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GEOTECHNICAL INVESTIGATION REPORT

7072 Sixth Line, Milton, ON

Project #: 24-0774
Prepared for: 1000377643 Ontario Inc.
Date: July 22, 2025

Report Version: 02

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July 22, 2025

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Attention: Zechariah Bouchard, Planner

SUBJECT: GEOTECHNICAL INVESTIGATION REPORT, 7072 SIXTH LINE, MILTON, ON

EnVision Consultants Ltd. is pleased to present the enclosed Geotechnical Investigation Report for the proposed development at 7072 Sixth Line, Milton, ON.

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,

Mark Cece, B.Sc.
Executive Vice President
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QUALITY MANAGEMENT

ISSUE	FIRST ISSUE	REVISION 1	REVISION 2
PROJECT NUMBER	24-0774	24-0774	
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PREPARED BY	Manvit Mettupalli	Manvit Mettupalli	
SIGNATURE	DRAFT		
REVIEWED BY	Harry Gharegrat	Harry Gharegrat	
SIGNATURE	DRAFT		
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EnVision Consultants Ltd. (EnVision) was retained by the 1000377643 Ontario Inc. (the 'Client') to provide preliminary geotechnical engineering consulting services in support of the proposed redevelopment of the subject property located at 7072 Sixth Line, Milton, ON (the 'Site').

The Site is located approximately 250m north of the intersection of Derry Road and Sixth Line, in the Town of Milton with a natural heritage feature located along the northern limit of the Site. The Site is currently occupied by an unpaved truck parking lot, with an existing residential property located at the southeast corner of the Site.

It is our understanding that the proposed development at the Site would include a commercial/industrial use development and that a pre-consultation with the Town of Milton has been undertaken. The design for commercial/industrial development and grading details are not available at the time of preparation of this report. It is assumed that the proposed buildings will be slab-on-grade structures with no basement levels.

The subsurface conditions in boreholes generally consist of surficial fill materials comprising sand and gravel sand and clayey silt underlain by silty clay/clayey silt till which extended to the termination depth of the boreholes.

The groundwater levels measured within the monitoring wells on April 03, 2025, and April 23, 2025, ranged from 0.9m to 4.7m bgs, corresponding to Elev. 185.4m to 189.2m.

2. INTRODUCTION

EnVision Consultants Ltd. (EnVision) was retained by the 1000377643 Ontario Inc. (the 'Client') to provide preliminary geotechnical engineering consulting services in support of the proposed redevelopment of the subject property located at 7072 Sixth Line, Milton, ON (the 'Site').

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The purpose of this preliminary geotechnical study was to explore the subsurface conditions at this Site by means of borehole drilling, in-situ testing, and laboratory testing on soil samples. The data obtained from the field investigation was used to provide a Borehole Location Plan, Log of Borehole Sheets, Laboratory test results, a description of the subsurface conditions and geotechnical design recommendations.

This report is provided based on the terms of reference presented above and on the assumption that the design will be in accordance with the applicable codes and standards. If there are any changes in the design features relevant to the geotechnical analyses, or if any questions arise concerning the geotechnical aspects of the codes and standards, this office should be contacted to review the design.

The site investigation and recommendations follow generally accepted practices 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 the most part follows ASTM or CSA Standards.

This report has been prepared for 1000377643 Ontario Inc.. Third party use of this report without EnVision's consent is prohibited. The limitations of conditions presented form an integral part of the report and must be considered in conjunction with this report.

3. FIELD INVESTIGATION AND GEOTECHNICAL LABORATORY TESTING

3.1. FIELD INVESTIGATION

The field investigation for this study was carried out on February 18, 2025, and March 14, 2025, and consisted of four (4) boreholes, denoted as BH25-01 through BH25-04, which were drilled and sampled to depths ranging from 6.7m to 12.6m below ground surface (bgs).

The approximate locations for the boreholes are shown in Drawing No. 1

All the boreholes were converted to monitoring wells for hydrogeological purposes and to enable the longer-term monitoring of groundwater levels. An additional monitoring well was installed near BH25-03, which was screened at a shallow depth to monitor the shallow groundwater regime.

The borehole locations were surveyed for coordinates and geodetic elevation, and this data is summarized in Table 3-1, below.

Table 3-1: Summary of Borehole/Monitoring Well Information

BOREHOLE ID	GROUND SURFACE ELEVATION (M)	BOREHOLE COORDINATES UTM NAD83, ZONE 17		DEPTH OF BOREHOLE (M)	MONITORING WELL (MW) INSTALLATION
		NORTHING (m)	EASTING (m)		
BH25-01	190.4	4822111	595083	6.7	50 mm MW
BH25-02	190.3	4822073	595050	6.5	50 mm MW
BH25-03D	190.1	4822116	595013	12.6	50 mm MW
BH25-03S	190.1	4822115	595013	6.1	50 mm MW
BH25-04	190.1	4822139	595052	12.5	50 mm MW

All the boreholes were drilled using a track mounted drill rig supplied and operated by specialist drilling contractors. Solid stem augers were used to advance the borings. The field work was supervised by EnVision's staff who arranged for the clearance of underground public utility locate services, supervised the sampling and in situ testing operations and logged the boreholes. The soil samples were identified in the field, placed in labelled containers, and transported to EnVision's laboratory for further examination and testing.

Samples of the overburden soils were generally obtained at depth intervals of 0.75m and 1.5m using a 50 mm outer diameter (O.D.) split-spoon sampler, in conjunction with the Standard Penetration Testing (SPT) procedures as specified in ASTM Method D 1586. 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).

The soil samples were logged on site and returned to the EnVision laboratory for detailed examination by the geotechnical engineer and for the assignment of laboratory testing.

Five (5), 50mm diameter monitoring wells were installed within all the boreholes. The monitoring wells were installed in the boreholes using environmental-grade, flush-threaded polyvinyl chloride (PVC) pipe

including a screened section with a factory (No. 10) machined slot width of 0.25mm and completed with a PVC riser pipe. All of the pipe material and screen sections were wrapped in plastic which was removed just prior to installation to minimize the potential for contamination. The base of the monitoring wells was covered with a PVC cap to prevent the influx of sediment. Clean silica supplied in bags from a commercial supplier of well sand was placed in the annular space between the pipe and the side of the borehole. The monitoring wells were constructed in accordance with Ontario Regulation 903 (amended by O. Reg. 372/07) by extending an impermeable bentonite grout layer from approximately 0.6m above the top of screened interval to the ground surface. The monitoring wells were completed by installing a protective well cover casing. Well construction details are provided on the respective borehole log sheets, presented in Appendix A.

3.2. GEOTECHNICAL LABORATORY TESTING

Selected soil samples were subjected to laboratory testing as outlined in Table 3-2, below. Geotechnical laboratory test results are summarized on the borehole logs in Appendix A. The geotechnical laboratory test results are provided in Appendix B.

Table 3-2: Summary of Geotechnical Laboratory Testing

GEOTECHNICAL TEST	PROCEDURE/METHODOLOGY	NUMBER OF TESTS
MOISTURE CONTENT	ASTM D2216	All SPT Samples
SIEVE AND HYDROMETER ANALYSIS	ASTM D422 / ASTM D1140	Five (5)
ATTERBERG LIMITS	ASTM D4318	Five (5)

4. SUBSURFACE CONDITIONS

The approximate borehole locations are shown on Drawing No. 1. The terms used in the record of boreholes and general notes on soil descriptions are presented in Appendix A. The subsurface conditions in the boreholes are presented in the individual borehole log sheets included in Appendix A and are summarized in the following paragraphs.

The stratigraphic boundaries shown on the Log of Borehole Sheets are inferred from non-continuous sampling and, therefore, represent transitions between soil types rather than exact planes of geological change. The subsurface conditions will vary between and beyond the borehole locations.

The subsurface conditions in boreholes generally consist of surficial fill materials comprising sand and gravel, sand and clayey silt underlain by silty clay/clayey silt till which extended to the termination depth of the boreholes.

The groundwater levels measured within the monitoring wells on April 03, 2025, and April 23, 2025, ranged from 0.9m to 4.7m bgs, corresponding to Elev. 185.4m to 189.2m.

4.1. SOIL CONDITIONS

4.1.1. FILL MATERIAL

From the ground surface, fill materials comprising of cohesionless sand and gravel or sand and cohesive silty clay/clayey silt fill materials were observed in all the boreholes, extending to depths ranging from approximately 1.2m to 3.1m below ground surface. Trace organics and rock fragments were encountered within the clayey silt fill in BH25-04.

Standard Penetration Test (SPT) 'N' values measured in the cohesionless fill material ranged from 8 to greater than 50 blows per 0.3m of penetration, corresponding to a loose to very dense state of compactness. SPT 'N' values measured in the cohesive fill material ranged from 8 to 24 blows per 0.3m of penetration, corresponding to a stiff to very stiff consistency.

The natural moisture contents measured in the tested samples of fill material ranged from 5% to 25%.

4.1.2. SILTY CLAY/CLAYEY SILT TILL

Below the fill material in all boreholes, a silty clay/clayey silt till deposit was encountered in all the boreholes and extended to the termination depth of all the boreholes.

SPT 'N' values measured within the silty clay till/clayey silt till deposits ranged from 7 to greater than 50 blows per 0.3m of penetration, indicating a firm to hard consistency.

The moisture contents measured in the silty clay till/clayey silt till samples ranged from 9% to 23%.

Grain size analysis was carried out on five (5) samples of silty clay/clayey silt till. The grain size distribution test results are summarized in Table 4-1 and the gradation curves are presented in Figure B1, in Appendix B.

Atterberg limits testing was carried out on five (5) samples of the silty clay/clayey silt till samples. The results of Atterberg Limits tests on the silty clay to clayey silt till samples are presented in Figure B2, in Appendix B and are summarized in Table 4-1.

Table 4-1: Summary of Grain Size Distribution and Atterberg Limits Test on Silty Clay/Clayey Silt Till

BH NO.	SAMPLE NO.	AVERAGE SAMPLE DEPTH (m)	GRAIN SIZE DISTRIBUTION				ATTERBERG LIMITS			SOIL TYPE
			GR (%)	SA (%)	SI (%)	CL (%)	LL (%)	PL (%)	PI	
BH25-01	SS4	2.3 – 2.9	4	24	51	21	23	15	8	CL
BH25-02	SS4	2.3 – 2.9	8	35	45	12	18	13	5	CL-ML
BH25-03D	SS4	2.3 – 2.9	1	11	47	41	31	16	15	CL
BH25-04	SS5	3.1 – 3.7	5	30	48	17	20	14	6	CL-ML
BH25-04	SS10	9.2 – 9.8	4	31	48	17	20	14	6	CL-ML

5. GROUNDWATER CONDITIONS

Groundwater levels measured in the monitoring wells installed within the boreholes BH25-01 through BH25-04 are summarized in Table 5-1, and are also presented in the borehole log sheets attached in Appendix A. The groundwater levels measured on April 03, 2025, and April 23, 2025, ranged from 0.9m to 4.7m bgs, corresponding to Elev. 185.4m to 189.2m on the date of measurement.

It should be noted that access to monitoring well BH25-04 could not be obtained, as the flush mounted well cover was covered with gravel as part of site grading operations, post installation of our monitoring well.,.

Table 5-1: Summary of Groundwater Levels

BOREHOLE NO.	GROUND SURFACE ELEVATION (m)	SOIL TYPE AT SCREEN LOCATION (DEPTH m)	DATE OF OBSERVATION	DEPTH OF GROUNDWATER (m)	GROUNDWATER TABLE ELEVATION (m)
BH25-01	190.4	Silty Clay Till 2.4 – 5.5	April 23, 2025	3.1	187.3
BH25-02	190.3	Clayey Silt Till 5.3 – 6.5	April 4, 2025	1.9	188.4
BH25-03D	190.1	Silty Clay Till 9.1 – 12.1	April 23, 2025	4.7	185.4
BH25-03S	190.1	Silty Clay Till 3.0 – 6.1	April 23, 2025	0.9	189.2
BH25-04	190.1	Clayey Silt Till 9.1 – 10.7	N/A	Not Accessible	Not Accessible

It should be noted that the groundwater levels will vary and are subjected to seasonal fluctuations and changes in response to weather events. Longer term groundwater level monitoring will be required to confirm the groundwater table and any seasonal groundwater level variations. Shallower, perched water may also be found trapped within bedding or backfill to existing structure/utilities.

6. DISCUSSION AND RECOMMENDATIONS

This section of the report presents an interpretation of the factual geotechnical data and provides geotechnical design recommendations. The subsurface conditions are interpreted as they relate to the design and construction of the proposed development at the Site. The conditions are known only at the borehole locations and in view of the generally wide spacing of the boreholes, conditions may vary significantly between boreholes. Comments concerning construction are intended for the guidance of the engineering designer to establish constructability.

The construction methods described in this report must not be considered as being specifications or direct recommendations to contractors, or as being the only suitable methods. Prospective contractors should evaluate all the factual information, obtain additional subsurface information as they deem necessary and should select their construction methods, sequencing and equipment based on their own experience in similar ground conditions.

The recommendations in this report pertain to the geotechnical design of the following project components:

- Construction of proposed commercial/industrial use development with no basement levels.
- Pavement structure for parking.

It is understood that the proposed development at the Site will consist of commercial/industrial use with no underground parking or basement level. The proposed finished floor elevation was not available at the time of preparation of this report. Site grading details were not available at the time of the preparation of this report.

6.1. OVERVIEW OF SUBSURFACE CONDITIONS AND RECOMMENDATIONS

The subsurface conditions in boreholes generally consist of surficial fill materials comprising sand and gravel, sand and clayey silt underlain by silty clay/clayey silt till which extended to the termination depth of the boreholes.

The groundwater levels measured within the monitoring wells on April 03, 2025, and April 23, 2025, ranged from 0.9m to 4.7m bgs, corresponding to Elev. 185.4m to 189.2m.

For design purposes, the groundwater level shall be taken as 1m higher than the measured groundwater level in the nearest monitoring well installed within the overburden, or the regional flood level, whichever is higher.

6.1.1. COBBLES AND BOULDERS

Rock fragments were encountered within the fill and till deposits which may be indicative of presence of boulder and/or cobbles. The method of borehole drilling used in the current investigation could not determine the size and frequency of any cobbles and boulders if occurred at the Site. The glacial till is known to contain cobbles and boulders, and their presence must be accounted for during excavation.

Cobbles are defined (under ASTM) as rock fragments that cannot pass through a screen with 75 mm square openings and are less than 300 mm in maximum dimension. Boulders are defined as rock fragments with their minimum dimension being equal to or greater than 300 mm. The Contractor should include provisions for removal/disposal or burial (if permissible) of boulders.

6.2. FOUNDATIONS

If a basement is not planned, the building will be supported at or near the ground surface. About 1.2m to 2.0m of fill was encountered in BH25-01 to BH25-03, while about 3.1m of fill was contacted in BH25-04.

The proposed building can be supported on shallow spread foundations which bear within the native silty clay/clayey silt till below the fill. In some areas the foundations may need to be stepped down to bear within competent native silty clay/clayey silt till.

The provided bearing resistances should be considered preliminary and should be confirmed once the final building design including finished floor elevations are available.

6.2.1. SHALLOW FOUNDATIONS

Based on the information from the boreholes, the proposed building can be supported by spread and strip footings founded on the undisturbed very stiff to hard silty clay/clayey silt till encountered at 1.2m to 3.1m below ground surface, corresponding to Elev. 187.1m to 189.0m.

Provided that groundwater is effectively lowered and maintained at least 1.0 meters below the lowest foundation excavation level during construction, footings placed on competent native silty clay or clayey silt till can be designed for factored bearing resistances of 225 kPa at the Ultimate Limit State (ULS) and a bearing resistance of 150 kPa at the Serviceability Limit State (SLS).

The geotechnical resistance for the founding soils at SLS allows for 25mm of compression of the founding medium. Differential settlement is expected to be less than 75% of this value, provided the subgrade is not loosened by construction activity or prolonged exposure to the elements.

Where necessary to place footings at different levels, the upper footing must be founded below an imaginary 10:7 (H:V) line drawn up from the base of the lower footing. The lower footing must be installed first to minimize the risk of undermining the upper footing.

The foundation base must be inspected by a qualified geotechnical inspector prior to placing concrete to ensure placement on suitable competent, undisturbed native soils. Variations in soil conditions may occur between and beyond the borehole location, and it is recommended that EnVision be retained to inspect the foundation subgrades to ensure that the recommendations of this report are implemented appropriately. Construction dewatering may be required to preserve the available bearing resistance at the founding level. In areas where the foundation soils are assessed as not having adequate bearing capacity by a qualified geotechnical inspector, the foundation soils shall be replaced with engineered fill or unshrinkable fill.

Footings exposed to seasonal freezing conditions must be protected against frost. The thermal insulation equivalent to that of 1.5m of earth cover should be provided as foundation frost protection. A 25mm thick layer of polystyrene insulation is thermally equivalent to 350mm of soil cover.

6.3. FLOOR SLAB ON GRADE

The floor slab can be supported on grade provided all the existing fill materials and any surficially softened/disturbed native soil are removed and replaced with Granular 'B' Type 1 or 2 and the base is thoroughly compacted, then proof rolled. The granular fill should be placed in shallow lifts of 200mm and compacted to 98 percent of Standard Proctor Maximum Dry Density (SPMDD).

A capillary break, consisting of 200mm of 19mm clear crushed limestone, should be placed above the granular fill below the slab. The capillary break should consist of 200mm of 19mm clear crushed stone (OPSS1010) with no fines. The decision to use a vapor barrier on top of clear stone capillary break should be made in discussion with the architect, floor finishing trades and the supplier of flooring material since this can affect floor flatness due to differential curing rates.

Requirements for underfloor drainage and/or waterproofing measures can be provided once grading details and the building finished floor elevations are provided.

6.4. EXCAVATIONS AND GROUND WATER CONTROL

The excavations will be carried out to remove existing fill soils which extended from 0.8m to 3.1m depth below existing ground surface.

All excavations must be carried out in accordance with the most recent Occupational Health and Safety Act (OHSA). In accordance with OHSA, the fill, native firm to stiff silty clay till can be classified as Type 3 Soil above the groundwater table and Type 4 below the groundwater table. The very stiff to hard silty clay/clayey silt till can be classified as Type 2 Soil.

The OSHA requires that the excavation be cut at a predetermined inclination based on soil types. For an excavation entirely in Type 2 soil, the side slopes may be cut vertically in the lower 1.2m from the base of an excavation and at an inclination of 1H:1V above 1.2m height. Excavations in Type 3 soil should be cut at an inclination of 1H:1V from the base of the excavation. If an excavation contains more than one soil type the excavation slope geometry shall be governed by the highest soil type.

The provided excavation soil types are for preliminary planning purposes only. Contractors must assign a Competent Person to supervise trenching and excavation work, and the Competent Person must re-assign the Soil Types based on the actual observed soil behaviour in the field, then provide appropriate trench support measures or specify the safe trench sidewall slopes, in accordance with the provisions of the OHSA.

Excavations in fill and native soil can be carried out using conventional equipment.

It should be noted that the native soils are known to contain cobbles and boulders. The presence of obstructions/debris such as concrete or rubble within the surficial fill materials is also possible. Provision should be made in the excavation contract for the removal/off-site disposal or on-site burial (if permissible) of cobbles and boulders.

The groundwater levels measured on April 03, 2025, and April 23, 2025, ranged from 0.9m to 4.7m bgs, corresponding to Elev. 185.4m to 189.2m. It should be noted that the groundwater levels will vary and are subjected to seasonal fluctuations and changes in response to weather events. Longer term groundwater level monitoring will be required to confirm the groundwater table and any seasonal

groundwater level variations. Shallower, perched water may also be found trapped within bedding or backfill to existing structure/utilities. Wherever encountered, groundwater must be lowered to 1m below the deepest excavation level.

It is expected that seepage, which occurs from perched water in fill material or seepage from native cohesive soils, can be removed by pumping using trash pumps set into filtered sumps. However, contractors should be prepared to employ more elaborate dewatering procedures, should the seepage from perched water in the fill or more permeable zones within the native soil become more severe.

6.5. REUSE OF EXISTING SOIL AS BACKFILL

The excavated soil will consist of fill comprising sand and gravel, sand and clayey silt and native clayey silt/silty clay till. The native materials can be used as engineered backfill in areas where free draining materials are not needed. The fill materials will need to be evaluated further to determine if they contain deleterious materials prior to reusing as engineered backfill.

The existing fill and native soil/glacial till materials in general have a high moisture content due to which they will require moisture content adjustments which may not be practical or economical. Moisture content adjustments will be required in order to achieve optimum moisture content for fill placement. The suitability of the excavated soils for reuse should be further evaluated by conducting Standard Proctor Tests (ASTM D698), to determine the extent of moisture content adjustment that will be required and its impact on construction operations. Organic soil, topsoil, deleterious or excessively wet material should not be used as backfill. The reuse of excavated site soils is subject to geotechnical review and confirmatory testing by qualified geotechnical personnel during construction.

Imported granular fill, which can be compacted with handheld equipment, should be used in confined areas.

Backfill placed against the foundation walls should also consist of OPSS1010 Gran 'A' or 'B', compacted carefully using handheld equipment so as not to induce excessive compaction surcharge against the foundation wall. This granular backfill zone should be capped with at least 400mm of compacted cohesive clay-rich fill to induce surface runoff and this cap should be sloped at least 2% away from the building walls.

6.6. EARTHQUAKE CONSIDERATIONS

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 can be classified as Class 'D' for seismic site response.

It should be noted that the OBC site class should be determined based on the average properties of the top 30 m of the soil profile. The above site class recommendation assumes that no soft/weak or loose stratum exists below the borehole depth, in particular between about 10m and 30m below the existing grade.

6.7. PAVEMENTS

The recommended preliminary pavement structure thicknesses for parking areas and access entrance drive are provided in Table 6-1.

Recommendations provided here-in are preliminary and may be subject to change once the site grading details become available.

Table 6-1: Recommended Pavement Structure Thickness

PAVEMENT LAYER	COMPACTION REQUIREMENTS	LIGHT DUTY PAVEMENT (PARKING FOR CARS)	MEDIUM DUTY PAVEMENT (ENTRANCE DRIVE, DELIVERY TRUCK ROUTES)
ASPHALTIC CONCRETE	92.0 to 96.5% Maximum Relative Density (MRD)	40mm OPSS HL 3 50mm OPSS HL 8	50mm OPSS HL 3 70mm OPSS HL 8
OPSS GRANULAR A BASE (OR 20MM CRUSHER RUN LIMESTONE)	100% SPMDD*	150mm	150mm
OPSS GRANULAR B (OR 50MM CRUSHER RUN LIMESTONE)	100% SPMDD*	300mm	400mm

* Denotes Standard Proctor Maximum Dry Density, ASTM-D698

The long-term performance of the pavement structure is highly dependent upon the subgrade support conditions. Stringent construction control procedures should be maintained to ensure uniform subgrade moisture and density conditions are achieved. In addition, the need for adequate drainage cannot be over-emphasized. The finished pavement surface and underlying subgrade should be free of depressions and should be sloped (preferably at a minimum grade of two percent) to provide effective surface drainage toward catch basins. Surface water should not be allowed to pond adjacent to the outside edges of pavement areas. Subdrains should be installed to intercept excess subsurface moisture and prevent subgrade softening. This is particularly important in heavy-duty pavement areas.

Additional comments on the construction of parking areas and access roadways are as follows:

- As part of the subgrade preparation, proposed parking areas and access roadways should be stripped of topsoil and other obvious objectionable material. Very loose to loose fill material encountered within the upper 0.8 to 1.5 m below existing grade is recommended to be removed and replaced/recompacted, based on the evaluation by a qualified geotechnical inspector, prior to grading and subgrade preparation. Fill required to raise the grades to design elevations should conform to backfill requirements outlined in previous sections of this report

(free of topsoil, frost susceptible soils, organic material, frozen lumps and boulders or other deleterious material). The subgrade should be properly shaped, crowned then proof-rolled in the full-time presence of a representative of this office. Soft or spongy subgrade areas should be sub-excavated and properly replaced with suitable approved backfill compacted to 98% SPMDD.

- To ensure the longevity and functionality of the pavement structure, proper drainage measures must be incorporated. Water should be prevented from collecting within the granular base layers, and effective provisions must be in place for its removal. In the case of curb and gutter construction, continuous perforated corrugated steel or plastic sub-drains, with a minimum diameter of 100 mm, should be installed to avoid water buildup in the pavement granular layers. These sub-drains should be wrapped in geotextile filter fabric and positioned at least 300 mm below the subgrade level. Backfill surrounding the drains should consist of free-draining OPSS Granular B Type I or an equivalent granular filter material. The sub-drains should have a positive gradient leading to frost-free sumps or catch basins.
- The most severe loading conditions on light-duty pavement areas and the subgrade may occur during construction. Consequently, special provisions such as restricted access lanes, half-loads during paving, etc., may be required, especially if construction is carried out during unfavourable weather.

It is recommended that EnVision be retained to review the final pavement structure designs and drainage plans prior to construction to ensure that they are consistent with the recommendations of this report.

7. GENERAL COMMENTS AND LIMITATIONS OF REPORT

EnVision Consultants Limited 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 guidance of the Owner's 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 results, so that they may draw their own conclusions as to how the subsurface conditions may affect them. It is expected that additional boreholes, testing, analysis and reporting will be undertaken to support the future detailed design. Such work will supercede this report. It is expected that areas of site that are currently inaccessible due to the presence of existing buildings will be investigated during this future stage of site investigation.

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 Limited, it shall not be used to express or imply a 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 recommendations given in this report are based on information determined at the test hole locations. The information contained herein in no way reflects the environmental 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 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.

Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. EnVision Consultants Limited accepts no responsibility for damages, if any suffered by any third party as a result of decisions made or actions based on this report.

We accept no responsibility for any decisions made or actions taken as a result of this report unless we are specifically advised of and participate in such action, in which case our responsibility will be as agreed to at that time.

7.1. SIGNATURES

Prepared by:

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7.2. QUALIFIER

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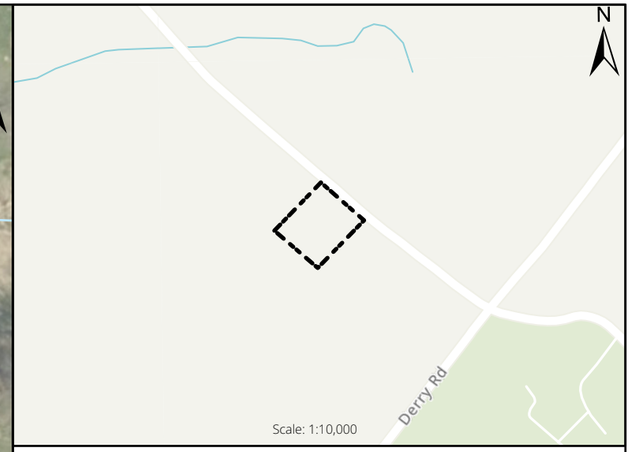
Drawings

Drawing No. 1 Borehole Location Plan



LEGEND

- Site Boundary
- Watercourse
- Proposed Development
- Borehole Location with monitoring well

TITLE

Borehole Location Plan

PROJECT

Geotechnical Investigation
7072 Sixth Line
Milton, Ontario

CLIENT

1000377643 Ontario Inc.

PROJECT NO.	DATE	PREPARED BY	APPROVED BY	DRAWING NO.
24-0774	June 2025	TP	MM	1

APPENDIX A:

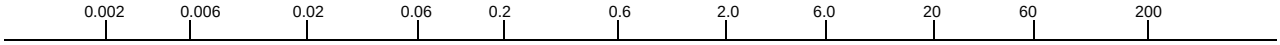
Record of Borehole Log Sheets

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		



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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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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LOG OF BOREHOLE BH25-01

PROJECT: 7072 Sixth Line, Milton
CLIENT: 1000377643 Ontario Inc.
PROJECT LOCATION: 7072 Sixth Line, Milton DATUM: Geodetic
BH LOCATION: N 4822110.9 E 595082.5

Method: Solid Stem Auger
Diameter: 150mm
Date: Feb-18-2025 to Feb-18-2025
Equipment: TEC Geological Drilling Inc CME 75 (Truck)

REF. NO.: 24-0774
ENCL NO.:
ORIGINATED BY ML
COMPILED BY PD
CHECKED BY MM

(m) ELEV / DEPTH	DESCRIPTION	STRATA PLOT	NUMBER	TYPE	BLOWS "N" 0.3 m	GROUND WATER CONDITIONS	ELEVATION	PID (ppm)	CGD (ppm)	PLASTIC LIMIT W_P / NATURAL MOISTURE CONTENT W / LIQUID LIMIT W_L — WATER CONTENT (%)	POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m³)	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
190.4	Ground Surface												
0.0	**FILL:**sand and gravel, brown, moist, dense		1	SS	initial 50/ 0mm		Flushmount 190						
189.6													
0.8	**FILL:**sand, trace to some silt, brown, moist to wet, loose		2A	SS	8		Bentonite						
189.2													
1.2	**SILTY CLAY TILL:**sandy, trace gravel, brown, moist, very stiff to hard		2B	SS			189						
			3	SS	18		Sand						
			4	SS	21		188						4 24 51 21
	some oxidation, brown to grey, moist to wet		5	SS	18		W. L. 187.3 m Apr 23, 2025 187						
	trace to some sand, trace cobbles, reddish brown, moist		6	SS	19		Screen 186						
			7	SS	30		185						
			8A	SS	20		Bentonite 184						
183.7			8B	SS									
6.7	**END OF BOREHOLE:**												

Notes:
1) A 50mm dia. monitoring well was installed screened from 2.4m to 5.5m upon drilling completion.

Water Level Readings:
Date W.L. Depth (mbgs)
April 23, 2025 3.09

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

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

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LOG OF BOREHOLE BH25-02

PROJECT: 7072 Sixth Line, Milton
CLIENT: 1000377643 Ontario Inc.
PROJECT LOCATION: 7072 Sixth Line, Milton DATUM: Geodetic
BH LOCATION: N 4822073.1 E 595049.8

Method: Solid Stem Auger
Diameter: 150mm
Date: Mar-14-2025 to Mar-14-2025
Equipment: TEC Geological Drilling Inc CME 75 (Truck)

REF. NO.: 24-0774
ENCL NO.:
ORIGINATED BY ML
COMPILED BY PD
CHECKED BY MM

(m) ELEV / DEPTH	DESCRIPTION	STRATA PLOT	NUMBER	TYPE	BLOWS 0.3 m "N"	GROUND WATER CONDITIONS	ELEVATION	PID (ppm)	CGD (ppm)	PLASTIC LIMIT w_P / NATURAL MOISTURE CONTENT w / LIQUID LIMIT w_L — WATER CONTENT (%)	POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m³)	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
190.3	Ground Surface							10 20 30 40	10 20 30 40	10 20 30			
0.0 / 189.8	**FILL:** sand and gravel, brown, moist, compact		1	SS			Flushmount 190						
0.5 / 189.5	**FILL:** silty clay, trace sand, trace gravel, brown, moist, stiff												
0.8	**FILL:** clayey silt to silty clay, trace sand, trace organics, trace gravel, reddish brown to grey, moist, very stiff to hard		2	SS	13		189						
1	some sand to sandy, brown, moist to wet		3A	SS	24	▽	W. L. 188.4 m Apr 04, 2025						
188.3 / 2			3B	SS									
2.0	**CLAYEY SILT TILL:** sandy, trace gravel, brown, moist, hard		4	SS	31		188 Bentonite						8 35 45 12
3			5	SS	31		187						
4			6	SS	34		186						
5			7	SS	42		Sand 185						
6							Screen						
183.8			8	SS	100/ 255mm		184						
6.5	**END OF BOREHOLE:**												

Notes:
1) A 50mm dia. monitoring well was installed screened from 5.3m to 6.5m upon drilling completion.

Water Level Readings:

Date	W.L. Depth (mbgs)
April 4, 2025	1.86

GROUNDWATER ELEVATIONS
Measurement 1st ▽ 2nd ▼ 3rd ▼ 4th ▼

GRAPH NOTES: $+^{3}$, $\times^{3}$: Numbers refer to Sensitivity; ○ ^{6}=3% Strain at Failure

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LOG OF BOREHOLE BH25-03D

PROJECT: 7072 Sixth Line, Milton
CLIENT: 1000377643 Ontario Inc.
PROJECT LOCATION: 7072 Sixth Line, Milton DATUM: Geodetic
BH LOCATION: N 4822116.1 E 595012.8

Method: Solid Stem Auger
Diameter: 150mm
Date: Feb-18-2025 to Feb-18-2025
Equipment: TEC Geological Drilling Inc CME 75 (Truck)

REF. NO.: 24-0774
ENCL NO.:
ORIGINATED BY ML
COMPILED BY PD
CHECKED BY MM

(m) ELEV / DEPTH	DESCRIPTION	STRATA PLOT	NUMBER	TYPE	BLOWS "N" 0.3 m	GROUND WATER CONDITIONS	ELEVATION	PID (ppm)	CGD (ppm)	PLASTIC LIMIT w_P / NATURAL MOISTURE CONTENT w / LIQUID LIMIT w_L WATER CONTENT (%)	POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m³)	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
190.1	Ground Surface												
0.0	**FILL:**sand and gravel, brown, moist, dense		1	SS	initial 50/150mm								
	moist to wet		2A	SS	13								
188.9													
1.2	**SILTY CLAY TILL:**some sand, trace gravel, brown, moist, stiff to hard		2B	SS									
			3	SS	18								
			4	SS	13								1 11 47 41
			5	SS	11								
			6	SS	19								
			7	SS	17								
			8	SS	16								
			9	SS	7								
			10A	SS	29								
			10B	SS									

Flushmount
Bentonite
W. L. 185.4 m
Apr 23, 2025
Sand

Soil Head Space Vapors

Continued Next Page

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

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

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LOG OF BOREHOLE BH25-03D

PROJECT: 7072 Sixth Line, Milton
CLIENT: 1000377643 Ontario Inc.
PROJECT LOCATION: 7072 Sixth Line, Milton DATUM: Geodetic
BH LOCATION: N 4822116.1 E 595012.8

Method: Solid Stem Auger
Diameter: 150mm
Date: Feb-18-2025 to Feb-18-2025
Equipment: TEC Geological Drilling Inc CME 75 (Truck)

REF. NO.: 24-0774
ENCL NO.:
ORIGINATED BY ML
COMPILED BY PD
CHECKED BY MM

(m) ELEV / DEPTH	DESCRIPTION	STRATA PLOT	NUMBER	TYPE	BLOWS / 0.3 m "N"	GROUND WATER CONDITIONS	ELEVATION	Soil Head Space Vapors PID (ppm) 10 20 30 40	Soil Head Space Vapors CGD (ppm) 10 20 30 40	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 CLAY TILL:some sand, trace gravel, brown, moist, stiff to hard(Continued)						180						
							Screen						
11			11	SS	38		179						
12							178						
			12A	SS	73/ 280mm		Bentonite						
177.5			12B	SS									
12.6	**END OF BOREHOLE:**												
	Notes: 1) A 50mm dia. monitoring well was installed screened from 9.1m to 12.1m upon drilling completion.												
	Water Level Readings: Date W.L. Depth (mbgs) April 23, 2025 4.70												

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

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

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LOG OF BOREHOLE BH25-03S

PROJECT: 7072 Sixth Line, Milton
CLIENT: 1000377643 Ontario Inc.
PROJECT LOCATION: 7072 Sixth Line, Milton DATUM: Geodetic
BH LOCATION: N 4822115 E 595012.8

Method: Solid Stem Auger
Diameter: 150mm
Date: Feb-18-2025 to Feb-18-2025
Equipment: TEC Geological Drilling Inc CME 75 (Truck)

REF. NO.: 24-0774
ENCL NO.:
ORIGINATED BY ML
COMPILED BY PD
CHECKED BY MM

(m) ELEV / DEPTH	DESCRIPTION	STRATA PLOT	NUMBER	TYPE	"N" BLOWS 0.3 m	GROUND WATER CONDITIONS	ELEVATION	Soil Head Space Vapors PID (ppm) 10 20 30 40	CGD (ppm) 10 20 30 40	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
190.1	Ground Surface												
0.0	Straight Auger						Flushmount						
							W. L. 189.2 m Apr 23, 2025						
							Bentonite						
							188						
							Sand						
							187						
							186						
							Screen						
							185						
184.0							184						
6.1	**END OF BOREHOLE:**												

Notes:
1) A 50mm dia. monitoring well was installed screened from 3.0m to 6.1m upon drilling completion.
2) BH25-03S was drilled 1m south of BH25-03D.

Water Level Readings:
Date W.L. Depth (mbgs)
April 23, 2025 0.88

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

GRAPH NOTES
+ 3, × 3: Numbers refer to Sensitivity
○ 8=3% Strain at Failure

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LOG OF BOREHOLE BH25-04

PROJECT: 7072 Sixth Line, Milton
CLIENT: 1000377643 Ontario Inc.
PROJECT LOCATION: 7072 Sixth Line, Milton DATUM: Geodetic
BH LOCATION: N 4822139 E 595051.6

Method: Solid Stem Auger
Diameter: 150mm
Date: Mar-14-2025 to Mar-14-2025
Equipment: TEC Geological Drilling Inc CME 75 (Truck)

REF. NO.: 24-0774
ENCL NO.:
ORIGINATED BY ML
COMPILED BY PD
CHECKED BY MM

(m) ELEV / DEPTH	DESCRIPTION	STRATA PLOT	SAMPLES NUMBER	TYPE	BLOWS "N" 0.3 m	GROUND WATER CONDITIONS	ELEVATION	Soil Head Space Vapors PID (ppm)	CGD (ppm)	PLASTIC LIMIT W_P / NATURAL MOISTURE CONTENT W / LIQUID LIMIT W_L WATER CONTENT (%)	POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m³)	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
190.1	Ground Surface												
0.0	**FILL:**sand and gravel, trace cobbles, dense		1	SS	initial 50/ 25mm		Flushmount						
189.3													
0.8	**FILL:**clayey silt, sandy, trace gravel, brown to grey, moist, stiff to very stiff		2	SS	8		189						
	trace cobbles		3	SS	23		188						
	trace organics, trace rock pieces, mottled		4	SS	19								
187.1													
3.1	**CLAYEY SILT TILL:**sandy, trace gravel, brown, moist, very stiff to hard		5	SS	15		187						5 30 48 17
			6	SS	19		186						
			7	SS	24		Bentonite 185						
			8	SS	15		184						
			9	SS	13		183						
			10	SS	13		182						4 31 48 17
							Sand 181						
							Screen						

Continued Next Page

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

GRAPH NOTES: $+^{3}$, $\times^{3}$: Numbers refer to Sensitivity; ○ 6 =3% Strain at Failure

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LOG OF BOREHOLE BH25-04

PROJECT: 7072 Sixth Line, Milton
CLIENT: 1000377643 Ontario Inc.
PROJECT LOCATION: 7072 Sixth Line, Milton DATUM: Geodetic
BH LOCATION: N 4822139 E 595051.6

Method: Solid Stem Auger
Diameter: 150mm
Date: Mar-14-2025 to Mar-14-2025
Equipment: TEC Geological Drilling Inc CME 75 (Truck)

REF. NO.: 24-0774
ENCL NO.:
ORIGINATED BY ML
COMPILED BY PD
CHECKED BY MM

(m) ELEV / DEPTH	SOIL PROFILE: DESCRIPTION	STRATA PLOT	SAMPLES: NUMBER	TYPE	"N" BLOWS 0.3 m	GROUND WATER CONDITIONS	ELEVATION	Soil Head Space Vapors: PID (ppm) 10 20 30 40	CGD (ppm) 10 20 30 40	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, brown, moist, very stiff to hard(Continued)						180						
11			11	SS	55		179						Wet spoon
							Bentonite						
12							178						
177.6			12	SS	100/ 230mm								Spoon bouncing Wet spoon
12.5	**END OF BOREHOLE:**												

Notes:
1) A 50mm dia. monitoring well was installed screened from 9.1m to 10.7m upon drilling completion.
2) Monitoring well covered with gravel and as a result inaccessible.

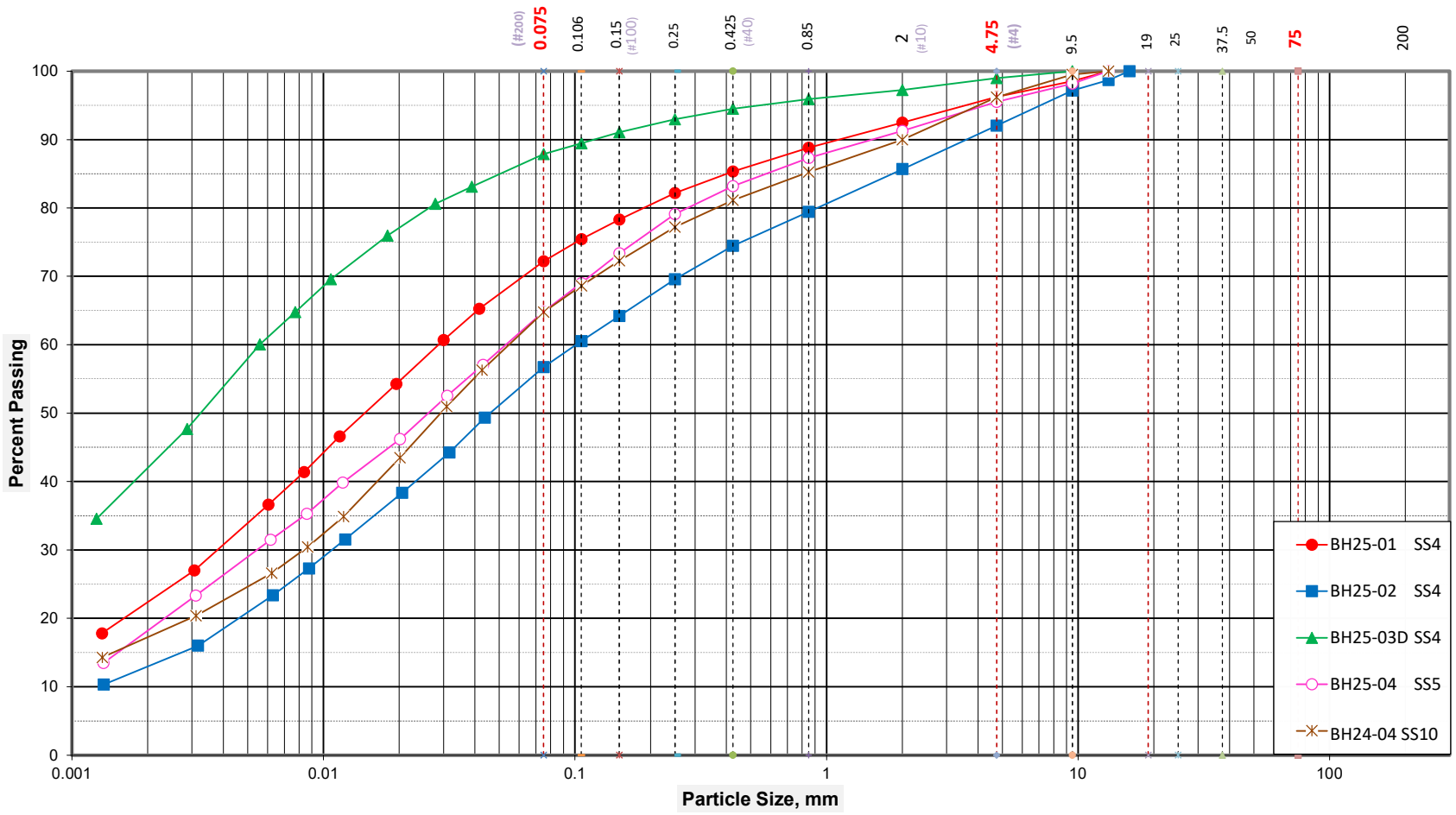
GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

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

APPENDIX B:

Soil Laboratory Test Results

Particle Size Distribution (ASTM-D421/D422)

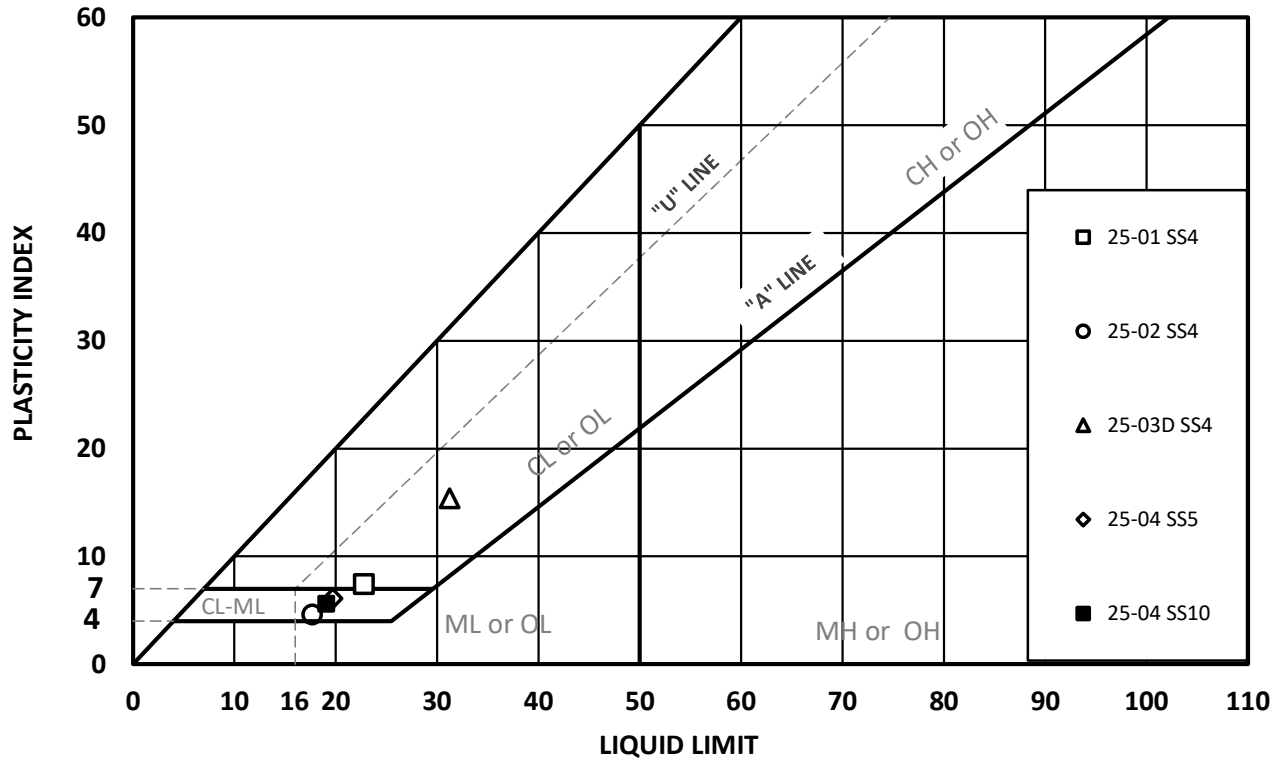


Silt & Clay		Sand			Gravel		Cobble+
Clay	Silt	Fine	Medium	Coarse	Fine	Coarse	

Envision Consultants Ltd
6415 Northwest Drive, Mississauga, ON

Project Number :	24-0774	Lab Requisition Number:	R0441
Project Name:	7072 Sixth Line, Milton	Date Received:	Mar-11-2025
Client:	1000377643 Ontario Inc.	Date Tested:	Mar-17-2025
Source/Location of Sample:		Tested by:	Bruce Shan
Sample #/Depth:		Reviewed by:	
		Figure #B1	

Atterberg Test (ASTM D-4318)



Code	Sample ID	Sample No.		Moisture Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	USCS Symbol
1	□	25-01	SS4		23	15	8	CL
2	○	25-02	SS4		18	13	5	CL-ML
3	△	25-03D	SS4		31	16	15	CL
4	◇	25-04	SS5		20	14	6	CL-ML
5	■	25-04	SS10		20	14	6	CL-ML

Project	7072 Sixth Line, Milton	Project No	24-0774
Location	Sixth Line, Milton	Date	Mar-24-2025
Client	1000377643 Ontario Inc.	Figure No	B2