



STREETSCAPE FEASIBILITY STUDY

805 DUNDAS STREET EAST
CITY OF MISSISSAUGA

PREPARED FOR:
KJC PROPERTIES INC.
1940 ELLESMERE ROAD
TORONTO, ON M1H 2V7

DATE: NOVEMBER 2022

PROJECT NO. 221285

PREPARED BY HUSSON
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C103 Utility Plan

1.0 INTRODUCTION

The purpose of this report is to evaluate the adequacy of the proposed building setback by confirming that an appropriate boulevard treatment can be accommodated within the public right-of-way along the frontage of the development in accordance with City Policies. Specifically, this report will verify that a two-metre wide below grade trench to accommodate the street tree corridor and above grade tree canopy clearance can be provided within the public right-of-way.

1.1 Site Description

The site is located at the northwest corner of the intersection of Dundas Street East and Haines Road and east of Cawthra Road. The total site area is 12,735m² and has existing single story commercial buildings that will be demolished. Refer to **Figure 1** for the site location.

A twelve-storey mixed-use development is proposed for the site, with two levels of underground parking as well as landscaping. The building will be mixed used and have main-floor commercial with residential above, as well as townhouse units along the north side of the site.

1.2 Background

The Streetscape Feasibility Study has been prepared to meet the requirements of the City of Mississauga (The City). The following materials were referenced in the preparation of this report.

- The City of Mississauga Development Requirements Manual (DRM), updated and effective January 2020.
- The Streetscape Feasibility Study Terms of Reference prepared by the City of Mississauga, dated May 2, 2019.
- Subsurface Utility Mapping (SUE QL-B) completed by OnSite Locates Inc., using Geophysics, dated August 26, 2022.
- The Subsurface Utility Report, prepared by Onsite Locates Inc., dated September 15, 2022.
- The Subsurface Utility Plan, prepared by Onsite Locates Inc., dated September 6, 2022.
- As-constructed plan and profile drawings for Dundas Street East, Haines Road and the storm sewer easement on site, provided by the City and Region.

The proposed Utility Plan, **Drawing C103**, has been prepared to meet the City's requirements. **Drawing C103** can be referenced in **Appendix A**.

2.0 EXISTING SUBSURFACE UTILITIES

OnSite Locates Inc. was retained to completed a Level B to D Subsurface Utility Engineering (SUE) Study as per CSA Standard S250 and ASCE Standard 38-02. As part of the scope of work, the sewer inverts, diameters and material were also confirmed. The Subsurface Utility Plan and Report prepared by OnSite Locates Inc. can be referenced in **Appendix B**.

3.0 TREE CORRIDORS

3.1 Haines Road Corridor

The existing trees within the Haines Road right-of-way will be protected. The tree protection zones within the Haines Road right-of-way cover the majority of the area and there is insufficient space on Haines Road to accommodate additional trees. Therefore, no tree corridor is proposed on Haines Road.

3.2 Dundas Street East Corridor

The existing utilities within the Dundas Street East right-of-way do now allow for sufficient space to accommodate a two-metre wide below grade trench to accommodate the street tree corridor. Therefore, the proposed underground levels were reduced in size and set-back from the right-of-way to accommodate a tree corridor. The property line is inconsistent across the frontage of the property, however the tree corridor will straddle the property line with approximately 1.1m of width located on the private site and 0.9m located within the right-of-way. Refer to the Utility Plan, **Drawing C103**, in **Appendix A**, for additional details and cross sections.

The unencumbered two metre wide street tree corridor is provided along the majority of the Dundas Street East frontage with a few exceptions. To the west, there are two easements that do not allow tree planting. There is one 10m wide easement for Trans-Northern Pipelines Inc., and a proposed 7.5m wide easement for a Storm Sewer. As no tree planting is allowed in either easement, the tree corridor terminates at the eastern boundary of the storm sewer easement.

In addition to this, there is one utility conflict with Hydro at the eastern end of the tree corridor on Dundas Street East. As this utility crossed onto the existing private property, it is assumed it is a private service that can be removed. Details will be reviewed by the electrical consultant and included in subsequent submissions.

4.0 CONCLUSIONS

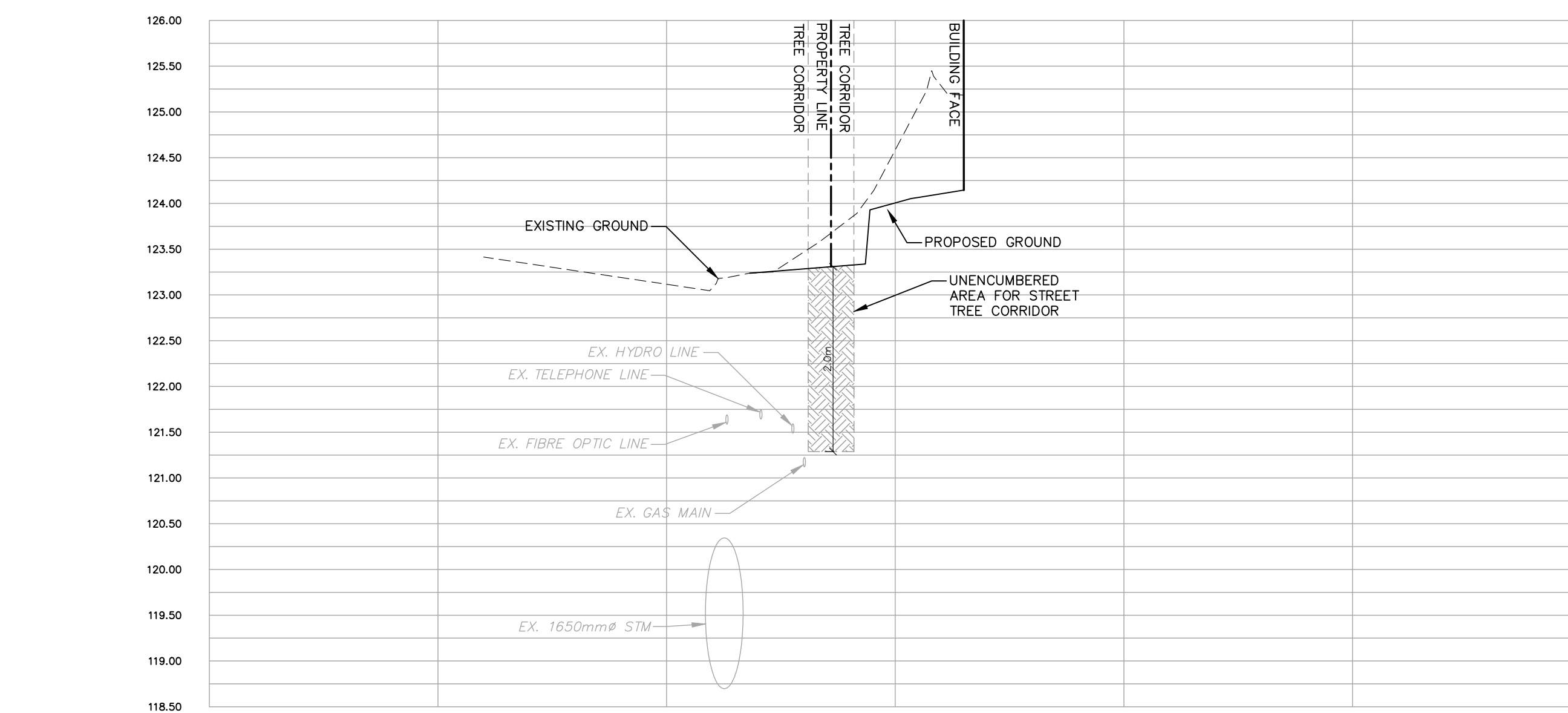
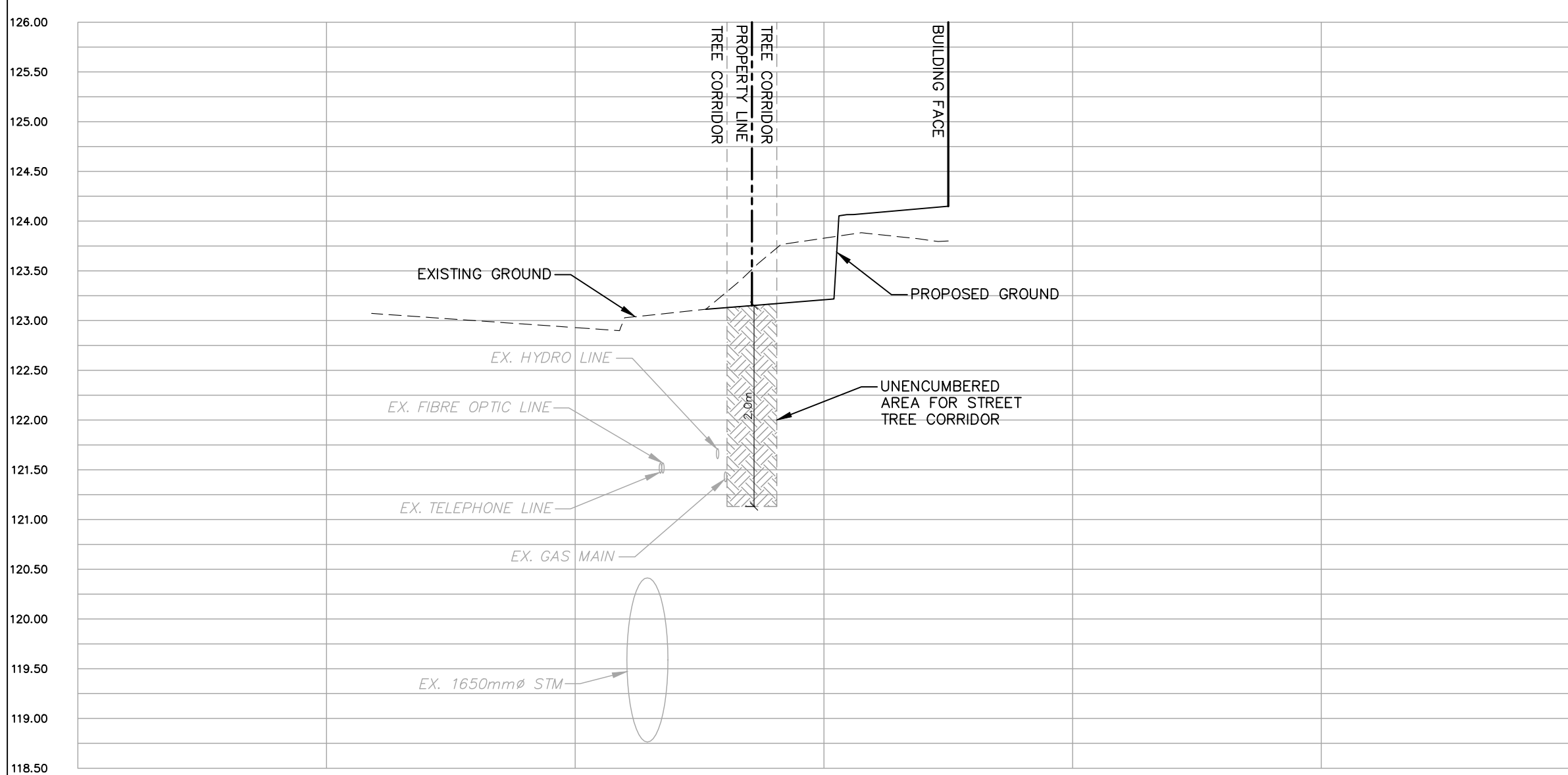
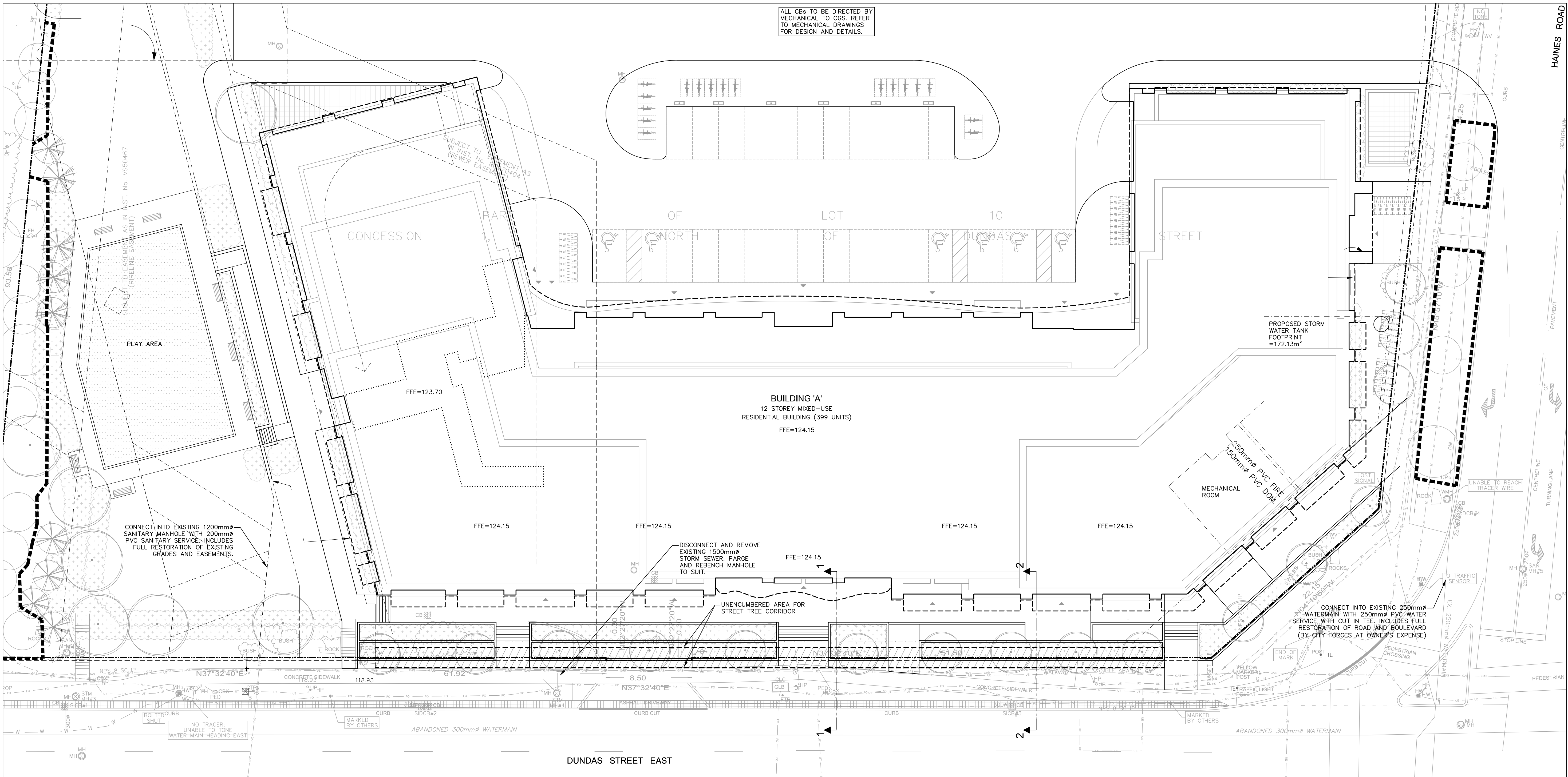
An appropriate boulevard treatment can be provided within the right-of-way. Therefore, based on the information provided herein, the streetscape feasibility requirements for the Zoning By-law Amendment have been provided.



APPENDIX A

UTILITY PLAN

ALL CBs TO BE DIRECTED BY MECHANICAL TO OGS. REFER TO MECHANICAL DRAWINGS FOR DESIGN AND DETAILS.



- LEGEND**
- EXISTING STORM SEWER
 - EXISTING SANITARY SEWER
 - EXISTING WATERMAIN
 - PROPOSED STORM SEWER
 - PROPOSED SANITARY SEWER
 - PROPOSED WATERMAIN
 - PROPOSED CATCHBASIN
 - ⊕ PROPOSED AREA DRAIN
 - ⊕ PROPOSED WATER VALVE
 - TREE PROTECTION HOARDING
 - EXISTING FIBRE OPTIC LINE
 - EXISTING UNDERGROUND HYDRO LINE
 - EXISTING UNDERGROUND TELEPHONE LINE
 - EXISTING GAS LINE



Revisions:		Date:
No.:	Revision:	



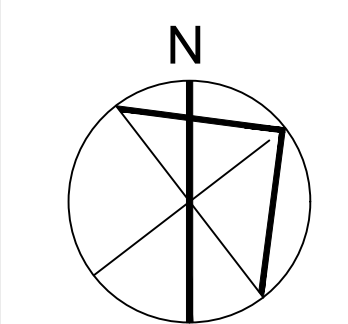
I HEREBY CERTIFY THAT THE INFORMATION ON THIS PLAN IS COMPLETE, ACCURATE AND BASED ON PHYSICAL LOCATES BY GEOPHYSICS, AS PROVIDED BY ONSITE LOCATES INC., ON 2022-08-26.

1.	Issued for Rezoning Application	Nov. 7, 2022
No.:	Issued For:	Date:

Client:
KJC PROPERTIES INC.
805 Dundas Street East, Mississauga, ON.
Proposed Residential Development

Drawing Title:
UTILITY PLAN

Scale:
1 : 200
Drawn by:
W.S.
Checked by:
M.L.P.
Project No.:
221285
Date:
NOV. 7, 2022
Drawing No.:

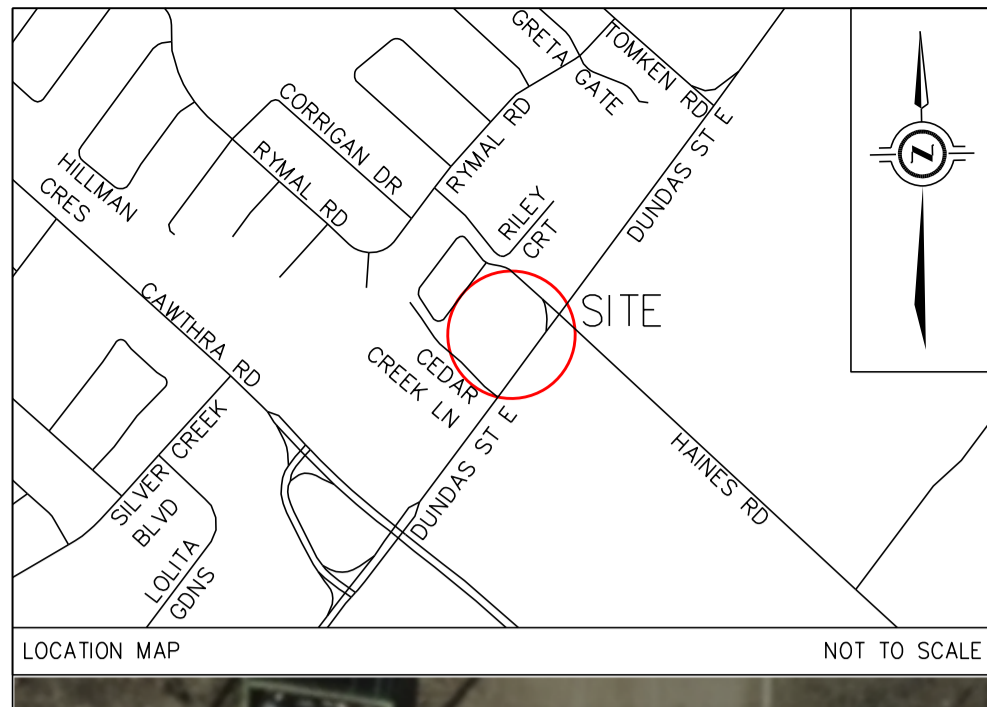


C103



APPENDIX B

**SUBSURFACE UTILITY
ENGINEERING**



SUBSURFACE UTILITY PLAN OF
799-805 DUNDAS ST E
 CITY OF MISSISSAUGA
 REGIONAL MUNICIPALITY OF PEE

ONSITE LOCATES INC.
 © COPYRIGHT 2022



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

COORDINATE SYSTEM
 UTM ZONE 17, NAD83 (CSRS) (2010.0).

NOTE:
 BUILDINGS ARE DEPICTED FOR VISUAL AID ONLY. ANY ASSUMPTIONS MADE ABOUT BUILDINGS OR LOCATIONS OF FEATURES IN RELATION TO THE BUILDINGS OR BUILDING TIES ARE MADE AT THE RISK OF THE INDIVIDUAL OR PARTIES TO WHOM THIS DOCUMENT HAS BEEN PROVIDED.

LEGEND

- SAN — DENOTES UNDERGROUND SANITARY SEWER
- STM — DENOTES UNDERGROUND STORM SEWER
- G — DENOTES UNDERGROUND GAS LINE
- W — DENOTES UNDERGROUND WATER LINE
- H — DENOTES UNDERGROUND HYDRO LINE
- TEL — DENOTES UNDERGROUND TELEPHONE LINE
- FIBRE — DENOTES UNDERGROUND FIBRE OPTIC LINE
- SAN MH DENOTES SANITARY MANHOLE
- STM MH DENOTES STORM MANHOLE
- SCB DENOTES DOUBLE CATCH BASIN
- DCB DENOTES SIDE INLET CATCH BASIN
- SCIB DENOTES GAS TEST POINT
- MH DENOTES GAS VALVE
- WH DENOTES WATER MANHOLE
- WV DENOTES WATER VALVE
- WWS DENOTES WATER WELL
- LW DENOTES LIGHT STANDARD
- FST DENOTES FIBER TEST POINT
- G/C DENOTES GROUND LEVEL CHAMBER
- MW DENOTES MONITORING WELL
- HW DENOTES HANDWELL
- LW DENOTES LIGHT STANDARD
- CAP/PLUG DENOTES CAP/PLUG

SEWER INVERT NOTE:
 SEWER INVERT DEPTHS ARE MANUALLY MEASURED FROM THE LID/GRADE OF THE GIVEN FEATURE.
 ANNOTATIONS DISPLAYED AS "/G/G222" WITH AN ASTERISK HAVE BEEN INTERPOLATED FROM RECORDS AND WERE NOT FIELD VERIFIED BY ONSITE LOCATES LTD.
 INVERT DEPTH MEASUREMENTS ARE FROM THE ASSUMED BOTTOM OF THE FACILITY STRUCTURE.
 DEPTHS ARE NOT SUITABLE FOR EXCAVATION PURPOSES. SEWER NETWORK CONNECTIONS WERE COMPILED WHERE FIELD EVIDENCE COINCIDED WITH AS-BUILT RECORDS.
 WHERE NO DEPTH INFORMATION COULD BE OBTAINED, UTILITIES ARE ASSUMED TO BE AT STANDARD INSTALLATION DEPTH FOR THE SPECIFIC TYPE OF UTILITY.
 THE MOST RELIABLE WAY TO PRECISELY DETERMINE THE HORIZONTAL AND VERTICAL LOCATION OF AN UNDERGROUND UTILITY IS THROUGH PHYSICAL EXPOSURE USING SAFE DIGGING TECHNIQUES (COMMONLY PERFORMED WITH HYDRO VACUUM EXCAVATION).
 INVERT DEPTH MEASUREMENTS HEREON ARE PROVIDED IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048.

SEWER INVERT DATA TABLE

MH/CB	DIRECTION	DIAMETER	INVERT	NOTES
SAN MH#1	N	200	1.85	N/E LATERAL, 200# DROP PIPE
SAN MH#2	N	250	2.78	
	SW	250	2.85	
SAN MH#3	N	200	2.53	
	S	200	2.54	
STM MH#3	N/E	N/A	*3.88	SEVERELY RECESSED CHAMBER
STM MH#4	N/W	1500	3.06	
	S/W	1500	4.01	N/W LID THROUGH CHAMBER, 2.00M TO TOP OF PIPE
SAN MH#5	N/W	250	3.17	
	SE	250	3.19	
STM MH#6	N/W	600	3.03	
	SW	600	2.98	
STM MH#7	W	250	2.57	
	SE	250	2.57	
SAN MH#8	N/W	150	5.16	RECESSED CHAMBER, 15.00M TO BOTTOM OF CHAMBER
	SE	150	5.20	
SCB#1	E	250	0.77	
SDCB#2	SW	250	1.08	
SDCB#3	SW	250	1.05	
DCB#4	N/E	N/A	N/A	1.09
	SE	250	1.09	

UNDERGROUND UTILITY NOTES
 THE UTILITY DATA DEPICTED ON THIS DRAWING WERE ACQUIRED IN ACCORDANCE WITH ASCE STANDARD 38-02. THE INFORMATION IS SHOWN BY ATTRIBUTED QUALITY LEVELS WHICH ARE DEFINED AS FOLLOWS:

DATA QUALITY LEVEL

- HIGHEST QUALITY: QUALITY LEVEL A (SOLID LINE)
- QUALITY LEVEL B (DASHED LINE)
- QUALITY LEVEL C (DOTTED LINE)
- QUALITY LEVEL D (DASH-DOTTED LINE)
- LOWEST QUALITY: QUALITY LEVEL "A" (DASH-DOTTED LINE)

QUALITY LEVEL "A" - INFORMATION OBTAINED BY ACTUAL PHYSICAL EXPOSURE OF TARGETED UTILITIES AND SUBSEQUENT MEASUREMENT OF THE EXPOSED PRECISE HORIZONTAL AND VERTICAL POSITION.
 QUALITY LEVEL "B" - INFORMATION OBTAINED USING GEOSPATIAL LOCATE TECHNIQUES TO IDENTIFY THE EXISTENCE AND APPROXIMATE HORIZONTAL POSITION OF THE DESIGNATED UTILITY.
 QUALITY LEVEL "C" - INFORMATION OBTAINED BY SURVEYING AND PLOTTING VISIBLE UTILITY FEATURES AND BY USING PROFESSIONAL JUDGMENT IN CORRELATING THIS INFORMATION TO THE QUALITY OF INFORMATION OBTAINED.
 QUALITY LEVEL "D" - INFORMATION DERIVED FROM UTILITY RECORDS OR VERBAL RECOLLECTIONS.
 ALL SERVICES ARE QUALITY "D" UNLESS NOTED OTHERWISE.
 LEVEL "D" RECORD INFORMATION SHOWN ON THIS PLAN HAVE BEEN PLOTTED APPROXIMATELY AS PER THE RECORDS FOUND AND COULD NOT BE FIELD VERIFIED WITHIN THE SCOPE OF THIS PROJECT IF FURTHER VERIFICATION IS REQUIRED.
 IT IS SUGGESTED THAT LEVEL "A" METHODOLOGIES BE EMPLOYED.
 LOST SIGNAL - DENOTES/INDICATES A POINT WHERE OL-B METHODS COULD NO LONGER ASCERTAIN THE HORIZONTAL POSITION OF A FACILITY.
 QUALITY LEVEL "D" INFORMATION COMPILED FROM RECORDS PROVIDED BY ELECTRA ONE, CALL REQUEST #20222930283, CITY OF MISSISSAUGA, ENGINEERING & WORKS DEPARTMENT PLAN #308-D AND #308-D-2, ENROUTE, FILE #3030123, EXTERNAL PEEL ASSES LOCATOR FILE NAME SCHEMATICS 1 & 2, AND REGION OF PEEL PLAN #412-D SHEET 1 OF 8, #4400-D SHEET 1 OF 4, AND #4407-D SHEET 2 OF 2.

CAUTION: CALL BEFORE YOU DIG
 THIS PLAN IS INTENDED FOR DESIGN PURPOSES ONLY. OTHER BURIED UTILITIES MAY EXIST WHICH ARE NOT SHOWN DUE TO INSUFFICIENT INFORMATION OR IMPROPER INSTALLATION. CONTACT ALL POTENTIAL OWNERS OF UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION OR BREAKING GROUND.
 IT IS THE RESPONSIBILITY OF THE CONTRACTOR/BUILDER TO ENSURE THE APPROPRIATE LEGAL REQUIREMENTS ARE MET.

SUBSURFACE UTILITY FIELD WORK WAS COMPLETED ON THE 31ST DAY OF AUGUST, 2022.

ONSITE LOCATES INC.
 UTILITY LOCATE SERVICES
 A wholly owned subsidiary of J.D. Barnes Ltd.

140 KENNEDY DRIVE, SUITE 100, MARKHAM, ON L3R 9R3
 T: 1-800-965-6155 www.onsitelocates.ca

DRAWN BY: AB CHECKED BY: MC REFERENCE NO: 22-46-33051
 FILE: Q:\22-46-33051\10 Chen\22-46-33051-Sept5.dwg DATED: 09/06/2022
 PLOTTED: 9/5/2022



September 15, 2022

KJC Properties Inc.
1940 Ellesmere Road
Scarborough, ON. | M1H 2V6
C/O
Michael Plewes P. ENG
Husson Engineering + Management
P 905.709.5825 x226
M 647.448.4158

Re: **Subsurface Utility Mapping (SUM) – 799-805 Dundas Street East, Mississauga, ON.**
Project Ref#: 22-46-33051

Project Summary

OnSite Locates Inc. (OSL) was engaged to complete Subsurface Utility Mapping of the above noted property by Husson Engineering + Management and KJC Properties Inc. (the client) on July 14th, 2022.

The SUM Investigation was completed in accordance with *CI/ASCE Standard 38-02: Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data*.

The work was conducted between July 27th, 2022 to August 31st, 2022 and was successful in designating the alignment of the underground utilities within the Project Area.

The following utilities were identified:

- Enbridge Gas
- Trans-Northern Pipeline Inc. Gas
- Alectra Hydro
- City of Mississauga Traffic Lights
- Bell, Zayo and Peel Region Telecommunications
- Peel Region Water and Sanitary
- City of Mississauga Sewer

This Report was created to supplement the digital file(s) *22-46-33051-Sept6.dwg* that make up the final deliverable of the project.

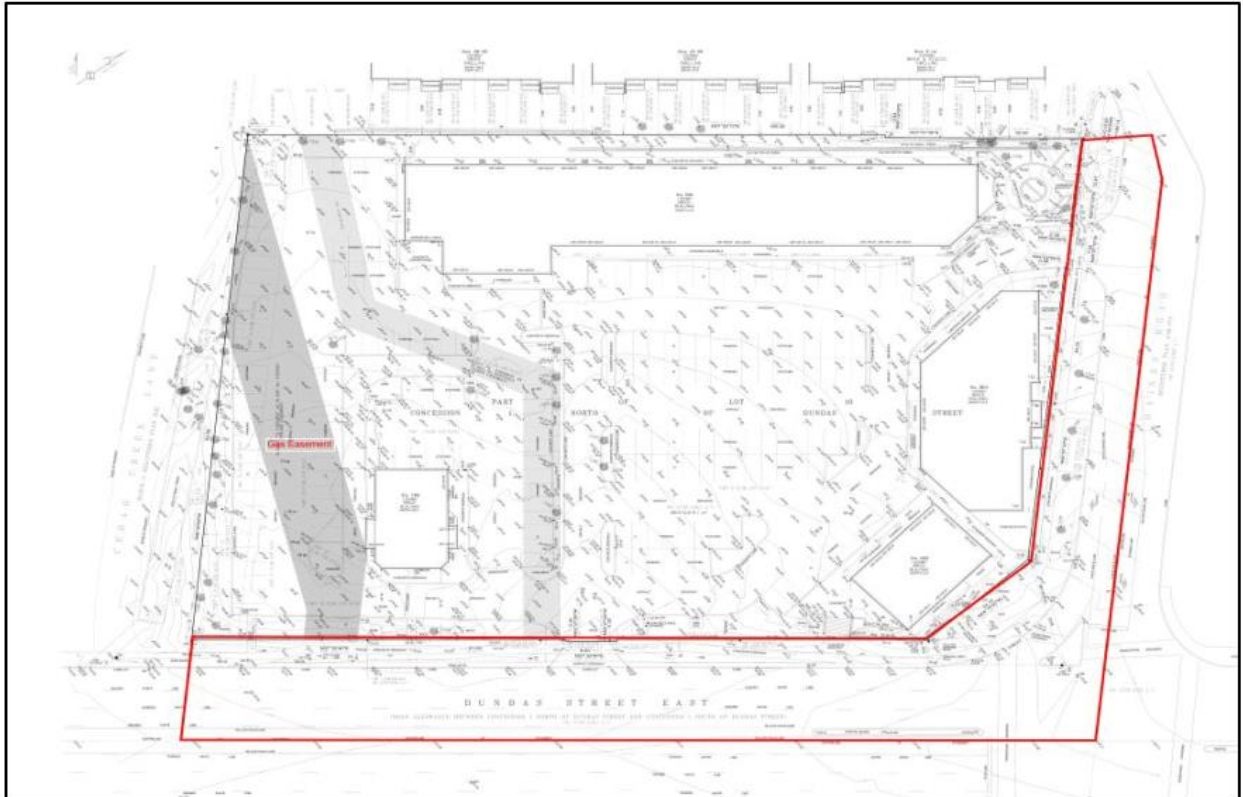
OLS recommends the following additional investigations for consideration by the client.

- Test Holes to verify material, size, and depth of utilities.
- CCTV investigation



Project Area

*From the property lines to the centreline of the adjacent road, approx. limits highlighted in RED below.



Subsurface Utility Mapping Investigation Standards

OnSite Locates Inc. performed the SUM Investigation in accordance with the *CI/ASCE Standard 38-02: Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data*.

CI/ASCE Standard 38-02 Summary

Quality Level D (QL-D) - information derived from utility records or oral recollections.

Quality Level C (QL-C) - Information obtained by surveying and plotting visible above-ground utility features and by using professional judgment in correlating this information to quality level D information.

Quality Level B (QL-B) - Information obtained through the application of appropriate surface geophysical methods to determine the existence and approximate horizontal position of subsurface utilities. Quality level B data should be reproducible by surface geophysics at any point of their depiction. This information is surveyed to applicable tolerances defined by the project and reduced onto plan documents.

Quality Level A (QL-A) - Precise horizontal and vertical location of utilities obtained by the actual exposure (or verification of previously exposed and surveyed utilities) and subsequent measurement of subsurface utilities, usually at a specific point. Minimally intrusive excavation equipment is typically used to minimize the potential for utility damage. A precise horizontal and vertical location, as well as other utility



attributes, is shown on plan documents. Accuracy is typically set to 15-mm vertical and to applicable horizontal survey and mapping accuracy as defined or expected by the project owner.

Equipment and Techniques

JDB/OSL survey crews are trained to use the tools provided to them in accordance with the JDB/OSL Standard Operating Procedures, project scope, conditions, and the manufacturer's instructions to ensure the work is completed safely, accurately, and on time. Below is a description of the equipment and techniques used by JDB/OSL during the SUM Investigation.

Electromagnetic Designating Equipment

JDB/OSL uses industry standard electromagnetic cable and pipe locate kits. This equipment consists of a transmitter and receiver operating in a range of frequencies. In essence, the transmitter is used to induce a signal on a utility either through direct connection to the utility or electromagnetic induction and the signal is detected by the transmitter allowing the operator to mark on the ground the approximate horizontal location of the utility. The receiver also provides a depth estimation of the buried utility.

It is important to note that this type of equipment has its limitations, since it is the electromagnetic field that is detected, and not the utility itself. It will not locate non-metallic lines such as plastic pipes. Additionally, there are several factors that may distort the signal, causing the designation to be inaccurate, or making the utility impossible to detect. These factors are broken tracer wires, utility congestion, and change in utility material etc.

Invert Measurement

Sewer invert depths were manually measured using measuring tapes from the lid/grate of the given feature.

Survey Equipment

JDB/OSL employs the use of typical surveying instruments such as Total Stations and high accuracy Global Navigation Satellite Systems (GNSS). GNSS units are primarily used, with Total Stations being an alternative when there is no good satellite signal: under trees, near buildings etc.

Computer-Aided Design (CAD) Drafting

JDB/OSL employs the use of industry standard programs e.g. MicroStation and AutoCAD to manipulate and present data.

Subsurface Utility Mapping Investigation Summary

Utility Circulation Request

The record search process commenced on July 14th, 2022 and the final records were obtained on September 1st, 2022. The results and status of the records search is provided below:

- Alectra – Received – August 24th, 2022.
- Beanfield – Cleared – August 8th, 2022.
- Bell – Received – July 29th, 2022.
- City of Mississauga – Received – August 29th, 2022.



- Enbridge – Received – August 10, 2022.
- Group Telecom – Cleared – August 11, 2022.
- Hydro One – Cleared – August 19, 2022.
- Peel Fibre – Received – August 29th, 2022.
- Peel Region – Received – September 1st, 2022.
- Rogers – Received – August 26th, 2022.
- Telus – Cleared – August 5th, 2022.
- Trans-Northern Pipeline Inc. – Received – August 29th, 2022.
- Zayo – Received – August 22nd, 2022.

Field Investigation

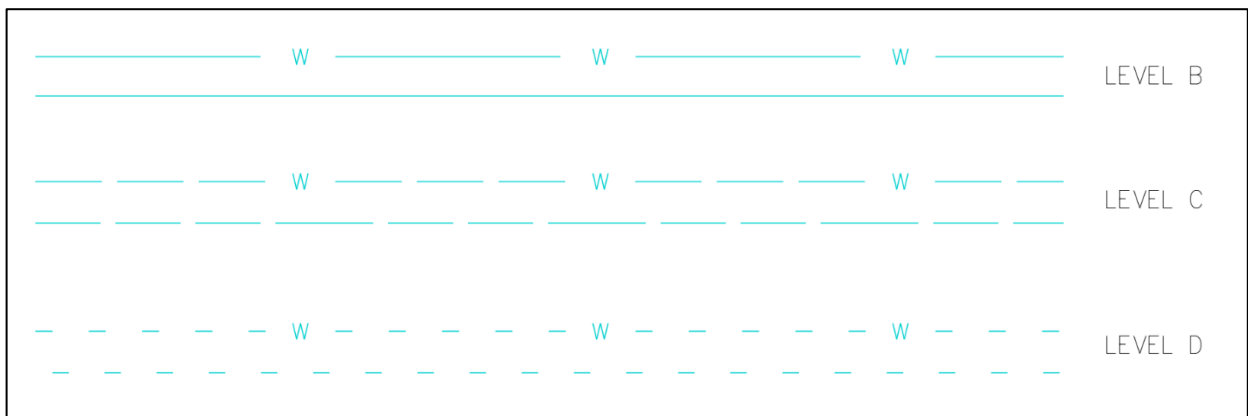
The field investigation was conducted using geophysical locate techniques. All above ground features related to underground utilities, such as pedestals, ground level boxes etc. were investigated. All manholes and catch basins in the investigation area were inspected to obtain invert depth and diameters measurements for storm and sanitary sewers.

Data Analysis

Field and record data were analyzed using professional judgement to provide a comprehensive presentation of the utility plant and infrastructure within the workspace.

CAD Presentation

Line styles are designated as per the CI/ASCE Standard 38-02 and are depicted in the CAD deliverable as seen below.



Report Prepared by:

Matthew Chua
Utility Surveys