ENVISION
CONSULTANTS LTD

FUNCTIONAL SERVICING REPORT

580 Hazelhurst Road

Project #: 25-1071
Prepared for: Armstrong Planning
Date: November 13, 2025

Report Version: 01

6415 Northwest Drive
Units 37-40
Mississauga, ON L4V 1X1

envisionconsultants.ca

November 13, 2025

Armstrong Planning
1600 Steeles Avenue West, Suite 318
Vaughan, Ontario L4K 4M2

Attention: Davin McCully, RPP, Manager – Planning and Project Management

SUBJECT: FUNCTIONAL SERVICING REPORT, 580 HAZELHURST ROAD

EnVision Consultants Ltd. is pleased to present the enclosed Functional Servicing Report for the above-noted property. This report provides the conceptual framework for water distribution, sanitary sewage and storm drainage for this development. A Stormwater Management Report outlining the proposed quality and quantity controls for stormwater on this Site has also been prepared by EnVision Consultants Ltd. under separate cover.

We thank you for utilizing EnVision for this assignment. If there are any questions regarding the enclosed report, please do not hesitate to contact us.

Yours sincerely,

Alex Williams, P.Eng.
Director – Land Development
awilliams@envisionconsultants.ca

QUALITY MANAGEMENT

ISSUE	FIRST ISSUE	REVISION 1	REVISION 2
PROJECT NUMBER	25-1071		
PROJECT REFERENCE	Functional Servicing Report, 580 Hazelhurst Road		
VERSION NO.	01		
REMARKS	Final Report		
PREPARED BY	Dabi Abikoye, P.Eng.		
SIGNATURE			
REVIEWED BY	Alex Williams, P.Eng.		
SIGNATURE			
DATE	November 13, 2025		

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

1. EXECUTIVE SUMMARY

EnVision Consultants Ltd. (EnVision) was retained by Armstrong Planning (the 'Client') to conduct a functional servicing assessment for the property located at 580 Hazelhurst Road (the 'Site') in support of a Site Plan Amendment (SPA) application.

The Site is a 1.52ha parcel of land bounded by Hazelhurst Road to the east, vacant land/woodlot (2875 Lakeshore Road W) to the west, an existing industrial development (550 Hazelhurst Road) to the south and an existing industrial development (584 Hazelhurst Road) to the north. Under existing conditions, the Site is occupied by an existing 1-storey industrial building. There was previously another 1-storey building within the property which has since been demolished. Excluding the 0.08 ha portion of the Site consisting of the existing woodlot and its associated environmental buffer, the net developable Site area is 1.45 ha. The proposed development will consist of three (3) industrial structures and a surface parking area. The existing building on-site is proposed to be maintained in place as part of the development proposal.

The scope of this review includes site water distribution, sanitary drainage and stormwater drainage for the proposed development. A Stormwater Management Report outlining the proposed quality and quantity controls for stormwater on this Site has been prepared by EnVision under separate cover. EnVision has reviewed the Site Plan provided by Armstrong Planning dated November 11, 2025, background information provided by the Client, City of Mississauga, Region of Peel, Conservation Authority and other publicly available materials.

Based on the functional servicing review, EnVision presents the following findings.

- The Site will be serviced by the existing Zone 1 300mm watermain on Hazelhurst Road. The proposed servicing for the Site will include a 100mm domestic watermain and 200mm fire watermain extending from one (1) H-type connection to the existing watermain on Hazelhurst Road. The existing water service connection for existing Building 'A' will be re-connected to the proposed internal watermain network;
- A hydrant flow test has been scheduled to be performed on the existing 300mm watermain on Hazelhurst Road to verify the available municipal water supply. This report will be updated with the test results once available;
- The proposed sanitary servicing for the Site will connect to the existing 250mm sanitary sewer on Hazelhurst Road via an existing 150mm sanitary service connection from the Site;
- The existing sanitary sewer system is expected to have sufficient capacity to receive sanitary flows from the development as there is no increase in sanitary flow to the existing sanitary sewer system based on the Region of Peel design criteria; and
- The existing municipal storm service connection from the Site to the existing 2100mm storm sewer on Hazelhurst Road is proposed to be maintained in-place for the development. An underground stormwater chamber and a Jellyfish treatment unit are proposed to meet the quantity control and quality control requirements for the Site prior to discharging flows to the existing storm sewer system on Hazelhurst Road.

2. INTRODUCTION

EnVision Consultants Ltd. (EnVision) was retained by Armstrong Planning (the 'Client') to conduct a functional servicing assessment for the property located at 580 Hazelhurst Road (the 'Site') in the City of Mississauga and Region of Peel. It is our understanding that this assessment has been requested in support of a Site Plan Amendment (SPA) Application.

2.1. SITE DESCRIPTION

The development is a 1.52 ha parcel of land bounded by Hazelhurst Road to the east, vacant land/woodlot (2875 Lakeshore Road W) to the west, an existing industrial development (550 Hazelhurst Road) to the south and an existing industrial development (584 Hazelhurst Road) to the north. Under existing conditions, the Site is occupied by an existing 1-storey industrial building. There was previously another 1-storey building within the property which has since been demolished. There is an existing woodlot along the western property limit and it's associated environmental buffer which occupy a 0.08 ha portion of the Site. Excluding the existing woodlot and the associated environmental buffer, the net developable area is 1.45 ha. Refer to Figure 1 for the Site Location Plan and Figure 2 for the Pre-Development Plan.

The proposed development will consist of three (3) industrial structures and a surface parking area. The existing building on-site is proposed to be maintained in place as part of the development proposal. The development statistics are summarized in Table 2-1. Refer to Figure 3 for an illustration of the Proposed Development Plan.

Table 2-1: Development Summary

LAND USE	AREA	BUILDING	BUILDING AREA
INDUSTRIAL	1.45	*A (Existing)*	*321 m^2*
		B	2802 m^2
		C	24 m^2
		D	24 m^2
WOODLOT (INCLUDING BUFFER)	0.08	-	-

The Site will be serviced by existing local municipal sewers and watermains within the adjoining municipal rights-of-way. Any existing service connections to the Site within the municipal road allowance will be decommissioned by the municipality at the Owner's cost. The proposed service connections will be extended within the Site to the proposed buildings and will be coordinated with the building design team.

2.2. OBJECTIVES, SCOPE AND BACKGROUND MATERIALS

2.2.1. OBJECTIVES

The objectives of the Functional Servicing Report are to:

- Determine the site specific water, sanitary and stormwater servicing requirements to ensure that the development proposal is in conformance with City of Mississauga and Region of Peel guidelines;
- Establish the proposed water and sanitary demands from the development;
- Demonstrate the impact of the proposed development on the capacity of the existing infrastructure in the area and identify necessary improvements to municipal servicing infrastructure if required;
- Develop a water, sanitary and stormwater servicing strategy for the development; and
- Determine the grading approach for the development and identify grading constraints.

2.2.2. SCOPE

The scope of this Functional Servicing Report includes the following components:

- Water Distribution
- Sanitary Drainage
- Stormwater Drainage
- Site Grading

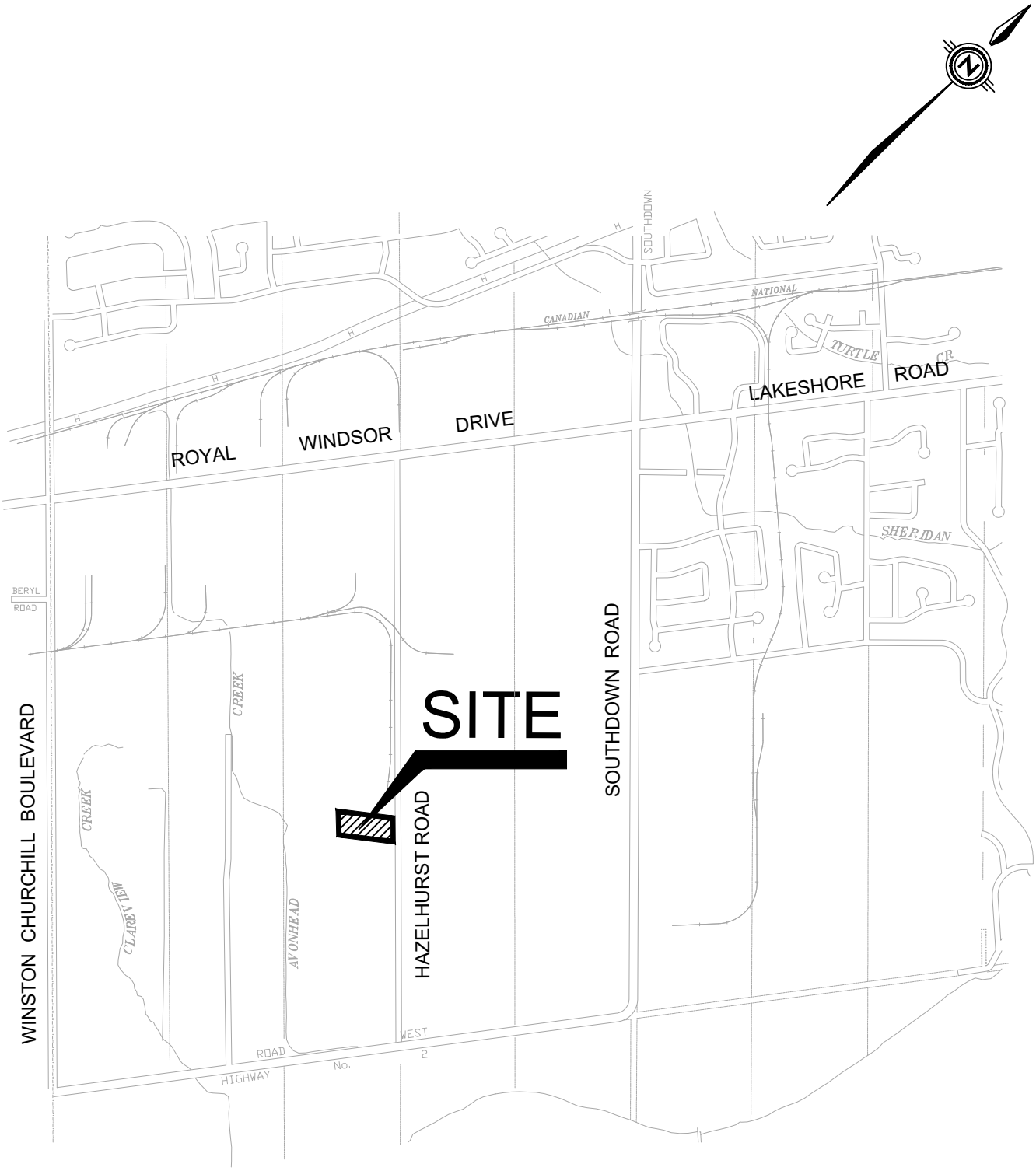
A Stormwater Management (SWM) Report outlining the proposed stormwater quality and quantity controls has been prepared under a separate cover by EnVision Consultants Ltd., dated November 13, 2025.

2.2.3. BACKGROUND MATERIALS

In preparing this report, EnVision used the following information to evaluate the servicing and grading for the Site:

- Topographic Survey prepared by R-PE Surveying Ltd. dated October 4, 2021;
- Architectural Plan prepared by Armstrong Planning dated November 11, 2025;
- Stormwater Management Report – 580 Hazelhurst Road prepared by EnVision Consultants Ltd. dated November 13, 2025;
- City of Mississauga Transportation and Works Development Requirements Manual dated August 2020;
- Region of Peel Linear Wastewater Standards dated March 2023;
- Region of Peel Public Works Design, Specifications & Procedures Manual – Watermain Design Criteria dated June 2010;
- Section 8 – City of Mississauga Transportation and Works Development Requirements Manual dated August 12, 2020; and

- Credit Valley Conservation Authority (CVCA) Stormwater Management Guideline dated July 2022.



CLIENT

ARMSTRONG PLANNING

TITLE

YORK1 HAZELHURST RECYCLING FACILITY
580 HAZELHURST ROAD

LOCATION PLAN

6415 Northwest Dr.
Mississauga, ON Canada
L4V 1X1
Office (905) 677-0202
E-mail admin@envisionconsultants.ca

Checked	Drawn
D.A.	M.R.
Date	Proj. No.
NOV 2025	25-1071
Scale	Figure No.
NTS	1

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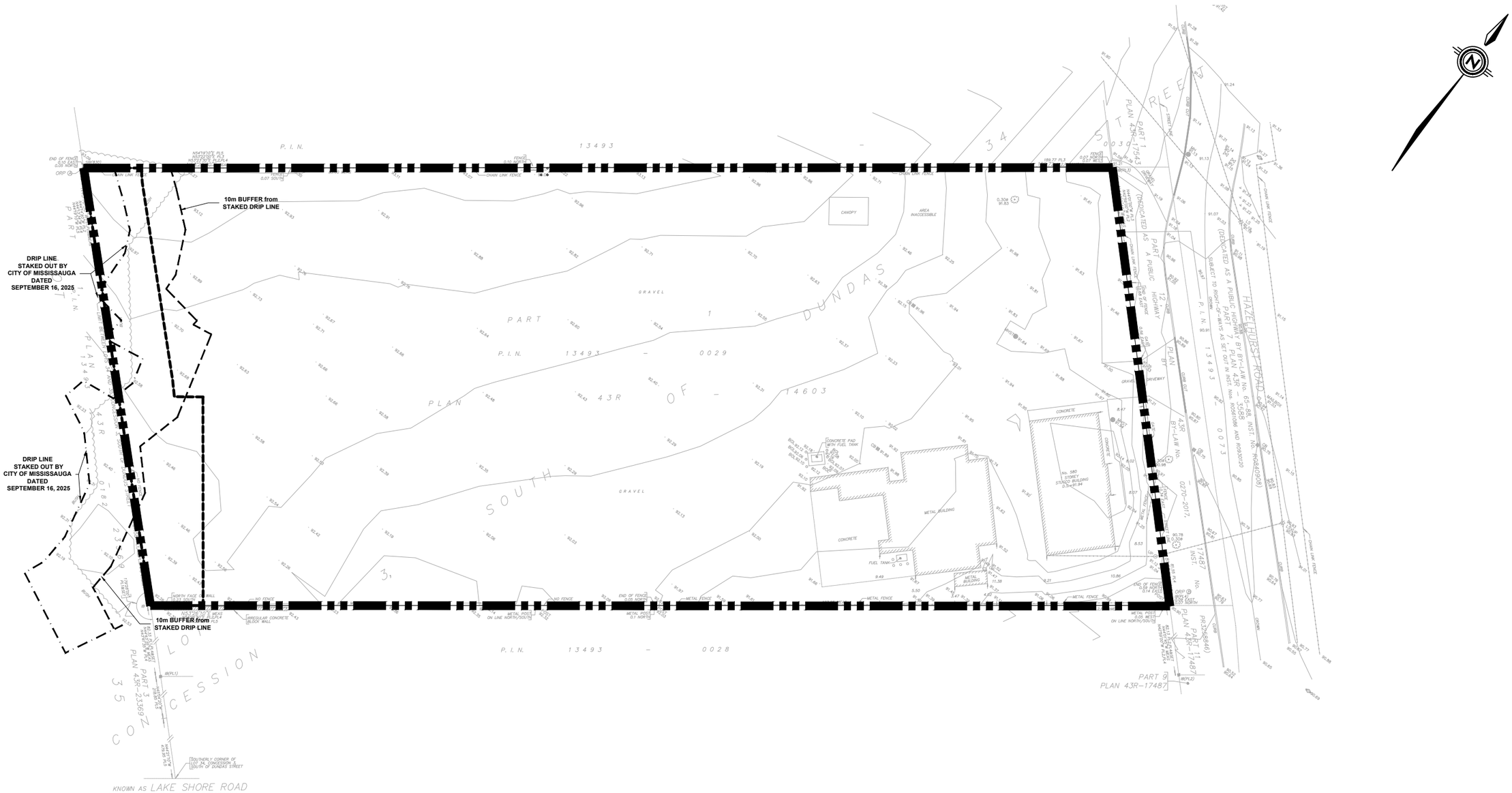
10m BUFFER from STAKED DRIP LINE
DRIP LINE STAKED OUT BY CITY OF MISSISSAUGA DATED SEPTEMBER 16, 2025
DRIP LINE STAKED OUT BY CITY OF MISSISSAUGA DATED SEPTEMBER 16, 2025
10m BUFFER from STAKED DRIP LINE
P. I. N. 13493 - 0029
P. I. N. 13493 - 0028
PART 1 DUNDAS SOUTH PLAN 43R - 14603
PART 1 PLAN 43R-17543
PART 2 PLAN 43R-17543
PART 9 PLAN 43R-17487
PART 11 PLAN 43R-17487
PART 3 PLAN 43R-23369
LOT 35 CONCESSION
LOT 34 CONCESSION
HAZELHURST ROAD (DEDICATED AS A PUBLIC HIGHWAY BY BY-LAW No. 65-85, PLAN 43R-3588 INST. No. R0840998 AND R0930120 SUBJECT TO RIGHT-OF-WAYS AS SET OUT IN INST. Nos. R0840998 AND R0930120)
DUNDAS STREET (DEDICATED AS A PUBLIC HIGHWAY BY BY-LAW No. 43R-0270-2017 INST. No. PR3256846)
KNOWN AS LAKE SHORE ROAD
SOUTHERLY CORNER OF LOT 34, CONCESSION 3 SOUTH OF DUNDAS STREET
GRAVEL
CONCRETE
METAL BUILDING
CANOPY
AREA INACCESSIBLE
CHAIN LINK FENCE
METAL FENCE
NO FENCE
No. 580 STUCCO BUILDING
No. 590 STUCCO BUILDING
No. 600 STUCCO BUILDING
No. 610 STUCCO BUILDING
No. 620 STUCCO BUILDING
No. 630 STUCCO BUILDING
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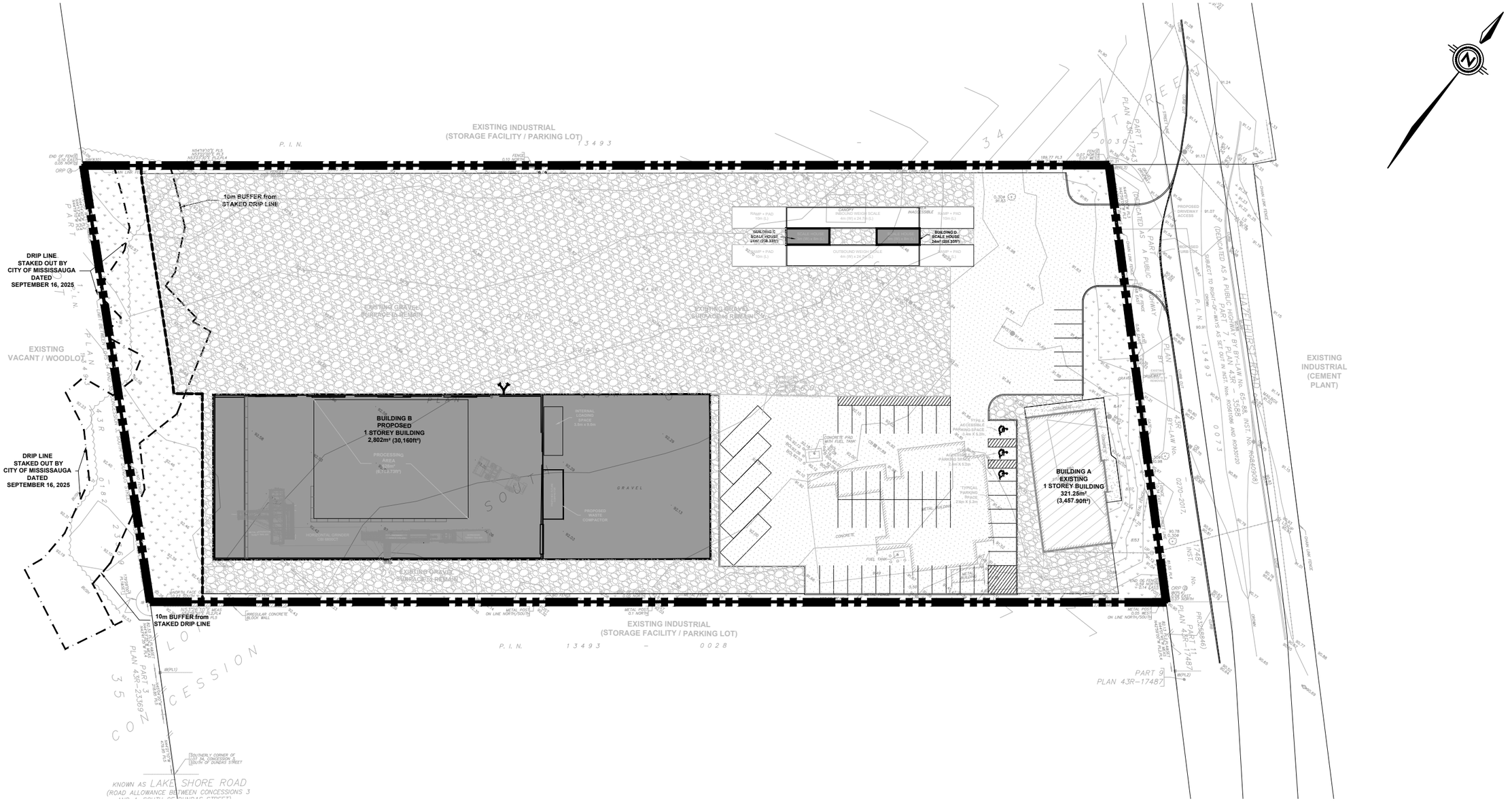
No. 660 STUCCO BUILDING
No. 670 STUCCO BUILDING
No.



LEGEND

LIMIT OF PROPERTY

CLIENT

ARMSTRONG PLANNING

TITLE

YORK1 HAZELHURST RECYCLING FACILITY
580 HAZELHURST ROAD

PROPOSED DEVELOPMENT PLAN

6415 Northwest Dr.
Mississauga, ON Canada
L4V 1X1
Office (905) 677-0202
E-mail admin@envisionconsultants.ca

Checked: D.A.	Drawn: J.Z.
Date: 25-1071	Proj. No.: NOV 2025
Scale: 1: 750	Figure No.: 3

3. WATER SERVICING

3.1. EXISTING CONDITIONS

EnVision has obtained record engineering drawings form the Region of Peel for the area surrounding the Site. Under existing conditions, there is a 300mm Zone 1 PVC watermain adjacent to the Site on the east side of Hazelhurst Road.

3.2. WATER DEMANDS

3.2.1. DOMESTIC WATER DEMAND

The peak domestic water demand for the development was calculated using the Region of Peel's design criteria for light industrial developments. The results of the calculation are summarized in Table 3-1 below. Refer to Appendix B for the detailed domestic water demand calculations.

Table 3-1: Estimated Domestic Water Demand

CRITERION	INFORMATION
LAND USE	Light Industrial
SITE AREA	1.52 ha
NET DEVELOPABLE SITE AREA	1.45 ha
POPULATION DENSITY	70 persons/ha
TOTAL EQUIVALENT INDUSTRIAL POPULATION	102 people
ICI AVERAGE CONSUMPTION RATE	300 L/employee/day
PEAKING FACTORS	Max. Day = 1.4, Peak Hour = 3.0
TOTAL AVERAGE WATER DEMAND FROM SITE	0.35 L/s
TOTAL PEAK WATER DEMAND FROM SITE	Max. Day = 0.50 L/s, Peak Hour = 1.06 L/s

3.2.2. FIRE FLOW DEMAND

The estimated fire flow has been calculated using the recommendations of the 2020 Fire Underwriters Survey. The fire flow calculation indicates that the recommended fire flow for Building 'A' is 66.67 L/s (1,057 USGPM) and the recommended fire flow for Building 'B' is 133.33 L/s (2,111 USGPM). The fire flow calculations have been prepared with the assumption that Building A is classified as non-combustible construction with combustible hazard occupancy while Building B will be classified as non-combustible construction with free burning hazard occupancy and will be equipped with a sprinkler system. The results of these calculations are included in Appendix B.

There are currently two (2) existing hydrants adjacent to the Site on the east side of Hazelhurst Road. A hydrant will be provided within the Site to provide the required fire protection coverage for the building. The Siamese connection to the proposed building will be located so that it is a maximum of 45m away from a hydrant.

3.2.3. PROPOSED WATER SERVICING

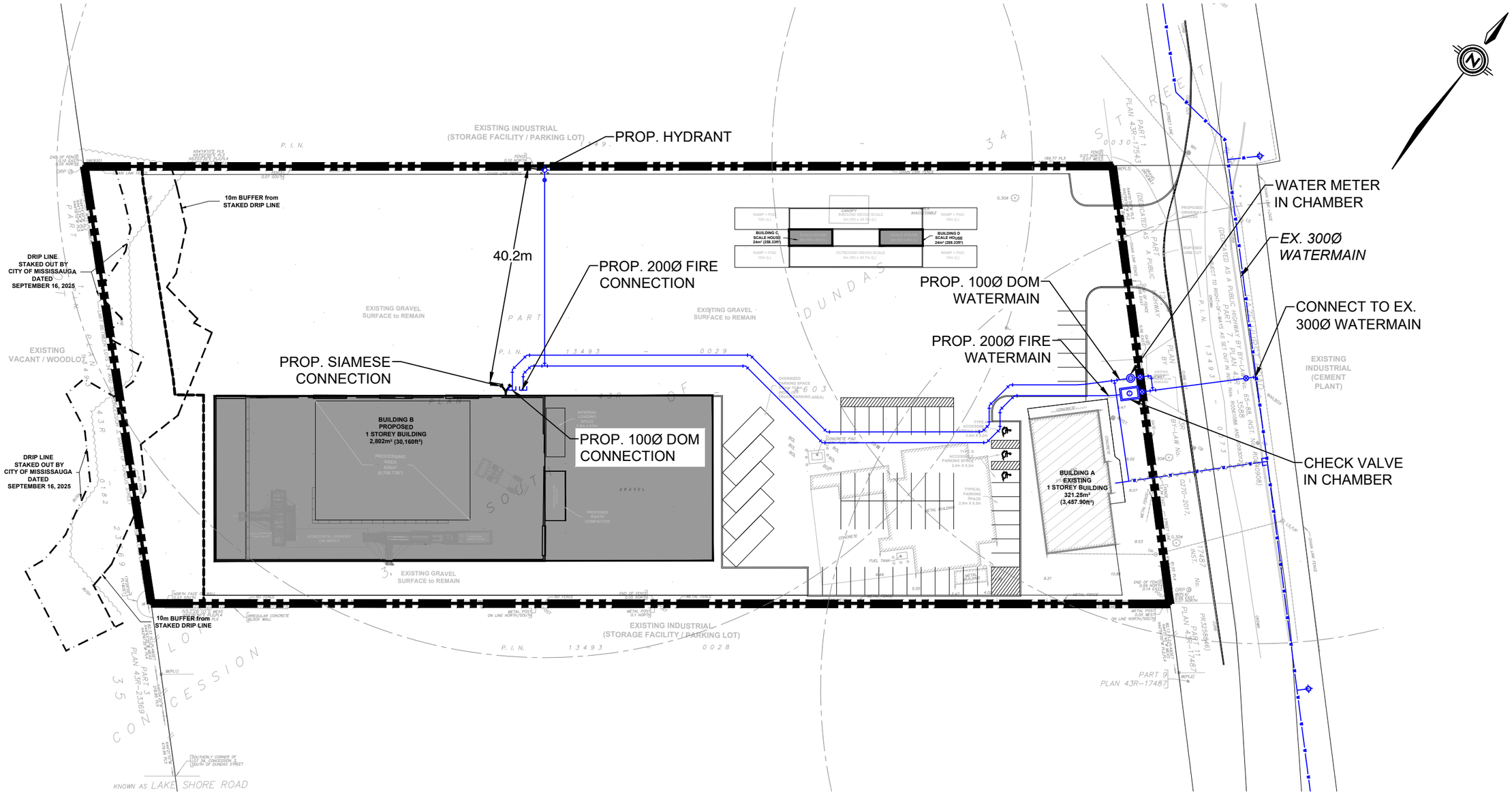
One (1) 100mm domestic and one (1) 200mm fire service connection is proposed for Building 'B' per Region of Peel requirements. Water service connections are not required and will not be provided for the scale house buildings (Buildings 'C' and 'D'). The existing water service connection for existing Building 'A' will be re-connected to the proposed internal watermain network. An H-style service connection with a 100mm domestic service connection branching off a 200mm fire service connection will be extended from the existing 300mm watermain on Argentia Road. The service connection to the municipal watermain is proposed to include valve and boxes at the property line. A water meter chamber and backflow preventer will be installed on the domestic service connection inside the property line. A check valve will be installed on the fire service connection inside the property line.

The on-site watermains and service connection within the municipal right-of-way will be designed to Region of Peel standards and the water services within the proposed buildings will be designed by the Site mechanical consultant to meet Ontario Plumbing Code Standards. The proposed water servicing and the hydrant locations are shown on Figure 4.

3.3. HYDRANT FLOW TEST

The maximum required fire flow demand for the proposed development was calculated to be 133.33 L/s (2,111 USGPM) as defined by the Fire Underwriters Survey (FUS). The total maximum day demand for the proposed development is 0.50 L/s. Therefore, the total maximum day plus fire flow demand is 133.83 L/s for the proposed development. Refer to Appendix B for FUS fire flow and detailed domestic demand calculations.

A hydrant flow test has been scheduled to be completed on the Hazelhurst Road watermain adjacent to the development. The test results are not available at the time of preparing this report but will be included once made available.



LEGEND

- LIMIT OF PROPERTY
- EX. WATERMAIN
- PROP. W/M CONNECTION
- PROP. VALVE & CHAMBER
- PROP. VALVE & BOX
- EX WM/SEWER TO BE REMOVED

CLIENT

ARMSTRONG PLANNING

TITLE

YORK1 HAZELHURST RECYCLING FACILITY
580 HAZELHURST ROAD

WATER SERVICING PLAN

6415 Northwest Dr.
Mississauga, ON Canada
L4V 1X1
Office (905) 677-0202
E-mail admin@envisionconsultants.ca

Checked: D.A.	Drawn: J.Z.
Date: 25-1071	Proj. No.: NOV 2025
Scale: 1: 750	Figure No.: 4

4. SANITARY SERVICING

4.1. EXISTING CONDITIONS

EnVision has obtained record engineering drawings from the Region of Peel for the area surrounding the Site. Under existing conditions, there is a 250mm PVC sanitary sewer drains south on the west side of Hazelhurst Road in the vicinity of the Site.

4.2. SANITARY FLOWS

4.2.1. DESIGN PARAMETERS

To calculate the peak sanitary flows, the following Region of Peel design criteria have been utilized:

- 270 L/employee/day average daily flow for non-residential use;
- Light industrial population equivalent: 70 persons/ha;
- Peaking Factor for residential use: Harmon Formula M = 1+(14/√(4+P/1000))
- Inflow/Infiltration Allowance: 0.26 L/s/ha

An estimate of the pre- and post-development sanitary sewage flows has been calculated and is included in Appendix C. The results of the calculations are discussed in Sections 4.2.2 and 4.2.3.

4.2.2. EXISTING SEWAGE FLOWS

The Site consists of an industrial building under existing conditions. The existing building has its sanitary flow directed to the existing 250mm Hazelhurst Road sanitary sewer. An estimate of the pre-development sanitary sewage flows from the Site to the downstream sanitary sewer system has been calculated using the Region of Peel Design Criteria:

- Average Sanitary Flow = 0.73 L/s (including Inflow/Infiltration allowance)
- Peak Sanitary Flow = 1.69 L/s (including Inflow/Infiltration allowance)

Detailed calculations of the pre-development flows are included in Appendix C.

4.2.3. POST-DEVELOPMENT SEWAGE FLOW

An estimate of the post-development sanitary sewage flows from the Site to the downstream sanitary sewer system has been calculated based on the development statistics provided by Armstrong Planning and has been calculated using Region of Peel Design Criteria. The calculation results are summarized in Table 4-1. Refer to Appendix B for detailed post-development sanitary flow calculations.

Table 4-1: Estimated Sanitary Flows

CRITERION	INFORMATION
LAND USE	Light Industrial
SITE AREA	1.52 ha

CRITERION	INFORMATION
NET DEVELOPABLE SITE AREA	1.45 ha
POPULATION DENSITY	70 persons/ha
TOTAL EQUIVALENT INDUSTRIAL POPULATION	102 people
PEAKING FACTORS	4.00 (Harmon Peaking Factor)
INFLOW / INFILTRATION ALLOWANCE	0.41 L/s
AVERAGE SANITARY FLOW FROM SITE	0.73 L/s
PEAK SANITARY FLOW FROM SITE	1.69 L/s

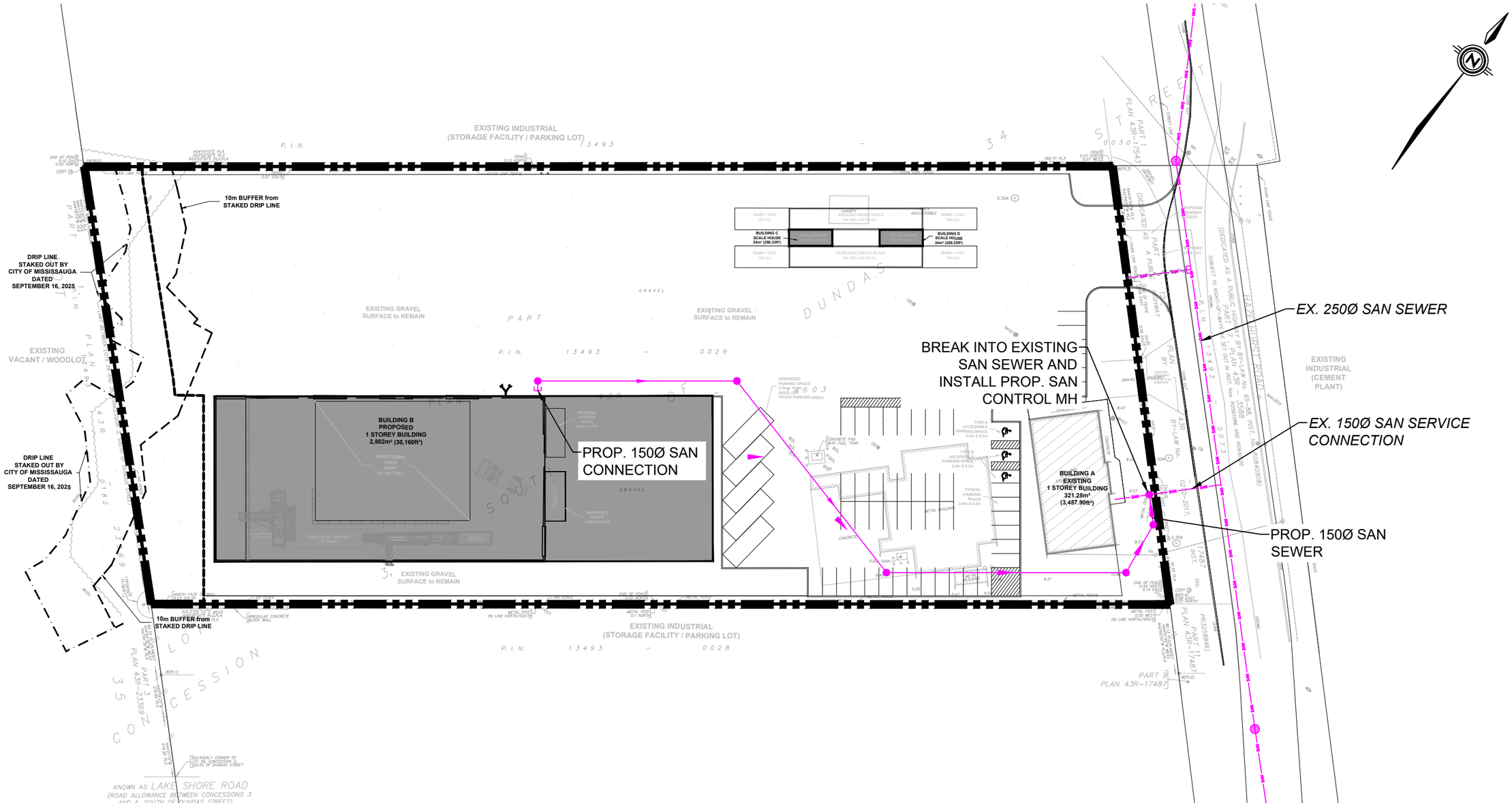
The approximate peak sanitary flow to the existing sanitary sewer system for the pre- and post-development conditions are 1.69 L/s and 1.69 L/s, respectively. Consequently, the increase in peak sanitary design flow resulting from the development to the sanitary sewer is 0.00 L/s.

4.3. SANITARY SERVICING

The proposed Building B will have one (1) 150mm diameter sanitary service connection. The existing sanitary service connection to existing Building 'A' will be maintained in place. Sanitary flows from the Site will be discharged to the existing 250mm sanitary sewer on Hazelhurst Road via the existing 150mm diameter municipal sanitary service connection from the Site. As per the Region of Peel requirements, a control manhole is proposed to be placed immediately inside the property line for the service connection. The on-site sanitary sewers and service connection within the municipal right-of-way will be designed to Region of Peel standards and the sanitary services within the proposed building will be designed by the Site mechanical consultant to meet Ontario Plumbing Code Standards. The proposed sanitary servicing layout shown on Figure 5.

4.4. DOWNSTREAM SEWER CAPACITY ANALYSIS

There is no increase in peak sanitary design flow resulting from the development as discussed in Section 4.2.3. Therefore, it is expected that the existing municipal sanitary system will have sufficient capacity to accommodate flows from the development. It is our understanding that the Region of Peel will use the multi-use demand table appended to this report to confirm using their sanitary infrastructure model that there will be sufficient capacity in the existing municipal sanitary sewer system to meet the estimated sanitary demand from the proposed development. The multi-use demand table for the Site has been included in Appendix D.


EXISTING INDUSTRIAL
(STORAGE FACILITY / PARKING LOT)
P. I. N. 13493 – 0034
10m BUFFER from
STAKED DRIP LINE
DRIP LINE
STAKED OUT BY
CITY OF MISSISSAUGA
DATED
SEPTEMBER 16, 2025
EXISTING
VACANT / WOODLOT
EXISTING GRAVEL
SURFACE to REMAIN
EXISTING GRAVEL
SURFACE to REMAIN
P. I. N. 13493 – 0029
BUILDING B
PROPOSED
1 STOREY BUILDING
2,802m² (30,160ft²)
PROCESSING
AREA
526m²
(5,659.73ft²)
PROPOSED
WASTE
COMPACTOR
PROP. 150Ø SAN
CONNECTION
EXISTING GRAVEL
SURFACE to REMAIN
BUILDING C
SCALE HOUSE
24m² (258.33ft²)
BUILDING D
SCALE HOUSE
24m² (258.33ft²)
CANOPY
INBOUND WEIGH SCALE
4m (W) x 24.7m (L)
OUTBOUND WEIGH SCALE
4m (W) x 24.7m (L)
RAMP + PAD
10m (L)
OVERSIZED
PARKING SPACE
3.5m x 15m
(ROLL-OFF
TRUCK PARKING AREA)
INTERNAL
LOADING
SPACE
3.5m x 9.0m
CONCRETE PAD
WITH FUEL TANK
TYPE A
ACCESSIBLE
PARKING SPACE
3.4m X 5.2m
TYPE B
ACCESSIBLE
PARKING SPACE
2.4m X 5.2m
TYPICAL
PARKING
SPACE
2.6m X 5.2m
METAL BUILDING
CONCRETE
FUEL TANKS
BREAK INTO EXISTING
SAN SEWER AND
INSTALL PROP. SAN
CONTROL MH
BUILDING A
EXISTING
1 STOREY BUILDING
321.25m²
(3,457.90ft²)
EX. 250Ø SAN SEWER
EX. 150Ø SAN SERVICE
CONNECTION
PROP. 150Ø SAN
SEWER
EXISTING
INDUSTRIAL
(CEMENT
PLANT)
DUNDAS STREET
(DEDICATED AS A PUBLIC HIGHWAY BY BY-LAW No. 65-85, PART 1, PLAN 43R-3568, INST. No. RO840998 AND ROXXXXX)
SUBJECT TO RIGHT-OF-WAYS
PART 1 PLAN 43R-17543
PROPOSED
DRIVEWAY
ACCESS
PROPOSED
CUT
EXISTING
ENTRANCE
TO BE REMOVED
PART 9
PLAN 43R-17487
PART 11
PLAN 43R-17487
PART 3
PLAN 43R-23369
10m BUFFER from
STAKED DRIP LINE
EXISTING INDUSTRIAL
(STORAGE FACILITY / PARKING LOT)
P. I. N. 13493 – 0028
KNOWN AS LAKE SHORE ROAD
(ROAD ALLOWANCE BETWEEN CONCESSIONS 3
AND 4, SOUTH OF DUNDAS STREET)
SOUTHERLY CORNER OF
LOT 34, CONCESSION 3,
SOUTH OF DUNDAS STREET
CONCESSION 3 SOUTH OF DUNDAS
LOT 34
PART
PLAN
43R-
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5. STORM DRAINAGE

A Stormwater Management (SWM) Report outlining the proposed stormwater quality and quantity controls has been prepared under a separate cover by Envision, dated November 13, 2025. The SWM Report is in compliance with MECP Stormwater Management Planning and Design Manual (2003), TRCA Stormwater Management Criteria (August 2012), the Region of Peel Public Works Stormwater Design Criteria and Procedural Manual (June 2019) and the City of Mississauga Storm Drainage Design Requirements and identifies the stormwater quantity and quality controls under which this Site will operate.

5.1. EXISTING CONDITIONS

The Site is located within Clearview Creek watershed. Based on City record drawings, there is an existing 2100mm storm sewer system adjacent to the Site on Hazelhurst Road.

5.2. PROPOSED MINOR STORM DRAINAGE SYSTEM

All storm flows within the Site will ben collected at-grade by proposed catchbasins and conveyed through an internal storm sewer system to an underground stormwater storage chamber. The on-site minor storm sewer system is proposed to be designed to capture and convey the runoff from the 10-year storm event. For portions of the Site where flows will be directed to the chamber, the internal storm sewer system will be sized to capture and convey flows from all storm events up to the 100-year storm event. The chamber will be designed to hold a volume of 455 m^3 and is sized to over-control flows to offset the uncontrolled flow contributions that will be directed directly to the municipal storm sewer on Hazelhurst Road. A 260mm orifice plate will be used to control the flow from the chamber to a peak release rate of 121.2L/s. The release rate is such that for all storm events up to the 100-year storm event, the total storm outflow from the Site is reduced to the 2-year pre-development level to conform with the City of Mississauga requirements. In case of system failure, the chamber will have an access hatch accessible at grade which will act as an emergency overflow. The on-site storm sewers will direct flows to the existing 2100mm storm sewer on Hazelhurst Road via the existing storm service connection from the Site. As per City requirements, a storm control manhole will be placed immediately inside the property line and will be accessible by the City.

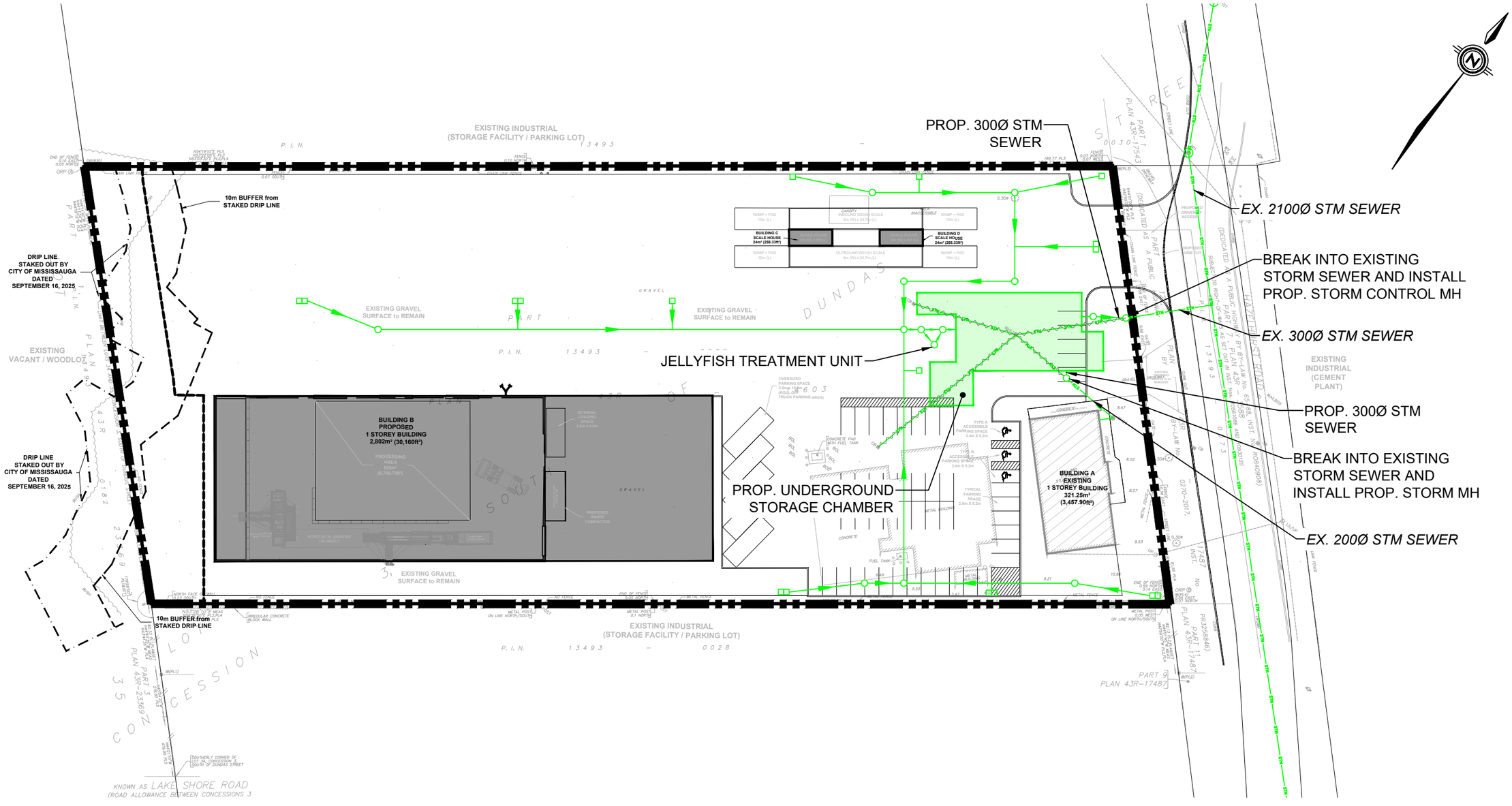
To meet water quality criteria, a Jellyfish Treatment Unit (JF-6-4-1) quality control unit is proposed to treat storm flows to achieve an 80% TSS removal rate in accordance with the City of Mississauga stormwater management criteria.

Since all storm flows up to the 100-year storm event will be reduced to the 2-year pre-development level, it can therefore be concluded that the existing storm sewer system will not be adversely affected under the post-development condition and will have adequate capacity to support flows from the proposed development. For further information on the stormwater management system being used or this Site, please see the Stormwater Management Report prepared by EnVision under a separate cover.

5.3. PROPOSED MAJOR STORM DRAINAGE SYSTEM

The major storm system is a conveyance system for flows in excess of the minor system flows. Stormwater runoff from events up to and including the 100-year storm event will be contained on-site via an underground stormwater storage chamber and released at a controlled rate within the allowable post development limits to the minor storm system. For major storm events exceeding the 100-year storm and the capacity of the underground storage system, an overland flow route will be provided to direct excess flows to the Hazelhurst Road right-of-way.

For the development of the Site, the grading design will be prepared such that the surface (i.e. parking lots, drive aisles and landscaped areas) grades will direct surface drainage away from the building to approved outlets such as the adjoining right-of-way. The proposed grading of the Site will ensure that existing grade elevations will be met along the property limits. The plumbing system for the building will be coordinated with the mechanical consultant to ensure that they are designed to convey 100-year storm event runoff from the development. For major storm events exceeding the 100-year storm event and the capacity of the tank, an overflow will be designed to direct excess flows to grade and ultimately to the adjacent public right-of-way.



LEGEND

- LIMIT OF PROPERTY
- EX. STORM SEWER
- PROP. STORM SEWER
- PROP. STORM SINGLE/DOUBLE CATCH BASIN
- PROP. STORM MH
- EX WM/SEWER TO BE REMOVED

CLIENT: ARMSTRONG PLANNING

TITLE: YORK1 HAZELHURST RECYCLING FACILITY
580 HAZELHURST ROAD

STORM SERVICING PLAN

6415 Northwest Dr.
Mississauga, ON Canada
L4V 1X1
Office (905) 677-0202
E-mail admin@envisionconsultants.ca

Checked: D.A.	Drawn: J.Z.
Date: 25-1071	Proj. No.: NOV 2025
Scale: 1: 750	Figure No.: 6

6. SITE GRADING

Under existing conditions, the Site slopes from southwest corner of the Site to the northeast corner of the Site. Existing elevations within the Site generally range from 93.50 masl to 90.80 masl.

The grading design of the proposed development will direct storm runoff to the on-site collection points so that the drainage is self contained. The grading design will comply with the City of Mississauga standards and will be designed to achieve the following:

- Maintain existing perimeter grades so that there is no impact to adjacent properties;
- Optimize earthworks i.e. minimize the quantity of deficit materials to be imported or exported;
- Minimize disruption to the existing municipal rights-of-way containing existing utilities and services;
- Promote drainage to the minor storm sewer system and accommodate stormwater management requirements;
- Provide adequate cover for underground services;
- Provide safe overland conveyance of flows exceeding the capacity of the storm sewer system through ponding;
- Satisfy the City's requirement for maximum 0.30m of stormwater ponding; and
- Building floor level will be set to avoid building / property damage during all design storms.

The proposed grading for the Site will, where possible, generally follow the existing grades to maintain drainage patterns and match boundary grades. Minor storm drainage is to be conveyed towards catchbasins that convey flows to the internal storm sewer network which discharges to the existing 2100mm storm sewer on Hazelhurst Road. Overland flow routes are provided to direct major storm drainage away from proposed and existing structures towards the Hazelhurst Road right-of-way.

Maximum 3:1 sloping is proposed at the development limits. Retaining walls / toe walls will be proposed where necessary to ensure that drainage is contained within the Site. Retaining walls above 1.0m in height will be designed by a Structural Engineer in accordance with City standards.

The grading design for drive aisles and parking areas will be saw-toothed to maintain a constant finished floor elevation for the warehouse building. The maximum ponding of the saw-tooth design is limited to 0.30m. Drive aisles will be designed with a minimum grade of 1.0%.

Coordination with the landscape consultant and mechanical consultant will be necessary to ensure grading initiatives support stormwater management and landscape objectives and provided sufficient cover above the sewers within the Site.

7. CLOSING

7.1. CONCLUSIONS AND RECOMMENDATIONS

Based on the information obtained through functional servicing assessment, EnVision presents the following conclusions and recommendations.

7.1.1. WATER SERVICING

The Site will be serviced by the 300mm Zone 1 watermain on Hazelhurst Road. One (1) 100mm domestic water service connection and one (1) 200mm fire service connection is proposed for the development. The existing water service connection for existing Building 'A' will be re-connected to the proposed internal watermain network. A hydrant flow test has been scheduled to be performed on the existing 300mm watermain on Hazelhurst Road to verify the available municipal water supply. This report will be updated with the test results once available.

The on-site watermains and service connections within the municipal right-of-way will be designed to Region of Peel standards while the water services within the proposed building are to be designed by the Site mechanical consultant per OBC, and coordinated with EnVision.

7.1.2. SANITARY SERVICING

The proposed Building 'B' will have one (1) 150mm sanitary service connection. The existing sanitary service connection to existing Building 'A' will be maintained in place. The proposed sanitary flow from the development will be discharged to the existing 250mm sanitary sewer on Hazelhurst Road via the existing 150mm municipal sanitary service connection from the Site. Based on the Region of Peel design criteria, there is no increase in sanitary flow to the existing sanitary sewer system. Therefore, the existing sanitary sewer system is expected to have sufficient capacity to receive sanitary flows from the development.

The on-site sanitary sewers will be designed to Region of Peel standards while the sanitary services within the proposed building are to be designed by the Site mechanical consultant per OBC, and coordinated with EnVision.

7.1.3. STORM SERVICING

The proposed development storm flows, up to the 100-year storm event, will be attenuated to the allowable levels using an underground stormwater management chamber. In compliance with City of Mississauga guidelines, the total storm flow rate of discharge from the Site under post-development conditions will be reduced to the 2-year pre-development level. Therefore, the existing storm sewer system will not be adversely affected under the post-development condition and will have adequate capacity to support flows from the proposed development. For major storm events exceeding the 100-year storm event, the Site will be graded to direct surface runoff away from the proposed and existing buildings, and towards the adjoining public right-of-way.

The on-site storm sewers will direct flows to the existing 2100mm storm sewer on Hazelhurst Road via the existing storm service connection from the Site.

A separate Stormwater Management Report has been prepared by EnVision under a separate cover to address requirements concerning stormwater management.

7.2. CERTIFICATION AND SIGNATURES

Prepared by

Dabi Abikoye, P.Eng.
Senior Project Engineer
dabikoye@envisionconsultants.ca

Reviewed by

Alex Williams, P.Eng.
Director – Land Development
awilliams@envisionconsultants.ca

7.3. QUALIFIER

EnVision prepared this report solely for the use of the intended recipient in accordance with the professional services agreement. In the event a contract has not been executed, the parties agree that the EnVision General Terms and Conditions, which were provided prior to the preparation of this report, shall govern their business relationship.

The report is intended to be used in its entirety. No excerpts may be taken to be representative of the findings in the assessment. The conclusions presented in this report are based on work performed by trained, professional and technical staff, in accordance with their reasonable interpretation of current and accepted engineering and scientific practices at the time the work was performed.

The content and opinions contained in the report are based on the observations and/or information available to EnVision at the time of preparation, using investigation techniques and engineering analysis methods consistent with those ordinarily exercised by EnVision and other engineering/scientific practitioners working under similar conditions, and subject to the same time, financial and physical constraints applicable to this project.

EnVision disclaims any obligation to update this report if, after the date of this report, any conditions appear to differ significantly from those presented in this report; however, EnVision reserves the right to amend or supplement this report based on additional information, documentation or evidence.

EnVision makes no other representations whatsoever concerning the legal significance of its findings. The intended recipient is solely responsible for the disclosure of any information contained in this report. If a

third party makes use of, relies on, or makes decisions in accordance with this report, said third party is solely responsible for such use, reliance or decisions. EnVision does not accept responsibility for damages, if any, suffered by any third party as a result of decisions made or actions taken by said third party based on this report.

EnVision has provided services to the intended recipient in accordance with the professional services agreement between the parties and in a manner consistent with that degree of care, skill and diligence normally provided by members of the same profession performing the same or comparable services in respect of projects of a similar nature in similar circumstances. It is understood and agreed by EnVision and the recipient of this report that EnVision provides no warranty, express or implied, of any kind. Without limiting the generality of the foregoing, it is agreed and understood by EnVision and the recipient of this report that EnVision makes no representation or warranty whatsoever as to the sufficiency of its scope of work for the purpose sought by the recipient of this report.

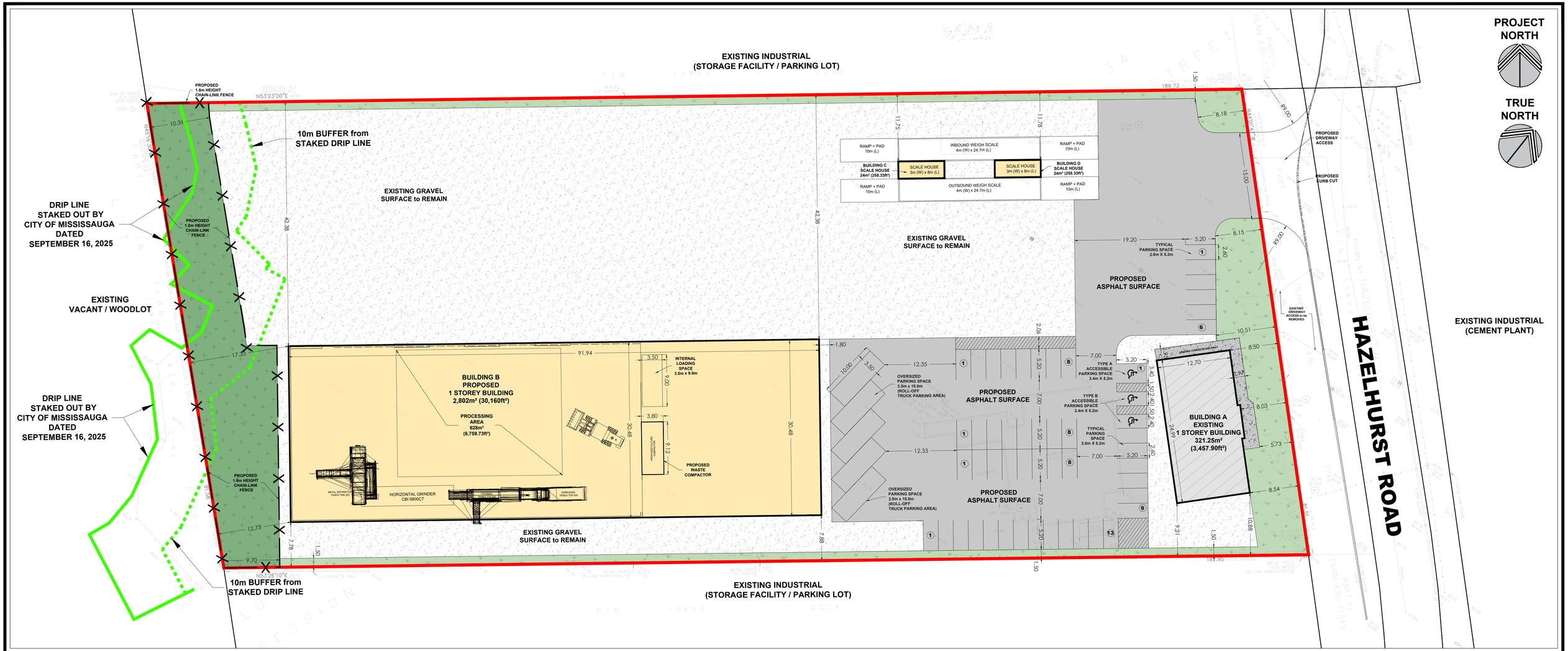
In preparing this report, EnVision has relied in good faith on information provided by others, as noted in the report. EnVision has reasonably assumed that the information provided is correct and EnVision is not responsible for the accuracy or completeness of such information.

Unless otherwise agreed in writing by EnVision, the Report shall not be used to express or imply warranty as to the suitability of the site for a particular purpose. EnVision disclaims any responsibility for consequential financial effects on transactions or property values, or requirements for follow-up actions /or costs.

This limitations statement is considered an integral part of this report.

APPENDIX A:

Site Plan and Topographic Survey



No.	REVISIONS	DATE
9		
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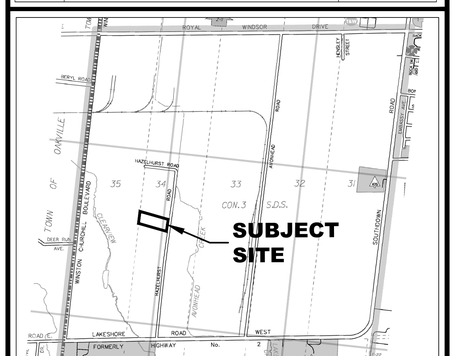
1		



KEY PLAN — SUBJECT SITE — N.T.S.

LEGEND

- PROPERTY BOUNDARY
- EXISTING BUILDING
- PROPOSED BUILDING
- PROPOSED LANDSCAPING
- PROPOSED PLANTING AREA
- EXISTING SIDEWALK
- GRAVEL SURFACE
- PROPOSED ASPHALT SURFACE
- STAKED DRIP LINE BY CITY of MISSISSAUGA SEPTEMBER 16, 2025
- 10m BUFFER from STAKED DRIPLINE
- —x— PROPOSED 1.8m HEIGHT CHAIN-LINK FENCE

SCALE 1:300

0 5 10 20 30 40 50

REGISTERED OWNER:
YORK1

PLANNER:
ARMSTRONG PLANNING & PROJECT MANAGEMENT
1600 STEELES AVENUE WEST, SUITE 318
VAUGHAN, ONTARIO
L4K 4M2

SURVEYOR:
R-PE SURVEYING LTD.
643 CHRISLEA ROAD, SUITE 7
WOODBRIDGE, ONTARIO
L4L 8A3

ZONING BY-LAW MATRIX: INDUSTRIAL ZONE (E3-12) PROPOSED WASTE PROCESSING STATION		
Description	**Required**	**Provided**
Lot Area	N/A	15,245.14m² (1.524 ha) (3.767 ac)
Minimum Lot Frontage	30m	81.41m
Minimum Front Yard Setback	7.5m	8.47m
Minimum Interior Side Yard	7.5m	5.50m - Existing 7.80m - Proposed
Minimum Rear Yard Setback	7.5m	7.80m - Proposed
Exisiting Building Area (Floor Area)	N/A	Building A - 321.25m² (3,457.90ft²)
Proposed Building Areas (Floor Area)	N/A	Building B - 2,802m² (30,160ft²) Building C - 24m² (258.33ft²) Building D - 24m² (258.33ft²) Total Proposed: 2,850ft² (30,677ft²)
Total Building Area (Existing and Proposed)	N/A	3,171.25m² (34,135.05ft²)
Building Coverage	N/A	20.80%
Maximum Building Height	N/A	TBD
Landscaped Area	N/A	2,032.44m² (13.33%)
Minimum depth of a landscape buffer measured from a lot line that is a street line	3.0m	5.73m
Minimum depth of a landscaped buffer measured from a lot line that abuts an Employment, Utility or Airport Zone, or any combination of zones thereof	0.0m	1.50m
Minimum depth of a landscape buffer measured from any other lot line	4.50m	4.50m
Paved Area	N/A	Gravel Surface - 7,112.49m² (46.65%) Asphalt Surface - 2,928.96m² (19.22%) Total - 9,999.91m² (65.87%)
Parking and Loading		
spaces per 100m² GFA - non-residential up to 2,325m² GFA - non-residential;	1.6 spaces	37 spaces
spaces per 100 m2 GFA - non-residential between 2,325m² and 9,300m² GFA - non-residential;	1.1 spaces	9 spaces
Total Parking	46 Required	52 spaces
Acessible Parking (4% of the Total)	3 spaces	3 spaces (1- Type A, 2 - Type B)
Loading Spaces	N/A	1 space

PROPOSED SITE PLAN

YORK1 HAZELHURST RECYCLING FACILITY
580 HAZELHURST ROAD

PART of LOT 34, CONCESSION 3
SOUTH of DUNDAS STRET
(GEOGRAPHIC TOWNHSHIP of TORONTO)
CITY of MISSISSAUGA
REGIONAL MUNICIPALITY of PEEL
SITE PLAN FILE No. _____

Project No.	Date: November 11, 2025	DWG No. **SP-100**
Scale: 1:300 (24x36)	Revised:	
Drawn By:	File No.: WPS_11_11_2025	

armstrong
planning | project management

PLAN OF SURVEY AND TOPOGRAPHY OF PART OF LOT 34, CONCESSION 3, SOUTH OF DUNDAS STREET
(GEOGRAPHIC TOWNSHIP OF TORONTO)
CITY OF MISSISSAUGA
REGIONAL MUNICIPALITY OF PEEL

SCALE 1:300

6m 3m 0m 6m 12m 18m 24m

R-PE SURVEYING LTD., O.L.S.

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

INTEGRATION NOTE

BEARINGS ARE GRID, UTM, NAD83 (CSRS:CBNV6:2010.0), DERIVED FROM OBSERVED REFERENCE POINTS (A) AND (B) USING CANNET REAL TIME NETWORK (RTN) No. PRS24771429903 (NORTHING: 4831192.07, EASTING: 620685.42).

COORDINATES ARE UTM ZONE 17, NAD83 (CSRS) (CBNV6-2010.0), TO URBAN ACCURACY PER SEC. 14 (2) OF O.REG. 216/10, AND CANNOT, IN THEMSELVES, BE USED TO RE-ESTABLISH CORNERS OR BOUNDARIES SHOWN ON THIS PLAN.

POINT	NORTHING	EASTING
ORP (A)	4816343.40	610598.10
ORP (B)	4816398.06	610806.98

DISTANCES ARE GROUND AND CAN BE CONVERTED TO GRID BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.999740.

BENCHMARK NOTE

ELEVATIONS ARE GEODETIC AND ARE REFERRED TO CITY OF MISSISSAUGA VERTICAL BENCH MARK NUMBER 1036 HAVING AN ORTHOMETRIC ELEVATION OF 100.258 METRES. ELEVATIONS ARE REFERENCED TO THE CANADIAN GEODETIC VERTICAL DATUM OF 1928, 1978 PRE-ADJUSTMENT (CGVD-1928:PRE-1978ADJ.).

TABLET IS SET HORIZONTALLY AT THE BASE OF A 750MM DIAMETER CONCRETE TRAFFIC POLE AT THE SOUTHWEST CORNER OF ROYAL WINDSOR DRIVE AND THE ENTRANCE TO THE PLAZA (APPROXIMATELY 460M WEST OF SOUTHDOWN ROAD) OPPOSITE THE ENTRANCE TO THE CITY OF MISSISSAUGA CLARKSON WORKS YARD.

NOTES

□	DENOTES MONUMENT SET
■	DENOTES MONUMENT FOUND
SIB	DENOTES STANDARD IRON BAR
IB	DENOTES IRON BAR
PL1	DENOTES PLAN 43R-23369
PL2	DENOTES PLAN 43R-17487
PL3	DENOTES SURVEYOR'S REAL PROPERTY REPORT BY DAVID HORWOOD LTD., O.L.S. DATED DECEMBER 10, 1999
PL4	DENOTES SURVEYOR'S REAL PROPERTY REPORT BY DIEGO FAZIO LTD., O.L.S. DATED DECEMBER 23, 1999
PL5	DENOTES PLAN 43R-16403
(830)	DENOTES E. W. PETZOLD, O.L.S.

LEGEND

CB	DENOTES CATCH BASIN
LS	DENOTES LAMP STANDARD
UP	DENOTES UTILITY POLE
WV	DENOTES WATER VALVE
MHST	DENOTES MANHOLE STORM
-W-	DENOTES OVERHEAD WIRE
-X-	DENOTES FENCE LINE
	DENOTES DECIDUOUS TREE
ø	DENOTES DIAMETER
	DENOTES FIRE HYDRANT
D.S.	DENOTES DOOR SILL ELEVATION
MH	DENOTES MANHOLE
BOL	DENOTES BOLLARD

SURVEYOR'S CERTIFICATE

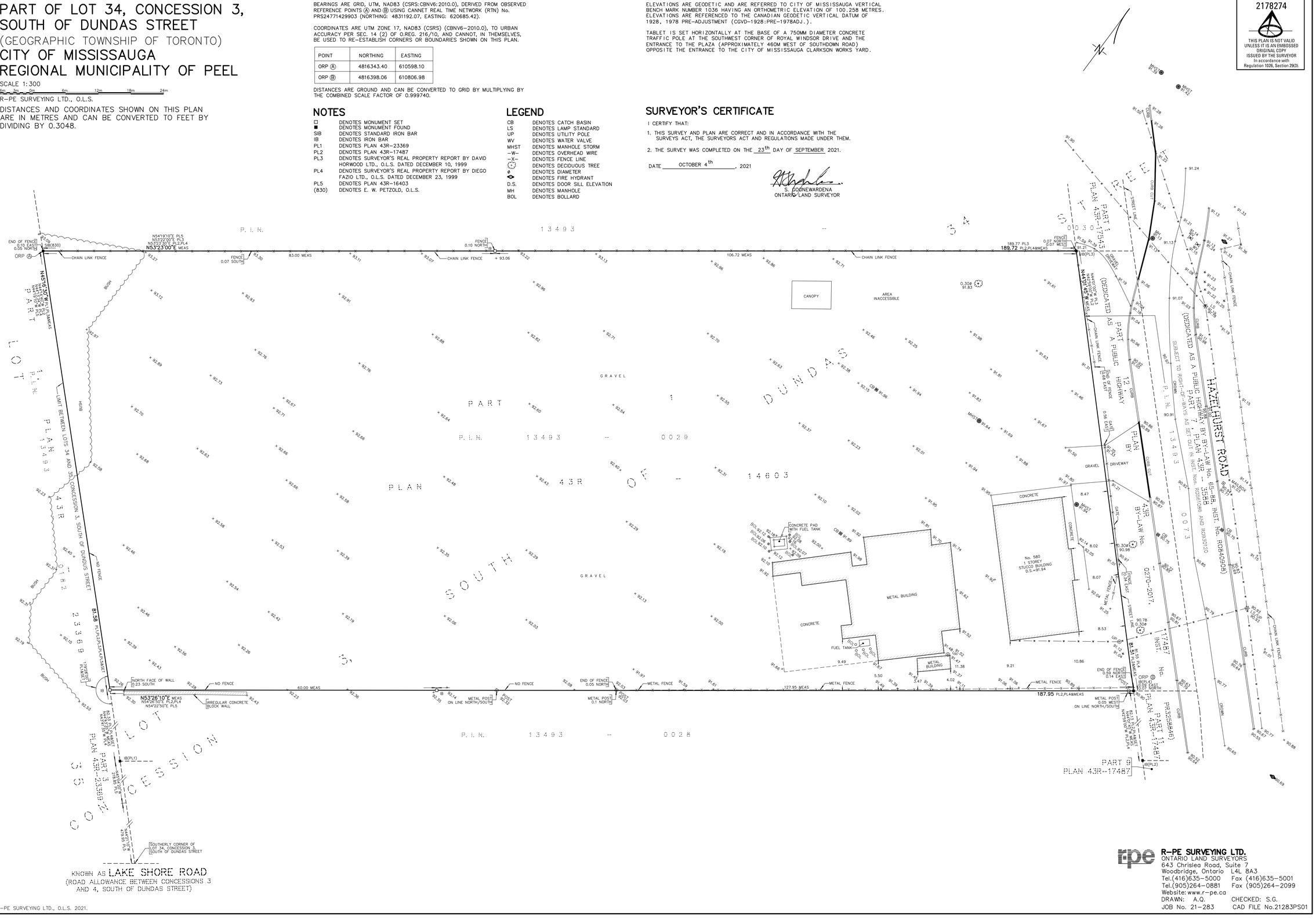
I CERTIFY THAT:

1. THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEYS ACT, THE SURVEYORS ACT AND REGULATIONS MADE UNDER THEM.
2. THE SURVEY WAS COMPLETED ON THE 23th DAY OF SEPTEMBER 2021.

DATE OCTOBER 4th, 2021

S. GODNEWARDENA
ONTARIO LAND SURVEYOR

ASSOCIATION OF ONTARIO LAND SURVEYORS
PLAN SUBMISSION FORM
2178274
THIS PLAN IS NOT VALID UNLESS IT IS AN EMBOSSED ORIGINAL COPY ISSUED BY THE SURVEYOR In accordance with Regulation 1026, Section 29(3).



APPENDIX B:

Domestic Water Demand, Fire Flow Calculations & Hydrant Flow Test Results

EnVision Consultants Ltd.
580 Hazelhurst Road, Mississauga
Project No.: 25-1071

Domestic Water Demand

City of Mississauga

2025-11-13
Designed: D.A.
Checked: A.W.

Existing Flows

Land Use	Site Area (ha)	Net Developable Area (ha)	Gross Floor Area (ha)	Population Density		Equivalent Population (persons)	Unitary Demand Rate (L/employee/day)	Average Daily Demand (L/s)	Max Day Peaking Factor	Max Day Demand (L/s)	Max Hour Peaking Factor	Max Hour Demand (L/s)
PRE DEVELOPMENT AREA												
Industrial Office	1.52	1.45	0.03	70	persons/ha	102	300	0.35	1.4	0.50	3.0	1.06
Industrial Building (x2)			0.05	70	persons/ha							
TOTAL	**1.52**	**1.45**	**0.08**			**102**		**0.35**		**0.50**		**1.06**

Notes:
1. Population densities and average daily flow generation rates are based on the guidelines outlined in Region of Peel Linear Wastewater Standards dated March 29, 2023.
2. Average Consumption Rates are based on the guidelines outlined in the Region of Peel Public Works Watermain Design Criteria dated June 2010.

EnVision Consultants Ltd.
580 Hazelhurst Road, Mississauga
Project No.: 25-1071

Domestic Water Demand

City of Mississauga

2025-11-13
Designed: D.A.
Checked: A.W.

Proposed Flows

Land Use	Site Area (ha)	Net Developable Area (ha)	Gross Floor Area (ha)	Population Density		Equivalent Population (persons)	Unitary Demand Rate (L/employee/day)	Average Daily Demand (L/s)	Max Day Peaking Factor	Max Day Demand (L/s)	Max Hour Peaking Factor	Max Hour Demand (L/s)
PROPOSED DEVELOPMENT AREA												
Industrial Area - Building A (Existing)	1.52	1.45	0.03	70	persons/ha	102	300	0.35	1.4	0.50	3.0	1.06
Industrial Area - Building B			0.28	70	persons/ha							
Industrial Area - Building C			0.002	70	persons/ha							
Industrial Area - Building D			0.002	70	persons/ha							
TOTAL	**1.52**	**1.45**	**0.31**			**102**		**0.35**		**0.50**		**1.06**

Notes:
1. Site statistics are based on the architectural site plan prepared by Armstrong Planning dated November 5, 2025.
2. Population densities and average daily flow generation rates are based on the guidelines outlined in Region of Peel Linear Wastewater Standards dated March 29, 2023.
3. Average Consumption Rates are based on the guidelines outlined in the Region of Peel Public Works Watermain Design Criteria dated June 2010.

Fire Flow Demand - Building A

EnVision Consultants Ltd. | 2025-11-13

580 Hazelhurst Road, Mississauga | City of Mississauga | Designed: J.Z.

Project No.: 25-1071 | Checked: D.A.

$$RFF = 220C\sqrt{A}$$

where RFF = Required Fire Flow (Lpm)

C = Construction Coefficient

A = Total Effective Floor Area (m2)

Section A - Building Construction Type

Construction Type = Type II Noncombustible Construction

Therefore Construction Coeffecient, C = 0.8

Section B - Total Effective Floor Area

For structures with a Construction Coefficient value below 1.0 and protected vertical openings;

A = Total Effective Floor Area

= Largest Floor Area + 25% of Adjoining Floor Areas

= 321.25+ 0.25(0 + 0)

= 321 m2

Section C - Building Height in Storeys

1 storey

Section D - Base Required Fire Flow

RFF = Required Fire Flow

= 220 x C x √A

= 220 x 0.8 x √321

= 3153 Lpm

Section E - Additions and Reductions to Required Fire Flow

Building Contents = Combustible

RFF Adjustment for Building Contents = 0%

Sprinkler System = N/A

RFF Adjustment for Sprinkler System = 0%

North exposure distance =	100	m
South exposure distance =	15.2	m
East exposure distance =	100	m
West exposure distance =	61.7	m

RFF Adjustment for Building Exposure = 15%

Total RFF Adjustment = 15%

= 0.15 x 3153 Lpm

= 473 Lpm

Section F - Required Fire Flow Calculation

RFF = Base RFF + Total RFF Adjustments

= 3626 Lpm

≈ 4000 Lpm (rounded to the nearest 1000 Lpm)

= 1055 US GPM

= 66.67 L/s

Notes:

1. Fire Flow Calculations per Water Supply for Public Fire Protection, 2020 by Fire Underwriters Survey.

2. Largest floor area is equivalent to the building footprint from the Site Plan statistics provided by Armstrong Planning dated November 5, 2025.

Fire Flow Demand - Building B

EnVision Consultants Ltd. | 2025-11-13
580 Hazelhurst Road, Mississauga | City of Mississauga | Designed: J.Z.
Project No.: 25-1071 | Checked: D.A.

$$RFF = 220C\sqrt{A}$$

where RFF = Required Fire Flow (Lpm)
C = Construction Coefficient
A = Total Effective Floor Area (m2)

Section A - Building Construction Type

Construction Type = Type II Noncombustible Construction
Therefore Construction Coeffecient, C = 0.8

Section B - Total Effective Floor Area

For structures with a Construction Coefficient value below 1.0 and protected vertical openings;

A = Total Effective Floor Area
= Largest Floor Area + 25% of Adjoining Floor Areas
= 2802+ 0.25(0 + 0)
= 2802 m2

Section C - Building Height in Storeys

1 storey

Section D - Base Required Fire Flow

RFF = Required Fire Flow
= 220 x C x √A
= 220 x 0.8 x √2802
= 9316 Lpm

Section E - Additions and Reductions to Required Fire Flow

Building Contents = Free Burning
RFF Adjustment for Building Contents = 15%

Sprinkler System = Fully Supervised Automatic Sprinkler System per NFPA 13
RFF Adjustment for Sprinkler System = -30%

North exposure distance =	100	m
South exposure distance =	107	m
East exposure distance =	61.7	m
West exposure distance =	100	m

RFF Adjustment for Building Exposure = 0%

Total RFF Adjustment = -15%
= -0.15 x 9316 Lpm
= -1397 Lpm

Section F - Required Fire Flow Calculation

RFF = Base RFF + Total RFF Adjustments
= 7919 Lpm
≈ 8000 Lpm (rounded to the nearest 1000 Lpm)
= 2111 US GPM
= 133.33 L/s

Notes:

1. Fire Flow Calculations per Water Supply for Public Fire Protection, 2020 by Fire Underwriters Survey.
2. Largest floor area is equivalent to the building footprint from the Site Plan statistics provided by Armstrong Planning dated November 5, 2025.

Fire Flow Demand - Building C

EnVision Consultants Ltd. | 2025-11-13
580 Hazelhurst Road, Mississauga | City of Mississauga | Designed: J.Z.
Project No.: 25-1071 | Checked: D.A.

$$RFF = 220C\sqrt{A}$$

where RFF = Required Fire Flow (Lpm)
C = Construction Coefficient
A = Total Effective Floor Area (m2)

Section A - Building Construction Type

Construction Type = Type II Noncombustible Construction
Therefore Construction Coeffecient, C = 0.8

Section B - Total Effective Floor Area

For structures with a Construction Coefficient value below 1.0 and protected vertical openings;

A = Total Effective Floor Area
= Largest Floor Area + 25% of Adjoining Floor Areas
= 24+ 0.25(0 + 0)
= 24 m2

Section C - Building Height in Storeys

1 storey

Section D - Base Required Fire Flow

RFF = Required Fire Flow
= 220 x C x √A
= 220 x 0.8 x √24
= 862 Lpm

Section E - Additions and Reductions to Required Fire Flow

Building Contents = Combustible
RFF Adjustment for Building Contents = 0%

Sprinkler System = Fully Supervised Automatic Sprinkler System per NFPA 13 with standard water supply for both the system and fire department hose line
RFF Adjustment for Sprinkler System = 0%

North exposure distance =	100	m
South exposure distance =	100	m
East exposure distance =	6.6	m
West exposure distance =	100	m

RFF Adjustment for Building Exposure = 20%

Total RFF Adjustment = 20%
= 0.2 x 862 Lpm
= 172 Lpm

Section F - Required Fire Flow Calculation

RFF = Base RFF + Total RFF Adjustments
= 1034 Lpm
≈ 1000 Lpm (rounded to the nearest 1000 Lpm)
= 264 US GPM
= 16.67 L/s

Notes:

1. Fire Flow Calculations per Water Supply for Public Fire Protection, 2020 by Fire Underwriters Survey.
2. Largest floor area is equivalent to the building footprint from the Site Plan statistics provided by AArmstrong Planning dated November 5, 2025.

Fire Flow Demand - Building D

EnVision Consultants Ltd. | 2025-11-13
580 Hazelhurst Road, Mississauga | City of Mississauga | Designed: J.Z.
Project No.: 25-1071 | Checked: D.A.

$$RFF = 220C\sqrt{A}$$

where RFF = Required Fire Flow (Lpm)
C = Construction Coefficient
A = Total Effective Floor Area (m2)

Section A - Building Construction Type

Construction Type = Type II Noncombustible Construction
Therefore Construction Coeffecient, C = 0.8

Section B - Total Effective Floor Area

For structures with a Construction Coefficient value below 1.0 and protected vertical openings;

A = Total Effective Floor Area
= Largest Floor Area + 25% of Adjoining Floor Areas
= 24+ 0.25(0 + 0)
= 24 m2

Section C - Building Height in Storeys

1 storey

Section D - Base Required Fire Flow

RFF = Required Fire Flow
= 220 x C x √A
= 220 x 0.8 x √24
= 862 Lpm

Section E - Additions and Reductions to Required Fire Flow

Building Contents = Combustible
RFF Adjustment for Building Contents = 0%

Sprinkler System = Fully Supervised Automatic Sprinkler System per NFPA 13 with standard water supply for both the system and fire department hose line
RFF Adjustment for Sprinkler System = 0%

North exposure distance =	100	m
South exposure distance =	149	m
East exposure distance =	100	m
West exposure distance =	8.7	m

RFF Adjustment for Building Exposure = 20%

Total RFF Adjustment = 20%
= 0.2 x 862 Lpm
= 172 Lpm

Section F - Required Fire Flow Calculation

RFF = Base RFF + Total RFF Adjustments
= 1034 Lpm
≈ 1000 Lpm (rounded to the nearest 1000 Lpm)
= 264 US GPM
= 16.67 L/s

Notes:

1. Fire Flow Calculations per Water Supply for Public Fire Protection, 2020 by Fire Underwriters Survey.
2. Largest floor area is equivalent to the building footprint from the Site Plan statistics provided by Armstrong Planning dated November 5, 2025.

APPENDIX C:

Sanitary Demand Calculations

EnVision Consultants Ltd.
580 Hazelhurst Road, Mississauga
Project No.: 25-1071

Sanitary Flow Generation

City of Mississauga

2025-11-13
Designed: D.A.
Checked: A.W.

EXISTING FLOWS

Land Use	Site Area (ha)	Net Developable Area (ha)	Gross Floor Area (ha)	Population Density		Equivalent Population (persons)	Unitary Flow Rate (L/cap/day)	Average Daily Flow (L/s)	Peaking Factor	Peak Flow (L/s)	I&I Allowance (L/s)	Total Design Flow (L/s)
DISCHARGE												
Industrial Office	1.52	1.45	0.03	70	persons/ha	102	270	0.32	4.00	1.28	0.41	1.69
Industrial Building (x2)			0.05	70	persons/ha							
Total Discharge	**1.52**	**1.45**	**0.08**			**102**		**0.32**		**1.28**	**0.41**	**1.69**

Notes:
1. Population densities and average daily flow generation rates are based on the guidelines outlined in Region of Peel Linear Wastewater Standards dated March 29, 2023.

EnVision Consultants Ltd.
580 Hazelhurst Road, Mississauga
Project No.: 25-1071

Sanitary Flow Generation

City of Mississauga

2025-11-13
Designed: D.A.
Checked: A.W.

PROPOSED FLOWS

Land Use	Site Area (ha)	Net Developable Area (ha)	Gross Floor Area (ha)	Population Density		Equivalent Population (persons)	Unitary Flow Rate (L/cap/day)	Average Daily Flow (L/s)	Peaking Factor	Peak Flow (L/s)	I&I Allowance (L/s)	Total Design Flow (L/s)
DISCHARGE												
Industrial Area - Building A (Existing)	1.52	1.45	0.03	70	persons/ha	102	270	0.32	4.00	1.28	0.41	1.69
Industrial Area - Building B			0.28	70	persons/ha							
Industrial Area - Building C			0.002	70	persons/ha							
Industrial Area - Building D			0.002	70	persons/ha							
Total Discharge	**1.52**	**1.45**	**0.31**			**102**		**0.32**		**1.28**	**0.41**	**1.69**

Notes:

1. Site statistics are based on the architectural site plan prepared by Armstrong Planning dated November 5, 2025.
2. Population densities and average daily flow generation rates are based on the guidelines outlined in Region of Peel Linear Wastewater Standards dated March 29, 2023.

APPENDIX D:

Region Multi-Use Demand Table

EnVision Consultants Ltd.
580 Hazelhurst Road, Mississauga
Project No.: 25-1071

Water and Wastewater Multi-Use Demand Table

City of Mississauga

2025-11-13
Designed: D.A.
Checked: A.W.

POPULATION

Existing

	area (m^2)	persons*
Industrial	14500	102
Total Existing	14500	102

Proposed

	area (m^2)	persons*
Industrial	14500	102
Proposed Employment		
Total Proposed	14500	102

Other

Existing GFA (industrial) (sqm)	321
Proposed GFA (industrial) (sqm)	3,171
Proposed Land Area (ha)	1.45

WATER CONNECTION

Hydrant flow test		
1	Test Pending	Test Pending

		Pressure (kPa)	Flow (L/s)	Time
1	Minimum water pressure	TBC	TBC	TBC
1	Maximum water pressure	TBC	TBC	TBC

No.	**Water demands**		
		Demand (L/s)	
	Demand type	**Industrial**	**Total**
	Existing Fire Flow		
1	Proposed average day flow	0.35	0.35
2	Proposed maximum day flow	0.50	0.5
3	Proposed peak hour flow	1.06	1.06
4	Proposed fire flow	133.33	133.33
Analysis			
5	Maximum day plus fire flow	133.83	133.83

WASTEWATER CONNECTION

	Discharge Location	**Flow (L/s)**
		Residential
Existing Effluent	250mm sanitary sewer on Hazelhurst Rd	1.69
Proposed Effluent	250mm sanitary sewer on Hazelhurst Rd	1.69

EnVision Consultants Ltd.
580 Hazelhurst Road, Mississauga
Project No.: 25-1071

Water and Wastewater Multi-Use Demand Table

City of Mississauga

2025-11-13
Designed: D.A.
Checked: A.W.

POPULATION

Existing

	area (m^2)	persons*
Industrial	14500	102
Total Existing	14500	102

Proposed

	area (m^2)	persons*
Industrial	14500	102
Proposed Employment		
Total Proposed	14500	102

Other

Existing GFA (industrial) (sqm)	321
Proposed GFA (industrial) (sqm)	3,171
Proposed Land Area (ha)	1.45

WATER CONNECTION

Hydrant flow test		
1	Test Pending	Test Pending

		Pressure (kPa)	Flow (L/s)	Time
1	Minimum water pressure	TBC	TBC	TBC
1	Maximum water pressure	TBC	TBC	TBC

No.	**Water demands**		
		Demand (L/s)	
	Demand type	**Industrial**	**Total**
	Existing Fire Flow		
1	Proposed average day flow	0.35	0.35
2	Proposed maximum day flow	0.50	0.5
3	Proposed peak hour flow	1.06	1.06
4	Proposed fire flow	133.33	133.33
Analysis			
5	Maximum day plus fire flow	133.83	133.83

WASTEWATER CONNECTION

	Discharge Location	**Flow (L/s)**
		Residential
Existing Effluent	250mm sanitary sewer on Hazelhurst Rd	1.69
Proposed Effluent	250mm sanitary sewer on Hazelhurst Rd	1.69