NYX Tannery LP
Functional Servicing and
Stormwater Management Report
51 & 57 Tannery St. and 208 Emby Drive.
Mississauga, ON.

City File (OPZR - 104636)

April 19, 2024
(Revised July 4, 2024)

GE Project #: 23-904

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1.0 Introduction

1.1 General Information

Greystone Engineering Inc. have been retained by Montcrest Asset Management to prepare a Functional Servicing and Stormwater Management Report for the proposed development at 51 and 57 Tannery Street in the City of Mississauga.

The property is located at the Southeast corner of Tannery Street and Broadway Street with a CPR Rail line to the East, Mullet Creek to the West, Tannery Street to the North and Emby Drive with existing commercial / industrial to the South. Refer to **Figure 1** for site location.

This Functional Servicing and Stormwater Management Report (FSR) has been completed to support the OPA/ZBA and future Site Plan Approval (SPA) applications.

1.2 Objectives

The objectives of this Functional Servicing and Stormwater Management Report are to:

- Confirm the location of existing infrastructure both internal and adjacent to the subject site.
- Evaluate and confirm capacity for sanitary servicing.
- Evaluate and confirm adequate supply and on-site distribution of municipal water to meet domestic and fire flow requirements.
- Provide Stormwater Management design in keeping with the City of Mississauga and Credit Valley Conservation Authority (CVC) requirements.
- Provide on-site retention and re-use of the 5.0mm storm as part of the City of Mississauga SWM design requirements.
- Quantity control of the 2-100 yr post development flows to the 10 yr pre development flow will be required for flows discharging to the City sewer.
- Provide Level 1 quality control with a minimum of 80% TSS removal.
- Implement LID features to the development where feasible.

All the above will be done in accordance with accepted engineering practices.

1.3 Existing Conditions

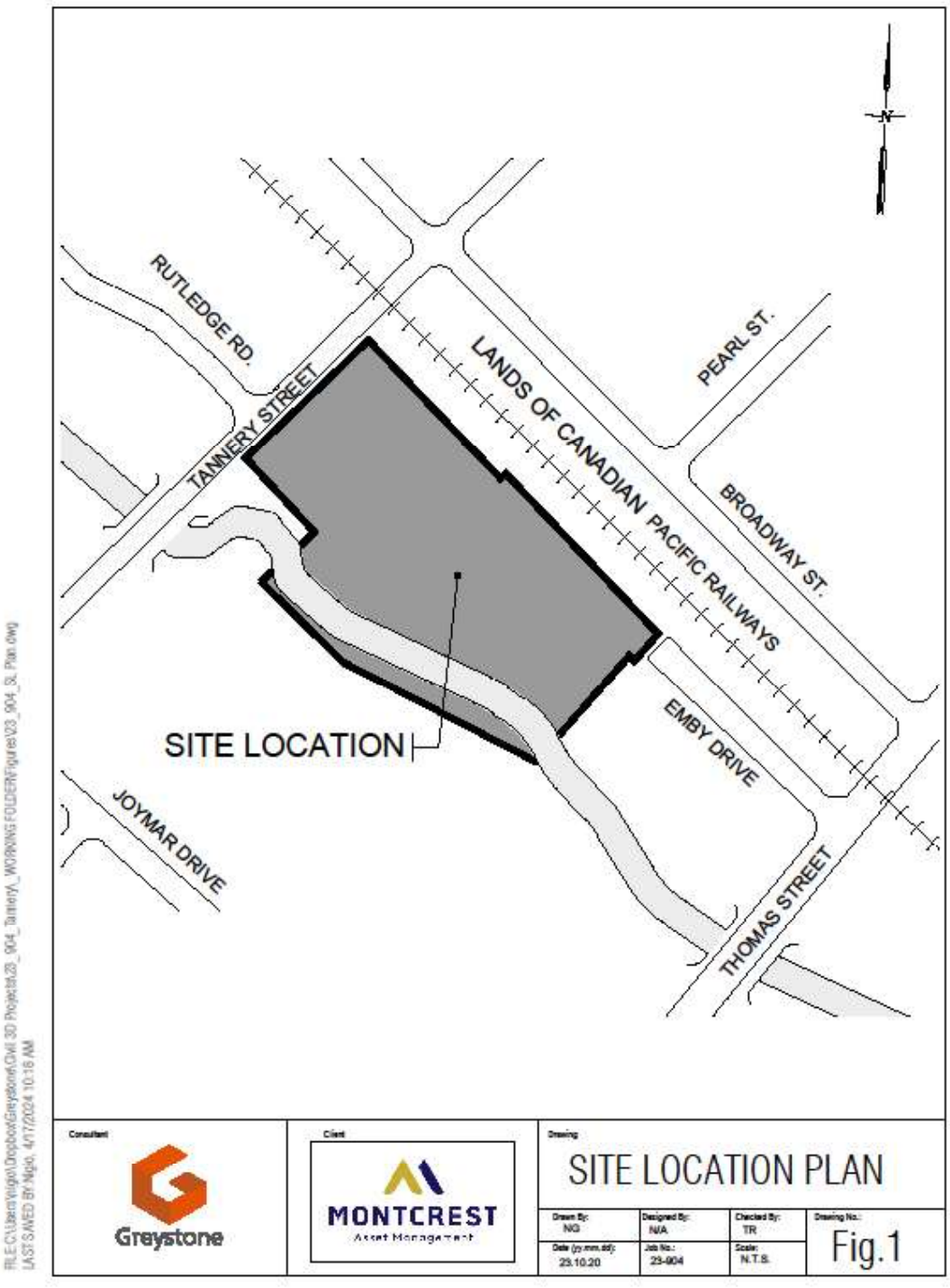
The site is currently a mixed-use development of residential and commercial / industrial. As mentioned above, the site is located at the Southeast corner of Tannery Street and Broadway Street with a CPR Rail line to the East, Mullet Creek to the West, Tannery Street to the North and Emby Drive with existing commercial / industrial to the South. Refer to **Figure 1** for site location.

The site generally drains East to West overland to Mullet Creek. There is an existing 500 mm diameter CSP culvert that bisects the property picking up external drainage from the CPR lands to the East (0.35 ha) and discharging to Mullet Creek. Other than the 500mm CSP, there are no storm systems in place on the site.

Servicing (storm, sanitary and water) are existing within Tannery St. to the North.

Refer to **drawing DR1** and **ESC1** in **Appendix A** for existing drainage details**.**

Figure 1 Site Location



1.4 Proposed Development

The proposed development will consist of a 14 Storey residential building with 633 units and underground parking. The total site area is 1.85 ha. As part of the development plan there will be a road dedication (0.023 ha) and valley land dedication (0.404 ha) leaving the proposed development area as 1.42 ha. For the purposes of this report, the site development area of 1.42 ha will be used.

The site will be serviced by existing municipal infrastructure for storm, water and sanitary within Tannery Street. Access to the site will be off of Tannery Street.

Refer to **drawing DR1-DR4** in **Appendix A** for existing drainage details**.**

2.0 Sanitary Servicing

2.1 Existing and Proposed Sanitary Sewer Infrastructure

There is an existing 250 mm diameter PVC sanitary sewer at 1.6% slope within Tannery St. and an existing 250 mm sanitary at 2.2% within Emby Drive. The existing Tannery sewer starts at EX MH 6A servicing the existing residential on both the north (Retirement residence at 175 Rutledge St) and south (within the proposed development) sides of Tannery St. We estimate a total sanitary contribution from the existing developments to be **5.2 L/s**.

A sanitary connection is proposed to the Tannery sewer with a new sanitary manhole (MH 01A). This sanitary sewer has a full flow capacity of **73.5 L/s.**

The Region of Peel Design standard 2-9-2 was used to analyze the proposed sanitary flows. Sewage flows are based on 302.8 Litres per capita day (Lpcd). Using the Regions allowance of 302.8 Lpcd, the proposed sanitary flow is estimated as follows:

633 units x 2.7 ppu = 1709.1 people x 302.8 Lpcd x 3.64 PF = **21.79 L/s**
Infiltration allowance = 1.42 ha x 0.28 L/s/ha = 0.40 L/s
Total combined flow = **22.2 L/s**.

This represents approximately 30% of the total capacity of the existing 250 mm sewer.

Refer to **Appendix A, dwg S1** for proposed design and **Appendix B** for sanitary information.

The existing sanitary infrastructure has sufficient capacity to service the proposed development.

3.0 Water Supply and Distribution

3.1 Existing and Proposed Water Infrastructure

There is an existing 12” (300mm) diameter PVC watermain within Tannery Street and an existing 300mm diameter PVC watermain within Emby Drive connecting to the existing 300 mm watermain within Thomas St. The existing watermain within Emby drive services the existing commercial / industrial lands that are part of the proposed redevelopment.

Flow tests were completed by Classic Fire Protection Inc. for both Thomas St. and Tannery St. dated May 10, 2019 and June 15, 2017 respectively. On Thomas St. the existing static water pressure is **75 psi** with an estimated residual flow of **2867 GPM** at **20 psi**. On Tannery St. the existing static water pressure is **62 psi** with an estimated residual flow of **3522 GPM** at **20 psi**. Refer to **Appendix D** for flow test results.

The site will be serviced using the existing 300 mm watermain within Tannery St. using a 200 mm PVC connection per Region of Peel standard 1-8-6. Refer to **Drawing S1** for details.

Property line valves will be added as well as a private hydrant within the site. Private hydrants are proposed with a maximum distance of 45 m to Siamese locations to meet OBC and NFPA requirements.

Using the Fire Underwriters Survey (FUS) for fireflow calculations, the estimated Peak Day Domestic Demand is **166 GPM** and Fire Flow demand for the development is **3386 GPM**. There is sufficient water pressure and volume to provide fire protection and domestic water to the proposed development. Based on the height of the building a booster pump will be required for fire protection.

Refer to **Appendix A, Drawings S1** for the proposed connections. Refer to **Appendix D** for flow test results, water demand calculations and Region of Peels water-wastewater design tables.

4.0 Stormwater Management

4.1 Design Criteria

The site is subject to the stormwater management design criteria outlined in the City of Mississauga development criteria Section 8 – Storm Drainage Design Requirements and the Credit Valley Conservation Authority (CVC) stormwater management design criteria. Stormwater design criteria is as follows:

- Provide on-site storage, reuse and retention of the 5.0mm storm as part of the City of Mississauga and TRCA SWM design requirements for water balance.
- Post to pre quantity control is required for all storm events from the 2 -100 year discharging to Mullett creek per CVC requirements. For stormwater discharging to City sewers, post development flows must be controlled to the 10 year storm (C = 0.5.) per the City of Mississauga standards.
- Provide Level 1 Quality control with a minimum of 80% TSS.
- Where feasible, provide low impact development measures (LID).
- Implement erosion and sediment control measures prior to construction to prevent sediment transport and erosion during construction.

4.2 Existing Storm Drainage System

As mentioned in Section 1.3, the site generally drains East to West overland to Mullet Creek. There is an existing 500 mm diameter CSP culvert that bisects the property picking up external drainage from the CPR lands to the East (0.352 ha) and discharging to Mullet Creek. The 100 year external flow is estimated to be 54.1 L/s (Lea Consulting Stormwater Management Brief, March 2021). Other than the 500mm CSP, there are no storm systems in place on the site.

Refer to “Pre Development Drainage Plans” provided in **Appendix A**.

Refer to **drawing DR1** and **ESC1** in **Appendix A** for existing drainage details**.**

4.3 Proposed Storm Drainage System

The Modified Rational Method (MRM) was used to calculate runoff rates from the site to quantify peak flows and required detention storage. Intensity-Duration-

Frequency curves from the City of Mississauga were used to simulate rainfall data. SWMHYMO was used to generate flows and storage requirements for the Regional storm.

Post development drainage for the site will be directed to a stormwater vault located within the building at the Northwest corner of the site. Refer to the Post Development Drainage Plan provided in **Appendix A**. The existing CPR external flows will be redirected to the existing 1050 mm diameter concrete storm sewer at 0.5% on Tannery St. which discharges to Mullet Creek approximately 45m upstream of its current discharge location.

The site has an allowable release rate of **195.61 L/s** being the 10 year design storm at a runoff coefficient of C=0.50.

Table 1 below outlines the site statistics and runoff coefficients used in the stormwater analysis. **Table 2** below outlines post development flows as well as storage requirements based on the 10 year design storm at a runoff coefficient of C=0.50.

Table 1: Site Statistics

Location	Current Area (ha)	Proposed Area (ha)
Building Area C=0.90	0.28	0.47
Landscaped Area C=0.25	0	0.38
Impervious Area C=0.90	1.14	0.57
Total Area:	**1.42**	**1.42**
Runoff Coeff:	**0.90**	**0.73**

Table 2: Peak Post Development Flows and Required Storage

Site	Q (L/s) 2 yr	Q (L/s) 5 yr	Q (L/s) 10 yr	Q (L/s) 25 yr	Q (L/s) 50 yr	Q (L/s) 100 yr	Q (L/s) Reg
Post Dev't Flow	172	231	284	359	407	454	206
Storage Required to meet 10 yr (m^3)	0	32	79.6	147	191	**233**	113

Refer to **Appendix C** for calculations.

The site will control the 100 yr post development flows to the 10 year storm at a runoff coefficient of C=0.5, **Q= 195.6 L/s**. Storage requirements are shown above in Table 2. During the 100 yr storm event approximately **233 m^3** of storage is required.

Site drainage will be directed to a stormwater vault with (17.0m x 10.5 m x 1.4 m deep) to provide a minimum of **250 m^3** of storage at elevation . The invert of the storm inlet will be set to 153.67 m with a tank bottom elevation of 152.27 m. Stormwater will be pumped out at the 10 yr allowable release rate of 195.6 L/s with a backup pump system.

Refer to SWM calculations in **Appendix C**

An emergency overland flow pipe and DICB will be provided on the West side of the vault in case of pump failure on both pumps or power failure.

The 5.0 mm site water balance will be provided through irrigation reuse in the proposed stormwater vault between elevation 152.27 m and 152.67 m to meet the required 5.0 mm reuse volume of **71 m^3** (1.42 ha x 5.0mm).

As part of the LID initiative, the site has been designed with larger than typical landscaped areas around the site. A combination of grassed areas, grassed swales and permeable pavers in landscaped areas to promote infiltration have been incorporated into the design. As mentioned above, the bottom 0.4 m of the SWM Vault will be used for irrigation of the landscaped areas.

Level 1 quality control will be provided using a Stormceptor EF04 providing 92% TSS removal.

Erosion and Sediment Controls will be implemented prior to construction as outlined on **Drawing ESC1, Appendix A**, consisting of Silt Fence, Mud mat at construction entrance and siltation control devices on existing CB's. These interim measures will ensure that all sediment laden runoff is maintained within the site and not transported downstream.

Refer to **Appendix A (Drawings S1/G1)** for proposed design and **Appendix C** for stormwater design calculations.

5.0 Conclusions and Recommendations

The servicing analysis provided within this report is summarized as follows:

- A sanitary connection is proposed to the Tannery sewer with a new sanitary manhole (MH 01A). This sanitary sewer has a full flow capacity of **73.5 L/s.** The estimated sanitary flows from the proposed development is **22.2 L/s.**

- Flow tests were completed by Classic Fire Protection Inc. for both Thomas St. and Tannery St. On Thomas St. the existing static water pressure is **75 psi** with an estimated residual flow of **2867 GPM** at **20 psi**. On Tannery St. the existing static water pressure is **62 psi** with an estimated residual flow of **3522 GPM** at **20 psi**.

- The site will be serviced by a 200 mm watermain to the 300 mm watermain within Tannery St. The fire flow demand is estimated at **3386 GPM**. There is sufficient water pressure and volume to provide fire protection and domestic water to the proposed development.

- A new private hydrant will be provided within 45 m of proposed Siamese locations to meet OBC and NFPA requirements.

- The 100 yr post development flow of **454 L/s** will be controlled to the allowable 10 yr storm at C=0.5 of **195.6 L/s** requiring approximately **233m^3** of storage.

- The 5.0 mm site water balance will be provided through irrigation reuse in the proposed stormwater vault between elevation 152.27 m and 152.67 m to meet the required 5.0 mm reuse volume of **71 m^3**

- Level 1 quality control will be provided using a Stormceptor EF04 providing 92% TSS removal.

- Erosion and Sediment Controls will be implemented prior to construction as outlined on **Drawing ESC1**.

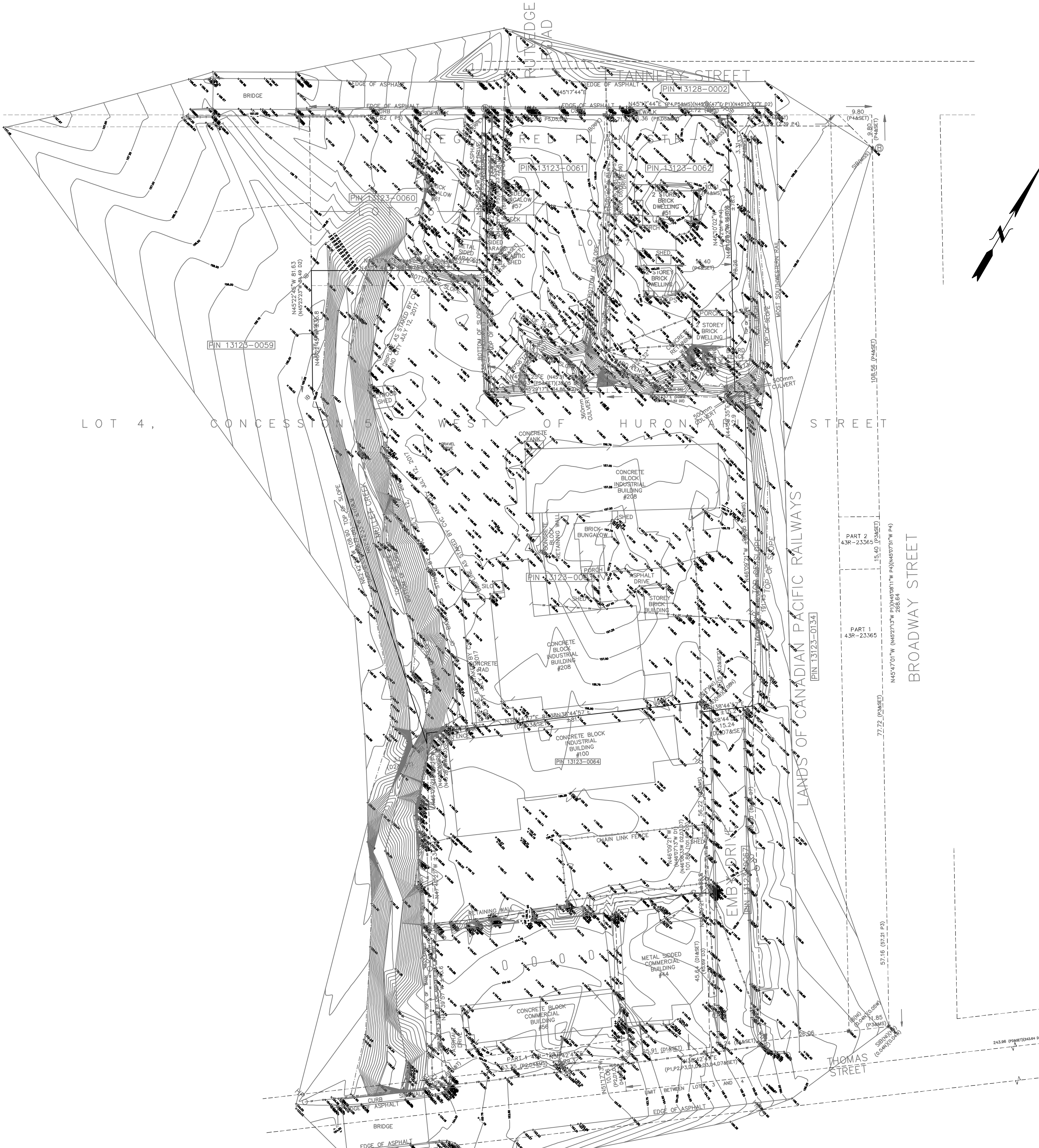
This Functional Servicing and Stormwater Management Report has been submitted in support of the 51 and 57 Tannery Street OPA/ZBA and SPA applications. The proposed development can be completed with the servicing designs outlined in this report.

Prepared by:

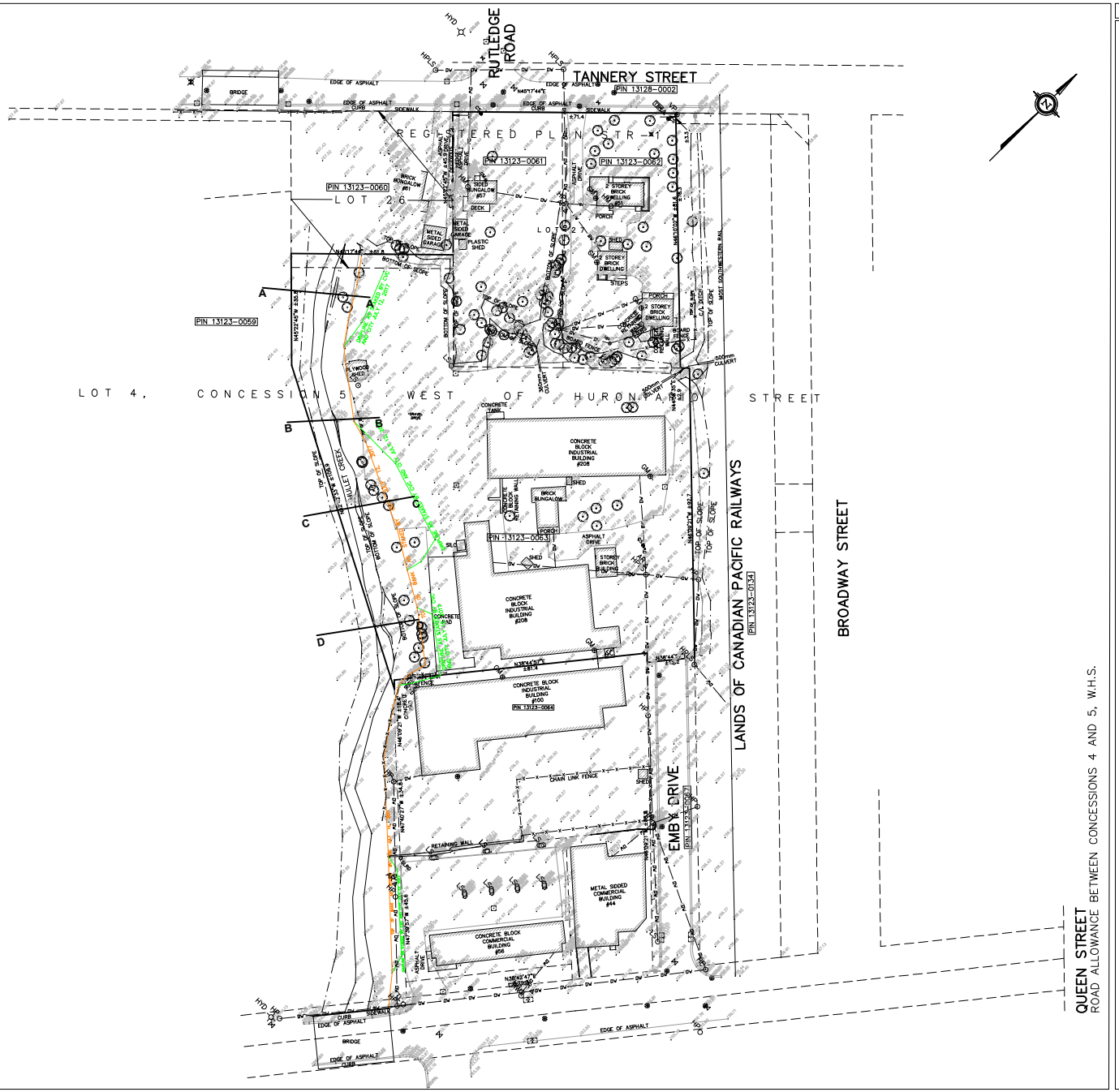
Greystone Engineering Inc.

Todd Ricketts, P.Eng.
Principal.

Appendix A
Proposed Development and Existing Information



RUTLEDGE ROAD
TANNERY STREET
PIN 13128-0002
EDGE OF ASPHALT
CURB
SIDEWALK
BRIDGE
REGISTERED PLAN
PIN 13123-0060
PIN 13123-0061
PIN 13123-0062
PIN 13123-0059
LOT 27
2 STOREY BRICK DWELLING #51
STOREY BRICK DWELLING
SHED
PORCH
BRICK BUNGALOW #57
DECK
METAL SIDED GARAGE
500mm CULVERT
360mm CULVERT
LOT 4, CONCESSION 5 WEST OF HURON STREET
CONCRETE TANK
CONCRETE BLOCK INDUSTRIAL BUILDING #208
BRICK BUNGALOW
CONCRETE BLOCK RETAINING WALL
ASPHALT DRIVE
STOREY BRICK BUILDING
SILO
CONCRETE PAD
TOP OF SLOPE
BOTTOM OF SLOPE
LANDS OF CANADIAN PACIFIC RAILWAYS
PIN 13123-0134
MOST SOUTHWESTERN RAIL
BROADWAY STREET
PART 2 43R-23365
PART 1 43R-23365
CONCRETE BLOCK INDUSTRIAL BUILDING #100
PIN 13123-0064
CHAIN LINK FENCE
RETAINING WALL
METAL SIDED COMMERCIAL BUILDING #44
CONCRETE BLOCK COMMERCIAL BUILDING #56
THOMAS STREET
LIMIT BETWEEN LOTS 3 AND 4



NOTES

TOPOGRAPHIC INFORMATION

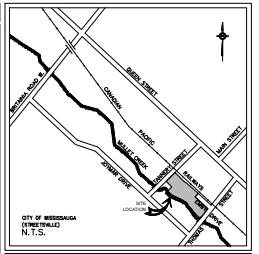
TOPOGRAPHIC INFORMATION MEASURED 19 MAY 2017. BOUNDARY IS APPROXIMATE. THIS IS NOT A PLAN OF SURVEY.

TEMPORARY BENCHMARK

ELEVATION 159.56

CUT CROSS ON THE SIDEWALK OPPOSITE #51 TANNERY STREET. CUT CROSS IS LOCATED 18.1m SOUTHWESTERLY FROM THE MOST WESTERLY RAIL OF CANADIAN PACIFIC RAILWAYS LINE, 4.3m SOUTHWESTERLY FROM THE GAS VENT PIPE AND 21.2m NORTHEASTERLY FROM THE WATER VALVE IN TANNERY STREET.

The location and extent of all existing utilities are not necessarily shown on this plan, and where shown, are to be considered approximate only. All Contractors shall inform themselves of the exact location and extent of all existing services prior to the start of construction, and shall assume all liabilities for damage to them or delays resulting from their actual extent and location.



LEGEND

- TEMPORARY BENCHMARK
- EX. GAS METER
- EX. GAS VENT PIPE
- EX. AIR CONDITIONER
- EX. ANCHOR
- EX. HYDRO METER
- EX. UTILITY POLE
- EX. HAND WELL
- EX. UTILITY POLE / LIGHT STANDARD
- EX. LIGHT STANDARD
- EX. TRAFFIC LIGHT
- EX. CATCH BASIN
- EX. MANHOLE
- EX. CURB STOP
- EX. FIRE HYDRANT
- EX. WATER VALVE
- EX. MONITORING WELL
- EX. BOLLARD
- EX. SIGN
- EX. TREE
- EX. OVERHEAD WIRES

NO	DATE	REVISIONS
	23 JAN 2019	ADD WATERCOURSE CROSS SECTIONS

0 10 20 30 Metres

DATE ISSUED 18 JUL 2017

Scale 1:600

STAMP

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

CLIENT

NYX CAPITAL CORP.
201-1131A LESLIE STREET
TORONTO, ON

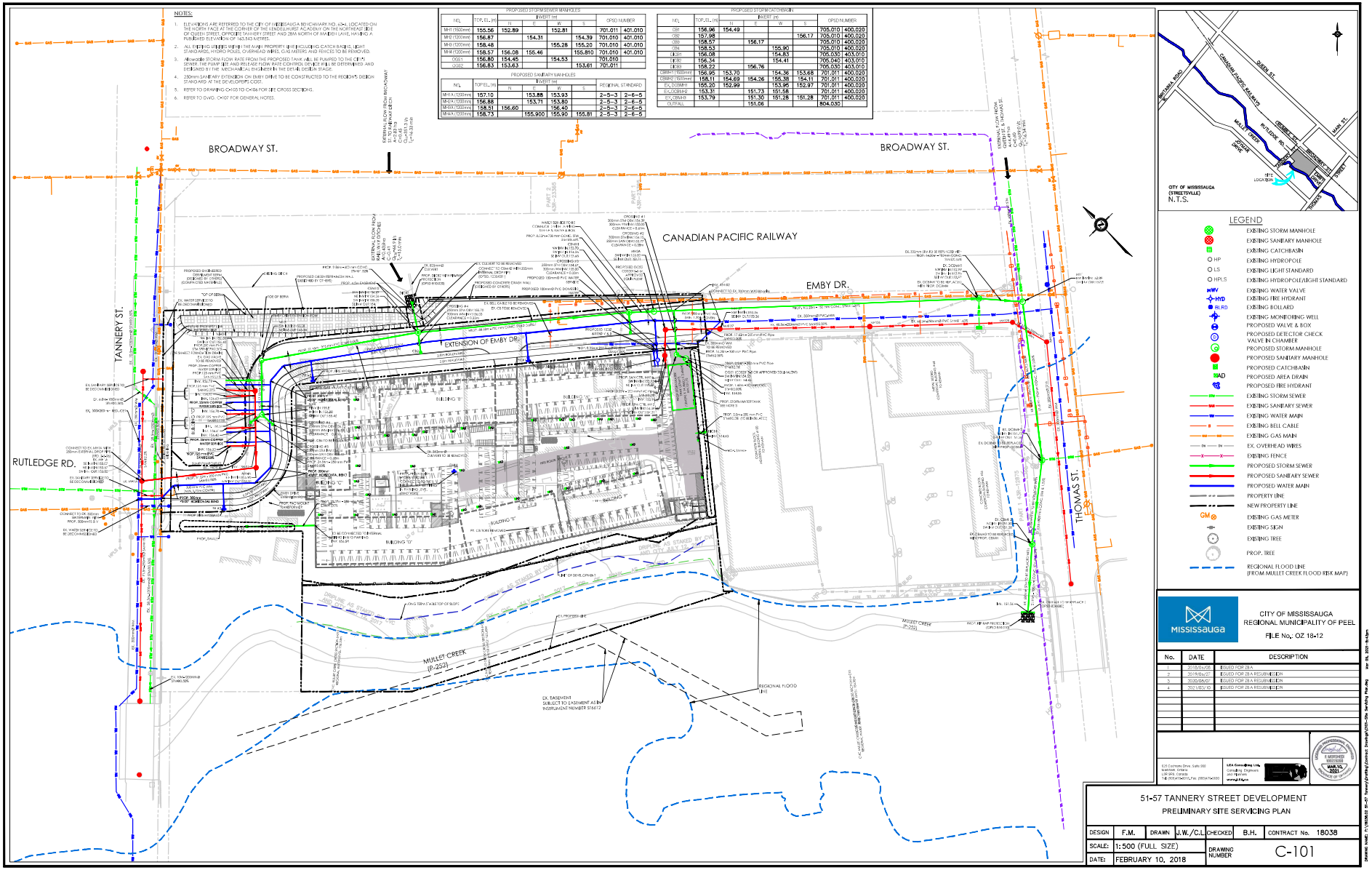
FIDDES CLIPSHAM INC.
Consulting Engineering • Land Surveying
16 Mountainview Road South, Suite 101 Halton Hills, Ontario L7G4K1
905-877-2211 info@fiddesclipsham.com fiddesclipsham.com

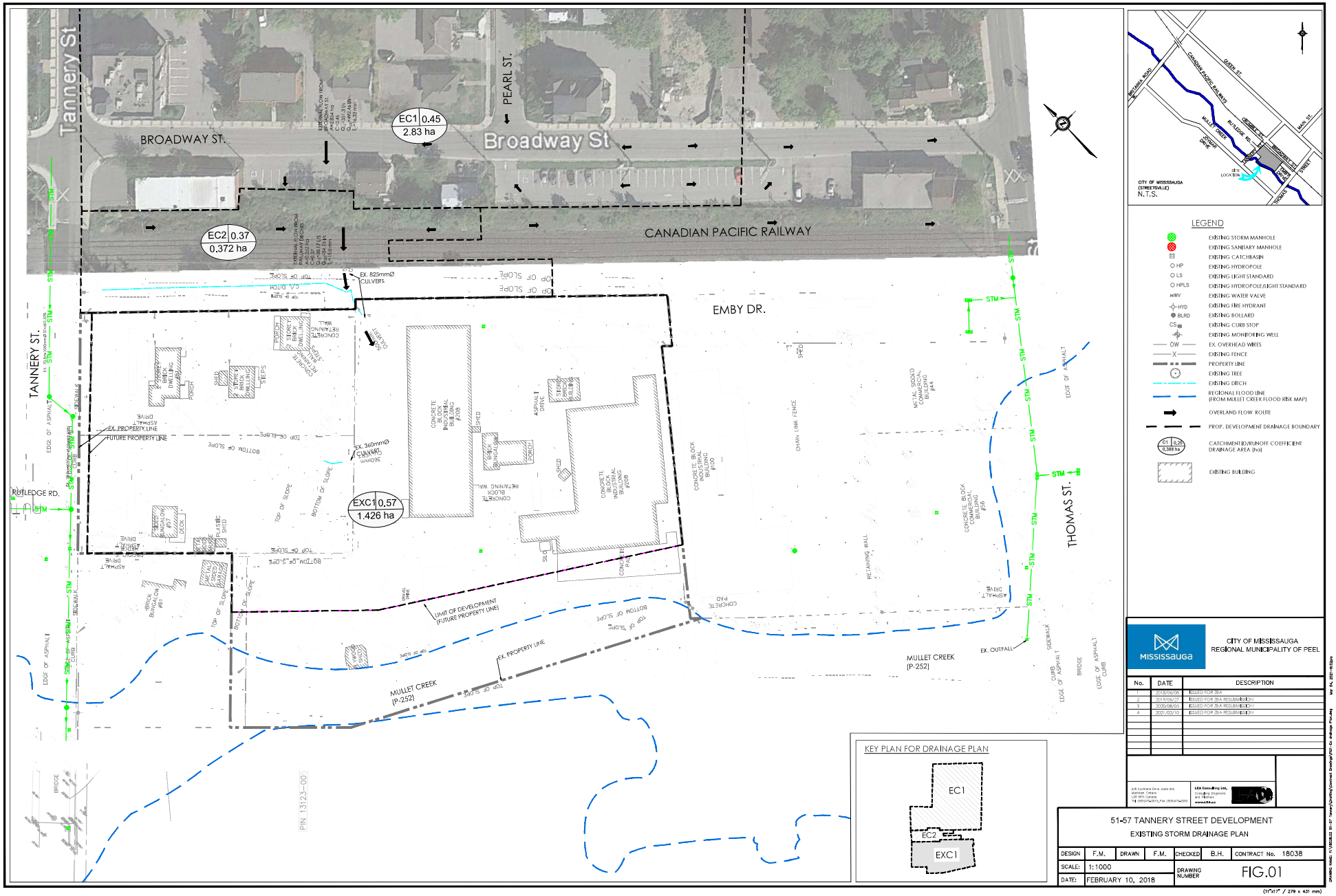
TOPOGRAPHICAL PLAN

LOT 27 AND PART LOT 26 REGISTERED PLAN STR-1 AND PART OF EAST HALF LOT 4
CONCESSION 5 W.H.S. (TORONTO)
CITY OF MISSISSAUGA
REGIONAL MUNICIPALITY OF PEEL

PROJECT No. 17-5362

DRAWING No. T-1


NOTES:
1. ELEVATIONS ARE REFERRED TO THE CITY OF MISSISSAUGA BENCHMARK NO. 1404, LOCATED ON THE NORTH FACE AT THE CORNER OF THE KENDLEHURST ACADEMY ON THE NORTHEAST SIDE OF QUEEN STREET, OPPOSITE TANNERY STREET AND 20M NORTH OF MAIDEN LANE, HAVING A PUBLISHED ELEVATION OF 160.543 METRES.
2. ALL EXISTING UTILITIES WITHIN THE MAIN PROPERTY LINE INCLUDING CATCH BASIN, LIGHT STANDARDS, HYDRO POLES, OVERHEAD WIRES, GAS METERS AND FENCES TO BE REMOVED.
3. Allowable STORM FLOW RATE FROM THE PROPOSED TANK WILL BE PUMPED TO THE CITY'S SEWER. THE PUMP SIZE AND RELEASE FLOW RATE CONTROL DEVICE WILL BE DETERMINED AND DESIGNED BY THE MECHANICAL ENGINEER IN THE DETAIL DESIGN STAGE.
4. 250mm SANITARY EXTENSION ON EMBY DRIVE TO BE CONSTRUCTED TO THE REGION'S DESIGN STANDARDS AT THE DEVELOPER'S COST.
5. REFER TO DRAWING C-103 TO C-106 FOR SITE CROSS SECTIONS.
6. REFER TO DWG. C-107 FOR GENERAL NOTES.
PROPOSED STORM SEWER MANHOLES
PROPOSED STORM CATCHBASIN
PROPOSED SANITARY MANHOLES
BROADWAY ST.
CANADIAN PACIFIC RAILWAY
EMBY DR.
EXTENSION OF EMBY DR.
TANNERY ST.
RUTLEDGE RD.
THOMAS ST.
MULLET CREEK (P-252)
BUILDING 'A'
BUILDING 'B'
BUILDING 'C'
BUILDING 'D'
BUILDING 'E'
BUILDING 'F'
BUILDING 'G'
REGIONAL FLOOD LINE
EX. EASEMENT SUBJECT TO EASEMENT AS IN INSTRUMENT NUMBER 576612
CITY OF MISSISSAUGA (STREETSVILLE)
N.T.S.
LEGEND
EXISTING STORM MANHOLE
EXISTING SANITARY MANHOLE
EXISTING CATCHBASIN
EXISTING HYDROPOLE
EXISTING LIGHT STANDARD
EXISTING HYDROPOLE/LIGHT STANDARD
EXISTING WATER VALVE
EXISTING FIRE HYDRANT
EXISTING BOLLARD
EXISTING MONITORING WELL
PROPOSED VALVE & BOX
PROPOSED DETECTOR CHECK VALVE IN CHAMBER
PROPOSED STORM MANHOLE
PROPOSED SANITARY MANHOLE
PROPOSED CATCHBASIN
PROPOSED AREA DRAIN
PROPOSED FIRE HYDRANT
EXISTING STORM SEWER
EXISTING SANITARY SEWER
EXISTING WATER MAIN
EXISTING BELL CABLE
EXISTING GAS MAIN
EX. OVERHEAD WIRES
EXISTING FENCE
PROPOSED STORM SEWER
PROPOSED SANITARY SEWER
PROPOSED WATER MAIN
PROPERTY LINE
NEW PROPERTY LINE
EXISTING GAS METER
EXISTING SIGN
EXISTING TREE
PROP. TREE
REGIONAL FLOOD LINE (FROM MULLET CREEK FLOOD RISK MAP)
CITY OF MISSISSAUGA
REGIONAL MUNICIPALITY OF PEEL
FILE No.: OZ 18-12
No. DATE DESCRIPTION
1 2018/04/06 ISSUED FOR ZBA
2 2018/06/27 ISSUED FOR ZBA RESUBMISSION
3 2020/08/07 ISSUED FOR ZBA RESUBMISSION
4 2021/03/10 ISSUED FOR ZBA RESUBMISSION
51-57 TANNERY STREET DEVELOPMENT
PRELIMINARY SITE SERVICING PLAN
DESIGN F.M. DRAWN J.W./C.L. CHECKED B.H. CONTRACT No. 18038
SCALE: 1:500 (FULL SIZE)
DATE: FEBRUARY 10, 2018
DRAWING NUMBER C-101



CITY OF MISSISSAUGA
REGIONAL MUNICIPALITY OF PEEL

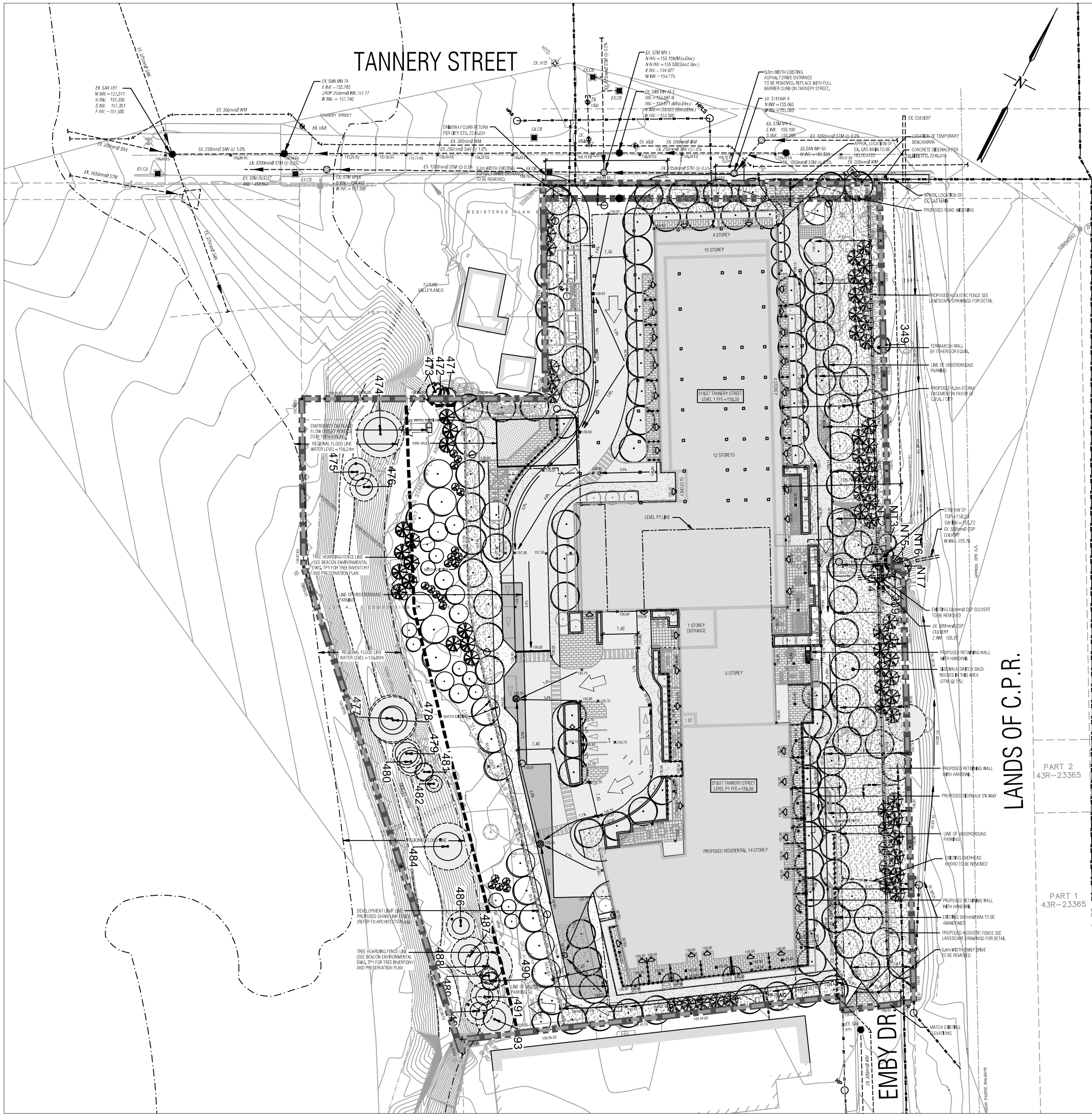
No.	DATE	DESCRIPTION
1	2018/06/08	ISSUED FOR ZBA
2	2019/06/27	ISSUED FOR ZBA RESUBMISSION
3	2020/08/05	ISSUED FOR ZBA RESUBMISSION
4	2021/03/10	ISSUED FOR ZBA RESUBMISSION

LEA Consulting Ltd.
Consulting Engineers and Planners
www.LEA.ca

51-57 TANNERY STREET DEVELOPMENT
EXISTING STORM DRAINAGE PLAN

DESIGN	F.M.	DRAWN	F.M.	CHECKED	B.H.	CONTRACT No.	18038
SCALE:	1:1000					DRAWING NUMBER	FIG.01
DATE:	FEBRUARY 10, 2018						

(11"x17" / 279 x 431 mm)



LANDSCAPE LEGEND:

- SODDING
- PRECAST CONCRETE UNIT PAVERS
- CONCRETE PAVING
- FEATURES / PERGOLA
- PLAY AREA
- CROSS WALK PAVMENT MARKINGS
- ROD IRON FENCE
- ACOUSTIC FENCE
- TREE HOARDING FENCE
- TREE TO BE PRESERVED
- TREE CROWN
- MINIMUM TREE PROTECTION ZONE
- TREE LOCATION
- TREE TAG

51 Tannery legal description: PT LT 27, PL STR1 , AS IN ST2792 ; MISSISSAUGA

57 Tanery St legal description: PT LT 27, PL STR1 , AS IN RO1078655; CITY OF MISSISSAUGA

208 Emby Dr legal description: PT LT 4, CON 5 WEST OF HURONTARIO ST TORONTO TWP, AS IN RO423322 ; PT LT 26, PL STR1 , AS IN RO423322 ; S/T ST6612; CITY OF MISSISSAUGA

GENERAL NOTES:

1. ALL WORK SHALL BE CARRIED OUT IN COMPLIANCE WITH THE APPLICABLE HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS.
2. ALL THE CONSTRUCTION WORK FOR THIS PROJECT SHALL COMPLY WITH THE STANDARD DRAWINGS AND SPECIFICATIONS OF THE CITY OF MISSISSAUGA AND THE ONTARIO PROVINCIAL STANDARDS AND SPECIFICATIONS.
3. THE CONTRACTOR IS ADVISED THAT WORKS BY OTHERS MAY BE ONGOING DURING THE PERIOD OF THIS CONTRACT. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH ALL OTHER CONTRACTORS AND PREVENT CONSTRUCTION CONFLICTS.
4. THE INFORMATION SHOWN FOR EXISTING UTILITIES WAS PROVIDED BY OTHERS. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UTILITIES DURING CONSTRUCTION. ALL EXISTING UTILITIES MUST BE LOCATED AND VERIFIED BY EACH UTILITY PRIOR TO COMMENCEMENT OF WORK. ANY VARIANCE IS TO BE IMMEDIATELY REPORTED TO THE ENGINEER. LOST TIME DUE TO FAILURE OF THE CONTRACTOR TO CONFIRM UTILITY LOCATIONS AND NOTIFY THE ENGINEER OF CONFLICTS PRIOR TO CONSTRUCTION WILL BE AT THE CONTRACTORS EXPENSE.
5. ROAD OCCUPANCY/ACCESS PERMIT MUST BE OBTAINED 48 HOURS PRIOR TO COMMENCING ANY WORKS WITHIN THE MUNICIPAL ROAD ALLOWANCE.

SITE GRADING:

1. ALL DISTURBED GRASSED AREAS SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER. THE RELOCATION OF TREES AND SHRUBS SHALL BE SUBJECT TO APPROVAL BY THE PROJECT LANDSCAPE ARCHITECT OR ENGINEER.
2. ALL GRANULAR BASE AND SUB-BASE MATERIALS SHALL BE GRADED AND COMPACTED TO 100% STANDARD PROCTOR DENSITY, FREE OF DEPRESSIONS.
3. FOR AREAS NOT ON STRUCTURAL SLAB THE PAVEMENT STRUCTURE SHALL BE CONSTRUCTED OF THE MINIMUM THICKNESSES OF MATERIALS AS PER THE GEOTECHNICAL REPORT (TERRAPEX MAR. 30 2023) AND MISSISAUGA STANDARDS, OR A MINIMUM OF THE FOLLOWING:

   CAR PARK AREA (LIGHT DUTY ASPHALT)
   50mm - HL3 (OPSS 1150)
   50mm - HL8 (OPSS 1150)
   150mm - OPSS 1010 GRANULAR 'A' BASE
   200mm - OPSS 1010 GRANULAR 'B' SUB-BASE TYPE 2

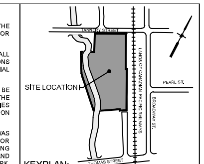
   FIRE ROUTE/TRUCK ENTRANCE (HEAVY DUTY ASPHALT)
   50mm - HL3 (OPSS 1150)
   70mm - HL8 (OPSS 1150)
   150mm - OPSS 1010 GRANULAR 'A' BASE
   300mm - OPSS 1010 GRANULAR 'B' SUB-BASE TYPE 2

4. PROVIDE SUBDRAINS, MINIMUM LENGTH OF 3.0m EXTENDING FROM ALL CATCHBASINS AND CATCHBASIN MANHOLES TO DRAIN THE GRANULAR SUB-BASE LAYER AS PER DETAIL ON DRAWING D1.
5. ALL BARRIER CURB WITHIN THE SITE TO BE CONSTRUCTED AS PER DETAIL ON DRAWING D1, UNLESS OTHERWISE SPECIFIED.
6. TRENCH BACKFILL WITHIN THE SITE TO BE CONSTRUCTED AS PER DETAIL ON DRAWING D1, UNLESS OTHERWISE SPECIFIED.
7. FROST SLABS ARE REQUIRED AT ALL DOOR LOCATIONS WHERE PROPOSED OUTSIDE GRADE IS FLUSH WITH FINISHED FLOOR ELEVATION.
8. ALL WORK SHALL BE SUBJECT TO THE CONDITIONS AND REQUIREMENTS OF CITY ROAD OCCUPANCY PERMIT.
9. INSPECTIONS: ALL WORK ON THE MUNICIPAL RIGHT OF WAY AND EASEMENTS TO BE INSPECTED BY THE MUNICIPALITY PRIOR TO BACKFILLING. ALL WORK RELATING TO WATERMAINS AND SEWERS TO BE INSPECTED BY THE MUNICIPALITY WHEN REQUIRED BY THE MUNICIPALITY.
10. REFER TO SITE PLAN FOR DIMENSIONS AND DETAILS.
11. STEP JOINTS ARE TO BE USED WHERE PROPOSED ASPHALT MEETS EXISTING ASPHALT AS PER DETAIL ON DRAWING D1. ALL JOINTS MUST BE SEALED AS PER DETAIL.
12. TRANSITIONS WITHIN THE SUBGRADE WITHIN 1.2m FROM THE TOP OF PAVEMENT SHOULD INCLUDE 3H:1V TRANSITIONS AS PER DETAIL ON DRAWING D1.
13. EMBANKMENTS TO BE SLOPED AT MAX. 3:1, UNLESS OTHERWISE SPECIFIED.
14. ALL PAVEMENT MARKING, LINE PAINTING, DIRECTIONAL LINES/ARROWS ETC, SHALL BE PLACED IN ACCORDANCE WITH THE ARCHITECTURAL SITE PLAN OR THE OWNER'S TRAFFIC ENGINEERING CONSULTANT'S DRAWINGS. LINE PAINTING AND DIRECTIONAL SYMBOLS SHALL BE APPLIED WITH A MINIMUM OF TWO COATS OF ORGANIC SOLVENT BASED PAINT IN ACCORDANCE WITH OPSS 712.
15. THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER 1 (ONE) SET OF AS CONSTRUCTED SITE SERVICING AND GRADING DRAWINGS.
16. ACCESSIBLE ENTRANCES, WALKWAYS, RAMPS, CURB CUTS AND FLUSH THRESHOLDS TO AND FROM THE BUILDING AS PER OBC AND MISSISSAUGA ACCESSIBILITY DESIGN HANDBOOK REQUIREMENTS.
17. ALL SURFACE DRAINAGE WILL BE SELF-CONTAINED, COLLECTED AND DISCHARGED AT A LOCATION TO BE APPROVED PRIOR TO THE ISSUANCE OF A BUILDING PERMIT.
18. THE PORTIONS OF THE DRIVEWAY WITHIN THE MUNICIPAL BOULEVARD WILL BE PAVED BY THE APPLICANT.
19. AT THE ENTRANCES TO THE SITE, THE MUNICIPAL CURB AND SIDEWALK WILL BE CONTINUOUS THROUGH THE DRIVEWAY AND A CURB DEPRESSION WILL BE PROVIDED FOR EACH ENTRANCE.
20. ALL ENTRANCES TO THE SITE ARE TO BE IN ACCORDANCE WITH CITY OF MISSISSAUGA STANDARDS 2240.030/2240.031 (AS APPLICAABLE) AND 2230.20. DRIVEWAY AND ENTRANCE CURB RADII DIMENSIONS SHALL BE IN ACCORDANCE WITH OPSD 350.010.
21. ALL EXCESS EXCAVATED MATERIAL WILL BE REMOVED FROM THE SITE.
22. THE EXISTING DRAINAGE PATTERN WILL BE MAINTAINED EXCEPT WHERE NOTED.
23. THE APPLICANT WILL BE REQUIRED TO CONTACT ALL UTILITY COMPANIES TO OBTAIN ALL REQUIRED LOCATES PRIOR TO THE INSTALLATION OF HOARDING WITHIN THE MUNICIPAL RIGHT-OF-WAY.
24. THE APPLICANT WILL B RESPONSIBLE FOR THE COST OF ANY UTILITY RELOCATIONS NECESSITATED BY THE PLAN.
25. PRIOR TO COMMENCING CONSTRUCTION, ALL REQUIRED HOARDING IN ACCORDANCE WITH THE ONTARIO OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS, MUST BE ERECTED AND THEN MAINTAINED THROUGHOUT ALL PHASES OF CONSTRUCTION.
26. SHOULD ANY WORKS BE REQUIRED WITHIN THE MUNICIPAL RIGHT-OF-WAY, A ROAD OCCUPANCY PERMIT WILL BE REQUIRED. PUCC APPROVAL WILL BE REQUIRED. FOR FURTHER INFORMATION, PLEASE CONTACT THE PUCC/PERMIT TECHNOLOGIST, AT 905-615-4950.

GRADING CERTIFICATION:

"I HAVE REVIEWED THE PLANS FOR THE CONSTRUCTION OF RESIDENTIAL BUILDINGS LOCATED AT **51 & 57 TANNERY STREET** AND **208 EMBY DRIVE** AND HAVE PREPARED THIS PLAN TO INDICATE THE COMPATIBILITY OF THE PROPOSAL TO EXISTING ADJACENT PROPERTIES AND MUNICIPAL SERVICES. IT IS MY BELIEF THAT ADHERENCE TO THE PROPOSED GRADES AS SHOWN WILL PRODUCE ADEQUATE SURFACE DRAINAGE AND PROPER FACILITY OF THE MUNICIPAL SERVICES WITHOUT ANY DETRIMENTAL EFFECT TO THE EXISTING DRAINAGE PATTERNS OR ADJACENT PROPERTIES"

_______________ (SIGNATURE) JULY 05, 2024 (DATE)



KEYPLAN:
N.T.S.

LEGEND:

- LIMIT OF CONSTRUCTION
- PROPERTY BOUNDARY
- BURIED FOUNDATION
- EXPOSED FOUNDATION
- RETAINING WALL
- BUILDING ENTRANCE/EXIT
- OIL GRIT SEPARATOR
- TRENCH DRAIN
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- CATCH BASIN/DOUBLE CATCH BASIN
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- PROPOSED SANITARY SEWER
- PROPOSED STORM SEWER
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- EXISTING STORM MANHOLE
- EXISTING CATCH BASIN
- EXISTING SANITARY SEWER — EX.SAN
- EXISTING STORM SEWER — EX.STM
- EXISTING WATERMAIN — EX.WM
- EXISTING SLOPES — 1.00%
- PROPOSED SLOPES — 1.00%
- INTERCEPTOR SWALE
- PROPOSED GROUND ELEVATION — × 99.20
- TOP OF CURB ELEVATION — × 99.20 TC
- EXISTING ELEVATION — × 99.20 EX
- PROPOSED OVERLAND FLOW ROUTE
- EMBANKMENT / BERM
- EXISTING OVERLAND FLOW ROUTE
- EXISTING CONTOURS — 331.26
- PONDING AREA — 199.74
- PROPOSED HEAVY DUTY ASPHALT

SITE PLAN PREPARED BY: SRM ATCHITECTS INC., MARCH.11TH, 2024.
TOPOGRAPHIC & LEGAL: PREPARED BY: FIDDELS CLIPSHAM INC. DATED MAY 7TH, 2019
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TEMPORARY BENCHMARK: ELEVATION 159.56
CUT CROSS ON THE SIDEWALK OPPOSITE #51 TANNERY STREET. CUT CROSS IS LOCATED 18.1M SW FROM THE MOST WESTERLY RAIL OF CANADIAN PACIFIC RAILWAYS LINE, 4.3M SW FROM THE GAS VENT PIPE AND 21.2M NE FROM THE WATER VALVE IN TANNERY STREET.

NOTES:

2. The contractor shall verify all dimensions, levels and datums on site and report any discrepancies or omissions to this office prior to construction.
3. This drawing is to be read and understood in conjunction with all other plans and documents applicable to this project.

NOT FOR CONSTRUCTION

LICENSED PROFESSIONAL ENGINEER
T. M. RICKETTS
90436981
JUL. 05, 2024
PROVINCE OF ONTARIO

Number	Issued/Revision	Date	Auth.
1	OPA/ZBA REVIEW	24/04/19	TR
2	REV. PER CITY APP. COMMENTS	24/07/05	TR

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Client:

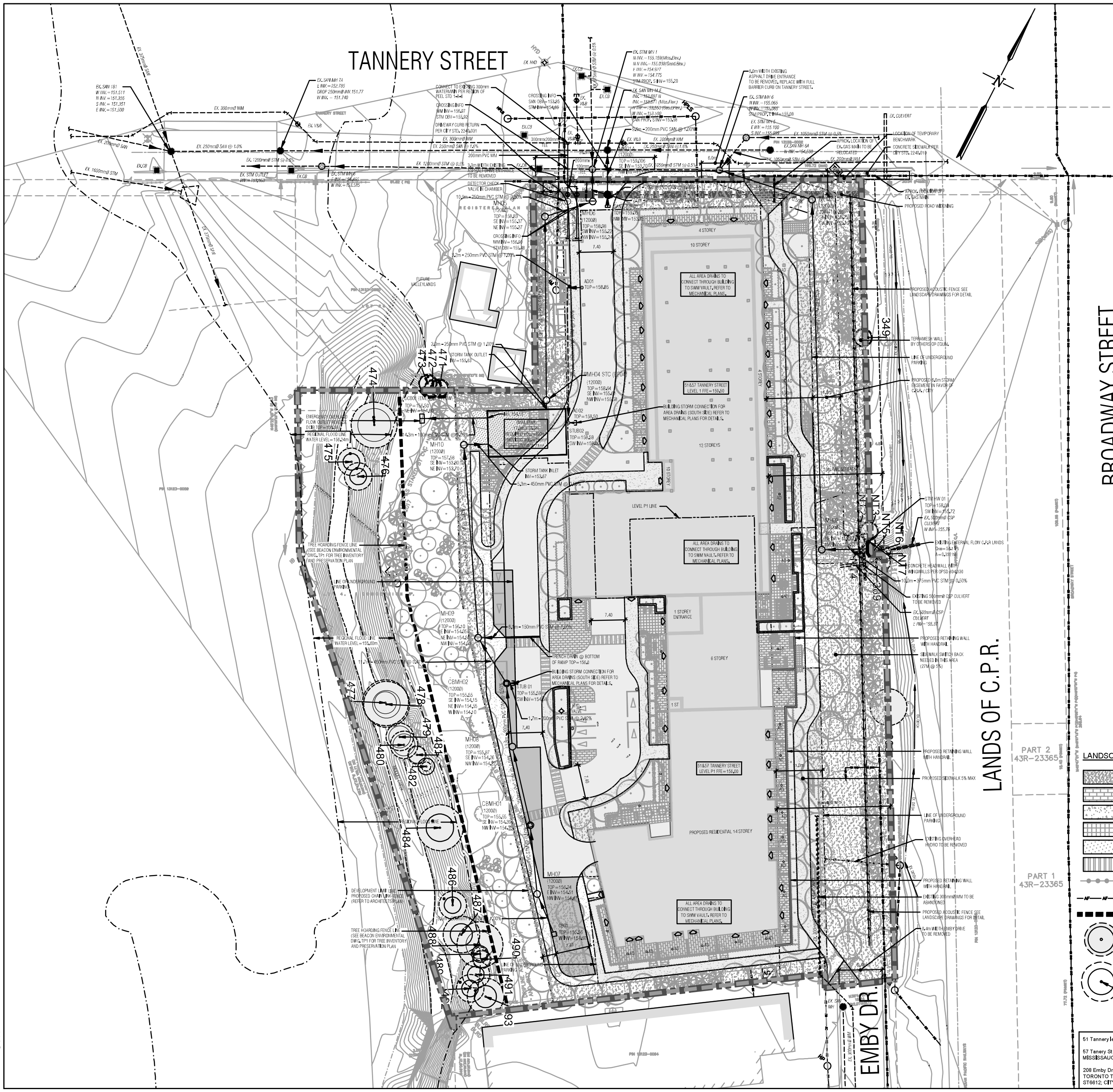
NYX TANNERY LP.

Drawing Title:

GRADING PLAN

51 & 57 TANNERY STREET
& 208 EMBY DRIVE
(CITY FILE #: OPZR-104636)
RESIDENTIAL DEVELOPMENT
MISSISSAUGA, ON

Drawn By:	Checked By:	Scale:	Drawing No.:
NG	TR	1:400	G1
Date (yy.mm.dd): 2024-04-19	Job No.: 23-904	Revision No.:	



LANDSCAPE LEGEND:

- SODDING
- PRECAST CONCRETE UNIT PAVERS
- CONCRETE PAVING
- FEATURES / PERGOLA
- PLAY AREA
- CROSS WALK PAVMENT MARKINGS
- ROD IRON FENCE
- ACOUSTIC FENCE
- TREE HOARDING FENCE
- TREE TO BE PRESERVED
- TREE CROWN
- MINIMUM TREE PROTECTION ZONE
- TREE LOCATION
- TREE TAG

51 Tannery legal description: PT LT 27, PL STR1 , AS IN ST2792 ; MISSISSAUGA

57 Tanery St legal description: PT LT 27, PL STR1 , AS IN RO1078655; CITY OF MISSISSAUGA

208 Emby Dr legal description: PT LT 4, CON 5 WEST OF HURONTARIO ST TORONTO TWP, AS IN RO423322 ; PT LT 26, PL STR1 , AS IN RO423322 ; S/T ST6612; CITY OF MISSISSAUGA

GENERAL NOTES:

1. ALL WORK SHALL BE CARRIED OUT IN COMPLIANCE WITH THE APPLICABLE HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS.
2. ALL THE CONSTRUCTION WORK FOR THIS PROJECT SHALL COMPLY WITH THE STANDARD DRAWINGS AND SPECIFICATIONS OF THE CITY OF MISSISSAUGA AND THE ONTARIO PROVINCIAL STANDARDS AND SPECIFICATIONS.
3. THE CONTRACTOR IS ADVISED THAT WORKS BY OTHERS MAY BE ONGOING DURING THE PERIOD OF THIS CONTRACT. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH ALL OTHER CONTRACTORS AND PREVENT CONSTRUCTION CONFLICTS.
4. THE INFORMATION SHOWN FOR EXISTING UTILITIES WAS PROVIDED BY OTHERS. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UTILITIES DURING CONSTRUCTION. ALL EXISTING UTILITIES MUST BE LOCATED AND VERIFIED BY EACH UTILITY PRIOR TO COMMENCEMENT OF WORK. ANY VARIANCE IS TO BE IMMEDIATELY REPORTED TO THE ENGINEER. LOST TIME DUE TO FAILURE OF THE CONTRACTOR TO CONFIRM UTILITY LOCATIONS AND NOTIFY THE ENGINEER OF CONFLICTS PRIOR TO CONSTRUCTION WILL BE AT THE CONTRACTORS EXPENSE.
5. ROAD OCCUPANCY/ACCESS PERMIT MUST BE OBTAINED 48 HOURS PRIOR TO COMMENCING ANY WORKS WITHIN THE MUNICIPAL ROAD ALLOWANCE.

STORM AND SANITARY:

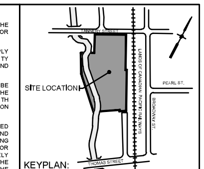
1. MANHOLES SHALL BE AS PER OPSD 701.010 AND OPSD 701.011; FRAMES AND COVERS SHALL BE AS PER OPSD 401.010. SAFETY PLATFORMS TO BE INSTALLED AS PER REGION OF PEEL STANDARDS 2-2-1 WHERE DEPTH EXCEEDS 5.0m.
2. SINGLE CATCH BASINS SHALL BE AS PER OPSD 705.010, WITH FRAMES AND COVERS AS PER OPSD 400.020. DOUBLE CATCH BASINS SHALL BE AS PER OPSD 705.020.
3. CONCRETE PIPE SEWER BEDDING SHALL BE AS PER OPSD 802.030 AND OPSD 802.033. PVC PIPE SEWER BEDDING SHALL BE CLASS 'B' AS PER OPSD 802.030 TO TOP OF SEWER. NATIVE BACKFILL TO BE COMPACTED TO A MIN. 98% STANDARD PROCTOR DENSITY WITH A MINIMUM 300mm SAND COVER OVER PIPE.
4. ALL STORM SEWER PIPES UP TO 450mm DIA. SHALL BE PVC SDR-35 OR APPROVED EQUIVALENT. ALL STORM SEWER PIPES 525mm DIA. AND LARGER SHALL BE CONCRETE AND EQUAL TO C.S.A. SPECIFICATIONS A257.2 REINFORCED CLASSES AS SPECIFIED (65-D, 100-D, 140-D.) OR LATEST AMENDMENT UNLESS OTHERWISE SPECIFIED.
5. ALL SANITARY PVC SEWER PIPES SHALL BE SDR-35 EQUAL CSA SPECIFICATIONS B182.2-M 1990 OR LATEST AMENDMENT UNLESS OTHERWISE NOTED.
6. ALL MANHOLE AND CATCH BASIN EXCAVATIONS TO BE BACKFILLED WITH GRANULAR MATERIAL COMPACTED TO 98% STANDARD PROCTOR DENSITY.
7. ALL CATCH BASINS AND CATCH BASIN MANHOLES ARE TO INCLUDE SUBDRAIN TREATMENT AS PER DETAIL ON DRAWING D1.
8. ALL BLIND CONNECTIONS TO MATCH THE INVERT OF THE CATCH BASIN LEAD TO THE SPRINGLINE OF THE STORM PIPE. OTHERWISE INSTALL THE CATCH BASIN LEAD AT A MAXIMUM 2.00% AND DROP INTO PIPE.
9. UNLESS NOTED OTHERWISE, CATCH BASIN LEADS SHALL BE 250mmØ AT MINIMUM 1.00% SLOPE
10. THE CONTRACTOR IS TO PROVIDE CCTV CAMERA INSPECTIONS OF ALL SANITARY AND STORM SEWERS, INCLUDING PICTORIAL REPORT AND TWO (2) CD COPIES IN A FORMAT SATISFACTORY TO THE ENGINEER. ALL SEWERS ARE TO BE FLUSHED PRIOR TO CAMERA INSPECTION.
11. THE CONTRACTOR IS TO VERIFY PIPE SIZE AND INVERT PRIOR TO CONSTRUCTION.

WATERMAINS - REGION OF PEEL NOTES:

1. WATERMAINS SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 300mm OVER AND 500mm UNDER SEWERS AND ALL OTHER UTILITIES WHEN CROSSING.
2. HYDRANT AND VALVE SET TO REGION STANDARD 1-6-1 DIMENSION A AND B, 0.7m (2') AND 0.9m (3') AND TO HAVE PUMPER NOZZLE.
3. PROVISIONS FOR FLUSHING WATER LINE PRIOR TO TESTING, ETC. MUST BE PROVIDED WITH AT LEAST A 50mm (2") OUTLET ON 100mm (4") AND LARGER LINES. COPPER LINES ARE TO HAVE FLUSHING POINTS AT THE END, THE SAME SIZE AS THE LINE. THEY MUST ALSO BE HOSED OR PIPED TO ALLOW THE WATER TO DRAIN ONTO A PARKING LOT OR DOWN A DRAIN. ON FIRE LINES, FLUSHING OUTLET TO BE 100mm (4") DIAMETER MINIMUM ON A HYDRANT.
4. ALL PROPOSED WATER PIPING MUST BE ISOLATED FROM EXISTING MAINS IN ORDER TO ALLOW INDEPENDENT PRESSURE TESTING AND CHLORINATION FROM EXISTING SYSTEMS.
5. ALL MATERIALS AND CONSTRUCTION METHODS MUST CORRESPOND TO THE CURRENT REGION OF PEEL STANDARDS AND SPECIFICATIONS.
6. WATERMAIN AND / OR SERVICE MATERIALS 100mm (4") AND LARGER MUST BE PVC DR18 CONSTRUCTED AS PER AWWA C900-16. SIZE 50mm (2") AND SMALLER MUST BE TYPE K SOFT COPPER CONSTRUCTED AS PER ASTM B88-49.
7. WATERMAINS AND / OR WATER SERVICES ARE TO HAVE A MINIMUM COVER OF 1.7m (5' 6") WITH A MINIMUM HORIZONTAL SPACING OF 1.2m (4') FROM THEMSELVES AND ALL OTHER UTILITIES.
8. WATERMAINS TO BE INSTALLED TO GRADES AS SHOWN ON APPROVED SITE PLAN, COPY OF GRADE SHEET MUST BE SUPPLIED TO INSPECTOR PRIOR TO COMMENCEMENT OF WORK, WHERE REQUESTED BY INSPECTOR.
9. ALL LIVE TAPPING AND OPERATION OF REGION WATER VALVES SHALL BE ARRANGED THROUGH THE REGIONAL INSPECTOR ASSIGNED OR BY CONTACTING THE OPERATIONS AND MAINTENANCE DIVISION.
10. LOCATION OF ALL EXISTING UTILITIES IN THE FIELD TO BE ESTABLISHED BY THE CONTRACTOR.
11. THE CONTRACTOR(S) SHALL BE SOLELY RESPONSIBLE FOR LOCATES, EXPOSING, SUPPORTING AND PROTECTING OF ALL UNDERGROUND AND OVERHEAD UTILITIES AND STRUCTURES EXISTING AT THE TIME OF CONSTRUCTION IN THE AREA OF WORK, WHETHER SHOWN ON THE PLANS OR NOT AND FOR ALL REPAIRS AND CONSEQUENCES RESULTING FROM DAMAGE TO SAME.
12. THE CONTRACTOR(S) SHALL BE SOLELY RESPONSIBLE TO GIVE 72 HOURS WRITTEN NOTICE TO THE UTILITIES PRIOR TO CROSSING SUCH UTILITIES, FOR THE PURPOSE OF INSPECTION BY THE CONCERNED UTILITY. THIS INSPECTION WILL BE FOR THE DURATION OF THE CONSTRUCTION, WITH THE CONTRACTOR RESPONSIBLE FOR ALL COSTS ARISING FROM SUCH INSPECTION.
13. ALL PROPOSED WATER PIPING MUST BE ISOLATED THROUGH A TEMPORARY CONNECTION THAT SHALL INCLUDE AN APPROPRIATE CROSS-CONNECTION CONTROL DEVICE, CONSISTENT WITH THE DEGREE OF HAZARD, FOR BACKFLOW PREVENTION OF THE ACTIVE DISTRIBUTION SYSTEM, CONFORMING TO REGION OF PEEL STANDARDS 1-7-7 OR 1-7-8.
14. ALL WATER METERS MUST BE INSTALLED IN HEATED AND ACCESSIBLE SPACE.
15. ALL CURB STOPS TO BE 3.0m (10') OFF THE FACE OF THE BUILDING UNLESS OTHERWISE NOTED.

WATERMAINS - CONSULTANTS NOTES:

1. WATERMAIN SHALL BE POLYVINYL CHLORIDE (PVC) CLASS 150 DR-18 PIPE MANUFACTURED TO AWWA C900-89 AND CSA CAN3 B137.3-M1986 WITH GASKETED BELL END CM #14 AWG SOLID COPPER TRACER WIRE.
2. WATERMAINS SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 300mm OVER AND 500mm UNDER SEWERS AND ALL OTHER UTILITIES WHEN CROSSING, ALL WATERMAINS AND SERVICES SHALL HAVE 1.80m MINIMUM COVER
3. ALL WATERMAIN STUBS SHALL BE TERMINATED WITH A PLUG AND 50mm BLOW OFF UNLESS OTHERWISE NOTED.
4. BEDDING FOR WATERMAINS SHALL BE AS PER OPSD 802.030 OR 802.033.
5. ALL WATERMAIN HORIZONTAL AND VERTICAL BENDS, JOINTS AND PLUGS TO BE MECHANICALLY RESTRAINED. THRUST BLOCKS/MECHANICAL RESTRAINERS MUST BE INSTALLED ON ALL WATERMAIN BENDS, TEES, AND PLUGS AS PER LOCAL MUNICIPAL STANDARDS.
6. ALL HYDRANT FLANGE ELEVATIONS TO BE INSTALLED 0.15m ABOVE PROPOSED FINISHED GRADE AT HYDRANT.
7. BUILDING SERVICE VALVES TO BE 3.0m OFF THE FACE OF THE BUILDING UNLESS OTHERWISE NOTED AND MUST BE RESTRAINED A MINIMUM OF 12m BACK FROM STUB.
8. ALL WATERMAINS SHALL BE HYDROSTATICALLY TESTED IN ACCORDANCE WITH REGION OF PEEL STANDARDS AND SPECIFICATIONS UNLESS OTHERWISE DIRECTED. PROVISIONS FOR FLUSHING WATER LINE PRIOR TO TESTING, ETC. MUST BE PROVIDED.



KEYPLAN:
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LICENSED PROFESSIONAL ENGINEER
T. M. RICKETTS
90436981
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PROVINCE OF ONTARIO

Number	Issued/Revision	Date	Auth.
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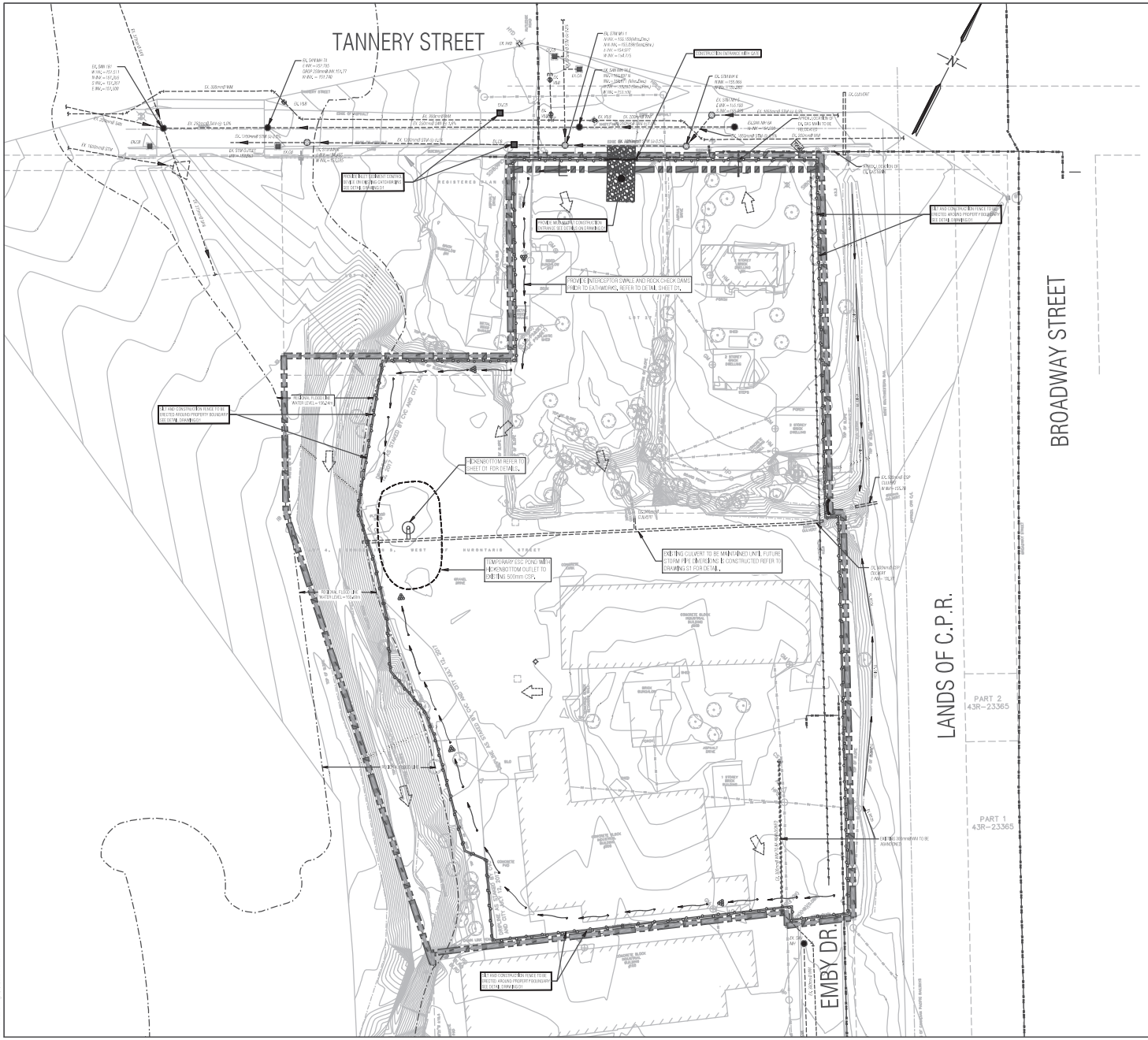
Client
NYX TANNERY LP.

Drawing Title:
SERVICING PLAN
51 & 57 TANNERY STREET
& 208 EMBY DRIVE
(CITY FILE #: OPZR-104636)
RESIDENTIAL DEVELOPMENT
MISSISSAUGA, ON

Drawn By:	Checked By:	Scale:	Drawing No.:
NG	TR	1:400	S1
Date (yy.mm.dd): 2024-04-19	Job No.: 23-904	Revision No.:	



GENERAL NOTES:

1. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED AND IN PROPER WORKING ORDER PRIOR TO THE STRIPPING OF ANY TOPSOIL. THE EXACT LOCATION TO BE DETERMINED IN THE FIELD AND IS TO BE APPROVED BY THE CITY.
2. ANY TREES SELECTED BY THE LAND ARCHITECT FOR PRESERVATION TO BE PROTECT BY SNOW FENCE. LAND ARCHITECT TO INDICATE ANY TREES THAT ARE TO BE TRANSPLANTED.
3. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE ROUTINELY INSPECTED AND MAINTAINED IN PROPER WORKING ORDER AND CLEANED PERIODICALLY.
4. ALL CONSTRUCTION VEHICLES SHALL ENTER AND EXIT THE SITE VIA THE APPROVED CONSTRUCTION ACCESS ONLY.
5. ALL TOPSOIL PILES SHALL BE SURROUNDED WITH SEDIMENTATION CONTROL FENCING. ALL PILES WHICH ARE STOCKED FOR MORE THAN 30 DAYS SHALL BE SEEDED.
6. SEDIMENT WHICH COLLECTS IN THE TEMPORARY SEDIMENT CONTROL FACILITIES WILL BE REMOVED WHEN FACILITY IS HALF FULL.

ESC NOTES:

1. ALL EROSION AND SEDIMENT CONTROL MEASURES TO BE INSTALLED PRIOR TO ANY CONSTRUCTION ACTIVITIES.
2. ADDITIONAL SILT FENCING SHOULD BE AVAILABLE IN CASE IMMEDIATE REPAIR IS REQUIRED.
3. CONTRACTOR TO STABILIZE THE SITE AS SOON AS POSSIBLE BY REESTABLISHING VEGETATIVE GROUND COVER AND ACCESS BARE SOIL AREAS. ALL AREAS (INCLUDING STOCKPILES) WHERE SITE IMPROVEMENTS ARE NOT EXPECTED TO OCCUR IMMEDIATELY SHALL BE REVEGETATED WITH 100mm OF TOPSOIL AND HYDROSEEDED.
4. ALL DRAINAGE WORKS REQUIRE EROSION / SEDIMENT CONTROL SATISFACTORY TO THE APPROVAL AGENCIES DURING CONSTRUCTION PERIOD AND MUST BE MONITORED AND MAINTAINED ON A REGULAR BASIS TO ENSURE MINIMIZED SILT MIGRATION OFF-SITE.
5. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CHECKED AND MAINTAINED ON A REGULAR BASIS AND INSPECTED AFTER EVERY RAINFALL.
6. TEMPORARY ESC MEASURES TO BE REMOVED FROM SITE UPON COMPLETION OF ALL EARTHWORKS AND STABILIZATION OF EXPOSED SOILS.
7. ALL EXTERNAL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES TO BE RESTORED TO EXISTING CONDITIONS OR BETTER.
8. EMERGENCY CONTACTS:

   TODD RICKETTS, P.Eng
   GREYSTONE ENGINEERING INC
   (416) 452-9800

   TIM JESSUP
   MONTCREST ASSET MANAGEMENT
   (647) 869-5254

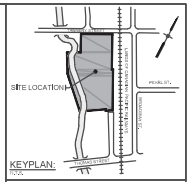
ESC STAGING PLAN:

STAGE 1: INSTALL MUD MAT AT CONSTRUCTION ENTRANCE
STAGE 2: INSTALL SILT FENCE AND CONSTRUCTION FENCE AROUND SITE.
STAGE 3: IN STALL TEMPORARY SEDIMENT CONTROL DEVISES ON ALL CATCH BASINS AND INLETS.
STAGE 4: PROVIDE REGULAR MAINTENANCE AND REPAIR OF ESC MEASURES DURING CONSTRUCTION ACTIVITIES AND PROVIDE INSPECTION AFTER EACH RAINFALL.

51 Tannery legal description: PT LT 27, PL STR1 , AS IN ST2792 ; MISSISSAUGA

57 Tannery St legal description: PT LT 27, PL STR1 , AS IN RO1078665; CITY OF MISSISSAUGA

208 Emby Dr legal description: PT LT 4, CON 5 WEST OF HURONTARIO ST TORONTO TWP, AS IN RO423322 ; PT LT 26, PL STR1 , AS IN RO423322 ; S/T ST89012; CITY OF MISSISSAUGA



LEGEND:

LIMIT OF CONSTRUCTION
PROPERTY BOUNDARY
SILT FENCE
CONSTRUCTION FENCE
MUDMAT CONSTRUCTION ACCESS PAD
SEDIMENT CONTROL DEVICE
PROPOSED OVERLAND FLOW ROUTE
EXISTING OVERLAND FLOW ROUTE
TEMPORARY ESC POND
INTERCEPTOR SWALE
EXISTING TREES/LANDSCAPING TO BE REMOVED
EXISTING CONTOURS
ROCK CHECK DAM

SURVEY PREPARED BY: SIMMONS DETTS INC., MARCH 11TH, 2024.
BENCHMARK (SURVEY): ELEVATIONS ARE REFERRED TO THE CITY OF MISSISSAUGA BENCH MARK NO. 0341 LOCATED ON THE NORTH EAST AT THE CORNER OF THE KNOLLCREST ACADEMY ON THE SE SIDE OF QUEEN STREET OPPOSITE TANNERY STREET AND 28M NORTH OF MARION LANE. HAVING A PUBLISHED ELEVATION OF 163.40 METRES.
TEMPORARY BENCHMARK: ELEVATION 155.09
CUT CROSS ON TOP OF A HYDRANT OPPOSITE 647 TANNERY STREET, CUT CROSS ON TOP OF THE HYDRANT LOCATED ON THE NORTH SIDE OF THE CANADIAN PACIFIC RAILWAY LINE, 42M SW FROM THE EMBY PROPERTY AND 21.2M E FROM THE WATER VALVE IN TANNERY STREET.

NOTES:
1. This drawing is the property of Greystone Engineering Inc. The reproduction of any part whatsoever without consent of the author is prohibited.
2. The contractor shall verify all dimensions, grades and datums on site and report any discrepancies to the consultant before proceeding with the work.
3. This drawing is to be read and understood in conjunction with all other plans and documents listed in the drawing list.

NOT FOR CONSTRUCTION

T. M. RICKETTS
90406951
JULY 05, 2024
PROFESSIONAL ENGINEER
PROVINCE OF ONTARIO

Number	Issue/Revision	Date	Init.
1	DP/ZBA REVIEW	24/04/19	TR
2	REV. PER CITY APP. COMMENTS	24/07/05	TR

Greystone Engineering

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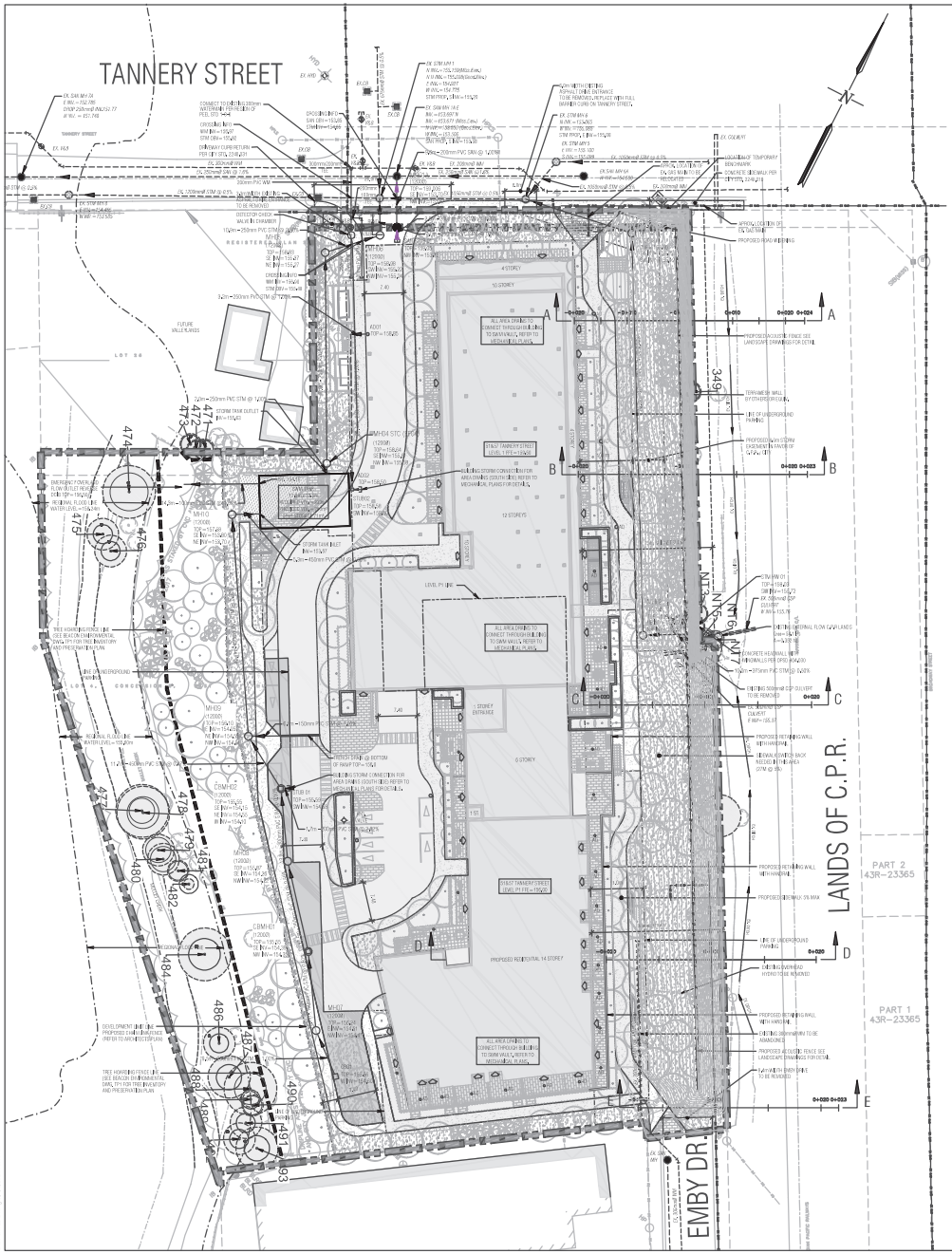
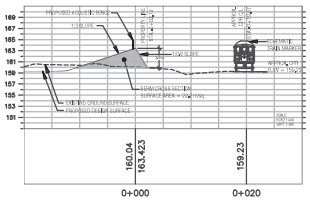
Client:
NYX TANNERY LP.

Drawing Title:
EROSION & SEDIMENT CONTROL PLAN
51 & 57 TANNERY STREET & 208 EMBY DRIVE
(CITY FILE #: OPZ-104636)
RESIDENTIAL DEVELOPMENT
MISSISSAUGA, ON

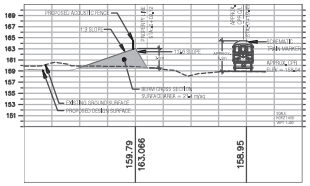
Drawn By:	Checked By:	Scale:	Drawing No.:
MD	TR	1:400	ESC1
Plotted on ANSI B (11"x17")	2018 No.: 124484	Revision No.:	



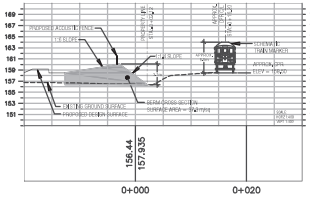
SECTION A–A PROFILE



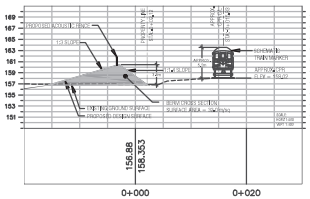
SECTION B–B PROFILE



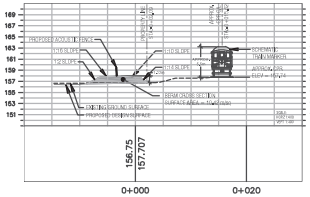
SECTION C–C PROFILE



SECTION D–D PROFILE



SECTION E–E PROFILE



GENERAL NOTES:

1. ALL WORK SHALL BE CARRIED OUT IN COMPLIANCE WITH THE APPLICABLE HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS.
2. ALL THE CONSTRUCTION WORK FOR THIS PROJECT SHALL COMPLY WITH THE STANDARD DRAWINGS AND SPECIFICATIONS OF THE CITY OF MISSISSAUGA AND THE ONTARIO PROVINCIAL STANDARDS AND SPECIFICATIONS.
3. THE CONTRACTOR IS ADVISED THAT WORKS BY OTHERS MAY BE ONGOING DURING THE PERIOD OF THIS CONTRACT. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH ALL OTHER CONTRACTORS AND PREVENT CONSTRUCTION CONFLICTS.
4. THE INFORMATION SHOWN FOR EXISTING UTILITIES WAS PROVIDED BY OTHERS. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UTILITIES DURING CONSTRUCTION. ALL EXISTING UTILITIES MUST BE LOCATED AND VERIFIED BY EACH UTILITY PRIOR TO COMMENCEMENT OF WORK. ANY VARIANCE IS TO BE IMMEDIATELY REPORTED TO THE ENGINEER. LOST TIME DUE TO FAILURE OF THE CONTRACTOR TO CONFIRM UTILITY LOCATIONS AND NOTIFY THE ENGINEER OF CONFLICTS PRIOR TO CONSTRUCTION WILL BE AT THE CONTRACTORS EXPENSE.
5. ROAD OCCUPANCY/ACCESS PERMIT MUST BE OBTAINED 48 HOURS PRIOR TO COMMENCING ANY WORKS WITHIN THE MUNICIPAL ROAD ALLOWANCE.

SITE GRADING:

1. ALL DISTURBED GRASSED AREAS SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER. THE RELOCATION OF TREES AND SHRUBS SHALL BE SUBJECT TO APPROVAL BY THE PROJECT LANDSCAPE ARCHITECT OR ENGINEER.
2. ALL GRANULAR BASE AND SUB-BASE MATERIALS SHALL BE GRADED AND COMPACTED TO 100% STANDARD PROCTOR DENSITY, FREE OF DEPRESSIONS.
3. THE PAVEMENT STRUCTURE SHALL BE CONSTRUCTED OF THE MINIMUM THICKNESSES OF MATERIALS AS PER THE GEOTECHNICAL REPORT (MTE OCT, 2019) AND MISSISSAUGA STANDARDS, OR A MINIMUM OF THE FOLLOWING:

CAR PARK AREA (LIGHT DUTY ASPHALT)
90mm • ASPHALT HOT MIX
90mm • ASPHALT HOT MIX
150mm • OPSS 1010 GRANULAR 'A' BASE
350mm • OPSS 1010 GRANULAR 'B' SUB-BASE

FIRE ROUTE/TRUCK ENTRANCE (HEAVY DUTY ASPHALT)
140mm • ASPHALT HOT MIX
140mm • ASPHALT HOT MIX
150mm • OPSS 1010 GRANULAR 'A' BASE
350mm • OPSS 1010 GRANULAR 'B' SUB-BASE

4. PROVIDE SUBDRAINS, MINIMUM LENGTH OF 3.0m EXTENDING FROM ALL CATCHBASINS AND CATCHBASIN MANHOLES TO DRAIN THE GRANULAR SUB-BASE LAYER AS PER DETAIL ON DRAWING D1.
5. ALL BARRIER CURB WITHIN THE SITE TO BE CONSTRUCTED AS PER DETAIL ON DRAWING D1, UNLESS OTHERWISE SPECIFIED.
6. TRENCH BACKFILL WITHIN THE SITE TO BE CONSTRUCTED AS PER DETAIL ON DRAWING D1, UNLESS OTHERWISE SPECIFIED.
7. FROST SLABS ARE REQUIRED AT ALL DOOR LOCATIONS WHERE PROPOSED OUTSIDE GRADE IS FLUSH WITH FINISHED FLOOR ELEVATION.
8. ALL WORK SHALL BE SUBJECT TO THE CONDITIONS AND REQUIREMENTS OF CITY ROAD OCCUPANCY PERMIT.
9. INSPECTIONS: ALL WORK ON THE MUNICIPAL RIGHT OF WAY AND EASEMENTS TO BE INSPECTED BY THE MUNICIPALITY PRIOR TO BACKFILLING. ALL WORK RELATING TO WATERMAINS AND SEWERS TO BE INSPECTED BY THE MUNICIPALITY WHEN REQUIRED BY THE MUNICIPALITY.
10. REFER TO SITE PLAN FOR DIMENSIONS AND DETAILS.
11. STEP JOINTS ARE TO BE USED WHERE PROPOSED ASPHALT MEETS EXISTING ASPHALT AS PER DETAIL ON DRAWING D1. ALL JOINTS MUST BE SEALED AS PER DETAIL.
12. TRANSITIONS WITHIN THE SUBGRADE WITHIN 1.2m FROM THE TOP OF PAVEMENT SHOULD INCLUDE 3H:1V TRANSITIONS AS PER DETAIL ON DRAWING D1.
13. EMBANKMENTS TO BE SLOPED AT MAX. 3:1, UNLESS OTHERWISE SPECIFIED.
14. ALL PAVEMENT MARKING, LINE PAINTING, DIRECTIONAL LINES/ARROWS ETC. SHALL BE PLACED IN ACCORDANCE WITH THE ARCHITECTURAL SITE PLAN OR THE OWNER'S TRAFFIC ENGINEERING CONSULTANT'S DRAWINGS. LINE PAINTING AND DIRECTIONAL SYMBOLS SHALL BE APPLIED WITH A MINIMUM OF TWO COATS OF ORGANIC SOLVENT BASED PAINT IN ACCORDANCE WITH OPSS 710.
15. THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER 1 (ONE) SET OF AS CONSTRUCTED SITE SERVICING AND GRADING DRAWINGS.
16. ACCESSIBLE ENTRANCES, WALKWAYS, RAMPS, CURB CUTS AND FLUSH THRESHOLDS TO AND FROM THE BUILDING AS PER OBC AND MISSISSAUGA ACCESSIBILITY DESIGN HANDBOOK REQUIREMENTS.

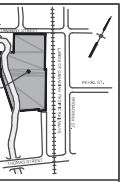
LANDSCAPE LEGEND:

- SODDING
- PRECAST CONCRETE UNIT PAVERS
- CONCRETE PAVING
- FEATURES / PERGOLA
- PLAY AREA
- CROSS WALK PAVEMENT MARKINGS
- ROD IRON FENCE
- ACOUSTIC FENCE
- TREE HOARDING FENCE
- TREE TO BE PRESERVED
- TREE CROWN
- MINIMUM TREE PROTECTION ZONE
- TREE LOCATION
- TREE TAG

51 Tannery Road legal description: PT LT 27, PL STR1 , AS IN ST2792 ; MISSISSAUGA

57 Tannery St legal description: PT LT 27, PL STR1 , AS IN RO1078665; CITY OF MISSISSAUGA

208 Emby Dr legal description: PT LT 4, CON 5 WEST OF HURONTARIO ST TORONTO TWP, AS IN RO423322 ; PT LT 26, PL STR1 , AS IN RO423322 ; ST. ST5812; CITY OF MISSISSAUGA



LEGEND:

- LIMIT OF CONSTRUCTION
- PROPERTY BOUNDARY
- BURIED FOUNDATION
- EXPOSED FOUNDATION
- RETAINING WALL
- BUILDING ENTRANCE/EXIT
- OIL GRIT SEPARATOR
- TRENCH DRAIN
- HEADWALL
- VALVE AND BOX
- HYDRANT AND VALVE
- SIAMESE CONNECTION
- WATER METER
- BACKFLOW PREVENTOR
- SANITARY MANHOLE
- STORM MANHOLE
- CATCH BASIN MANHOLE
- CATCH BASIN/DOUBLE CATCH BASIN
- AREA DRAIN
- PROPOSED WATERMAIN
- PROPOSED SANITARY SEWER
- PROPOSED STORM SEWER
- EXISTING SANITARY MANHOLE
- EXISTING STORM MANHOLE
- EXISTING CATCH BASIN
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- EXISTING WATERMAIN
- EXISTING SLOPES
- PROPOSED SLOPES
- INTERCEPTOR SWALE
- PROPOSED GROUND ELEVATION
- TOP OF CURB ELEVATION
- EXISTING ELEVATION
- PROPOSED OVERLAND FLOW ROUTE
- EMBANKMENT / BERM
- EXISTING OVERLAND FLOW ROUTE
- EXISTING CONTOURS
- PONDING AREA
- PROPOSED HEAVY DUTY ASPHALT

SURVEY PLAN IS ALL PREPARED BY: SIRM AND ERETZ INC., MARCH 11TH, 2024, PROJECT NO. 24-0015, PREPARED BY: NICOLLE CLEMENTINO.

BENCHMARK: ALL ELEVATIONS ARE REFERRED TO THE CITY OF MISSISSAUGA BENCHMARK NO. 0144, LOCATED ON THE NORTHEAST ACE AT THE CORNER OF THE KINGSLEY FIRST ACADEMY ON THE NE SIDE OF QUEEN STREET OPPOSITE TANNERY STREET AND 200 NORTH OF MARILLAC, HAVING A PUBLISHED ELEVATION OF 163.240 METRES.

TEMPORARY BENCHMARK: ELEVATION=159.09 TOP OF CUT CROSS ON CONCRETE SIDEWALK OPPOSITE 51 TANNERY STREET, CUT 0.07 CROSS CUT ON CONCRETE SIDEWALK OPPOSITE 57 TANNERY STREET, 0.40 EAST OF THE CENTRELINE OF QUEEN STREET AND 0.40 SOUTH OF THE CENTRELINE OF TANNERY STREET.

NOTES:
1. This drawing is the property of Greystone Engineering Inc. The reproduction of any part without prior written permission is forbidden.
2. The contractor shall verify all dimensions on site and report any discrepancies to the engineer before proceeding with the work.
3. This drawing is to be read and understood in conjunction with all other drawings and documents forming part of this contract.

NOT FOR CONSTRUCTION

Number	Issue/Revision	Date	Init.
1	REV. PER CITY APP. COMMENTS	24/07/05	TR

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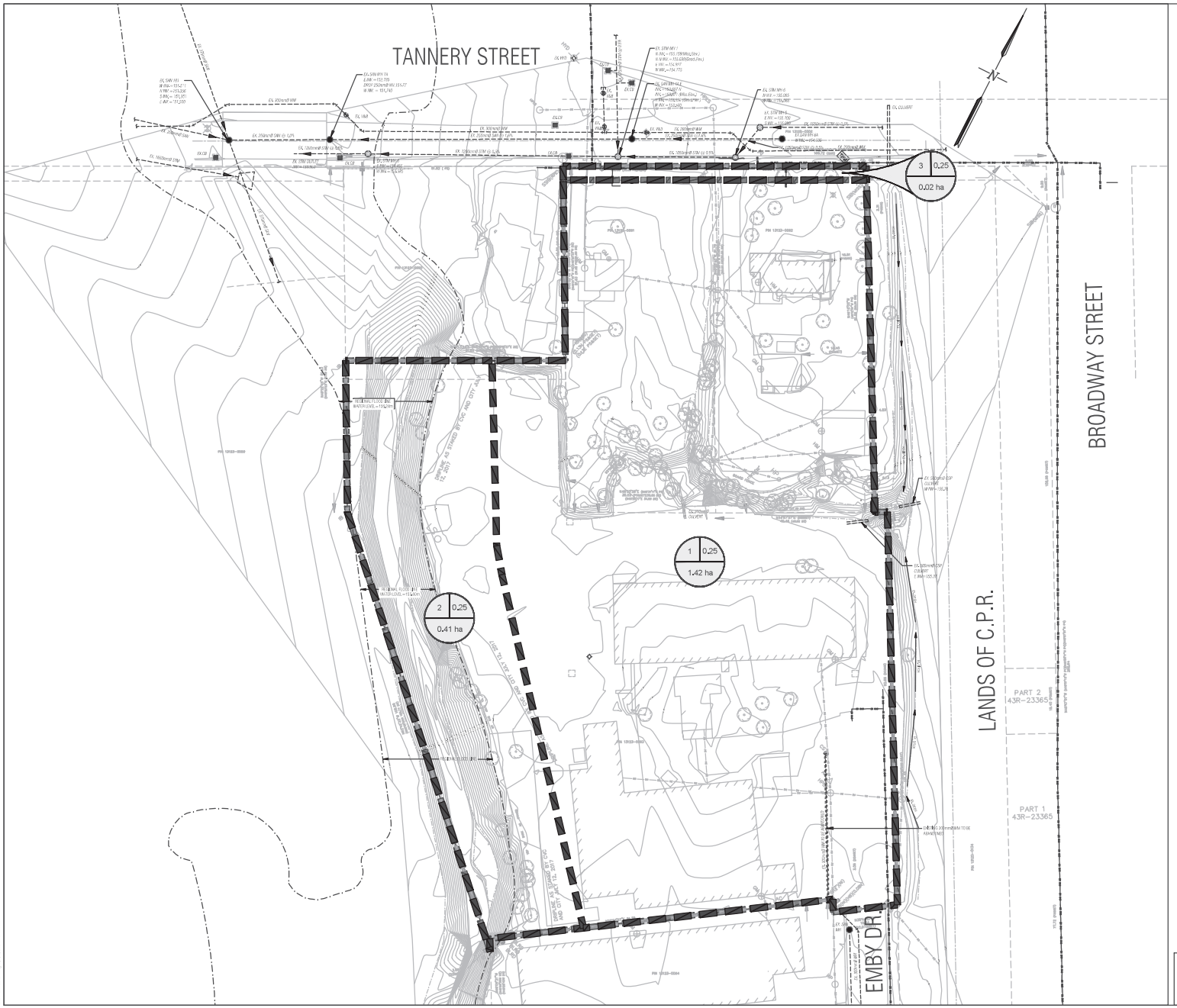
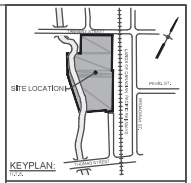
www.greystoneinc.ca

Client:
NYX TANNERY LP.

Drawing Title:
C.P.R. BERM
CROSS SECTIONS
51 & 57 TANNERY STREET
& 208 EMBY DRIVE
(CITY FILE #: OPZ-104636)
RESIDENTIAL DEVELOPMENT
MISSISSAUGA, ON

Drawn By	Checked By	Scale	Drawing No.
HD	TR	1:400	SEC1
Date (yy/mm/dd)	File No.	Revision No.	
23/04/05	23-0409		





LEGEND:

- LIMIT OF CONSTRUCTION
- PROPERTY BOUNDARY
- SANITARY MANHOLE
- STORM MANHOLE
- CATCH BASIN MANHOLE
- CATCH BASIN/DOUBLE CATCH BASIN
- PROPOSED SLOPES
- INTERCEPTOR SWALE
- PROPOSED GROUND ELEVATION
- TOP OF CURB ELEVATION
- EXISTING ELEVATION
- PROPOSED OVERLAND FLOW ROUTE
- DRAINAGE AREA
- RUN OFF COEFFICIENT
- AREA #
- AREA (ha)

FILED AU PREPARED BY: SIRAJ ATAR ARCHITECTS INC., MARCH 11TH, 2024, EXCEPTION TO NOTE: PROPERTIES ON THE SOUTH SIDE OF QUEEN STREET, OPPOSITE TANNERY STREET AND SOUTH OF MARION LANE, HAVING A PUBLISHED ELEVATION OF 103.345 METRES. TEMPORARY BENCHMARK: ELEVATION 155.00 TOP CENTRE OF A FIRE HYDRANT OPPOSITE 61 TANNERY STREET, CUT CROSS ON TOP OF CONCRETE WATER VALVE CHAMBER LID, 1.5 METRES SOUTH OF THE NORTH CURB LINE OF QUEEN STREET AND 21.2 METRES FROM THE WATER VALVE IN TANNERY STREET.

NOTES:

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NOT FOR CONSTRUCTION

Number	Issue/Revision	Date	Init.
1	DPA/ZBA REVIEW	24/04/19	TR
2	REV. PER CITY APP. COMMENTS	24/07/05	TR

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(416) 440-0338

Client:
NYX TANNERY LP.

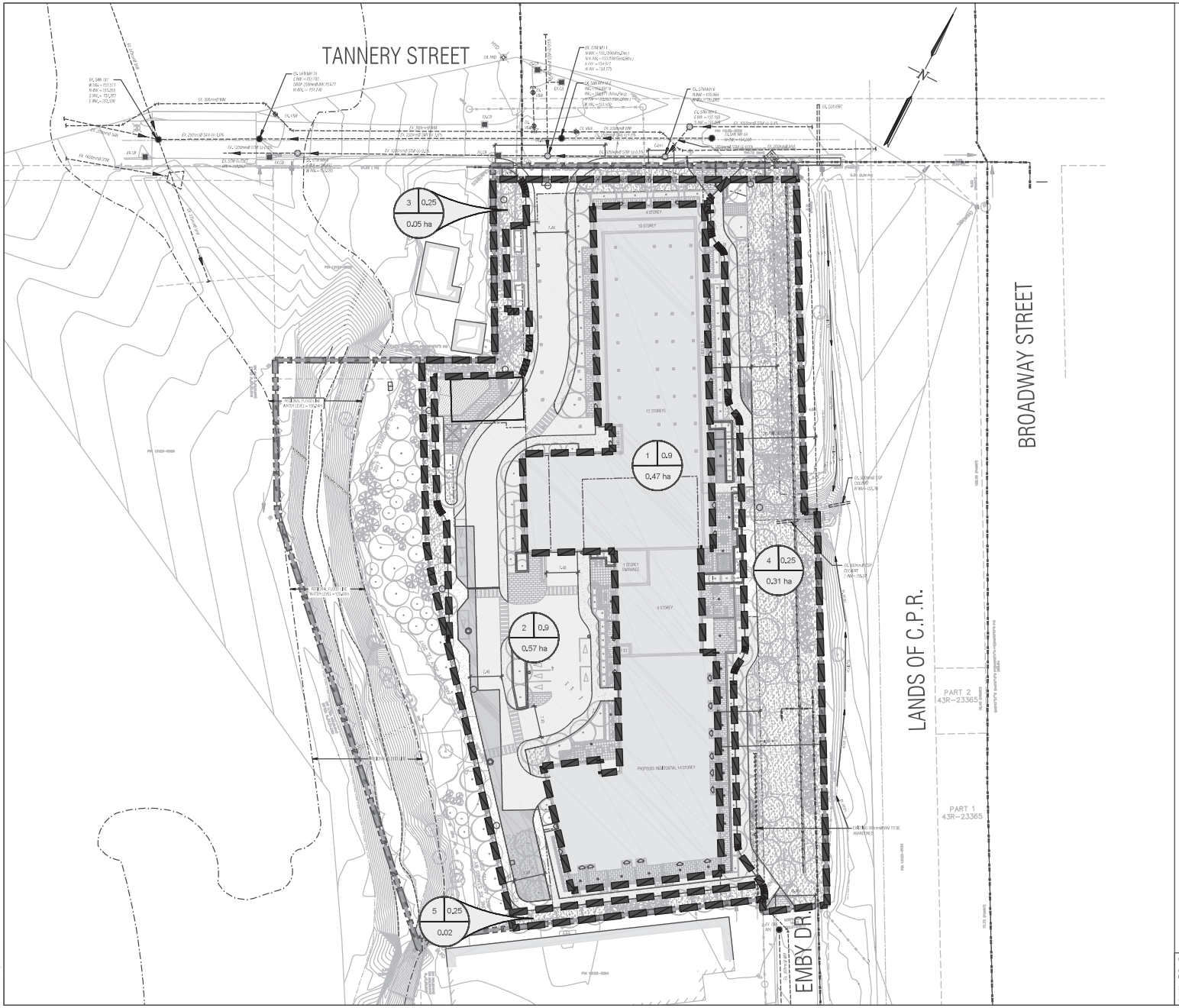
Drawing Title:
PRE - DRAINAGE PLAN
51 & 57 TANNERY STREET & 208 EMBY DRIVE
(CITY FILE #: OPZR-104636)
RESIDENTIAL DEVELOPMENT
MISSISSAUGA, ON

Drawn By:	Checked By:	Scale:	Drawing No.:
MD	TR		DR1
Date (yy-mm-dd):	File No.:	Revision No.:	
23-04-20	23-069		

51 Tannery legal description: PT LT 27, PL STR1 , AS IN ST2792 ; MISSISSAUGA

57 Tannery St legal description: PT LT 27, PL STR1 , AS IN RO1078665; CITY OF MISSISSAUGA

208 Emby Dr legal description: PT LT 4, CON 5 WEST OF HURONTARIO ST TORONTO TWP, AS IN RO423222 ; PT LT 26, PL STR1 , AS IN RO423222 ; S/T ST58612; CITY OF MISSISSAUGA



SITE LOCATION

KEYPLAN:

LEGEND:

- LIMIT OF CONSTRUCTION
- PROPERTY BOUNDARY
- SANITARY MANHOLE
- STORM MANHOLE
- CATCH BASIN MANHOLE
- CATCH BASIN/DOUBLE CATCH BASIN
- PROPOSED SLOPES
- INTERCEPTOR SWALE
- PROPOSED GROUND ELEVATION
- TOP OF CURB ELEVATION
- EXISTING ELEVATION
- PROPOSED OVERLAND FLOW ROUTE
- DRAINAGE AREA
- RUN OFF COEFFICIENT
- AREA #
- AREA (ha)

FILE: AU PREPARED BY: SRM ARCHITECTS INC. MARCH 11TH, 2024.
ELEVATIONS ARE IN METRIC: REFERRED TO THE CITY OF MISSISSAUGA BENCH MARK No. 0344 LOCATED ON THE NORTH EAST AT THE CORNER OF THE KINGSLEY FIRST ACADEMY ON THE NE SIDE OF QUEEN STREET OPPOSITE TANNERY STREET AND 200 NORTH OF MARION LANE. HAVING A PUBLISHED ELEVATION OF 163.40 METRES.
TEMPORARY BENCHMARK: ELEVATION 159.06
MAG NAIL SET IN THE SIDEWALK OPPOSITE 61 TANNERY STREET, CUT CROSS SET ON THE TOP NUT OF A FIRE HYDRANT LOCATED ON THE SOUTH SIDE OF TANNERY STREET, 24.0 METRES FROM THE EAST PIN AND 21.2 METRES FROM THE WATER VALVE IN TANNERY STREET.

NOTES:
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NOT FOR CONSTRUCTION

J. M. RICKETTS 90439581 LICENCE OF ONTARIO

Number	Issue/Revision	Date	Init.
1	DPA/ZBA REVIEW	24/04/19	TR
2	REV. PER CITY APP. COMMENTS	24/07/05	TR

Greystone Engineering

Cambridge
Toronto

Client: NYX TANNERY LP.

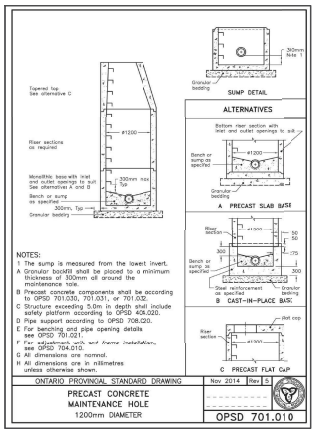
Drawing Title: POST - DRAINAGE PLAN
51 & 57 TANNERY STREET & 208 EMBY DRIVE
(CITY FILE #: OPZR-104636)
RESIDENTIAL DEVELOPMENT
MISSISSAUGA, ON

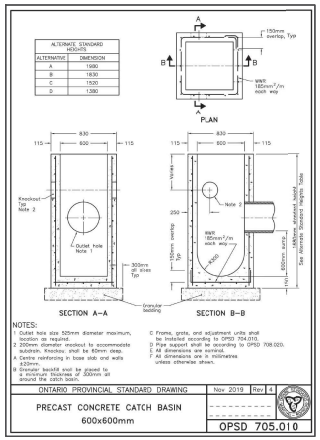
Drawn By: HD	Checked By: TR	Date:	Drawing No.: DR2
Project No.: 23-040	File No.: 23-040	Revision No.:	

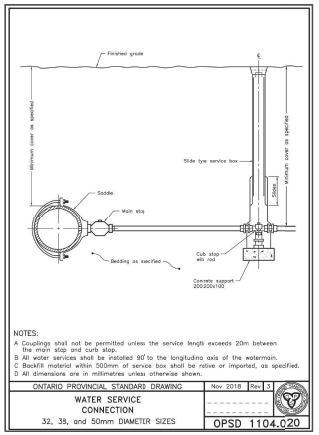
51 Tannery legal description: PT LT 27, PL STR1 , AS IN ST2792 ; MISSISSAUGA

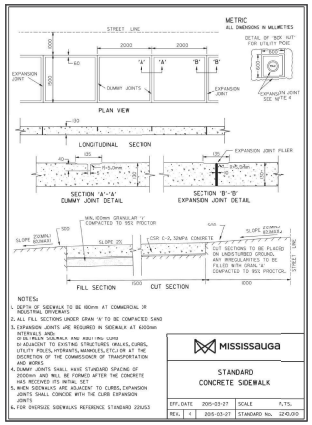
57 Tannery St legal description: PT LT 27, PL STR1 , AS IN RO1078665; CITY OF MISSISSAUGA

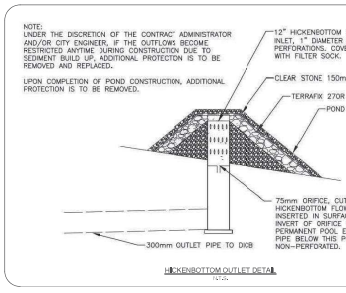
208 Emby Dr legal description: PT LT 4, CON 5 WEST OF HURONTARIO ST TORONTO TWP, AS IN RO423222 ; PT LT 26, PL STR1 , AS IN RO423222 ; S/T ST6812; CITY OF MISSISSAUGA

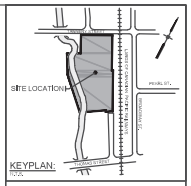


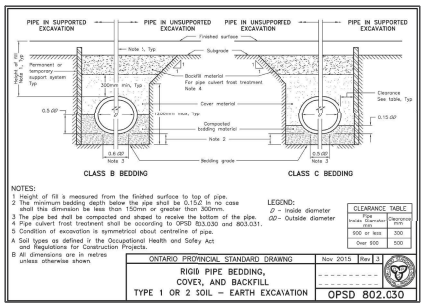


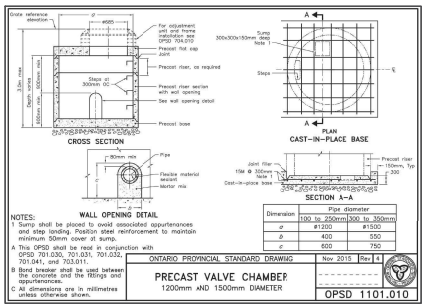


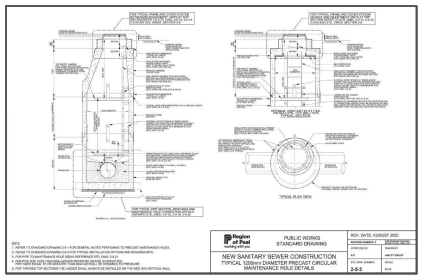


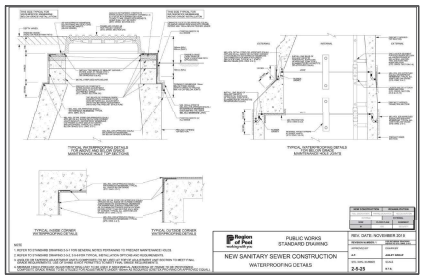


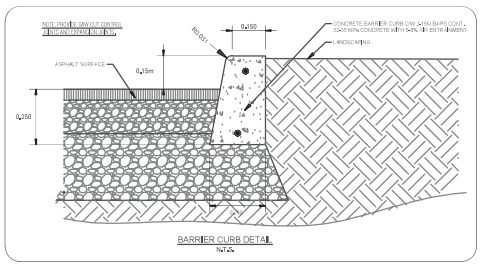


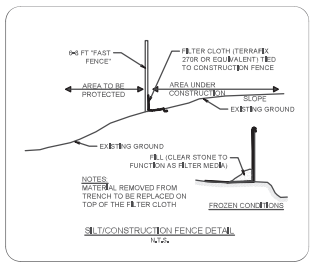


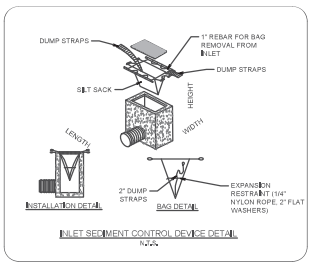


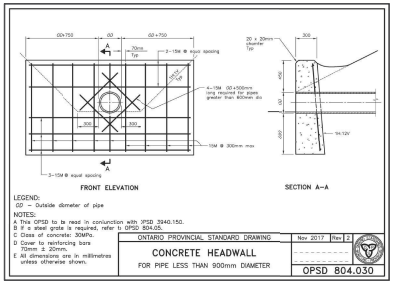


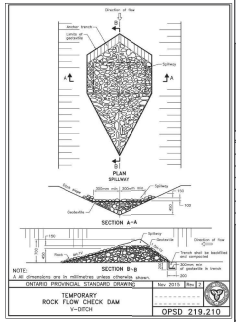


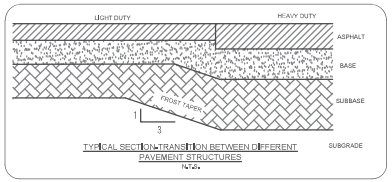


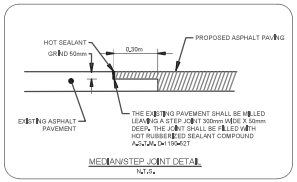


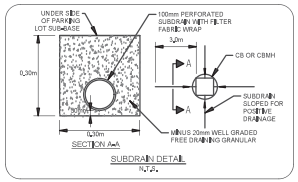


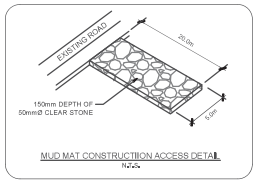












51 Tannery legal description: PT LT 27, PL STR1 , AS IN ST2792 ; MISSISSAUGA

57 Tannery St legal description: PT LT 27, PL STR1 , AS IN RO1078665; CITY OF MISSISSAUGA

208 Emby Dr legal description: PT LT 4, CON 5 WEST OF HURONTARIO ST TORONTO TWP, AS IN RO423322 ; PT LT 26, PL STR1 , AS IN RO423322 ; S/T ST6812; CITY OF MISSISSAUGA

FILED AS PREPARED BY: SRM ATKINSBETTS ING. MARCH 11TH, 2024.
REVISIONS TO SHEET(S) REVISED BY: (BCIN, INITIALS etc.) DATED (DD/MM/YY)
NOTES/LEGEND:
ALL DIMENSIONS ARE REFERRED TO THE CITY OF MISSISSAUGA DATUM.
THE SITE IS LOCATED ON THE NORTHEAST CORNER OF THE KINGSBURY ACADEMY ON THE NE SIDE OF QUEEN STREET, OPPOSITE TANNERY STREET AND 200m NORTH OF QUEEN LANE. IT HAS A PUBLISHED ELEVATION OF 103.240 METRES.
TEMPORARY BENCHMARK: ELEVATION 100.00
CUT GRASS ON THE NORTHWEST SIDE OF A MAINTENANCE HOLE LOCATED ON THE SOUTHWEST SIDE OF QUEEN STREET, 1.5m SOUTHEAST OF THE CENTRELINE OF A DRIVEWAY, 24.4m SOUTHEAST OF THE CENTRELINE OF TANNERY STREET AND 21.2m NORTHEAST OF THE WATER VALVE IN TANNERY STREET.
NOTES:
1. This drawing is the property of Greystone Engineering Inc. The reproduction of any part without prior written consent of the author is prohibited.
2. The contractor shall verify all dimensions in the field and assume all risks and costs associated with any discrepancies before proceeding with the work.
3. This drawing is to be read in conjunction with all other drawings and documents prepared for this project.
NOT FOR CONSTRUCTION

Number	Issue/Revision	Date	Auth.
1	DP/AZBA REVIEW	24/04/19	TR
2	REV. PER CITY APP. COMMENTS	24/07/05	TR

Greystone Engineering
Cambridge
Toronto

Client:
NYX TANNERY LP.

Drawing Title:
DETAIL PLAN
51 & 57 TANNERY STREET & 208 EMBY DRIVE
(CITY FILE #: OPZ-104636)
RESIDENTIAL DEVELOPMENT
MISSISSAUGA, ON

Drawn By	Checked By	Scale	Drawing No.
HD	TR	N.T.S.	D1
Date (yy/mm/dd)	File No.	Revision No.	
23/04/20	23409		

Appendix B
Sanitary Design Information

2. DESIGN FLOWS

Design calculations for sanitary sewer systems shall be completed on Standard Drawing ~~2-5-1~~ **2-9-1** (appended hereto).

2.1. Population Equivalents based on Land Use

Residential

Population equivalent densities are to be calculated based upon the following criteria:

Density	Pop./Hectare
Single family (greater than 10m frontage)	50 persons/hectare
Single family (less than 10m frontage)	70 persons/hectare
Semi-detached	70 persons/hectare
Row dwellings	175 persons/hectare
Apartments	475 persons/hectare

Apartments

If the proposed population equivalent is greater than 475 persons/hectare, based on a rate of 2.7 people per unit (ppu), then the calculated population equivalent shall be used for design.

$$\frac{2.7 \text{ ppu} \times (\#\text{ units})}{\text{area}} = \text{pop/hectare}$$

Standard Drawing ~~2-5-2~~ **2-9-2** (appended hereto) lists domestic sewage flows versus population including a peaking factor.

Industrial

For light industrial areas, use an equivalent population of 70 persons per hectare. Refer to Standard Drawing ~~2-5-2~~ **2-9-2** for sanitary sewage flows. Individual studies are to be made for special industries and major industrial areas.

Population	Peak Flow (m^3/sec)	Population	Peak Flow (m^3/sec)	Population	Peak Flow (m^3/sec)
1000	0.0130	4750	0.0542	13000	0.1292
1050	0.0139	5000	0.0569	14000	0.1376
1100	0.0145	5250	0.0594	15000	0.1459
1150	0.0151	5500	0.0618	16000	0.1540
1200	0.0157	5750	0.0640	17000	0.1620
1300	0.0169	6000	0.0666	18000	0.1700
1400	0.0181	6250	0.0691	19000	0.1779
1500	0.0193	6500	0.0710	20000	0.1857
1600	0.0204	6750	0.0737	25000	0.2236
1700	0.0217	7000	0.0762	30000	0.2601
1800	0.0228	7250	0.0784	35000	0.2955
1900	0.0239	7500	0.0809	40000	0.3298
2000	0.0251	7750	0.0830	45000	0.3634
2200	0.0273	8000	0.0854	50000	0.3963
2400	0.0296	8250	0.0878	55000	0.4286
2600	0.0318	8500	0.0898	60000	0.4603
2800	0.0340	8750	0.0922	65000	0.4915
3000	0.0361	9000	0.0945	70000	0.5224
3250	0.0387	9250	0.0968	75000	0.5528
3500	0.0415	9500	0.0981	80000	0.5828
3750	0.0441	9750	0.1010	85000	0.6126
4000	0.0467	10000	0.1033	90000	0.6420
4250	0.0492	11000	0.1120	95000	0.6711
4500	0.0518	12000	0.1210	100000	0.7000

Notes:
1. Domestic sewage flows are based upon a unit sewage flow of 302.8 Lpcd.
2. The flows in the above table include the Harmon Peaking Factor.
3. Domestic sewage flow for less than 1000 persons shall be 0.013m^3/sec.
4. Domestic sewage flow for greater than 100,000 persons shall be 7.0 x 10^{-6} m^3/sec per capita.
5. Lpcd = Litres per capita per day 1 Litre = 0.001 $metre^3$

Region of Peel
Working for you

Date: June 2005 Rev: 1

Approved:

SEWAGE FLOWS
(EXCLUDING INFILTRATION)

STD. DWG. ~~2-5-2~~
2-9-2

Project Name: 51 + 57 Tannery St, Mississauga
Project Number: 23-904
Date: 18-Apr-24

Design by: T.Ricketts
Title: **PROPOSED SANITARY CALCULATIONS**

Region of Peel Sanitary Design Calculations*

The Region of Peel uses a contibuting flow of 302.8 L/person/day as sanitary flow with a peaking factor dependent on population
Therefore residential flows are equal to: 0.00350463 L/person/s

Total Units = 633

This is an equivalent population of: **1709.10**
This population gives a peaking factor of: 3.64
Proposed Residential peak flows from the site are: **21.79** L/s

Commercial Sanitary Contribution

Commercial area = - m^2
at 180,000 L/floor ha/day (incl. PF)
- L/day
- L/sec

Infiltration

Infiltration allowance = 0.280 L/sec/ha (all areas)
Total site area = 1.420 ha
Infiltration = **0.398** L/sec

Total prop. Infiltration flows from site:
Total Peak Flow = **0.40** L/sec

Total Proposed Sanitary Contribution **22.2 L/sec**

* Calculations completed using Region of Peel Design Criteria - Sanitary Sewers (July 2009)

Residential Data - SRM Architects

Unit Size	# of Units	ppu equiv.*	Total persons
Studio	31	2.7	83.7
1 Bedroom	342	2.7	923.4
2 Bedroom	187	2.7	504.9
3 Bedroom	73	2.7	197.1
Total	633		**1709.1**

* Average 2.7 ppu Region of Peel std

Commercial Data - NOT USED

Location	GFA sq.m	ppu equiv. 1.1p/100 m2	Total persons
P2	0	1.1	0
P1	0	1.1	0
Level 1	0	1.1	0
Level 2	0	1.1	0
Level 4	0	1.1	0
Total	0		**0.0**

Appendix C
Stormwater Management Design Information

Greystone Engineering

Project:	**51 + 57 Tannery**	Prepared by:	**Todd Ricketts**
Task:	**10 yr Post-Development Flowrates**	Checked by:	**Todd Ricketts**
Date:	**18-Apr-24**	Project # :	**23-904**

2-year Post-Dev Flow			IDF Values: City of Mississauga			
A	610					
B	4.6					
C	0.78					
Tc	15.000	minutes				

Land Use Description	Runoff Coefficient	Intensity (mm/hr)	Area (ha)	Runoff (L/s)
Parking Area	0.9	59.89	0.5700	85.3
Landscape	0.25	59.89	0.3800	15.8
Building	0.9	59.89	0.4700	70.4
Total			1.42	**171.5**

$$Q = \frac{CiA}{0.36}$$

= 171.5 L/s

Greystone Engineering

Project:	**51 + 57 Tannery**	Prepared by:	**Todd Ricketts**
Task:	**10 yr Post-Development Flowrates**	Checked by:	**Todd Ricketts**
Date:	**18-Apr-24**	Project # :	**23-904**

5-year Post-Dev Flow			IDF Values: City of Mississauga			
A	820					
B	4.6					
C	0.78					
Tc	15.000	minutes				

Land Use Description	Runoff Coefficient	Intensity (mm/hr)	Area (ha)	Runoff (L/s)
Parking Area	0.9	80.51	0.5700	114.7
Landscape	0.25	80.51	0.3800	21.2
Building	0.9	80.51	0.4700	94.6
Total			1.42	**230.6**

$$Q = \frac{CiA}{0.36}$$

= 230.6 L/s

Greystone Engineering

Project:	**51 + 57 Tannery**	Prepared by:	**Todd Ricketts**
Task:	**10 yr Allowable Release**	Checked by:	**Todd Ricketts**
Date:	**18-Apr-24**	Project # :	**23-904**

10-year Allowable C=0.5 IDF Values: City of Mississauga

A	1010	
B	4.6	
C	0.78	
Tc	15.000	minutes

Land Use Description	Runoff Coefficient	Intensity (mm/hr)	Area (ha)	Runoff (L/s)
Total Site	0.5	99.17	1.4200	195.6
	0.5	99.17	0.0000	0.0
	0.5	99.17	0.0000	0.0
Total			1.420	**195.6**

$$Q = \frac{CiA}{0.36}$$

= 195.6 L/s

Greystone Engineering

Project:	**51 + 57 Tannery**	Prepared by:	**Todd Ricketts**
Task:	**10 yr Post-Development Flowrates**	Checked by:	**Todd Ricketts**
Date:	**18-Apr-24**	Project # :	**23-904**

10-year Post-Dev Flow Proposed			IDF Values: City of Mississauga			
A	1010					
B	4.6					
C	0.78					
Tc	15.000	minutes				

Land Use Description	Runoff Coefficient	Intensity (mm/hr)	Area (ha)	Runoff (L/s)
Parking Area	0.9	99.17	0.5700	141.3
Landscape	0.25	99.17	0.3800	26.2
Building	0.9	99.17	0.4700	116.5
Total			1.42	**284.0**

$$Q = \frac{CiA}{0.36}$$

= 284 L/s

Greystone Engineering

Project:	**51 + 57 Tannery**	Prepared by:	**Todd Ricketts**
Task:	**25 yr Post-Development Flowrates**	Checked by:	**Todd Ricketts**
Date:	**18-Apr-24**	Project # :	**23-904**

25 year Post-Dev Flow Proposed			IDF Values: City of Mississauga
A	1160		
B	4.6		
C	0.78		
Tc	15.000	minutes	Note Runoff Coefficient factor of 1.1 applied - max C=1.0

Land Use Description	Runoff Coefficient	Intensity (mm/hr)	Area (ha)	Runoff (L/s)
Parking Area	0.99	113.89	0.5700	178.5
Landscape	0.275	113.89	0.3800	33.1
Building	0.99	113.89	0.4700	147.2
Total			1.420	**358.8**

$$Q = \frac{CiA}{0.36}$$

= 358.8 L/s

Greystone Engineering

Project:	**51 + 57 Tannery**	Prepared by:	**Todd Ricketts**
Task:	**50 yr Post-Development Flowrates**	Checked by:	**Todd Ricketts**
Date:	**18-Apr-24**	Project # :	**23-904**

50-year Post-Dev Flow Proposed			IDF Values: City of Mississauga
A	1300		
B	4.7		
C	0.78		
Tc	15.000	minutes	Note Runoff Coefficient factor of 1.2 applied - max C=1.0

Land Use Description	Runoff Coefficient	Intensity (mm/hr)	Area (ha)	Runoff (L/s)
Parking Area	1	127.13	0.5700	201.3
Landscape	0.3	127.13	0.3800	40.3
Building	1	127.13	0.4700	166.0
Total			1.420	**407.5**

$$Q = \frac{CiA}{0.36}$$

= 407.5 L/s

Greystone Engineering

Project:	**51 + 57 Tannery**	Prepared by:	**Todd Ricketts**
Task:	**100 yr Post-Dev Flowrates - Proposed**	Checked by:	**Todd Ricketts**
Date:	**18-Apr-24**	Project # :	**23-904**

100-year Post Dev Flow Proposed			IDF Values: City of Mississauga			
A	1450					
B	4.9					
C	0.78					
Tc	15.000	minutes	Note Runoff Coefficient factor of 1.25 applied - max C=1.0			

Land Use Description	Runoff Coefficient	Intensity (mm/hr)	Area (ha)	Runoff (L/s)
Parking Area	1	140.69	0.5700	222.8
Landscape	0.32	140.69	0.3800	47.5
Building	1	140.69	0.4700	183.7
Total			1.420	**454.0**

$$Q = \frac{CiA}{0.36}$$

= 454 L/s

Greystone Engineering

Project:	**51 + 57 Tannery**	Prepared by:	**Todd Ricketts**
Task	**On-site Storage**	Checked by:	**Todd Ricketts**
Date:	**18-Apr-24**	Project no.:	**23-904**

10 - YR Design Storm
Mississauga

A=	1010
B=	4.6
C=	0.78

Total Site Rainfall (10 Year)

	Site
Runoff Coeff. (C):	0.726
Drainage Area (ha):	1.4200
Control Flow (m3/s)	0.196

TIME minutes	I mm/HR	Inflow CIA/360 cms	Storage Rate cms	Max Stor Reqd (cu.m.)	
15.00	99.17	0.284	0.088	79.6	max
20.00	83.06	0.238	0.042	50.8	
25.00	71.90	0.206	0.010	15.5	
30.00	63.66	0.182	0.000	0.0	
35.00	57.30	0.164	0.000	0.0	
40.00	52.22	0.150	0.000	0.0	
45.00	48.07	0.138	0.000	0.0	
50.00	44.60	0.128	0.000	0.0	
55.00	41.65	0.119	0.000	0.0	
60.00	39.11	0.112	0.000	0.0	
65.00	36.91	0.106	0.000	0.0	
70.00	34.96	0.100	0.000	0.0	
75.00	33.24	0.095	0.000	0.0	
80.00	31.69	0.091	0.000	0.0	
85.00	30.31	0.087	0.000	0.0	
90.00	29.05	0.083	0.000	0.0	
95.00	27.90	0.080	0.000	0.0	
100.00	26.86	0.077	0.000	0.0	
105.00	25.90	0.074	0.000	0.0	
110.00	25.01	0.072	0.000	0.0	
115.00	24.19	0.069	0.000	0.0	
120.00	23.43	0.067	0.000	0.0	
125.00	22.72	0.065	0.000	0.0	

Greystone Engineering

Project:	**51 + 57 Tannery**	Prepared by:	**Todd Ricketts**
Task	**On-site Storage**	Checked by:	**Todd Ricketts**
Date:	**18-Apr-24**	Project no.:	**23-904**

25 - YR Design Storm
Mississauga

A= 1160
B= 4.6
C= 0.78

Note Runoff Coefficient factor of 1.1 applied - max C=1.0

		Site
Total Site Rainfall (25 Year)	Runoff Coeff. (C):	0.799
	Drainage Area (ha):	1.4200
	Control Flow (m3/s)	0.196

TIME minutes	I mm/HR	Inflow CIA/360 cms	Storage Rate cms	Max Stor Reqd (cu.m.)	
15.00	113.89	0.359	0.163	146.9	max
20.00	95.40	0.301	0.105	125.9	
25.00	82.58	0.260	0.065	96.8	
30.00	73.11	0.230	0.035	62.5	
35.00	65.80	0.207	0.012	24.6	
40.00	59.98	0.189	0.000	0.0	
45.00	55.21	0.174	0.000	0.0	
50.00	51.22	0.161	0.000	0.0	
55.00	47.84	0.151	0.000	0.0	
60.00	44.92	0.142	0.000	0.0	
65.00	42.39	0.134	0.000	0.0	
70.00	40.15	0.126	0.000	0.0	
75.00	38.17	0.120	0.000	0.0	
80.00	36.40	0.115	0.000	0.0	
85.00	34.81	0.110	0.000	0.0	
90.00	33.36	0.105	0.000	0.0	
95.00	32.05	0.101	0.000	0.0	
100.00	30.85	0.097	0.000	0.0	
105.00	29.74	0.094	0.000	0.0	
110.00	28.73	0.090	0.000	0.0	
115.00	27.79	0.088	0.000	0.0	
120.00	26.91	0.085	0.000	0.0	
125.00	26.10	0.082	0.000	0.0	

Greystone Engineering

Project:	**51 + 57 Tannery**	Prepared by:	**Todd Ricketts**
Task	**On-site Storage**	Checked by:	**Todd Ricketts**
Date:	**18-Apr-24**	Project no.:	**23-904**

50 - YR Design Storm
Mississauga

A= 1300
B= 4.7
C= 0.78

Note Runoff Coefficient factor of 1.2 applied - max C=1.0

		Site
Total Site Rainfall (50 Year)	Runoff Coeff. (C):	0.813
	Drainage Area (ha):	1.4200
	Control Flow (m3/s)	0.196

TIME minutes	I mm/HR	Inflow CIA/360 cms	Storage Rate cms	Max Stor Reqd (cu.m.)	
15.00	127.13	0.408	0.212	190.8	max
20.00	106.57	0.342	0.146	175.3	
25.00	92.30	0.296	0.100	150.4	
30.00	81.75	0.262	0.066	119.7	
35.00	73.60	0.236	0.040	84.7	
40.00	67.10	0.215	0.020	46.8	
45.00	61.77	0.198	0.002	6.6	
50.00	57.32	0.184	0.000	0.0	
55.00	53.54	0.172	0.000	0.0	
60.00	50.28	0.161	0.000	0.0	
65.00	47.45	0.152	0.000	0.0	
70.00	44.95	0.144	0.000	0.0	
75.00	42.74	0.137	0.000	0.0	
80.00	40.76	0.131	0.000	0.0	
85.00	38.97	0.125	0.000	0.0	
90.00	37.36	0.120	0.000	0.0	
95.00	35.89	0.115	0.000	0.0	
100.00	34.54	0.111	0.000	0.0	
105.00	33.31	0.107	0.000	0.0	
110.00	32.17	0.103	0.000	0.0	
115.00	31.12	0.100	0.000	0.0	
120.00	30.14	0.097	0.000	0.0	
125.00	29.23	0.094	0.000	0.0	

Greystone Engineering

Project:	**51 + 57 Tannery**	Prepared by:	**Todd Ricketts**
Task	**On-site Storage**	Checked by:	**Todd Ricketts**
Date:	**18-Apr-24**	Project no.:	**23-904**

100 - YR Design Storm
Mississauga

A= 1450
B= 4.9
C= 0.78

Note Runoff Coefficient factor of 1.25 applied - max C=1.0

		Site
Total Site Rainfall (100 Year)	Runoff Coeff. (C):	0.818
	Drainage Area (ha):	1.4200
	Control Flow (m3/s)	0.196

TIME minutes	I mm/HR	Inflow CIA/360 cms	Storage Rate cms	Max Stor Reqd (cu.m.)	
15.00	140.69	0.454	0.258	232.5	max
20.00	118.12	0.381	0.186	222.7	
25.00	102.41	0.330	0.135	202.3	
30.00	90.77	0.293	0.097	175.2	
35.00	81.77	0.264	0.068	143.4	
40.00	74.58	0.241	0.045	108.2	
45.00	68.68	0.222	0.026	70.3	
50.00	63.75	0.206	0.010	30.4	
55.00	59.56	0.192	0.000	0.0	
60.00	55.95	0.181	0.000	0.0	
65.00	52.81	0.170	0.000	0.0	
70.00	50.03	0.161	0.000	0.0	
75.00	47.58	0.154	0.000	0.0	
80.00	45.38	0.146	0.000	0.0	
85.00	43.39	0.140	0.000	0.0	
90.00	41.60	0.134	0.000	0.0	
95.00	39.97	0.129	0.000	0.0	
100.00	38.47	0.124	0.000	0.0	
105.00	37.10	0.120	0.000	0.0	
110.00	35.84	0.116	0.000	0.0	
115.00	34.66	0.112	0.000	0.0	
120.00	33.58	0.108	0.000	0.0	
125.00	32.57	0.105	0.000	0.0	

Greystone Engineering

Project:	**51 + 57 Tannery**	Prepared by:	**Todd Ricketts**
Task	**On-site Storage**	Checked by:	**Todd Ricketts**
Date:	**18-Apr-24**	Project no.:	**23-904**

2 - YR Design Storm
Mississauga

A= 610
B= 4.6
C= 0.78

Total Site
Rainfall (2 Year)

	Site
Runoff Coeff. (C):	0.726
Drainage Area (ha):	1.4200
Control Flow (m3/s)	0.196

TIME minutes	I mm/HR	Inflow CIA/360 cms	Storage Rate cms	Max Stor Reqd (cu.m.)	
15.00	59.89	0.172	0.000	0.0	max
20.00	50.16	0.144	0.000	0.0	max
25.00	43.42	0.124	0.000	0.0	max
30.00	38.45	0.110	0.000	0.0	max
35.00	34.60	0.099	0.000	0.0	max
40.00	31.54	0.090	0.000	0.0	max
45.00	29.03	0.083	0.000	0.0	max
50.00	26.94	0.077	0.000	0.0	max
55.00	25.16	0.072	0.000	0.0	max
60.00	23.62	0.068	0.000	0.0	max
65.00	22.29	0.064	0.000	0.0	max
70.00	21.12	0.060	0.000	0.0	max
75.00	20.07	0.057	0.000	0.0	max
80.00	19.14	0.055	0.000	0.0	max
85.00	18.30	0.052	0.000	0.0	max
90.00	17.54	0.050	0.000	0.0	max
95.00	16.85	0.048	0.000	0.0	max
100.00	16.22	0.046	0.000	0.0	max
105.00	15.64	0.045	0.000	0.0	max
110.00	15.11	0.043	0.000	0.0	max
115.00	14.61	0.042	0.000	0.0	max
120.00	14.15	0.041	0.000	0.0	max
125.00	13.72	0.039	0.000	0.0	max

Greystone Engineering

Project:	**51 + 57 Tannery**	Prepared by:	**Todd Ricketts**
Task	**On-site Storage**	Checked by:	**Todd Ricketts**
Date:	**18-Apr-24**	Project no.:	**23-904**

5 - YR Design Storm
Mississauga

A=	820
B=	4.6
C=	0.78

Total Site Rainfall (5 Year)

	Site
Runoff Coeff. (C):	0.726
Drainage Area (ha):	1.4200
Control Flow (m3/s)	0.196

TIME minutes	I mm/HR	Inflow CIA/360 cms	Storage Rate cms	Max Stor Reqd (cu.m.)	
15.00	80.51	0.231	0.035	31.5	max
20.00	67.43	0.193	0.000	0.0	
25.00	58.37	0.167	0.000	0.0	
30.00	51.68	0.148	0.000	0.0	
35.00	46.52	0.133	0.000	0.0	
40.00	42.40	0.121	0.000	0.0	
45.00	39.02	0.112	0.000	0.0	
50.00	36.21	0.104	0.000	0.0	
55.00	33.82	0.097	0.000	0.0	
60.00	31.76	0.091	0.000	0.0	
65.00	29.96	0.086	0.000	0.0	
70.00	28.38	0.081	0.000	0.0	
75.00	26.98	0.077	0.000	0.0	
80.00	25.73	0.074	0.000	0.0	
85.00	24.60	0.070	0.000	0.0	
90.00	23.58	0.068	0.000	0.0	
95.00	22.66	0.065	0.000	0.0	
100.00	21.81	0.062	0.000	0.0	
105.00	21.03	0.060	0.000	0.0	
110.00	20.31	0.058	0.000	0.0	
115.00	19.64	0.056	0.000	0.0	
120.00	19.02	0.054	0.000	0.0	
125.00	18.45	0.053	0.000	0.0	

```
2     Metric units
*#*********************************************************************
*******
*#  Project Name: [Tannery]    Project Number: [23-904]
*#  Date        : July 2024
*#  Modeller    : [T. Ricketts, P.Eng.]
*#  Company     : Greystone Engineering Inc
*#  License #   : 4842139
*#
*#  Modeling proposed development conditions Regional Storm
*#
*#*********************************************************************
*******
*#*********************************************************************
*******
START               TZERO=[0.0],  METOUT=[2],  NSTORM=[1],  NRUN=[1]
                    ["C:\SWM\Tannery\Hazel.stm"] <--storm filename
*%-----------------|-----------------------------------------------------
------|
READ STORM          STORM_FILENAME=["STORM.001"]
*%-----------------|-----------------------------------------------------
------|
*#*********************************************************************
*******
*#  Catchment 201 - To vault
*#*********************************************************************
*******
DESIGN STANDHYD     ID=[1], NHYD=["201"], DT=[15]min, AREA=[1.42](ha),
                    XIMP=[0.82], TIMP=[0.82], DWF=[0.0](cms), LOSS=[2],
CN=[74],
                    SLOPE=[2](%), RAINFALL=[ , , , , ](mm/hr), END=-1
*%-----------------|-----------------------------------------------------
------|
*%-----------------|-----------------------------------------------------
------|
ROUTE RESERVOIR     IDout=[2],   NHYD=["SWM VAULT"],  IDin=[1],
                    RDT=[ 15 ](min),
                          TABLE of ( OUTFLOW-STORAGE ) values
                                     (cms) - (ha-m)
                                   [   0.0 ,  0.0 ]
                                   [ 0.196 , 0.0089 ]
                                   [ 0.196 , 0.0250 ]
                                   [   -1  ,  -1  ]  (max twenty pts)
                          IDovf=[3], NHYDovf=["OV-S1"]
*#-----------------|-----------------------------------------------------
------|
*%-----------------|-----------------------------------------------------
------|
FINISH
```

```
================================================================================
========================

 SSSSS   W   W   M   M   H   H   Y   Y   M   M    OOO          222
000    11   5555   =========
 S       W W W   MM MM   H   H    Y Y    MM MM   O   O           2    0
0   11   5
 SSSSS   W W W   M M M   HHHHH     Y     M M M   O   O           2    0
0   11   5      Ver 5.500
     S    W W    M   M   H   H     Y     M   M   O   O        222     0
0   11   555    FEB  2015
 SSSSS    W W    M   M   H   H     Y     M   M    OOO         2       0
0   11      5   =========
                                                              2       0
0   11      5   # 4842139
       StormWater Management HYdrologic Model                  222
000    11   555    =========


********************************************************************************
************************
 ************************************  SWMHYMO Ver 5.500
****************************************
 ******************  A single event and continuous hydrologic simulation
model  ******************
 ******************     based on the principles of HYMO and its
successors      ******************
 ******************                 OTTHYMO-83 and OTTHYMO-89.
******************

********************************************************************************
************************
 ****************** Distributed by:  J.F. Sabourin and Associates Inc.
******************
 ******************                  Ottawa,  Ontario: (613) 836-3884
******************
 ******************                  Gatineau, Quebec: (819) 243-6858
******************
 ******************                  E-Mail: swmhymo@jfsa.Com
******************

********************************************************************************
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++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++++++++++++++++++++++++
 ++++++++++++++++++ Licensed user: Greystone Engineering Inc.]
++++++++++++++++++
 ++++++++++++++++++               Pickering            SERIAL#:4842139
++++++++++++++++++
```

```
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++++++++++++++++++++++++

********************************************************************************
************************
 ******************           ++++++ PROGRAM ARRAY DIMENSIONS ++++++
******************
 ******************           Maximum value for ID numbers  :     11
******************
 ******************           Max. number of rainfall points: 105408
******************
 ******************           Max. number of flow points    : 105408
******************

********************************************************************************
************************

 *******************************   D E T A I L E D   O U T P U T
*******************************

********************************************************************************
************************
 *                  RUN DATE: 2024-07-04     TIME: 15:34:18     RUN
COUNTER: 000030                *

********************************************************************************
************************
 * Input   file: C:\SWM\Tannery\TanneryREG1.dat
*
 * Output  file: C:\SWM\Tannery\TanneryREG1.out
*
 * Summary file: C:\SWM\Tannery\TanneryREG1.sum
*
 * User comments:
*
 *
1:_____________________________________________________________________________
_____________________*
 *
2:_____________________________________________________________________________
_____________________*
 *
3:_____________________________________________________________________________
_____________________*

********************************************************************************
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--------------------------------------------------------------------------------
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```

```
R0001:C00001-------------------------------------------------------------------
--------------------------
*#####################################################################
*******
*#  Project Name: [Tannery]    Project Number: [23-904]
*#  Date        : July 2024
*#  Modeller    : [T. Ricketts, P.Eng.]
*#  Company     : Greystone Engineering Inc
*#  License #   : 4842139
*#
*#  Modeling proposed development conditions Regional Storm
*#
*#####################################################################
*******
*#####################################################################
*******
--------------------
| START            | Project  dir.:C:\SWM\Tannery\
-------------------- Rainfall dir.:C:\SWM\Tannery\
    TZERO =   .00 hrs on        0
    METOUT=   2 (output = METRIC)
    NRUN  = 0001
    NSTORM=   1
           #  1=C:\SWM\Tannery\Hazel.stm
-------------------------------------------------------------------------------
--------------------------
R0001:C00002-------------------------------------------------------------------
--------------------------
--------------------
| READ STORM       |  Filename: C:\SWM\Tannery\Hazel.stm
| Ptotal= 285.08 mm|  Comments: Hurricane Hazel
--------------------
      TIME    RAIN|   TIME    RAIN|   TIME    RAIN|   TIME    RAIN|
TIME    RAIN|   TIME    RAIN
     hh:mm   mm/hr|  hh:mm   mm/hr|  hh:mm   mm/hr|  hh:mm   mm/hr|
hh:mm   mm/hr|  hh:mm   mm/hr
      1:00   2.030|   9:00   2.030|  17:00   2.030|  25:00   2.030|
33:00   2.030|  41:00  17.000
      2:00   2.030|  10:00   2.030|  18:00   2.030|  26:00   2.030|
34:00   2.030|  42:00  13.000
      3:00   2.030|  11:00   2.030|  19:00   2.030|  27:00   2.030|
35:00   2.030|  43:00  23.000
      4:00   2.030|  12:00   2.030|  20:00   2.030|  28:00   2.030|
36:00   2.030|  44:00  13.000
      5:00   2.030|  13:00   2.030|  21:00   2.030|  29:00   2.030|
37:00   6.000|  45:00  13.000
      6:00   2.030|  14:00   2.030|  22:00   2.030|  30:00   2.030|
38:00   4.000|  46:00  53.000
      7:00   2.030|  15:00   2.030|  23:00   2.030|  31:00   2.030|
39:00   6.000|  47:00  38.000
      8:00   2.030|  16:00   2.030|  24:00   2.030|  32:00   2.030|
40:00  13.000|  48:00  13.000
```

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--------------------------------------------------------------------------
--------------------------
R0001:C00003-------------------------------------------------------------
--------------------------
*#########################################################################
*******
*#  Catchment 201 - To vault
*#########################################################################
*******
--------------------------
| DESIGN STANDHYD        |   Area    (ha)=    1.42
| 01:201        DT=15.00 |   Total Imp(%)=   82.00   Dir. Conn.(%)=
82.00
--------------------------
                             IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       1.16          .26
     Dep. Storage     (mm)=        .80         1.50
     Average Slope     (%)=       2.00         2.00
     Length            (m)=      97.30        40.00
     Mannings n           =       .013         .250

     Max.eff.Inten.(mm/hr)=      53.00        48.75
               over (min)        15.00        15.00
     Storage Coeff.  (min)=       2.63 (ii)   12.04 (ii)
     Unit Hyd. Tpeak (min)=      15.00        15.00
     Unit Hyd. peak  (cms)=        .11          .08
                                                        *TOTALS*
     PEAK FLOW       (cms)=        .17          .03          .206 (iii)
     TIME TO PEAK    (hrs)=      45.75        46.00         46.000
     RUNOFF VOLUME    (mm)=     284.28       215.69        271.934
     TOTAL RAINFALL   (mm)=     285.08       285.08        285.080
     RUNOFF COEFFICIENT   =       1.00          .76           .954
*** WARNING: Storage Coefficient is smaller than DT! Use a smaller DT or
a larger area.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN* =  74.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE
COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------
--------------------------
R0001:C00004-------------------------------------------------------------
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------------------------
|  ROUTE RESERVOIR -> |    Requested routing time step = 15.0 min.
|  IN>01:201          |
| OUT<02:SWM VAULT    | ========================  OUTLFOW STORAGE TABLE
========================
---------------------- OUTFLOW   STORAGE| OUTFLOW   STORAGE| OUTFLOW
STORAGE| OUTFLOW   STORAGE
                        (cms)    (ha.m.)|   (cms)    (ha.m.)|   (cms)
(ha.m.)|   (cms)    (ha.m.)
```

```
                          .000 .0000E+00|    .196 .8900E-02|    .196
.2500E-01|    .000 .0000E+00

     ROUTING RESULTS             AREA     QPEAK     TPEAK       R.V.
     ----------------------      (ha)     (cms)     (hrs)       (mm)
     INFLOW > 01:201            1.420      .206    46.000    271.934
    OUTFLOW < 02:SWM VAULT      1.420      .196    45.500    271.934
   OVERFLOW < 03:OV-S1           .000      .000      .000       .000

                    TOTAL NUMBER OF SIMULATED OVERFLOWS  =        0
                    CUMULATIVE TIME OF OVERFLOWS  (hours)=      .00
                    PERCENTAGE OF TIME OVERFLOWING    (%)=      .00


                    PEAK   FLOW   REDUCTION [Qout/Qin](%)=   95.260
                    TIME SHIFT OF PEAK FLOW         (min)=   -30.00
                    MAXIMUM  STORAGE   USED       (ha.m.)=.1127E-01

--------------------------------------------------------------------------
--------------------------
R0001:C00005-------------------------------------------------------------
--------------------------
*#-----------------|-----------------------------------------------------
------|
--------------------
| FINISH           |
--------------------
--------------------------------------------------------------------------
--------------------------
**************************************************************************
*************************
     WARNINGS / ERRORS / NOTES
     -------------------------
R0001:C00003  DESIGN STANDHYD
*** WARNING: Storage Coefficient is smaller than DT! Use a smaller DT or
a larger area.
   Simulation ended on 2024-07-04     at 15:34:18
==========================================================================
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Stormceptor®

Rinker MATERIALS® A QUIKRETE® COMPANY

Imbrium® OGS Net Annual Sediment Load Reduction Sizing Tool

Project Summary Site Details Sizing Result

< Back Cancel Save Sizing Report

Project Name: 51 + 57 Tannery **Site Name:** 51 + 57 Tannery **Location:** Mississauga / ON

Site has been saved successfully.

Download Stormceptor Specifications & Drawings

Download Stormceptor EFO Sizing Report

Design Summary

Net Annual Sediment (TSS) Load Reduction Sizing Summary

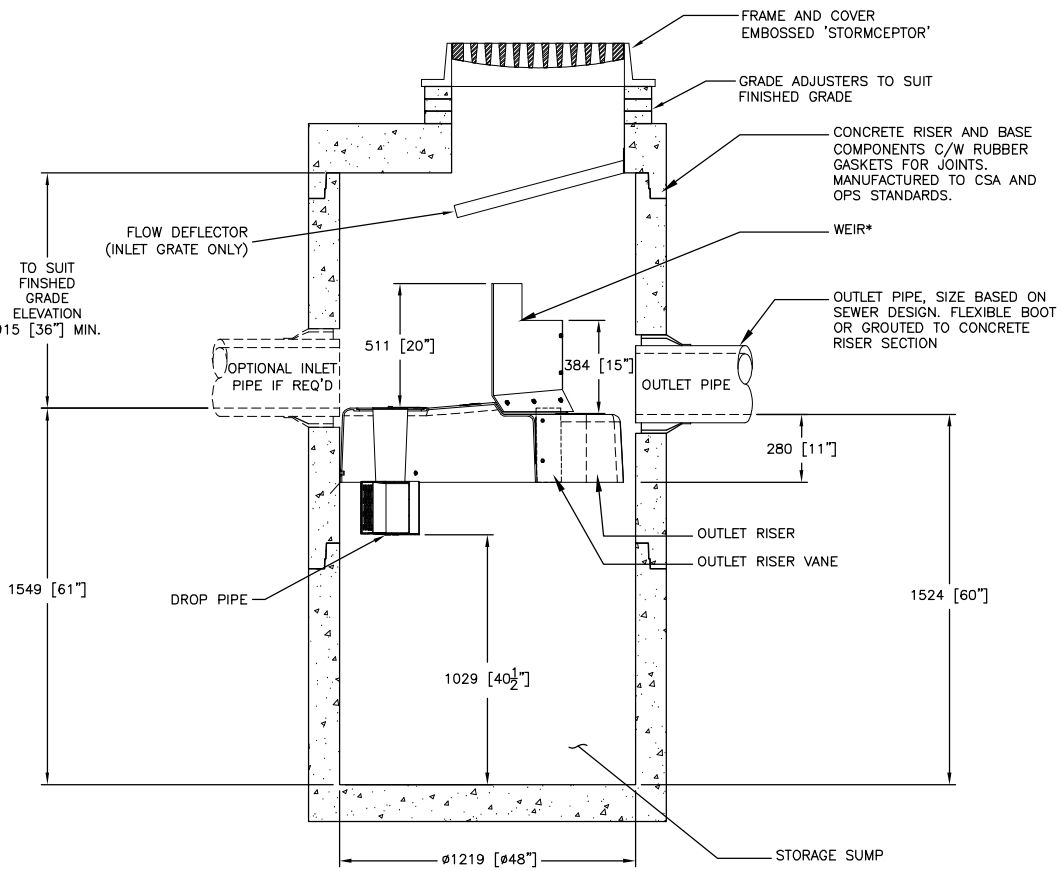
Stormceptor Model	TSS Removal Provided (%)
EFO4	92
EFO6	99
EFO8	100
EFO10	100
EFO12	100

Recommended Stormceptor EFO Model: EFO4

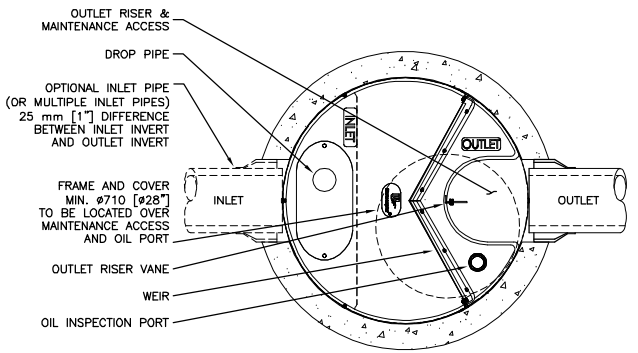
Estimated Net Annual Sediment (TSS) Load Reduction (%): 92

Water Quality Runoff Volume Capture (%): > 90

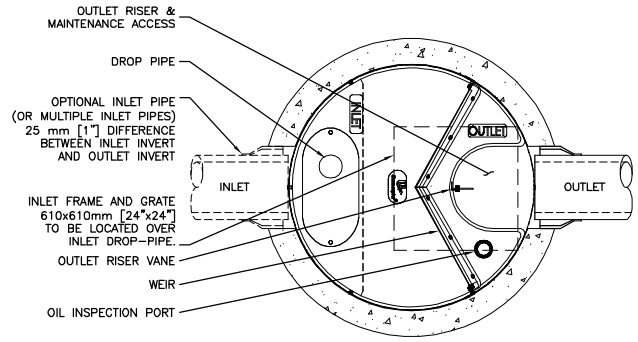
Rainfall Intensity (mm/hr)	Percent Rainfall Volume	Cumulative Rainfall Volume	Flow Rate (L/s)	Flow Rate (L/min)	Surface Loading Rate (L/min/m²)	Removal Efficiency (%)	Incremental Removal (%)	Cumulative Removal (%)
0.5	8.5%	8.5%	1.48	88.8	74.0	100	8.5	8.5
1	20.6%	29.1%	2.96	177.6	148.0	100	20.6	29.1
2	16.8%	45.9%	5.92	355.3	296.1	100	16.8	45.9
3	10.8%	56.7%	8.88	532.9	444.1	100	10.8	56.7
4	8.5%	65.2%	11.84	710.6	592.1	100	8.5	65.2
5	6.4%	71.6%	14.80	888.2	740.2	100	6.4	71.6
6	5.5%	77.0%	17.76	1065.9	888.2	100	5.5	77.0
7	3.9%	81.0%	20.72	1243.5	1036.2	98	3.9	80.9
8	2.9%	83.9%	23.69	1421.1	1184.3	88	2.6	83.4
9	2.7%	86.5%	26.65	1598.8	1332.3	79	2.1	85.5
10	2.2%	88.7%	29.61	1776.4	1480.4	70	1.5	87.1
11	1.0%	89.7%	32.57	1954.1	1628.4	64	0.6	87.7
12	1.7%	91.3%	35.53	2131.7	1776.4	59	1.0	88.7
13	1.4%	92.8%	38.49	2309.3	1924.5	54	0.8	89.4
14	1.0%	93.7%	41.45	2487.0	2072.5	50	0.5	89.9
15	0.3%	94.0%	44.41	2664.6	2220.5	47	0.1	90.1
16	0.8%	94.8%	47.37	2842.3	2368.6	44	0.3	90.4
17	0.8%	95.7%	50.33	3019.9	2516.6	41	0.3	90.7
18	0.2%	95.8%	53.29	3197.6	2664.6	40	0.1	90.8
19	1.5%	97.3%	56.25	3375.2	2812.7	37	0.6	91.4
20	0.2%	97.5%	59.21	3552.8	2960.7	36	0.1	91.4
21	0.6%	98.2%	62.17	3730.5	3108.7	33	0.2	91.6
22	0.0%	98.2%	65.14	3908.1	3256.8	32	0.0	91.6
23	0.2%	98.4%	68.10	4085.8	3404.8	30	0.1	91.7
24	0.2%	98.6%	71.06	4263.4	3552.8	30	0.1	91.8
25	0.2%	98.9%	74.02	4441.1	3700.9	28	0.1	91.9
30	1.1%	100.0%	88.82	5329.3	4441.1	24	0.3	92.1
35	0.0%	100.0%	103.62	6217.5	5181.2	20	0.0	92.1
40	0.0%	100.0%	118.43	7105.7	5921.4	18	0.0	92.1
45	0.0%	100.0%	133.23	7993.9	6661.6	16	0.0	92.1



SECTION VIEW



PLAN VIEW (STANDARD)



PLAN VIEW (INLET TOP)

FOR SITE SPECIFIC DRAWINGS PLEASE CONTACT YOUR LOCAL STORMCEPTOR REPRESENTATIVE. SITE SPECIFIC DRAWINGS ARE BASED ON THE BEST AVAILABLE INFORMATION AT THE TIME. SOME FIELD REVISIONS TO THE SYSTEM LOCATION OR CONNECTION PIPING MAY BE NECESSARY BASED ON AVAILABLE SPACE OR SITE CONFIGURATION REVISIONS. ELEVATIONS SHOULD BE MAINTAINED EXCEPT WHERE NOTED ON BYPASS STRUCTURE (IF REQUIRED).

GENERAL NOTES:

* MAXIMUM SURFACE LOADING RATE (SLR) INTO LOWER CHAMBER THROUGH DROP PIPE IS 1135 L/min/m^2 (27.9 gpm/ft^2) FOR STORMCEPTOR EF4 AND 535 L/min/m^2 (13.1 gpm/ft^2) FOR STORMCEPTOR EFO4 (OIL CAPTURE CONFIGURATION). WEIR HEIGHT IS 150 mm (6 INCH) FOR EF04.

1. ALL DIMENSIONS INDICATED ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SPECIFIED.
2. STORMCEPTOR STRUCTURE INLET AND OUTLET PIPE SIZE AND ORIENTATION SHOWN FOR INFORMATIONAL PURPOSES ONLY.
3. UNLESS OTHERWISE NOTED, BYPASS INFRASTRUCTURE, SUCH AS ALL UPSTREAM DIVERSION STRUCTURES, CONNECTING STRUCTURES, OR PIPE CONDUITS CONNECTING TO COMPLETE THE STORMCEPTOR SYSTEM SHALL BE PROVIDED AND ADDRESSED SEPARATELY.
4. DRAWING FOR INFORMATION PURPOSES ONLY. REFER TO ENGINEER'S SITE/UTILITY PLAN FOR STRUCTURE ORIENTATION.
5. NO PRODUCT SUBSTITUTIONS SHALL BE ACCEPTED UNLESS SUBMITTED 10 DAYS PRIOR TO PROJECT BID DATE, OR AS DIRECTED BY THE ENGINEER OF RECORD.

INSTALLATION NOTES

A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STRUCTURE (LIFTING CLUTCHES PROVIDED)
C. CONTRACTOR WILL INSTALL AND LEVEL THE STRUCTURE, SEALING THE JOINTS, LINE ENTRY AND EXIT POINTS (NON-SHRINK GROUT WITH APPROVED WATERSTOP OR FLEXIBLE BOOT)
D. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT THE DEVICE FROM CONSTRUCTION-RELATED EROSION RUNOFF.
E. DEVICE ACTIVATION, BY CONTRACTOR, SHALL OCCUR ONLY AFTER SITE HAS BEEN STABILIZED AND THE STORMCEPTOR UNIT IS CLEAN AND FREE OF DEBRIS.

STANDARD DETAIL
NOT FOR CONSTRUCTION

SITE SPECIFIC DATA REQUIREMENTS

STORMCEPTOR MODEL	EF4				
STRUCTURE ID					*
WATER QUALITY FLOW RATE (L/s)					*
PEAK FLOW RATE (L/s)					*
RETURN PERIOD OF PEAK FLOW (yrs)					*
DRAINAGE AREA (HA)					*
DRAINAGE AREA IMPERVIOUSNESS (%)					*
PIPE DATA:	I.E.	MAT'L	DIA	SLOPE %	HGL
INLET #1	*	*	*	*	*
INLET #2	*	*	*	*	*
OUTLET	*	*	*	*	*

* PER ENGINEER OF RECORD

MARK	DATE	REVISION DESCRIPTION	BY
1	6/8/18	UPDATES	JSK
0	5/29/17	INITIAL RELEASE	JSK

Stormceptor® EF

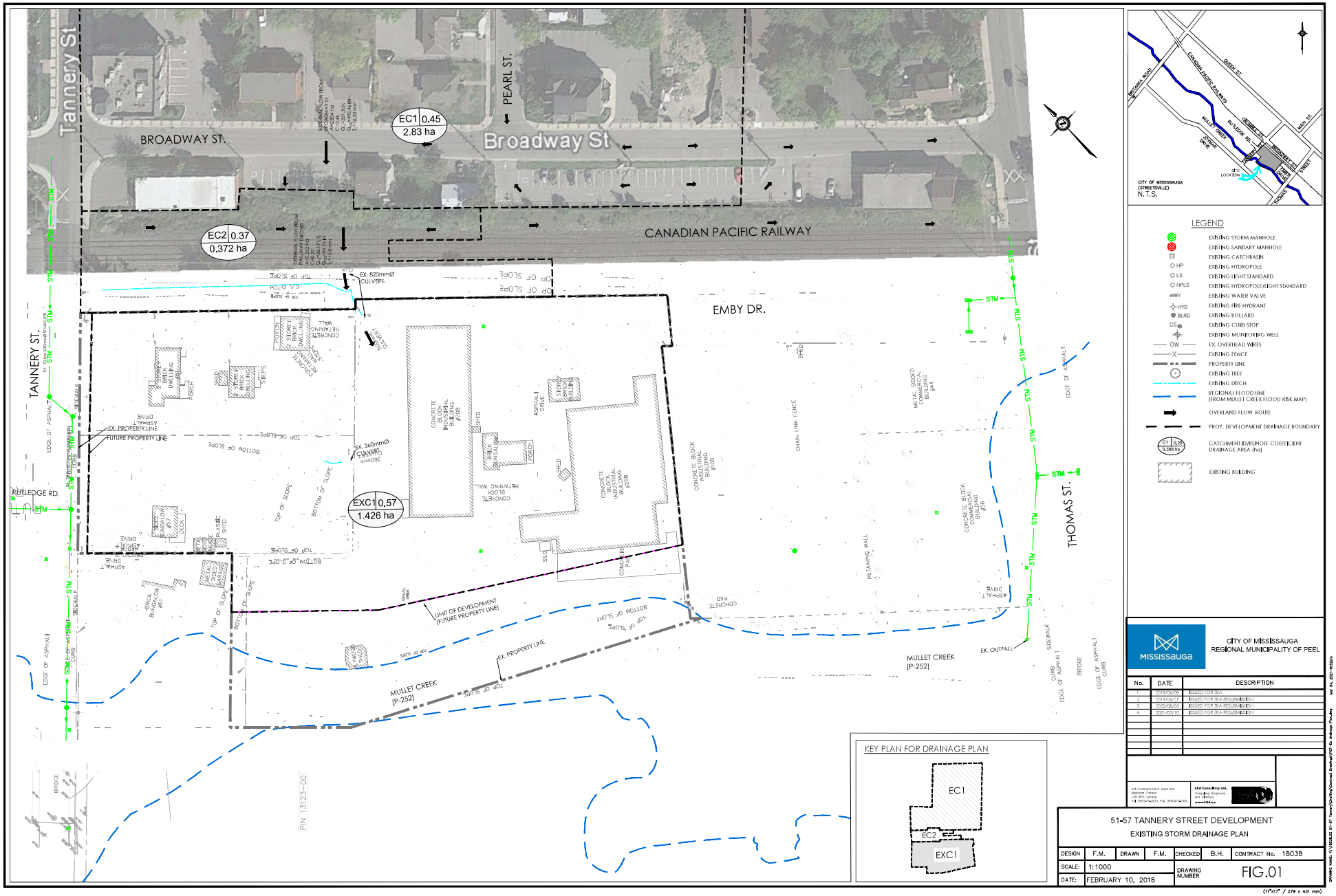
SCALE = NTS

imbrium
7030 WOODBINE AVENUE, SUITE 500, MARKHAM, ONTARIO L3R 6G2
USA: 888-579-4928 CA: 905-946-1041 INTL: 1-416-946-1041
www.imbrium.com

DATE: 5/26/2017

DESIGNED:	DRAWN:
JSK	JSK
CHECKED:	APPROVED:
BSF	SP
PROJECT No.:	SEQUENCE No.:
EF4	*

SHEET: 1 OF 1



CITY OF MISSISSAUGA
REGIONAL MUNICIPALITY OF PEEL

No.	DATE	DESCRIPTION
1	2018/06/08	ISSUED FOR ZBA
2	2019/06/27	ISSUED FOR ZBA RESUBMISSION
3	2020/08/05	ISSUED FOR ZBA RESUBMISSION
4	2021/03/10	ISSUED FOR ZBA RESUBMISSION

LEA Consulting Ltd.
Consulting Engineers and Planners
www.LEA.ca

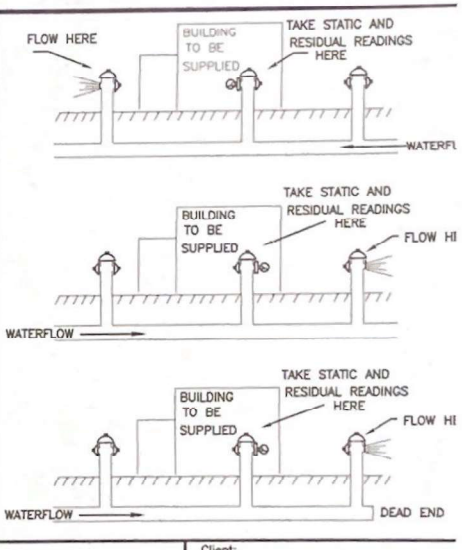
51-57 TANNERY STREET DEVELOPMENT
EXISTING STORM DRAINAGE PLAN

DESIGN	F.M.	DRAWN	F.M.	CHECKED	B.H.	CONTRACT No.	18038
SCALE:	1:1000					DRAWING NUMBER	FIG.01
DATE:	FEBRUARY 10, 2018						

(11"x17" / 279 x 431 mm)

Appendix D
Water Design Information

DURING THE FLOW TEST AS PER THE CITY WATER PERSONNEL, THE FLOW HYDRANT MAY HAVE BEEN DEFECTIVE. CITY TO INVESTIGATE.



TEST:	PLAY PIPE	C=	STATIC(PSI)	RESIDUAL(PSI)	PITOT(PSI)	FLOW(USGPM)
	1x1 1/8					
	2x1 1/8					
	3x1 1/8					
	4x1 1/8					
	1x1 3/4					
	2x1 3/4					
	3x1 3/4					
	4x1 3/4					
	HYDRANT BUTT					
1	1x2 1/2	.835	75	73	15	602.9
2	2x2 1/2	.835	75	71	5	696.2
	3x2 1/2					
	4x2 1/2					
	FM NOZZLE					
	1x2 1/4	.88				
	2x2 1/4	.88				
	3x2 1/4	.88				
	4x2 1/4	.88				

OUTLET TYPE

- ☐ COEF.=0.90 OUTLET SMOOTH AND WELL ROUNDED
- ☐ COEF.=0.80 OUTLET SQUARE AND SHARP
- ☐ COEF.=0.70 OUTLET SQUARE AND PROJECTING INTO BARREL
- ☒ COEF.=0.835 MODEL LPD-250A DECHLORINATOR DIFFUSER

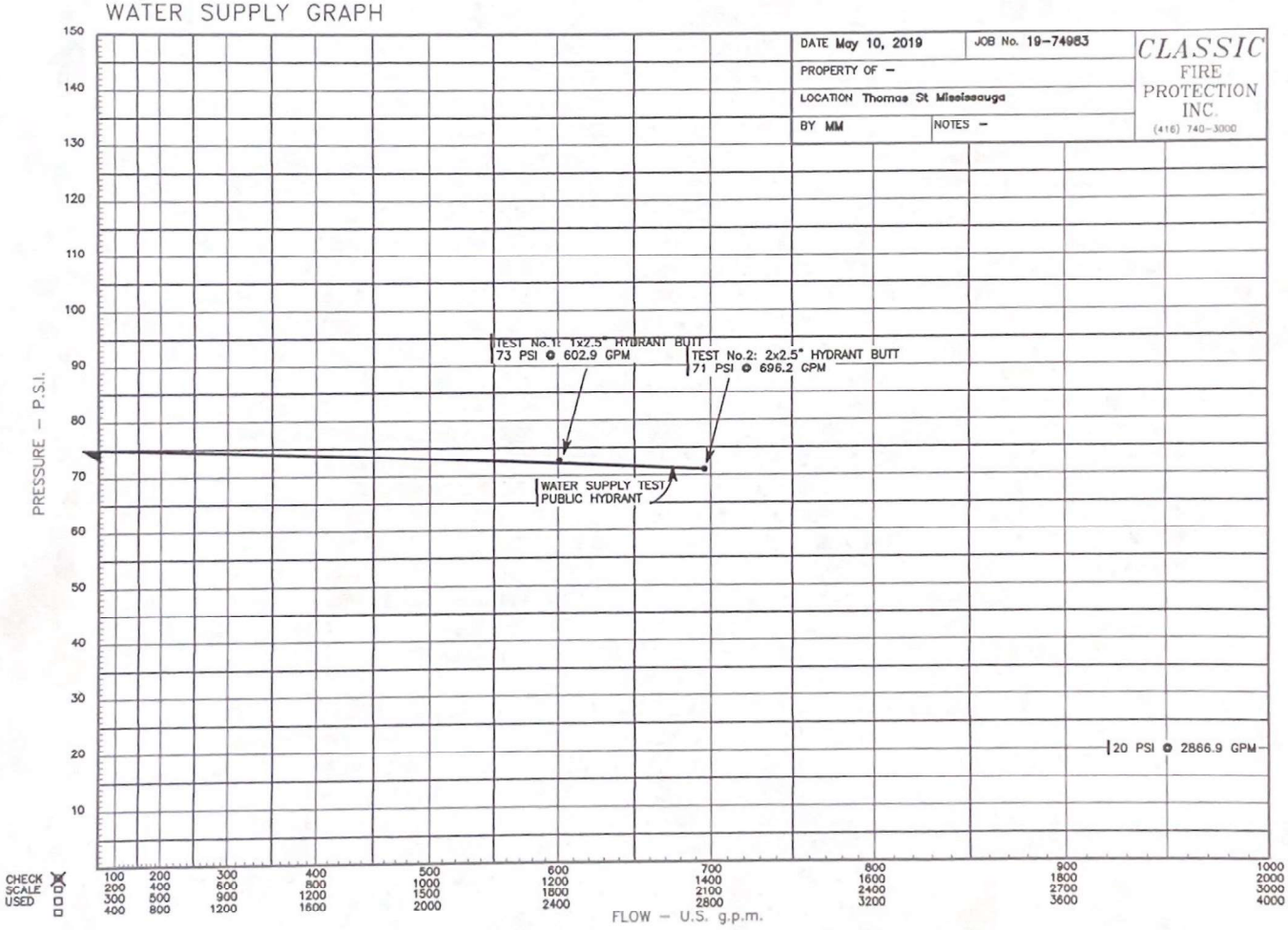
PITOT TUBE

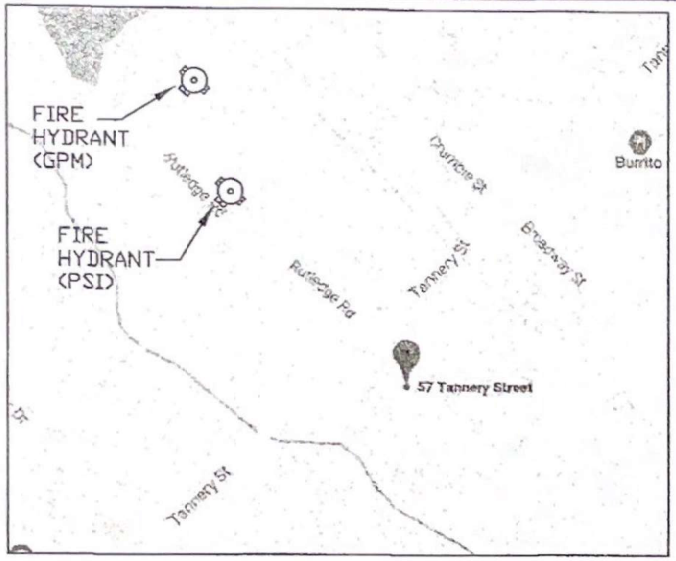
Client:
LEA CONSULTING LTD.
625 COCHRANE DR.
MARKHAM, ON

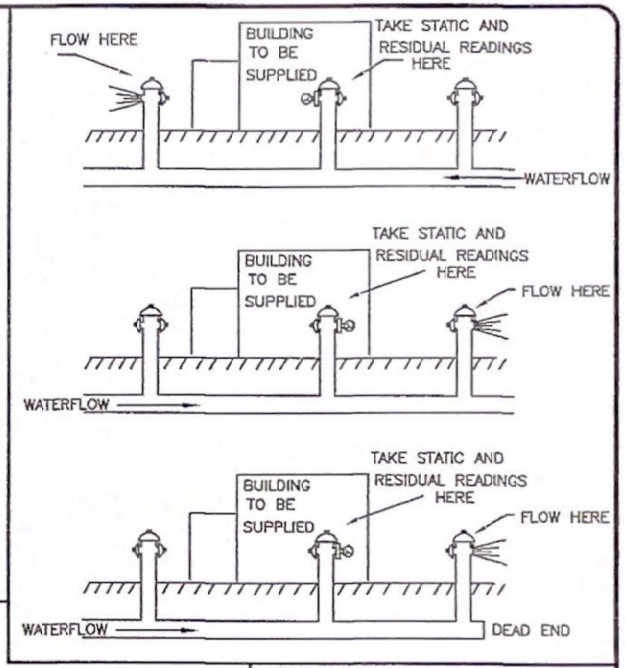
Location:
Thomas St
Mississauga, ON

1988
CLASSIC FIRE PROTECTION INC.
845 GARYRAY
North York, (
M9L 1P9
(416) 740-3
Web: www.classicfire.

WATER SUPPLY GRAPH







TEST:	PLAY PIPE	C=	STATIC(PSI)	RESIDUAL(PSI)	PITOT(PSI)	FLOW(USGPM)
	1x1 1/8					
	2x1 1/8					
	3x1 1/8					
	4x1 1/8					
	1x1 3/4					
	2x1 3/4					
	3x1 3/4					
	4x1 3/4					
	HYDRANT BUTT					
1	1x2 1/2	.80	62	54	21	683.5
2	2x2 1/2	.80	62	58	11	983.3
	3x2 1/2					
	4x2 1/2					
	FM NOZZLE					
	1x2 1/4	.88				
	2x2 1/4	.88				
	3x2 1/4	.88				
	4x2 1/4	.88				

OUTLET TYPE

☐  COEF.=0.90 OUTLET SMOOTH AND WELL ROUNDED

☒  COEF.=0.80 OUTLET SQUARE AND SHARP

☐  COEF.=0.70 OUTLET SQUARE AND PROJECTING INTO BARREL

Client:

Location:

51-57 Tannery St

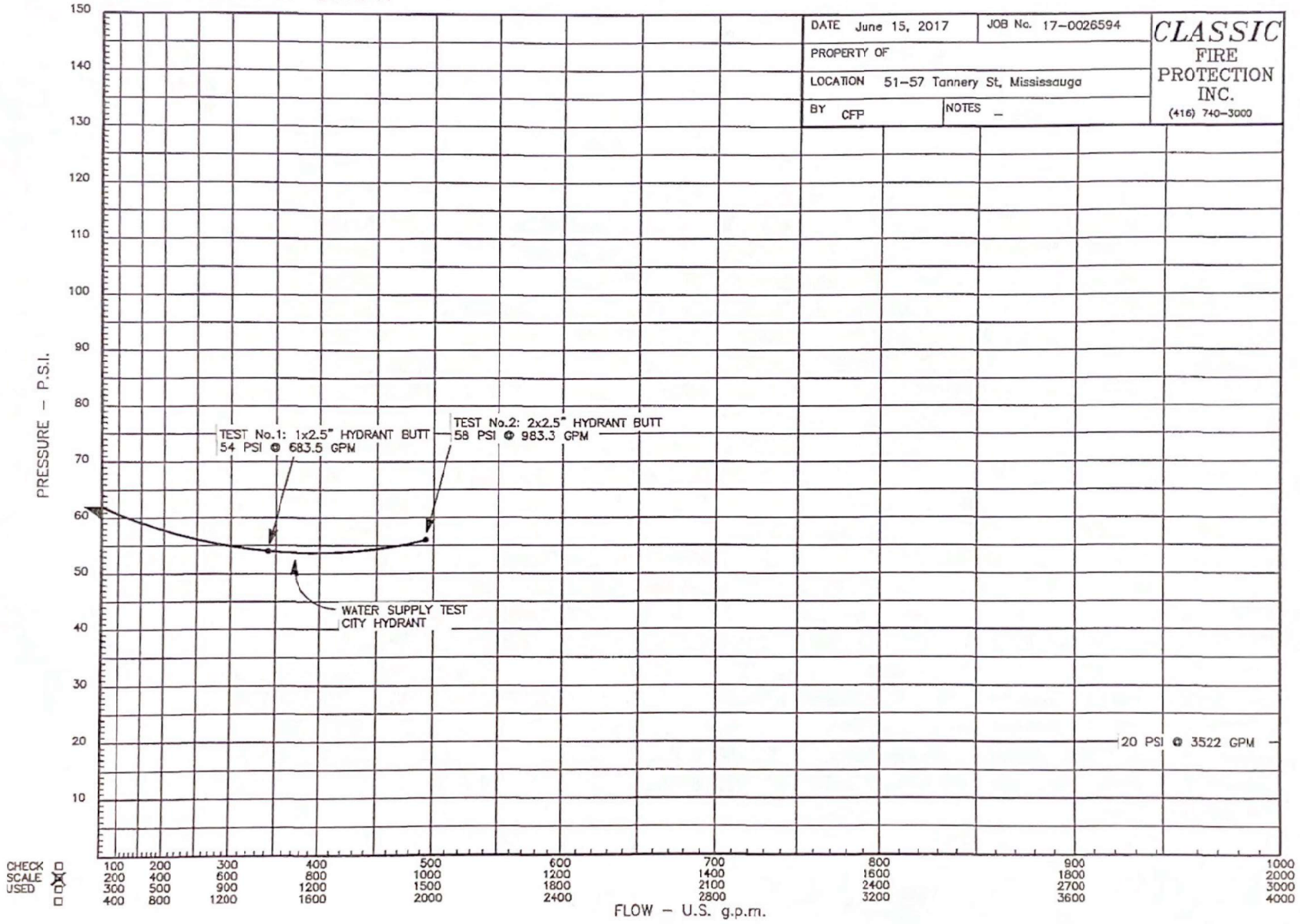
Mississauga, ON

1988
CLASSIC FIRE PROTECTION INC.
645 GARYRAY DR.
North York, ON
M9L 1P9
(416) 740-3000
Web: www.classicfire.com

WATER SUPPLY GRAPH

DATE June 15, 2017	JOB No. 17-0026594
PROPERTY OF	
LOCATION 51-57 Tannery St, Mississauga	
BY CFP	NOTES –

CLASSIC FIRE PROTECTION INC.
(416) 740-3000



2.3 Water Demands

Water demands are to be calculated as follows:

Table #1 – Typical Water Demand Criteria

Population Type	Unit	Avg. Consumption Rate	Max Day Factor	Peak Hour Factor
Residential	L/cap • d	280	2.0	3.0
ICI	L/Employee • d	300	1.4	3.0

ICI = Industrial, Commercial or Institutional

Custom demands for larger volume consumers or those with exceptional peak demands require special considerations regarding flow calculations. Each case will be reviewed on an individual basis.

It has been noted that some new development can generate higher water demands during the first years of occupancy. Factors for this elevated water use include additional lawn watering for new sod and changes in water use patterns. Table #2 states the potential short term water demand criteria for new development. However, over the long term, it is estimated that water use would ultimately be reduced through water conservation programs and other potential factor including rates. As such, for the purpose of projecting long term water requirements, the water demand criteria in Table #1 should be used.

Table #2 – Potential short term water demand criteria for new development

Population Type	Unit	Avg. Consumption Rate	Max Day Factor	Peak Hour Factor
Residential	L/cap • d	409	2.0	3.0
ICI	L/Employee • d	300	2.0	3.0

The Region may impose the higher short-term water demand criteria for new developments where water supply capacity or residual pressure may be marginal.

Project Name: 51 + 57 Tannery Street.
Project Number: 23-904
Date: 17-Apr-24

Design by: T.Ricketts
Title: **WATER DEMAND AND FIRE FLOW CALCULATION**

Based on Fire Underwriters Survey

1 F= 220 C (sqrt (A))

Where F= Fire flow in Lpm
C= construction type coefficient
= 0.6 fire resistive construction
A = total floor area in sq.m. excluding basements (garage or areas with 50% underground)

Floor	Area (sq.m)	%
Level 2	13,940	25%
Level 1	14,403	100%
P1	8,061	25%

Vertical openings protected (1 hr rating)
Largest Floor plus 25% of each adjoining floor

Largest Area= 19,903 sq.m
F = 18,622 L/min

Round to nearest 1000 l/min
F = 19,000 L/min

2 Occupancy Reduction
25% reduction for non-combustible
Reduction = 4750 L/min
F = 14,250 L/min

3 Separation Charge

5%	North Side	32 m			
0%	East Side	52.8 m			
20%	South Side	10.4 m			
5%	West Side	34.4 m			
30%		Total Separation Charge,	**4275**	L/min	

F = 18,525 L/min

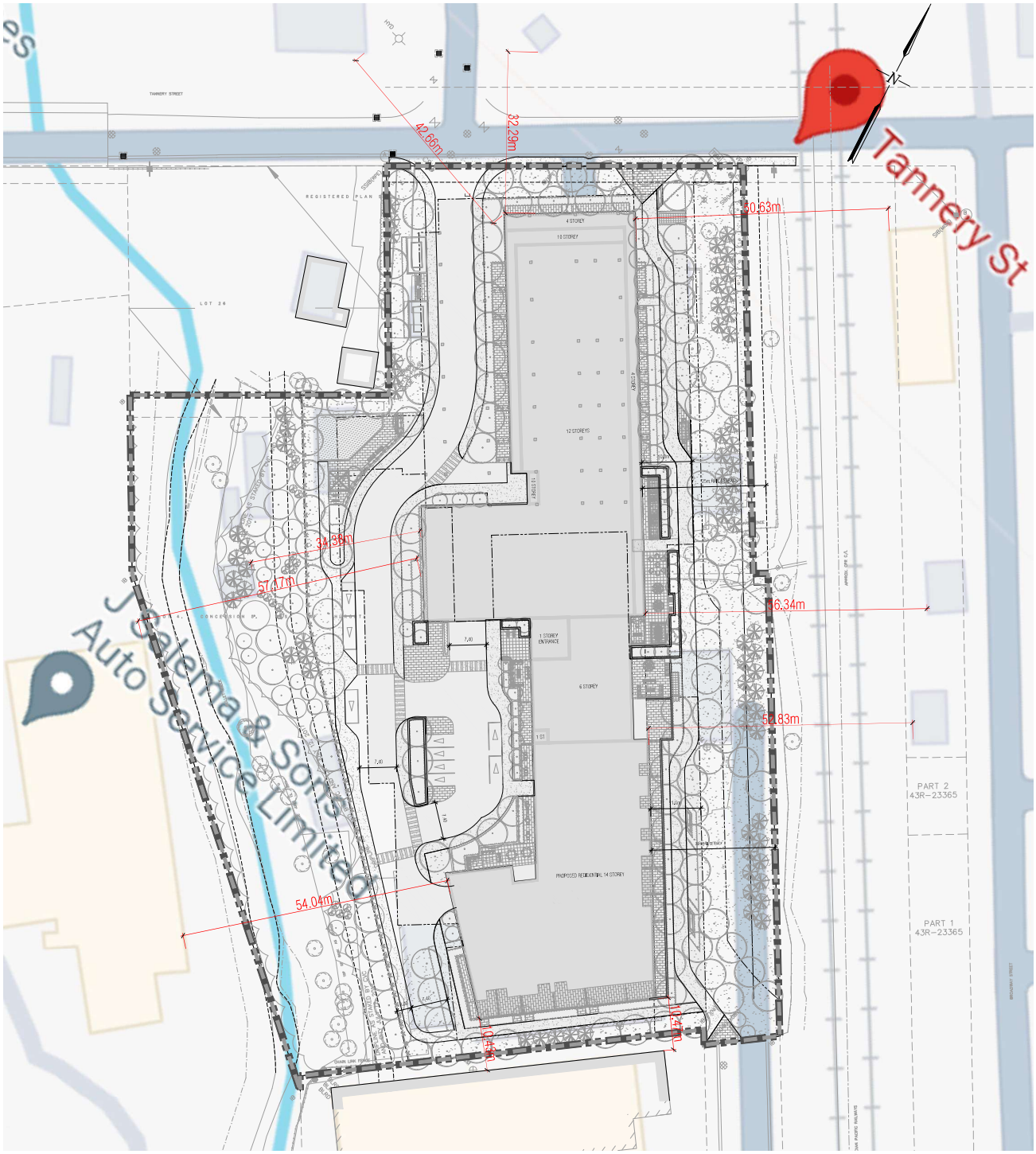
Separation	Charge
0 to 3 m	25%
3.1 to 10 m	20%
10.1 to 20 m	15%
20.1 to 30 m	10%
30.1 to 45 m	5%
45 m >	0%

4 Sprinkler Reduction
40% Reduction for NFPA Sprinkler System
Reduction = **5700** L/min

5 Domestic Flow Calculations
Population 1709 (633 units x 2.7 ppu)
Ave. Day Demand = 280 L/cap/day
332 L/min
Max. Day Peaking Factor = 2.0 Residential
Max. Domestic Flow Rate F_{dom} = **665** L/min

Water Demand = Fire Flow - Sprinkler Reduction + Domestic Flow (F_3 - F_4 + F_5)

F = 18,525 - 5700 + 665 = 13,490 l/min
F = 225 L/s
F = **3561** GPM


Tannery St
42.66m
32.29m
30.63m
34.38m
57.17m
16.34m
52.83m
54.04m
PART 2
43R-23365
PART 1
43R-23365
J Scaleria & Sons
Auto Service Limited