soil Engineers Limited study, the site's surficial soils consist of a topsoil layer overlying fill material. Underneath the fill material native soil consists of silty clay. Groundwater levels were measured at depths ranging from 238.06m – 241.08m.

3.4 Existing Water

There are two existing watermain surrounding the subject site.

- 150mm diameter watermain located on Queensgate Boulevard
- 150mm diameter watermain located on Esposito Drive

3.5 Existing Sanitary

There are three Region sanitary sewers surrounding the subject site.

- Existing 900mm diameter CPP sanitary sewer on Albion-Vaughan Road
- Existing 375mm diameter PVC sanitary sewer on Queensgate Boulevard
- Existing 250mm diameter PVC sanitary sewer on Esposito Drive

3.6 Existing Storm Drainage

There is an existing 900mm diameter storm connection at the south of the site which captures drainage from the west portion of the site.

There is an existing 600mm diameter steel culvert located at the southeast corner of the site which captures drainage from the east portion of the site and external drainage areas to the north.

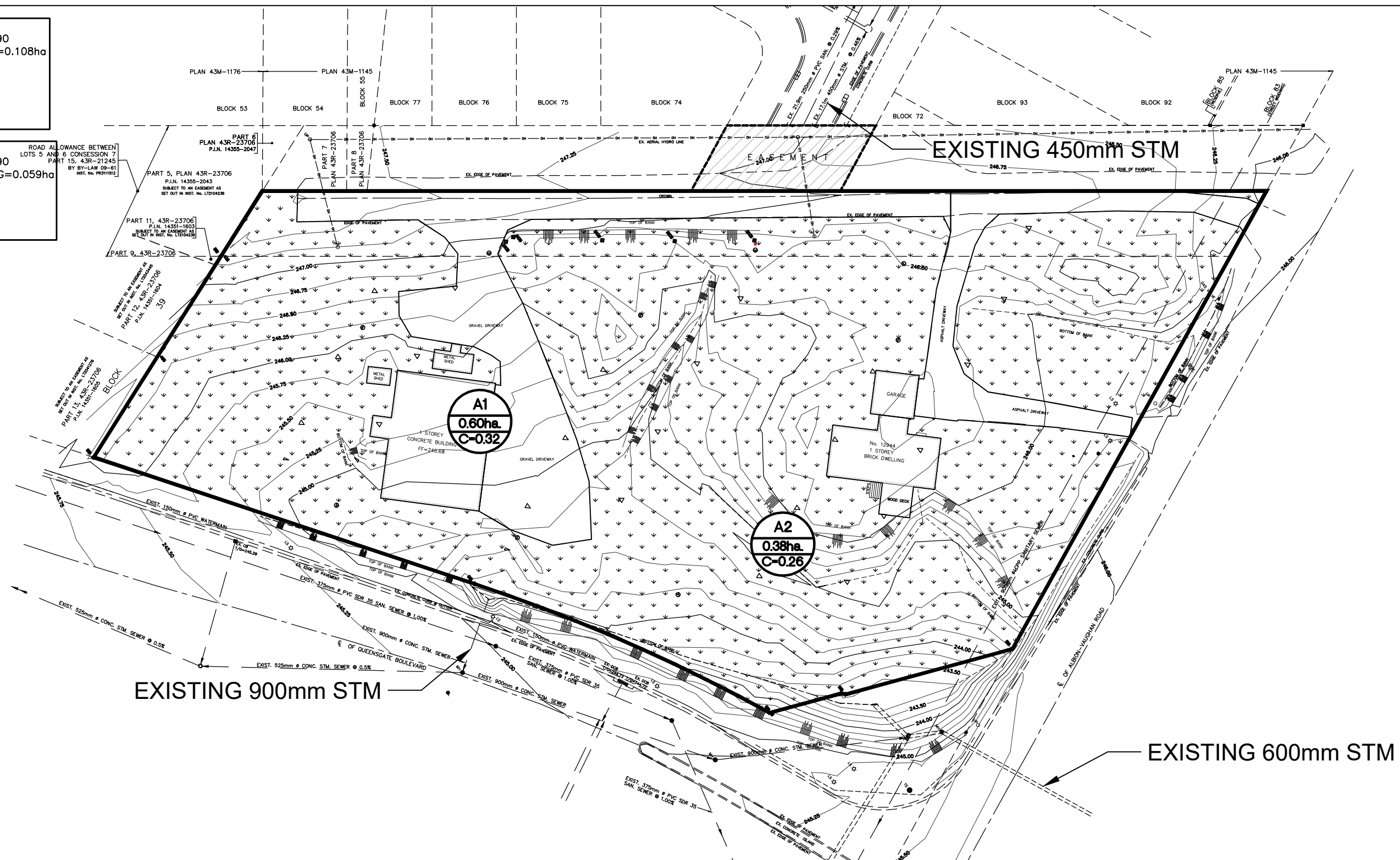
There is an existing 450mm diameter storm sewer to the north of the site at Esposito Drive.

Refer to **Figure 2** – Pre-Development Drainage Area Plan for details of the existing storm services surrounding the subject site.

The site was previously accounted for in the design of the existing downstream Stormwater Management Ponds #2 and #3. A design runoff coefficient, $C=0.45$ and a time of concentration, $T_c=10$ minutes was assumed in the design. Due to the proposed site plan having a higher imperviousness, additional stormwater management controls will be required.

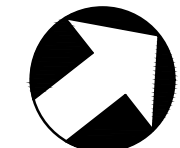
AREA A1=0.600ha
 IMPERVIOUS AREAS C=0.90
 GRAVEL/ASPHALT PAVING=0.108ha
 BUILDINGS=0.034
 PERVIOUS AREAS C=0.25
 LAWN=0.458
 COMPOSITE C=0.32

AREA A2=0.383ha
 IMPERVIOUS AREAS C=0.90
 BUILDING/ASPHALT PAVING=0.059ha
 PERVIOUS AREAS C=0.25
 LAWN=0.324
 COMPOSITE C=0.26



MOSAIK HOMES
PROPOSED RESIDENTIAL DEVELOPMENT
12944 QUEENSGATE BOULEVARD
TOWN OF CALEDON

PRE- DEVELOPMENT
DRAINAGE AREA PLAN



CANDEVCON GROUP INC.
 CONSULTING ENGINEERS AND PLANNERS
 5356 GOREWAY DRIVE
 BRAMPTON ON L6P 0M7
 TEL: (905) 794-3800
 FAX: (905) 794-0611

DATE: DECEMBER 16, 2025	JOB No. W25070
DESIGN: S.A	FIG. No. 2
SCALE: N.T.S	

4 PROPOSED SERVICING

4.1 General

Storm and sanitary for the proposed development will be provided by connecting to existing storm and sanitary sewers on Queensgate Boulevard.

Water supply for domestic use and fire protection will be provided by connecting to the existing watermain on Queensgate Boulevard and Esposito Drive.

Proposed grading and servicing (water, sanitary and storm) required for the proposed development site is provided below in greater detail.

4.2 Grading

The proposed grading for the site plan is designed to match into the existing elevations at the site boundaries as necessary. Retaining walls will be required as necessary to accommodate any elevation differential along the perimeter of the site adjacent to the existing residential area and the existing road right-of-ways.

The proposed grading is designed to direct major overland flow toward Queensgate Boulevard.

The proposed grading is shown on **Drawing GR-1 – Grading Plan** and included with this report for reference.

4.3 Proposed Water Service (Domestic and Firemain)

As shown on **Drawing SS-1 – Site Servicing Plan**, water supply to the proposed site will be provided by installing a 150mm diameter PVC water service and connecting to the existing watermain on Queensgate Boulevard and on Esposito Drive.

The anticipated water demand is summarized in **Table 1 - Anticipated Water Demand** shown below.

Table 1 – Anticipated Water Demand

UNIT TYPE	Pop/UNIT Pop/m2	UNITS/Area	POPULATION
Townhouse unit ^C	3.4	49	166.6
TOTAL POPULATION			167
	FACTOR	FLOW (L/s)	
Avg day ^A	1.0	0.54	
Max day	2.0 (Residential) 1.4 (ICI)	1.08	
Peak hour	3.0	1.62	
Fire flow ^B		50.0	
Fire flow + Max Day		51.1	

^A Based on 280 L/cap/day, 300 L/Employee/day consumption rates for residential and ICI

^B Based on Fire Underwriters Survey - Water Supply for Public Fire Protection in Canada 2020

^C Based on Region of Peel Linear Wastewater Standards November 2022, Table 2-2

Domestic Water and Fire Flow Demand Calculations are included for reference in **Appendix “B”**.

As shown in Table 1, the required water demand (max day + fire flow) for the proposed development is **51.1 L/s**.

4.4 Proposed Sanitary Drainage

As shown on **Drawing SS-1 – Site Servicing Plan**, the proposed townhouse site plan will be serviced by a proposed 250mm diameter sanitary service which connects to the existing 375mm diameter sanitary sewer on Queensgate Boulevard.

The sanitary service invert is 239.49m. Sanitary demand calculations and Peel Region Multi-Use Demand Table are included in **Appendix “B”** for reference.

The anticipated sanitary flows are summarized in *Table 2 – Anticipated Sanitary Flows* below. The total peak sanitary flow for the proposed development is **2.58 L/s**.

Table 2 – Anticipated Sanitary flows

UNIT TYPE	POP/UNIT	UNITS	POPULATION
Townhouse ^D	3.4	49	166.6
TOTAL POPULATION			167
Average day (L/s) ^A	0.56		
Peak factor ^B	4.18		
Peak sanitary flow (L/s)	2.34		
Infiltration (L/s) ^C	0.24		
Total peak Sanitary Flow (L/s)	2.58		

^A Based on 290L/cap/day

^B $PF=1 + 14/(4+P^{0.5})$

^C Based on I&I rate of 0.26 L/s/ha

^D Based on Region of Peel Linear Wastewater Standards November 2022, Table 2-2

4.5 Storm Drainage and Stormwater Management

4.5.1 Stormwater Management Criteria

Stormwater quality and quantity controls for the site are provided by an external downstream stormwater management (SWM Pond #3) facility located to the south. Since the proposed imperviousness of the development is higher than previously designed, additional stormwater quantity and quality controls will be required.

The internal storm sewers will be designed to meet the Town of Caledon’s criteria for storm sewer design, based on Town of Caledon’s Rainfall Intensity Curves (Standard Drawing No: 104) and a time of concentration of ten (10) minutes.

4.5.2 Existing Conditions

Stormwater drainage patterns are shown on **Figure 2 – Pre-Development Drainage Area Plan**. Stormwater from the site is captured and conveyed through a 600mm diameter culvert beneath the Albion-Vaughan Road.

An external drainage area to the north of the subject site currently drains along the Albion-Vaughan Road to the existing culvert crossing.

4.5.3 Storm Drainage

The proposed storm sewers within the proposed development site are designed to convey the 10-year storm event. Storm drainage from the 10-year to 100-year storm events exceeding the pipe capacity will be directed overland to Queensgate Boulevard. Storm drainage from the 100-year storm for a portion of the site, specifically the rear yards of Block 4 and Block 5, will be captured and conveyed to the underground storm tank due to grading constraints. A 525mm diameter storm service connection is proposed for the site. The connection will convey stormwater externally to the existing SWM Pond #3.

Existing external storm drainage will continue to drain to the culvert crossing Albion-Vaughan Road.

The downstream sewer and stormwater management pond were designed to accommodate the site area with a composite runoff coefficient of $C=0.45$. The design composite runoff coefficient for the site is $C=0.75$, therefore stormwater quantity and quality controls will be required to make up this difference. Water quantity and water quality controls will be discussed further in the following sections. The post development drainage area plan is shown in **Figure 3 – Post Development Storm Drainage Area Plan**.

4.6 Stormwater Quality

The existing stormwater management pond #3 was designed to treat runoff from the site with $C=0.45$. Due to the increased imperviousness of the proposed development, increased runoff is anticipated. A hydrodynamic separator will be provided to meet the additional runoff resulting from the increased imperviousness of the site ($C=0.75-0.45$ or $C=0.30$). Please refer to **Appendix “C”** for Stormceptor sizing calculations.

4.7 Stormwater Quantity

Stormwater quantity controls will be required to match the design peak flows for the site. The storm sewer was designed for a 10-year storm with a runoff $C=0.75$, and the allowable release rate for the site is **164 L/s**.

The modified rational method was used to calculate the maximum storage volume required to control post-development peak flow rates for the 100-year storm to the allowable **164 L/s**. The maximum storage required is **160.2m³**.

Refer to **Appendix “C”** for stormwater management calculations.

The required stormwater storage volume will be provided using an underground storage tank. Details of the underground storage tank are provided on **Drawing SS-1 – Site Servicing Plan**.

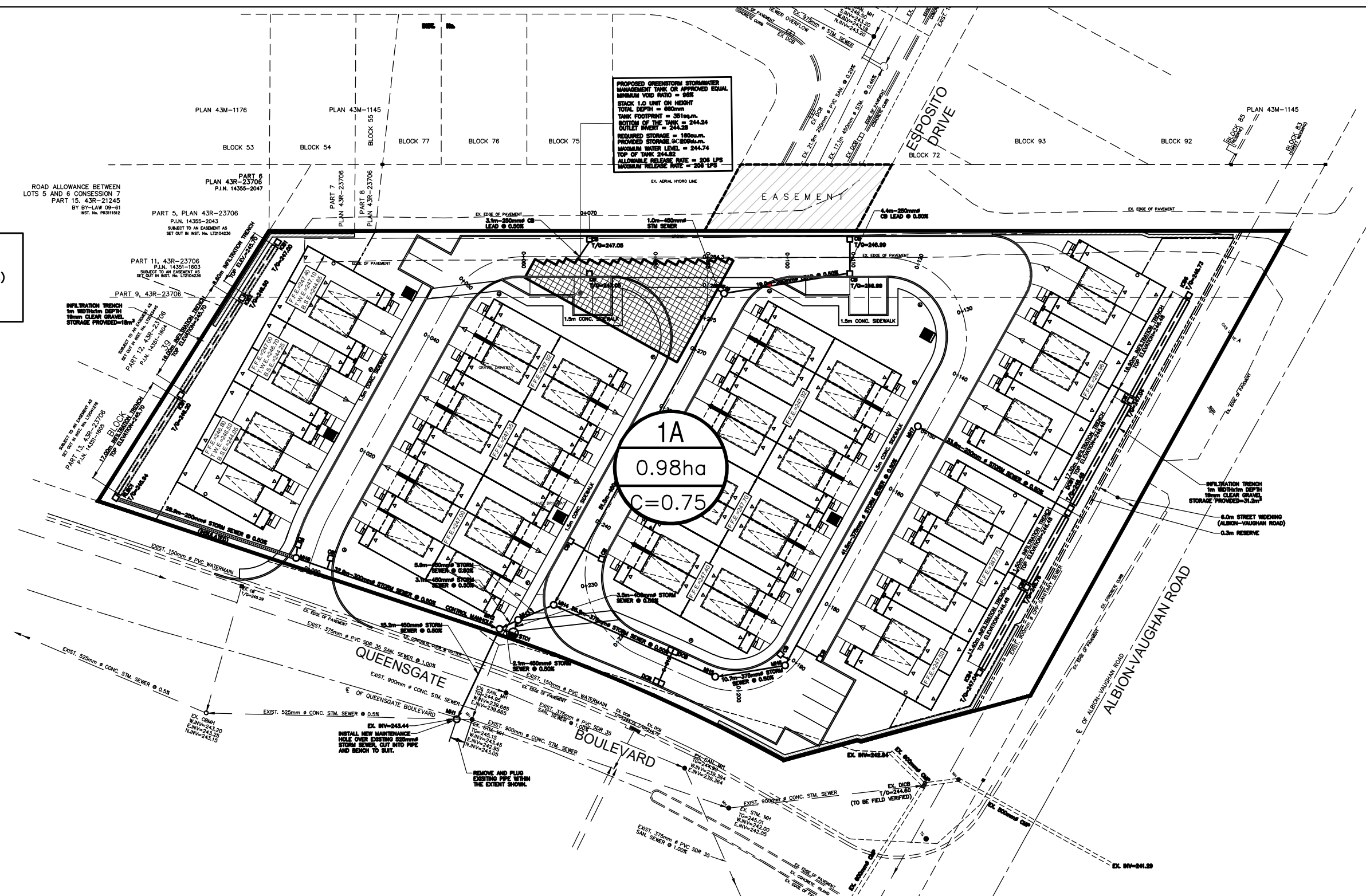
Overland flow will be directed to southerly towards Queensgate Boulevard. The 10-year through 100-year storm events will be conveyed to the Humber River through the existing 600mm culvert.

RUN-OFF CO-EFFICIENT 'C'
 ROOF C=0.90
 LANDSCAPED SURFACE C=0.25
 HARD SURFACE C=0.90

TOTAL LANDSCAPED AREA = 2290m² (0.23ha.)
 (PERVIOUS)
 TOTAL HARD SURFACE AREA = 7508m² (0.75ha.)
 (IMPERVIOUS)
 TOTAL SITE AREA = 9798m² (0.98ha.)

PROPOSED OVERFLOW STORMWATER
 MANAGEMENT TANK OR APPROVED EQUAL
 MINIMUM VOID RATIO = 90%
 STACK 1.0 UNIT ON HEIGHT
 TOTAL DEPTH = 600mm
 TANK FOOTPRINT = 351sq.m.
 BOTTOM OF THE TANK = 244.34
 OUTLET HEIGHT = 244.28
 REQUIRED STORAGE = 1800mm.
 PROVIDED STORAGE = 2000mm.
 MAXIMUM WATER LEVEL = 244.74
 TOP OF TANK 244.82
 ALLOWABLE RELEASE RATE = 200 LPS
 MAXIMUM RELEASE RATE = 200 LPS

1A
 0.98ha
 C=0.75



MOSAIK HOMES
 PROPOSED RESIDENTIAL DEVELOPMENT
 12944 QUEENSGATE BOULEVARD
 TOWN OF CALEDON

POST- DEVELOPMENT
 DRAINAGE AREA PLAN

CDG CANDEVCON GROUP INC.
 CONSULTING ENGINEERS AND PLANNERS
 5038 GOREWAY DRIVE
 BRAMPTON ON. L6P-0M7
 TEL (905) 794-0800
 FAX (905) 794-0611

DATE: DECEMBER 16, 2025	JOB No. W25070
DESIGN: S.A	FIG. No. 3
SCALE: N.T.S	

4.8 Water Balance/Erosion Control

In accordance with the current requirements of TRCA, the first 5mm of rainfall from impervious surfaces is to be retained on site for infiltration and re-use. The erosion control volume required is determined below;

$$\text{Impervious Area} = 7350 \text{ m}^2$$

$$\text{Erosion Control Volume} = 5 \text{ mm}$$

$$\begin{aligned} \text{Volume Requirements} &= 7350 \text{ m}^2 \times 5 \text{ mm} \\ &= \mathbf{36.8 \text{ m}^3} \end{aligned}$$

Infiltration gallery

An infiltration gallery comprised of clear stone with a void ratio of 0.4 is proposed to infiltrate rainwater runoff from the rear yard and rooftops. A total volume of 36.8 m³ is required to be captured and directed to the infiltration galleries at the east and west of the site.

The proposed infiltration galleries consist of a 45.0m and a 78.0m long, 1.0m wide and 1.0m deep infiltration gallery (trench) complete with a 150mm diameter perforated subdrain pipe at 0.00% slope. Based on this configuration, the proposed infiltration gallery provides 49.2 m³ of storage as shown on **Drawing SS-1 – Site Servicing Plan**.

$$\text{Required Infiltration Storage Volume} = 36.8 \text{ m}^3$$

$$\text{Provided Infiltration Storage Volume} = 49.2 \text{ m}^3$$

5 SEDIMENT AND EROSION CONTROL

Erosion and sediment control measures will be provided as shown on the Erosion and Sediment Control Plan drawing ESC-1.

Erosion and sediment control measures may consist of the following;

Stage 1 – Pre-Construction and Topsoil Stripping:

- Installation of perimeter sediment fence and any tree preservation fencing
- Construct mud mat at the proposed construction access
- Install silt traps at all catch basins.
- Regular Review by Environmental Monitor and after significant rainfall events.
- Demolition and removal of all structures and debris on the site.
- Strip topsoil and remove from site.

Stage 2 – Pre-Grading and Underground Servicing:

- Complete the required cut and fill operations.
- Restore and stabilize all disturbed areas, outside noted limits, with 300mm topsoil and seed as soon as practical.
- Decommission/remove/fill temporary ditching, outlets and traps as drainage works replace temporary works.
- Base roadworks construction and paving.
- Install sediment traps at all catchbasins as they are installed and at existing structures on the adjacent roadway.

Stage 3 – Post Servicing and Building Construction:

- Complete landscaping as soon as practical.
- Maintain sediment control devices as required.
- Maintain roads in clean condition.
- Remove catch basin siltation controls when top course asphalt is laid.
- Monitor site conditions during building construction operations

Sediment and erosion control works are illustrated on **Drawing ESC-1 - Erosion and Sediment Control Plan**.

6 SUMMARY AND COMPLIANCE DECLARATION

6.1 Summary

Based on the findings of this report, the conclusions and recommendations are as follows:

- i. Sanitary sewer servicing for the proposed development site can be provided by connecting to the existing 375mm diameter regional sanitary sewer on Queensgate Boulevard.
- ii. Water supply for both Domestic water and Fire demand for the proposed development can be provided by connecting to the existing 150mm diameter watermains on Esposito Drive and Queensgate Boulevard. Fire hydrants are provided internally throughout the site.
- iii. Stormwater Management Quality and Quantity control requirements can be met with a combination of the existing downstream Stormwater Management Pond #3 and onsite underground storage. Quality control requirements can be met via the Stormwater Management Pond #3 and a proposed Stormceptor.
- iv. Overland flow will be directed to the Queensgate Boulevard.
- v. Erosion Control/Water Balance can be achieved by directing runoff from the east and west townhouse blocks to rear yard infiltration trenches. The proposed configuration of the galleries (infiltration trenches) allows for the storage of sufficient storm water volume to satisfy the Water Balance requirement for the site to capture and retain the first 5mm of rainfall from the impervious areas for infiltration and re-use.
- vi. Erosion and Sediment Control measures shall be implemented as required on the Erosion and Sediment Control Plan to minimize the transport of sediment into the adjacent downstream storm sewer system during construction.



Reviewed by: Loreto Tersigni, P. Eng.



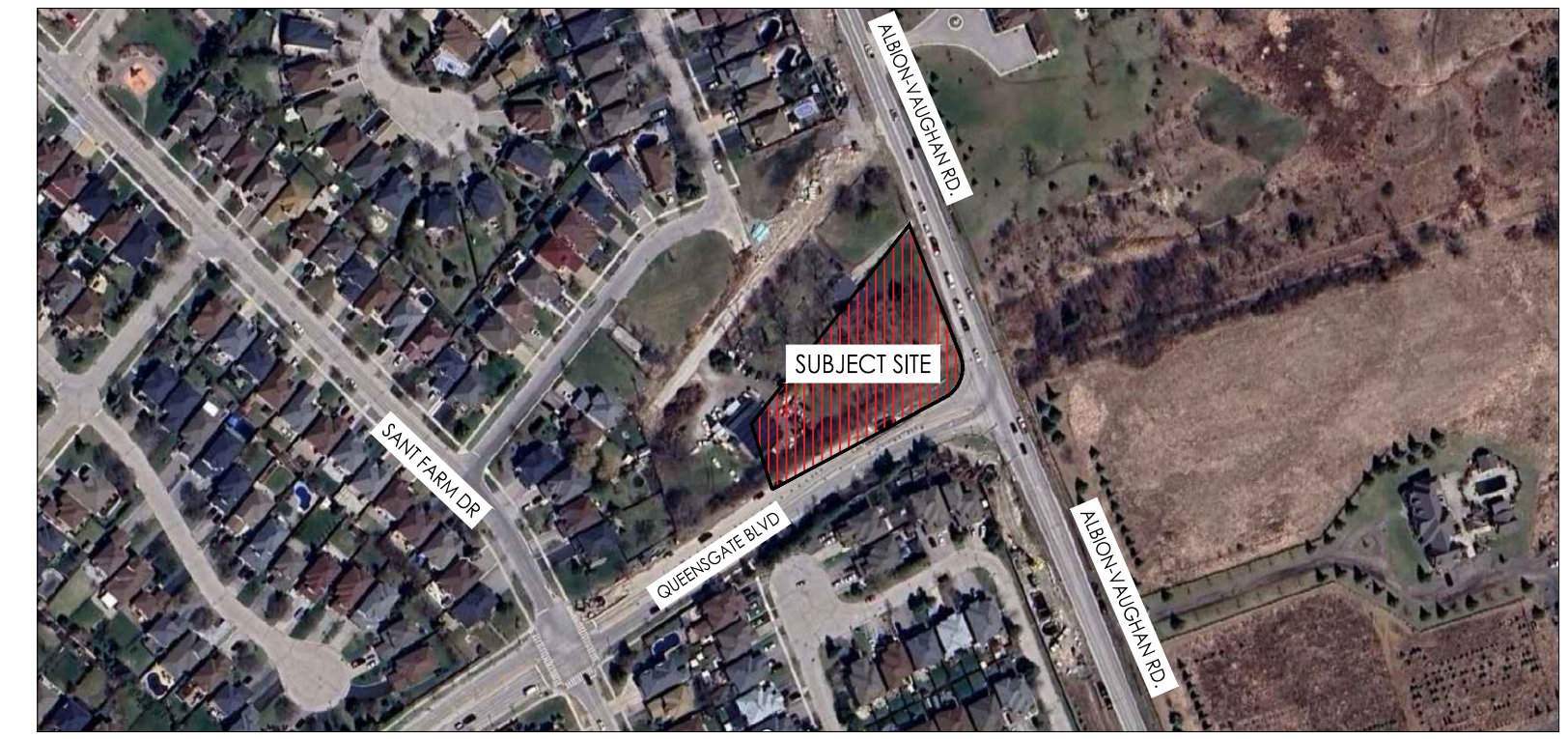
Prepared by: Scott Ahonen, P. Eng.

APPENDIX “A”

Reference Drawings

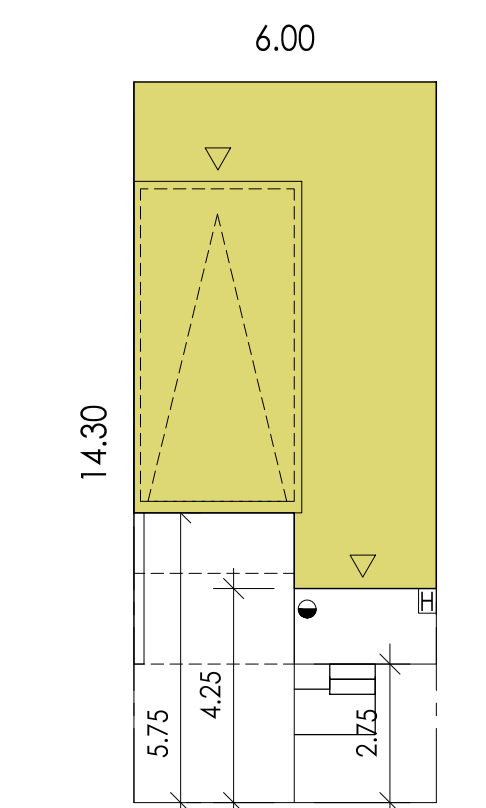
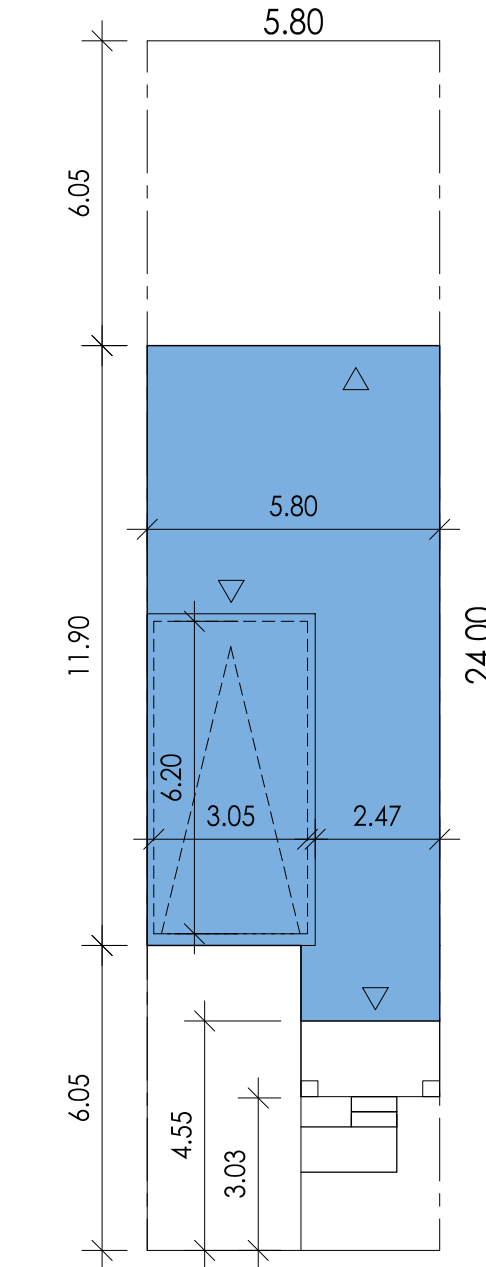
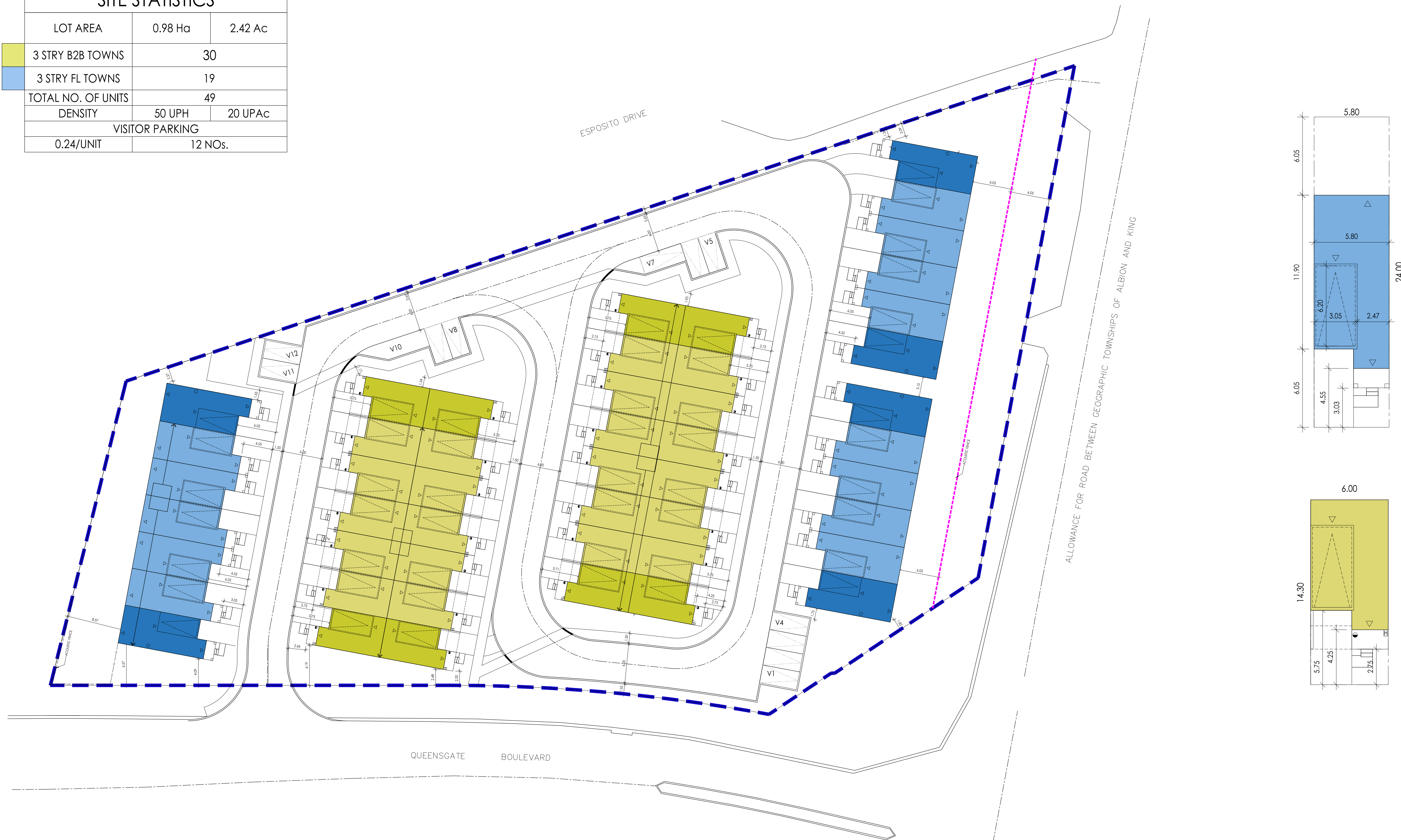
Site Plan – SP-100 prepared by RN Design, dated November 6, 2025
(Project No.: 24080)





KEY PLAN - NTS

SITE STATISTICS		
LOT AREA	0.98 Ha	2.42 Ac
3 STRY B2B TOWNS	30	
3 STRY FL TOWNS	19	
TOTAL NO. OF UNITS	49	
DENSITY	50 UPH	20 UPAC
VISITOR PARKING		
0.24/UNIT	12 NOS.	

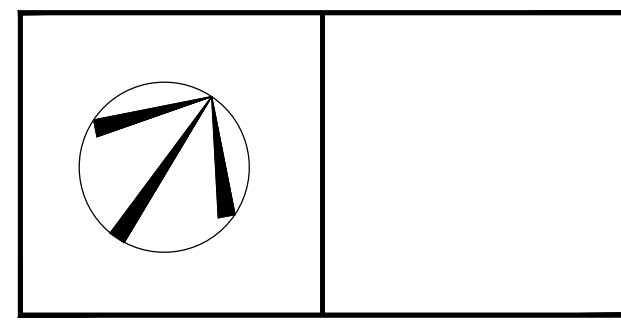


THESE DRAWINGS ARE NOT TO BE SCALED.
ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR PRIOR TO COMMENCEMENT OF ANY WORK. ANY DISCREPANCIES MUST BE REPORTED DIRECTLY TO ARCHITECT.

PROJECT CONSULTANTS:

ISSUED OR REVISION COMMENTS					
NO.	DESCRIPTION	DATE	BY	CHK	
1	ISSUED FOR REVIEW	21-11-2024	PP	RP	
2	ISSUED FOR PRECON	22-11-2024	PP	RP	
3	ISSUED FOR REVIEW	22-JUL-25	AG	RP	
4	ISSUED FOR REVIEW	29-JUL-25	PP	AG	
5	REV PER ENGG COMMENTS	26-AUG-25	AG		
6	ISSUED FOR COORDINATION	06-NOV-25	AG		

RN DESIGN
WWW.RNDESIGN.COM
T:905-738-3177
WWW.THEPLUSGROUP.CA



CLIENT: **MOSAİK**
PROJECT/LOCATION: **ALBION-VAUGHAN**
DRAWING: **SITE PLAN**

DATE: 30-11-2024	SCALE: 1:300
DRAWN BY: PP	CHECKED BY: RP
PROJECT NUMBER: 24080	DRAWING NUMBER: SP-100

APPENDIX “B”

Domestic Water Demand and Fire Demand Calculations

Sanitary Calculations

Region of Peel Connection Multi-Use Demand Table

Mosaik Homes, Caledon
Water Demands

Project Number W25040

Site Area 0.98

UNIT TYPE	Population/Unit	Area (ha)	POPULATION
Townhouse Unit ^C	3.4	49	166.6
TOTAL POPULATION			167
	FACTOR	FLOW (L/s)	
Avg day ^A	1.0	0.54	
Max day	2.0 (Residential)	0.76	
	1.4 (ICI)		
Peak hour	3.0	1.62	
Fire flow ^B		83.3	
Fire flow + Max day		84.1	

^A Based on 280 L/cap/day, 300 L/Employee/day consumption rates for residential and ICI

^B Based on Fire Underwriters Survey - Water Supply for Public Fire Protection in Canada 2020

^C Based on Region of Peel Linear Wastewater Standards November 2022, Table 2-2

FIRE FLOW CALCULATION

Project: Plan of Condominium - Mosaik Homes, Bolton

1 Using Fire Underwriter Survey Methodology, an estimate of the Fire Flow is give by the Formula: $F = 220 C \sqrt{A}$

where:

F = Required Fire Flow in L/min

C = Coefficient related to the type of construction

A = The total floor area in m² (including all storeys but excluding basements at least 50% below grade)

Note: For fire resistive buildings, consider the two largest adjoining floor plus 50% of the remaining floors up to eight, when openings are inadequately protected. For adequately protected vertical openings consider only the area of the largest floor plus 25% of each of the two immediately adjoining floors.

Type of Construction:	Fire Resistive	Coefficient:	1.00	Total Floor Area:	1,116	m ²
F =	7,349	L/min		Adequately Protected Vertical Openings:	Yes	
F =	7,000	L/min				

2 Determine the increase / decrease for occupancy and adjust the value in No. 1:

Occupancy Contents:	Limited Combustible	Factor:	-15	%
F =	5,950	L/min		

3 Determine the decrease, if any, for automatic sprinkler protection and adjust the value in No. 2:

NFPA 13 Sprinkler	No	Reduction:	0	%
Standard Water Supply	Yes	Reduction:	10	%
Fully Supervised	No	Reduction:	0	%
		Total Reduction:	10	%
		Sprinkler Reduction:	595	L/min

4 Adjust the value in No. 2 for exposure:

	Separation (m)	Increase	
North	> 45m	0	%
South	> 45m	0	%
East	> 45m	0	%
West	> 45m	0	%
	Total Increase:	0	%
	Exposure Increase:	0	L/min

5 Estimated Fire Flow is value in No. 2 minus Sprinkler Reduction plus Exposure Increase and rounded to nearest 1000:

F = 5,355 L/min
 F = **5,000** L/min
 83.33 L/s

Prepared by: SAA
 Checked by: SDL

Water and Wastewater Modelling Demand Table

Site Plan Applications

Version	Date	Description of Revision
1	January 10 2023	Posted to Peel Website
2	August 30 2024	Reflects 2023 Linear Wastewater Standards and ICI population estimates as per Peel 2020 DC background study

WATER AND WASTEWATER MODELLING DEMAND TABLE

Introduction

Water and wastewater modelling may be required as a condition of the development approval process or prior to regional site servicing connection approval where intensification is proposed, where a possible increase in water demand or wastewater discharge is identified or where deemed necessary by Regional staff.

A completed table includes the Professional Engineer's signature and stamp as well as a site servicing concept. The table will be deemed complete once all the information below is submitted and/or included. Modelling will commence once the information is deemed complete. All required calculations must be submitted with the completed demand table. The calculations shall be based on the specific development proposal.

Application Information

Application Number:	PRE-2024-0255
Address:	12944 Albion Vaughan Road, Caledon
Consulting Engineer:	Candevcon Group Inc.
Date Prepared:	December 16, 2025

Population

Existing

		Units	Persons
1	Residential ⁸⁾	2	7
2	Institutional/Employment ⁸⁾		0
3	Total	2	7

WATER AND WASTEWATER MODELLING DEMAND TABLE

Proposed

			Units	Persons
4	Residential ¹⁾	singles/semis (4.2 ppu)	0	0
5		Townhomes (3.4 ppu)	49	166.6
6		Large apartments (>1 bedroom – 3.1 ppu)	0	0
7		Small apartments (<=1 bedroom – 1.7 ppu)	0	0
8		Total proposed residential	0	166.6
9	Proposed Institutional ²⁾			0
10	Proposed employment ³⁾			0
11	Total Proposed			167

Other

12	Existing gross floor area for commercial and/or retail (sqm)		0
13	Proposed gross floor area for commercial and/or retail (sqm)		0
14	Land area (ha)		0.98

Water Connection

Hydrant flow test ⁴⁾

15	Location 1	TBD
16	Location 2	TBD

WATER AND WASTEWATER MODELLING DEMAND TABLE

		Pressure (kPa)	Flow (L/s)	Time (hh:mm)
17	Minimum water pressure	TBD	TBD	TBD
18	Maximum water pressure	TBD	TBD	

Water Demands (L/s)

		Use 1 ⁶⁾	Use 2 ⁶⁾	Use 3 ⁶⁾	Total
19	Existing fire flow ^{5) 8)}				n/a
20	Proposed average day flow	0.5	0.0		0.5
21	Proposed maximum day flow	0.9	0.0		0.9
22	Proposed peak hour flow	1.6	0.0		1.6
23	Proposed fire flow ⁵⁾				83.3

Water calculations

Please use the following updated typical water demand criteria as per Peel's 2020 Development Charges background study.

Population Type	Unit	Average Consumption Rate	Max Day Factor	Peak Hour Factor
Residential	L/cap/d	270	1.8	3
Institutional/Commercial/ Industrial	L/emp/d	250	1.4	3

WATER AND WASTEWATER MODELLING DEMAND TABLE

Wastewater Connection

Wastewater Effluent (L/s)

		Discharge location ⁷⁾	Flow
24	Existing effluent ⁸⁾	n/a	0.00
25	Proposed effluent	Queensgate Boulevard	0.56
26	Proposed effluent	Inflow + Infiltration	0.25
27	Proposed effluent	-	
28	Proposed additional effluent ⁸⁾	-	
29	Other proposed effluent*	n/a	
30	Total proposed effluent		0.82

*Please specify other proposed effluent (ex. occasional tank purges, off peak discharge, pool drainage)

Wastewater calculations

Please use the following updated daily per capita as per 2023 Peel Linear Wastewater Standards

Population Type	Unit	Average Day Demand	Min Peaking Factor	Max Peaking Factor	Inflow and Infiltration**
Residential	L/cap/d	290	2	4	0.26L/s/Ha
Non-residential	L/emp/d	270	2	4	0.26L/s/Ha

WATER AND WASTEWATER MODELLING DEMAND TABLE

**For maintenance holes that are flood prone or located in low lying areas, an extra 0.28 L/s per maintenance hole may be added to the I&I calculation.

Notes

- 1) In accordance with Peel Linear Wastewater Standards and Region of Peel 2020 DC background Study
- 2) refer to Peel Linear Wastewater Standards
- 3) For the commercial and industrial design flow calculations, please refer to Schedule 8b on page A-9 of the Region of Peel 2020 DC background Study to determine population.
- 4) Please include the graphs associated with the hydrant flow test data. Hydrant flow tests should be performed within 2 years of submission to the Region. The Region will not permit hydrant flow tests during the winter, please contact Region Water Operations for scheduling. The Region reserves the right to request an updated hydrant flow test as required at any time.
- 5) Please reference the Fire Underwriters Survey Document
- 6) Please identify the flows for each use type, **if applicable**
- 7) Please include drainage plan for multiple discharge locations
- 8) For Intensification, sites with additions to buildings or additional buildings please provide existing flow for existing buildings and the added flows for the new proposal, **if applicable**

APPENDIX “C”

Stormwater Storage Calculations



TIME minutes	100-year INTENSITY mm/hr	Q 100-year m ³ /s	Control Q (Allow) m ³ /s	Q Stored m ³ /s	STORAGE m ³
0	0.0	0.000	0.164		
10	196.5	0.401	0.164	0.237	142.2
11	189.8	0.387	0.164	0.223	147.3
12	183.5	0.375	0.164	0.210	151.4
13	177.6	0.363	0.164	0.198	154.6
14	172.1	0.351	0.164	0.187	157.1
15	166.9	0.341	0.164	0.176	158.8
16	162.0	0.331	0.164	0.166	159.8
17	157.4	0.321	0.164	0.157	160.2
18	153.1	0.313	0.164	0.148	160.1
19	149.0	0.304	0.164	0.140	159.5
20	145.1	0.296	0.164	0.132	158.4
21	141.5	0.289	0.164	0.124	156.8
22	138.0	0.282	0.164	0.117	154.9

Site - Controlled

Area (ha) 0.9800

Allowable Flow

Area (ha) 0.9800

R 0.45

Tc (min) 10.00

Intensity mm/hr 134.2

Qc 0.164

less uncontrolled
(see below left) 0.000

Qcontrol 0.164

Post-Development

R 0.75

Time Incr. 1.0

Post Storm

Return Period 100-year

Intensity

$$i = a \times T^b \text{ (mm/hr)}$$

where,

c = 0.9624

b = 17

a = 4688

Site - Uncontrolled

Area (ha) 0.000

R 0.75

Tc (min) 10.00

Intensity mm/hr 196.5

Qun-control 0.000

Pre Storm

Return Period 10-year

Intensity

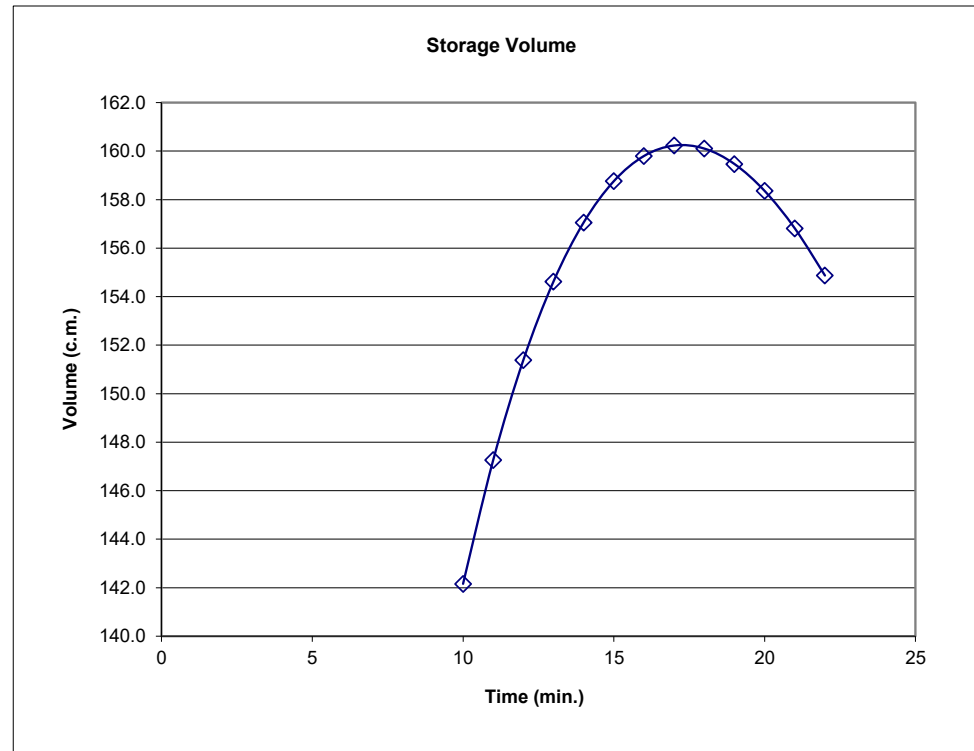
$$i = a \times T^b \text{ (mm/hr)}$$

where,

c = 0.9080

b = 12

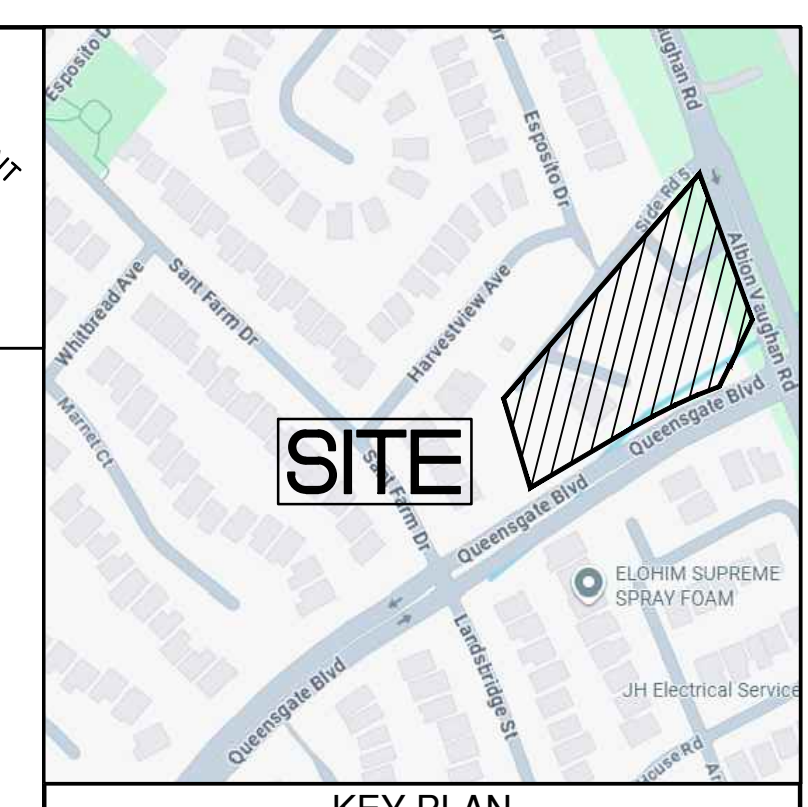
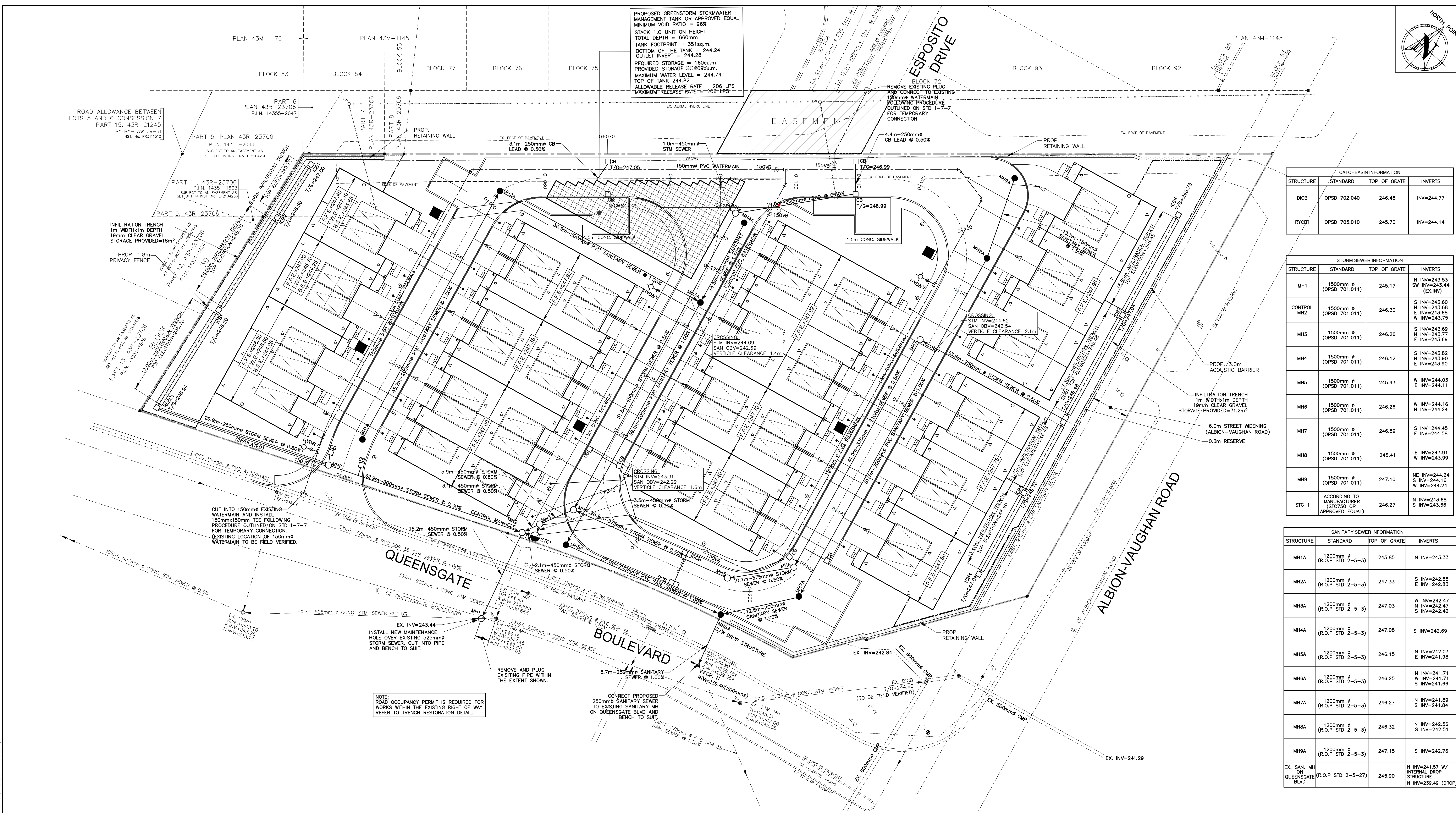
a = 2221



DRAWINGS

- DRAWING SS-1 Site Servicing Plan – Queensgate (Mosaik), Town of Caledon
(Candevcon Group Inc., Project No. W25040)
- DRAWING GR-1 Grading Plan – Queensgate (Mosaik), Town of Caledon
(Candevcon Group Inc., Project No. W25040)
- DRAWING ESC-1 Erosion and Sediment Control Plan – Queensgate (Mosaik), Caledon
(Candevcon Group Inc., Project No. W25040)





CATCHBASIN INFORMATION

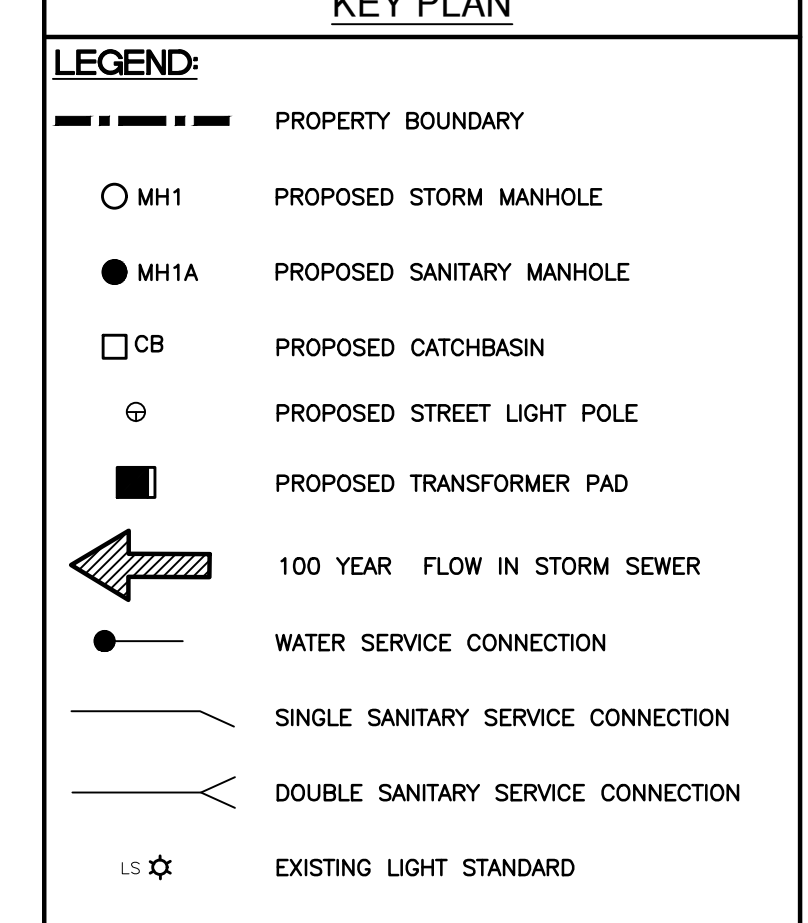
STRUCTURE	STANDARD	TOP OF GRATE	INVERTS
DICB	OPSD 702.040	246.48	INV=244.77
RYC91	OPSD 705.010	245.70	INV=244.14

STORM SEWER INFORMATION

STRUCTURE	STANDARD	TOP OF GRATE	INVERTS
MH1	150mm # (OPSD 701.011)	245.17	N INV=243.53 SW INV=243.44 (EX-INV)
CONTROL MH2	150mm # (OPSD 701.011)	246.30	S INV=243.60 N INV=243.68 E INV=243.75 W INV=243.69
MH3	150mm # (OPSD 701.011)	246.26	S INV=243.69 N INV=243.77 E INV=243.69
MH4	150mm # (OPSD 701.011)	246.12	S INV=243.82 N INV=243.90 E INV=243.90
MH5	150mm # (OPSD 701.011)	245.93	W INV=244.03 E INV=244.11
MH6	150mm # (OPSD 701.011)	246.26	W INV=244.16 N INV=244.24
MH7	150mm # (OPSD 701.011)	246.89	S INV=244.45 N INV=244.58
MH8	150mm # (OPSD 701.011)	245.41	E INV=243.91 W INV=243.99
MH9	150mm # (OPSD 701.011)	247.10	SE INV=244.24 N INV=244.16 W INV=244.24
STC 1	ACCORDING TO MANUFACTURER (STC750 OR APPROVED EQUAL)	246.27	N INV=243.68 S INV=243.66

SANITARY SEWER INFORMATION

STRUCTURE	STANDARD	TOP OF GRATE	INVERTS
MH1A	1200mm # (R.O.P. STD 2-5-3)	245.85	N INV=243.33
MH2A	1200mm # (R.O.P. STD 2-5-3)	247.33	S INV=242.88 E INV=242.83
MH3A	1200mm # (R.O.P. STD 2-5-3)	247.03	W INV=242.47 N INV=242.47 S INV=242.42
MH4A	1200mm # (R.O.P. STD 2-5-3)	247.08	S INV=242.69
MH5A	1200mm # (R.O.P. STD 2-5-3)	246.15	N INV=242.03 E INV=241.98
MH6A	1200mm # (R.O.P. STD 2-5-3)	246.25	N INV=241.71 W INV=241.71 S INV=241.66
MH7A	1200mm # (R.O.P. STD 2-5-3)	246.27	N INV=241.89 S INV=241.94
MH8A	1200mm # (R.O.P. STD 2-5-3)	246.32	N INV=242.56 S INV=242.51
MH9A	1200mm # (R.O.P. STD 2-5-3)	247.15	S INV=242.76
EX. SAN. MH ON QUEENSGATE BLVD	1200mm # (R.O.P. STD 2-5-27)	245.90	N INV=241.57 W/ INTERNAL DROP STRUCTURE N INV=239.49 (OROP)



LEGAL DESCRIPTION
BLOCK 40, REGISTERED PLAN 43M - 1281 PART OF LOT 5, CONFESSION 7 AND PART OF THE ORIGINAL ROAD ALLOWANCE BETWEEN LOTS 5 AND 6, CONFESSION 7 (GEOGRAPHIC TOWNSHIP OF PEEL) TOWN OF CALEDON REGIONAL MUNICIPALITY OF ALBION

SURVEY INFORMATION:
SURVEY INFORMATION TAKEN FROM DRAWING PREPARED BY RADY-PENTEK & EDWARDS SURVEYING LTD. ONTARIO LAND SURVEYORS JOB NO. 17 - 199 DATED OCTOBER 17, 2017

BENCHMARK INFORMATION:
ELEVATIONS ARE GEODETIC AND ARE REFERRED TO BENCHMARK STATION NO. 00819758056, HAVING AN ORTHOMETRIC ELEVATION OF 251.263 METRES. ELEVATIONS ARE REFERRED TO THE CANADIAN GEODETIC VERTICAL DATUM OF 1928, 1979 ADJUSTMENT (CGVD-1928/1979ADJ). BENCHMARK IS LOCATED ON CONCRETE BRIDGE CARRYING HWY 50 OVER CPR, 2.0KM SOUTH OF JCT OF HWY 50 AND KING STREET IN THE TOWN OF CALEDON (BOLTON) AND 0.4 KM NORTH OF SOUTH JCT OF HWY 50 AND HEALEY ROAD.
TABLE IS SET HORIZONTALLY IN NORTHEAST FACE OF FOOTING OF PIER COLUMN 1.4 METRES BELOW TOP OF FOOTING, 1.8 METRES SOUTH-EAST OF NORTHWEST END, 0.73 METRES ABOVE GROUND LEVEL, AND 4.3 KM EAST OF CENTRELINE OF HWY 50.

GENERAL NOTES - STORM SEWERS:

- STORM SEWER TO BE PROVIDED ON ALL ROADS WITH CURB AND GUTTER.
- PLACE ALL CATCH BASIN LATERALS AT 2% GRADE UNLESS OTHERWISE NOTED. PIPE SIZE MINIMUM 250mm DIA. SINGLE, 300mm DIA. DOUBLE.
- STORM SEWERS SHALL BE CONSTRUCTED WITH BEDDING AS PER OPSD 802.030 FOR RIGID PIPE OR OPSD 802.010 WITH GRANULAR 'A' FOR FLEXIBLE PIPE UNLESS APPROVED OTHERWISE BY THE GENERAL MANAGER OF FINANCE & INFRASTRUCTURE SERVICES.
- MAINTENANCE HOLE TOPS (FRAMES) AND CATCHBASIN (FRAMES) ARE TO BE SET TO BASE COURSE ASPHALT AND THEN ADJUSTED TO FINAL GRADE WHEN THE TOP LIFT OF ASPHALT IS PLACED.
- STORM SEWER TO BE LOCATED OFFSET 1.5m SOUTH OR WEST OF CENTERLINE UNLESS OTHERWISE SPECIFIED.
- ALL CONNECTIONS TO THE STORM MAIN SHALL BE MADE WITH A STORM MANHOLE OR APPROVED FACTORY TEE CONNECTION AS PER OPSD 708.01 OR 708.03.
- PIPE MATERIAL TO BE REINFORCED CONCRETE WITH A STRENGTH OF 50 N/mm² MINIMUM CERTIFIED TO C.S.A. STANDARD A247.2-1982, CLASS 50-D (PREVIOUSLY C.S.A. STANDARD A257.2-1974 CLASS II) OR PVC CERTIFIED TO C.S.A. STANDARDS 182.2 AND 182.4 MAX. PVC PIPE DIA. IS 800mm ID OR 800mm OD POLYETHYLENE PIPE WITH GASKETED BELL AND SPRIG JOINTS CERTIFIED C.S.A. B182.6 FOR STORM SEWERS UP TO 900mm DIA. WHERE ONLY CONNECTION STD CATCHBASINS ARE CONSIDERED.
- STORM SEWER TO BE MINIMUM 300mm DIA. WITH JOINTS CONFORMING TO C.S.A. STANDARD A 257.3
- ALL PIPE BEDDING MUST CONFORM TO OPSD MAXIMUM COVER TABLE. NO FLEXIBLE PIPE SEWERS WILL BE INSTALLED WITH A DEPTH COVER GREATER THAN 6m UNLESS SPECIFICALLY APPROVED BY THE DIRECTOR OF PUBLIC WORKS AND ENGINEERING.
- ALL PIPE HANDLING INSTRUCTIONS MUST BE IN STRICT COMPLIANCE WITH MANUFACTURERS INSTALLATION GUIDES AND THE OCCA OR UNIBELL GUIDELINES.

REGION OF PEEL-GENERAL:

- THE APPLICANT, APPLICANT'S REPRESENTATIVE, CONSULTANT, CONTRACTOR AND SUB CONTRACTORS ARE RESPONSIBLE TO ENSURE THAT THEIR DESIGN MATERIALS AND CONSTRUCTION PRACTICES CONFORM TO THE LATEST REGION OF PEEL STANDARDS, SPECIFICATIONS, MATERIALS AND DESIGN CRITERIA, POSTED ON REGION OF PEEL'S WEBSITE (www.regionofpeel.ca/pw/standards). IN THE ABSENCE OF REGION SPECIFICATIONS, THE ONTARIO PROVINCIAL STANDARD SPECIFICATIONS (OPSS) SHALL APPLY.
- ALL WORKS SHALL BE COMPLETED IN ACCORDANCE WITH THE OCCUPATIONAL HEALTH AND SAFETY ACT. THE GENERAL CONTRACTOR SHALL BE DEEMED THE CONSTRUCTOR AS DEFINED IN THE ACT.
- THE CONTRACTOR AT THEIR EXPENSE SHALL VERIFY THE LOCATION, DIMENSION AND ELEVATION OF ALL EXISTING SERVICES AND UTILITIES IN THE FIELD.

- PRIOR TO EXCAVATION OR BORING CONTRACTOR AT THEIR EXPENSE SHALL EXPOSE AND VERIFY THE LOCATION AND ELEVATION OF ALL EXISTING UTILITIES AND SERVICES TO BE CROSSED AND MUST NOTIFY THE DESIGN ENGINEER AND THE AGENCY FIELD INSPECTOR AND/OR PROJECT MANAGER IMMEDIATELY, IN WRITING, OF ANY CONFLICTS OR DISCREPANCIES. CONTRACTOR SHALL BE RESPONSIBLE FOR EXPOSING THE EXISTING UTILITIES FAR ENOUGH IN ADVANCE OF CONSTRUCTION TO MAKE NECESSARY DESIGN MODIFICATIONS FOR REVIEW AND APPROVAL, IF REQUIRED, WITHOUT DELAYING THE WORK.
- THE CONTRACTOR, AT THEIR EXPENSE AND TO THE SATISFACTION OF THE REGION OF PEEL, SHALL BE RESPONSIBLE FOR THE RESTORATION AND THE REPAIR OF THE EXISTING UTILITIES AND ALL AREAS BEYOND THE PLAN OF SUBDIVISION DISTURBED DURING CONSTRUCTION.
- THE SUPPORT OF ALL UTILITIES SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION.
- ALL BACKFILL FOR SEWERS, WATERMANS AND UTILITIES ON THE ROAD ALLOWANCE MUST BE MECHANICALLY COMPACTED.
- ALL BOREHOLES SHOWN ON DRAWING ARE FOR INFORMATION ONLY. REFER TO GEOTECHNICAL REPORT.
- ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE SPECIFIED.

SANITARY SEWERS:

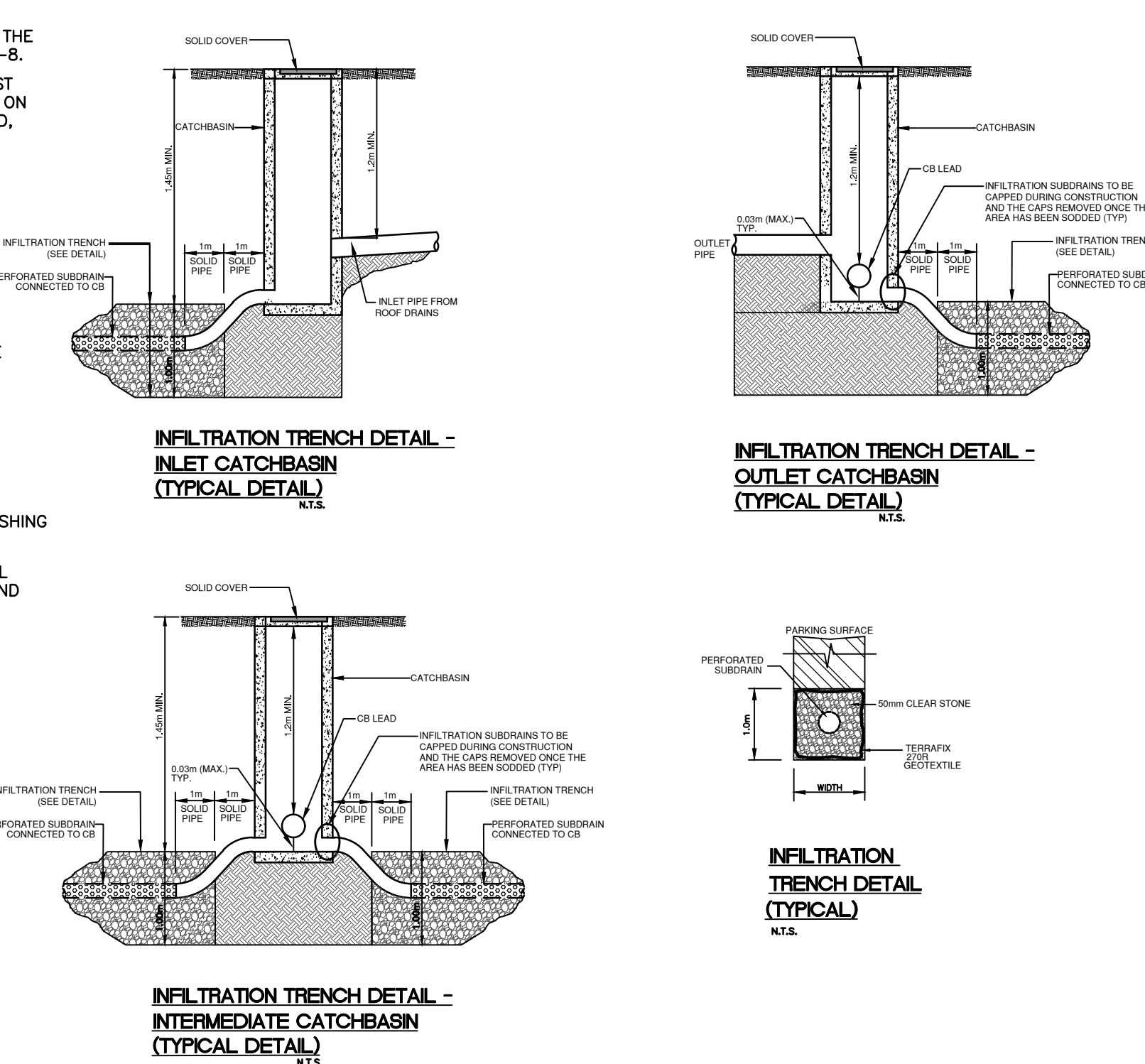
- ALL SANITARY SEWER BEDDING AS PER STD. 2-3-1.
- MAINLINE SANITARY SEWER PIPE SHALL BE MINIMUM 250mm IN DIAMETER INSTALLED AT THE APPROVED DESIGN GRADE. PIPE CLASS AND APPURTENANCES AS PER REGION'S SPECIFICATIONS.
- ALL SEWERS CONSTRUCTED WITH GRADES 0.5% OR LESS SHALL BE APPROVED BY THE ENGINEER AND THE AGENCY PROJECT MANAGER OR DESIGNATE AND BE INSTALLED WITH LASER AND CHECKED PRIOR TO BACKFILL.
- MINIMUM SANITARY SEWER PIPE SLOPE FOR LAST LEG SHALL BE 1% AND DESIRABLE SLOPE 2%
- ALL MANHOLES SHALL BE AS PER REGION STD. DWG. 2-5-2, 2-5-3, 2-5-4, 2-5-5 AND 2-5-6 AND BENCHING AS PER STD 2-5-20.
- FRAME AND COVERS SHALL BE AS PER REGION STD. DWG. 2-5-13, 2-6-1 TO 2-6-8
- MANHOLE STEPS SHALL BE AS PER REGION STD. DWG. 2-6-9 TO 2-6-11
- MANHOLES DEEPER THAN 5.0m MUST BE EQUIPPED WITH SAFETY PLATFORMS, AS PER STD 2-6-13 AND 2-6-14
- MANHOLE DROP STRUCTURES SHALL BE AS PER REGION STD. DWG. 2-5-26 AND 2-5-27.
- SINGLE SANITARY SERVICE LATERALS SHALL BE MINIMUM 125mm DIAMETER PVC PIPES. DOUBLE SANITARY SERVICE LATERALS SHALL BE MINIMUM 125mm DIAMETER PVC PIPES TO THE 'Y' FITTING AND 100mm DIAMETER PVC PIPES TO PROPERTY LINE.

- SANITARY SERVICE SHALL BE LOWER THAN AND TO THE RIGHT OF THE WATER SERVICE AT THE PROPERTY LINE WHEN FACING THE LOT FROM THE STREET.
- CONNECTIONS TO SEWERS SHALL BE MADE WITH MANUFACTURED TEES OR WYES WHERE APPLICABLE AND SHALL BE COLOUR CODED AS NON-WHITE, AS PER STD. DWG. 2-4-1 TO 2-4-7

WATERMANS:

- THE REGION OF PEEL SHALL CONDUCT THE OPERATION OF EXISTING VALVES AND HYDRANTS IF REQUIRED.
- CONTRACTOR MUST USE BATTER BOARD OR ROD-AND-LEVEL METHOD FOR WATERMAN INSTALLATION.
- ALL WATERMANS SHALL HAVE 1.70m MINIMUM COVER FOR URBAN ROAD DESIGN AND 2.1m MINIMUM COVER FOR RURAL ROAD DESIGN.
- ALL WATERMANS SHALL MAINTAIN A MINIMUM 1.5m CLEARANCE FROM ALL MANHOLES AND CATCH BASINS, WHERE APPLICABLE.
- FOR WATERMANS CROSSING OVER OR UNDER SEWERS A MINIMUM 0.5m VERTICAL CLEARANCE SHALL BE PROVIDED.
- FOR HYDRANTS CROSSING A SANITARY SEWER, WATERMAN JOINTS ARE TO BE OFFSET A MINIMUM OF 2.5m HORIZONTALLY FROM THE CENTERLINE OF THE SANITARY SEWER.
- WATERMAN BEDDING SHOULD BE AS PER TRENCH DETAIL ON THE PLAN AND PROFILE DRAWING AND COMPACTED TO 100% STANDARD PROCTOR DENSITY.
- WATERMANS TO BE INSTALLED TO GRADES AS SHOWN ON APPROVED PLANS. COPY OF GRADE SHEET MUST BE SUPPLIED TO THE REGION OF PEEL INSPECTOR PRIOR TO COMMENCEMENT OF WORK.
- ANY JOINT DEFLECTION SHALL BE 50% OF MANUFACTURER'S SPECIFICATIONS. PIPE BARREL DEFLECTION IS PROHIBITED.
- FIRE HYDRANTS SHALL BE INSTALLED AS PER REGION STD. DWG. 1-6-1 OR 1-6-2 WITH FLANGE SET BETWEEN 50mm AND 150mm ABOVE FINISHED GRADE.
- ALL HYDRANTS SHALL HAVE 1.2m MINIMUM HORIZONTAL CLEARANCE FROM ALL OTHER UTILITIES AND STRUCTURES MEASURED FROM THE NEAREST POINT OF THE STRUCTURE.
- MECHANICAL RESTRAINTS ARE REQUIRED FOR ALL FITTINGS, VALVES, DEAD ENDS, CAPS AND HYDRANTS ON ALL PVC WATERMANS. MINIMUM RESTRAINED PIPE LENGTH AS PER REGION'S STANDARD DRAWING 1-5-9.
- STAINLESS STEEL NUTS AND BOLTS ARE TO BE USED ON ALL METALLIC FITTINGS AND JOINT RESTRAINTS.
- ALL METALLIC VALVES, FITTINGS, THROUGH WALL METAL PIPING AND JOINT RESTRAINTS TO BE C/W DENSO PASTE, DENSO MASTIC & DENSO TAPE OR APPROVED EQUAL APPLIED TO MANUFACTURER'S RECOMMENDATIONS.
- WHERE PLASTIC PIPE IS USED, INSTALL A 12 GAUGE TWI STRANDED COPPER, LIGHT COLOURED, PLASTIC COATED TRACER WIRE ATTACHED TO THE PIPE WITH APPROVED WIRE SPLICE. THE WIRE SHOULD BE BROUGHT TO THE SURFACE AT EACH SERVICE & VALVE BOX AND HYDRANT VALVES.

- 50mm DIAMETER WATERMAN SHALL BE TYPE K SOFT COPPER. WATERMAN INSTALLATION IN CUL-DE-SACS AS PER REGION STD. DWG. 1-7-4.
- A PHYSICAL SEPARATION MUST BE MAINTAINED AT ALL CONNECTION POINTS OF NEW WATERMAN TO THE EXISTING SYSTEM UNTIL BACTERIOLOGICAL TESTS HAVE PASSED, AS PER STD. DWG. 1-7-7 AND 1-7-8.
- PROVISION FOR FLUSHING OF NEW WATERMANS PRIOR TO TESTING MUST BE PROVIDED WITH AT LEAST 50mm OUTLET ON WATERMANS SMALLER THAN 300mm IN DIAMETER, AND MINIMUM 100mm OUTLET ON WATERMANS 300mm AND LARGER. COPPER WATERMANS ARE TO HAVE FLUSHING POINTS AT THE END, THE SAME SIZE AS THE WATERMAN, AS PER STD. DWG. 1-7-7 AND 1-7-8.
- ALL SERVICE CONNECTIONS TO PVC PIPES ARE TO BE MADE USING APPROVED WIDE BAND SERVICE SADDLE. DIRECT TAPPING IS NOT ALLOWED.
- ALL WATER SERVICES SHALL BE MINIMUM 25mm DIA NOMINAL COPPER PIPE SIZE OR 32mm DIA POLYETHYLENE PIPE IN GENERAL. NON METALLIC SERVICES SHALL BE ONE SIZE LARGER THAN THE NOMINAL COPPER PIPE SIZE AS PER LATEST APPROVED REGIONAL PRODUCT LIST AND SIZES C/W TRACER WIRE.
- THE MINIMUM LATERAL DISTANCE BETWEEN WATER SERVICES AND OTHER UTILITIES SHALL BE 1.2m.
- WITH MINIMUM DISTANCE OF 1.0 METRES FROM THE EDGE OF THE DRIVEWAY, BE FLUSH WITH GRADE AND ACCESSIBLE AT ALL TIME.
- VALVE AND BOXES SHALL BE CAST IRON SLIDING TYPE, COMPLETED WITH VALVE GUIDE PLATES AND INSTALLED AS PER REGION STD. 1-3-8. MAINLINE VALVES TO BE RESTRAINED AS PER REGION STD. 1-3-3A. VALVES SHALL OPEN TO THE LEFT (COUNTER-CLOCKWISE)
- ALL WATER SERVICES BOXES SHOULD BE "LEAD FREE" AS PER REGION'S MATERIAL SPECIFICATIONS.
- THE REGION WILL COMPLETE THE NECESSARY WATER TESTING (PRESSURE TEST, FLUSHING, CHLORINATION AND SAMPLING). CONTRACTOR MAY PROCEED WITH HIS OWN PRESSURE TEST AND FLUSHING PRIOR TO REGION'S TESTING.
- ALL METALLIC WATER PIPES INCLUDING 'K' COPPER WATER SERVICES, INSTALLED OR REPAIRED, SHALL HAVE ZINC ANODE AS PER REGION OF PEEL STANDARD 1-7-1, OPSD 422 AND OPSD 1109.011 AND TO CONFORM TO ASTM B-618 TYPE.
- WATERMAN PIPES SHALL BE BROUGHT ON SITE WITH MANUFACTURER'S PLUGS AND STORED SO NO DEBRIS ENTER THE PIPE. THE CONTRACTOR IS NOT ALLOWED TO INSTALL ANY WATERMAN UNTIL HE HAS A NIGHT PLUG ON SITE. THE NIGHT PLUG IS TO BE USED EVERY TIME THE WORK IS STOPPED.



REVISIONS

NO.	DESCRIPTION	DATE	BY

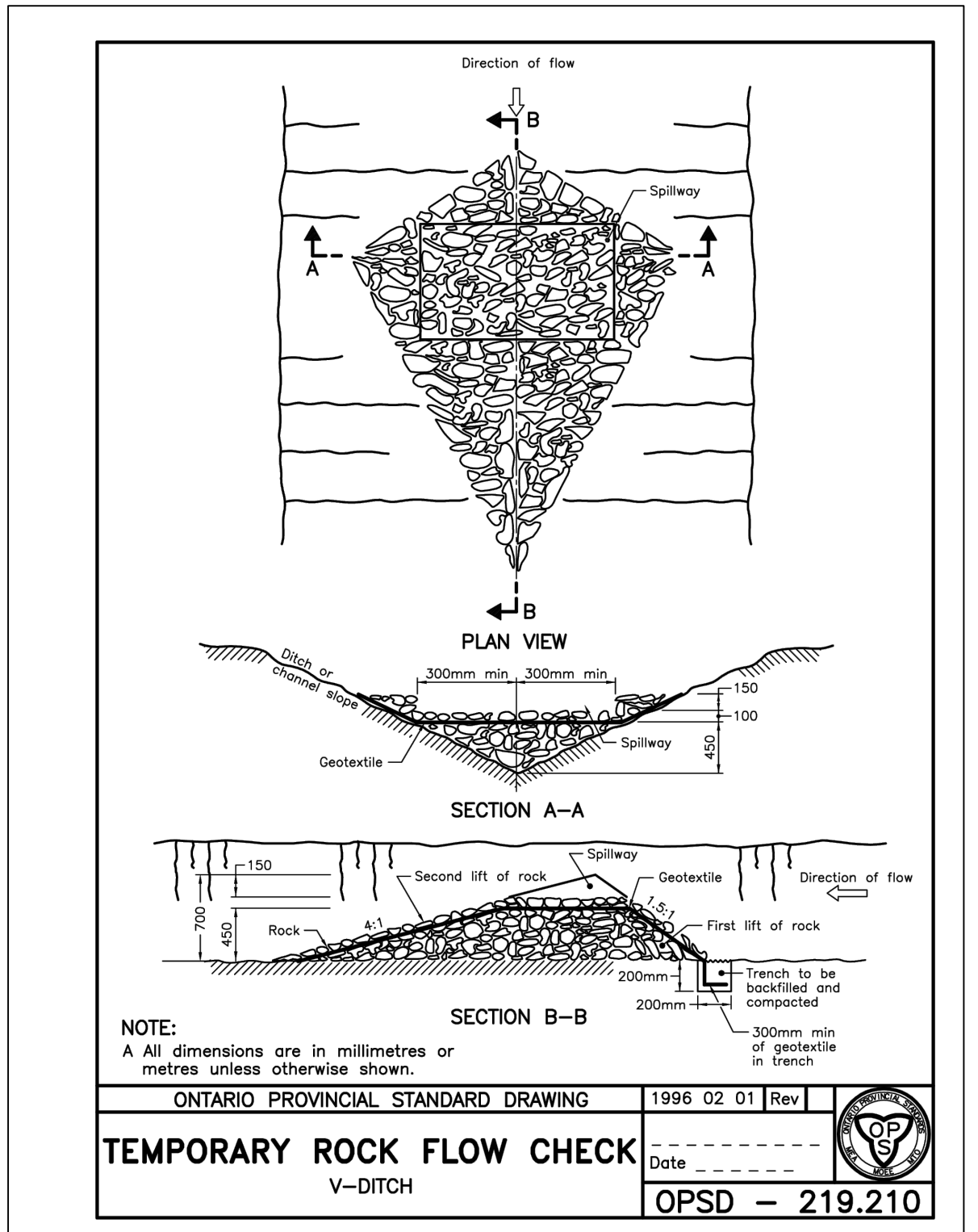
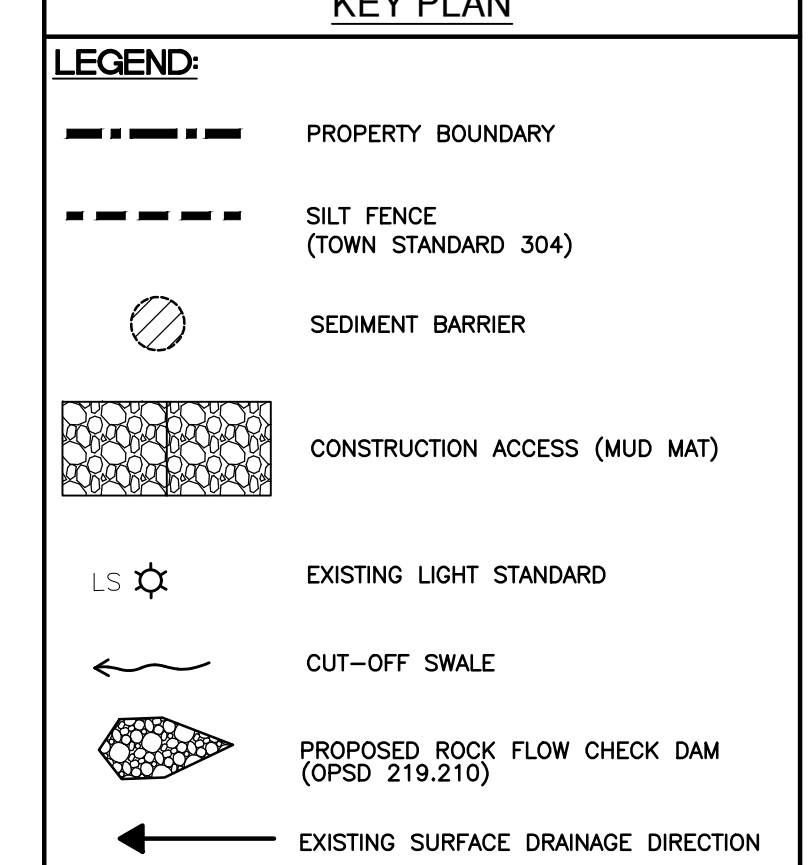
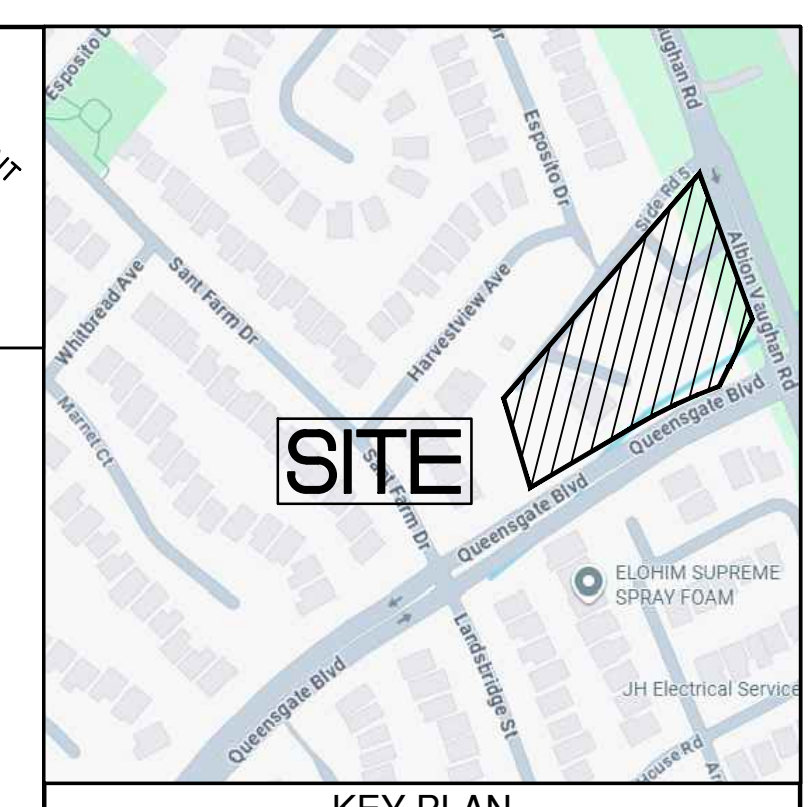
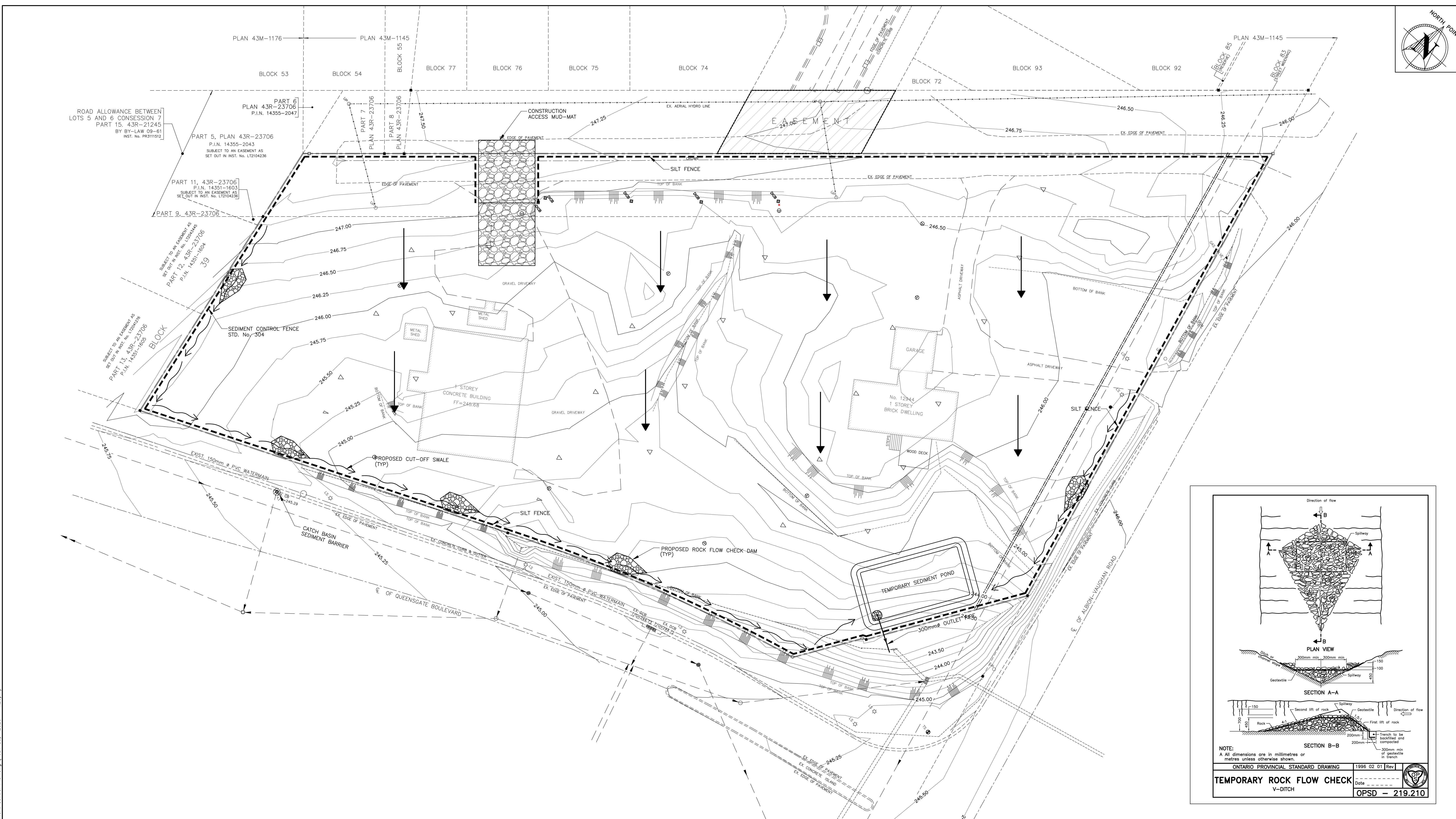
303 CANDEVCON GROUP INC.
CONSULTING ENGINEERS AND PLANNERS
3258 GOVERNOR DRIVE BRAMPTON, ONTARIO L6P 0M7
TEL: (905) 794-0000 FAX: (905) 794-0611

L. TERLSONI
REGISTERED PROFESSIONAL ENGINEER
PROVINCE OF ONTARIO

MOSAİK HOMES
PROPOSED RESIDENTIAL DEVELOPMENT
12944 QUEENSGATE BOULEVARD
TOWN OF CALEDON

TOWN FILE No. REGION FILE No.
SHEET TITLE: **SS-1**

DRAWN BY: R.V.M PROJECT No. W25040
CHECKED BY: R.N. DRAWING No.
SCALE: 1:250
DATE: SEPTEMBER 08, 2025



GENERAL SEDIMENT AND EROSION CONTROL NOTES:

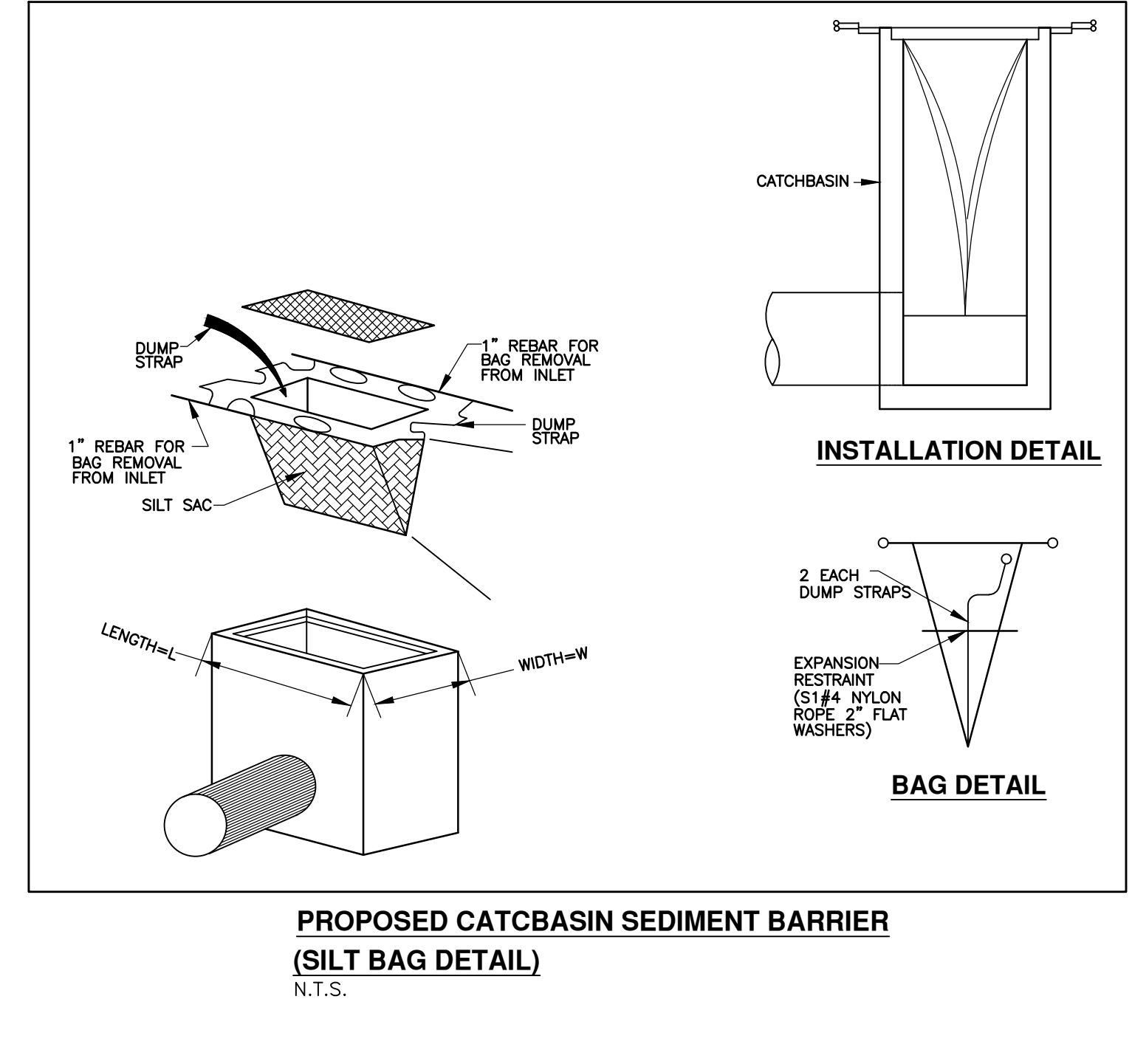
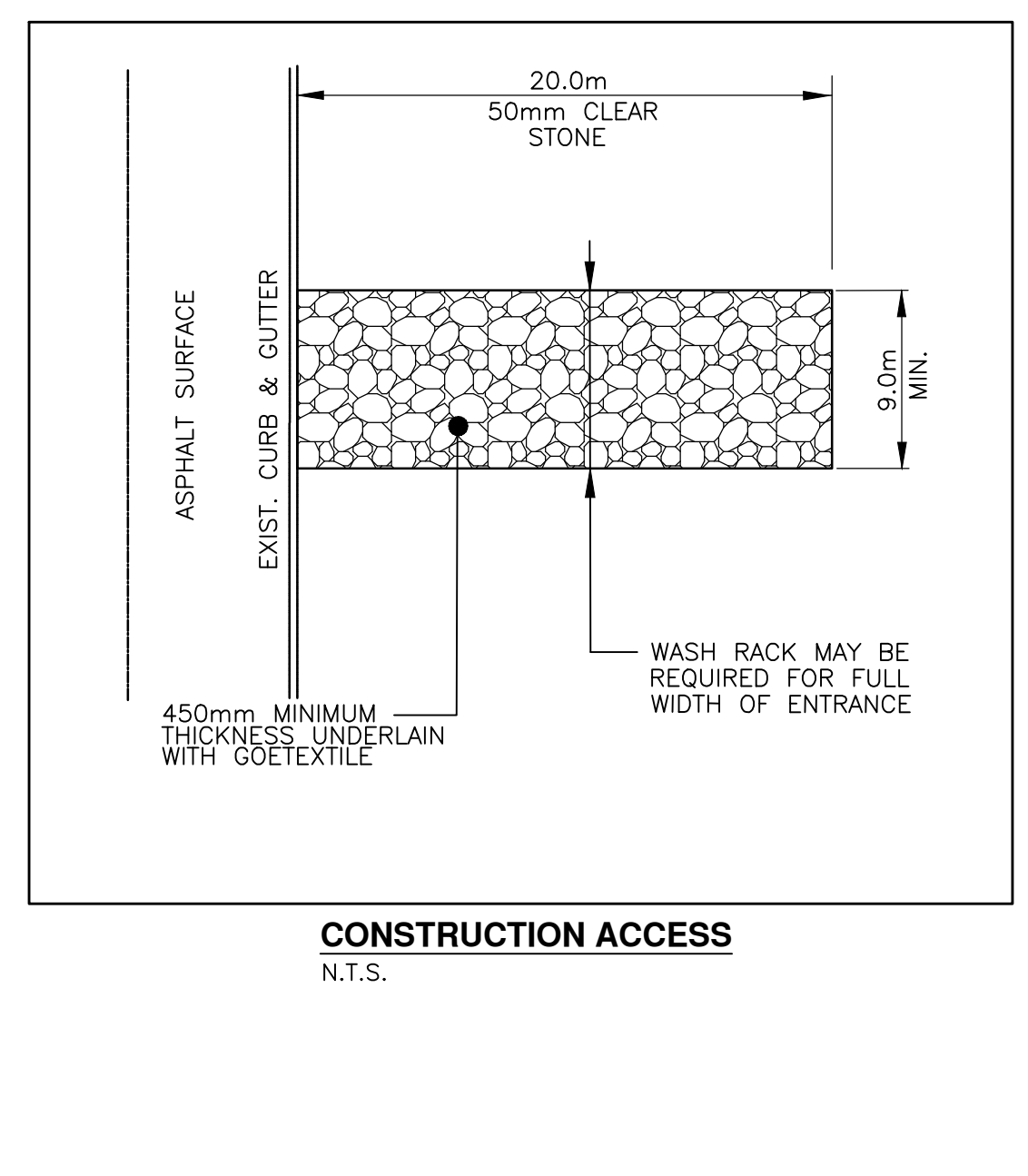
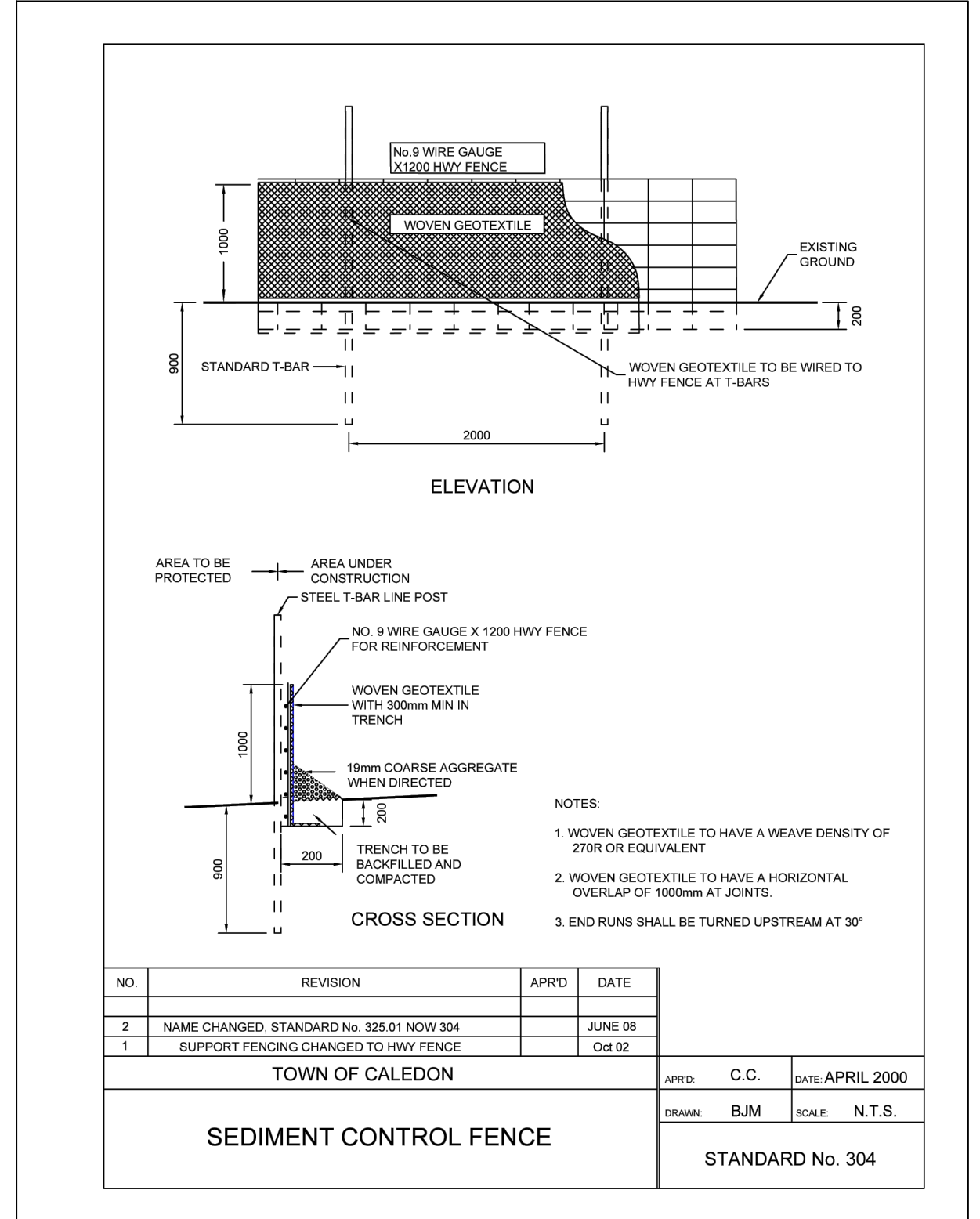
1. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED AND IN PROPER WORKING ORDER PRIOR TO THE REMOVAL OF ANY TOPSOIL OR COMMENCING EXCAVATION. THE EXACT LOCATION OF THE SEDIMENT CONTROL MEASURES SHALL BE CONFIRMED IN THE FIELD BY THE ENGINEER.
2. THE EROSION AND SEDIMENT CONTROL STRATEGIES OUTLINED ON THE PLANS ARE NOT STATIC AND MAY NEED TO BE UPDATED/AMENDED AS SITE CONDITIONS CHANGE TO PREVENT SEDIMENT RELEASES TO THE NATURAL ENVIRONMENT.
3. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED WEEKLY OR IN THE EVENT OF A MAJOR STORM AND REPAIRS SHALL BE CONDUCTED WITHIN 48 HOURS IN ACCORDANCE WITH THE TRCA GUIDELINES.
4. ALL CONSTRUCTION VEHICLES SHALL EXIT THE SITE VIA THE TEMPORARY CONSTRUCTION ACCESS.
5. CLEAN QUEENSGATE BOULEVARD AND ALDRICH-VAUGHAN ROAD OF ANY TRACKED OR DEPOSITED MUD ON A REGULAR BASIS.
6. DURING CONSTRUCTION AND UNTIL SUCH TIME AS THE SITE HAS BEEN PAVED AND SODDED, THE SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED IN GOOD OPERATING CONDITION. THE CONTRACTOR SHALL PREVENT STORM WATER RUNOFF FROM DIRECTLY ENTERING THE MUNICIPAL STORM SEWER SYSTEM AND THE ADJOINING PROPERTY BY INSTALLING AND MAINTAINING SEDIMENT CONTROL FACILITIES AT ALL CATCHBASINS AND BY INSTALLING AND MAINTAINING THE SILT FENCE AS SHOWN ON THE DRAWING.
7. PROVIDE CATCHBASIN SEDIMENT PROTECTION AT EXISTING CATCHBASINS PRIOR TO CONSTRUCTION AND MAINTAIN REGULARLY (SEE DETAIL ON THIS DRAWING).
8. ALL ACTIVITIES, INCLUDING MAINTENANCE PROCEDURES, WILL BE CONTROLLED TO PREVENT THE ENTRY OF PETROLEUM PRODUCTS, DEBRIS, RUBBLE, CONCRETE OR OTHER DELETERIOUS SUBSTANCES INTO THE WATER, VEHICULAR REFUELING AND MAINTENANCE WILL BE CONDUCTED A MINIMUM OF 30 METRES FROM ANY WATER.
9. THE PROPONENT/CONTRACTOR SHALL MONITOR THE WEATHER SEVERAL DAYS IN ADVANCE OF THE ONSET OF THE PROJECT TO ENSURE THAT THE WORKS WILL BE CONDUCTED DURING FAVOURABLE WEATHER CONDITIONS. SHOULD AN UNEXPECTED STORM ARISE, THE CONTRACTOR WILL REMOVE ALL UNFIXED ITEMS FROM THE REGIONAL STORM FLOOD PLAN THAT WOULD HAVE THE POTENTIAL TO CAUSE A SPILL OR AN OBSTRUCTION TO FLOW, E.G., FUEL TANKS, PORTA-POTTIES, MACHINERY, EQUIPMENT, CONSTRUCTION MATERIALS, ETC.
10. ALL DEWATERING/UNWATERING SHALL BE TREATED AND RELEASED TO THE ENVIRONMENT AT LEAST 30 METRES FROM A WATERCOURSE OR WETLAND AND ALLOWED TO DRAIN THROUGH A WELL-VEGETATED AREA. NO DEWATERING EFFLUENT SHALL BE SENT DIRECTLY TO ANY WATERCOURSE, WETLAND OR FOREST, OR ALLOWED TO DRAIN ONTO DISTURBED SOILS WITHIN THE WORK AREA. THESE CONTROL MEASURES SHALL BE MONITORED FOR EFFECTIVENESS AND MAINTAINED OR REVISED TO MEET THE OBJECTIVE OF PREVENTING THE RELEASE OF SEDIMENT LADEN WATER.

STANDARD EROSION AND SEDIMENT CONTROL NOTES:

1. EROSION AND SEDIMENT CONTROL (ESC) MEASURES WILL BE IMPLEMENTED PRIOR TO AND MAINTAINED DURING THE CONSTRUCTION PHASES, TO PREVENT ENTRY OF SEDIMENT INTO THE WATER. ALL DAMAGED EROSION AND SEDIMENT CONTROL MEASURES SHOULD BE REPAIRED AND/OR REPLACED WITHIN 48 HOURS OF THE DISTURBED AREA WILL BE MINIMIZED TO THE EXTENT POSSIBLE, AND TEMPORARILY OR PERMANENTLY STABILIZED OR RESTORED AS THE WORK PROGRESSES.
2. ALL IN-WATER AND NEAR WATER WORKS WILL BE CONDUCTED IN THE DRY WITH APPROPRIATE EROSION AND SEDIMENT CONTROLS.
3. THE EROSION AND SEDIMENT CONTROL STRATEGIES OUTLINED ON THE PLANS ARE NOT STATIC AND MAY NEED TO BE UPDATED/AMENDED AS SITE CONDITIONS CHANGE TO MINIMIZE SEDIMENT LADEN RUNOFF FROM LEAVING THE WORK AREAS. IF THE PRESCRIBED MEASURES ON THE PLANS ARE NOT EFFECTIVE IN PREVENTING THE RELEASE OF A DELETERIOUS SUBSTANCE, INCLUDING SEDIMENT, THEN ALTERNATIVE MEASURES MUST BE IMPLEMENTED IMMEDIATELY TO MINIMIZE POTENTIAL ECOLOGICAL IMPACTS. TRCA ENFORCEMENT OFFICER SHOULD BE IMMEDIATELY CONTACTED. ADDITIONAL ESC MEASURES TO BE KEPT ON SITE AND USED AS NECESSARY.
4. AN ENVIRONMENTAL MONITOR WILL ATTEND THE SITE TO INSPECT ALL NEW CONTROLS, AS WELL AS ON A REGULAR BASIS, OR FOLLOWING RAIN/DOWNFALL EVENT, TO MONITOR ALL WORKS, AND IN PARTICULAR WORKS RELATED TO EROSION AND SEDIMENT CONTROL, DEBRIS, OR UNWATERING. RESTORATION AND IN- OR NEAR- WATER WORKS SHOULD CONCERNS ARISE ON SITE. THE ENVIRONMENTAL MONITOR WILL CONTACT THE TRCA ENFORCEMENT OFFICER AS WELL AS THE PROPONENT.

SITE SPECIFIC NOTES:

1. THE CONTRACTOR SHALL MONITOR WEATHER FORECASTS TO ENSURE THAT THE WORKS WILL BE CONDUCTED IN FAVOURABLE WEATHER CONDITIONS. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL CONSTRUCTION EQUIPMENT AND MATERIALS THAT WOULD HAVE A POTENTIAL TO CAUSE A SPILL OR OBSTRUCTION (I.E. FUEL TANKS, PORTABLE TOILETS, MACHINERY, ETC.) FROM THE SITE IN THE CASE OF A LARGE STORM EVENT.
2. CROSSING AN ACTIVE WATERCOURSE OR WETLAND BY EQUIPMENT, VEHICLES, PERSONNEL, ETC. IS NOT PERMITTED UNLESS APPROVED BY CVC. ALL ACCESS TO WORK SITES SHALL BE FROM EITHER SIDES OF THE WATERCOURSE OR WETLAND.
3. ALL IN-WATER AND NEAR WATER WORKS WILL BE CONDUCTED IN THE DRY AND MUST BE STAGED WITH APPROPRIATE EROSION AND SEDIMENT CONTROLS. THE WORK SHALL BE PLANNED ACCORDINGLY TO SUIT THE WEATHER FORECAST.
4. ALL "AFTER-HOURS" CONTACT NUMBERS ARE TO BE CLEARLY POSTED ON-SITE FOR EMERGENCIES. ALL PLANS SHOULD HAVE THE NAMES AND CONTACT INFORMATION OF THE PERSON RESPONSIBLE FOR THE ESC MEASURES FOR THE PROJECT.



LEGAL DESCRIPTION:
 BLOCK 40, REGISTERED PLAN 43M - 1281
 PART OF LOT 5, CONCESSION 7 AND
 PART OF THE ORIGINAL ROAD ALLOWANCE
 BETWEEN LOTS 5 AND 6, CONCESSION 7
 (GEOGRAPHIC TOWNSHIP OF ALBION)
 TOWN OF CALEDON
 REGIONAL MUNICIPALITY OF PEELE

SURVEY INFORMATION:
 SURVEY INFORMATION TAKEN FROM DRAWING PREPARED BY RADY-PENYK & EDWARDS SURVEYING LTD.
 ONTARIO LAND SURVEYORS
 JOB No. 17 - 199
 DATED OCTOBER 17, 2017

BENCHMARK INFORMATION:
 ELEVATIONS ARE GEODETIC AND ARE REFERRED TO BENCHMARK STATION No. 00819758056, HAVING AN ORTHOMETRIC ELEVATION OF 251.263 METRES. ELEVATIONS ARE REFERRED TO THE CANADIAN GEODETIC VERTICAL DATUM OF 1928, 1979 ADJUSTMENT (CVD0-1928:1978ADJ).
 BENCHMARK IS LOCATED ON CONCRETE BRIDGE CARRYING HWY 50 OVER CPR, 2.0KM SOUTH OF JCT OF HWY 50 AND KING STREET IN THE TOWN OF CALEDON (BOLTON) AND 0.4 KM NORTH OF SOUTH JCT OF HWY 50 AND HEALEY ROAD.
 TABLE IS SET HORIZONTALLY IN NORTHEAST FACE OF FOOTING OF PIER COLUMN 1.4 METRES BELOW TOP OF FOOTING, 1.8 METRES SOUTH-EAST OF NORTHWEST END, 0.73 METRES ABOVE GROUND LEVEL, AND 4.3 KM EAST OF CENTRELINE OF HWY 50.

NO.	DESCRIPTION	DATE	BY

REVISIONS

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 PROVINCE OF ONTARIO

MOSAIK HOMES
 PROPOSED RESIDENTIAL DEVELOPMENT
 12944 QUEENSGATE BOULEVARD
 TOWN OF CALEDON

TOWN FILE No. REGION FILE No.
 SHEET TITLE: **EROSION AND SEDIMENT CONTROL PLAN**
 DRAWN BY: R.V.M. PROJECT No. W25040
 CHECKED BY: R.N. DRAWING No.
 SCALE: 1:250
 DATE: SEPTEMBER 08, 2025