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PRELIMINARY GEOTECHNICAL SITE INVESTIGATION REPORT

5500 Dundas Street West, Toronto

Project #: 25-1032
Prepared for: First Capital Asset Management LP
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Attention: Albert Ho, Senior Director, Environmental Programs

SUBJECT: PRELIMINARY GEOTECHNICAL SITE INVESTIGATION REPORT, 5500 DUNDAS STREET WEST, TORONTO

EnVision Consultants Ltd. is pleased to present the enclosed draft Preliminary Geotechnical Site Investigation Report for the above-noted property.

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,

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QUALITY MANAGEMENT

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1. EXECUTIVE SUMMARY

EnVision Consultants Ltd. (EnVision) was retained by First Capital Asset Management LP (the 'Client') to conduct preliminary geotechnical, environmental and hydrogeological site investigation services for a proposed residential and commercial development located at 5500 Dundas Street West, Toronto (the 'Site').

The Site is located on the north side of Dundas Street West approximately 60 m east of The East Mall Crescent, in a mixed residential and commercial area of Toronto, Ontario. The Site is approximately rectangular in shape, occupying an area of approximately 0.98 hectares (2.4 acres) and is currently occupied by one-storey commercial building operating as a Tesla automotive dealership (Previous dealership of Evans Ford Lincoln Inc.) in the centre of the Site. The remainder of the Site is covered by asphalt paving for use as parking areas.

EnVision has received revised conceptual design drawings, dated October 17, 2025 prepared by Superkül on October 23, 2025, which indicate that the property at 5500 Dundas Street West is to be developed in two phases consisting of two separate midrise buildings (Building A under Phase 1 and Building B under Phase 2) above ground but both buildings will extend from a common 2-level underground parking podium. Building A and Building B will have 16 and 14 stories above ground respectively with 1 level of mechanical penthouse.

EnVision conducted a preliminary geotechnical, environmental and hydrogeological site investigation which included advancing a total of ten (10) boreholes (BH25-01 to BH25-10) to depths ranging from 5.6 to 22.1 mbgs (metres below ground surface). Eight (8) geotechnical boreholes (BH25-01 to BH25-08) were drilled to depths ranging from 9.1 to 22.1 mbgs with three (3) shallow monitoring wells installed within boreholes BH25-03, BH25-07 and BH25-08 for geo-environmental and hydrogeological purposes. Additionally, one (1) intermediate depth monitoring well was installed within borehole BH25-01 and two (2) deep monitoring wells in BH25-02 and BH25-06 for geo-hydrogeological purposes. Another two boreholes (BH25-09 and BH25-10), taken to depths ranging from 5.6 to 5.8 mbgs were completed as environmental-grade shallow monitoring wells for geo-environmental and hydrogeological studies. All of these shallow, intermediate and deep monitoring wells are available for measurement of the groundwater table over a longer period of observation, if required.

The boreholes revealed a stratigraphy generally consisting of asphalt pavement structure overlying fill material consisting of sand and gravel, silty clay/ clayey silt, underlain by a complex variety of native soils generally consisting of cohesionless glacial till deposits of silty sand, sandy silt, and cohesive glacial till deposits of silty clay and clayey silt and silty sand, sand and silty clay interbedded with till deposits.

Silty clay till/ shale complex was encountered in BH25-01, BH25-03 and BH25-04 at Elev. 113.7m, 110.8m and 112.7m respectively and clayey silt till/ shale complex was encountered in BH25-07 at Elev. 110.7m. Sandy Silt/shale complex was encountered in BH25-06 at Elev. 107.1m. Bedrock or inferred bedrock of the Georgian Bay Formation was encountered at depths of 13.4 mbgs, 18.3 mbgs, 19.2 mbgs and 16.8 mbgs corresponding to elevations 112.5m, 107.8m, 106.9m and 107.0m respectively in BH25-02, BH25-05, BH25-06 and BH25-07.

Cobbles and boulders are expected in the cohesionless deposits and in the glacial till deposits of silty sand to sandy silt and silty clay to clayey silt. Cobbles and boulders and limestone slabs are expected in till/shale complex.

The groundwater levels measured in the intermediate and deep monitoring wells installed in BH25-01, BH25-02 and BH25-BH25-06, were found to range from 2.83 mbgs (Elev. 122.94m) to 3.83 mbgs (Elev. 122.21m) and in the shallow monitoring wells installed in BH25-03, BH25-07, BH25-08, BH25-09 and BH25-10, groundwater levels were measured to range from 2.70 mbgs (Elev. 123.36 m) to 3.33 mbgs (Elev. 123.21m).

Under the City of Toronto's Foundation Drainage Policy (effective January 1, 2022), on-site management of foundation drainage water is required on each development property to ensure that no permanent foundation drainage to the City's sewer system is necessary. This must be achieved using one or more on-site management options including: foundation waterproofing, modifying the building design such that interception of the groundwater table does not occur, or on-site management by discharge of groundwater to surface (which is not likely feasible or practical at this site).

A conventional spread footing and slab on grade alternative will require an underdrainage system and continuous pumping of groundwater which is inconsistent with the Foundation Drainage Policy. To align with the City's drainage policy, adoption of a 'tanked' waterproofed raft foundation system, designed to exclude groundwater is required.

The conceptualized building with two (2) levels of basement (finished P2 level assumed to lie at about 10.5 mbgs below grade) can be supported by a raft foundation founded on the undisturbed native, very dense or hard soils at the anticipated founding level (approx. assumed raft base at Elev. 115.0m) using a uniformly distributed bearing pressure of 400 kPa at SLS (Serviceability Limit State) and 600 kPa at ULS (Ultimate Limit State).

For the conceptualized building with multiple levels of basement, a continuous cut-off caisson wall (secant pile wall) will be required to be installed around the perimeter of exterior basement walls to temporarily control the groundwater seepage during the construction stage, and to permanently reduce groundwater flow. The cut-off caisson wall should ideally be sealed well into a lower silty clay till/ clayey silt till/ silty clay (aquitard). However, it is important to highlight that this lower silty clay till/ clayey silt till/ silty clay (aquitard) appears to be discontinuous based on the borehole findings.

Even with use of a secant pile wall, dewatering within the site footprint will be required to facilitate the excavation and to maintain groundwater at least 1 m below underside of raft elevation during construction. For more comments on groundwater control, refer to hydrogeological study report for the proposed development of the site.

Based on the existing borehole information and according to Table 4.1.8.4.A of OBC 2012, the subject site for the proposed buildings with two (2) levels of basement can be classified as Class 'C' for seismic site response.

2. INTRODUCTION

EnVision Consultants Ltd. (EnVision) was retained by First Capital Asset Management LP (the 'Client') to conduct preliminary geotechnical, environmental and hydrogeological site investigation work associated with a residential and commercial development at the property located at 5500 Dundas Street West, Toronto (the 'Site').

It is our understanding that this assessment has been requested to facilitate the redevelopment of the Site for residential and commercial uses. We also understand that the potential re-development of the site could consist of two residential towers on a common podium with two (2) levels of below grade parking. The number of storeys above grade may range from 14 to 16 with 1 level of mechanical penthouse as per revised conceptual design drawings prepared by Superkül. The revised Conceptual Design Drawings, dated October 17, 2025 are enclosed in Appendix D. A more detailed geotechnical site investigation and analysis are required to support detailed design, at which time the basement elevation level and expected column loads will need to be known.

The Site is approximately rectangular in shape, occupying an area of approximately 0.98 hectares (2.4 acres) located on the north side of Dundas Street West approximately 60m east of The East Mall Crescent in the City of Toronto and is currently occupied by one-storey commercial building operating as a Tesla automotive dealership (Previous dealership of Evans Ford Lincoln Inc.) in the centre of the Site. Currently, the rest of the Site is covered by asphalt paving for use as parking.

A geotechnical report (Ref. No. BRM-00609125-A0) dated May 5, 2020 was prepared by EXP Services Inc. (EXP) entitled "Geotechnical Investigation - Proposed Residential Development – 5500 Dundas Street West, Toronto, Ontario" for First Capital Asset Management LP for rezoning purposes. That report was prepared based on seven (7) boreholes (BH1 to BH7), the logs for which are presented in Appendix A for ease of reference. The exp borings were drilled to depths ranging 12.2 to 18.3 mbgs.

In July/ August of 2025 a total of ten (10) boreholes, BH25-01 to BH25-10, taken to depths ranging from 5.6 to 22.1 mbgs, were drilled by EnVision as part of preliminary geotechnical, environmental and hydrogeological site investigation work. A total of eight (8) geotechnical boreholes (BH25-01 to BH25-08) were drilled to depths ranging from 9.1 to 22.1 mbgs within the proposed commercial/ residential building development. A total of eight (8) shallow/ intermediate/ deep monitoring wells were installed within BH25-01 to BH25-03 and BH25-06 to BH25-10 for short and long term groundwater monitoring for preliminary geotechnical, environmental and hydrogeological study purposes. The approximate locations of these boreholes and monitoring wells are shown in Drawing No. 1.

The purpose of this preliminary geotechnical investigation is to determine the subsurface conditions at the borehole locations and from the findings in the boreholes, to make preliminary geotechnical recommendations for the proposed development, as currently envisaged (as described by the client) for the following:

1. Foundations
2. Floor slab and permanent drainage

3. Excavations and groundwater control
4. Temporary shoring
5. Lateral Earth Pressures
6. Earthquake considerations.

Preliminary geo-environmental and preliminary hydrogeological studies were also completed by EnVision which are presented in separate reports.

Recommendations given in this report are preliminary and need to be reassessed once the final design details for the building are firmed up. This report is provided on the basis of the terms of reference presented above and on the assumption that the design will be in accordance with the applicable codes and standards.

The site investigation and recommendations follow generally accepted practice for geotechnical consultants in Ontario. The format and contents are guided by client specific needs and economics and do not conform to generalized standards for services. Laboratory testing for most part follows ASTM or CSA Standards or modifications of these standards that have become standard practice.

This report has been prepared for First Capital Asset Management LP and its architect and structural designers. Third party use of this report without EnVision's consent is prohibited. The limitation conditions presented in this report form an integral part of the report and must be considered in conjunction with this report.

3. FIELD AND LABORATORY WORK

3.1. FIELD INVESTIGATION AND TESTING

The preliminary field investigation consisted of drilling eight (8) geotechnical boreholes (BH25-01 to BH25-08) to depths ranging from 9.1 to 22.1 mbgs (metres below ground surface) and fitting selected borings with with one (1) intermediate depth (BH25-01) monitoring well; two (2) deep (BH25-02 and BH25-06) monitoring wells and three (3) shallow monitoring wells (BH25-03, BH25-07 and BH25-08). Additionally, two (2) boreholes (BH25-09 and BH25-10) advanced to depths ranging from 5.6 to 5.8 mbgs were drilled for environmental sampling purposes and the installation of two shallow monitoring wells. The locations of the boreholes are presented on the Borehole Location Plan (Drawing 1).

The as-drilled borehole locations were surveyed by EnVision using Real-time kinematic (RTK) GPS. The borehole coordinates and ground geodetic elevations at the borehole locations are summarized in *Table 3-1* and are presented in the Record of Borehole sheets in Appendix A.

Table 3-1: Summary of Borehole Information

BOREHOLE ID	GROUND SURFACE ELEVATION (m)	BOREHOLE COORDINATES UTM NAD83, ZONE 17		DEPTH OF BOREHOLE (mbgs)	MONITORING WELL INSTALLATIONS
		NORTHING (m)	EASTING (m)		
BH25-01	125.9	4831895.6	617051.0	13.0	50 mm intermediate MW
BH25-02	125.9	4831920.1	617045.0	19.0	50 mm deep MW
BH25-03	126.1	4831924.5	617073.4	15.3	50 mm shallow MW
BH25-04	126.2	4831917.5	617116.6	14.2	-
BH25-05	126.1	4831962.2	617146.2	18.4	-
BH25-06	126.1	4831961.5	617180.2	22.1	50 mm deep MW
BH25-07	126.7	4831940.5	617193.8	16.9	50 mm shallow MW
BH25-08	125.9	4831901.6	617043.1	9.1	50 mm shallow MW
BH25-09	126.0	4831907.2	617113.7	5.6	50 mm shallow MW
BH25-10	126.2	4831962.2	617127.8	5.8	50 mm shallow MW

The field investigation work of borehole drilling was carried out on July 24, 2025 to August 15, 2025 by Profile Drilling Inc. with technical supervision provided by EnVision personnel. Boreholes were advanced

using a B37 track mounted power auger drilling machine with mud rotary casing advancement. Split spoon samples were retrieved at regular intervals with a hammer weighing 624 N and dropping 760 mm as per ASTM D1586. This sampling method recovers samples from the soil strata, and the number of blows required to drive the sampler 0.3m depth into the undisturbed soil (SPT 'N'-values) gives an indication of the compactness condition or consistency of the sampled soil material. The SPT 'N' values are indicated on the Borehole Logs (Refer to Appendix A).

Boreholes BH25-02 and BH25-06 were advanced using diamond core drilling while encountering bedrock over lengths ranging between 2.8 m to 5.6 m. The coring of the rock used HQ size core barrel equipment, allowing recovery of 63.5 mm diameter core samples. The Total Core Recovery (TCR), Solid Core Recovery (SCR), Rock Quality Designation (RQD) values and Fracture Indices (FI) of each rock core were recorded in accordance with the conventions used by the International Society for Rock Mechanics (ISRM). An explanation of these terms is presented in Appendix A. Photographs of the recovered cores are provided in Appendix C.

The samples were logged in the field and returned to the Envision laboratory for detailed examination by the geotechnical engineer and for laboratory testing.

Prior to drilling operations, underground utilities were cleared at the borehole locations by the representatives of the public and private utilities locate companies.

Monitoring wells of 50 mm diameter were installed in the boreholes (BH25-01 to BH25-03 and BH25-06 to BH25-10) for longer term groundwater level monitoring and for environmental and hydrogeological study purposes. Prior to site development, all of the monitoring wells must be decommissioned by a licensed water well contactor in accordance with Reg. 903 (as amended).

3.2. GEOTECHNICAL LABORATORY TESTING

The laboratory testing program consisted of the measurement of the natural moisture content of all available soil samples and the results are presented on the respective borehole logs. Grain size analyses were conducted on 16 selected samples, the results are presented on the respective borehole log sheets in Appendix A and the gradation curves are presented in Appendix B. Out of ten (10) samples selected for Atterberg Limits tests seven (7) samples appeared to be non-plastic due to liquid limit could not be determined; and Atterberg Limits tests were conducted on three (3) soil samples and the results are presented in Appendix B and on borehole log sheets in Appendix A.

4. SUBSURFACE CONDITIONS

The borehole locations are shown on Drawing No. 1. A generalized subsurface profile at the borehole locations is presented on Drawing No. 2. The Notes on Sample Descriptions (Enclosure 1A), Explanation of Terms Used in the Record of Borehole (Enclosure 1B) and Explanation of Terms Used in the Bedrock Core Log (Enclosure 1C) in Appendix A. The subsurface conditions in the boreholes are presented in the individual borehole log sheets attached in Appendix A and are summarized in the following paragraphs.

The subsurface conditions encountered in the boreholes generally consisted of asphaltic pavement overlying fill material consisting of sand and gravel, silty clay/ clayey silt, underlain by native soils generally consisting of cohesionless glacial till deposits of silty sand, sandy silt, and cohesive glacial till deposits of silty clay and clayey silt textures. Layers or lenses of silty sand, sand and silty clay are interbedded within the till deposits.

Silty clay till/ shale complex was encountered in BH25-01, BH25-03, BH25-04 and BH25-07 at depths/ elevations of 12.2 mbgs (Elev. 113.7m), 15.2 mbgs (Elev. 110.8m), 13.5 mbgs (Elev. 112.7m) and 116.0 mbgs (Elev. 110.7m) respectively. Sandy Silt/ shale complex was encountered in BH25-06 at a depth of 19.0 mbgs corresponding to an elevation of 107.1m. Bedrock/ inferred bedrock of the Georgian Bay Formation was encountered in BH25-02, BH25-05, BH25-06 and BH25-07 at depths of 13.4 mbgs (112.5m), 18.3 mbgs (107.8m), 19.2 mbgs (106.9m) and 16.8 mbgs (109.9m) respectively.

Cobbles and boulders are expected in the cohesionless deposits and in the glacial till deposits. Cobbles, boulders and limestone/siltstone/shale slabs are expected within till/shale complex.

The groundwater levels measured in the intermediate and deep monitoring wells installed in BH25-01, BH25-02 and BH25-BH25-06, were found to range from 2.83 mbgs (Elev. 122.94m) to 3.83 mbgs (Elev. 122.21m) and in the shallow monitoring wells installed in BH25-03, BH25-07, BH25-08, BH25-09 and BH25-10 range from Elev. 123.8m to Elev. 123.2m. It appears that the shallow, intermediate and deep monitoring wells communicate with the same water table at the Site.

4.1. SOIL CONDITIONS

4.1.1. PHYSIOGRAPHIC REGION AND SITE OVERVIEW

The Site falls within the Great Lakes – St. Lawrence Lowlands physiographic region of southern Ontario and is located near the former shoreline of Glacial Lake Iroquois, which represents the area between the southern slope of the Oak Ridges Moraine and the Lake Iroquois shoreline, and is characterized by deep deposits of silt and clay (Chapman, 2007). Deep valleys have been cut by the Credit, Humber, Don, Rouge, Bronte, Oakville, and Etobicoke Creeks, leaving no large, undrained depressions in the area. The bedrock is comprised of limestone and shale of the Georgian Bay formation (Gao, 2006).

The paleozonic sedimentary bedrock under this area is likely shale interbedded with siltstone and lenses of stronger limestone/ dolostone and sandstone. The bedrock is generally weathered and closely fractured nearer to its upper contact, especially where overburden is thin. The shale is of low to very low secondary permeability while the limestone interbeds can have significantly higher permeability, as can

the upper surface of bedrock which is typically moderately weathered. The bedrock/overburden contact zone and upper more weathered bedrock are typically the greatest sources of groundwater infiltration during excavation.

For details of the subsurface conditions encountered at the borehole locations, reference should be made to the individual borehole logs. The properties of the primary soil units encountered in geotechnical boreholes BH25-01 to BH25-08 are described briefly in the following sections.

4.1.2. PAVEMENT STRUCTURE

All eight (8) geotechnical boreholes BH25-01 to BH25-08 were drilled from the existing parking lot paved surface where they encountered a flexible pavement structure consisting of 115 to 126 mm of asphalt overlying 60 mm to 630 mm of granular base/ sub-base material in three borehole locations (BH25-03, BH25-05 and BH25-07) and fill material at the remaining borehole locations.

4.1.3. FILL MATERIAL

Below the asphalt paving and granular base/ subbase material, heterogeneous fill material consisting of silty clay/ clayey silt/ silt/ silty sand with trace to some sand and trace gravel and organic soil was found at the location of the boreholes. The fill depth ranges from 2.3 to 3.2 mbgs at the boring locations.

SPT 'N' values in these cohesive and non-cohesive fill materials were in the range from 3 to 15 and 3 to 31 blows per 300 mm of penetration, corresponding to a soft to very stiff and very loose to compact consistency respectively. Water contents of the fill samples ranged widely from 5% to 29%.

4.1.4. COHESIVE SOILS - SILTY CLAY TILL/ CLAYEY SILT TILL/ SILTY CLAY & SILTY CLAY/CLAYEY SILT TILL/ SHALE COMPLEX

Below fill material in BH25-05 and BH25-07 a native cohesive deposit of silty clay till was encountered extending to depths ranging from 3.8 to 5.3 mbgs. Further deeper deposits of silty clay till were intercepted at depths of 12.2 to 13.7 mbgs at BH25-02 and 13.8 to 16.0 mbgs at BH25-07. Clayey silt till was encountered below fill material in BH25-04 and BH25-06 to depth ranged to 3.8 mbgs and further deeper deposits of clayey silt till were intercepted at depths of 11.2 to 12.2 mbgs at BH25-01, 4.1 to 5.3 mbgs at BH25-03, 9.1 to 12.2 mbgs at BH25-05, 14.9 to 16.5 mbgs at BH25-06 and 7.6 to 9.1 at BH25-07. Silty clay was found at depths ranging from 13.7 to 15.2 mbgs at BH25-03.

Silty clay/clayey silt till/ Shale complex or Shale fragments were encountered in BH25-01 to BH25-04 and BH25-07 as shown in *Table 4-1*.

Table 4-1: Depths of Silty Clay Till/ Shale Complex, Clayey Silt Till/ Shale Complex and Shale Fragments

BOREHOLE ID	TYPE OF SOIL IN CONTACT WITH BEDROCK	DEPTH RANGE		BOREHOLE TERMINATION DEPTH (mbgs)
		FROM (mbgs)	TO (mbgs)	
BH25-01	Silty Clay Till/ Shale Complex	12.2	13.0	13.0
BH25-02	Shale Fragments	13.42	13.44	19.0
BH25-03	Silty Clay Till/ Shale Complex	15.2	15.3	15.3
BH25-04	Silty Clay Till/ Shale Complex	13.5	14.2	14.2
BH25-07	Silty Clay Till/ Shale Complex	16.0	16.8	16.9

These cohesive deposits exhibited a very stiff to hard consistency, with measured SPT 'N' values of 15 to more than 50 blows per 300 mm of penetration. These cohesive soils were generally found to be moist to wet with measured water contents ranging from 7% to 17%.

The grinding of augers during drilling and the high SPT N-values indicated that cobbles/boulders are plentiful within the silty clay to clayey silt till. Refer to the right-most margin notes provided in the borehole log sheets for indirect indications of boulder/cobble strikes.

Grain size analyses and Atterberg Limit tests were conducted on three (3) selected cohesive soil samples. The grain size distribution and Atterberg Limits test results are summarized in *Table 4-2*. The gradation curves are presented in Figure 1 and plasticity chart is presented in Figure 4 in Appendix B.

Table 4-2: Summary of Grain Size Distribution and Atterberg Limits Tests on Cohesive Soil samples

BOREHOLE NO.	SAMPLE NO.	SAMPLE DEPTH (m)	GRAIN SIZE DISTRIBUTION				ATTERBERG LIMITS			SOIL TYPE
			GRAVEL (%)	SAND (%)	SILT (%)	CLAY (%)	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	
BH25-04	SS4	2.3	5	29	48	18	24	15	9	CL (Clayey silt)
BH25-07	SS7	4.6	7	34	48	11	17	13	4	CL-ML (Silty clay)
BH25-07	SS17	16.0	3	35	46	16	26	18	8	CL (Clayey silt)

The three (3) tested cohesive soil samples BH25-04/SS4 and BH25-07/SS17 are classified as inorganic clayey silt (CL) and BH25-07/SS7 as inorganic silty clay (CL-ML) according to the Unified Soil Classification System.

4.1.5. COHESIONLESS SOILS – SILTY SAND TILL/ SANDY SILT TILL/ SILTY SAND/ SANDY SILT/ SAND/ GRAVELLY SAND, COBBLE/BOULDER & SANDY SILT TILL/SHALE COMPLEX

Below fill material in BH25-01 to BH25-03, cohesionless deposits of silty sand till were encountered extending to depths ranged from 3.1 to 4.1 mbgs.

Further deeper deposits of silty sand till were intercepted at depths of 3.8 to 10.7 mbgs at BH25-01; 4.6 to 7.6 mbgs at BH25-02; 6.1 to 7.0 mbgs and 7.6 to 9.1 mbgs at BH25-03; 3.8 to 5.3 mbgs, 6.9 to 9.1, 12.2 to 13.7 and 15.2 to 16.8 mbgs at BH25-05.

Sandy silt till was encountered below fill material at BH25-08 to a depth of 7.6 mbgs and further deeper deposits of sandy silt till were intercepted at depths of 8.1 to 9.1 mbgs at BH25-02; 5.3 to 6.1 mbgs at BH25-03; 3.8 to 7.6 mbgs and 10.7 to 11.7 at BH25-04; 3.8 to 14.9 mbgs and 16.8 to 19.0 mbgs at BH25-06; 5.3 to 7.6 mbgs and 9.1 to 13.7 mbgs at BH25-07 and 7.6 to 9.1 mbgs at BH25-08. Silty sand was found to be intercepted at depths ranging from 3.1 to 3.8 mbgs at BH25-01; 10.7 to 12.2 mbgs at BH25-03; 7.6 to 9.1 at BH25-04 and 13.7 to 13.8 at BH25-04. An isolated deposit of sandy silt was encountered in BH25-03 at depths ranging from 3.8 to 4.1 mbgs.

Sand deposits were encountered at depths ranging from 10.7 to 11.2 mbgs in BH25-01; 4.1 to 4.6 mbgs, 7.6 to 8.1 mbgs and 9.1 to 12.2 mbgs in BH25-02; 7.0 mbgs to 7.6, 9.1 to 10.7 mbgs and 12.2 to 13.7 mbgs in BH25-03; 5.3 to 6.9 mbgs and 13.7 to 15.2 mbgs in BH25-05. An isolated deposits of gravelly sand with cobble/ boulders was encountered in BH25-04 depths ranging from 9.1 to 10.7 mbgs and 11.7 to 13.5 mbgs respectively.

Shale/ limestone fragments and Sandy silt till/ Shale complex were encountered in BH25-06 at depths ranging from 16.5 to 16.8 mbgs and 19.0 to 19.2 mbgs respectively.

These cohesionless deposits were mostly found to be wet and in a compact to very dense state based on measured SPT 'N' values ranging from 10 to more than 50 blows per 300 mm of penetration. The moisture content in the tested sand samples ranged from 5% to 20%.

Grain size analyses were conducted on thirteen selected cohesionless soil samples. The test results are summarized in *Table 4-3* and the grain size distribution curves for the samples are presented in Figures 2 and 3 in Appendix B. Atterberg Limits tests on selected seven (7) samples revealed that the test samples were non-plastic (NP).

Table 4-3: Summary of Grain Size Distribution on Cohesionless samples

BOREHOLE NO.	SAMPLE NO.	SAMPLE DEPTH (M)	GRAIN SIZE DISTRIBUTION					ATTERBERG LIMITS NON-PLASTIC (NP)
			GRAVEL (%)	SAND (%)	SILT (%)	CLAY (%)	FINES (%)	
BH25-01	SS8	5.4	7	47	41	5	46	NP
BH25-02	SS7	4.6	4	47	43	6	49	NP
BH25-02	SS10A	7.6	14	81	-	-	5	-
BH25-03	SS9	6.1	13	46	37	4	41	NP
BH25-03	SS12	9.2	2	84	-	-	14	-
BH25-03	SS14	12.2	0	89	-	-	11	-
BH25-04	SS10	7.6	0	74	-	-	26	-
BH25-05	SS8	5.4	13	70	-	-	17	-
BH25-05	SS11	7.6	6	47	41	6	47	NP
BH25-05	SS15	13.7	6	83	-	-	11	-
BH25-07	SS9	6.2	5	41	49	5	54	NP
BH25-08	SS6	3.8	6	44	46	4	50	NP
BH25-08	SS10	7.6	12	54	30	4	34	NP

Seven (7) cohesionless soil samples BH25-01/SS8, BH25-02/SS7, BH25-03/SS9, BH25-04/SS10, BH25-05/SS11, BH25-08/SS6 and BH25-08/SS10 are classified as inorganic silty sand (SM) and samples BH25-02/SS10A, BH25-03/SS12, BH25-03/SS14, BH25-05/SS8, BH25-05/SS15 are classified as poorly graded sand (SP) and one sample BH25-07/SS9 is classified as sandy silt (ML) according to the Unified Soil Classification System.

Cobbles and boulder sizes are expected within cohesionless till deposits.

4.1.6. BEDROCK

Bedrock of the Georgian Bay Formation was encountered in the boreholes at depths ranging from 13.4 to 19.2 mbgs, corresponding to elevations of 112.5 to 106.9m, as listed on *Table 4-4* below. Bedrock was confirmed by coring in boreholes BH25-02 and BH25-06. Rock core logs are provided in Appendix A and photographs of the rock cores are provided in Appendix C. Bedrock was *inferred in BH25-05 and BH25-07 as listed below in *Table 4-4*.

Table 4-4: Depth and Elevation of Bedrock Surface

BOREHOLE NO.	APPROX. ELEVATION GROUND SURFACE	APPROX. BEDROCK SURFACE DEPTH (MBGS)	APPROX. BEDROCK SURFACE ELEVATION (M)	NOTE
BH25-02	125.9	13.4	112.5	Rock Coring
BH25-05	126.1	18.4	107.8	*Inferred Bedrock
BH25-06	126.1	19.2	106.9	Rock Coring
BH25-07	126.7	16.8	109.9	*Inferred Bedrock

Variations in the bedrock surface elevation across the site should be expected. Commonly the till overlying the shale contains slabs of limestone which would give a false indication of the bedrock level. Similarly, the depth of weathering cannot be determined accurately due to the presence of limestone layers and also due to the method of drilling and sampling, the actual top surface elevations of the bedrock may be different than indicated on the borehole logs. As such, the bedrock surface should not be considered accurate to better than ±1.0 m.

The descriptive terms used on the record of rock cores and throughout this report are explained on the "Enclosure 1C: Explanation of Terms Used in the Bedrock Core Log" sheet in Appendix A. In general, the conventions of the International Society for Rock Mechanics (ISRM) are adopted herein. Detailed descriptions of the index properties and results of laboratory testing are presented in the following paragraphs.

In BH25-02 and BH25-06 the bedrock of the Georgian Bay Formation is comprised of slightly to highly weathered, thinly laminated to medium bedded, grey, very weak to medium strong shale (73% to 100%), interbedded with thinly laminated to thinly bedded, with slightly weathered to fresh, light grey, strong to very strong siltstone and limestone (0% to 27%). Photographs of the core samples are attached in Appendix C.

4.1.6.1 TOTAL CORE RECOVERY (TCR)

The total core recovery indicates the total length of rock core recovered, expressed as a percentage of the actual length of the core run. The total core recovery was 11% to 100% in boreholes BH25-02 and BH25-06.

4.1.6.2 SOLID CORE RECOVERY (SCR)

The solid core recovery is the total length of solid, full diameter rock core that was recovered, expressed as a percentage of the length of the core run. Solid core recovery ranged from 11% to 100% in BH25-02 and BH25-06; individually 47% to 96% in BH25-02 and 11% to 100% in BH25-06, generally improving with depth. The SCR index is influenced by the orientations of the fractures.

4.1.6.3 ROCK QUALITY DESIGNATION (RQD)

The rock quality designation index is obtained by measuring the total length of recovered rock core pieces which are longer than 100 mm and expressing their sum total length as a percentage of the length of the core run. RQD is a function of the frequency of joints, bedding plane partings and fractures in the rock cores. While the use of double tube core barrels provided reasonably good protection of the core during drilling and core retrieval, the fissile nature of the shale greatly influences the RQD values of the rock cores. Consequently, it is believed that the RQD values recorded underestimate the rock quality classification of the laminated fissile shale. On the basis of the recorded RQD values which ranged from 0% to 71% in BH25-02 and BH25-06; individually 8% to 71% in BH25-02 and 0% to 44% in BH25-06, the rock quality is estimated to be "very poor" to "fair", and the average value of 31% suggests a rock of generally "poor" quality in the available borings at the depths investigated.

4.1.6.4 HARD LAYERS

Based on the visual examination of the rock cores, an attempt was made to identify and record the thickness and percentages of the relatively harder siltstone and limestone layers. The percentage of the "hard layers" per core run typically was up to 27% in BH25-02 and 8% in BH25-06. The thickness of these layers varied but was between 50 mm and 130 mm. Local experience suggests that individual hard layers can be as thick as 600mm.

The layers can vary significantly in thickness over short distance. It is also common to encounter closely spaced groupings of thin strong limestone/siltstone layers which individually may only be less than 50 mm thick but collectively can be 1 m in thickness.

4.1.6.5 FRACTURE INDEX

When logging the rock cores, the fracture Index (i.e. the number of fractures for each 0.3 m length of core) was also recorded. It was observed that the planes of weaknesses along which the cores tended to break included; planes of fissility and bedding, the contact surfaces between shale and siltstone or limestone bands, and some oblique and subvertical joints.

4.1.6.6 INTACT STRENGTH

Point load index strength tests performed on similar core samples revealing a wide range of approximate intact strengths (Uniaxial Compressive Strength) ranging from 1 MPa to 120 MPa. Experience indicates that the shale matrix rock ranges in intact strength from 'very weak' to 'medium strong' while the hard interbeds are more typically 'medium strong' to 'very strong'. These ISRM strength ranges are defined in the fly sheet provided in Appendix A.

4.1.6.7 WEATHERING AND GAS

In general, the degree of weathering revealed in the available core runs ranged from 'highly' to 'slightly' weathered (in accordance with ISRM convention, see Appendix A definitions), as indicated on the rock core logs. The siltstone and limestone layers were generally slightly weathered, with only moderate surficial weathering on joint surfaces in the zone close to the bedrock surface.

The Georgian Bay Formation is known to contain pockets of combustible gas. Appropriate care and monitoring are essential in all confined bedrock excavations, particularly for bored shafts and tunnels. Stress relief features such as folds and faults are common in the bedrock.

4.2. GROUNDWATER CONDITIONS

The groundwater levels measured in the monitoring wells on August 13 and 19, 2025 and September 4 and 18, 2025 are summarized in *Table 4-5* and are also shown in the borehole log sheets attached in Appendix A.

The groundwater levels measured in the intermediate and deep monitoring wells installed in BH25-01, BH25-02 and BH25-BH25-06, were found to range from 2.83 mbgs (Elev. 122.9m) to 3.83 mbgs (Elev. 122.2m) and in the shallow monitoring well installed in BH25-03, BH25-07, BH25-08, BH25-09 and BH25-10 range from 2.70 mbgs (Elev. 123.4m) to 3.33 mbgs (Elev. 123.2m). It appears that the shallow, intermediate and deep monitoring wells communicate with the same water table at the Site.

Table 4-5: Summary of Groundwater Levels Observed in the Monitoring Wells

BOREHOLE ID	DATE OF WELL INSTALLATION	GROUND SURFACE ELEV. (m)	TYPE OF SOIL AT SCREEN DEPTH (mbgs)	DATE OF WATER READING	DEPTH OF GROUND WATER (mbgs)	ELEVATION OF GROUND WATER (m)
BH25-01	24-Jul-25	125.9	Silty sand till/ Sand (9.1 to 10.7)	13-Aug-25	2.9	123.0
				19-Aug-25	2.8	123.0
				4-Sep-25	2.9	123.0
				18-Sep-25	2.9	123.0
BH25-02	28-Jul-25	125.9	Bedrock (13.7 to 16.8)	13-Aug-25	3.3	122.6
				19-Aug-25	3.3	122.6
				4-Sep-25	3.4	122.5
				18-Sep-25	3.4	122.5
BH25-03	15-Jul-25	126.1	Sandy silt till/ clayey silt till (2.1 to 5.2)	13-Aug-25	2.7	123.4
				19-Aug-25	2.8	123.3
				4-Sep-25	2.9	123.2
				18-Sep-25	3.0	123.1
BH25-06	1-Aug-25	126.1	Bedrock (20.5 to 22.1)	13-Aug-25	2.9	123.3
				19-Aug-25	2.9	123.2
				4-Sep-25	3.8	122.3
				18-Sep-25	2.9	123.2
BH25-07	13-Aug-25	126.7	Silty sand fill/ Silty clay till (1.8 to 4.9)	13-Aug-25	3.0	123.8
				19-Aug-25	3.3	123.4
				4-Sep-25	3.2	123.5

BOREHOLE ID	DATE OF WELL INSTALLATION	GROUND SURFACE ELEV. (m)	TYPE OF SOIL AT SCREEN DEPTH (mbgs)	DATE OF WATER READING	DEPTH OF GROUND WATER (mbgs)	ELEVATION OF GROUND WATER (m)
				18-Sep-25	3.2	123.5
BH25-08	25-Jul-25	125.9	Silty sand till 3.1 to 6.1)	13-Aug-25 19-Aug-25 4-Sep-25 18-Sep-25	3.0 3.0 2.9 3.0	122.9 123.0 123.0 123.0
BH25-09	15-Aug-25	126.0	Silty clay till/ Sandy silt till/ Silty sand (2.1 to 5.2)	13-Aug-25 19-Aug-25 4-Sep-25 18-Sep-25	3.2 3.2 3.0 3.0	122.9 122.9 123.1 123.0
BH25-10	1-Aug-25	126.2	Clayey silt till/ Sandy silt till/ Silty sand till (2.7 to 5.8)	13-Aug-25 19-Aug-25 4-Sep-25 18-Sep-25	2.8 3.1 2.8 2.9	123.4 123.1 123.4 123.3

It should be noted that groundwater levels will vary and are subject to seasonal fluctuations in response to weather events. The long-term groundwater table is expected to be slightly higher than that shown on *Table 4-5*.

5. DISCUSSION AND PRELIMINARY RECOMMENDATIONS

5.1. FOUNDATIONS

This geotechnical investigation and reporting is of a preliminary nature based on limited site investigation and the conceptual nature of the proposed building details. This report is intended to support preliminary design to facilitate the redevelopment of the Site for residential and commercial uses. Additional geotechnical investigation will be required at the detailed design stage which will supersede the preliminary recommendations provided herein.

It is understood that the proposed development will consist of two residential towers constructed over a common podium with up to two (2) levels of underground parking. The number of storeys above grade may range from 14 to 16 plus 1 level mechanical penthouse as per the revised conceptual drawings prepared by Superkül, appended to this report. The finished P2 basement floor level is expected to be about 7 m below the existing ground and the underside of the raft foundation is expected to be about 1.5m below the P2 basement floor level.

Under the City of Toronto's Foundation Drainage Policy (effective January 1, 2022), on-site management of foundation drainage water is required on each development property to ensure that no permanent foundation drainage to the City's sewer system is necessary. This must be achieved using one or more on-site management options including: foundation waterproofing, modifying the building design such that interception of the groundwater table does not occur, or on-site management by discharge of groundwater to surface (which is not likely feasible or practical at this site).

A conventional spread footing and slab on grade alternative would require an underdrainage system and continuous pumping of groundwater which would not be compliant with this By-Law. To better align with the City of Toronto's 2022 groundwater drainage policy, adoption of a 'tanked' waterproofed raft foundation system, designed to exclude groundwater will be more appropriate.

The conceptualized building with two (2) levels of basement (finished P2 top of slab level assumed to lie at about 7m below grade) can be supported by a raft foundation founded on the undisturbed native, dense to very dense or hard soils at the anticipated founding level (approx. raft base Elev. 117.5m) using a uniformly distributed bearing pressure of 400 kPa at SLS (Serviceability Limit State) and 600 kPa at ULS (Ultimate Limit State).

Shallower basement options (i.e., less than 2 levels) may have reduced bearing resistance (i.e., less than the values cited in the previous paragraph) and geotechnical advice must be sought for such options once the base elevation is known. In some areas of site, poorly consolidated fill soils (weak, non—native soils incapable of supporting foundation pressures) extend quite deep.

For preliminary design of the raft slab, a subgrade reaction modulus of 16 MPa/m may be assumed below the P2 basement floor.

Raft foundations designed to the specified allowable bearing capacity at the Serviceability Limit States (SLS) are expected to settle less than 40 mm total and 30 mm differential.

The raft must be designed to resist uplift water pressure, assuming the water table at about 1m higher than the highest groundwater level at the site. Longer term groundwater level monitoring using level loggers and additional wells will be required to confirm the groundwater table and seasonal groundwater level variations.

It should be noted that extensive layers of sand/silty sand and non-plastic glacial till of similar texture, prone to disturbance and dilation are found below the groundwater table at this site which may lie at founding level, depending on the number of basements. Such deposits will require advance dewatering in order to preserve their bearing resistance and maintain stable base conditions in the excavation. The piezometric level must be lowered to 1.0 m below the deepest excavation base level by active, advance dewatering. It is likely that a closely spaced system of perimeter eductors will be required to achieve this required drawdown in advance of commencing excavation work.

All foundation bases must be inspected by a geotechnical engineer prior to placing concrete. Where the excavated footing base will lie within wet to saturated sandy deposits, these should be covered with 50 mm thick mud slab immediately after inspection and cleaning, in order to avoid disturbance of the founding soil due to construction activity and weathering.

It should be noted that the recommended bearing pressure has been calculated by EnVision from the borehole information for the preliminary design stage only. The investigation and comments are necessarily on-going as new information of the underground conditions becomes available. For example, more specific information is available with respect to conditions arising from supplementary borings to be advanced during the detailed design stage, as well as in-between boreholes and when foundation construction is underway. The interpretation between boreholes and the recommendations of this report must therefore be checked through field inspections provided by EnVision to validate the information for use during the construction stage.

5.2. WATERPROOFING

For a raft slab and watertight (tank design) structure, waterproofing should be designed for hydrostatic uplift pressures (Drawing No. 3). Drawing No. 3 is conceptual only. The building science engineer and the nominated waterproofing subtrade will need to prepare detailed designs including measures to accommodate tie-back heads and other projections into the wall plane.

5.3. ELEVATOR AND SUMP PITS

It is anticipated that elevator pits and sump pits for the proposed buildings with up to two (2) levels of basement will be installed in cohesionless deposits of sandy silt to silty sand below the groundwater table. It is understood that the elevator pits will be designed as water-tight structures, and water pressure on the pit walls and the slab should be considered, assuming the water table at elevation 124.5m. For further information regarding groundwater table the hydrogeological study report for this site should be read. Additional localized dewatering measures are expected to be required around each elevator shaft pit during construction (i.e., vacuum well points or eductors, closely spaced, activated several weeks prior to commencing pit excavation).

Effective water table drawdown must be field-verified by the Geotechnical Engineer by means of monitoring well / piezometer measurements in advance of excavation.

5.4. FROST PROTECTION

All foundations exposed to seasonal freezing conditions must have at least 1.2 metres of soil cover for frost protection.

There is no official rule governing the required founding depth for footings below unheated basement floors. Certainly, it will not be greater than the 1.2 m required in Southern Ontario for exterior footings. Un-monitored experience indicates that a shallower depth ranging from 0.9 m for interior column footings and 0.5 m for wall footings has been successful where 2 or more basement levels apply. The 0.9 m depth is believed to be close to the minimum structural requirement for interior column footings. Adjacent to air shafts and entrance and exit doors, a footing depth of 1.2 m below floor level is required or, alternatively, rigid, extruded, exterior grade polystyrene insulation protection must be provided.

5.5. EXCAVATION AND GROUNDWATER CONTROL

Excavations can be carried out with heavy hydraulic excavators. The proposed excavation for two (2) levels of basement could extend about 8.5 below the existing grade. According to the borehole information, the groundwater table in the monitoring wells was found at a depth of about 2.7m below existing grade, corresponding to Elev. 123.4m.

For two (2) levels of basement, a continuous caisson wall (secant pile wall) is recommended to be installed around the perimeter of the excavation to temporarily reduce the groundwater seepage during the construction stage, to mitigate potential ravelling/caving of cohesionless soils, and to permanently reduce groundwater flow. The continuous caisson walls should be sealed well into the lower (aquitard) silty clay till/ clayey silt till/ silty clay, where present. However, it is important to highlight that this lower silty clay till/ clayey silt till/ silty clay (aquitard) appears to be discontinuous based on the limited boreholes. The lower (aquitard) silty clay till/ clayey silt till/ silty clay was encountered at 7.6 to 15.3 mbgs in BH25-02 to BH25-07. As part of detailed design work, additional investigation will be required to establish the suitable secant pile wall cut-off depth.

Stabilizing drilling mud and full steel casing will be required to advance the secant pile bores and tieback anchor holes to prevent basal boiling and loss of ground.

Even with a caisson wall, dewatering within the site will be required to assist the excavation. For more comments on the groundwater control, reference should be made to the hydrogeological study report for the proposed development of the site.

Piezometric levels must be lowered to at least 1m below the excavation base level in the deposits below the water table. Otherwise, it will result in an unstable base condition which will compromise or destroy the available bearing resistance and site trafficability.

It should be noted that the native soils will contain boulders. The presence of obstructions such as concrete or rubble within the surficial fill material is also possible. Provisions must be made in the excavation contract for the removal of boulders in the till and obstructions in the fill material.

All excavations must be carried out in accordance with the most recent Occupational Health and Safety Act (OHSA). In accordance with OHSA, the fill material can be classified as Type 3 Soil above the groundwater table. The cohesionless deposits of sandy silt, silty sand, sand, gravelly sand and silty sand till to sandy silt till can be classified as Type 3 Soil above the groundwater table and Type 4 Soil below groundwater table. Very stiff to hard clayey soils can be classified as Type 2 Soils above the groundwater table and Type 3 Soils below groundwater table. Where an excavation will penetrate more than one OHSA Soil Type, the least favourable Soil Type number (i.e., the highest number) governs the excavation side slopes required under the OHSA.

5.6. EARTH PRESSURES ON PERMANENT BASEMENT WALLS

The lateral earth pressures acting on basement walls may be calculated from the following expression:

In soils above the groundwater table ($z < d_w$):

$$p = K(\gamma h + q)$$

In soils below the groundwater table ($z \geq d_w$):

$$p = K\{\gamma d_w + \gamma_1 (z - d_w) + q\} + p_w$$

where p	=	Lateral earth earth and water pressure in kPa acting at a depth of z below ground surface
K	=	Earth pressure coefficient for vertical walls and horizontal backfill K = 0.45 for vertical walls
γ_1	=	submerged unit weight of soil below groundwater table, assuming γ_1 = 12 kN/m^3
γ_w	=	unit weight of water, assuming γ_w = 9.8 kN/m^3
γ	=	unit weight of soil = 22 kN/m^3
z	=	depth below ground surface to point of interest, in metres
d_w	=	depth of groundwater table below ground surface, in metres
h	=	Depth to point of interest in metres
q	=	Equivalent value of surcharge on the ground surface in kPa
p_w	=	hydrostatic water pressure in kPa

When the basement wall is poured against the shoring caisson wall, the basement wall as well as the shoring caisson wall should be designed for hydrostatic pressure.

5.7. TEMPORARY SHORING

For the temporary excavation support of up to two (2) levels of basement, a continuous caisson wall (secant pile wall) constructed around the excavation perimeter will be required to be installed to retain the soils and to reduce groundwater seepage. The requirement for caisson walls to support adjacent structures is given in Drawing No. 4. The caisson wall must be sealed well into the lower aquitard (where present) to cut off the seepage from the sandy deposits and to passively restrain the base of the shoring system. Where this lower aquitard does not exist, the caisson tips will need to be sufficiently deep so as to reduce the upward hydraulic gradient (and exit gradient) such that basal heave does not occur due to upward seepage.

The shoring system must be designed in accordance with the 5th Edition (2023) of the Canadian Foundation Engineering Manual. The surcharge loading from construction equipment, surcharges and adjacent structures must be considered and added to the design earth pressure envelope.

Temporary casing and/or mud drilling methods will be required during the construction of the tiebacks prevent caving of soils.

Soil anchors will be required to support the shoring. The anchors must be of a length that meets the Canadian Foundation Manual recommendations. It is important to note that the minimum length lies beyond the 45 - $\phi/2$ + 0.15H line drawn from the base of the king piles and the overall stability of the system must be checked at each anchor level, where H is the shoring height.

The top anchor must not be placed lower than 3.0 meters below the top of level ground surface. Tieback bond values of 100 kPa in hard/very dense soils are suggested but these values are preliminary since the contractor's installation procedures and the soil units that the bond zones are anchored into will determine the actual soil to grout bond value. Hence, the contractor must decide on a capacity and confirm its availability. Tie back anchors should be post grouted. All anchors must be Proof tested as indicated in the Canadian Foundation Manual, 5th edition (2023). Performance testing should be performed on a representative number of anchors at each anchor level.

Movement of the shoring system is inevitable. Vertical movements will result from the vertical load on the soldier piles resulting from the inclined tiebacks and inward horizontal movement resulting from earth and water pressures. The magnitude of this movement can be controlled by sound design and construction practices, and with such good practices it is anticipated that the horizontal movement at the wall plane will be about 0.2%H.

A more detailed assessment of the potential impacts of the proposed excavation on existing adjacent buildings or underground structures / utilities is required as part of detailed design. As-constructed design drawings for any proximal structures/utilities will be needed to undertake such an assessment.

To ensure that movements of the shoring are within an acceptable range, monitoring must be carried out. Vertical and horizontal targets on the soldier piles must be located and surveyed before excavation begins.

Weekly readings during excavation should show that the movements will be within those predicted; if not, the monitoring results could be useful in determining mitigation measures to be employed to improve the shoring. In more critical areas, such as in proximity to existing utilities or structures, the use of inclinometers to measure horizontal soil strains is also recommended.

Construction must comply with the City of Toronto's Noise and Vibration By-Law.

Preconstruction condition surveys of adjacent structures within and beyond the zone of influence of the excavation should be conducted prior to start of any construction work.

5.8. EARTHQUAKE CONSIDERATIONS

Based on the existing borehole information and according to Table 4.1.8.4.A of the Ontario Building Code (OBC 2012). The classification is based on the determination of the average shear wave velocity in the top 30 meters of the site stratigraphy, where shear wave velocity measurements have been taken or alternatively estimated on the basis of rational analysis of undrained shear strength or penetration resistance. Based on the borehole information, the subsurface stratigraphy as revealed in the boreholes generally comprises surficial fill materials underlain by glacial till consisting of very dense sandy soil deposits below proposed building foundations. Therefore, for seismic design purposes for the proposed building with two levels of basement can be classified as "Class C" (OBC 4.1.8.4 Table 4.1.8.4.A.) for seismic site response, which needs to be confirmed by geophysical shear wave velocity testing using downhole seismic profiling or MASW (Multi-channel Analysis of Surface Waves) methods.

5.9. CORROSION AND CEMENT TYPE

Four (4) soil samples were submitted for corrosivity testing related to potential corrosivity towards any buried metallic elements and degradation of sub-structure concrete in contact with the tested soils. The laboratory certificates of analyses are included in Appendix B and *Table 5-1* below summarizes the rating for the tested soil samples for the potential for corrosion towards buried grey or ductile cast iron pipe using the 10 point method after ANSI/AWWA, 2010 (American National Standards Institute/ American Water Works Association). A score of 10 points or more indicates potential for corrosion.

Table 5-1: Results of ANSI/AWWA Soil Corrosivity Potential Rating and Sulphate Content

BH No.	Sample ID	Chloride (mg/kg)	Sulphate (mg/kg)	Electrical Conductivity (mS/cm)	pH/ Score	Resistivity (ohm-cm)/ Score	Sulfide (mg/kg)/ Score	Moisture Content (%)/ Drainage/ Score	Redox Potential (mV)/ Score	Total Points
BH25-01	SS4	107	< 20	283	7.67/ 0	3530/ 0	0.22/ 3.5	10.6/ 2	268/ 0	5.5
BH25-04	SS6	192	134	573	8.02/ 0	1740/ 8	0.42/ 3.5	10.0/ 2	250/ 0	***13.5***
BH25-06	SS4	309	< 20	606	7.54/ 0	1650/ 8	< 0.25/ 2	20.5/ 2	265/ 0	***12***
BH25-08	SS5	71.9	192	407	8.00/ 0	2460/ 2	< 0.22/ 2	8.5/ 1	282/ 0	5

According to Table A.1 of the ANSI/AWWA, C105/A21.5-10 rating system, the tested samples pose relatively low to high potential for corrosion of grey or ductile iron pipe.

Note that there may be other overriding factors in the assessment of corrosion potential, such as the application of de-icing salts on the roadway and subsequent leaching into the sub soils, stray currents, contact with sewage, etc.

The analytical test results for sulphate were compared to the Canadian Standard CAN3/CSA A23.1 Table 3 (Additional Requirements for Concrete Subjected to Sulphate Attack) to assess the potential severity of sulphate attack on concrete during its service life. Table 3 of this standard indicates negligible risk for sulphate attack on concrete for water soluble soil sulphate content of <0.1% (1000 mg/kg) to moderate potential for sulphate attack on concrete for water soluble soil sulphate content between 0.1% (1000 mg/kg) and 0.2% (2000 mg/kg). The test results revealed water soluble soil sulphate contents ranging from < 20 mg/kg to 192 mg/kg indicating negligible risk for sulphate attack towards buried concrete.

6. GENERAL COMMENTS AND LIMITATIONS OF REPORT

This is a preliminary site investigation (geotechnical) report. Additional geotechnical boreholes, along with more detailed hydrogeological studies, are required in support of final design. This report will be superseded by a final geotechnical investigation and design report.

EnVision Consultants Ltd. should be retained for a general review of the final design and specifications to verify that this report has been properly interpreted and implemented. If not accorded the privilege of making this review, EnVision will assume no responsibility for interpretation of the recommendations in the report.

The comments given in this report are intended only for the preliminary guidance of design engineers. The number of boreholes required to determine the localized underground conditions between boreholes affecting construction costs, techniques, sequencing, equipment, scheduling, etc., would be much greater than has been carried out for design purposes. Contractors bidding on or undertaking the works should, in this light, decide on their own investigations, as well as their own interpretations of the factual borehole and test pit results, so that they may draw their own conclusions as to how the subsurface conditions may affect them.

This report is intended solely for the Client named. The material in it reflects our best judgment in light of the information available to EnVision at the time of preparation. Unless otherwise agreed in writing by EnVision Consultants Ltd., it shall not be used to express or imply warranty as to the fitness of the property for a particular purpose. No portion of this report may be used as a separate entity, it is written to be read in its entirety.

The conclusions and preliminary recommendations given in this report are based on information determined at the test hole locations. The information contained herein in no way reflects on the environment aspects of the project, unless otherwise stated. Subsurface and groundwater conditions between and beyond the test holes may differ from those encountered at the test hole locations, and conditions may become apparent during construction, which could not be detected or anticipated at the time of the site investigation. The benchmark and elevations used in this report are primarily to establish relative elevation differences between the test hole locations and should not be used for other purposes, such as grading, excavating, planning, development, etc.

The preliminary design recommendations given in this report are applicable only to the project described in the text and then only if constructed substantially in accordance with the details stated in this report.

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We trust that the information contained in this report is satisfactory. Should you have any questions, please do not hesitate to contact this office.

6.1. CERTIFICATION AND SIGNATURES

Prepared by

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6.2. QUALIFIER

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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.

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

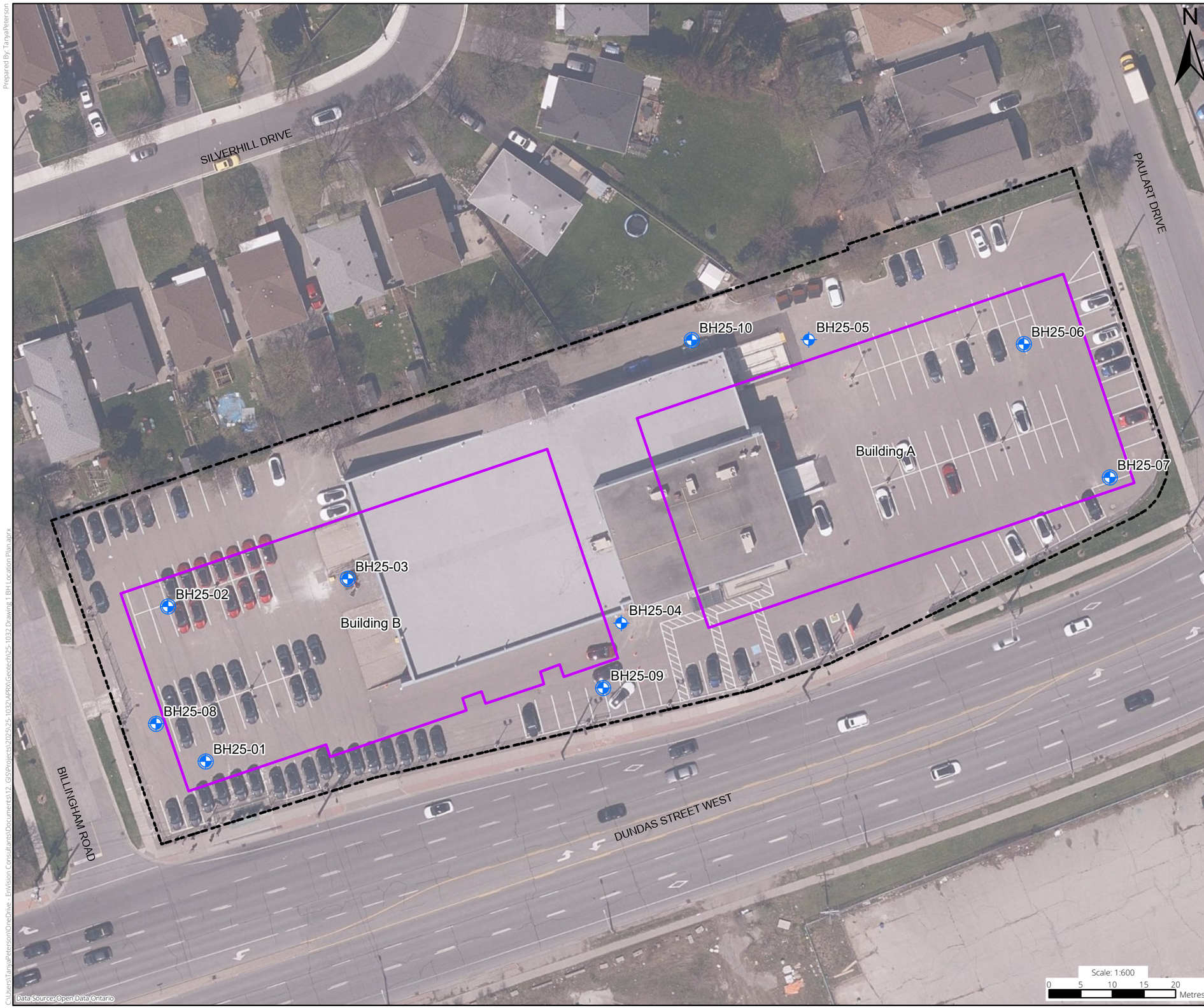
DRAWINGS:

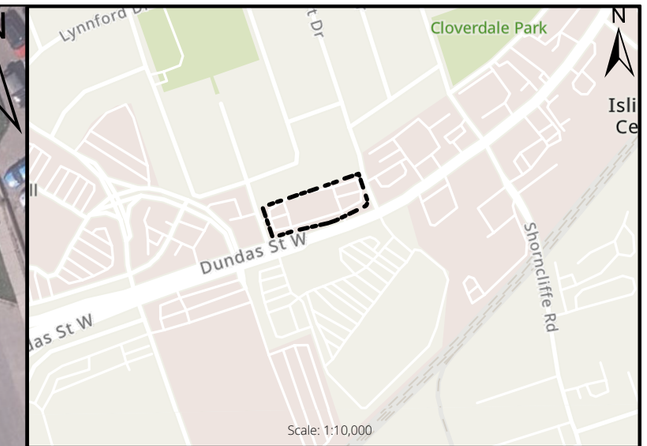
DRAWING NO. 1 Borehole Location Plan

DRAWING NO. 2 Generalized Subsurface Profile

DRAWING NO. 3 Conceptual Raft Slab System

DRAWING NO. 4 Guidelines for Underpinning In Soil and Excavation Support





LEGEND

- Site Boundary
- Proposed Building
- Borehole Location (Envision, 2025)
- Borehole with Monitoring Well Location (Envision, 2025)

TITLE

Borehole and Monitoring Well Location Plan

PROJECT

Geotechnical Investigation
5500 Dundas Street West
Toronto, Ontario

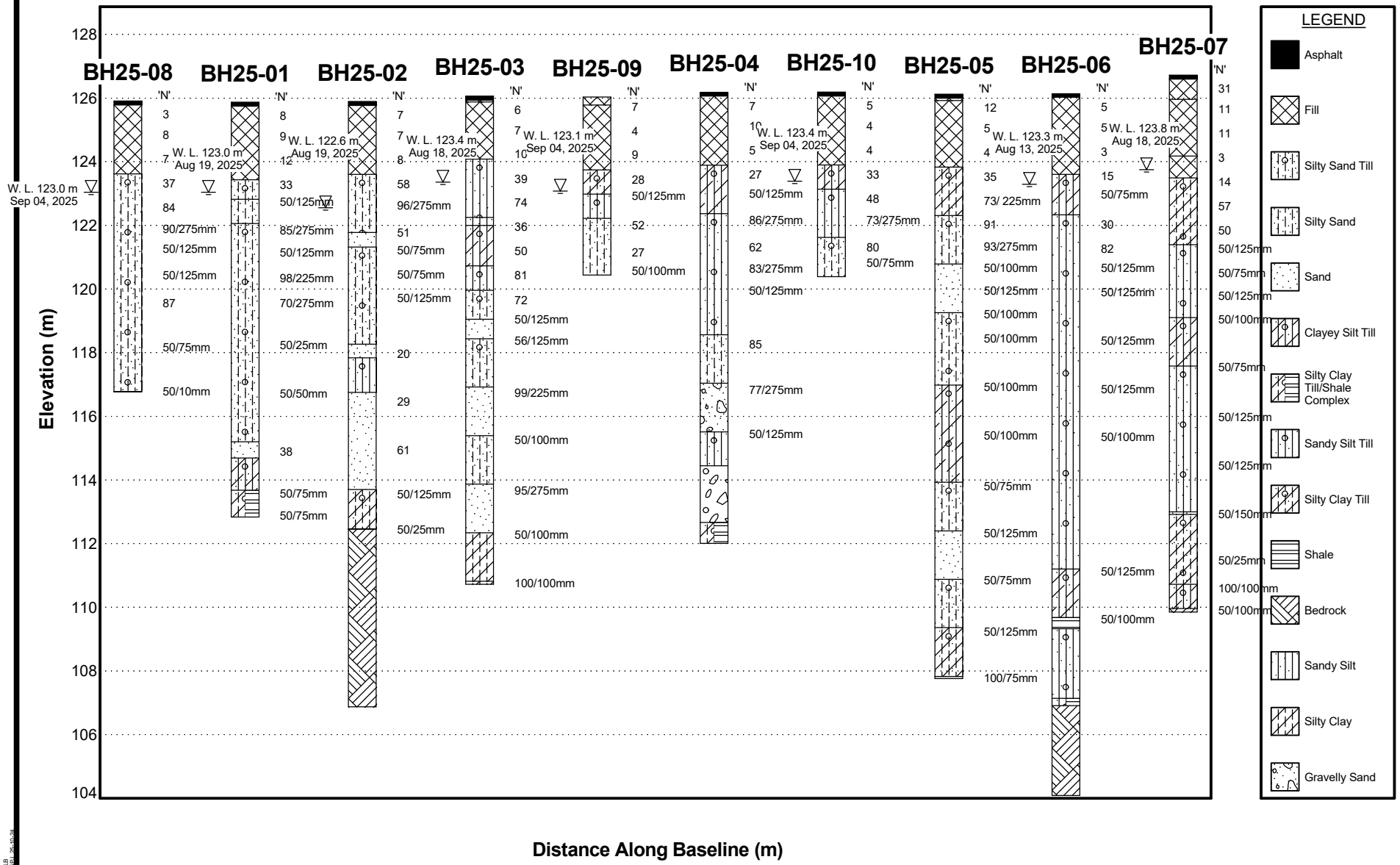
CLIENT

First Capital Asset Management LP

PROJECT NO.	DATE	PREPARED BY	APPROVED BY	DRAWING NO.
25--1032	October 2025	TP	SU	1

Prepared By: TanyaPeterson

C:\Users\TanyaPeterson\OneDrive - EnVision Consultants\Documents\12_GIS\Projects\2025\25-1032\APRX\Geotech\25-1032 Drawing 1 BH Location Plan.aprx



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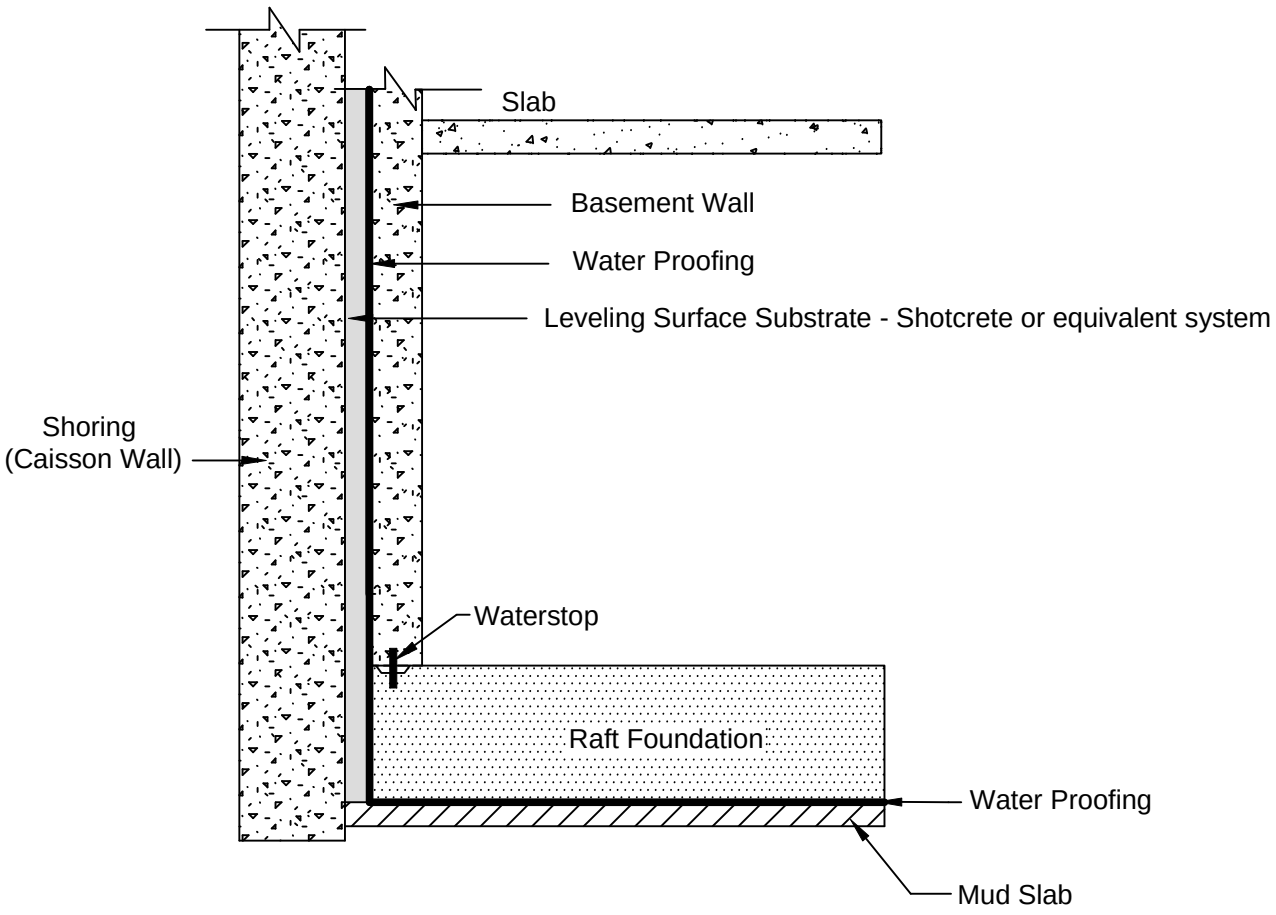
6415 Northwest Drive
Mississauga, Ontario
L4V 1X1

Generalized Subsurface Profile

DRAWING NO.	2
JOB NO.	25-1032
DATE	October 2025

ENVISION-SOIL-ROCK-MAY2024.GLB
FENCE ENVISION_2021_25-1032.GPJ 25-10-24



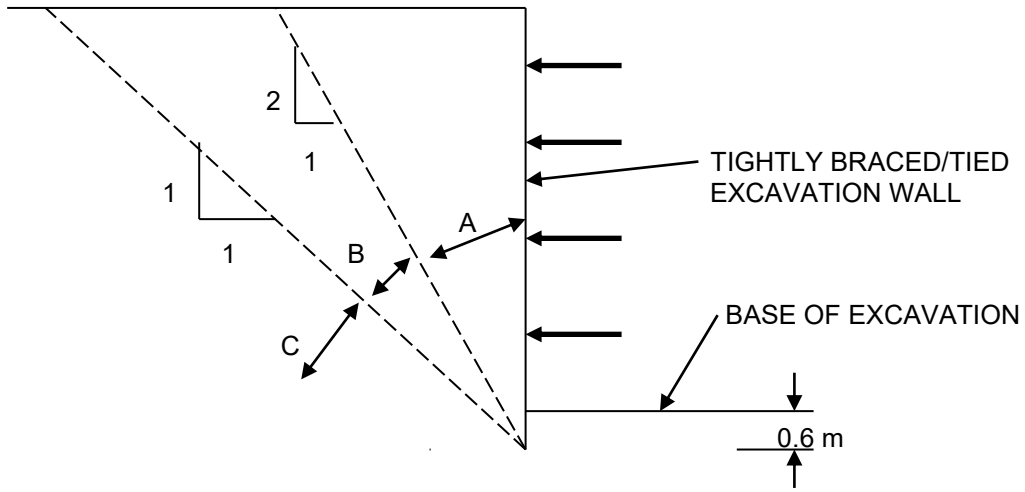
Notes

1. Detailing of the concepts shown on this drawing are to be completed by the Building Science Engineer or Architect.
2. Not for construction.

CONCEPTUAL RAFT SLAB SYSTEM
For Basement Designed as a Watertight Structure
(not to scale)

Guidelines for Underpinning in Soil and Excavation Support

Existing foundations located within Zone A normally require underpinning, especially for heavy structures. For some foundations in Zone A, it may be possible to eliminate underpinning and control foundation movement by tightly braced excavation walls, such as caisson walls.



Excavation zones of influence and potential use of underpinning

Zone A : Foundations located within this zone may require underpinning. Horizontal and vertical pressures on the excavation wall of non-underpinned foundations must be considered. Horizontal and vertical deformations of foundations within this zone must be considered relative to underpinned and non-underpinned foundations.

Zone B : Foundations located within this zone do not normally require under-pinning. Horizontal and vertical forces on the excavation wall for non-underpinned foundations must be considered. Horizontal and vertical deformations of foundations within this zone must be considered relative to underpinned and non-underpinned foundations.

Zone C : Underpinning to structures is normally founded in this zone. Lateral pressure from underpinning is not normally considered.

(Reference: Figure 20.39 from Canadian Foundation Engineering Manual, 5th Edition)

APPENDIX A:

Enclosure 1A: Notes On Sample Descriptions;

Enclosure 1B: Explanation of Terms used in the Record of Borehole;

Enclosure 1C: Explanation of Terms Used in the Bedrock Core Log;

Logs of Boreholes (BH25-01 to BH25-10) by EnVision

BH Location & Logs of Boreholes (BH1 to BH7) by EXP

Enclosure 1A: Notes On Sample Descriptions

1. All sample descriptions included in this report generally follow the Unified Soil Classification. Laboratory grain size analyses provided by EnVision also follow the same system. Different classification systems may be used by others, such as the system by the International Society for Soil Mechanics and Foundation Engineering (ISSMFE). Please note that, with the exception of those samples where a grain size analysis and/or Atterberg Limits testing have been made, all samples are classified visually. Visual classification is not sufficiently accurate to provide exact grain sizing or precise differentiation between size classification systems.

ISSMFE SOIL CLASSIFICATION

CLAY	SILT			SAND			GRAVEL			COBBLES	BOULDERS
	FINE	MEDIUM	COARSE	FINE	MEDIUM	COARSE	FINE	MEDIUM	COARSE		

0.002 0.006 0.02 0.06 0.2 0.6 2.0 6.0 20 60 200

EQUIVALENT GRAIN DIAMETER IN MILLIMETRES

CLAY (PLASTIC) TO	FINE	MEDIUM	CRS.	FINE	COARSE
SILT (NONPLASTIC)	SAND			GRAVEL	

UNIFIED SOIL CLASSIFICATION

2. Fill: Where fill is designated on the borehole log it is defined as indicated by the sample recovered during the boring process. The reader is cautioned that fills are heterogeneous in nature and variable in density or degree of compaction. The borehole description may therefore not be applicable as a general description of site fill materials. All fills should be expected to contain obstruction such as wood, large concrete pieces or subsurface basements, floors, tanks, etc., none of these may have been encountered in the boreholes. Since boreholes cannot accurately define the contents of the fill, test pits are recommended to provide supplementary information. Despite the use of test pits, the heterogeneous nature of fill will leave some ambiguity as to the exact composition of the fill. Most fills contain pockets, seams, or layers of organically contaminated soil. This organic material can result in the generation of methane gas and/or significant ongoing and future settlements. Fill at this site may have been monitored for the presence of methane gas and, if so, the results are given on the borehole logs. The monitoring process does not indicate the volume of gas that can be potentially generated nor does it pinpoint the source of the gas. These readings are to advise of the presence of gas only, and a detailed study is recommended for sites where any explosive gas/methane is detected. Some fill material may be contaminated by toxic/hazardous waste that renders it unacceptable for deposition in any but designated land fill sites; unless specifically stated the fill on this site has not been tested for contaminants that may be considered toxic or hazardous. This testing and a potential hazard study can be undertaken if requested. In most residential/commercial areas undergoing reconstruction, buried oil tanks are common and are generally not detected in a conventional preliminary geotechnical site investigation.

3. Till: The term till on the borehole logs indicates that the material originates from a geological process associated with glaciation. Because of this geological process the till must be considered heterogeneous in composition and as such may contain pockets and/or seams of material such as sand, gravel, silt or clay. Till often contains cobbles (60 to 200 mm) or boulders (over 200 mm). Contractors may therefore encounter cobbles and boulders during excavation, even if they are not indicated by the borings. It should be appreciated that normal sampling equipment cannot differentiate the size or type of any obstruction. Because of the horizontal and vertical variability of till, the sample description may be applicable to a very limited zone; caution is therefore essential when dealing with sensitive excavations or dewatering programs in till materials.

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Enclosure 1B: **Explanation of Terms Used in the Record of Borehole**

Sample Type

AS	Auger sample
BS	Block sample
CS	Chunk sample
DO	Drive open
DS	Dimension type sample
FS	Foil sample
NR	No recovery
RC	Rock core
SC	Soil core
SS	Spoon sample
SH	Shelby tube sample
ST	Slotted tube
TO	Thin-walled, open
TP	Thin-walled, piston
WS	Wash sample

Penetration Resistance

Standard Penetration Resistance (SPT), N:
The number of blows by a 63.5 kg (140 lb) hammer dropped 760 mm (30 in) required to drive a 50 mm (2 in) drive open sampler for a distance of 300 mm (12 in).

WH – Samples sinks under "weight of hammer"

Dynamic Cone Penetration Resistance, N_d:
The number of blows by a 63.5 kg (140 lb) hammer dropped 760 mm (30 in) to drive uncased a 50 mm (2 in) diameter, 60° cone attached to "A" size drill rods for a distance of 300 mm (12 in).

Textural Classification of Soils (ASTM D2487-10)

Classification	Particle Size
Boulders	> 300 mm
Cobbles	75 mm - 300 mm
Gravel	4.75 mm - 75 mm
Sand	0.075 mm - 4.75 mm
Silt	0.002 mm - 0.075 mm
Clay	<0.002 mm(*)

(*) Canadian Foundation Engineering Manual (4th Edition)

Coarse Grain Soil Description (50% greater than 0.075 mm)

Terminology	Proportion (*)
Trace	0-10%
Some	10-20%
Adjective (e.g. silty or sandy)	20-35%
And (e.g. sand and gravel)	> 35%

(*) Canadian Foundation Engineering Manual (4th Edition)

Soil Description

a) Cohesive Soils(*)

Consistency	Undrained Shear Strength (kPa)	SPT "N" Value
Very soft	<12	0-2
Soft	12-25	2-4
Firm	25-50	4-8
Stiff	50-100	8-15
Very stiff	100-200	15-30
Hard	>200	>30

(*) Hierarchy of Shear Strength prediction
1. Lab triaxial test
2. Field vane shear test
3. Lab. vane shear test
4. SPT "N" value
5. Pocket penetrometer

b) Cohesionless Soils

Density Index (Relative Density)	SPT "N" Value
Very loose	<4
Loose	4-10
Compact	10-30
Dense	30-50
Very dense	>50

Soil Tests

w	Water content
w_p	Plastic limit
w_l	Liquid limit
C	Consolidation (oedometer) test
CID	Consolidated isotropically drained triaxial test
CIU	consolidated isotropically undrained triaxial test with porewater pressure measurement
D_R	Relative density (specific gravity, Gs)
DS	Direct shear test
ENV	Environmental/ chemical analysis
M	Sieve analysis for particle size
MH	Combined sieve and hydrometer (H) analysis
MPC	Modified proctor compaction test
SPC	Standard proctor compaction test
OC	Organic content test
U	Unconsolidated Undrained Triaxial Test
V	Field vane (LV-laboratory vane test)
γ	Unit weight

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Enclosure 1C: Explanation of Terms Used in the Bedrock Core Log

Strength (ISRM)

Term	Grade	Description	Unconfined Compressive Strength (MPa)	(psi)
Extremely weak rock	RO	Indented by thumbnail	0.25-1.0	36-145
Very weak	R1	Crumbles under firm blows with point of geological hammer, can be peeled by a pocket knife	1.0-5.0	145-725
Weak rock	R2	Can be peeled by a pocket knife with difficulty, shallow indentations made by firm blow with point of geological hammer	5.0-25	725-3625
Medium Strong	R3	Cannot be scraped or peeled with a pocket knife, specimen can be fractured with single firm blow of geological hammer	25-50	3625-7250
Strong rock	R4	Specimen require more than one blow of geological hammer to fracture it	50-100	7250-14500
Very strong rock	R5	Specimen requires many blows of geological hammer to fracture it	100-250	14500-36250
Extremely strong rock	R6	Specimen can only be chipped with geological hammer	>250	>36250

Bedding (Geological Society Eng. Group Working Party, 1970. Q.J. of Eng. Geol. Vol. 3)

Term	Bed Thickness	
Very thickly bedded	>2 m	>6.5 ft
Thickly bedded	600 mm-2 m	2.00-6.50 ft
Medium bedded	200 mm-600 mm	0.65-2.00 ft
Thinly bedded	60 mm-200 mm	0.20-0.65 ft
Very thinly bedded	20 mm-60 mm	0.06-0.20 ft
Laminated	6 mm-20 mm	0.02-0.06 ft
Thinly laminated	<6 mm	<0.02 ft

TCR (Total Core Recovery)

Sum of lengths of rock core recovered from a core run, divided by the length of the core run and expressed as a percentage.

SCR (Solid Core Rocovery)

Sum length of solid, full diameter drill core recovered expressed as a percentage of the total length of the core run.

RQD (Rock Quality Designation, after Deere, 1968)

Sum of lengths of pieces of rock core measured along centreline of core equal to or greater than 100 mm from a core run, divided by the length of the core run and expressed as a percentage. Core fractured by drilling is considered intact. RQD normally quoted for N-size or H-size core.

RQD(%)	Rock Quality
90-100	Excellent
75-90	Good
50-75	Fair
25-50	Poor
0-25	Very poor

Weathering (ISRM)

Term	Grade	Description
Fresh	W1	No visible sign of rock material weathering
Slightly weathered	W2	Discolouration indicates weathering of rock material and discontinuity surface. All the rock material may be discoloured by weathering and may be somewhat weaker than in its fresh condition
Moderately weathered	W3	Less than half of the rock material is decomposed and/or disintegrated to a soil. Fresh or discoloured rock is present either as a either as a continuous framework or as corestones
Highly weathered	W4	More than half of the rock material is decomposed and/or disintegrated to a soil. Fresh or discoloured rock is present either as a continuous framework or as corestones
Completely weathered	W5	All rock material is decomposed and/or disintegrated to a soil. The original mass structure is still largely intact
Residual soil	W6	All rock material is converted to soil. The mass structure and material fabric are destroyed. There is a large change in volume, but the soil has not been significantly transported

(FI) Fracture Index

Expressed as the number of discontinuities per 300mm (1 ft). Excludes drill-induced fractures and fragmented zones. Reported as “>25" if frequency exceeds 25 fractures/0.3m.

Broken Zone

Zone of full diameter core of very low RQD which may include some drill-induced fractures.

Fragmented Zone

Zone where core is less than full diameter and RQD = 0.

Discontinuity Spacing (ISRM)

Term	Average Spacing	
Extremely widely spaced	>6 m	>20.00 ft
Very widely spaced	2 m-6 m	6.50-20.00 ft
Widely spaced	600 mm-2 m	2.00-6.50 ft
Moderately spaced	200 mm-600 mm	0.65-2.00 ft
Closely spaced	60 mm-200 mm	0.20-0.65 ft
Very closely spaced	20 mm-60 mm	0.06-0.20 ft
Extremely closely spaced	<20 mm	>0.06 ft

Note: Excludes drill-induced fractures and fragmented rock.

Discontinuity Orientation

Discontinuity, fracture and bedding plane orientations are cited as the acute angle measured with respect to the core axis. Fractures perpendicular to the core axis are at 90° and those parallel to the core axis are at 0°.

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LOG OF BOREHOLE BH25-01

PROJECT: Geotechnical Investigation - 5500 Dundas St W, Toronto
REF. NO.: 25-1032
CLIENT: First Capital Asset Management LP
Method: Hollow Stem Augers
ENCL NO.: 1
PROJECT LOCATION: 5500 Dundas Street West, Toronto, ON
Diameter: 200mm
ORIGINATED BY JG
DATUM: Geodetic
Date: Jul-24-2025
COMPILED BY HK
BH LOCATION: N 4831895.6 E 617051
Equipment: Profile B37
CHECKED BY MB

ELEV (m) / DEPTH (m)	DESCRIPTION	NUMBER	TYPE	"N" BLOWS 0.3 m	ELEVATION	GR	SA	SI	CL
125.9	Ground Surface								
125.8 / 0.1	**ASPHALT:** 125mm				Flush Mount Cover				
0.1	**FILL:** silty clay/clayey silt, sandy, trace gravel, dark brown to dark grey, moist, firm to stiff; trace organics between 0.13 and 1.50 mbgs	1	SS	8					
		2	SS	9	125				
	some sand to sandy, brown and grey below 1.50 mbgs	3	SS	12	124				
123.5 / 2.4	**SILTY SAND TILL:** trace gravel, trace to some clay, brown, moist, dense	4A	SS	33					
		4B	SS		W. L. 123.1 m Aug 19, 2025				
122.9 / 3.1	**SILTY SAND:** trace gravel, brown, moist, very dense	5	SS	50/ initial 125mm					
122.1 / 3.8	**SILTY SAND TILL:** trace gravel, trace to some clay, grey, moist, very dense	6	SS	85/ 275mm	122				
					Bentonite				
		7	SS	50/ 125mm					
	wet below 4.9 mbgs				121				
		8	SS	98/ 225mm		7	47	41	5
					120				
		9	SS	70/ 275mm					
					119				
		10	SS	50/ initial 25mm	118				

Continued Next Page

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

GRAPH NOTES: + 3, × 3: Numbers refer to Sensitivity; ε=3% Strain at Failure

ENVISION-SOIL-ROCK-OCTOBER-12-2021.GLB
ENVISION SOIL LOG 25-1032.GPJ 25-10-24

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LOG OF BOREHOLE BH25-01

PROJECT: Geotechnical Investigation - 5500 Dundas St W, Toronto
REF. NO.: 25-1032
CLIENT: First Capital Asset Management LP
Method: Hollow Stem Augers
ENCL NO.: 1
PROJECT LOCATION: 5500 Dundas Street West, Toronto, ON
Diameter: 200mm
ORIGINATED BY JG
DATUM: Geodetic
Date: Jul-24-2025
COMPILED BY HK
BH LOCATION: N 4831895.6 E 617051
Equipment: Profile B37
CHECKED BY MB

SOIL PROFILE (m) ELEV / DEPTH	DESCRIPTION	SAMPLES NUMBER	TYPE	BLOWS "N" 0.3 m	ELEVATION
	Continued				
	SILTY SAND TILL: trace gravel, trace to some clay, grey, moist, very dense(Continued)				Sand,
9		11	SS	50/ initial 50mm	
10					Screen
115.2 / 10.7	**SAND:** trace to some silt, trace gravel, grey, wet, dense	12A	SS	38	115 Sand
11 / 114.7 / 11.2	**CLAYEY SILT TILL:** contains silt lenses, grey, wet, hard	12B	SS		
12 / 113.7					114 Bentonite
12.2	**SILTY CLAY TILL/SHALE COMPLEX:** trace to some sand, with shale fragments, grey, moist, hard	13	SS	50/ 75mm	
13 / 112.9		14	SS	50/ initial 75mm	113
13.0	**END OF BOREHOLE**				

GROUND WATER CONDITIONS

DYNAMIC CONE PENETRATION RESISTANCE PLOT 20 40 60 80 100

SHEAR STRENGTH (kPa)
○ UNCONFINED
● QUICK TRIAXIAL
+ FIELD VANE & Sensitivity
× LAB VANE
20 40 60 80 100

PLASTIC LIMIT w_P — NATURAL MOISTURE CONTENT w — LIQUID LIMIT w_L
WATER CONTENT (%) 10 20 30

POCKET PEN. (Cu) (kPa)

NATURAL UNIT WT (kN/m³)

REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL

Notes:
1) Borehole was open and unstabilized water level was at 5.2m below ground surface (mbgs) upon completion of drilling.
2) 50mm dia. monitoring well was installed upon completion of drilling, screened from 9.1 to 10.7 mbgs.

Water Level Measurement in monitoring well:

Date	W.L Depth (mbgs)
Aug 13, 2025	2.87
Aug 19, 2025	2.83
Sep 04, 2025	2.86
Sep 18, 2025	2.91

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

GRAPH NOTES + 3, × 3: Numbers refer to Sensitivity ○ ε=3% Strain at Failure

ENVISION-SOIL-ROCK-OCTOBER-12-2021.GLB
ENVISION SOIL LOG 25-1032.GPJ 25-10-24

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LOG OF BOREHOLE BH25-02

PROJECT: Geotechnical Investigation - 5500 Dundas St W, Toronto
REF. NO.: 25-1032
CLIENT: First Capital Asset Management LP
Method: Hollow Stem Augers
ENCL NO.: 2
PROJECT LOCATION: 5500 Dundas Street West, Toronto, ON
Diameter: 200mm
ORIGINATED BY JG
DATUM: Geodetic
Date: Jul-25-2025 to Jul-28-2025
COMPILED BY HK
BH LOCATION: N 4831920.1 E 617045
Equipment: Profile B37
CHECKED BY MB

(m) ELEV / DEPTH	DESCRIPTION	NUMBER	TYPE	BLOWS 0.3 m "N"	ELEVATION	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
125.9	Ground Surface					
125.8	**ASPHALT:** 125mm				Flush Mount Cover	
0.1	**FILL:** silty clay/clayey silt, trace to some sand, trace gravel, trace organics, dark brown to dark grey, moist, firm to stiff	1	SS	7		
	some organics, dark grey at 0.8 mbgs	2	SS	7	125	
		3	SS	8	124	
123.6						
2.3	**SILTY SAND TILL:** trace gravel, trace clay, brown, moist, very dense	4	SS	58	123	
		5A	SS	96/ 275mm		
	grey below 3.4 mbgs	5B	SS		W. L. 122.6 m Aug 19, 2025	
	wet below 3.8 mbgs	6A	SS	51	122	Wet spoon
121.8						
4.1	**SAND:** some silt, trace gravel, grey, wet, very dense	6B	SS			
121.3						
4.6	**SILTY SAND TILL:** trace gravel, trace clay, brown, moist, very dense	7	SS	50/ 75mm	121	4 47 43 6
		8	SS	50/ 75mm	120	
		9	SS	50/ initial 125mm	Bentonite	
					119	
118.3						
7.6	**SAND:** coarse, trace silt, grey, moist, compact	10A	SS	20	118	Wet spoon 14 81 (5)

SOIL PROFILE | SAMPLES | GROUND WATER CONDITIONS | STRATA PLOT

DYNAMIC CONE PENETRATION RESISTANCE PLOT (20 40 60 80 100)

SHEAR STRENGTH (kPa): ○ UNCONFINED ● QUICK TRIAXIAL + FIELD VANE & Sensitivity × LAB VANE (20 40 60 80 100)

PLASTIC LIMIT w_P — NATURAL MOISTURE CONTENT w — LIQUID LIMIT w_L; WATER CONTENT (%) (10 20 30)

POCKET PEN. (Cu) (kPa) | NATURAL UNIT WT (kN/m³)

Continued Next Page

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

GRAPH NOTES: +3, ×3: Numbers refer to Sensitivity; ○ ε=3% Strain at Failure

ENVISION-SOIL-ROCK-OCTOBER-12-2021.GLB
ENVISION SOIL LOG 25-1032.GPJ 25-10-24

LOG OF BOREHOLE BH25-02

PROJECT: Geotechnical Investigation - 5500 Dundas St W, Toronto
REF. NO.: 25-1032
CLIENT: First Capital Asset Management LP
Method: Hollow Stem Augers
ENCL NO.: 2
PROJECT LOCATION: 5500 Dundas Street West, Toronto, ON
Diameter: 200mm
ORIGINATED BY JG
DATUM: Geodetic
Date: Jul-25-2025 to Jul-28-2025
COMPILED BY HK
BH LOCATION: N 4831920.1 E 617045
Equipment: Profile B37
CHECKED BY MB

SOIL PROFILE (m) ELEV / DEPTH	DESCRIPTION	SAMPLES NUMBER	TYPE	BLOWS 0.3 m "N"	ELEVATION	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
	Continued					
117.9 / 8.1	**SANDY SILT TILL:** trace gravel, trace clay, grey, moist, compact	10B	SS			Auger grinding
116.8 / 9.1	**SAND:** trace to some silt, trace gravel, grey, moist, compact to very dense	11	SS	29	117	
	some silt to silty, wet below 10.7 mbgs	12	SS	61	116, 115	
113.7 / 12.2	**SILTY CLAY TILL:** contains sand seams, trace shale fragments, grey, moist to wet, hard	13	SS	50/ 125mm	114, 113	
112.5 / 13.4	**SHALE FRAGMENTS:** grey, moist, hard	14	SS	50/ initial 25mm	Sand	
	BEDROCK: grey shale interbedded with siltstone /limestone. (Georgian Bay Formation) Rock coring started from 13.44 mbgs Refer to rock core log.	1	RC		112	
		2	RC		111, Screen, 110	

DYNAMIC CONE PENETRATION RESISTANCE PLOT 20 40 60 80 100

SHEAR STRENGTH (kPa) ○ UNCONFINED ● QUICK TRIAXIAL + FIELD VANE & Sensitivity × LAB VANE 20 40 60 80 100

PLASTIC LIMIT w_P — NATURAL MOISTURE CONTENT w — LIQUID LIMIT w_L

WATER CONTENT (%) 10 20 30

POCKET PEN. (Cu) (kPa) — NATURAL UNIT WT (kN/m³)

GROUND WATER CONDITIONS — STRATA PLOT

Continued Next Page

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

GRAPH NOTES + 3, × 3: Numbers refer to Sensitivity ○ ε=3% Strain at Failure

ENVISION-SOIL-ROCK-OCTOBER-12-2021.GLB
ENVISION SOIL LOG 25-1032.GPJ 25-10-24

ENVISION CONSULTANTS LTD

LOG OF ROCK CORE BH25-02

PROJECT: Geotechnical Investigation - 5500 Dundas St W, Toronto		REF. NO.: 25-1032	
CLIENT: First Capital Asset Management LP	Method: Hollow Stem Augers	ENCL NO.: 2	
LOCATION: 5500 Dundas Street West, Toronto, ON	Diameter: 200mm	ORIGINATED BY	JG
DATUM: Geodetic	Date: Jul-25-2025 to Jul-28-2025	COMPILED BY	HK
BH LOCATION: N 4831920.1 E 617045	Equipment: Profile B37	CHECKED BY	MB

(m) ELEV / DEPTH	ROCK DESCRIPTION	GROUND WATER CONDITIONS	CORE SAMPLE NUMBER	CORE SAMPLE SIZE	TOTAL CORE RECOVERY (%)	SOLID CORE RECOVERY (%)	HARD LAYER (%)	RQD (%)	FRACTURE INDEX (per 0.3 m)	DISCONTINUITIES	Weathering Index	HYDRAULIC CONDUCTIVITY (cm/sec)	POINT LOAD TEST UCS AXIAL (MPa)*	POINT LOAD TEST UCS DIAMETRAL (MPa)*	UNIAXIAL COMPRESSION (MPa)	DENSITY (g/cm³) E (GPa)
112.5	Rock Surface															
13.4	Highly weathered (W4)) to slightly (W2), thinly laminated to medium bedded, grey, very weak to medium strong, **SHALE** (73%-96%), interbedded with thinly laminated to thinly bedded, slightly weathered to fresh, light grey to grey, strong to very strong **SILTSTONE** and **LIMESTONE** (4%-27%). Bedding almost horizontal (θ=90°). (Georgian Bay Formation)		1	HQ	84	47	16	8	8 7 10 7	Fracture zone: 13.44m-13.53m 13.69m-13.72m 13.74m-13.79m 14.35m-14.43m Fracture: 13.51m-13.54m, θ=45° 13.69m-13.72m, θ=45° 14.02m-14.05m, θ=45° 14.33m-14.35m, θ=75° 14.50m-14.53m, θ=0°	13.74m ~ 13.79m (W5) 13.79m ~ 13.82m (W5-W4) 13.97m ~ 14.05m (W5) 14.1m ~ 14.22m (W5-W4) 14.22m ~ 14.33m (W5) 14.35m ~ 14.48m (W5-W4) 14.73m ~ 14.80m (W6-W5)	W4				
111.2																
14.7	Siltstone and limestone (hard) layers generally less than 50mm thick except at noted depths. 107mm thick hard layer at 13.53m 51mm thick hard layer at 13.69m 76mm thick hard layer at 14.81m 76mm thick hard layer at 15.14m 76mm thick hard layer at 15.72m 76mm thick hard layer at 15.95m		2	HQ	100	85	22	31	9 4 6 6 15	Fracture zone: 14.88m-14.94m 15.54m-15.57m 16.00m-16.08m 16.28m-16.38m Fracture: 14.81m-14.88m, θ=0° 15.46m-15.48m, θ=0° 15.54m-15.57m, θ=0° 15.95m-16.00m, θ=0° 16.00m-16.10m, θ=0° 16.18m-16.26m, θ=0° 16.28m-16.33m, θ=15°	15.49m ~ 15.52m (W4-W3) 16m ~ 16.08m (W4-W3)	W3-W2				
109.5																
16.4	127mm thick hard layer at 16.8m 51mm thick hard layer at 17.01m 102mm thick hard layer at 17.27m 51mm thick hard layer at 17.67m		3	HQ	100	96	27	71	5 2 9 3 5	Fracture zone: 16.64m-16.69m 17.04m-17.09m 17.70m-17.73m Fracture: 16.66m-16.69m, θ=0° 17.07m-17.09m, θ=45° 17.27m-17.40m, θ=0° 17.73m-17.78m, θ=45°	16.92m ~ 16.94m (W4-W3) 17.22m ~ 17.27m (W4-W3)	W3-W2				
108.1																
17.8			4	HQ	100	90	4	56	7 8 3 2	Fracture zone: 18.01m-18.02m 18.21m-18.31m Fracture: 17.78m-17.83m, θ=0° 17.96m-18.01m, θ=45° 18.01m-18.02m, θ=0° 18.20m-18.21m, θ=45° 18.64m-18.66m, θ=75°		W3-W2				
106.9																
19.0	**END OF BOREHOLE**															

Notes:
1) 50mm dia. monitoring well was installed upon completion of drilling, screened from 13.7 to 16.8 mbgs.

Water Level Measurement in monitoring well:

Date	W.L Depth (mbgs)
Aug 13, 2025	3.34
Aug 19, 2025	3.34
Sep 04, 2025	3.39
Sep 18, 2025	3.41

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ENVISION ROCK CORE-2021** 25-1032.GPJ 25-10-24

Weathering Index: W1-Fresh, W2-Slightly weathered, W3-Moderately weathered, W4-Highly weathered, W5-Completely weathered θ = angle to the core axis E = Modulus of Elasticity
** Only vertical/subvertical fracture indicated *: UCS [Mpa] ≈ 24 $I_{S(50)}$

ENVISION CONSULTANTS LTD

LOG OF BOREHOLE BH25-02

PROJECT: Geotechnical Investigation - 5500 Dundas St W, Toronto
REF. NO.: 25-1032
CLIENT: First Capital Asset Management LP
Method: Hollow Stem Augers
ENCL NO.: 2
PROJECT LOCATION: 5500 Dundas Street West, Toronto, ON
Diameter: 200mm
ORIGINATED BY JG
DATUM: Geodetic
Date: Jul-25-2025 to Jul-28-2025
COMPILED BY HK
BH LOCATION: N 4831920.1 E 617045
Equipment: Profile B37
CHECKED BY MB

SOIL PROFILE (m) ELEV / DEPTH	DESCRIPTION	STRATA PLOT	SAMPLES NUMBER	TYPE	"N" BLOWS / 0.3 m	GROUND WATER CONDITIONS	ELEVATION	DYNAMIC CONE PENETRATION RESISTANCE PLOT (20 40 60 80 100) / SHEAR STRENGTH (kPa) ○ UNCONFINED ● QUICK TRIAXIAL + FIELD VANE & Sensitivity × LAB VANE (20 40 60 80 100)	PLASTIC LIMIT w_P — NATURAL MOISTURE CONTENT w — LIQUID LIMIT w_L / WATER CONTENT (%) (10 20 30)	POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m³)	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
	Continued											
	BEDROCK: grey shale interbedded with siltstone /limestone. (Georgian Bay Formation) Rock coring started from 13.44 mbgs Refer to rock core log.(Continued)											
17			3	RC			109					
							Sand					
18							108					
							Bentonite					
			4	RC								
19 106.9							107					
19.0	**END OF BOREHOLE**											

Notes:
1) 50mm dia. monitoring well was installed upon completion of drilling, screened from 13.7 to 16.8 mbgs.

Water Level Measurement in monitoring well:

Date	W.L Depth (mbgs)
Aug 13, 2025	3.34
Aug 19, 2025	3.34
Sep 04, 2025	3.39
Sep 18, 2025	3.41

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

GRAPH NOTES + 3, × 3: Numbers refer to Sensitivity ○ ε=3% Strain at Failure

ENVISION-SOIL-ROCK-OCTOBER-12-2021.GLB
ENVISION SOIL LOG 25-1032.GPJ 25-10-24

ENVISION CONSULTANTS LTD

LOG OF BOREHOLE BH25-03

PROJECT: Geotechnical Investigation - 5500 Dundas St W, Toronto
REF. NO.: 25-1032
CLIENT: First Capital Asset Management LP
Method: Hollow Stem Augers/Mud Rotary
ENCL NO.: 3
PROJECT LOCATION: 5500 Dundas Street West, Toronto, ON
Diameter: 200mm/100mm
ORIGINATED BY MHS
DATUM: Geodetic
Date: Aug-14-2025 to Aug-15-2025
COMPILED BY HK
BH LOCATION: N 4831924.5 E 617073.4
Equipment: Profile B37
CHECKED BY MB

(m) ELEV / DEPTH	DESCRIPTION	NUMBER	TYPE	BLOWS 0.3 m "N"	ELEVATION	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
126.1	Ground Surface					
126.0	**ASPHALT:** 123mm				Flush Mount Cover	
125.9	**FILL:** sand and gravel, brown, moist, loose	1A	SS			
0.2	**FILL:** silty clay/clayey silt, trace sand, trace gravel, trace organics, dark brown to dark grey, moist, firm to stiff	1B	SS	6		
1		2	SS	7	Bentonite 125	
	brown and grey at 1.5 mbgs	3	SS	10		
124.1 2	**SANDY SILT TILL:** trace to some clay, trace gravel, brown, moist, loose to very dense				Sand 124	
		4	SS	39	W. L. 123.4 m Aug 18, 2025	
3					123	
	grey below 3.4 mbgs	5	SS	74	Screen	
122.3						
3.8 4 122.0	**SANDY SILT:** trace clay, trace gravel, grey, wet, dense	6A	SS			Switched to mud rotary
4.1	**CLAYEY SILT TILL:** sandy, trace gravel, grey, moist, hard	6B	SS	36	122	
		7A	SS	50		
5		7B	SS		121	
120.8						
5.3	**SANDY SILT TILL:** trace clay, trace gravel, grey, wet, very dense	8	SS	81	Sand	
6 120.0						
6.1	**SILTY SAND TILL:** some gravel to gravelly, grey, wet, very dense	9	SS	72	120	Auger grinding 13 46 37 4
119.1 7	**SAND:** some gravel, grey, wet, very dense	10	SS	50/ 125mm	119	
118.5						
7.6 8	**SILTY SAND TILL:** trace clay, trace gravel, grey, moist, very dense	11	SS	56/ initial 125mm		

SOIL PROFILE | SAMPLES | GROUND WATER CONDITIONS | ELEVATION | STRATA PLOT

DYNAMIC CONE PENETRATION RESISTANCE PLOT 20 40 60 80 100

SHEAR STRENGTH (kPa) ○ UNCONFINED ● QUICK TRIAXIAL + FIELD VANE & Sensitivity × LAB VANE 20 40 60 80 100

PLASTIC LIMIT w_P — NATURAL MOISTURE CONTENT w — LIQUID LIMIT w_L — WATER CONTENT (%) 10 20 30

POCKET PEN. (Cu) (kPa) | NATURAL UNIT WT (kN/m³)

Continued Next Page

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

GRAPH NOTES + 3, × 3: Numbers refer to Sensitivity ○ ε=3% Strain at Failure

ENVISION-SOIL-ROCK-OCTOBER-12-2021.GLB
ENVISION SOIL LOG 25-1032.GPJ 25-10-24

ENVISION CONSULTANTS LTD

LOG OF BOREHOLE BH25-03

PROJECT: Geotechnical Investigation - 5500 Dundas St W, Toronto
REF. NO.: 25-1032
CLIENT: First Capital Asset Management LP
Method: Hollow Stem Augers/Mud Rotary
ENCL NO.: 3
PROJECT LOCATION: 5500 Dundas Street West, Toronto, ON
Diameter: 200mm/100mm
ORIGINATED BY MHS
DATUM: Geodetic
Date: Aug-14-2025 to Aug-15-2025
COMPILED BY HK
BH LOCATION: N 4831924.5 E 617073.4
Equipment: Profile B37
CHECKED BY MB

SOIL PROFILE (m) ELEV / DEPTH	DESCRIPTION	STRATA PLOT	SAMPLES NUMBER	TYPE	"N" BLOWS 0.3 m	GROUND WATER CONDITIONS	ELEVATION	DYNAMIC CONE PENETRATION RESISTANCE PLOT (20 40 60 80 100) / SHEAR STRENGTH (kPa) ○ UNCONFINED ● QUICK TRIAXIAL + FIELD VANE & Sensitivity × LAB VANE (20 40 60 80 100)	PLASTIC LIMIT w_P / NATURAL MOISTURE CONTENT w / LIQUID LIMIT w_L — WATER CONTENT (%) (10 20 30)	POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m³)	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
	Continued											
	SILTY SAND TILL: trace clay, trace gravel, grey, moist, very dense(Continued)						118					
9 / 117.0							117					
9.1	**SAND:** trace silt, grey, wet, very dense		12	SS	99/ 225mm				○			2 84 (14)
10 / 115.4							116					
							Bentonite					
10.7	**SILTY SAND:** trace gravel, grey, wet, very dense		13	SS	50/ 100mm				○			
11 / 113.9							115					
12.2	**SAND:** coarse, trace silt, grey, wet, very dense		14	SS	95/ 275mm				○			0 89 (11)
13 / 112.4							114					
							113					Auger grinding
13.7	**SILTY CLAY:** trace sand, trace shale fragments, grey, moist, hard		15	SS	50/ initial 100mm				○			
14 / 110.9							112					
15							111					
15.3	**SILTY CLAY TILL/SHALE COMPLEX:** trace sand, with shale fragments, grey, moist, hard		16	SS	100/ initial 100mm				○			
	END OF BOREHOLE											
	Notes:											

Continued Next Page

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

GRAPH NOTES + 3, × 3: Numbers refer to Sensitivity ○ ε=3% Strain at Failure

ENVISION-SOIL-ROCK-OCTOBER-12-2021.GLB
ENVISION SOIL LOG 25-1032.GPJ 25-10-24

ENVISION CONSULTANTS LTD

LOG OF BOREHOLE BH25-03

PROJECT: Geotechnical Investigation - 5500 Dundas St W, Toronto
REF. NO.: 25-1032
CLIENT: First Capital Asset Management LP
Method: Hollow Stem Augers/Mud Rotary
ENCL NO.: 3
PROJECT LOCATION: 5500 Dundas Street West, Toronto, ON
Diameter: 200mm/100mm
ORIGINATED BY MHS
DATUM: Geodetic
Date: Aug-14-2025 to Aug-15-2025
COMPILED BY HK
BH LOCATION: N 4831924.5 E 617073.4
Equipment: Profile B37
CHECKED BY MB

SOIL PROFILE (m) ELEV / DEPTH	DESCRIPTION	STRATA PLOT	SAMPLES NUMBER	TYPE	"N" BLOWS / 0.3 m	GROUND WATER CONDITIONS	ELEVATION	DYNAMIC CONE PENETRATION RESISTANCE PLOT 20 40 60 80 100 / SHEAR STRENGTH (kPa) ○ UNCONFINED ● QUICK TRIAXIAL + FIELD VANE & Sensitivity × LAB VANE 20 40 60 80 100	PLASTIC LIMIT w_P / NATURAL MOISTURE CONTENT w / LIQUID LIMIT w_L / WATER CONTENT (%) 10 20 30	POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m³)	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
	Continued										
	1) 50mm dia. monitoring well was installed upon completion of drilling, screened from 2.1 to 5.2 mbgs. Water Level Measurement in monitoring well: Date W.L Depth (mbgs) Aug 18, 2025 2.70 Aug 19, 2025 2.75 Sep 04, 2025 2.87 Sep 18, 2025 2.95										

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

GRAPH NOTES + 3, × 3: Numbers refer to Sensitivity ○ ε=3% Strain at Failure

ENVISION-SOIL-ROCK-OCTOBER-12-2021.GLB
ENVISION SOIL LOG 25-1032.GPJ 25-10-24

ENVISION CONSULTANTS LTD

LOG OF BOREHOLE BH25-04

PROJECT: Geotechnical Investigation - 5500 Dundas St W, Toronto
REF. NO.: 25-1032
CLIENT: First Capital Asset Management LP
Method: Hollow Stem Augers
ENCL NO.: 4
PROJECT LOCATION: 5500 Dundas Street West, Toronto, ON
Diameter: 200mm
ORIGINATED BY JG
DATUM: Geodetic
Date: Jul-29-2025 to Jul-30-2025
COMPILED BY HK
BH LOCATION: N 4831917.5 E 617116.6
Equipment: Profile B37
CHECKED BY MB

ELEV (m) / DEPTH	DESCRIPTION	NUMBER	TYPE	BLOWS 0.3 m "N"	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
126.2	Ground Surface				
126.0 / 0.0	**ASPHALT:** 120mm				
0.1	**FILL:** silty clay/clayey silt, trace to some sand, trace gravel, trace organics, dark brown to dark grey, moist, firm to stiff	1	SS	7	
	some organics, dark grey at 0.8 mbgs	2	SS	10	
		3	SS	5	
123.9 / 2.3	**CLAYEY SILT TILL:** sandy, trace gravel, brown, moist, very stiff to hard	4	SS	27	5 29 48 18
		5	SS	50/125mm	
122.4 / 3.8	**SANDY SILT TILL:** trace gravel, trace clay, grey, moist, very dense	6	SS	86/275mm	
		7	SS	62	
		8	SS	83/275mm	
		9	SS	50/125mm	Auger grinding
118.6 / 7.6	**SILTY SAND:** grey, wet, very dense	10	SS	85	Auger grinding Wet spoon 0 74 (26)

GROUND WATER CONDITIONS

ELEVATION: 126, 125, 124, 123, 122, 121, 120, 119

DYNAMIC CONE PENETRATION RESISTANCE PLOT: 20 40 60 80 100

SHEAR STRENGTH (kPa): ○ UNCONFINED ● QUICK TRIAXIAL + FIELD VANE & Sensitivity × LAB VANE (20 40 60 80 100)

PLASTIC LIMIT w_P — NATURAL MOISTURE CONTENT w — LIQUID LIMIT w_L

WATER CONTENT (%): 10 20 30

POCKET PEN. (Cu) (kPa)

NATURAL UNIT WT (kN/m³)

Continued Next Page

GROUNDWATER ELEVATIONS

Measurement 1st 2nd 3rd 4th

GRAPH NOTES: +3, ×3: Numbers refer to Sensitivity ○ ε=3% Strain at Failure

ENVISION-SOIL-ROCK-OCTOBER-12-2021.GLB
ENVISION SOIL LOG 25-1032.GPJ 25-10-24

ENVISION CONSULTANTS LTD

LOG OF BOREHOLE BH25-04

PROJECT: Geotechnical Investigation - 5500 Dundas St W, Toronto
REF. NO.: 25-1032
CLIENT: First Capital Asset Management LP
Method: Hollow Stem Augers
ENCL NO.: 4
PROJECT LOCATION: 5500 Dundas Street West, Toronto, ON
Diameter: 200mm
ORIGINATED BY JG
DATUM: Geodetic
Date: Jul-29-2025 to Jul-30-2025
COMPILED BY HK
BH LOCATION: N 4831917.5 E 617116.6
Equipment: Profile B37
CHECKED BY MB

SOIL PROFILE (m) ELEV / DEPTH	DESCRIPTION	STRATA PLOT	SAMPLES NUMBER	TYPE	"N" BLOWS / 0.3 m	GROUND WATER CONDITIONS	ELEVATION	DYNAMIC CONE PENETRATION RESISTANCE PLOT (20 40 60 80 100) / SHEAR STRENGTH (kPa) ○ UNCONFINED ● QUICK TRIAXIAL + FIELD VANE & Sensitivity × LAB VANE (20 40 60 80 100)	PLASTIC LIMIT w_P / NATURAL MOISTURE CONTENT w / LIQUID LIMIT w_L — WATER CONTENT (%) (10 20 30)	POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m³)	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
	Continued											
	SILTY SAND: grey, wet, very dense(Continued)						118					
9 / 117.1												
9.1	**GRAVELLY SAND:** some silt, trace clay, grey, wet, very dense		11	SS	77/ 275mm		117		○			
10 / 115.5							116					
10.7	**SANDY SILT TILL:** trace gravel, trace clay, grey, wet, very dense		12	SS	50/ initial 125mm				○			
11 / 114.5							115					
11.7	**COBBLE/BOULDER** grey		1	RC								
12							114					
13							113					
112.7	cobble/boulder and limestone slabs from 13.3 to 13.5 mbgs											
13.5	**SILTY CLAY TILL/SHALE COMPLEX:** trace sand, with shale fragments, grey, moist		2	RC								
14 / 112.0												
14.2	**END OF BOREHOLE**											

Notes:
1) Rock core sampling RC1-RC2 carried out due to encountering off/ on shale bedrock/ boulder within glacial till.

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

GRAPH NOTES + 3, × 3: Numbers refer to Sensitivity ○ ε=3% Strain at Failure

ENVISION-SOIL-ROCK-OCTOBER-12-2021.GLB
ENVISION SOIL LOG 25-1032.GPJ 25-10-24

ENVISION CONSULTANTS LTD

LOG OF BOREHOLE BH25-05

PROJECT: Geotechnical Investigation - 5500 Dundas St W, Toronto
REF. NO.: 25-1032
CLIENT: First Capital Asset Management LP
Method: Hollow Stem Augers/Mud Rotary
ENCL NO.: 5
PROJECT LOCATION: 5500 Dundas Street West, Toronto, ON
Diameter: 200mm/100mm
ORIGINATED BY MHS
DATUM: Geodetic
Date: Aug-13-2025 to Aug-14-2025
COMPILED BY HK
BH LOCATION: N 4831962.2 E 617146.2
Equipment: Profile B37
CHECKED BY MB

(m) ELEV / DEPTH	DESCRIPTION	NUMBER	TYPE	BLOWS 0.3 m "N"	ELEVATION	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
126.1	Ground Surface					
126.0	**ASPHALT:** 126mm					
125.9 0.2	**FILL:** sand and gravel, brown, moist, compact	1A	SS		126	
	FILL: silty clay/clayey silt, trace sand, trace gravel, dark grey, moist, soft to stiff	1B	SS	12		
1		2	SS	5	125	
	brown at 1.5 mbgs	3	SS	4		
2					124	
123.8 2.3	**SILTY CLAY TILL:** sandy, trace gravel, trace oxidation, brown, moist, hard	4	SS	35		
3		5	SS	73/ 225mm	123	
122.3 3.8	**SILTY SAND TILL:** trace clay, grey, wet, very dense	6	SS	91	122	
4		7	SS	93/ 275mm		
5					121	
120.8 5.3	**SAND:** some gravel to gravelly, grey, wet, very dense	8	SS	50/ 100mm		13 70 (17) Auger grinding
6		9	SS	50/ initial 125mm	120	
119.2 6.9	**SILTY SAND TILL:** trace gravel, trace clay, grey, moist to wet, very dense	10	SS	50/ initial 100mm	119	Auger grinding
7		11	SS	50/ initial 100mm		6 47 41 6
8						

SOIL PROFILE | SAMPLES | GROUND WATER CONDITIONS | ELEVATION

DYNAMIC CONE PENETRATION RESISTANCE PLOT (20 40 60 80 100)

SHEAR STRENGTH (kPa): ○ UNCONFINED ● QUICK TRIAXIAL + FIELD VANE & Sensitivity × LAB VANE (20 40 60 80 100)

PLASTIC LIMIT w_P — NATURAL MOISTURE CONTENT w — LIQUID LIMIT w_L

WATER CONTENT (%) (10 20 30)

POCKET PEN. (Cu) (kPa) | NATURAL UNIT WT (kN/m³)

STRATA PLOT

Continued Next Page

GROUNDWATER ELEVATIONS

Measurement 1st 2nd 3rd 4th

GRAPH NOTES + 3, × 3: Numbers refer to Sensitivity ○ ε=3% Strain at Failure

ENVISION-SOIL-ROCK-OCTOBER-12-2021.GLB
ENVISION SOIL LOG 25-1032.GPJ 25-10-24

PROJECT: Geotechnical Investigation - 5500 Dundas St W, Toronto
REF. NO.: 25-1032
CLIENT: First Capital Asset Management LP
Method: Hollow Stem Augers/Mud Rotary
ENCL NO.: 5
PROJECT LOCATION: 5500 Dundas Street West, Toronto, ON
Diameter: 200mm/100mm
ORIGINATED BY MHS
DATUM: Geodetic
Date: Aug-13-2025 to Aug-14-2025
COMPILED BY HK
BH LOCATION: N 4831962.2 E 617146.2
Equipment: Profile B37
CHECKED BY MB

SOIL PROFILE (m) ELEV / DEPTH	DESCRIPTION	STRATA PLOT	SAMPLES NUMBER	TYPE	"N" BLOWS 0.3 m	GROUND WATER CONDITIONS	ELEVATION	DYNAMIC CONE PENETRATION RESISTANCE PLOT (20 40 60 80 100) / SHEAR STRENGTH (kPa) ○ UNCONFINED ● QUICK TRIAXIAL + FIELD VANE & Sensitivity × LAB VANE (20 40 60 80 100)	PLASTIC LIMIT w_P — NATURAL MOISTURE CONTENT w — LIQUID LIMIT w_L / WATER CONTENT (%) (10 20 30)	POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m³)	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
	Continued											
	SILTY SAND TILL: trace gravel, trace clay, grey, moist to wet, very dense(Continued)						118					Auger grinding
9 / 117.0							117					
9.1	**CLAYEY SILT TILL:** sandy, trace gravel, grey, moist, hard		12	SS	50/ initial 100mm				○			Auger grinding
10							116					
			13	SS	50/ initial 100mm				○			
11							115					Auger grinding
12 / 113.9							114					
12.2	**SILTY SAND TILL:** trace gravel, trace clay, grey, wet, very dense		14	SS	50/ 75mm				○			
13 / 112.4							113					Auger grinding
13.7	**SAND:** coarse, grey, wet, very dense		15	SS	50/ initial 125mm				○			Auger grinding 6 83 (11)
14 / 110.9							112					
15.2	**SILTY SAND TILL:** trace clay, trace gravel, grey, wet, very dense		16	SS	50/ initial 75mm		111		○			
16												

Continued Next Page

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

GRAPH NOTES + 3, × 3: Numbers refer to Sensitivity ○ ε=3% Strain at Failure

ENVISION-SOIL-ROCK-OCTOBER-12-2021.GLB
ENVISION SOIL LOG 25-1032.GPJ 25-10-24

ENVISION CONSULTANTS LTD

LOG OF BOREHOLE BH25-05

PROJECT: Geotechnical Investigation - 5500 Dundas St W, Toronto
REF. NO.: 25-1032
CLIENT: First Capital Asset Management LP
Method: Hollow Stem Augers/Mud Rotary
ENCL NO.: 5
PROJECT LOCATION: 5500 Dundas Street West, Toronto, ON
Diameter: 200mm/100mm
ORIGINATED BY MHS
DATUM: Geodetic
Date: Aug-13-2025 to Aug-14-2025
COMPILED BY HK
BH LOCATION: N 4831962.2 E 617146.2
Equipment: Profile B37
CHECKED BY MB

SOIL PROFILE (m) ELEV / DEPTH	DESCRIPTION	STRATA PLOT	SAMPLES NUMBER	TYPE	BLOWS 0.3 m "N"	GROUND WATER CONDITIONS	ELEVATION	DYNAMIC CONE PENETRATION RESISTANCE PLOT 20 40 60 80 100 / SHEAR STRENGTH (kPa) ○ UNCONFINED ● QUICK TRIAXIAL + FIELD VANE & Sensitivity × LAB VANE 20 40 60 80 100	PLASTIC LIMIT w_P / NATURAL MOISTURE CONTENT w / LIQUID LIMIT w_L WATER CONTENT (%) 10 20 30	POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m³)	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
	Continued											
	SILTY SAND TILL: trace clay, trace gravel, grey, wet, very dense(Continued)						110					
109.3												
16.8	**SILTY CLAY TILL:** trace sand, trace gravel, trace shale fragments, grey, moist, hard		17	SS	50/ 125mm		109		○			
107.8							108					
107.3	**HIGHLY WEATHERED SHALE:** grey, moist, hard		18	SS	100/ initail 75mm				○			
18.4	**END OF BOREHOLE**											

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

GRAPH NOTES + 3, × 3: Numbers refer to Sensitivity ○ ε=3% Strain at Failure

ENVISION-SOIL-ROCK-OCTOBER-12-2021.GLB
ENVISION SOIL LOG 25-1032.GPJ 25-10-24

ENVISION CONSULTANTS LTD

LOG OF BOREHOLE BH25-06

PROJECT: Geotechnical Investigation - 5500 Dundas St W, Toronto
REF. NO.: 25-1032
CLIENT: First Capital Asset Management LP
Method: Hollow Stem Augers
ENCL NO.: 6
PROJECT LOCATION: 5500 Dundas Street West, Toronto, ON
Diameter: 200mm
ORIGINATED BY JG
DATUM: Geodetic
Date: Jul-31-2025 to Aug-01-2025
COMPILED BY HK
BH LOCATION: N 4831961.5 E 617180.2
Equipment: Profile B37
CHECKED BY MB

(m) ELEV / DEPTH	DESCRIPTION	NUMBER	TYPE	"N" BLOWS / 0.3 m	ELEVATION	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
126.1	Ground Surface					
126.0 / 0.0	**ASPHALT:** 115mm				Flush Mount Cover	
0.1	**FILL:** silty clay to clayey silt, trace to some sand, trace gravel, trace organics, dark grey to dark brown, moist, soft to very stiff	1	SS	5		
	some organics, dark brown at 0.8 mbgs	2	SS	5	125	
		3	SS	3	124	
123.6		4A	SS	15		
2.5	**CLAYEY SILT TILL:** sandy, trace gravel, trace oxidation, brown, moist, very stiff to hard	4B	SS		W. L. 123.3 m Aug 13, 2025	
		5	SS	50/ 75mm	123	
122.3						Auger grinding
3.8	**SANDY SILT TILL:** trace gravel, trace clay, grey, moist, dense to very dense	6	SS	30	122	
	occasional cobbles/boulders at 4.6 mbgs	7	SS	82	121	
		8	SS	50/ 125mm		
		9	SS	50/ 125mm	120	
	wet below 7.6 mbgs	10	SS	50/ 125mm	119	

DYNAMIC CONE PENETRATION RESISTANCE PLOT (20 40 60 80 100)

SHEAR STRENGTH (kPa): ○ UNCONFINED ● QUICK TRIAXIAL + FIELD VANE & Sensitivity × LAB VANE (20 40 60 80 100)

PLASTIC LIMIT w_P — NATURAL MOISTURE CONTENT w — LIQUID LIMIT w_L

WATER CONTENT (%) (10 20 30)

POCKET PEN. (Cu) (kPa)

NATURAL UNIT WT (kN/m³)

Continued Next Page

GROUNDWATER ELEVATIONS

Measurement 1st 2nd 3rd 4th

GRAPH NOTES + 3, × 3: Numbers refer to Sensitivity ○ ε=3% Strain at Failure

ENVISION-SOIL-ROCK-OCTOBER-12-2021.GLB
ENVISION SOIL LOG 25-1032.GPJ 25-10-24

ENVISION CONSULTANTS LTD

LOG OF BOREHOLE BH25-06

PROJECT: Geotechnical Investigation - 5500 Dundas St W, Toronto
REF. NO.: 25-1032
CLIENT: First Capital Asset Management LP
Method: Hollow Stem Augers
ENCL NO.: 6
PROJECT LOCATION: 5500 Dundas Street West, Toronto, ON
Diameter: 200mm
ORIGINATED BY JG
DATUM: Geodetic
Date: Jul-31-2025 to Aug-01-2025
COMPILED BY HK
BH LOCATION: N 4831961.5 E 617180.2
Equipment: Profile B37
CHECKED BY MB

SOIL PROFILE (m) ELEV / DEPTH	DESCRIPTION	STRATA PLOT	SAMPLES NUMBER	TYPE	"N" BLOWS / 0.3 m	GROUND WATER CONDITIONS	ELEVATION	DYNAMIC CONE PENETRATION RESISTANCE PLOT (20 40 60 80 100) / SHEAR STRENGTH (kPa) ○ UNCONFINED ● QUICK TRIAXIAL + FIELD VANE & Sensitivity × LAB VANE (20 40 60 80 100)	PLASTIC LIMIT w_P — NATURAL MOISTURE CONTENT w — LIQUID LIMIT w_L / WATER CONTENT (%) (10 20 30)	POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m³)	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
	Continued											
	SANDY SILT TILL: trace gravel, trace clay, grey, moist, dense to very dense(Continued)						118					
9												
							117					
			11	SS	50/ 125mm				○			
10							Bentonite					
	occasional cobbles/boulders at 10.7 mbgs		12	SS	50/ 100mm				○			
11							115					
12			1	RC			114					
13							113					
			2	RC								
14							112					
111.2												
15 14.9	**CLAYEY SILT TILL:** contains sand/silty sand seams, trace shale fragments, grey, moist to wet, hard		13	SS	50/ initial 125mm		111		○			
16												

Continued Next Page

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

GRAPH NOTES + 3, × 3: Numbers refer to Sensitivity ○ ε=3% Strain at Failure

ENVISION-SOIL-ROCK-OCTOBER-12-2021.GLB
ENVISION SOIL LOG 25-1032.GPJ 25-10-24

ENVISION CONSULTANTS LTD

LOG OF BOREHOLE BH25-06

PROJECT: Geotechnical Investigation - 5500 Dundas St W, Toronto
REF. NO.: 25-1032
CLIENT: First Capital Asset Management LP
Method: Hollow Stem Augers
ENCL NO.: 6
PROJECT LOCATION: 5500 Dundas Street West, Toronto, ON
Diameter: 200mm
ORIGINATED BY JG
DATUM: Geodetic
Date: Jul-31-2025 to Aug-01-2025
COMPILED BY HK
BH LOCATION: N 4831961.5 E 617180.2
Equipment: Profile B37
CHECKED BY MB

(m) ELEV / DEPTH	SOIL PROFILE: DESCRIPTION (Continued)	NUMBER	TYPE	BLOWS 0.3 m "N"	ELEVATION
109.6	**CLAYEY SILT TILL:** contains sand/silty sand seams, trace shale fragments, grey, moist to wet, hard(Continued)				110
16.5 / 109.3	**SHALE AND LIMESTONE FRAGMENTS:** grey, moist, hard cobble/boulder from 16.6 to 16.8 mbgs	14	SS	50/ initial/ 100mm	
16.8	**SANDY SILT TILL:** containing limestone fragments, grey, moist	3	RC		109
	50mm layer of silty clay till at 17.5 mbgs	4	RC		108
107.1					
19.0 / 106.9	**SANDY SILT TILL/SHALE COMPLEX:** with shale fragments, grey, moist				107
19.2	**BEDROCK:** grey shale interbedded with siltstone /limestone. (Georgian Bay Formation) Actual rock coring started from 19.23 mbgs Refer to rock core log.	5	RC		106 Sand
		6	RC		105 Screen
104.1					
22.1	**END OF BOREHOLE**				

Notes:
1) Rock core sampling RC1-RC4 carried out due to encountering off/ on shale bedrock/ boulder within glacial till.
2) 50mm dia. monitoring well was installed upon completion of drilling, screened from 20.5 to 22.1 mbgs.

Water Level Measurement in monitoring well:

Date	W.L Depth (mbgs)
Aug 13, 2025	2.85
Aug 19, 2025	2.92
Sep 04, 2025	3.83
Sep 18, 2025	2.94

DYNAMIC CONE PENETRATION RESISTANCE PLOT: 20 40 60 80 100
SHEAR STRENGTH (kPa): ○ UNCONFINED ● QUICK TRIAXIAL + FIELD VANE & Sensitivity × LAB VANE (20 40 60 80 100)
PLASTIC LIMIT w_P — NATURAL MOISTURE CONTENT w — LIQUID LIMIT w_L
WATER CONTENT (%): 10 20 30
POCKET PEN. (Cu) (kPa)
NATURAL UNIT WT (kN/m³)
REMARKS AND GRAIN SIZE DISTRIBUTION (%): GR SA SI CL

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

GRAPH NOTES: +3, ×3: Numbers refer to Sensitivity ○ ε=3% Strain at Failure

ENVISION-SOIL-ROCK-OCTOBER-12-2021.GLB
ENVISION SOIL LOG 25-1032.GPJ 25-10-24

ENVISION CONSULTANTS LTD

LOG OF ROCK CORE BH25-06

PROJECT: Geotechnical Investigation - 5500 Dundas St W, Toronto			REF. NO.: 25-1032
CLIENT: First Capital Asset Management LP	Method: Hollow Stem Augers		ENCL NO.: 6
LOCATION: 5500 Dundas Street West, Toronto, ON	Diameter: 200mm		ORIGINATED BY JG
DATUM: Geodetic	Date: Jul-31-2025 to Aug-01-2025		COMPILED BY HK
BH LOCATION: N 4831961.5 E 617180.2	Equipment: Profile B37		CHECKED BY MB

(m) ELEV / DEPTH	ROCK DESCRIPTION	GROUND WATER CONDITIONS	CORE SAMPLE NUMBER	CORE SAMPLE SIZE	TOTAL CORE RECOVERY (%)	SOLID CORE RECOVERY (%)	HARD LAYER (%)	RQD (%)	FRACTURE INDEX (per 0.3 m)	DISCONTINUITIES	Weathering Index	HYDRAULIC CONDUCTIVITY (cm/sec)	POINT LOAD TEST UCS AXIAL (MPa)*	POINT LOAD TEST UCS DIAMETRAL (MPa)*	UNIAXIAL COMPRESSION (MPa)	DENSITY (g/cm³) E (GPa)
106.9	Rock Surface															
19.2	Highly weathered (W4) to slightly (W2), thinly laminated to thinly bedded, grey, very weak to medium strong, **SHALE** (92%-100%), interbedded with thinly laminated to medium bedded, slightly weathered to fresh, light grey, strong to very strong **SILTSTONE** and **LIMESTONE** (0%-8%). Bedding almost horizontal (θ=90°). (Georgian Bay Formation)		5	HQ	11	11	0	0	1	19.25m ~ 19.34m (W4)	W4-W3					
20																
105.6																
20.5			6	HQ	100	100	8	44	3	Fracture: 21.23m-21.26m, θ=45° 21.27m-21.30m, θ=45° 21.29m-21.30m, θ=75°	W3-W2					
21									3							
									4							
									5							
22									3							
104.1																
22.1	**END OF BOREHOLE**															

Notes:
1) Rock core sampling RC1-RC4 carried out due to encountering off/ on shale bedrock/ boulder within glacial till.
2) 50mm dia. monitoring well was installed upon completion of drilling, screened from 20.5 to 22.1 mbgs.

Water Level Measurement in monitoring well:

Date	W.L Depth (mbgs)
Aug 13, 2025	2.85
Aug 19, 2025	2.92
Sep 04, 2025	3.83
Sep 18, 2025	2.94

ENVISION-SOIL-ROCK-MAY2024.GLB
ENVISION ROCK CORE-2021** 25-1032.GPJ 25-10-24

Weathering Index: W1-Fresh, W2-Slightly weathered, W3-Moderately weathered, W4-Highly weathered, W5-Completely weathered
** Only vertical/subvertical fracture indicated

θ = angle to the core axis

E = Modulus of Elasticity
*: UCS [Mpa] ≈ 24 $I_{S(50)}$

ENVISION CONSULTANTS LTD

LOG OF BOREHOLE BH25-07

PROJECT: Geotechnical Investigation - 5500 Dundas St W, Toronto
REF. NO.: 25-1032
CLIENT: First Capital Asset Management LP
Method: Hollow Stem Augers/Mud Rotary
ENCL NO.: 7
PROJECT LOCATION: 5500 Dundas Street West, Toronto, ON
Diameter: 200mm/75mm
ORIGINATED BY MHS
DATUM: Geodetic
Date: Aug-13-2025
COMPILED BY HK
BH LOCATION: N 4831940.5 E 617193.8
Equipment: Profile B37
CHECKED BY MB

ELEV (m) / DEPTH	DESCRIPTION	NUMBER	TYPE	"N" BLOWS 0.3 m	ELEVATION	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
126.7	Ground Surface					
126.6 / 0.0	**ASPHALT:** 125mm					
0.1 / 125.9	**FILL:** sand and gravel, brown, moist, dense	1	SS	31	Flush Mount Cover	
0.8	**FILL:** silty sand, trace gravel, black, moist, very loose to compact	2	SS	11	126 Bentonite	
	trace asphalt pieces above 1.5 mbgs	3	SS	11	Sand	
	brown below 1.5 mbgs					
124.2		4A	SS	3		
2.5	**FILL:** silt, trace sand, some organics, dark brown to dark grey, moist, very loose to compact	4B	SS		124	
123.5		5A	SS		W. L. 123.7 m Aug 18, 2025	
3.2	**SILTY CLAY TILL:** sandy, trace gravel, grey, moist, stiff to hard	5B	SS	14	Screen	
		6	SS	57	123	Switched to mud rotary
	occasional cobbles/boulders at 4.6 mbgs	7	SS	50	122	7 34 48 11
121.4					Sand	
5.3	**SANDY SILT TILL:** trace so some clay, trace gravel, grey, moist to wet, very dense	8	SS	50/125mm	121	
	trace to some gravel at 6.1 mbgs	9	SS	50/75mm	120	5 41 49 5
119.1		10	SS	50/initial 125mm		
7.6	**CLAYEY SILT TILL:** sandy, trace gravel, grey, moist, hard	11	SS	50/initial 100mm	119	

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GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

GRAPH NOTES: + 3, × 3: Numbers refer to Sensitivity; ○ ε=3% Strain at Failure

ENVISION-SOIL-ROCK-OCTOBER-12-2021.GLB
ENVISION SOIL LOG 25-1032.GPJ 25-10-24

LOG OF BOREHOLE BH25-07

PROJECT: Geotechnical Investigation - 5500 Dundas St W, Toronto
REF. NO.: 25-1032
CLIENT: First Capital Asset Management LP
Method: Hollow Stem Augers/Mud Rotary
ENCL NO.: 7
PROJECT LOCATION: 5500 Dundas Street West, Toronto, ON
Diameter: 200mm/75mm
ORIGINATED BY MHS
DATUM: Geodetic
Date: Aug-13-2025
COMPILED BY HK
BH LOCATION: N 4831940.5 E 617193.8
Equipment: Profile B37
CHECKED BY MB

SOIL PROFILE (m) ELEV / DEPTH	DESCRIPTION	STRATA PLOT	SAMPLES NUMBER	TYPE	BLOWS 0.3 m "N"	GROUND WATER CONDITIONS	ELEVATION	DYNAMIC CONE PENETRATION RESISTANCE PLOT (20 40 60 80 100) / SHEAR STRENGTH (kPa) ○ UNCONFINED ● QUICK TRIAXIAL + FIELD VANE & Sensitivity × LAB VANE (20 40 60 80 100)	PLASTIC LIMIT w_P / NATURAL MOISTURE CONTENT w / LIQUID LIMIT w_L — WATER CONTENT (%) (10 20 30)	POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m³)	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
	Continued											
	CLAYEY SILT TILL: sandy, trace gravel, grey, moist, hard(Continued)						118					
9 / 117.6												
9.1	**SANDY SILT TILL:** trace clay, trace gravel, grey, moist to wet, very dense		12	SS	50/ initial 75mm		117					
10												
			13	SS	50/ initial 125mm		116					
11							Bentonite					
12							115					
	trace to some gravel at 12.2 mbgs		14	SS	50/ initial 125mm							
13							114					
113.0												
113.9 / 13.8	**SILTY SAND:** trace clay, grey, moist, very dense		15A / 15B	SS / SS	50/ initial 150mm		113					
14	**SILTY CLAY TILL:** sandy, trace gravel, grey, moist, hard											
							112					
15												
			16	SS	50/ initial 25mm							Hammer bouncing
							111					
16 / 110.7												

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GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

GRAPH NOTES + 3, × 3: Numbers refer to Sensitivity ○ ε=3% Strain at Failure

ENVISION-SOIL-ROCK-OCTOBER-12-2021.GLB
ENVISION SOIL LOG 25-1032.GPJ 25-10-24

ENVISION CONSULTANTS LTD

LOG OF BOREHOLE BH25-07

PROJECT: Geotechnical Investigation - 5500 Dundas St W, Toronto
REF. NO.: 25-1032
CLIENT: First Capital Asset Management LP
Method: Hollow Stem Augers/Mud Rotary
ENCL NO.: 7
PROJECT LOCATION: 5500 Dundas Street West, Toronto, ON
Diameter: 200mm/75mm
ORIGINATED BY MHS
DATUM: Geodetic
Date: Aug-13-2025
COMPILED BY HK
BH LOCATION: N 4831940.5 E 617193.8
Equipment: Profile B37
CHECKED BY MB

SOIL PROFILE (m) ELEV / DEPTH	DESCRIPTION	STRATA PLOT	SAMPLES NUMBER	TYPE	BLOWS 0.3 m "N"	GROUND WATER CONDITIONS	ELEVATION	DYNAMIC CONE PENETRATION RESISTANCE PLOT 20 40 60 80 100 / SHEAR STRENGTH (kPa) ○ UNCONFINED ● QUICK TRIAXIAL + FIELD VANE & Sensitivity × LAB VANE 20 40 60 80 100	PLASTIC LIMIT w_P / NATURAL MOISTURE CONTENT w / LIQUID LIMIT w_L — WATER CONTENT (%) 10 20 30	POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m³)	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
	Continued											
16.0	**CLAYEY SILT TILL/SHALE COMPLEX:** sandy, trace gravel, with shale fragments, grey, moist, hard		17	SS	100/ 100mm							3 35 46 16
109.9							110					
109.8	**INFERRED BEDROCK:**		18	SS	50/ initial 100mm							
16.9	**END OF BOREHOLE**											

Notes:
1) 50mm dia. monitoring well was installed upon completion of drilling, screened from 1.8 to 4.9 mbgs.

Water Level Measurement in monitoring well:

Date	W.L Depth (mbgs)
Aug 18, 2025	2.97
Aug 19, 2025	3.33
Sep 04, 2025	3.19
Sep 18, 2025	3.24

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

GRAPH NOTES + 3, × 3: Numbers refer to Sensitivity ○ ε=3% Strain at Failure

ENVISION-SOIL-ROCK-OCTOBER-12-2021.GLB
ENVISION SOIL LOG 25-1032.GPJ 25-10-24

ENVISION CONSULTANTS LTD

LOG OF BOREHOLE BH25-08

PROJECT: Geotechnical Investigation - 5500 Dundas St W, Toronto
REF. NO.: 25-1032
CLIENT: First Capital Asset Management LP
Method: Hollow Stem Augers
ENCL NO.: 8
PROJECT LOCATION: 5500 Dundas Street West, Toronto, ON
Diameter: 200mm
ORIGINATED BY JG
DATUM: Geodetic
Date: Jul-25-2025
COMPILED BY HK
BH LOCATION: N 4831901.5 E 617043.1
Equipment: Profile B37
CHECKED BY MB

(m) ELEV / DEPTH	DESCRIPTION	NUMBER	TYPE	"N" BLOWS 0.3 m	ELEVATION	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
125.9	Ground Surface					
125.8 0.1	**ASPHALT:** 125mm				Flush Mount Cover	
	FILL: silty clay to clayey silt, trace to some sand, trace gravel, trace organics, dark grey, moist, soft to stiff	1	SS	3		
	some organics, dark brown to dark grey at 0.8 mbgs	2	SS	8	125	
					Bentonite	
	brown and grey at 1.5 mbgs	3	SS	7	124	
123.6 2.3	**SILTY SAND TILL:** trace to some gravel, trace clay, brown, moist, dense to very dense	4	SS	37		Auger grinding
					W. L. 123.0 m Sep 04, 2025	
	grey below 3.1 mbgs	5	SS	84		
	wet below 3.8 mbgs	6	SS	90/ 275mm	122	6 44 46 4
		7	SS	50/ initial 125mm	Screen	
					121	Auger grinding
	contains silt layers at 5.3 mbgs	8	SS	50/ 125mm		
					120	
		9	SS	87	Sand	Auger grinding
					119	
		10	SS	50/ 75mm	Bentonite 118	12 54 30 4

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GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

GRAPH NOTES: $+^3$, $\times^3$: Numbers refer to Sensitivity; ε=3% Strain at Failure

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ENVISION SOIL LOG 25-1032.GPJ 25-10-24

ENVISION CONSULTANTS LTD

LOG OF BOREHOLE BH25-08

PROJECT: Geotechnical Investigation - 5500 Dundas St W, Toronto
REF. NO.: 25-1032
CLIENT: First Capital Asset Management LP
Method: Hollow Stem Augers
ENCL NO.: 8
PROJECT LOCATION: 5500 Dundas Street West, Toronto, ON
Diameter: 200mm
ORIGINATED BY JG
DATUM: Geodetic
Date: Jul-25-2025
COMPILED BY HK
BH LOCATION: N 4831901.5 E 617043.1
Equipment: Profile B37
CHECKED BY MB

SOIL PROFILE (m) ELEV / DEPTH	DESCRIPTION	STRATA PLOT	SAMPLES NUMBER	TYPE	"N" BLOWS 0.3 m	GROUND WATER CONDITIONS	ELEVATION	DYNAMIC CONE PENETRATION RESISTANCE PLOT 20 40 60 80 100 / SHEAR STRENGTH (kPa) ○ UNCONFINED ● QUICK TRIAXIAL + FIELD VANE & Sensitivity × LAB VANE 20 40 60 80 100	PLASTIC LIMIT w_P / NATURAL MOISTURE CONTENT w / LIQUID LIMIT w_L — WATER CONTENT (%) 10 20 30	POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m³)	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
	Continued											
	SILTY SAND TILL: trace to some gravel, trace clay, brown, moist, dense to very dense(Continued)											Auger grinding
116.8							117					
116.8 9.1	**WEATHERED SHALE:** grey, moist, hard		11	SS	50/ initial 10mm							Auger refusal
	END OF BOREHOLE											

Notes:
1) Borehole was open and unstabilized water level was at 7.3 mbgs upon completion of drilling.
2) 50mm dia. monitoring well was installed upon completion of drilling, screened from 3.1 to 6.1mbgs.

Water Level Measurement in monitoring well:

Date	W.L Depth (mbgs)
Aug 13, 2025	3.00
Aug 19, 2025	2.95
Sep 04, 2025	2.87
Sep 18, 2025	2.96

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

GRAPH NOTES + 3, × 3: Numbers refer to Sensitivity ○ ε=3% Strain at Failure

ENVISION-SOIL-ROCK-OCTOBER-12-2021.GLB
ENVISION SOIL LOG 25-1032.GPJ 25-10-24

ENVISION CONSULTANTS LTD

LOG OF BOREHOLE BH25-09

PROJECT: Geotechnical Investigation - 5500 Dundas St W, Toronto
REF. NO.: 25-1032
CLIENT: First Capital Asset Management LP
Method: Hollow Stem Augers
ENCL NO.: 9
PROJECT LOCATION: 5500 Dundas Street West, Toronto, ON
Diameter: 200mm
ORIGINATED BY MHS
DATUM: Geodetic
Date: Aug-15-2025
COMPILED BY HK
BH LOCATION: N 4831907.2 E 617113.7
Equipment: Profile B37
CHECKED BY MB

ELEV (m) / DEPTH	DESCRIPTION	NUMBER	TYPE	"N" BLOWS 0.3 m	ELEVATION	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
126.0	Ground Surface					
0.0 / 125.8	**FILL:** sand and gravel, dark brown, moist, loose				Flush Mount Cover	
0.3	**FILL:** silty clay/clayey silt, trace to some sand, trace gravel, dark brown to dark grey, moist, firm to stiff	1	SS	7		
1		2	SS	4	Bentonite	
2		3	SS	9	Sand	
123.7 / 2.3	**SILTY CLAY TILL:** sandy, trace gravel, brown, moist, very stiff	4	SS	28		
3 / 123.0					W. L. 123.1 m Sep 04, 2025	
3.1	**SANDY SILT TILL:** trace gravel, trace clay, grey, moist, very dense	5	SS	50/ initial 125mm		Auger grinding
122.2					Screen	
3.8 / 4	**SILTY SAND:** grey, wet, compact to very dense	6	SS	52	122	
5		7	SS	27	121	
120.4		8	SS	50/ 100mm	Bentonite	
5.6	**END OF BOREHOLE**					

Notes:
1) 50mm dia. monitoring well was installed upon completion of drilling, screened from 2.1 to 5.2 mbgs.

Water Level Measurement in monitoring well:

Date	W.L Depth (mbgs)
Aug 18, 2025	3.18
Aug 19, 2025	3.18
Sep 04, 2025	2.95
Sep 18, 2025	3.01

DYNAMIC CONE PENETRATION RESISTANCE PLOT: 20 40 60 80 100

SHEAR STRENGTH (kPa): ○ UNCONFINED ● QUICK TRIAXIAL + FIELD VANE & Sensitivity × LAB VANE (20 40 60 80 100)

PLASTIC LIMIT w_P — NATURAL MOISTURE CONTENT w — LIQUID LIMIT w_L; WATER CONTENT (%): 10 20 30

POCKET PEN. (Cu) (kPa) — NATURAL UNIT WT (kN/m³)

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

GRAPH NOTES: $+^3$, $\times^3$: Numbers refer to Sensitivity; ○ ε=3% Strain at Failure

ENVISION-SOIL-ROCK-OCTOBER-12-2021.GLB
ENVISION SOIL LOG 25-1032.GPJ 25-10-24

ENVISION CONSULTANTS LTD

LOG OF BOREHOLE BH25-10

PROJECT: Geotechnical Investigation - 5500 Dundas St W, Toronto
REF. NO.: 25-1032
CLIENT: First Capital Asset Management LP
Method: Hollow Stem Augers
ENCL NO.: 10
PROJECT LOCATION: 5500 Dundas Street West, Toronto, ON
Diameter: 200mm
ORIGINATED BY MHS
DATUM: Geodetic
Date: Aug-01-2025
COMPILED BY HK
BH LOCATION: N 4831962.2 E 617127.7
Equipment: Profile B37
CHECKED BY MB

ELEV (m) / DEPTH	DESCRIPTION	NUMBER	TYPE	"N" BLOWS 0.3 m	ELEVATION
126.2	Ground Surface				
126.0 / 0.0	**ASPHALT:** 125mm				Flush Mount Cover
0.1	**FILL:** silty clay to clayey silt, trace to some sand, trace gravel, brown to dark brown, moist, soft to firm	1	SS	5	126
		2	SS	4	125
	trace organics above 1.5 mbgs				Bentonite
	brown and grey at 1.5 mbgs	3	SS	4	
123.9 / 2.3	**CLAYEY SILT TILL:** sandy, trace gravel, brown, moist, hard	4	SS	33	124 Sand
					W. L. 123.4 m Sep 04, 2025
123.2 / 3.1	**SANDY SILT TILL:** trace clay, trace gravel, grey, moist, dense to very dense	5	SS	48	123
	wet below 3.8 mbgs	6	SS	73/ 275mm	122 Screen
121.6 / 4.6	**SILTY SAND TILL:** trace clay, trace gravel, grey, wet, very dense	7	SS	80	
		8	SS	50/ initial 75mm	121
120.4 / 5.8	**END OF BOREHOLE**				

Notes:
1) Borehole was open and dry upon completion of drilling.
2) 50mm dia. monitoring well was installed upon completion of drilling, screened from 2.7 to 5.8 mbgs.

Water Level Measurement in monitoring well:

Date	W.L Depth (mbgs)
Aug 13, 2025	2.80
Aug 19, 2025	3.11
Sep 04, 2025	2.80
Sep 18, 2025	2.89

DYNAMIC CONE PENETRATION RESISTANCE PLOT: 20 40 60 80 100

SHEAR STRENGTH (kPa): ○ UNCONFINED ● QUICK TRIAXIAL + FIELD VANE & Sensitivity × LAB VANE: 20 40 60 80 100

PLASTIC LIMIT w_P — NATURAL MOISTURE CONTENT w — LIQUID LIMIT w_L

WATER CONTENT (%): 10 20 30

POCKET PEN. (Cu) (kPa)

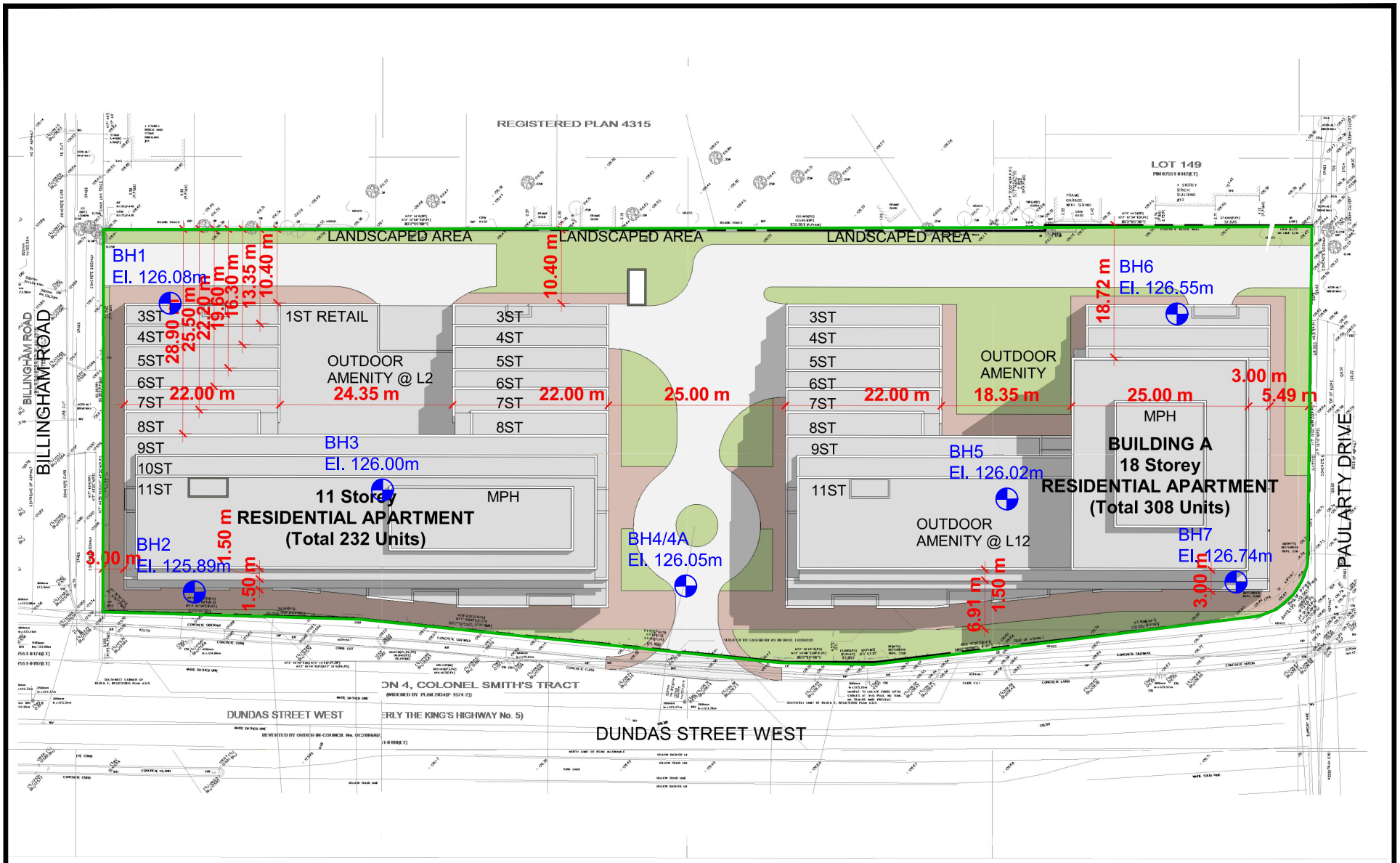
NATURAL UNIT WT (kN/m³)

REMARKS AND GRAIN SIZE DISTRIBUTION (%): GR SA SI CL

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

GRAPH NOTES + 3, × 3: Numbers refer to Sensitivity ○ ε=3% Strain at Failure

ENVISION-SOIL-ROCK-OCTOBER-12-2021.GLB
ENVISION SOIL LOG 25-1032.GPJ 25-10-24



NOTES:

1. THE BOUNDARIES AND SOIL TYPES HAVE BEEN ESTABLISHED ONLY AT BOREHOLE LOCATIONS. BETWEEN BOREHOLES THEY ARE ASSUMED AND MAY BE SUBJECT TO CONSIDERABLE ERROR
2. SOIL SAMPLES WILL BE RETAINED IN STORAGE FOR 1 MONTH AND THEN DESTROYED UNLESS CLIENT ADVISES THAT AN EXTENDED TIME PERIOD IS REQUIRED.
3. THIS DRAWING WAS REPRODUCED FROM A SITE PLAN PROVIDED FROM THE CLIENT.
4. BOREHOLE ELEVATIONS SHOULD NOT BE USED FOR BUILDING OR PARKING LOT GRADES.

LEGEND:

BOREHOLE LOCATION

EXP Services Inc.
t: +1.905.695.3217 | f: +1.905.695.0169
220 COMMERCE VALLEY DR., SUITE 110
MARKHAM, ON L3T 0A8
Canada
www.exp.com

PROJECT TITLE AND LOCATION:	DRAWING TITLE:	PROJECT#:	DWN.:
GEOTECHNICAL INVESTIGATION PROPOSED RESIDENTIAL DEVELOPMENT 5500 DUNDAS STREET WEST TORONTO, ONTARIO	BOREHOLE LOCATION PLAN	BRM-00609125-A0	LC
		SCALE: ~1:750	CHKD.: PC
		DATE: JANUARY 2020	DWG. No.: 1

Notes On Sample Descriptions

1. All sample descriptions included in this report follow the Canadian Foundations Engineering Manual soil classification system. This system follows the standard proposed by the International Society for Soil Mechanics and Foundation Engineering. Laboratory grain size analyses provided by exp also follow the same system. Different classification systems may be used by others; one such system is the Unified Soil Classification. Please note that, with the exception of those samples where a grain size analysis has been made, all samples are classified visually. Visual classification is not sufficiently accurate to provide exact grain sizing or precise differentiation between size classification systems.

ISSMFE SOIL CLASSIFICATION

CLAY	SILT			SAND			GRAVEL			COBBLES	BOULDERS
	FINE	MEDIUM	COARSE	FINE	MEDIUM	COARSE	FINE	MEDIUM	COARSE		

0.002 0.006 0.02 0.06 0.2 0.6 2.0 6.0 20 60 200

EQUIVALENT GRAIN DIAMETER IN MILLIMETERS

CLAY (PLASTIC) TO	FINE	MEDIUM	CRS.	FINE	COARSE
SILT (NONPLASTIC	SAND			GRAVEL	

UNIFIED SOIL CLASSIFICATION

2. Fill: Where fill is designated on the borehole log it is defined as indicated by the sample recovered during the boring process. The reader is cautioned that fills are heterogeneous in nature and variable in density or degree of compaction. The borehole description may therefore not be applicable as a general description of site fill materials. All fills should be expected to contain obstruction such as wood, large concrete pieces or subsurface basements, floors, tanks, etc., none of these may have been encountered in the boreholes. Since boreholes cannot accurately define the contents of the fill, test pits are recommended to provide supplementary information. Despite the use of test pits, the heterogeneous nature of fill will leave some ambiguity as to the exact composition of the fill. Most fills contain pockets, seams, or layers of organically contaminated soil. This organic material can result in the generation of methane gas and/or significant ongoing and future settlements. Fill at this site may have been monitored for the presence of methane gas and, if so, the results are given on the borehole logs. The monitoring process does not indicate the volume of gas that can be potentially generated nor does it pinpoint the source of the gas. These readings are to advise of the presence of gas only, and a detailed study is recommended for sites where any explosive gas/methane is detected. Some fill material may be contaminated by toxic/hazardous waste that renders it unacceptable for deposition in any but designated land fill sites; unless specifically stated the fill on this site has not been tested for contaminants that may be considered toxic or hazardous. This testing and a potential hazard study can be undertaken if requested. In most residential/commercial areas undergoing reconstruction, buried oil tanks are common and are generally not detected in a conventional geotechnical site investigation.

3. Till: The term till on the borehole logs indicates that the material originates from a geological process associated with glaciation. Because of this geological process the till must be considered heterogeneous in composition and as such may contain pockets and/or seams of material such as sand, gravel, silt or clay. Till often contains cobbles (60 to 200 mm) or boulders (over 200 mm). Contractors may therefore encounter cobbles and boulders during excavation, even if they are not indicated by the borings. It should be appreciated that normal sampling equipment cannot differentiate the size or type of any obstruction. Because of the horizontal and vertical variability of till, the sample description may be applicable to a very limited zone; caution is therefore essential when dealing with sensitive excavations or dewatering programs in till materials.

Log of Borehole 1

Project No. BRM-00609125-A0

Drawing No. 2

Project: Proposed Residential Development

Sheet No. 1 of 1

Location: 5500 Dundas Street West, Toronto, Ontario

Date Drilled: January 22, 2020

Drill Type: CME75 Truck Mount

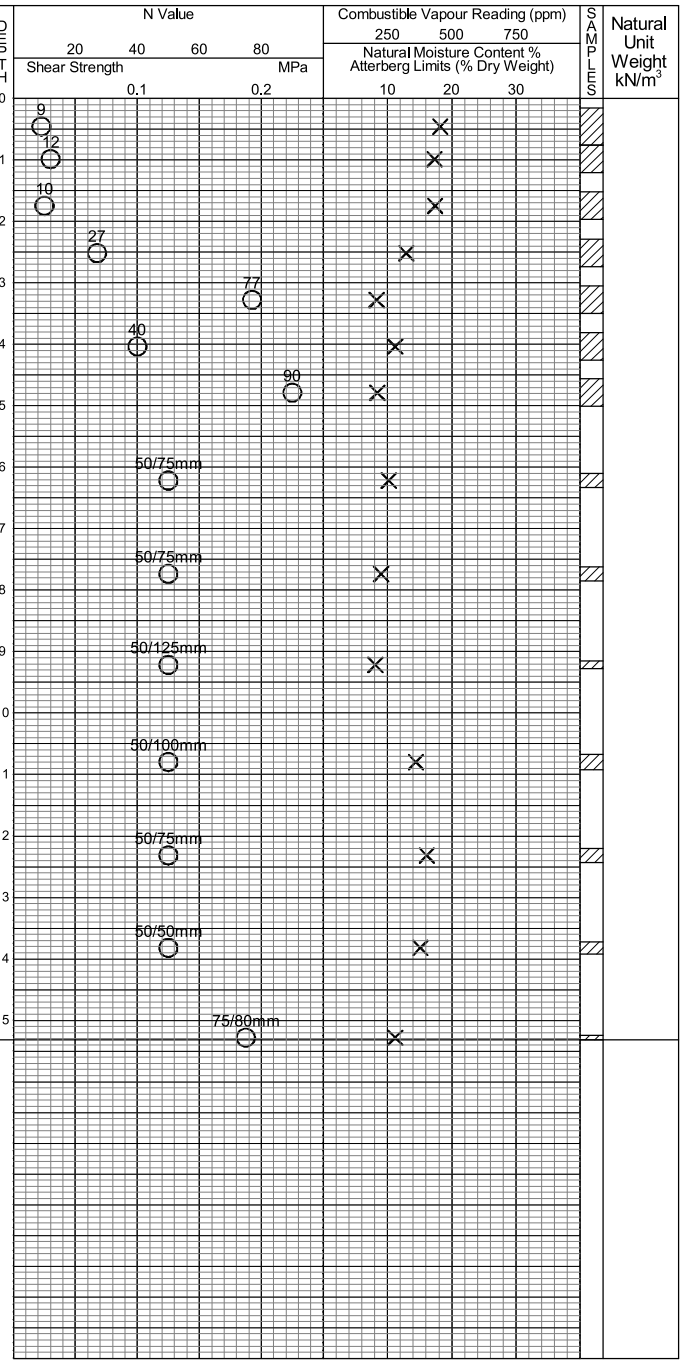
Datum: Geodetic

Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Field Vane Test

Combustible Vapour Reading
Natural Moisture
Plastic and Liquid Limit
Undrained Triaxial at % Strain at Failure
Penetrometer

GWL	SYMBOL	Soil Description	ELEV. m
			126.08
		PAVEMENT STRUCTURE - 150 mm asphaltic concrete	125.9
		- over 100 mm granular material	125.8
		FILL - clayey silt, trace to some sand, trace gravel; black/brown to grey, moist	123.9
		SILTY SAND TILL - trace clay, trace gravel, occasional wet sand seams; brown/grey, moist to very moist, compact to very dense	
		- becoming grey	118.8
		SILTY SAND - trace gravel; grey, very moist, very dense	
		- becoming wet	111.0
		HIGHLY WEATHERED TO WEATHERED SHALE - grey, moist	110.8
		END OF BOREHOLE	

NOTES:
1. Groundwater monitoring well installed to 12.2 m depth.



Natural Unit Weight kN/m³

Time	Water Level (m)	Depth to Cave (m)
On completion	10.52	Well
February 7, 2020	0.72	Well
March 7, 2020	8.74	Well
April 9, 2020	2.58	Well
April 26, 2020	2.72	Well

Log of Borehole 2

Project No. BRM-00609125-A0

Drawing No. 3

Project: Proposed Residential Development

Sheet No. 1 of 1

Location: 5500 Dundas Street West, Toronto, Ontario

Date Drilled: January 24, 2020

Drill Type: CME75 Truck Mount

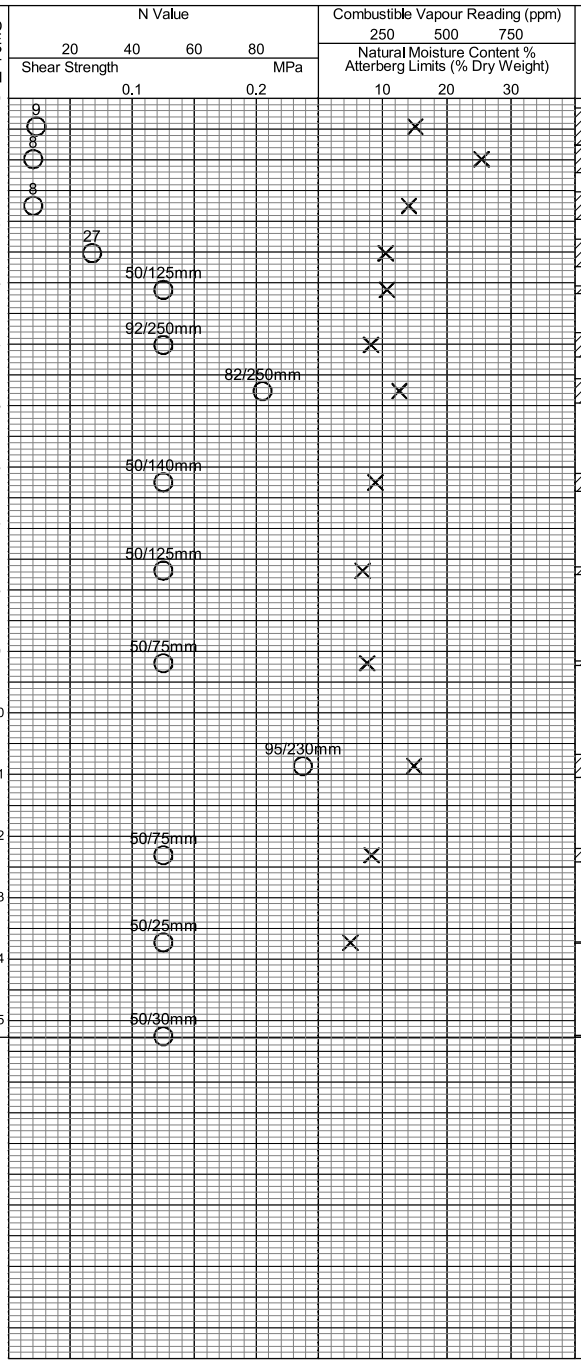
Datum: Geodetic

Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Field Vane Test

Combustible Vapour Reading
Natural Moisture
Plastic and Liquid Limit
Undrained Triaxial at % Strain at Failure
Penetrometer

GWL	SYMBOL	Soil Description	ELEV. m
		PAVEMENT STRUCTURE - 100 mm asphaltic concrete	125.89
		- over 170 mm granular material	125.8
		FILL - clayey silt, trace to some sand, trace gravel; black/grey, moist	125.6
		SILTY SAND TILL - trace gravel, numerous wet sand seams and sand and gravel layers; brown/grey, moist to very moist, very dense	123.0
		- becoming grey	
		- wet sand layer, medium grained	
		SANDY SILT TILL - with shale fragments, trace clay, trace gravel; grey, moist, very dense	114.3
		HIGHLY WEATHERED TO WEATHERED SHALE - grey, moist	112.2
		END OF BOREHOLE	110.6

NOTES:
1. Groundwater monitoring well installed to 12.2 m depth.



Natural Unit Weight kN/m³

Time	Water Level (m)	Depth to Cave (m)
On completion	10.67	Well
February 7, 2020	0.49	Well
March 7, 2020	2.47	Well
April 9, 2020	2.49	Well
April 26, 2020	2.59	Well

LAGWGL02 BRM00609125A0.GPJ NEW.GDT 5/1/20

Log of Borehole 3

Project No. BRM-00609125-A0

Drawing No. 4

Project: Proposed Residential Development

Sheet No. 1 of 1

Location: 5500 Dundas Street West, Toronto, Ontario

Date Drilled: January 22, 2020

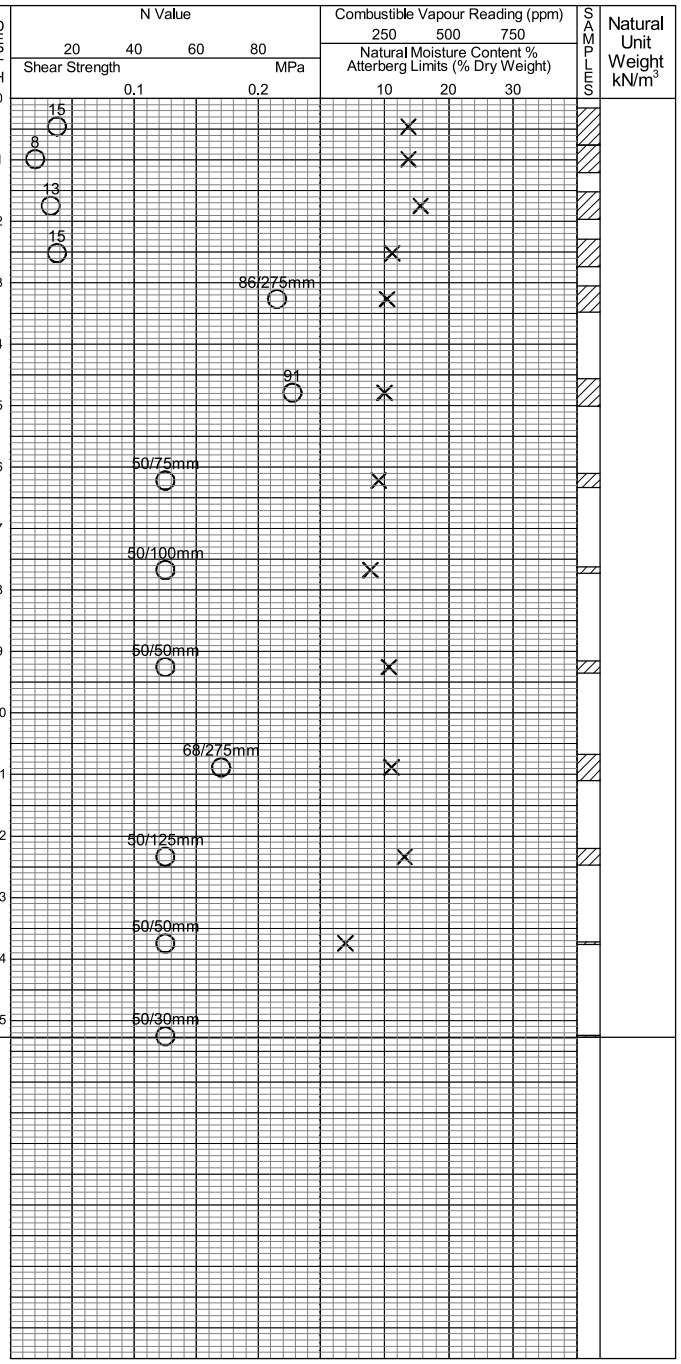
Drill Type: CME75 Truck Mount

Datum: Geodetic

Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Field Vane Test

Combustible Vapour Reading
Natural Moisture
Plastic and Liquid Limit
Undrained Triaxial at % Strain at Failure
Penetrometer

GWL	SYMBOL	Soil Description	ELEV. m
			126.00
		PAVEMENT STRUCTURE - 100 mm asphaltic concrete	125.8
		- over 170 mm granular material	125.5
		FILL - clayey silt, trace to some sand, trace gravel; black/brown to grey, moist	123.1
		SILTY SAND TILL - trace gravel, numerous wet sand seams and layers; grey, moist to very moist, very dense	
		- becoming grey	119.3
		SILTY SAND - fine to medium grained, trace gravel; grey, very moist, very dense	
		- becoming wet	112.6
		HIGHLY WEATHERED TO WEATHERED SHALE - grey, moist	110.7
		END OF BOREHOLE	



Natural Unit Weight kN/m³

Time	Water Level (m)	Depth to Cave (m)
On completion	9.15	9.15

LAGWGL02 BRM00609125A0.GPJ NEW.GDT 5/1/20

Log of Borehole 4

Project No. BRM-00609125-A0

Drawing No. 5

Project: Proposed Residential Development

Sheet No. 1 of 1

Location: 5500 Dundas Street West, Toronto, Ontario

Date Drilled: January 20, 2020

Drill Type: CME75 Truck Mount

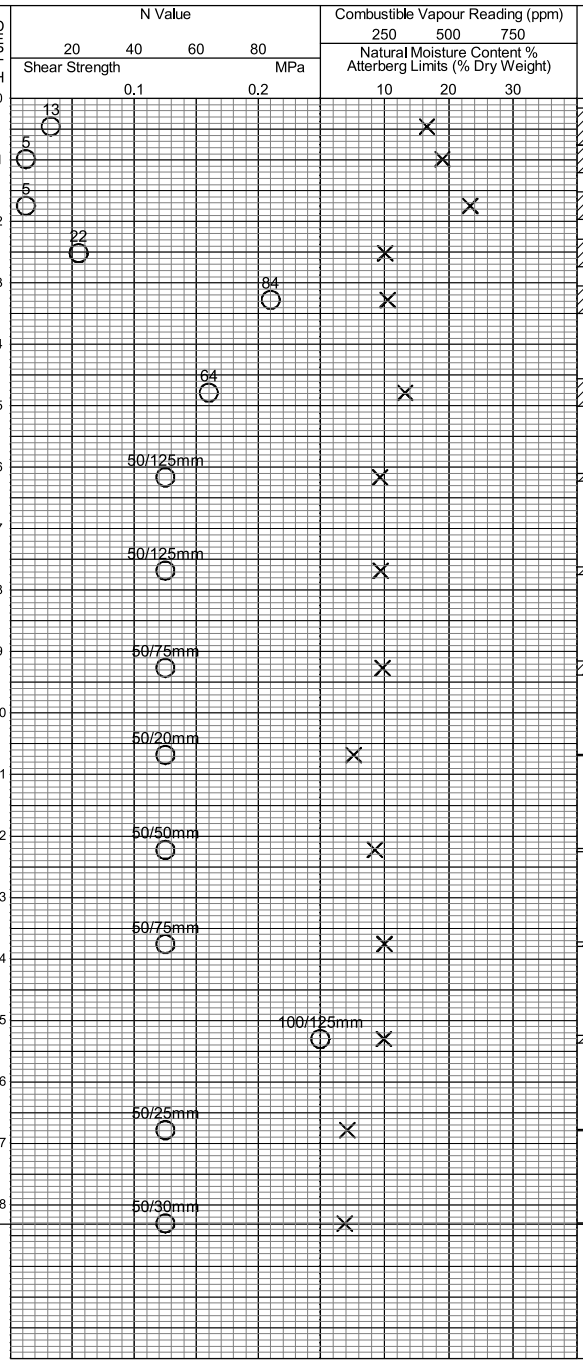
Datum: Geodetic

Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Field Vane Test

Combustible Vapour Reading
Natural Moisture
Plastic and Liquid Limit
Undrained Triaxial at % Strain at Failure
Penetrometer

GWL	SYMBOL	Soil Description	ELEV. m
			126.05
		PAVEMENT STRUCTURE - 130 mm asphaltic concrete	125.9
		- over 200 mm granular material	125.7
		FILL - clayey silt, trace to some sand, trace gravel; brown, moist	124.0
		CLAYEY SILT TILL - trace gravel; brown, moist, very stiff	123.2
		SILTY SAND TILL - trace gravel; grey, moist, very dense	120.6
		SILTY SAND - fine to medium grained, trace gravel; grey, very moist, very dense	
		- becoming wet - sand and gravel layer	111.5
		SANDY SILT TILL - some clay, trace gravel, occasional shale fragments; grey, moist, very dense	109.6
		HIGHLY WEATHERED TO WEATHERED SHALE - grey, moist	107.7
		END OF BOREHOLE	

NOTES:
1. Groundwater monitoring well installed to 16.77 m depth.



Natural Unit Weight kN/m³

Time	Water Level (m)	Depth to Cave (m)
On completion	12.20	Well
February 7, 2020	1.52	Well
March 7, 2020	3.31	Well
April 9, 2020	3.33	Well
April 26, 2020	3.15	Well

Log of Borehole 5

Project No. BRM-00609125-A0

Drawing No. 7

Project: Proposed Residential Development

Sheet No. 1 of 1

Location: 5500 Dundas Street West, Toronto, Ontario

Date Drilled: January 15, 2020

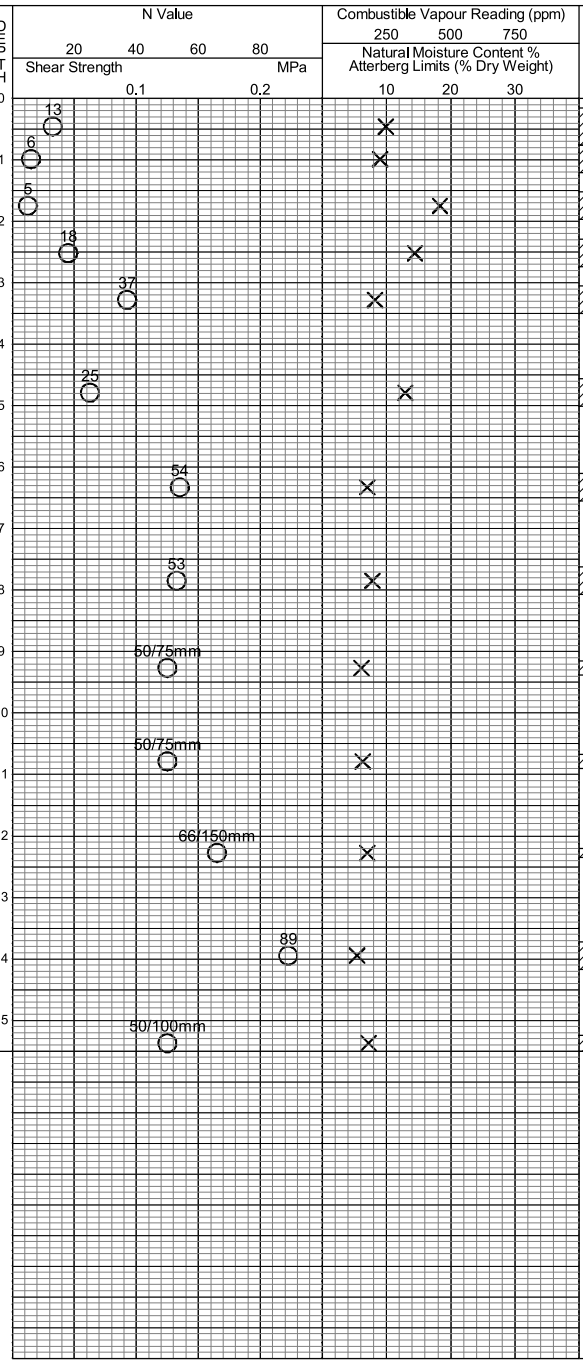
Drill Type: CME75 Truck Mount

Datum: Geodetic

Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Field Vane Test

Combustible Vapour Reading
Natural Moisture
Plastic and Liquid Limit
Undrained Triaxial at % Strain at Failure
Penetrometer

GWL	SYMBOL	Soil Description	ELEV. m
			126.02
		PAVEMENT STRUCTURE - 100 mm asphaltic concrete	125.9
		- over 200 mm granular material	125.7
		FILL - clayey silt, trace to some sand, trace gravel; brown, moist	123.6
		CLAYEY SILT TILL - trace sand, trace gravel; brown, moist, very stiff	122.0
		SANDY SILT TILL - trace to some clay, trace gravel, numerous wet sand seams/layers; grey, moist, compact to very dense	
		- wet gravelly sand layer	110.5
		END OF BOREHOLE	



Natural Unit Weight kN/m³

Time	Water Level (m)	Depth to Cave (m)
On completion	4.57	6.10

LAGWGL02 BRM00609125A0.GPJ NEW.GDT 5/1/20

Log of Borehole 6

Project No. BRM-00609125-A0

Drawing No. 8

Project: Proposed Residential Development

Sheet No. 1 of 1

Location: 5500 Dundas Street West, Toronto, Ontario

Date Drilled: January 16, 2020

Drill Type: CME75 Truck Mount

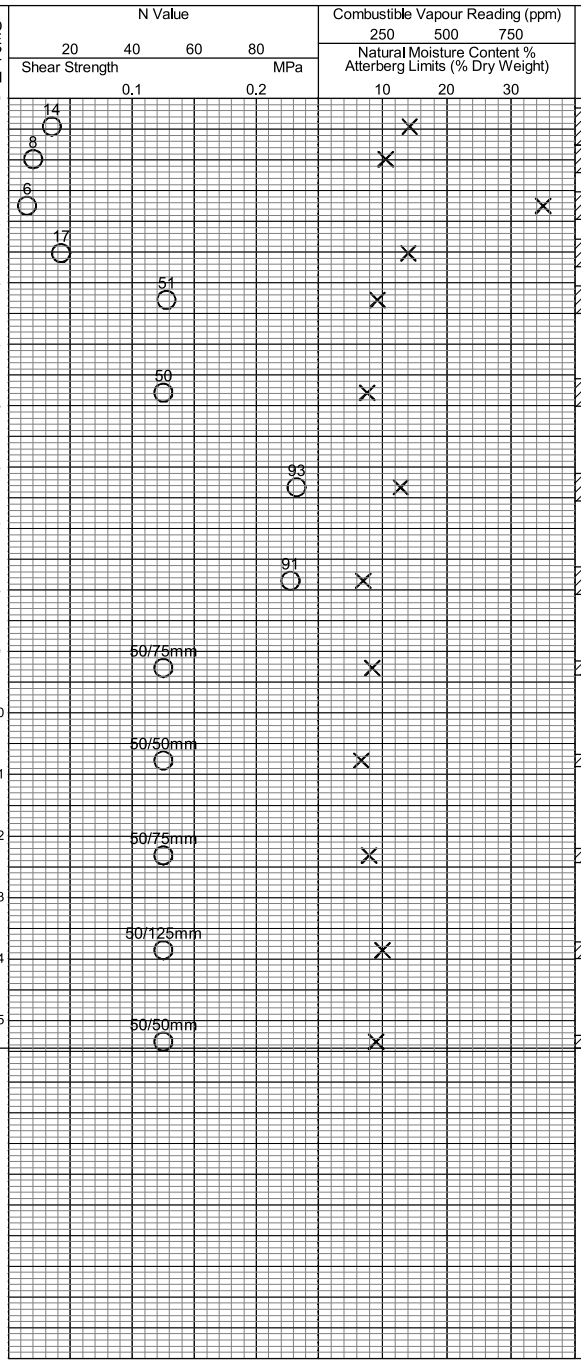
Datum: Geodetic

Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Field Vane Test

Combustible Vapour Reading
Natural Moisture
Plastic and Liquid Limit
Undrained Triaxial at % Strain at Failure
Penetrometer

GWL	SYMBOL	Soil Description	ELEV. m
		PAVEMENT STRUCTURE - 130 mm asphaltic concrete	126.55
		- over 230 mm granular material	126.4
		FILL - clayey silt, trace to some sand, trace gravel; brown, moist	126.2
		CLAYEY SILT TILL - trace sand, trace gravel; brown, moist, very stiff	123.9
		SANDY SILT TILL - trace to some clay, trace gravel, numerous wet sand seams/layers; brown, moist, compact to very dense	123.2
		- wet gravelly sand layer	
		END OF BOREHOLE	111.1

NOTES:
1. Groundwater monitoring well installed to 12.2 m depth.



Natural Unit Weight kN/m³

Time	Water Level (m)	Depth to Cave (m)
On completion	13.41	Well
February 7, 2020	3.20	Well
March 7, 2020	4.74	Well
April 9, 2020	2.31	Well
April 26, 2020	2.43	Well

LAGWGL02 BRM00609125A0.GPJ NEW.GDT 5/1/20

Log of Borehole 7

Project No. BRM-00609125-A0 | Drawing No. 9

Project: Proposed Residential Development | Sheet No. 1 of 1

Location: 5500 Dundas Street West, Toronto, Ontario

Date Drilled: January 16, 2020

Drill Type: CME75 Truck Mount

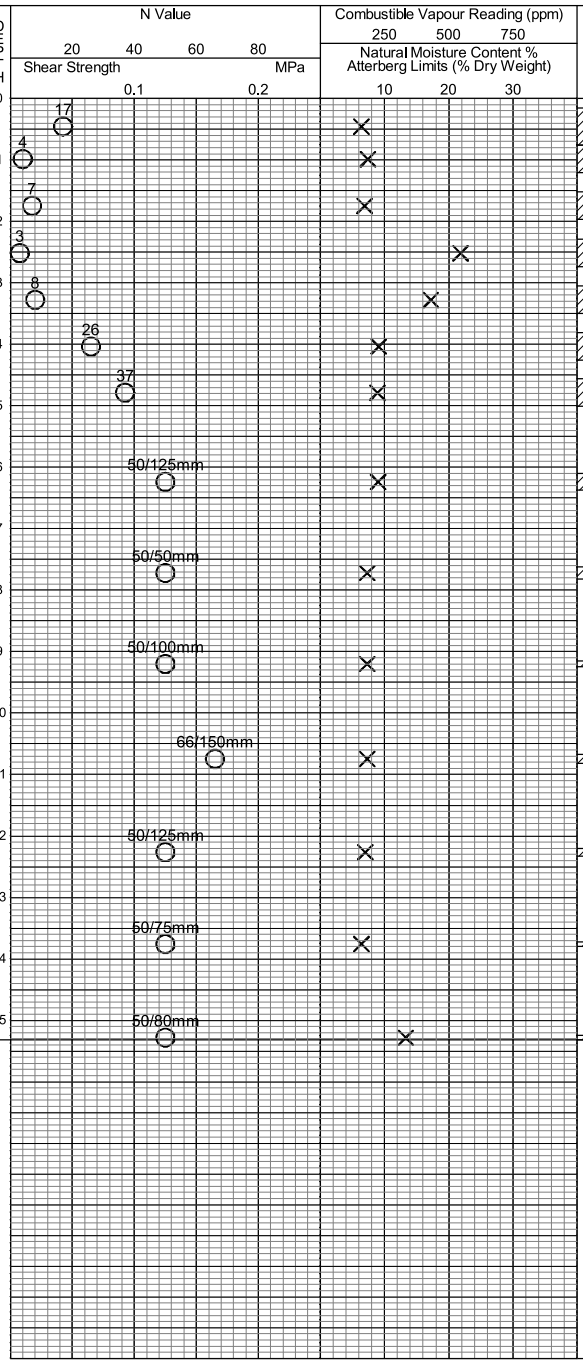
Datum: Geodetic

Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Field Vane Test

Combustible Vapour Reading
Natural Moisture
Plastic and Liquid Limit
Undrained Triaxial at % Strain at Failure
Penetrometer

GWL	SYMBOL	Soil Description	ELEV. m
		PAVEMENT STRUCTURE - 100 mm asphaltic concrete	126.74
		- over 320 mm granular material	126.6
		FILL - clayey silt, trace to some sand, trace gravel, occasional brick fragments to ~0.8 m; brown, moist	126.3
		CLAYEY SILT TILL - trace sand, trace gravel; brown, moist, stiff	123.9
		SANDY SILT TILL - trace to some clay, trace gravel, numerous wet sand seams/layers; brown, moist, compact to very dense	122.7
		- becoming grey	
		- wet gravelly sand layer	
		END OF BOREHOLE	111.4

NOTES:
1. Groundwater monitoring well installed to 12.2 m depth.



Natural Unit Weight kN/m³

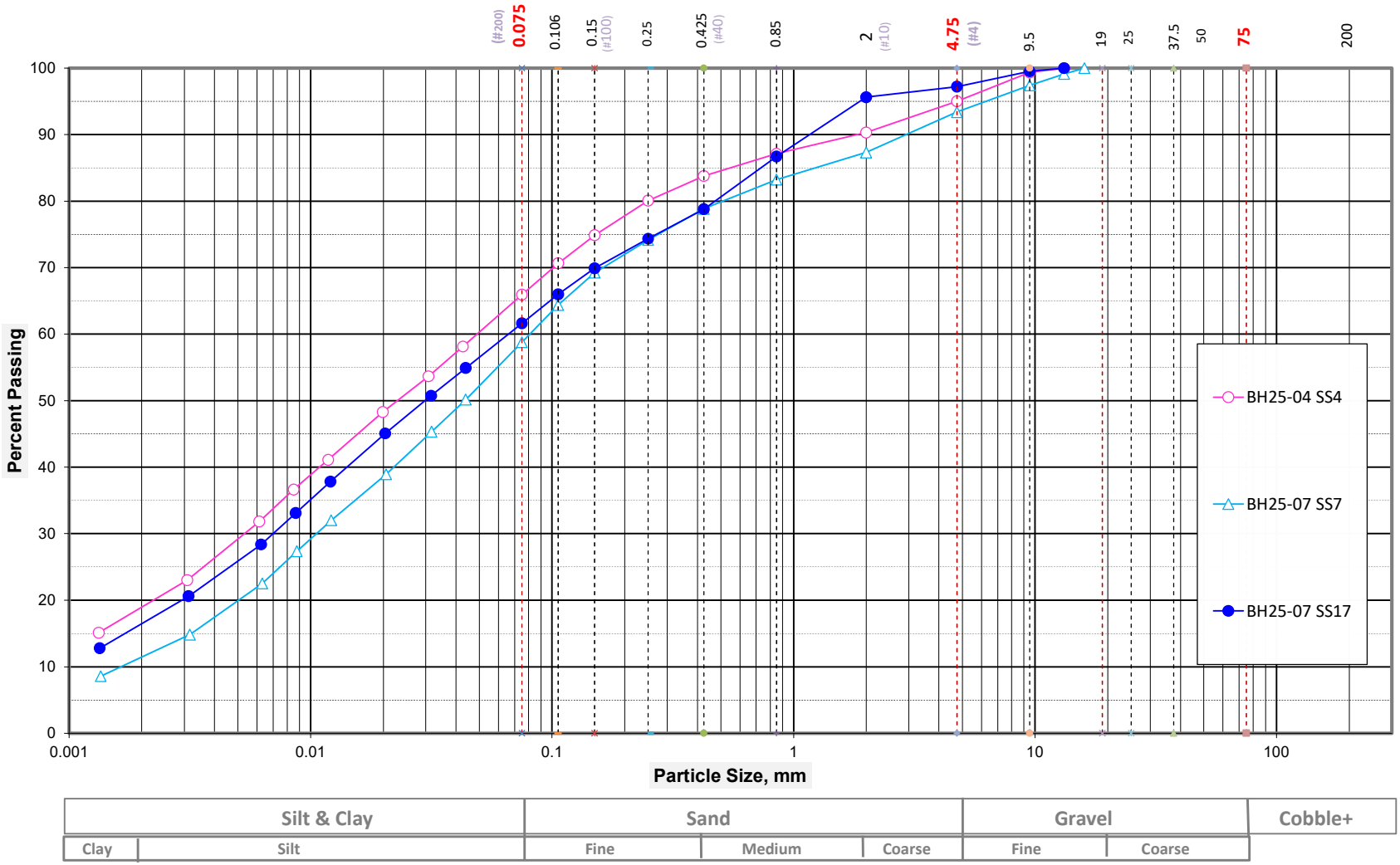
Time	Water Level (m)	Depth to Cave (m)
On completion	13.72	Well
February 7, 2020	0.78	Well
March 7, 2020	3.03	Well
April 9, 2020	3.07	Well
April 26, 2020	2.51	Well

APPENDIX B:

Grain Size Analyses and Atterberg Limits Test Results (Figures 1 to 4)

Soil Corrosivity Test Results

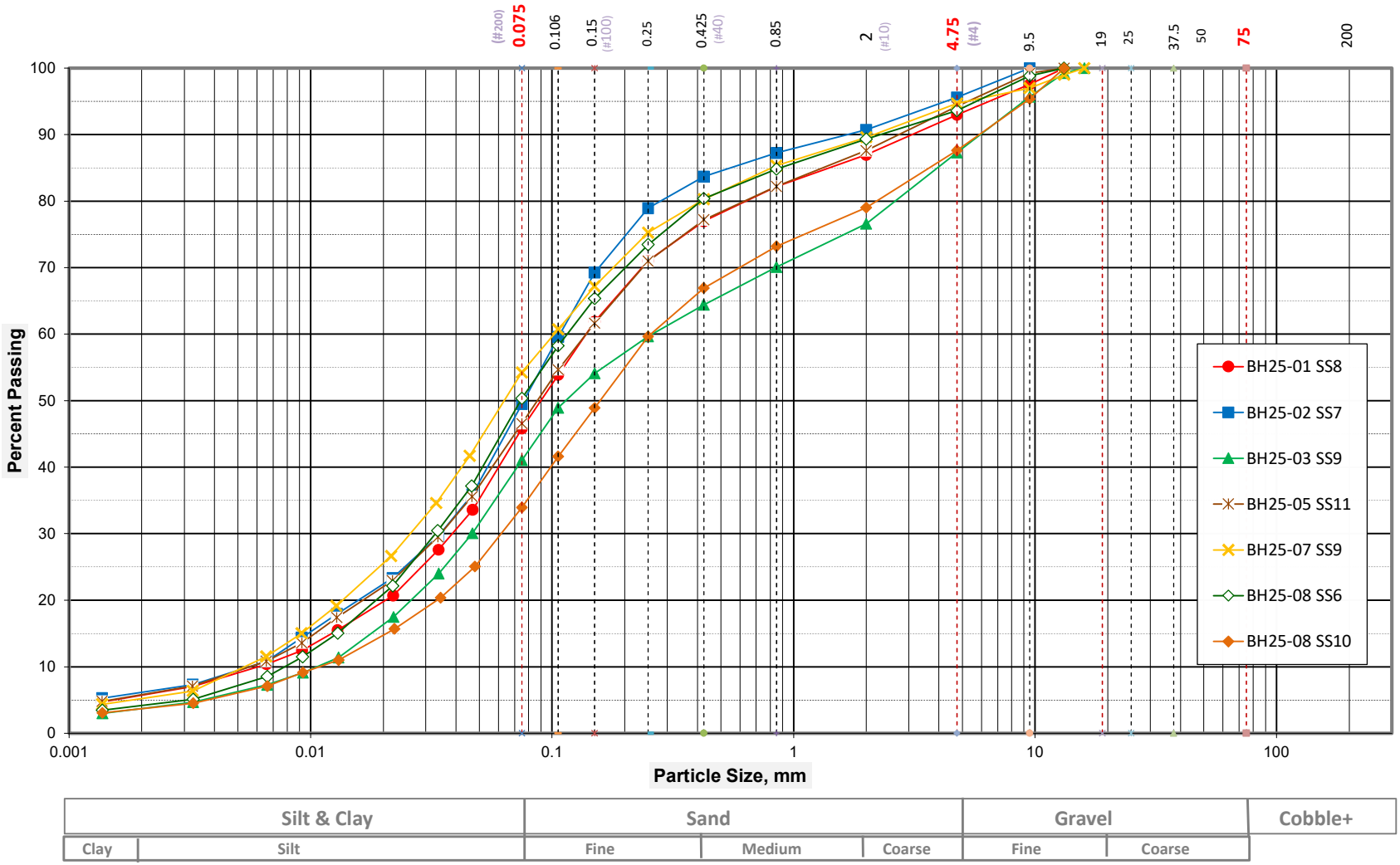
Particle Size Distribution (ASTM-D421/D422)



Project Number :	25-1032	Lab Requisition Number:	R0534
Project Name:	5500 Dundas St. W, Toronto	Date Received:	Sep-08-2025
Client:	First Capital Asset Management LP	Date Tested:	Sep-18-2025
Source/Location of Sample:		Tested by:	Bruce Shan
Sample #/Depth:		Reviewed by:	
		Figure #1	

Envision Consultants Ltd
6415 Northwest Drive, Mississauga, ON

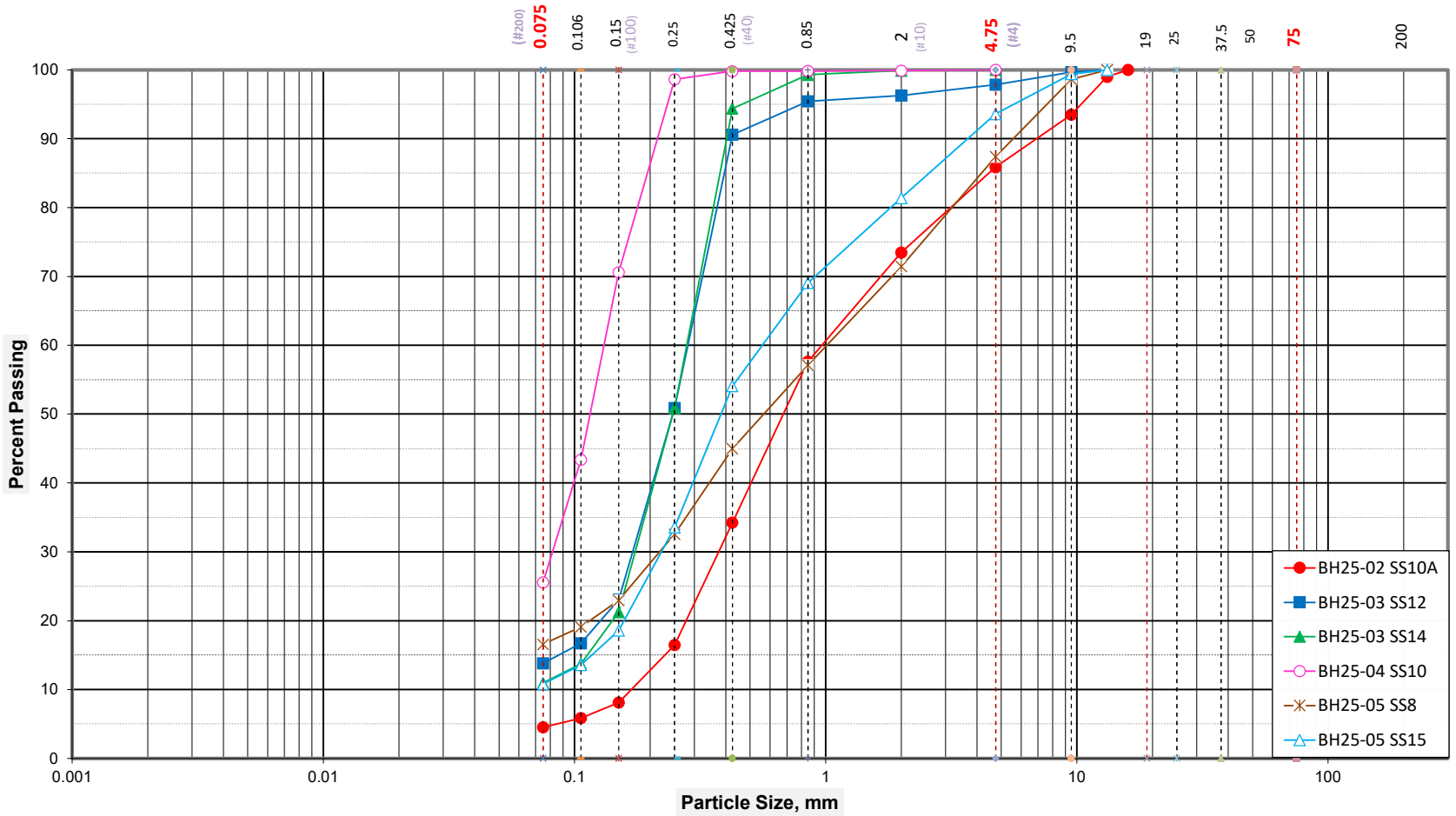
Particle Size Distribution (ASTM-D421/D422)



Project Number :	25-1032	Lab Requisition Number:	R0534
Project Name:	5500 Dundas St. W, Toronto	Date Received:	Sep-08-2025
Client:	First Capital Asset Management LP	Date Tested:	Sep-18-2025
Source/Location of Sample:		Tested by:	Bruce Shan
Sample #/Depth:		Reviewed by:	
		Figure #2	

Envision Consultants Ltd
6415 Northwest Drive, Mississauga, ON

Particle Size Distribution (ASTM-D421/D422)

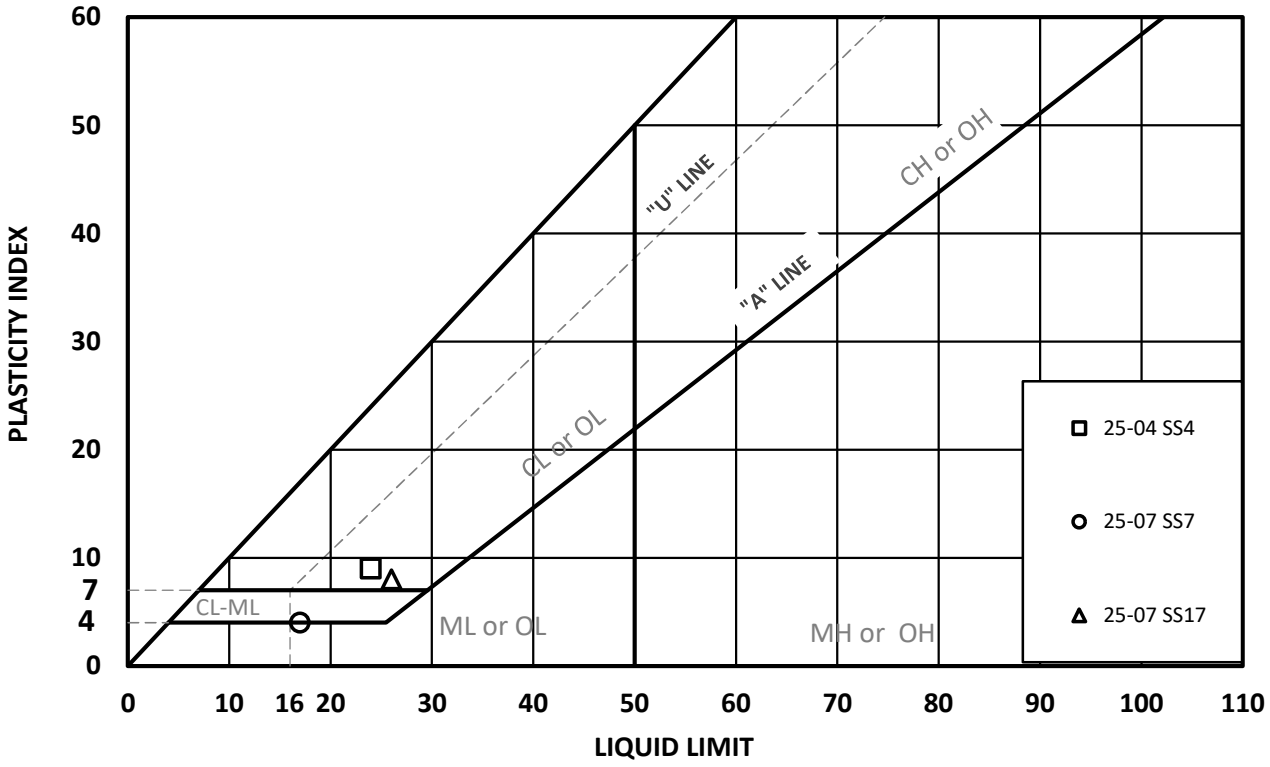


Silt & Clay		Sand			Gravel		Cobble+
Clay	Silt	Fine	Medium	Coarse	Fine	Coarse	

Envision Consultants Ltd
6415 Northwest Drive, Mississauga, ON

Project Number :	25-1032	Lab Requisition Number:	R0534
Project Name:	5500 Dundas St. W, Toronto	Date Received:	Sep-08-2025
Client:	First Capital Asset Management LP	Date Tested:	Sep-18-2025
Source/Location of Sample:		Tested by:	Bruce Shan
Sample #/Depth:		Reviewed by:	
		Figure #3	

Atterberg Test (ASTM D-4318)



Code	Sample ID	Sample No.		Moisture Contant (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	USCS Symbol
1	□	25-04	SS4		24	15	9	CL
2	○	25-07	SS7		17	13	4	CL-ML
3	△	25-07	SS17		26	18	8	CL

Project No	25-1032	Date	Sep-16-2025
Project	5500 Dundas St. W, Toronto	Tested by	
Lab No	0534	Figure No	4

ALS Canada Ltd.

right solutions.
right partner.

CERTIFICATE OF ANALYSIS

Work Order	: **WT2521733**		
Client	: **EnVision Consultants Ltd.**	Laboratory	: ALS Environmental - Waterloo
Contact	: Maqsooda Bibi	Account Manager	: Emily Hansen
Address	: 6415 Northwest Drive U37-40 Mississauga Ontario Canada L4V 1X1	Address	: 60 Northland Road, Unit 1 Waterloo ON Canada N2V 2B8
Telephone	: ----	E-mail	: emily.hansen@alsglobal.com
Project	: 25-1032	Telephone	: +1 519 886 6910
PO	: ----	Date Samples Received	: 07-Aug-2025 11:00
C-O-C number	: ----	Date Analysis Commenced	: 13-Aug-2025
Sampler	: ----	Issue Date	: 15-Aug-2025 17:45
Site	: ----		
Quote number	: 2024-2025 Standing Offer		
No. of samples received	: 4		
No. of samples analysed	: 4		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Nik Perkio		Inorganics, Waterloo, Ontario
Niral Patel		Centralized Prep, Waterloo, Ontario

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key: CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances.
LOR: Limit of Reporting (detection limit).

Unit	*Description*
%	percent
mg/kg	milligrams per kilogram
mV	millivolts
ohm cm	ohm centimetres (resistivity)
pH units	pH units
µS/cm	microsiemens per centimetre

<: less than.
>: greater than.
Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.
UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical Results

Sub-Matrix: Soil
(Matrix: Soil/Solid)

				Client sample ID	BH25-01 SS4 ----	BH25-04 SS6 ----	BH25-06 SS4 ----	BH25-08 SS5 ----	----
				Client sampling date / time	24-Jul-2025 00:00	29-Jul-2025 00:00	24-Jul-2025 00:00	25-Jul-2025 00:00	----
Analyte	CAS Number	Method/Lab	LOR	Unit	WT2521733-001	WT2521733-002	WT2521733-003	WT2521733-004	----
					Result	Result	Result	Result	----
Physical Tests									
Conductivity (1:2 leachate)	----	E100-L/WT	5.00	µS/cm	283	573	606	407	----
Moisture	----	E144/WT	0.25	%	10.6	10.0	20.5	8.48	----
Oxidation-reduction potential [ORP]	----	E125/WT	0.10	mV	268	250	265	282	----
pH (1:2 soil:CaCl2-aq)	----	E108A/WT	0.10	pH units	7.67	8.02	7.54	8.00	----
Resistivity	----	EC100R/WT	100	ohm cm	3530	1740	1650	2460	----
Inorganics									
Sulfides, acid volatile	----	E396-L/WT	0.20	mg/kg	0.22	0.42	<0.25	<0.22	----
Leachable Anions & Nutrients									
Chloride, soluble ion content	16887-00-6	E236.Cl/WT	5.0	mg/kg	107	192	309	71.9	----
Sulfate, soluble ion content	14808-79-8	E236.SO4/WT	20	mg/kg	<20	134	<20	192	----

Please refer to the General Comments section for an explanation of any qualifiers detected.

ALS Canada Ltd.

right solutions.
right partner.

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **WT2521733**	Page	: 1 of 9
Client	: **EnVision Consultants Ltd.**	Laboratory	: ALS Environmental - Waterloo
Contact	: Maqsooda Bibi	Account Manager	: Emily Hansen
Address	: 6415 Northwest Drive U37-40 Mississauga ON Canada L4V 1X1	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: ----	Telephone	: +1 519 886 6910
Project	: 25-1032	Date Samples Received	: 07-Aug-2025 11:00
PO	: ----	Issue Date	: 15-Aug-2025 17:45
C-O-C number	: ----		
Sampler	: ----		
Site	: ----		
Quote number	: 2024-2025 Standing Offer		
No. of samples received	: 4		
No. of samples analysed	: 4		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- Analysis Holding Time Outliers exist - please see following pages for full details.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Inorganics : Acid Volatile Sulfide in Soil by Colourimetry (0.2 mg/kg)										
Glass soil jar/Teflon lined cap [ON MECP]										
BH25-04 SS6	E396-L	29-Jul-2025	15-Aug-2025	14 days	17 days	× EHT	15-Aug-2025	7 days	0 days	✓
Inorganics : Acid Volatile Sulfide in Soil by Colourimetry (0.2 mg/kg)										
Glass soil jar/Teflon lined cap [ON MECP]										
BH25-08 SS5	E396-L	25-Jul-2025	15-Aug-2025	14 days	21 days	× EHT	15-Aug-2025	7 days	0 days	✓
Inorganics : Acid Volatile Sulfide in Soil by Colourimetry (0.2 mg/kg)										
Glass soil jar/Teflon lined cap [ON MECP]										
BH25-06 SS4	E396-L	24-Jul-2025	15-Aug-2025	14 days	22 days	× EHTL	15-Aug-2025	7 days	0 days	✓
Inorganics : Acid Volatile Sulfide in Soil by Colourimetry (0.2 mg/kg)										
Glass soil jar/Teflon lined cap [ON MECP]										
BH25-01 SS4	E396-L	24-Jul-2025	15-Aug-2025	14 days	22 days	× EHTL	15-Aug-2025	7 days	0 days	✓
Leachable Anions & Nutrients : Water Extractable Chloride by IC										
Glass soil jar/Teflon lined cap [ON MECP]										
BH25-04 SS6	E236.Cl	29-Jul-2025	14-Aug-2025	30 days	17 days	✓	14-Aug-2025	28 days	0 days	✓
Leachable Anions & Nutrients : Water Extractable Chloride by IC										
Glass soil jar/Teflon lined cap [ON MECP]										
BH25-08 SS5	E236.Cl	25-Jul-2025	14-Aug-2025	30 days	21 days	✓	14-Aug-2025	28 days	0 days	✓
Leachable Anions & Nutrients : Water Extractable Chloride by IC										
Glass soil jar/Teflon lined cap [ON MECP]										
BH25-06 SS4	E236.Cl	24-Jul-2025	14-Aug-2025	30 days	22 days	✓	14-Aug-2025	28 days	0 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Leachable Anions & Nutrients : Water Extractable Chloride by IC										
Glass soil jar/Teflon lined cap [ON MECP] BH25-01 SS4	E236.Cl	24-Jul-2025	14-Aug-2025	30 days	22 days	✓	14-Aug-2025	28 days	0 days	✓
Leachable Anions & Nutrients : Water Extractable Sulfate by IC										
Glass soil jar/Teflon lined cap [ON MECP] BH25-04 SS6	E236.SO4	29-Jul-2025	14-Aug-2025	30 days	17 days	✓	14-Aug-2025	28 days	0 days	✓
Leachable Anions & Nutrients : Water Extractable Sulfate by IC										
Glass soil jar/Teflon lined cap [ON MECP] BH25-08 SS5	E236.SO4	25-Jul-2025	14-Aug-2025	30 days	21 days	✓	14-Aug-2025	28 days	0 days	✓
Leachable Anions & Nutrients : Water Extractable Sulfate by IC										
Glass soil jar/Teflon lined cap [ON MECP] BH25-06 SS4	E236.SO4	24-Jul-2025	14-Aug-2025	30 days	22 days	✓	14-Aug-2025	28 days	0 days	✓
Leachable Anions & Nutrients : Water Extractable Sulfate by IC										
Glass soil jar/Teflon lined cap [ON MECP] BH25-1 SS4	E236.SO4	24-Jul-2025	14-Aug-2025	30 days	22 days	✓	14-Aug-2025	28 days	0 days	✓
Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)										
Glass soil jar/Teflon lined cap [ON MECP] BH25-04 SS6	E100-L	29-Jul-2025	13-Aug-2025	30 days	16 days	✓	14-Aug-2025	30 days	16 days	✓
Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)										
Glass soil jar/Teflon lined cap [ON MECP] BH25-08 SS5	E100-L	25-Jul-2025	13-Aug-2025	30 days	20 days	✓	14-Aug-2025	30 days	20 days	✓
Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)										
Glass soil jar/Teflon lined cap [ON MECP] BH25-06 SS4	E100-L	24-Jul-2025	13-Aug-2025	30 days	21 days	✓	14-Aug-2025	30 days	21 days	✓
Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)										
Glass soil jar/Teflon lined cap [ON MECP] BH25-01 SS4	E100-L	24-Jul-2025	13-Aug-2025	30 days	21 days	✓	14-Aug-2025	30 days	21 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap [ON MECP] BH25-04 SS6	E144	29-Jul-2025	----	----	----		13-Aug-2025	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap [ON MECP] BH25-06 SS4	E144	24-Jul-2025	----	----	----		13-Aug-2025	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap [ON MECP] BH25-08 SS5	E144	25-Jul-2025	----	----	----		13-Aug-2025	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap [ON MECP] BH25-01 SS4	E144	24-Jul-2025	----	----	----		13-Aug-2025	----	----	
Physical Tests : ORP by Electrode										
Glass soil jar/Teflon lined cap [ON MECP] BH25-04 SS6	E125	29-Jul-2025	13-Aug-2025	180 days	16 days	✓	14-Aug-2025	180 days	16 days	✓
Physical Tests : ORP by Electrode										
Glass soil jar/Teflon lined cap [ON MECP] BH25-08 SS5	E125	25-Jul-2025	13-Aug-2025	180 days	20 days	✓	14-Aug-2025	180 days	20 days	✓
Physical Tests : ORP by Electrode										
Glass soil jar/Teflon lined cap [ON MECP] BH25-06 SS4	E125	24-Jul-2025	13-Aug-2025	180 days	21 days	✓	14-Aug-2025	180 days	21 days	✓
Physical Tests : ORP by Electrode										
Glass soil jar/Teflon lined cap [ON MECP] BH25-01 SS4	E125	24-Jul-2025	13-Aug-2025	180 days	21 days	✓	14-Aug-2025	180 days	21 days	✓
Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received										
Glass soil jar/Teflon lined cap [ON MECP] BH25-04 SS6	E108A	29-Jul-2025	12-Aug-2025	30 days	15 days	✓	13-Aug-2025	30 days	15 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received										
Glass soil jar/Teflon lined cap [ON MECP]										
BH25-08 SS5	E108A	25-Jul-2025	12-Aug-2025	30 days	19 days	✓	13-Aug-2025	30 days	19 days	✓
Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received										
Glass soil jar/Teflon lined cap [ON MECP]										
BH25-06 SS4	E108A	24-Jul-2025	12-Aug-2025	30 days	20 days	✓	13-Aug-2025	30 days	20 days	✓
Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received										
Glass soil jar/Teflon lined cap [ON MECP]										
BH25-01 SS4	E108A	24-Jul-2025	12-Aug-2025	30 days	20 days	✓	13-Aug-2025	30 days	20 days	✓

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Soil/Solid**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)	E100-L	2155675	1	18	5.5	5.0	✓
pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received	E108A	2155514	1	20	5.0	5.0	✓
ORP by Electrode	E125	2157312	1	11	9.0	5.0	✓
Moisture Content by Gravimetry	E144	2156852	1	18	5.5	5.0	✓
Water Extractable Chloride by IC	E236.Cl	2155677	1	13	7.6	5.0	✓
Water Extractable Sulfate by IC	E236.SO4	2155678	1	13	7.6	5.0	✓
Acid Volatile Sulfide in Soil by Colourimetry (0.2 mg/kg)	E396-L	2162691	1	15	6.6	4.7	✓
Laboratory Control Samples (LCS)							
Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)	E100-L	2155675	2	18	11.1	10.0	✓
pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received	E108A	2155514	1	20	5.0	5.0	✓
ORP by Electrode	E125	2157312	1	11	9.0	5.0	✓
Moisture Content by Gravimetry	E144	2156852	1	18	5.5	5.0	✓
Water Extractable Chloride by IC	E236.Cl	2155677	2	13	15.3	10.0	✓
Water Extractable Sulfate by IC	E236.SO4	2155678	2	13	15.3	10.0	✓
Acid Volatile Sulfide in Soil by Colourimetry (0.2 mg/kg)	E396-L	2162691	1	15	6.6	4.7	✓
Method Blanks (MB)							
Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)	E100-L	2155675	1	18	5.5	5.0	✓
Moisture Content by Gravimetry	E144	2156852	1	18	5.5	5.0	✓
Water Extractable Chloride by IC	E236.Cl	2155677	1	13	7.6	5.0	✓
Water Extractable Sulfate by IC	E236.SO4	2155678	1	13	7.6	5.0	✓
Acid Volatile Sulfide in Soil by Colourimetry (0.2 mg/kg)	E396-L	2162691	1	15	6.6	4.7	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)	E100-L ALS Environmental - Waterloo	Soil/Solid	CSSS Ch. 15 (mod)/APHA 2510 (mod)	Conductivity, also known as Electrical Conductivity (EC) or Specific Conductance, is measured by immersion of a conductivity cell with platinum electrodes into a soil sample that has been added in a defined ratio of soil to deionized water, then shaken well and allowed to settle. Conductance is measured in the fluid that is observed in the upper layer.
pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received	E108A ALS Environmental - Waterloo	Soil/Solid	MECP E3530	pH is determined by potentiometric measurement with a pH electrode, and is conducted at ambient laboratory temperature (normally 20 ± 5°C) and is carried out in accordance with procedures described in the Analytical Protocol (prescriptive method). A minimum 10g portion of the sample, as received, is extracted with 20mL of 0.01M calcium chloride solution by shaking for at least 30 minutes. The aqueous layer is separated from the soil by centrifuging, settling, or decanting and then analyzed using a pH meter and electrode. This method is equivalent to ASTM D4972 and is acceptable for topsoil analysis.
ORP by Electrode	E125 ALS Environmental - Waterloo	Soil/Solid	APHA 2580 (mod)	Oxidation Redution Potential (ORP) is reported as the oxidation-reduction potential of the platinum metal-reference electrode employed in the analysis, measured in mV.
Moisture Content by Gravimetry	E144 ALS Environmental - Waterloo	Soil/Solid	CCME PHC in Soil - Tier 1	Moisture is measured gravimetrically by drying the sample at 105°C. Moisture content is calculated as the weight loss (due to water) divided by the wet weight of the sample, expressed as a percentage.
Water Extractable Chloride by IC	E236.Cl ALS Environmental - Waterloo	Soil/Solid	EPA 300.1	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection using a soil sample that has been added in a defined ratio of soil to deionized water, then shaken well and allowed to settle. Anions are measured in the fluid that is observed in the upper layer.
Water Extractable Sulfate by IC	E236.SO4 ALS Environmental - Waterloo	Soil/Solid	EPA 300.1	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection using a soil sample that has been added in a defined ratio of soil to deionized water, then shaken well and allowed to settle. Anions are measured in the fluid that is observed in the upper layer.
Acid Volatile Sulfide in Soil by Colourimetry (0.2 mg/kg)	E396-L ALS Environmental - Waterloo	Soil/Solid	APHA 4500S2J	This analysis is carried out in accordance with the method described in APHA 4500 S2-J. After extraction the Acid Volatile Sulphide is determined colourimetrically.
Resistivity Calculation for Soil Using E100-L	EC100R ALS Environmental - Waterloo	Soil/Solid	APHA 2510 B	Soil Resistivity (calculated) is determined as the inverse of the conductivity of a 2:1 water:soil leachate (dry weight). This method is intended as a rapid approximation for Soil Resistivity. Where high accuracy results are required, direct measurement of Soil Resistivity by the Wenner Four-Electrode Method (ASTM G57) is recommended.

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Leach 1:2 Soil:Water for pH/EC	EP108 ALS Environmental - Waterloo	Soil/Solid	BC WLAP METHOD: PH, ELECTROMETRIC, SOIL	The procedure involves mixing the dried (at <60°C) and sieved (No. 10 / 2mm) sample with deionized/distilled water at a 1:2 ratio of sediment to water.
Leach 1:2 Soil : 0.01CaCl2 - As Received for pH	EP108A ALS Environmental - Waterloo	Soil/Solid	MOEE E3137A	A minimum 10g portion of the sample, as received, is extracted with 20mL of 0.01M calcium chloride solution by shaking for at least 30 minutes. The aqueous layer is separated from the soil by centrifuging, settling or decanting and then analyzed using a pH meter and electrode.
Preparation of ORP by Electrode	EP125 ALS Environmental - Waterloo	Soil/Solid	APHA 2580 (mod)	Field-moist sample is extracted in a 1:2 ratio with DI water and then analyzed by ORP meter.
Anions Leach 1:10 Soil:Water (Dry)	EP236 ALS Environmental - Waterloo	Soil/Solid	EPA 300.1	5 grams of dried soil is mixed with 50 grams of distilled water for a minimum of 30 minutes. The extract is filtered and analyzed by ion chromatography.
Distillation for Acid Volatile Sulfide in Soil	EP396-L ALS Environmental - Waterloo	Soil/Solid	APHA 4500S2J	Acid Volatile Sulfide is determined by colourimetric measurement on a sediment sample that has been treated with hydrochloric acid within a purge and trap system, where the evolved hydrogen sulfide gas is carried into a basic solution by argon gas for analysis.

QUALITY CONTROL REPORT

Work Order	: **WT2521733**	Page	: 1 of 5
Client	: EnVision Consultants Ltd.	Laboratory	: ALS Environmental - Waterloo
Contact	: Maqsooda Bibi	Account Manager	: Emily Hansen
Address	: 6415 Northwest Drive U37-40 Mississauga ON Canada L4V 1X1	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: ----	Telephone	: +1 519 886 6910
Project	: 25-1032	Date Samples Received	: 07-Aug-2025 11:00
PO	: ----	Date Analysis Commenced	: 12-Aug-2025
C-O-C number	: ----	Issue Date	: 15-Aug-2025 17:44
Sampler	: ----		
Site	: ----		
Quote number	: 2024-2025 Standing Offer		
No. of samples received	: 4		
No. of samples analysed	: 4		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Reference Material (RM) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Nik Perkio	Senior Analyst	Waterloo Inorganics, Waterloo, Ontario
Niral Patel		Waterloo Centralized Prep, Waterloo, Ontario

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percent Difference
# = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Physical Tests (QC Lot: 2155514)											
EO2506910-001	Anonymous	pH (1:2 soil:CaCl2-aq)	----	E108A	0.10	pH units	6.83	6.86	0.438%	5%	----
Physical Tests (QC Lot: 2155675)											
WT2521565-011	Anonymous	Conductivity (1:2 leachate)	----	E100-L	5.00	µS/cm	0.168 mS/cm	174	3.39%	20%	----
Physical Tests (QC Lot: 2156852)											
WT2521502-001	Anonymous	Moisture	----	E144	0.25	%	8.08	7.88	2.43%	20%	----
Physical Tests (QC Lot: 2157312)											
EO2506910-001	Anonymous	Oxidation-reduction potential [ORP]	----	E125	0.10	mV	390	376	3.66%	25%	----
Inorganics (QC Lot: 2162691)											
EO2506910-001	Anonymous	Sulfides, acid volatile	----	E396-L	0.23	mg/kg	<0.23	<0.23	0	Diff <2x LOR	----
Leachable Anions & Nutrients (QC Lot: 2155677)											
EO2506910-001	Anonymous	Chloride, soluble ion content	16887-00-6	E236.Cl	5.0	mg/kg	<5.0	<5.0	0	Diff <2x LOR	----
Leachable Anions & Nutrients (QC Lot: 2155678)											
EO2506910-001	Anonymous	Sulfate, soluble ion content	14808-79-8	E236.SO4	20	mg/kg	157	159	1.37%	30%	----

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Soil/Solid**

Analyte	*CAS Number*	*Method*	*LOR*	*Unit*	*Result*	*Qualifier*
Physical Tests (QCLot: 2155675)						
Conductivity (1:2 leachate)	----	E100-L	5	µS/cm	<5.00	----
Physical Tests (QCLot: 2156852)						
Moisture	----	E144	0.25	%	<0.25	----
Inorganics (QCLot: 2162691)						
Sulfides, acid volatile	----	E396-L	0.2	mg/kg	<0.20	----
Leachable Anions & Nutrients (QCLot: 2155677)						
Chloride, soluble ion content	16887-00-6	E236.Cl	5	mg/kg	<5.0	----
Leachable Anions & Nutrients (QCLot: 2155678)						
Sulfate, soluble ion content	14808-79-8	E236.SO4	20	mg/kg	<20	----

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Target Concentration	LCS	Low	High	Qualifier
Physical Tests (QCLot: 2155514)									
pH (1:2 soil:CaCl2-aq)	----	E108A	----	pH units	7 pH units	100	98.0	102	----
Physical Tests (QCLot: 2155675)									
Conductivity (1:2 leachate)	----	E100-L	5	µS/cm	1410 µS/cm	97.5	90.0	110	----
Physical Tests (QCLot: 2156852)									
Moisture	----	E144	0.25	%	50 %	99.4	90.0	110	----
Inorganics (QCLot: 2162691)									
Sulfides, acid volatile	----	E396-L	0.2	mg/kg	100 mg/kg	81.0	70.0	130	----
Leachable Anions & Nutrients (QCLot: 2155677)									
Chloride, soluble ion content	16887-00-6	E236.Cl	5	mg/kg	1000 mg/kg	99.5	80.0	120	----
Leachable Anions & Nutrients (QCLot: 2155678)									
Sulfate, soluble ion content	14808-79-8	E236.SO4	20	mg/kg	1000 mg/kg	100.0	80.0	120	----

Reference Material (RM) Report

A Reference Material (RM) is a homogenous material with known and well-established analyte concentrations. RMs are processed in an identical manner to test samples, and are used to monitor and control the accuracy and precision of a test method for a typical sample matrix. RM results are expressed as percent recovery of the target analyte concentration. RM targets may be certified target concentrations provided by the RM supplier, or may be ALS long-term mean values (for empirical test methods).

Sub-Matrix:

					Reference Material (RM) Report				
					RM Target	Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Reference Material ID	Analyte	CAS Number	Method	Concentration	RM	Low	High	Qualifier
Physical Tests (QCLot: 2155675)									
QC-2155675-003	RM	Conductivity (1:2 leachate)	----	E100-L	599 µS/cm	105	70.0	130	----
Physical Tests (QCLot: 2157312)									
QC-2157312-001	RM	Oxidation-reduction potential [ORP]	----	E125	475 mV	101	90.0	110	----
Leachable Anions & Nutrients (QCLot: 2155677)									
QC-2155677-003	RM	Chloride, soluble ion content	16887-00-6	E236.Cl	382 mg/kg	107	70.0	130	----
Leachable Anions & Nutrients (QCLot: 2155678)									
QC-2155678-003	RM	Sulfate, soluble ion content	14808-79-8	E236.SO4	647 mg/kg	114	70.0	130	----

SGL-910

www.alsglobal.com

Chain of Custody (COC) / Analytical Request Form

Canada Toll Free: 1 800 668 9878

Affix ALS barcode label here
(lab use only)

COC

Environmental Division Waterloo
Work Order Reference
WT2521733

Telephone : +1 519 886 6910

Report To		Report Format / Distribution	Select Service Level Below (Rush Turna
Company:	Envision Consultants Ltd.	Select Report Format: ☑ PDF ☑ EXCEL ☐ EDD (DIGITAL)	R ☑ Regular (Standard TAT if received by 3 p
Contact:	Maqsooda Bibi	Quality Control (QC) Report with Report ☐ Yes ☐ No	P ☐ Priority (2-4 bus. days if received by 3pm
Address:	6415 Northwest Drive Unit 37-40	☐ Criteria on Report - provide details below if box checked	E ☐ Emergency (1-2 bus. days if received by :
	Mississauga / ON	Select Distribution: ☑ EMAIL ☐ MAIL ☐ FAX	E2 ☐ Same day or weekend emergency - conta
Phone:	647-919-0887	Email 1 or Fax mbibi@envisionconsultants.ca	Specify Date Required for E2,E or P:
		Email 2	Analysi

Invoice To	Same as Report To ☑ Yes ☐ No	Invoice Distribution
	Copy of Invoice with Report ☑ Yes ☐ No	Select Invoice Distribution: ☑ EMAIL ☐ MAIL ☐ FAX
Company:	Envision Consultants Ltd.	Email 1 or Fax payables@envisionconsultants.ca
Contact:	Account Payables	Email 2 mbibi@envisionconsultants.ca

Project Information		Oil and Gas Required Fields (client use)	
ALS Quote #:		Approver ID:	Cost Center:
Job #:	25-1032	GL Account:	Routing Code:
PO / AFE:		Activity Code:	
LSD:		Location:	

ALS Lab Work Order # (lab use only): WT2521733 FH

ALS Contact:

Sampler:

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	Corrosivity Package with Redox	Number of Containers
	BH25-1 SS4	24-Jul-25	AM	Soil	R	1
	BH25-04 SS6	29-Jul-25	AM	Soil	R	1
	BH25-06 SS4	24-Jul-25	AM	Soil	R	1
	BH25-08 SS5	25-Jul-25	AM	Soil	R	1

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System? ☐ Yes ☑ No

Are samples for human drinking water use? ☐ Yes ☑ No

Special Instructions / Specify Criteria to add on report (client Use)

SAMPLE CONDITION ASRECEIVED (lab use only)

Frozen ☐ SIF Observations Yes ☐ No ☐

Ice packs Yes ☐ No ☐ Custody seal intact Yes ☐ No ☐

Cooling Initiated ☐

INITIAL COOLER TEMPERATURES °C			FINAL COOLER TEMPERATURES °C		
			10.4		

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (lab use only)			FINAL SHIPMENT RECEPTION (lab use only)		
Released by:	Date:	Time:	Received by:	Date:	Time:	Received by: FH	Date: 2025-08-07	Time: 11:00

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION WHITE - LABORATORY COPY YELLOW - CLIENT COPY

NA-FM-0326e v09 Front/04 January 2014

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.

APPENDIX C:

Rock Core Photographs

5500 DUNDAS STREET WEST, TORONTO - ROCKCORE PHOTOGRAPHS

Rock Core Photo: BH25-02
Run 1: 44'1" - 48'4" (13.44m - 14.70m)

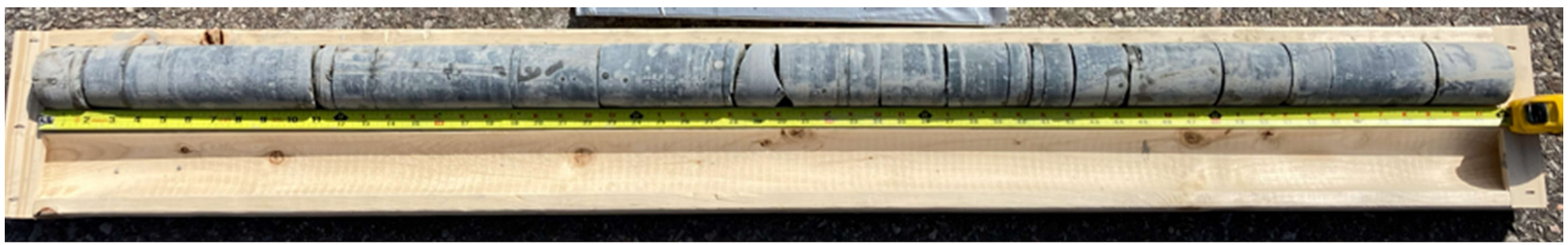
Rock Core Photo: BH25-02
Run 2: 48'4" - 53'9" (14.70 m - 16.40 m)

Rock Core Photo: BH25-02
Run 3: 53'9" - 58'4" (16.40 m - 17.80 m)

Rock Core Photo: BH25-02
Run 4: 58'4" - 62'5" (17.80 m - 19.00 m)

5500 DUNDAS STREET WEST, TORONTO - ROCKCORE PHOTOGRAPHS

Rock Core Photo: BH25-06
Run 5: 62'4" - 67'4" (19.20 m - 20.50 m)

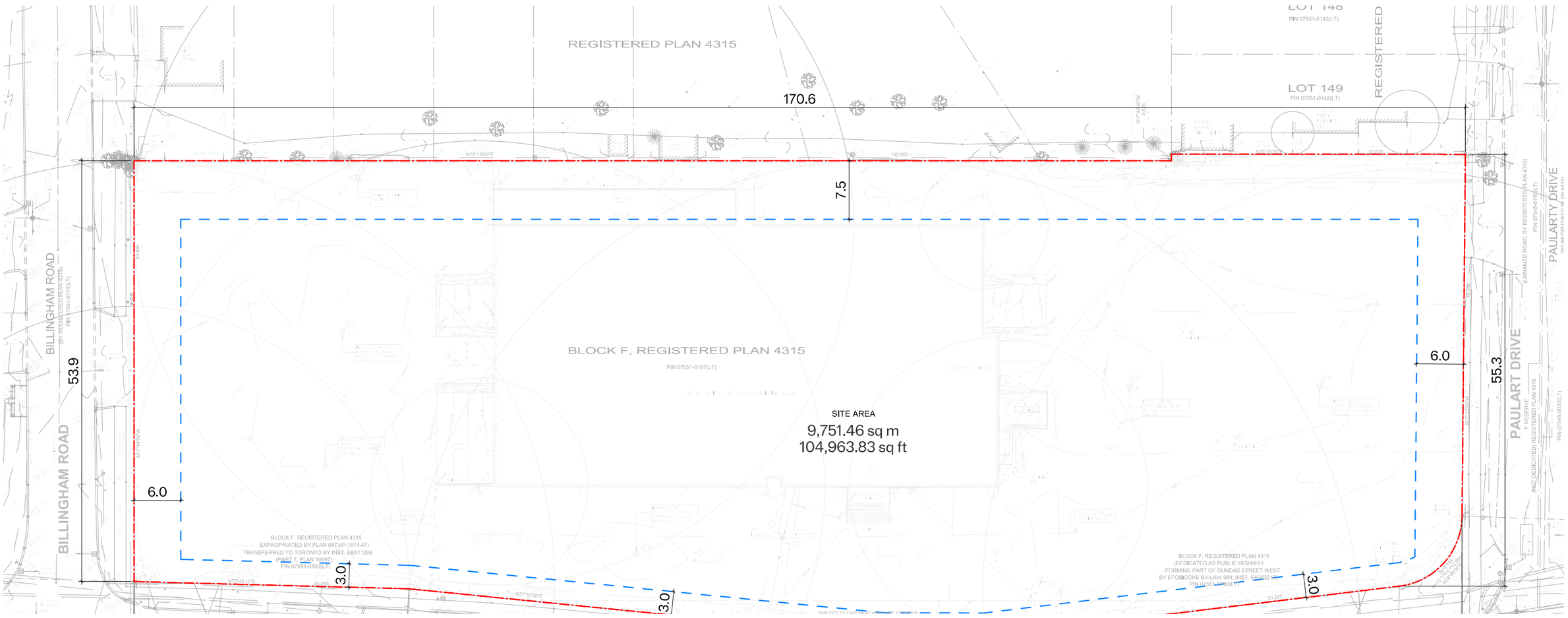


Rock Core Photo: BH25-06
Run 6: 67'4" - 72'4" (20.50 m - 22.10 m)

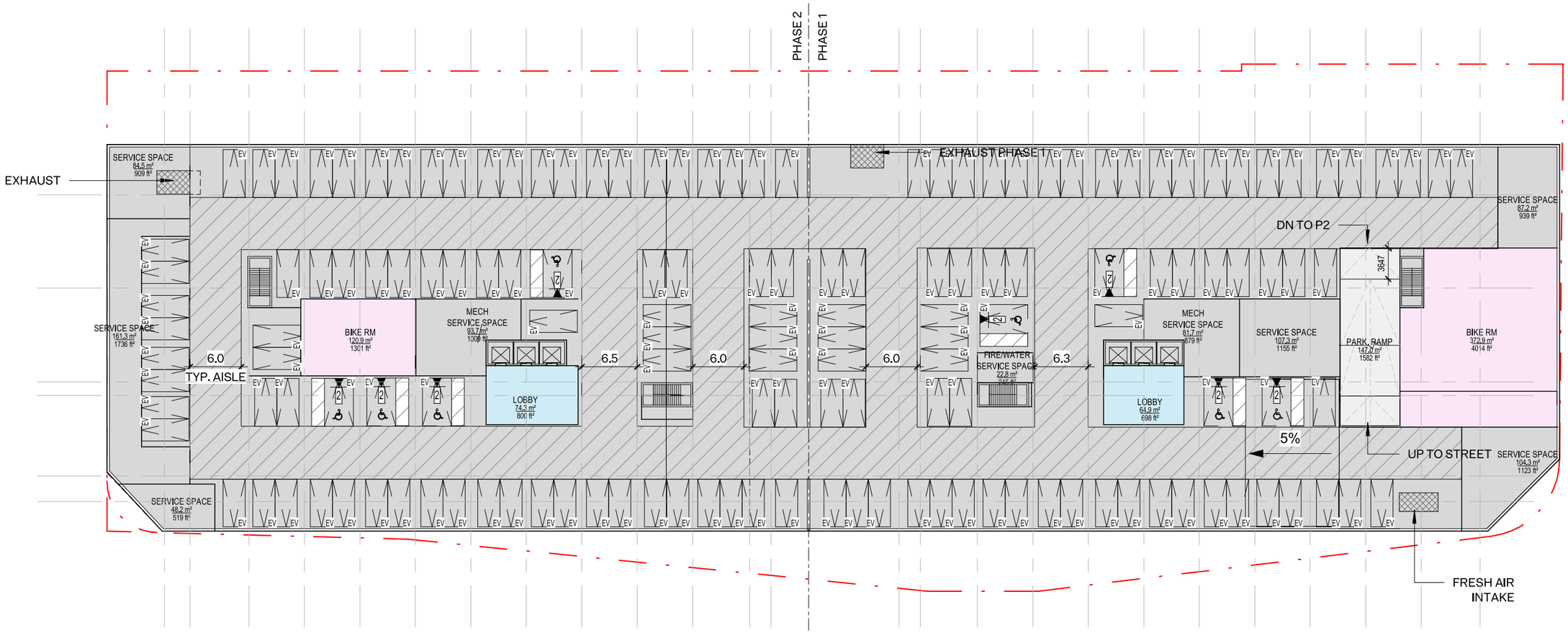
APPENDIX D: *Conceptual Design Drawings, Dated October 17, 2025*

Site Conditions

Setback Assumptions



Ground Floor

Parking

Schematic P1 + P2