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A REPORT TO TRINITY FIELD INC.

**TOWN OF CALEDON
PLANNING
RECEIVED**

October 31, 2025

A HYDROGEOLOGICAL ASSESSMENT FOR PROPOSED RESIDENTIAL DEVELOPMENT

NORTHWEST CORNER OF THE GORE ROAD AND MAYFIELD ROAD TOWN OF CALEDON

REFERENCE NO. 2508-W034

OCTOBER 29, 2025

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ISSUES AND REVISIONS REGISTRY

SEL Reference No.	Report Description	Date	Description of Issued and/or Revision
2508-W034	Draft	October 8, 2025	Draft Hydrogeological Assessment Report (Preliminary)
2508-W034	Draft 2	October 28, 2025	Addressing client comments
2508-W034	Final	October 29, 2025	Final Hydrogeological Assessment Report (Preliminary)



1.0 EXECUTIVE SUMMARY

Soil Engineers Ltd. (SEL) was retained by Trinity Field Inc. to conduct a hydrogeological assessment for proposed residential development at the northwest corner of The Gore Road and Mayfield Road, in the Town of Caledon (the Subject Site).

The Subject Site is bounded by residential and agricultural properties to the north, The Gore Road, residential properties, and West Humber River to the east, Mayfield Road, vacant land and residential properties to the south, and commercial, residential and agricultural properties to the west.

The Subject Site currently consists of mainly farm field with waterhead drainage features crossing through the Subject Site from the northwest to the southeast.

The Concept Plan prepared by Bousfield Inc., dated October 6, 2025 indicates that the proposed development will include the construction of a mixed density residential subdivision, which will be provided with municipal services and paved roadways meeting urban standards, and blocks reserved for a park, open space, and two (2) stormwater management ponds (SWMP).

The current investigation revealed that:

- The subsoil investigations conducted by SEL and GEI Consultants Ltd. have revealed that beneath the topsoil veneer, the Subject Site is mainly underlain by strata of silty clay till, with localized deposits of sandy silt till, silty sand till, and silt to a maximum termination depth of 6.6 meters below ground surface (mbgs).
- The finding of the groundwater monitoring indicates that shallow groundwater level elevation ranged from the EL. 215.8 meters above sea level (masl) to 228.0 masl at GEI-BH/MW 38D and GEI-BH/MW 30D and S, respectively.
- The findings of SWRTs reveal that the hydraulic conductivity (K) for the water bearing units underneath the Subject Site ranges from 8.0×10^{-6} at GEI-BH/MW 29 to 1.1×10^{-8} m/sec at GEI-BH/MW 40.
- Record review indicates there are records of not evaluated wetland features as per Ontario Wetland Evaluation System (OWES), located at the southeast and northwest portions of the Subject Site. Additionally, there are four (4) waterhead drainage features that traverse through the Subject Site from northwest to south east, a watercourse located at the southeast portion of the Subject Site, and a wooded area at the northwest portion of the Subject Site. Record review also indicates that tributaries of Humber River West Branch, associated wooded areas, and unevaluated wetland features are scattered around the Subject Site.



- The dewatering requirement and the potential short-term dewatering and long-term foundation drainage flow rates should be assessed once the groundwater levels from the final monitoring event have been recorded. As such, the assessment will be completed and included in a revised report.
- Groundwater quality assessment is on-going and will be completed during the third site visit. The results of the groundwater quality assessment will be presented in an updated hydrogeological assessment report.



2.0 INTRODUCTION

2.1 Site Location and Project Description

Soil Engineers Ltd. (SEL) was retained by Trinity Field Inc. to conduct a hydrogeological assessment for proposed residential development at the northwest corner of The Gore Road and Mayfield Road, in the Town of Caledon (the Subject Site). The Subject Site is bounded by residential and agricultural properties to the north, The Gore Road, residential properties, and West Humber River to the east, Mayfield Road, vacant land and residential properties to the south, and commercial, residential and agricultural properties to the west. The location of the Subject Site is shown on **Drawing 1**.

The Subject Site currently consists of mainly farm field with waterhead drainage features crossing the Subject Site from the northwest to the southeast.

The Concept Plan prepared by Bousfield Inc., dated October 6, 2025 indicates that the proposed development will include the construction of a mixed density residential subdivision, which will be provided with municipal services and paved roadways meeting urban standards, and blocks reserved for a park, open space, and two (2) stormwater management ponds (SWMP).

2.2 Project Objectives

The current hydrogeological assessment report presents the regional and local setting of the Subject Site. The findings of the fieldwork, including subsoil investigation, groundwater level monitoring, and hydraulic conductivity testing are presented in the report. Groundwater quality assessment will be presented in a revised report once the 3rd and final monitoring event is completed. Potential needs for preliminary short-term dewatering and preliminary long-term foundation drainage control will be assessed, and hydrogeological impacts of the proposed development to the nearby groundwater receptors including water supply wells, natural heritage features, and structures will be assessed (if applicable) once the 3rd and final monitoring event is completed. The revised report will provide comments on mitigating the potential impacts of the proposed development to the groundwater receptors, and structures. Comments and recommendations will be provided on any needs for applying for a Permit to Take Water (PTTW), or posting Environmental Activity and Sector Registry (EASR) with the Ministry of the Environment, Conservation and Parks (MECP), and will be included in the revised report.

2.3 Scope of Work

The scope of work for the hydrogeological assessment is summarized below:

- *Background Review:* Available background geological and hydrogeological information for the Subject Site including topographic mapping, surface geological, natural heritage features databases,



Town of Caledon official plans, Toronto Region and Conservation Authority (TRCA) regulated area plans, and MECP water well records were reviewed.

- *Fieldwork:* Fieldwork includes inspecting the Subject Site and surrounding properties with respect to the natural features, groundwater receptors, and structures, as well as installing and developing the monitoring wells. Additionally, groundwater levels within the installed monitoring wells by SEL and the previously installed monitoring wells by GEI Consultants were monitored over two (2) monitoring events (the final 3rd event is on-going), in-situ hydraulic conductivity testing was completed within the installed monitoring wells. Groundwater quality sampling will be conducted during the 3rd site visit and included in a revised report.
- *Preliminary Short-Term Dewatering and Long-term foundation Drainage Control Needs:* Short-term dewatering and long-term foundation drainage flow estimates will be calculated once the 3rd and final monitoring event is completed. The short-term dewatering and long-term foundation drainage flow estimates will be presented in a revised report.



3.0 APPLICABLE REGULATIONS AND OFFICIAL PLANS

The regulations and policies are relevant to this hydrogeological assessment and the location of the Subject Site within the official plans are summarized below.

3.1 Toronto Region and Conservation Authority (TRCA) Policies and Regulation (O. Reg. 41/24)

Under Section 28 of the Conservation Authorities Act, local conservation authorities are mandated to protect the health and integrity of the regional greenspace system, and to maintain or improve the hydrological and ecological functions performed by valley and stream corridors. The TRCA, through its regulatory mandate, is responsible for issuing permits under O. Reg. 41/24, Development, Interference with Wetlands and Alterations to Shorelines and Watercourses for development proposal or Site alteration work to shorelines and watercourses within the regulated areas.

TRCA Regulated Area online mapping was reviewed on September 29, 2025. It is our understanding that the Subject Site is partially located within a TRCA Regulated Area (O. Reg. 41/24). As such, it is anticipated that obtaining a permit from the TRCA under O. Reg. 41/24 will be required for the proposed development.

3.2 Clean Water Act

The MECP mandates the protection of existing and future sources of drinking water under the Clean Water Act, 2006 (CWA). Initiatives under the CWA include the delineation of Wellhead Protection Areas (WHPAs), significant groundwater recharge areas (SGRAs) and Highly Vulnerable Aquifers (HVAs) as well as the assessment of drinking water quality and quantity threats within Source Protection Regions. Source Protection Plans are developed under the CWA and include the restriction and prohibition of certain types of activities and land uses within WHPAs.

Based on a regional-scale source water protection mapping (Source Water Protection Information Atlas) provided by the MECP updated on September 29, 2025, the Subject Site is not located within, a Significant Groundwater Recharge Area, an Issue Contributing Area, Intake Protection Zone, Event Based Area, or Wellhead Protection Areas Q1 and Q2. However, it is located within a Highly Vulnerable Aquifer with a score of 6.

3.3 Town of Caledon Official Plan

The Town of Caledon Official Plan sets up policies that deal with legislative and administrative concerns, guides physical growth, and addresses social, economic, and environmental concerns. The Official Plan provides land use planning designations and identifies areas of environmental significance where more stringent policies may apply for development applications.



Town of Caledon Official Plan maps were reviewed for the current study with the results summarized below:

- Schedule A-1 (Water Resource System Features & Areas) – A review of the map, dated April 2022, indicates that the Subject Site has watercourses including permanent intermittent streams running through it.
- Schedule A-2 (Highly Vulnerable Aquifers) – A review of the map, dated April 2022, indicates that the Subject Site is partially located within a Highly Vulnerable Aquifer.
- Schedule A-3 (Significant Groundwater Recharge Areas) – A review of the map, dated April 2022, indicates that the Subject Site is not located within an area designated as a Significant Groundwater Recharge Area.
- Schedule C-1 (Greenlands System) – A review of the map, dated April 2022, indicates that the small portions of the Subject Site are partially located within a Greenlands System.



4.0 METHODOLOGY

4.1 Borehole Advancement and Monitoring Well Installation

4.1.1 Monitoring Wells Installed by SEL

Drilling boreholes and construction of monitoring wells were conducted for the hydrogeological investigations by SEL on August 20 and 21, 2025. The program consisted of the drilling of six (6) boreholes (BH) and the installation of three (3) monitoring wells (BH/MW) for hydrogeological assessment purposes within the footprint of the proposed development of the Subject Site. The locations of the boreholes and monitoring wells are shown on **Drawing 2**.

Borehole drilling and monitoring well construction were completed by a licensed water well contractor, under the full-time supervision of SEL's geotechnical supervisor who logged the soil strata encountered during borehole advancement and collected representative soil samples for textural classification. The boreholes were drilled using a track-mounted drill rig equipped with continuous flight, solid-stem augers. Detailed descriptions of the encountered subsoil and groundwater conditions as well as a grain size distribution graph are provided by SEL and presented on the borehole and monitoring well logs, in the enclosed **Appendix AI**.

The monitoring wells were constructed using 50-mm diameter Trilock pipes and 1.5 or 3.0 m long 10-slot well screens, which were installed in each of the boreholes. The three (3) monitoring wells were equipped with monument protective casings.

The UTM coordinates and ground surface elevations at the monitoring wells' locations, as well as the monitoring well construction details, are presented in **Table 4-1**. The ground surface elevations and horizontal coordinates at the monitoring well locations were determined at the time of the investigation, using a handheld Global Navigation Satellite System survey equipment (Trimble TSC3) which has an accuracy of ± 0.05 m.

Table 4-1- Monitoring Well Installation Details Installed by SEL

Monitoring Well ID	Installation Date	UTM Coordinates (m)		Ground EL. (masl)	Screen Interval (mbgs)	Soil in the Screen Interval	Casing Dia. (mm)	Protective Casing Type
		Easting	Northing					
BH/MW 25-02	August 21, 2025	601908	4852823	225.3	4.2-6.7	Silt	50	Monument
BH/MW 25-03	August 20, 2025	601758	4852311	227.6	3.1-6.1	Silty Clay Till	50	Monument
BH/MW 25-06	August 21, 2025	602011	4851707	222.1	3.1-4.6	Silty Clay Till	50	Monument

Notes:

mbgs metres below ground surface
masl metres above sea level



4.1.2 Existing Monitoring Wells

SEL was provided with borehole logs for the boreholes and monitoring wells that were previously drilled and installed by GEI Consultants Ltd. A review of the borehole logs indicates that ten (10) boreholes were drilled at the locations. A total of twelve (12) monitoring wells including four (4) pair for shallow and deep nested monitoring wells were installed at eight (8) selected boreholes' locations. The location of the boreholes and monitoring wells are presented on **Drawing 2** and the borehole logs are included in **Appendix AII**. A summary of the monitoring well details is presented in **Table 4-2**.

Table 4-2- Monitoring Well Installation Details Installed by GEI

Monitoring Well ID	Installation Date	UTM Coordinates (m)		Ground El. (masl)	Screen Interval (mbgs)	Soil in the Screen Interval	Casing Dia. (mm)	Protective Casing Type
		Easting	Northing					
GEI-BH/MW 27 ¹	May 1, 2023	601870.8	4853049	226.3	4.6-6.1	Silty Clay Till/Sandy Silt Till	50	Monument
GEI-BH/MW 28D ¹	April 28, 2023	601695	4852786	226.3	3.1-4.6	Silty Clay Till/Inferred Bedrock	25	Monument
GEI-BH/MW 28S ¹	April 28, 2023	601694.2	4852785	226.3	1.5-3.0	Silty Clay Till	25	Monument
GEI-BH/MW 29 ¹	April 28, 2023	601513.8	4852609	230.6	4.6-6.1	Inferred Bedrock	50	Monument
GEI-BH/MW 30D ¹	April 28, 2023	601630.1	4852437	229.7	3.1-4.6	Silty Clay Till	25	Monument
GEI-BH/MW 30S ¹	April 28, 2023	601629.7	4852437	229.7	1.5-3.0	Silty Clay Till	25	Monument
GEI-BH/MW 36 ¹	April 28, 2023	601914.3	4852605	225.1	4.6-6.1	Silty Clay Till/Sandy Silt Till	50	Monument
GEI-BH/MW 38D ¹	April 28, 2023	602168.9	4852629	221.3	4.9-6.4	Sandy Silt Till	50	Monument
GEI-BH/MW 38S ¹	April 28, 2023	602168.5	4852629	221.3	2.2-3.7	Sandy Silt Till/Silty Clay Till	50	Monument
GEI-BH/MW 39D ¹	April 28, 2023	602171.6	4852542	221.5	4.9-6.4	Silty Clay Till/Sandy Silt/Sand and Silt Till	25	Monument
GEI-BH/MW 39S ¹	April 28, 2023	602172.1	4852543	221.6	1.5-3.0	Silty Clay Till	25	Monument
GEI-BH/MW 40 ¹	April 28, 2023	601919.2	4852203	225.7	3.1-6.1	Silty Clay Till	50	Monument

Notes:

mbgs metres below ground surface

masl metres above sea level



4.2 MECP Water Well Records Review

MECP Water Well Records (WWRs) were reviewed for the registered wells located within 500 m radius of the Subject Site (Study Area). The water well records indicate that eighty (80) wells are located within the 500 m zone of influence Study Area relative to the Subject Site. The findings of the MECP well records are summarized in the **Section 5.6** of the current report.

4.3 Groundwater Monitoring

The three (3) monitoring wells installed by SEL in August 2025 and the twelve (12) monitoring wells previously installed by GEI Consultants Ltd. were utilized to measure and monitor groundwater levels. Monitoring wells were developed, and the groundwater monitoring program confirmed the stabilized groundwater level beneath the Subject Site. The stabilized groundwater levels were manually measured over two (2) monitoring events on September 11 and 25, 2025 with the results presented in **Section 7.1**. The 3rd monitoring event is on-going and the findings will be presented in a revised hydrogeological assessment report. The borehole and monitoring well logs prepared by Wood. are presented in **Appendix AII**.

4.4 In-Situ Hydraulic Conductivity Test

SEL has conducted in-situ hydraulic conductivity tests (falling head) at two (2) of the three (3) monitoring wells installed by SEL and at four (4) of the twelve (12) monitoring wells previously installed by GEI Consultants Ltd. In-situ hydraulic conductivity testing was not conducted in certain monitoring wells due to either insufficient groundwater levels or the monitoring wells having a diameter of only 25 mm, which is too small to complete the test.

The in-situ hydraulic conductivity test (falling head and rising head) provides estimated hydraulic conductivity (K) for subsoil strata at the depths of the well screens. The monitoring wells were developed in advance of the tests. Well development involves the purging and removal of groundwater from each monitoring well to remove remnants of clay, silt and other debris introduced into the monitoring well during construction, and to induce the flow of formation groundwater through the well screens, thereby improving the transmissivity of the subsoil strata formation at the well screen depths.

The in-situ falling head hydraulic conductivity test involves the placement of a slug of known volume into the monitoring well, below the water table, to displace the groundwater level upward. The in-situ rising head hydraulic conductivity test involves removing a volume of water from the monitoring well to displace the groundwater level downward. The rate at which the water level recovers to static conditions (rising head/falling head) is tracked manually using a water level tape and a data logger. Slug tests in the monitoring wells with partially submerged screens may exhibit double straight-line effect due to the filter pack drainage. Therefore, the data that represent the filter pack around the screen is eliminated during the



interpretation of the slug test. The rate at which the water table recovers to static conditions is used to estimate the K value for the water-bearing strata formation at the well screen depth using the Bouwer and Rice method (1976). The findings for the hydraulic conductivity testing are presented in **Section 7.3** of the current report.

4.5 Groundwater Quality Assessment

Groundwater quality assessment is on-going and will be completed during the 3rd and final site visit. The results of the groundwater quality assessment will be presented in an updated hydrogeological assessment report.

4.6 Review of Regional Data and Available Reports for the Subject Site

The maps, data, and documents provided by the MECP, Ontario Geological Survey (OGS), Ministry of Natural Resources (MNR), Oak Ridges Moraine Groundwater Program (ORMGP), and TRCA were reviewed with the findings summarized in **Sections 5** and **6**.



5.0 REGIONAL AND LOCAL SITE SETTING

5.1 Regional Geology

The current understanding of the surface geological setting of the Subject Site is based on scientific work conducted by the OGS (OGS, 2003). The Subject Site is located within an area mapped as Fine-textured glaciolacustrine deposits (8b), comprising of silt, clay, minor sand, and gravel. **Drawing 3** illustrates the mapped surficial geology for the Subject Site and the surrounding area.

The Oak Ridges Moraine Groundwater Program (ORMGP) produced a cross-sectional geological map to aid in the characterization of the general area. Considering the regional cross-section, it is understood that the overburden units prevalent in this area are as follows, with the youngest unit at the top:

- *Undifferentiated Sediments*: Undifferentiated sediments present in ground surface, with an approximate thickness ranging from 0.5 m to 3.3 m.
- *Halton Till (Upper Till)*: The Halton Till is mainly comprised of sandy silt to clayey silt till interbedded with silt, clay, and a number of discontinuous sand and gravel lenses. It was deposited approximately 12,500 years ago. Based on cross-section, the Halton Till or equivalent can be contacted beneath the undifferentiated sediments with an approximate thickness ranging from 15.1 m to 22.0 m.
- *Oak Ridges Moraine*: The Oak Ridges Moraine Aquifer Complex (ORAC) is a regionally significant aquifer in southern Ontario. It is primarily composed of interbedded fine sand and silt deposits with localized coarse sand and gravel deposits. The ORAC has an approximate thickness of 0.1 m and 3.2 m.
- *Thorncliffe Formation*: The Thorncliffe Formation consists of glaciofluvial and glaciolacustrine sand and silt deposited approximately 30,000 to 50,000 years ago. The Thorncliffe Formation shows a considerable variation in grain size and thickness, both locally and regionally. It acts as a regional aquifer. Based on the ORMGP cross-section, the Thorncliffe Formation has an approximate thickness ranging from 0 m to 1.4 m beneath the Subject Site.

The underlying bedrock at the Subject Site is the Georgian Bay Formation, which consists of shale, limestone, dolostone, and siltstone (OGS, 2007). A review of the ORMGP cross-section indicates that the bedrock could be contacted at an approximate elevation between 197.8 and 209.9 metres above sea level (masl) beneath the Subject Site.

5.2 Regional Physiography

The majority of the Subject Site lies within the Peel Plain physiographic region of Southern Ontario, while the northern portion of the Subject Site is situated within the South Slope region. The Peel Plains and South



Slope within the vicinity of the Subject Site comprises of Bevelled Till Plains and Drumlinized Till Plains, respectively. **Drawing 4** shows the location of the Subject Site within the regional physiography map.

5.3 Regional Topography and Drainage

A review of a regional topography map presented on **Drawing 5** indicates that the topography of the Subject Site exhibits a decline towards the southeast direction.

The ground surface elevation ranges approximately between 221.2 and 230.5 masl, based on ground surface elevations measured at the borehole and monitoring wells' locations installed by SEL and GEI Consultants Ltd.

5.4 Watershed Setting

The Subject Site is located within the Humber River watershed that falls in the Toronto Region and Conservation Authority (TRCA) jurisdiction.

5.5 Local Surface Water and Natural Heritage Features

MNR database was reviewed for any natural heritage features including, watercourses, bodies of water, wetland features, Area of Natural and Scientific Interest (ANSI) and wooded areas. Details are presented below. **Drawing 6** shows the location of the Subject Site within the surrounding Natural Heritage Features.

Record review indicates there are records of not evaluated wetland features as per Ontario Wetland Evaluation System (OWES), located at the southeast and northwest portions of the Subject Site. Additionally, there are four (4) waterhead drainage features that traverse through the Subject Site from northwest to south east, a watercourse located at the southeast portion of the Subject Site, and a wooded area at the northwest portion of the Subject Site.

Record review also indicates there are records of wetland features, classified as unevaluated wetlands (as per OWES) located 50 m and 200 m south and east of the Subject Site, a water body located 75 m east of the Subject Site. Tributaries of Humber River West Branch and associated wooded areas and unevaluated wetland features are scattered around the Subject Site. Additionally, there is a watercourse located 150 m east of the Subject Site, wooded areas within the northwest portion of the Subject Site, and wooded areas located adjacent to the east boundary and 75 m south of the Subject Site.

5.6 Ground Water Resources (MECP Well Records)

MECP well record database was reviewed for records located within a radius of 500 m from the approximate Subject Site (Study Area). The records indicate that eighty (80) well records are located within the Study Area relative to the Subject Site boundaries. A summary of the final status of the records, obtained from the records review is presented in **Table 4-1**.



The locations of the well records, based on the UTM coordinates provided by the records, are shown on **Drawing 7**. Details of the MECP water well records that were reviewed are provided in **Appendix B**.

Table 5-1 - MECP Well Record Summary

Water Use- Final Status	Number of Records
Water Supply	25
Test Hole	20
Observation Wells	15
Abandoned-Other	8
Unknown	7
Monitoring and Test Hole	3
Abandoned-Quality	2

The above summary indicates that there are twenty-five (25) records of water supply wells in the Study Area. However, there are no record of water supply well within the Subject Site.

5.7 Active Permit to Take Water Application Record Review

MECP website was reviewed for any active PTTW application records within 1.0 km radius of the Subject Site on September 30, 2025. Record review indicates there are no active PTTW within 1 km radius of the Subject Site.



6.0 SOIL LITHOLOGY AND SUBSURFACE INVESTIGATION

The subsoil investigations conducted by SEL and GEI Consultants Ltd. have revealed that beneath the topsoil veneer, the Subject Site is mainly underlain by strata of silty clay till, with localized deposits of sandy silt till, silty sand till, and silt to a maximum termination depth of investigation at 6.6 mbgs. Information regarding SEL and GEI Consultants Ltd's. borehole logs and grain size distributions are presented in **Appendix AI** and **AII**. The approximate locations of boreholes are shown on **Drawing 2**. Additionally, a key plan and subsoil profile are presented on **Drawings 8-1** and **8-2**, respectively. Based on a review of the borehole logs, the stratigraphy beneath the investigated areas of the Subject Site generally consists of the followings:

6.1 Topsoil

The investigation revealed that the thickness of the topsoil veneer, encountered at all BH and BH/MW locations, is approximately 10 cm to 30.5 cm.

6.2 Silty Clay Till

Native deposits of silty clay till (classified as "Clay and Silt Glacial Till" in the GEI borehole logs) was encountered at all BH and BH/MW locations beneath the topsoil veneer. The silty clay till layer consists of a mixture of particle sizes ranging from clay to gravel, with silt and clay being the dominant fraction. There were traces of sand and gravel with occasional sand seams, cobbles, and boulders within the till layer. The consistency of the till is soft to hard and the moisture contents for the retrieved subsoil samples indicate generally damp to wet conditions. Grain size analysis was performed on one (1) selected subsoil sample, and the gradations are plotted in **Appendix AI (Figure 7)**.

6.3 Sandy Silt Till and Silty Sand Till

The sandy silt till and silty sand till (classified as "Sandy Silt Glacial Till" or "Sand and Silt Glacial Till" in the GEI borehole logs) were contacted beneath the topsoil and silty clay till in in BH/MW 101, as well as the previously drilled BHs 25-05, 27, and 37 and BH/MWs 36, 38, and 39. The tills consist of a random mixture of particle sizes ranging from clay to gravel, with the sand and silt being the dominant fraction. There were traces of clay and some gravel, with occasional cobbles and boulders. The till is compact to very dense in consistency and the moisture contents for the retrieved subsoil samples indicate generally damp to very moist conditions. Grain size analysis was performed on one (1) selected subsoil sample, and the gradations are plotted in **Appendix AI (Figure 8)**.



6.4 Silt

The silt deposit (classified as “Sandy Silt” in the GEI borehole logs) was encountered in BH/MWs 25-02 and 39. The silt consist of some clay and variable amounts of sand. The silt is very dense in consistency and the moisture contents for the retrieved subsoil samples indicate generally moist to very moist conditions. Grain size analysis was performed on one (1) selected subsoil sample, and the gradations are plotted in **Appendix AI (Figure 9)**.

6.5 Inferred Shale Bedrock

Inferred shale bedrock was encountered beneath the silty clay till in BH/MWs 28, 29, and 36 completed by GEI. The shale bedrock is grey in color and weathered. However, bedrock was not contacted in the boreholes and monitoring wells drilled and installed by SEL to the maximum termination elevation of investigation at 215.5 masl.



7.0 LOCAL HYDROGEOLOGICAL STUDY

7.1 Monitoring Well Development and Groundwater Level Monitoring

The groundwater levels in the monitoring wells were measured, manually on September 11 and 25, 2025 to record the fluctuation of the shallow groundwater table beneath the Subject Site. Three (3) newly installed monitoring wells by SEL and twelve (12) existing monitoring wells installed by GEI Consultants Ltd. were considered for the groundwater monitoring program.

Monitoring wells were developed and groundwater levels were monitored over two (2) monitoring events. The third monitoring event is on-going, and findings will be presented in an updated hydrogeological assessment report. SEL measured the groundwater levels using an interface probe (Heron Water Tape Series #1900). A summary of the groundwater level observations and their corresponding elevations are provided in **Table 7-1**.

Table 7-1- A Summary of Groundwater Monitoring

MW ID	Unit	Groundwater Level	
		September 11, 2025	September 25, 2025
BH/MW 25-02	mbgs	3.4	3.9
	masl	221.9	221.4
BH/MW 25-03	mbgs	5.3	5.3
	masl	222.3	222.3
BH/MW 25-06	mbgs	1.9	1.9
	masl	220.2	220.2
GEI-BH/MW 27 ¹	mbgs	Dry	Dry
	masl	Dry	Dry
GEI-BH/MW 28D ¹	mbgs	0.0	0.2
	masl	226.3	226.1
GEI-BH/MW 28S ¹	mbgs	0.6	0.5
	masl	225.7	225.8
GEI-BH/MW 29 ¹	mbgs	2.8	2.9
	masl	227.8	227.7
GEI-BH/MW 30D ¹	mbgs	1.7	1.9
	masl	228.0	227.8
GEI-BH/MW 30S ¹	mbgs	1.7	1.9
	masl	228.0	227.8
GEI-BH/MW 36 ¹	mbgs	1.8	2.0
	masl	223.3	223.1
GEI-BH/MW 38D ¹	mbgs	5.5	5.0
	masl	215.8	216.3
GEI-BH/MW 38S ¹	mbgs	Dry	Dry
	masl	Dry	Dry



MW ID	Unit	Groundwater Level	
		September 11, 2025	September 25, 2025
GEI-BH/MW 39D ¹	mbgs	2.4	2.7
	masl	219.1	218.8
GEI-BH/MW 39S ¹	mbgs	1.8	2.0
	masl	219.8	219.6
GEI-BH/MW 40 ¹	mbgs	1.8	4.1
	masl	223.9	221.6

Notes:

mbgs metres below ground surface

masl metres above sea level

¹ Monitoring Wells Installed by GEI Consultants Ltd.

The finding of the groundwater monitoring indicates that shallow groundwater level elevation ranged from the EL. 215.8 masl to 228.0 masl at GEI-BH/MW 38D and GEI-BH/MW 30D and S, respectively.

GEI Consultants Ltd. previously installed twelve (12) monitoring wells and conducted the groundwater level measurements on July 11, 2023. The groundwater levels measured by GEI Consultants Ltd. indicate that the groundwater elevation ranged from EL. 220.7 masl to 229.1 masl at GEI-BH/MW 38D and GEI-BH/MW 30S. The groundwater levels recorded at GEI-BH/MWs 28 D and S were measured above the ground surface. The groundwater levels can be found on the GEI borehole logs enclosed in **Appendix AII**.

7.2 Shallow Groundwater Flow Pattern

The shallow groundwater flow pattern at the Subject Site will be prepared once the 3rd and final monitoring event has been completed.

7.3 Single Well Response Test

Two (2) BH/MWs installed by SEL and four (4) monitoring wells previously installed by GEI Consultants underwent a single well response testing (SWRTs), to assess the hydraulic conductivity (K) for saturated shallow aquifer or water bearing unit at the depths of the well screens. BH/MWs 25-02 and 25-06 and GEI-BH/MWs 29, 36, 38D, and 40 underwent SWRTs on September 25, 2025. In-situ hydraulic conductivity testing was not conducted in certain monitoring wells due to either insufficient groundwater levels or the monitoring wells having a diameter of only 25 mm, which is too small to complete the test. Each monitoring well was equipped with a digital transducer to record the fluctuation made to complete the SWRT. The results of the SWRT tests are presented in **Appendix C**, with a summary of the findings provided in **Table 7-2**.

**Table 7-2- A Summary of In-Situ Hydraulic Conductivity Testing**

Well ID	Ground El. (masl)	Monitoring Well Depth (mbgs)	Screen Interval (m)	Screened Soil Strata	Hydraulic Conductivity (K)-(m/sec)	Test Method
BH/MW 25-02	225.3	6.7	5.2-6.7	Silt	2.7×10^{-8}	Falling Head Test
BH/MW 25-06	222.1	4.6	3.1-4.6	Silty Clay Till	2.1×10^{-8}	Falling Head Test
GEI-BH/MW 29 ¹	230.6	6.1	4.6-6.1	Weathered Shale	8.0×10^{-6}	Falling Head Test
GEI-BH/MW 36 ¹	225.1	6.1	4.6-6.1	Sandy Silt Till/Silty Clay Till	2.8×10^{-8}	Falling Head Test
GEI-BH/MW 38D ¹	221.3	6.4	4.9-6.4	Sandy Silt Till	2.5×10^{-7}	Falling Head Test
GEI-BH/MW 40 ¹	225.7	6.1	3.1-6.1	Silty Clay Till	1.1×10^{-8}	Falling Head Test

Notes:

mbgs metres below ground surface

masl metres above sea level

¹ Monitoring Wells Installed by GEI Consultants Ltd.

The findings of SWRTs reveal that the hydraulic conductivity (K) for the water bearing units underneath the Subject Site ranges from 8.0×10^{-6} at GEI-BH/MW 29 to 1.1×10^{-8} m/sec at GEI-BH/MW 40.

7.4 Groundwater Quality

Groundwater quality assessment is on-going and will be completed during the third site visit. The results of the groundwater quality assessment will be presented in an updated hydrogeological assessment report.



8.0 DISCHARGE WATER CONTROL

The 3rd and final monitoring event is on-going at the time of preparation of this report. Therefore, the dewatering requirement and the potential short-term dewatering and long-term foundation drainage flow rates will be assessed once the groundwater levels from the final monitoring event have been recorded and will be included in a revised report.

The Concept Plan prepared by Bousfield Inc., dated January 2025 indicates that the proposed development will include the construction of a mixed density residential subdivision, which will be provided with municipal services and paved roadways meeting urban standards, and blocks reserved for a park, and two (2) SWMP. The reviewed plans are enclosed in **Appendix D**.



9.0 CONCLUSIONS AND RECOMMENDATIONS

- The current understanding of the surface geological setting of the Subject Site is based on scientific work conducted by the OGS (OGS, 2003). The Subject Site is located within an area mapped as Fine-textured glaciolacustrine deposits (8b), comprising of silt, clay, minor sand, and gravel.
- The majority of the Subject Site lies within the Peel Plain physiographic region of Southern Ontario, while the northern portion of the Subject Site is situated within the South Slope region.
- The Subject Site is located within the Humber River watershed that falls in the Toronto Region and Conservation Authority (TRCA) jurisdiction.
- The subsoil investigations conducted by SEL and GEI Consultants Ltd. have revealed that beneath the topsoil veneer, the Subject Site is mainly underlain by strata of silty clay till, with localized deposits of sandy silt till, silty sand till, and silt to a maximum termination depth of 6.6 meters below ground surface (mbgs).
- The finding of the groundwater monitoring indicates that shallow groundwater level elevation ranged from the EL. 215.8 masl to 228.0 masl at GEI-BH/MW 38D and GEI-BH/MW 30D and S, respectively.
- The findings of SWRTs reveal that the hydraulic conductivity (K) for the water bearing units underneath the Subject Site ranges from 8.0×10^{-6} at GEI-BH/MW 29 to 1.1×10^{-8} m/sec at GEI-BH/MW 40.
- Record review indicates there are records of not evaluated wetland features as per Ontario Wetland Evaluation System (OWES), located at the southeast and northwest portions of the Subject Site. Additionally, there are four (4) drainage features that traverse through the Subject Site from northwest to south east, a watercourse located at the southeast portion of the Subject Site, and a wooded area at the northwest portion of the Subject Site. Record review also indicates that tributaries of Humber River West Branch and associated wooded areas and unevaluated wetland features are scattered around the Subject Site.
- The dewatering requirement and the potential short-term dewatering and long-term foundation drainage flow rates should be assessed once the groundwater levels from the final monitoring event have been recorded. As such, the assessment will be completed and included in a revised report.
- Groundwater quality assessment is on-going and will be completed during the third site visit. The results of the groundwater quality assessment will be presented in an updated hydrogeological assessment report.



10.0 CLOSURE

We trust that the above-noted information is suitable for your review. If you have any questions regarding this information, please do not hesitate to contact the undersigned.

Yours truly,

SOIL ENGINEERS LTD.

Tarek Agha, E.I.T. PMP.
Project Manager-Hydrogeological Services

Narjes Alijani, M.Sc., P.Geo.
Department Manager-Hydrogeological Services





11.0 REFERENCES

1. Chapman, L.J. and D.F. Putnam, 1984. The Physiography of Southern Ontario. Ontario.
2. Freeze, A. and Cherry, J., 1979. Groundwater, Prentice-Hall Inc., New Jersey.
3. Geological Survey. Ontario Geological Survey (OGS), 2003. Surficial Geology of Southern Ontario. Miscellaneous Release – Data 128 – revised.
4. Geological Survey. Ontario Geological Survey (OGS), 2007. Bedrock Geology of Ontario. Miscellaneous Release – MRD 219.
5. Ministry of the Environment, Conservation and Parks, 2025, Source Protection Information Atlas Interactive Map.
6. Ministry of Natural Resources, 2025, Natural Heritage Interactive Map.
7. Toronto and Region Conservation Authority, 2025, Online Regulated Area Map.
8. Town of Caledon Official Plans, 2025.



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FAX: (705) 684-8522

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DRAWINGS 1 to 8

REFERENCE NO. 2508-W034



N

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Key Map

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Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Legend

Approximate Boundary of Subject Site

Major Road

Local Road

Waterbody

Soil Engineers Ltd.

Site Location Plan

Hydrogeological Assessment
Proposed Residential Development
Northwest Corner Of The Gore Road
And Mayfield Road
Town of Caledon

Reference No. 2508-W034

Date: September 25, 2025

Scale:
0 50 100 200 300 400 500
Metres

Drawing No. 1



D:\Projects\2508-W034

N

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Legend

Approximate Boundary of Subject Site

Major Road

Local Road

Waterbody

Borehole (3)

Borehole With Monitoring Well (3)

Borehole From GEI (3)

Borehole and Monitoring Well From GEI (7)

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Borehole and Monitoring Well Location Plan

Hydrogeological Assessment
Proposed Residential Development
Northwest Corner Of The Gore Road
And Mayfield Road
Town of Caledon

Reference No. 2508-W034

Date: September 25, 2025

Scale:

0204080120160200

Metres

Drawing No. 2



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N

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Legend

Approximate Boundary of Subject Site


Major Road

Local Road

5d: Halton Till; consisting of diamicton

8b: Lacustrine-Wildfield Complex; consisting of clay, silt diamicton: foreshore/basinal

19: Modern Alluvium; consisting of silt, sand, gravel

 **Soil Engineers Ltd.**

Surface Geology Map

Hydrogeological Assessment
Proposed Residential Development
Northwest Corner Of The Gore Road
And Mayfield Road
Town of Caledon

Reference No. 2508-W034

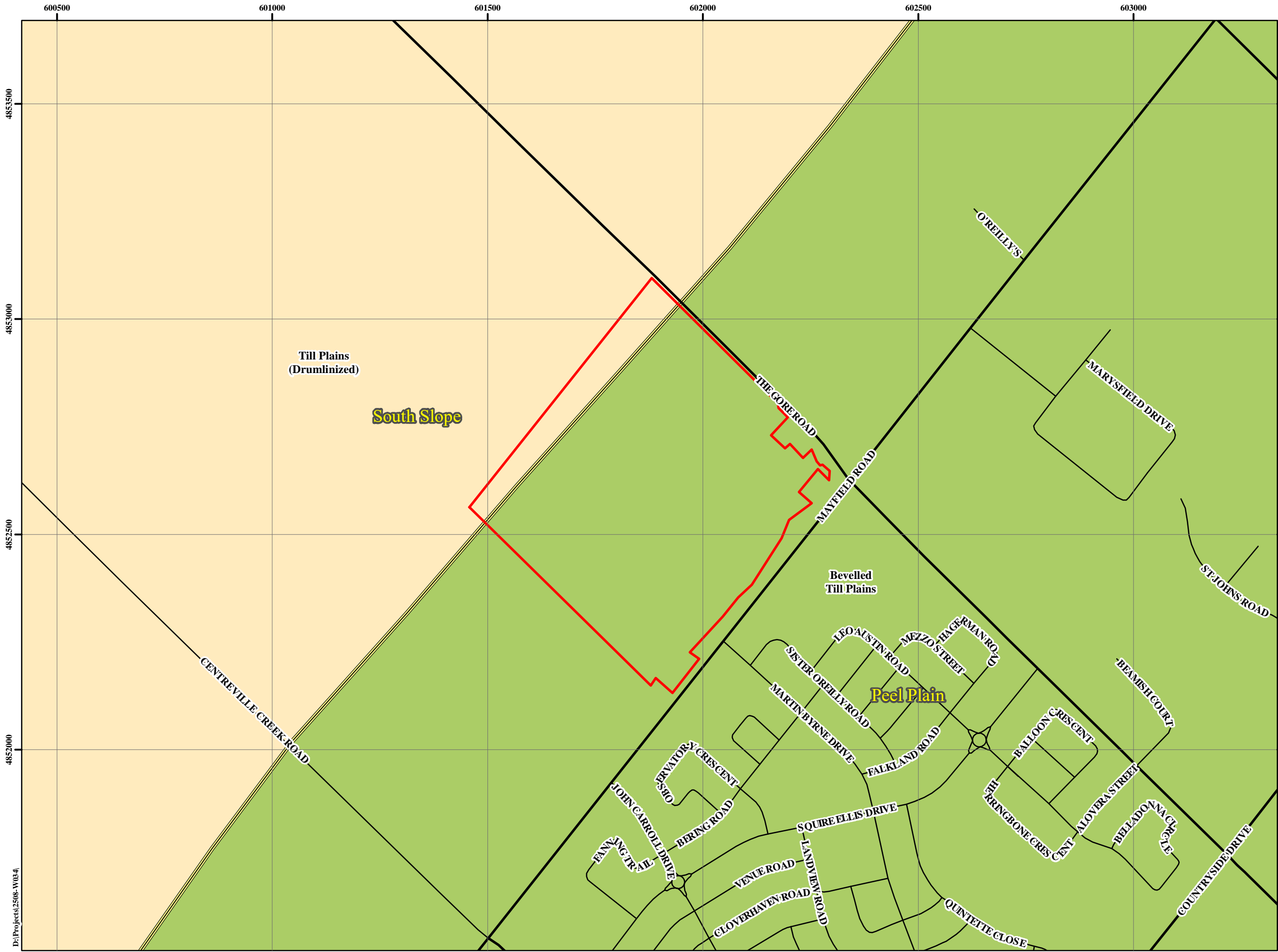
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Metres

Drawing No. 3



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Source: Chapman, L.J. and Putnam, D.F. 2007. Physiography of Southern Ontario; Ontario Geological Survey, Miscellaneous Release--Data 228 ISBN 978-1-4249-5158-1

References: © Physiography Map was Produced by Soil Engineers Ltd. under license from the Ministry of North Development and Mines (MNDM). Copyright (c) is held by the King's Printer for Ontario, 2025. Physiography of Southern Ontario, 2007, Ontario Geological Survey, Miscellaneous Release — Date 228.

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Legend

- Approximate Boundary of Subject Site
- Major Road
- Local Road
- Region Boundary
- Till Plains (Drumlinized)
- Bevelled Till Plains

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Physiographic Map

Hydrogeological Assessment
Proposed Residential Development
Northwest Corner Of The Gore Road
And Mayfield Road
Town of Caledon

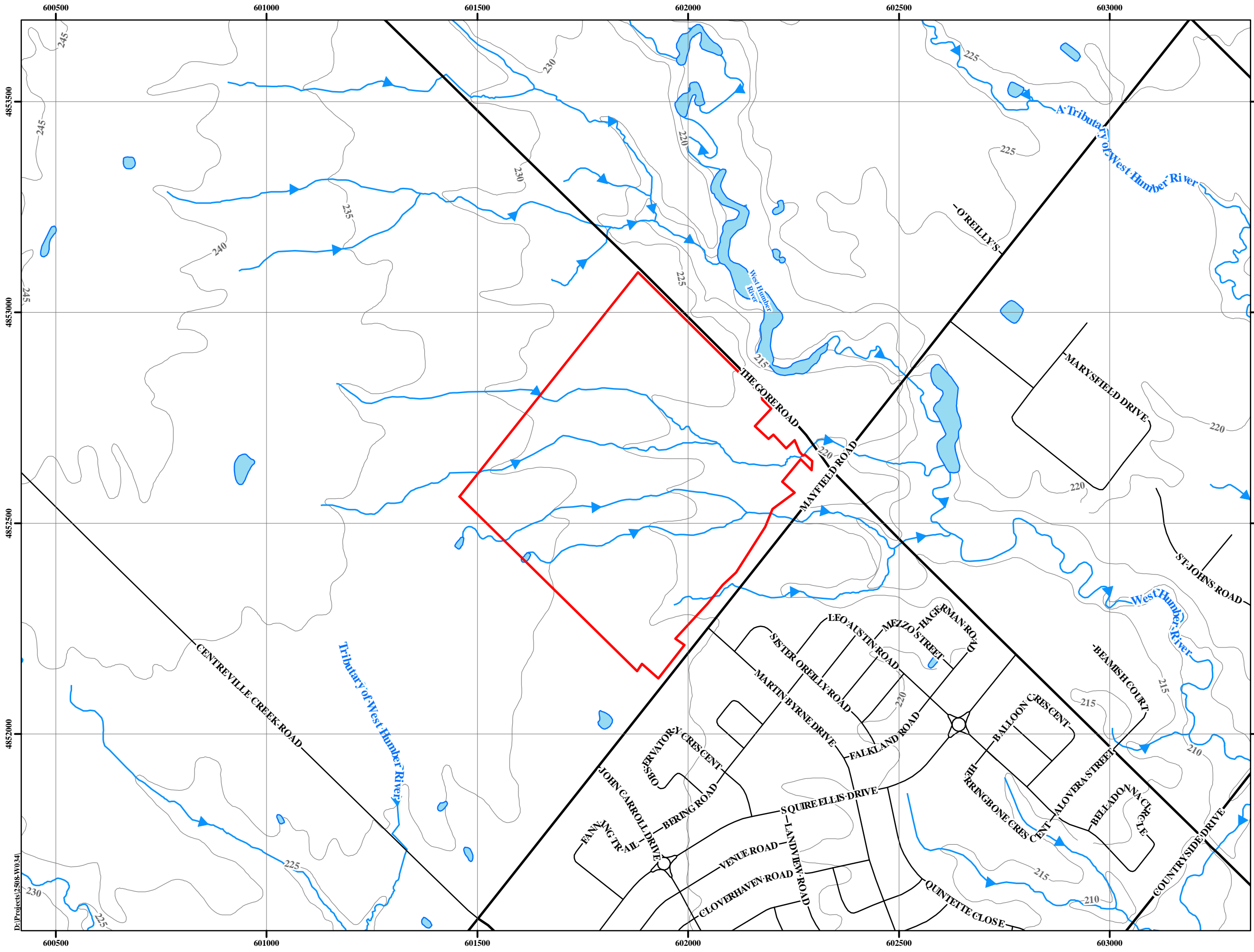
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Date: September 25, 2025

Scale:

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Metres

Drawing No. 4



N

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Legend

- Approximate Boundary of Subject Site
- Major Road
- Local Road
- Waterbody
- Watercourse
- Ontario - 5 m

Topographic Map

Hydrogeological Assessment
Proposed Residential Development
Northwest Corner Of The Gore Road
And Mayfield Road
Town of Caledon

Reference No. 2508-W034

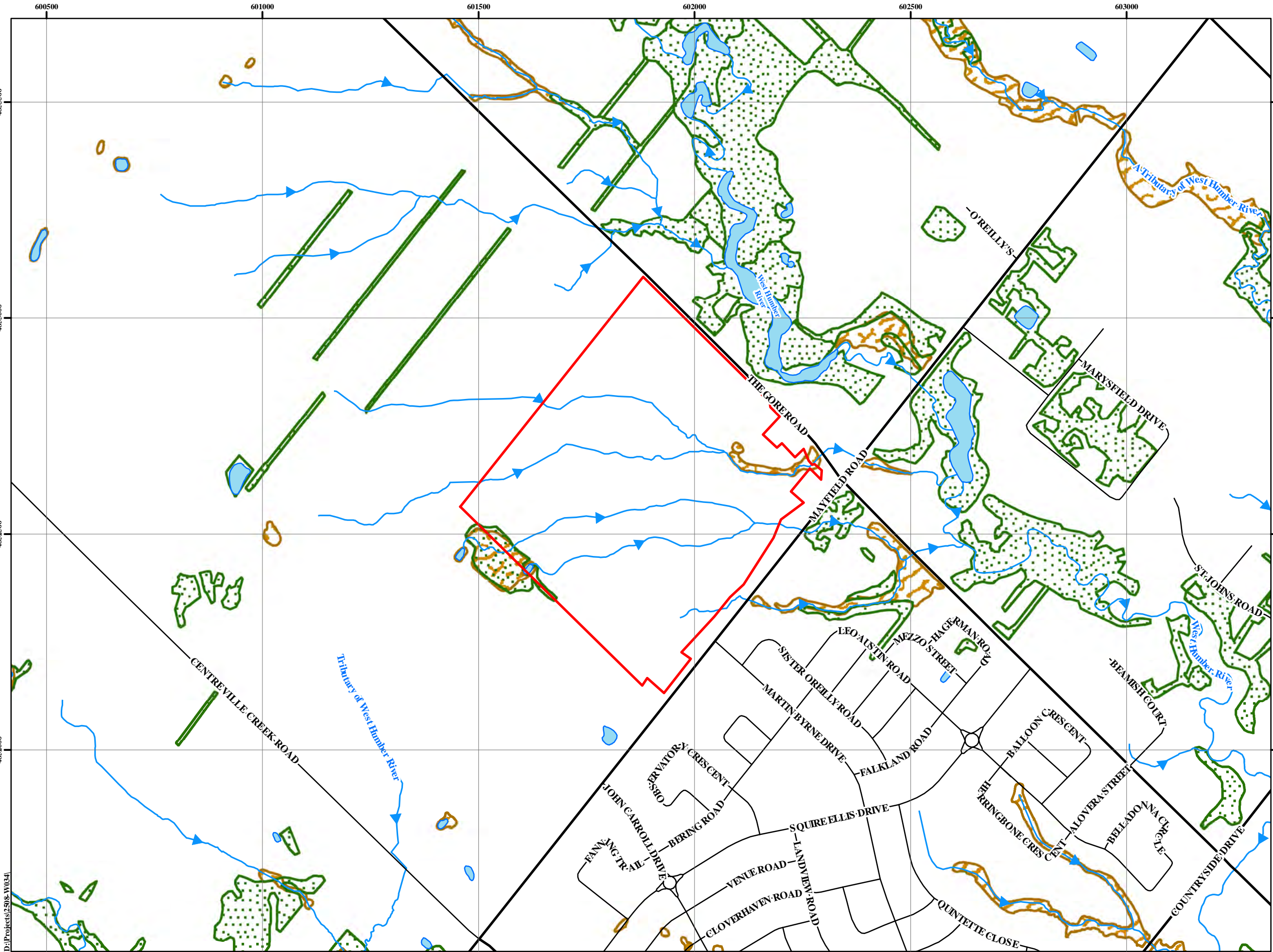
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Scale:

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Metres

Drawing No. 5

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Legend

- Approximate Boundary of Subject Site
- Major Road
- Local Road
- Watercourse
- Waterbody
- Wooded Area Wooded Area
- Wetland (Not evaluated per OWES)

Natural Features and Protection Area Plan

Hydrogeological Assessment
Proposed Residential Development
Northwest Corner Of The Gore Road
And Mayfield Road
Town of Caledon

Reference No. 2508-W034

Date: September 25, 2025

Scale:

Metres

Drawing No. 6



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N

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Key Map

East

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Legend

Approximate Boundary of Subject Site

500 Metres From Subject Site Boundary

Major Road

Local Road

Waterbody

Watercourse

Unknown (7)

Abandoned-Other (8)

Abandoned-Quality (2)

Monitoring and Test Hole (3)

Observation Wells (15)

Test Hole (20)

Water Supply (25)

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MECP Well Location Plan

Hydrogeological Assessment
Proposed Residential Development
Northwest Corner Of The Gore Road
And Mayfield Road
Town of Caledon

Reference No. 2508-W034

Date: September 25, 2025

Scale:

0

50

100

200

300

400

500

Metres

Drawing No. 7



D:\Projects\2508-W034

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Source: Esri, Maxar, Earthstar Geographic's, and the GIS User Community

Legend

Approximate Boundary of Subject Site

A A'

Cross Section

Major Road

Local Road

Waterbody

Borehole (3)

Borehole With Monitoring Well (3)

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Subsurface Profile Cross-Section Key Plan

Hydrogeological Assessment
Proposed Residential Development
Northwest Corner Of The Gore Road
And Mayfield Road
Town of Caledon

Reference No. 2508-W034

Date: September 25, 2025

Scale:
0 20 40 80 120 160 200
Metres

Drawing No. 8-1



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SUBSURFACE PROFILE

CROSS SECTION A-A'

DRAWING NO. 8-2

SCALE: AS SHOWN

JOB NO.: 2508-W034

REPORT DATE: October 2025

PROJECT DESCRIPTION: Proposed Residential Development

PROJECT LOCATION: Northwest Corner of The Gore Road and Mayfield Road,
Town of Caledon

LEGEND



SILT



SILTY CLAY TILL



SILTY SAND TILL

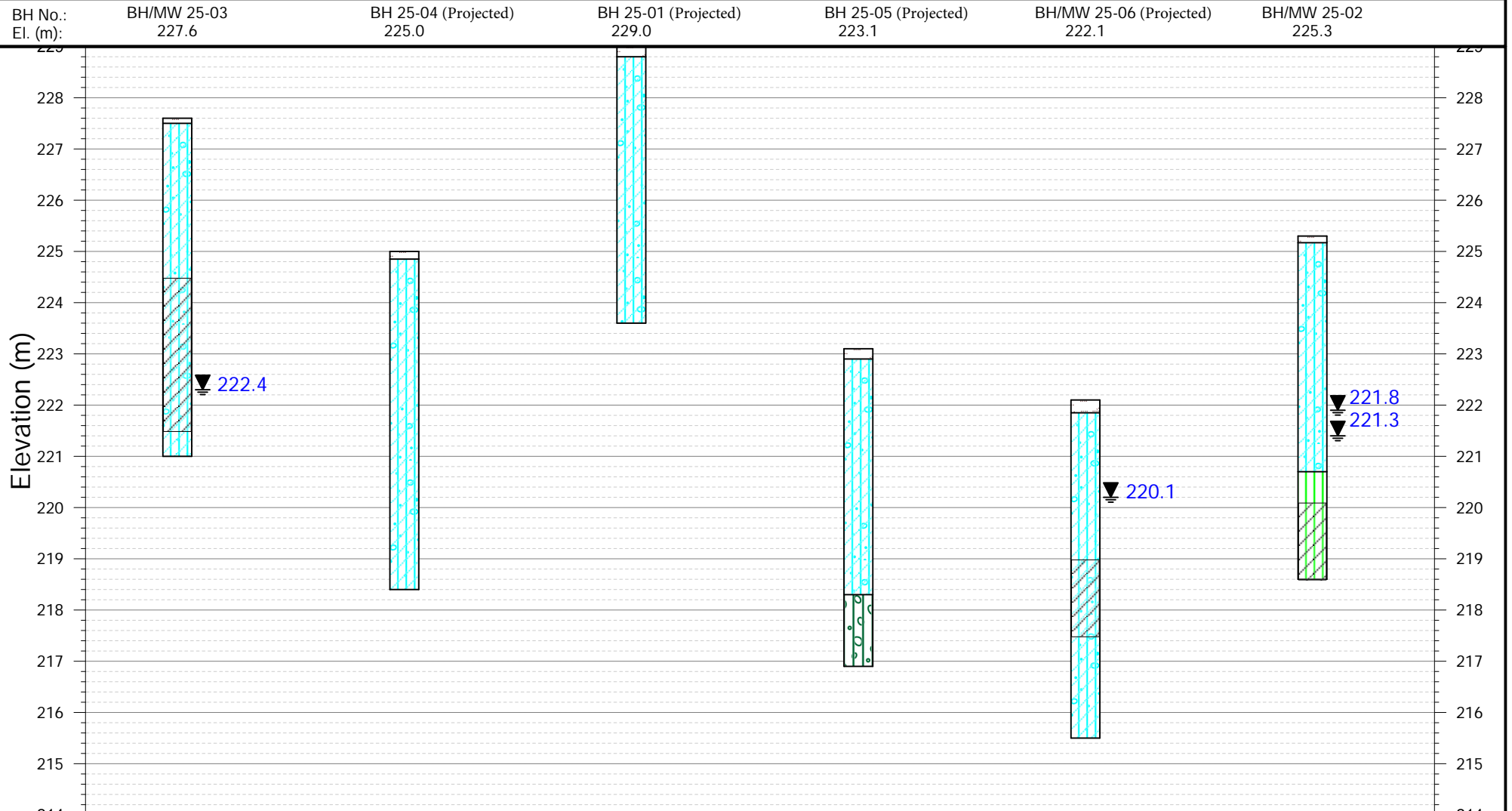


TOPSOIL



SCREEN

WATER LEVEL (STABILIZED)▼





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APPENDIX 'A'

BOREHOLE LOGS/MONITORING WELL LOGS AND GRAIN SIZE DISTRIBUTION GRAPH

REFERENCE NO. 2508-W034

LIST OF ABBREVIATIONS AND DESCRIPTION OF TERMS

The abbreviations and terms commonly employed on the borehole logs and figures, and in the text of the report, are as follows:

SAMPLE TYPES

AS Auger sample
CS Chunk sample
DO Drive open (split spoon)
DS Denison type sample
FS Foil sample
RC Rock core (with size and percentage recovery)
ST Slotted tube
TO Thin-walled, open
TP Thin-walled, piston
WS Wash sample

SOIL DESCRIPTION

Cohesionless Soils:

<u>'N' (blows/ft)</u>	<u>Relative Density</u>
0 to 4	very loose
4 to 10	loose
10 to 30	compact
30 to 50	dense
over 50	very dense

Cohesive Soils:

PENETRATION RESISTANCE

Dynamic Cone Penetration Resistance:

A continuous profile showing the number of blows for each foot of penetration of a 2-inch diameter, 90° point cone driven by a 140-pound hammer falling 30 inches.

Plotted as '—●—'

Undrained Shear
Strength (ksf)

less than 0.25
0.25 to 0.50
0.50 to 1.0
1.0 to 2.0
2.0 to 4.0
over 4.0

'N' (blows/ft)

0 to 2
2 to 4
4 to 8
8 to 16
16 to 32
over 32

Consistency

very soft
soft
firm
stiff
very stiff
hard

Standard Penetration Resistance or 'N' Value:

The number of blows of a 140-pound hammer falling 30 inches required to advance a 2-inch O.D. drive open sampler one foot into undisturbed soil.

Plotted as '○'

WH Sampler advanced by static weight
PH Sampler advanced by hydraulic pressure
PM Sampler advanced by manual pressure
NP No penetration

Method of Determination of Undrained
Shear Strength of Cohesive Soils:

x 0.0 Field vane test in borehole; the number denotes the sensitivity to remoulding

△ Laboratory vane test

□ Compression test in laboratory

For a saturated cohesive soil, the undrained shear strength is taken as one half of the undrained compressive strength

METRIC CONVERSION FACTORS

1 ft = 0.3048 metres
1lb = 0.454 kg

1 inch = 25.4 mm
1ksf = 47.88 kPa



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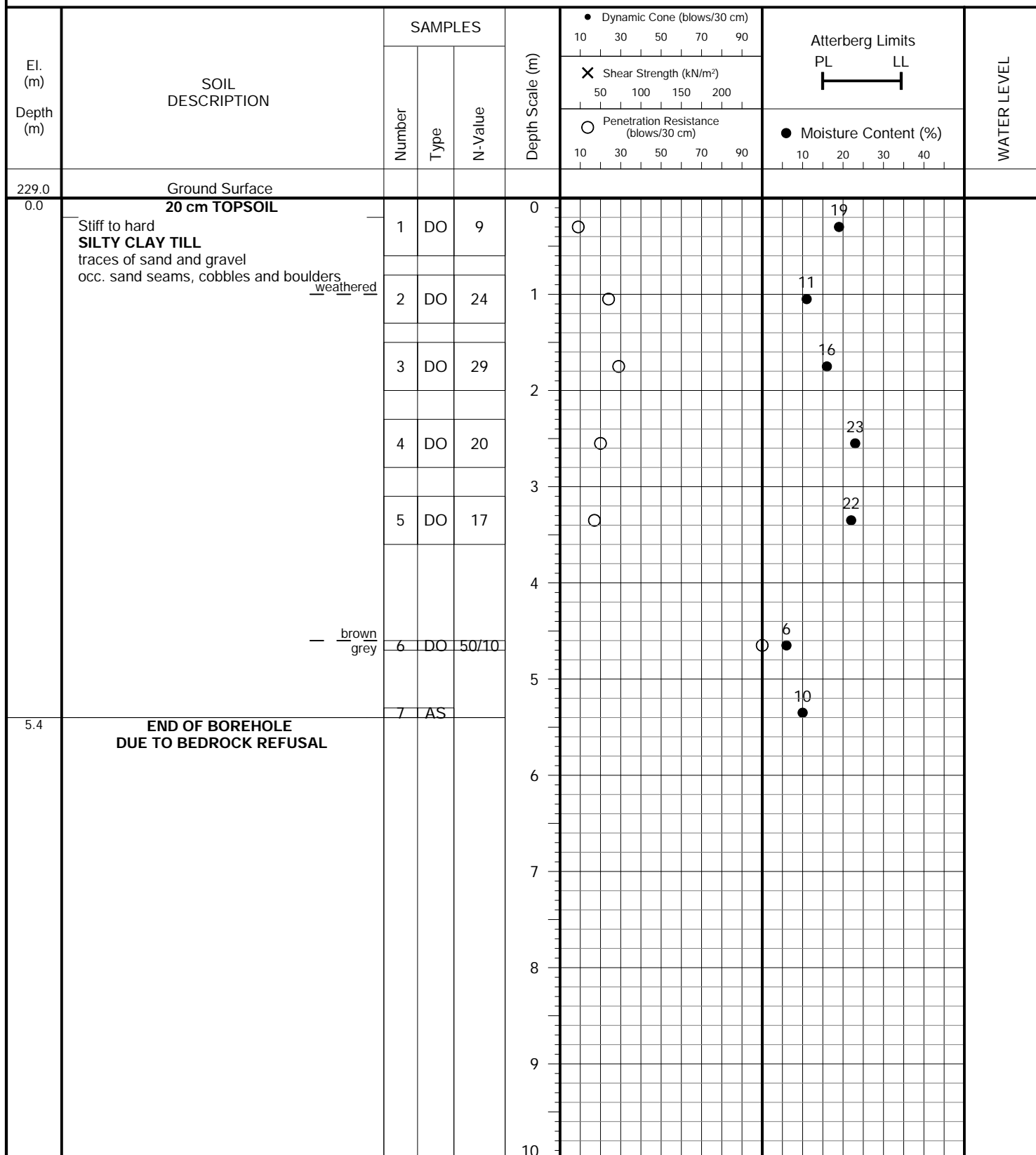
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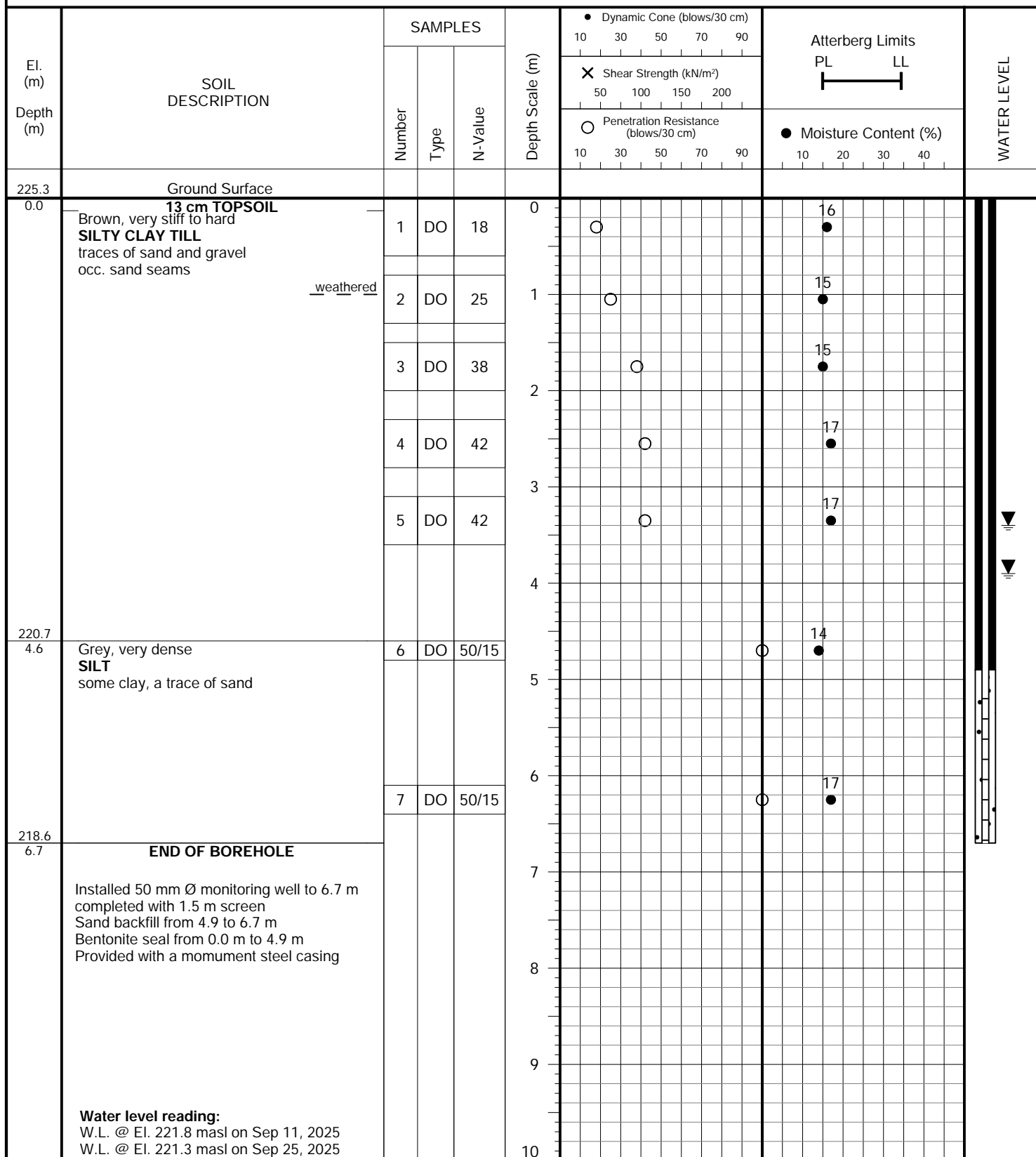
JOB NO.: 2508-W034

LOG OF BOREHOLE: BH 25-01

FIGURE NO.: 1

PROJECT DESCRIPTION: Proposed Residential Development**METHOD OF BORING:** Solid Stem Augers**PROJECT LOCATION:** Northwest Corner of The Gore Road and Mayfield Road,
Town of Caledon**DRILLING DATE:** August 20, 2025**Soil Engineers Ltd.**

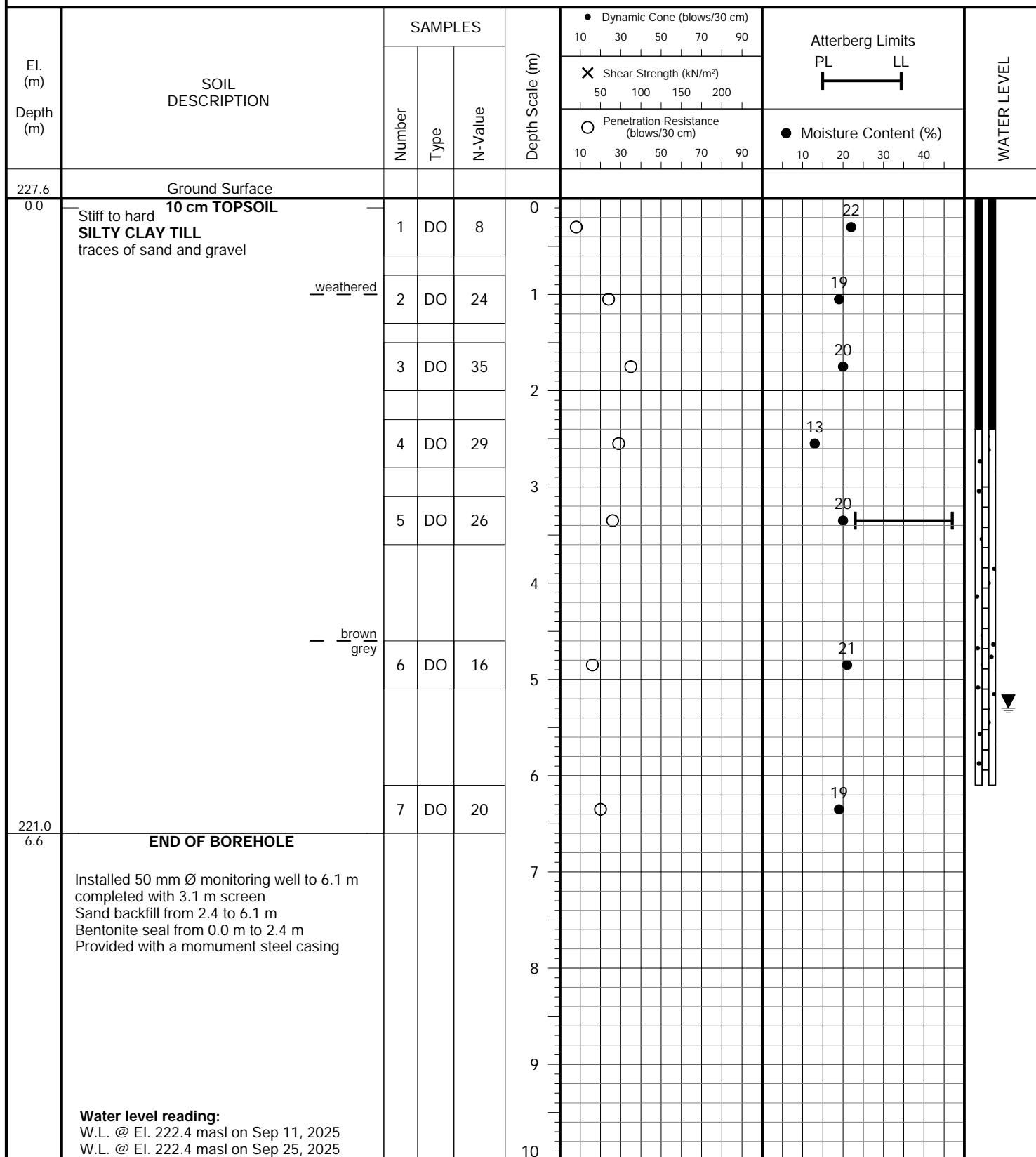
JOB NO.: 2508-W034

LOG OF BOREHOLE: BH/MW 25-02 **FIGURE NO.: 2****PROJECT DESCRIPTION:** Proposed Residential Development**METHOD OF BORING:** Solid Stem Augers**PROJECT LOCATION:** Northwest Corner of The Gore Road and Mayfield Road,
Town of Caledon**DRILLING DATE:** August 21, 2025**Soil Engineers Ltd.**

JOB NO.: 2508-W034

LOG OF BOREHOLE: BH/MW 25-03

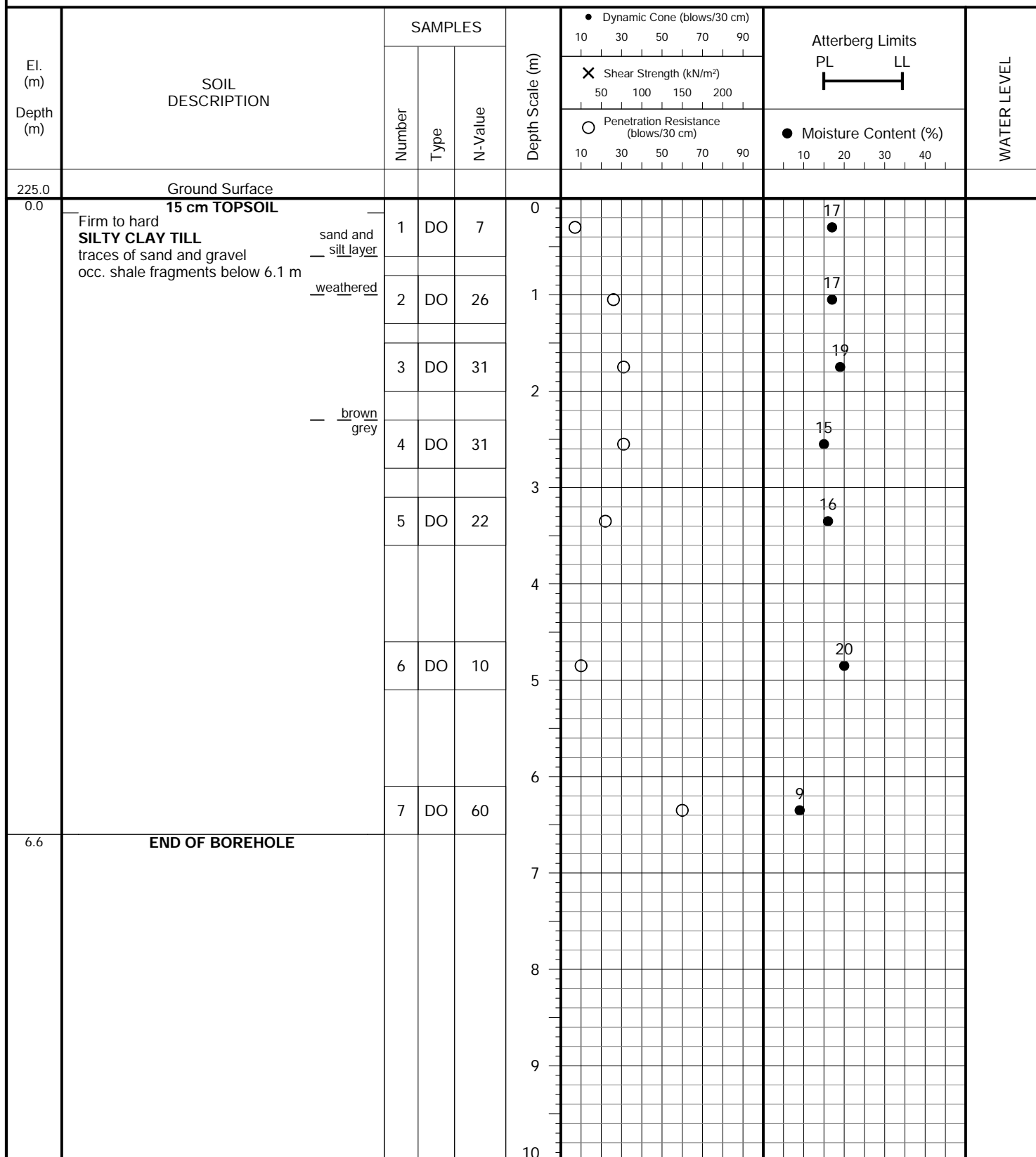
FIGURE NO.: 3

PROJECT DESCRIPTION: Proposed Residential Development**METHOD OF BORING:** Solid Stem Augers**PROJECT LOCATION:** Northwest Corner of The Gore Road and Mayfield Road,
Town of Caledon**DRILLING DATE:** August 20, 2025**Soil Engineers Ltd.**

JOB NO.: 2508-W034

LOG OF BOREHOLE: BH 25-04

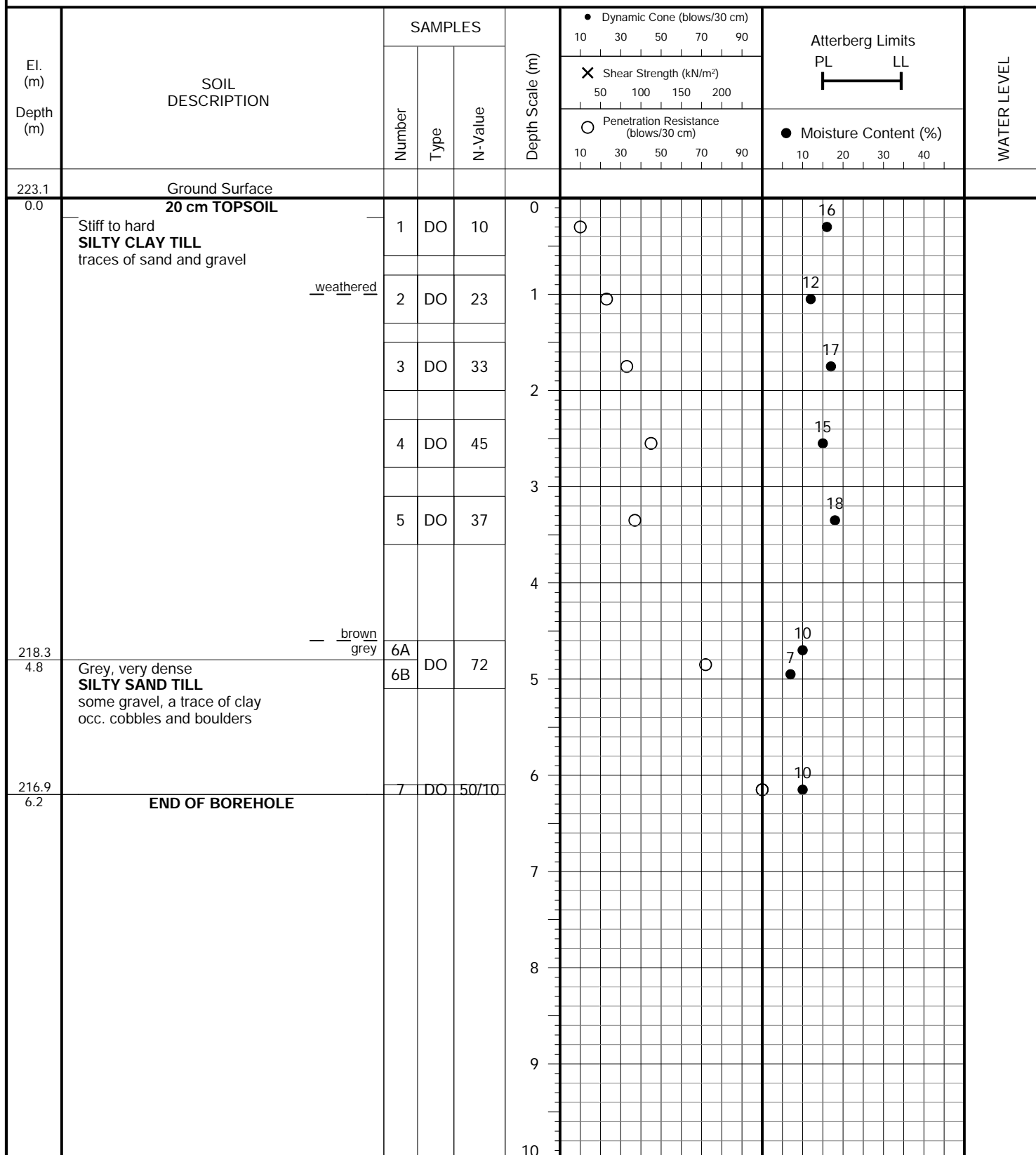
FIGURE NO.: 4

PROJECT DESCRIPTION: Proposed Residential Development**METHOD OF BORING:** Solid Stem Augers**PROJECT LOCATION:** Northwest Corner of The Gore Road and Mayfield Road,
Town of Caledon**DRILLING DATE:** August 20, 2025**Soil Engineers Ltd.**

JOB NO.: 2508-W034

LOG OF BOREHOLE: BH 25-05

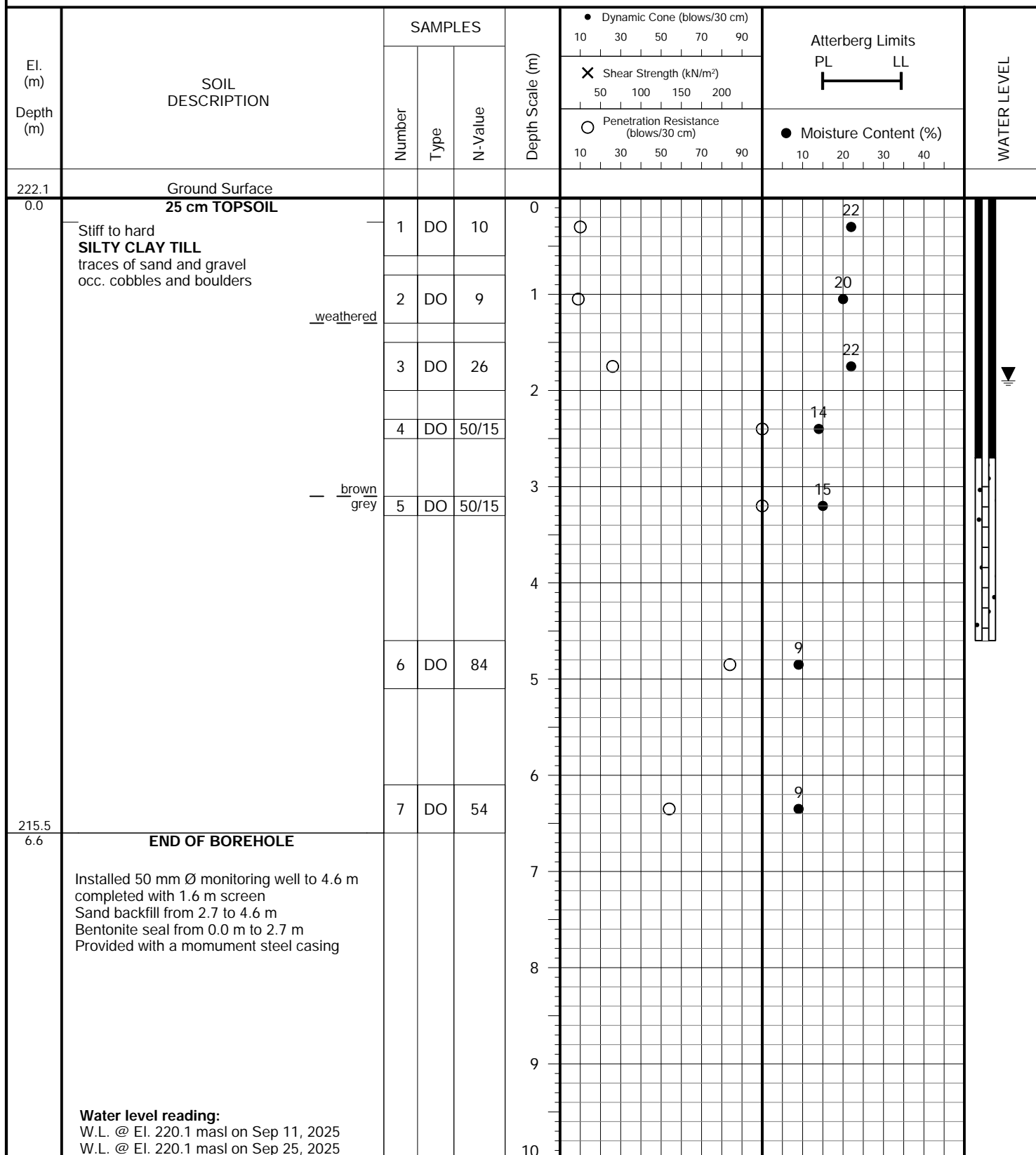
FIGURE NO.: 5

PROJECT DESCRIPTION: Proposed Residential Development**METHOD OF BORING:** Solid Stem Augers**PROJECT LOCATION:** Northwest Corner of The Gore Road and Mayfield Road,
Town of Caledon**DRILLING DATE:** August 20, 2025**Soil Engineers Ltd.**

JOB NO.: 2508-W034

LOG OF BOREHOLE: BH/MW 25-06

FIGURE NO.: 6

PROJECT DESCRIPTION: Proposed Residential Development**METHOD OF BORING:** Solid Stem Augers**PROJECT LOCATION:** Northwest Corner of The Gore Road and Mayfield Road,
Town of Caledon**DRILLING DATE:** August 21, 2025**Soil Engineers Ltd.**

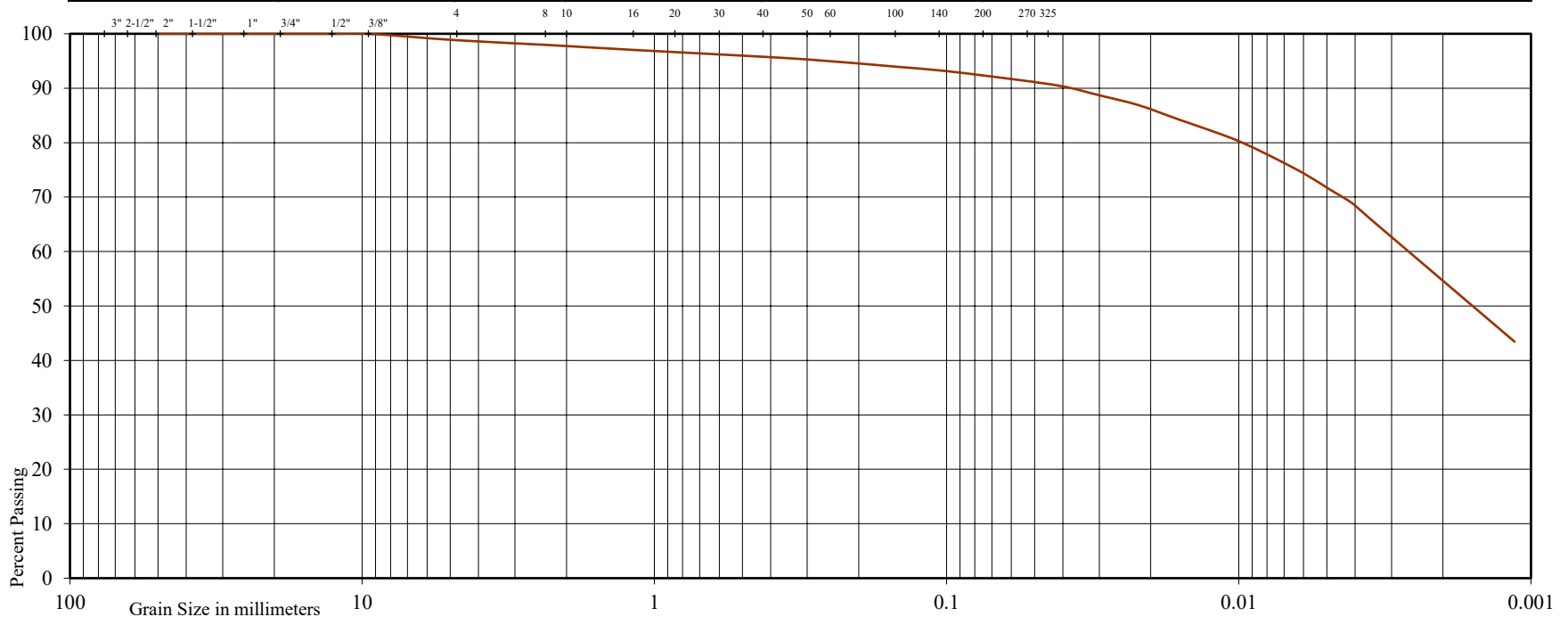


U.S. BUREAU OF SOILS CLASSIFICATION

GRAVEL			SAND				SILT	CLAY
COARSE		FINE	COARSE	MEDIUM	FINE	V. FINE		

UNIFIED SOIL CLASSIFICATION

GRAVEL		SAND			SILT & CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	



Project: Proposed Residential Development

Location: Northwest Corner of The Gore Road and Mayfield Road, Town of Caledon

Borehole No: 25-03

Sample No: 5

Depth (m): 3.4

Elevation (m): 224.2

Liquid Limit (%) = 47

Plastic Limit (%) = 23

Plasticity Index (%) = 24

Moisture Content (%) = 20

Estimated Permeability

(cm./sec.) = 10^{-7}

Classification of Sample [& Group Symbol]: SILTY CLAY TILL
traces of sand and gravel



Reference No: 2508-S034

GRAVEL		SAND				SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	V. FINE		

GRAVEL		SAND			SILT & CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	



Location: Northwest Corner of The Gore Road and Mayfield Road, Town of Caledon

Liquid Limit (%) = -

Plastic Limit (%) = -

Borehole No: 25-05

$$\text{Plasticity Index (\%)} = \frac{w_L - w_P}{w_L} \times 100$$

Sample No: 6B

Moisture Content (%) = 7

Depth (m): 5.0

Estimated Permeability

Elevation (m): 218.1

$$(\text{cm./sec.}) = 10^{-4}$$

Classification of Sample [& Group Symbol]:	SILTY SAND TILL some gravel, a trace of clay
--------------------------------------------	-------------------------------------------------

Figure: 8

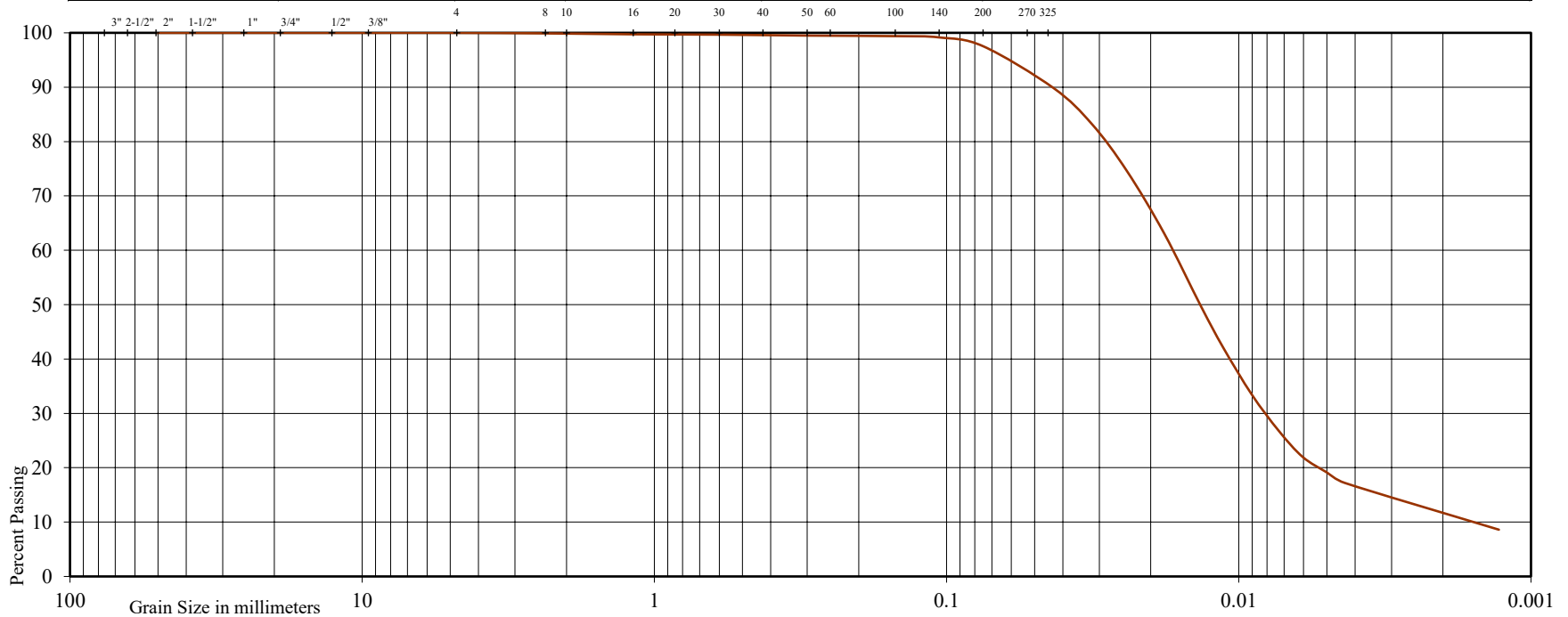


U.S. BUREAU OF SOILS CLASSIFICATION

GRAVEL			SAND				SILT	CLAY
COARSE		FINE	COARSE	MEDIUM	FINE	V. FINE		

UNIFIED SOIL CLASSIFICATION

GRAVEL		SAND			SILT & CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	



Project: Proposed Residential Development

Location: Northwest Corner of The Gore Road and Mayfield Road, Town of Caledon

Borehole No: 25-02

Sample No: 7

Depth (m): 6.3

Elevation (m): 219.0

Liquid Limit (%) = -

Plastic Limit (%) = -

Plasticity Index (%) = -

Moisture Content (%) = 17

Estimated Permeability

(cm./sec.) = 10^{-6}

Classification of Sample [& Group Symbol]: SILT
some clay, a trace of sand



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FAX: (705) 721-7864	FAX: (905) 542-2769	FAX: (905) 725-1315	FAX: (905) 881-8335	FAX: (705) 684-8522	FAX: (905) 542-2769

APPENDIX 'AII'

GEI CONSULTANTS LTD. BOREHOLE AND MONITORING WELL LOGS

REFERENCE NO. 2508-W034

RECORD OF BOREHOLE No. 27



Project Number: **2100463**
 Project Client: **Wildfield Village Landowners Group Inc.**
 Project Name: **Wildfield Village**
 Project Location: **Town of Caledon, ON**
 Drilling Location: **See Borehole Location Plan**
 Local Benchmark: **Geodetic**

Drilling Method: **Solid Stem Augers** Drilling Machine: **Track Mount**
 Logged By: **FH** Northing: **4853049** Date Started: **May 1/23**
 Reviewed By: **RW** Easting: **601870.8** Date Completed: **May 1/23**

LITHOLOGY PROFILE		SOIL SAMPLING				DEPTH (m)	ELEVATION (m)	FIELD TESTING		LAB TESTING		Instrumentation Installation	COMMENTS & GRAIN SIZE DISTRIBUTION (%)			
Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value			Shear Strength Testing (kPa)		Atterberg Limits			GR SA SI CL			
	Geodetic							Penetration Testing		Water Content (%)						
	0.0 226.3							○ SPT	● DCPT	PL	○					
	0.2 226.1							10 20 30 40			10 20 30 40					
	0.8 225.6															
	CLAY AND SILT GLACIAL TILL: Some sand, trace gravel, inferred cobbles and boulders, very stiff, brown, moist															

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Groundwater depth encountered on completion of drilling: Dry
 Groundwater depth observed on: Jul 11/23 at depth of: 3.73 m.



Cave depth after auger removal: Open
 Groundwater Elevation: 222.6 m

Borehole details presented do not constitute a thorough understanding of all potential conditions present and require interpretative assistance from a qualified geotechnical engineer. Also, borehole information should be read in conjunction with the geotechnical report for which it was commissioned and the accompanying 'Explanation of Boring Log'.

Scale: 1 : 75
 Page: 1 of 1

RECORD OF BOREHOLE No. 28-D



Project Number: **2100463**
 Project Client: **Wildfield Village Landowners Group Inc.**
 Project Name: **Wildfield Village**
 Project Location: **Town of Caledon, ON**
 Drilling Location: **See Borehole Location Plan**
 Local Benchmark: **Geodetic**

Drilling Method: **Solid Stem Augers** Drilling Machine: **Track Mount**
 Logged By: **FH** Northing: **4852786** Date Started: **Apr 28/23**
 Reviewed By: **RW** Easting: **601695** Date Completed: **Apr 28/23**

LITHOLOGY PROFILE		SOIL SAMPLING				DEPTH (m)	ELEVATION (m)	FIELD TESTING	LAB TESTING	Instrumentation Installation	COMMENTS & GRAIN SIZE DISTRIBUTION (%)					
Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT "N" Value			Shear Strength Testing (kPa)			Atterberg Limits	Water Content (%)	GR	SA	SI	CL
Geodetic						0.0	226.3									
0.3	TOPSOIL: 305 mm					0.3	226.0									
0.8	WEATHERED/DISTURBED Firm, mottled brown to dark brown, moist	SS	1	100	6			6	15							
0.8	CLAY AND SILT GLACIAL TILL: Some sand, trace gravel, inferred cobbles and boulders, very stiff, brown to dark brown, moist	SS	2	100	16			16	14							
		SS	3	100	26			26	11							
		SS	4	100	28			28	18							
3.4		SS	5	100	62			62	15							
	INFERRED BREDROCK: Weathered shale, grey															
4.6	Borehole Terminated at 4.6 m	AS	6	0	100+			100+								

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Groundwater depth encountered on completion of drilling: Dry Cave depth after auger removal: Open
 Groundwater depth observed on: Jul 11/23 at depth of: -0.6 m. Groundwater Elevation: 226.9 m

Borehole details presented do not constitute a thorough understanding of all potential conditions present and require interpretative assistance from a qualified geotechnical engineer. Also, borehole information should be read in conjunction with the geotechnical report for which it was commissioned and the accompanying 'Explanation of Boring Log'.

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RECORD OF BOREHOLE No. 28-S



Project Number: **2100463**
 Project Client: **Wildfield Village Landowners Group Inc.**
 Project Name: **Wildfield Village**
 Project Location: **Town of Caledon, ON**
 Drilling Location: **See Borehole Location Plan**
 Local Benchmark: **Geodetic**

Drilling Method: **Solid Stem Augers** Drilling Machine: **Track Mount**
 Logged By: **FH** Northing: **4852785** Date Started: **Apr 28/23**
 Reviewed By: **RW** Easting: **601694.2** Date Completed: **Apr 28/23**

LITHOLOGY PROFILE		SOIL SAMPLING				DEPTH (m)	ELEVATION (m)	FIELD TESTING	LAB TESTING		COMMENTS & GRAIN SIZE DISTRIBUTION (%)
Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT "N" Value			Shear Strength Testing (kPa)	Atterberg Limits		
								Other Test + Pocket Penetrometer ▲ Field Vane (Intact) ▲ Field Vane (Remolded)	Combustible Organic Vapour (ppm) Combustible Organic Vapour (%LEL) Total Organic Vapour (ppm)	Water Content (%)	
							Penetration Testing				
							SPT DCPT				
							10 20 30 40	10 20 30 40			

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Groundwater depth encountered on completion of drilling: Dry Cave depth after auger removal: Open
 Groundwater depth observed on: Jul 11/23 at depth of: -0.17 m. Groundwater Elevation: 226.5 m

Borehole details presented do not constitute a thorough understanding of all potential conditions present and require interpretative assistance from a qualified geotechnical engineer. Also, borehole information should be read in conjunction with the geotechnical report for which it was commissioned and the accompanying 'Explanation of Boring Log'.

Scale: 1 : 75
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RECORD OF BOREHOLE No. 29



Project Number: **2100463**
 Project Client: **Wildfield Village Landowners Group Inc.**
 Project Name: **Wildfield Village**
 Project Location: **Town of Caledon, ON**
 Drilling Location: **See Borehole Location Plan**
 Local Benchmark: **Geodetic**

Drilling Method: **Solid Stem Augers** Drilling Machine: **Track Mount**
 Logged By: **FH** Northing: **4852609** Date Started: **Apr 28/23**
 Reviewed By: **RW** Easting: **601513.8** Date Completed: **Apr 28/23**

LITHOLOGY PROFILE		SOIL SAMPLING				DEPTH (m)	ELEVATION (m)	FIELD TESTING		LAB TESTING		Instrumentation Installation	COMMENTS & GRAIN SIZE DISTRIBUTION (%)			
Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT "N" Value			Shear Strength Testing (kPa)		Atterberg Limits			Water Content (%)		GR	SA
	Geodetic							Penetration Testing		PL		LL				
0.0 230.6								○ SPT ● DCPT		○ Water Content (%)						
0.2 230.4		SS	1	100	4	0		○ 4		○ 22						
0.8 229.8		SS	2	100	20	1.5	229.5	○ 20		○ 21						
CLAY AND SILT GLACIAL TILL: Some sand, trace gravel, inferred cobbles and boulders, very stiff, brown to mottled brown, moist		SS	3	100	26			○ 26		○ 15						
		SS	4	100	16		228	○ 16		○ 20						
		SS	5	100	31	3		○ 31		○ 20						
3.4 227.1							226.5			○ 20						
INFERRED BEDROCK: Weathered shale, grey		AS	6	0	100+	4.5		○ 100+ →		○ 20						
							225									
6.2 224.4		AS	7	0	100+	6		○ 100+ →								
Borehole Terminated at 6.2 m																

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Groundwater depth encountered on completion of drilling: 5.4 m. Cave depth after auger removal: Open
 Groundwater depth observed on: Jul 11/23 at depth of: 1.71 m. Groundwater Elevation: 228.9 m

Borehole details presented do not constitute a thorough understanding of all potential conditions present and require interpretative assistance from a qualified geotechnical engineer. Also, borehole information should be read in conjunction with the geotechnical report for which it was commissioned and the accompanying 'Explanation of Boring Log'.

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RECORD OF BOREHOLE No. 30-D



Project Number: **2100463**
 Project Client: **Wildfield Village Landowners Group Inc.**
 Project Name: **Wildfield Village**
 Project Location: **Town of Caledon, ON**
 Drilling Location: **See Borehole Location Plan**
 Local Benchmark: **Geodetic**

Drilling Method: **Solid Stem Augers** Drilling Machine: **Track Mount**
 Logged By: **FH** Northing: **4852437** Date Started: **Apr 28/23**
 Reviewed By: **RW** Easting: **601630.1** Date Completed: **Apr 28/23**

LITHOLOGY PROFILE		SOIL SAMPLING				DEPTH (m)	ELEVATION (m)	FIELD TESTING		LAB TESTING				COMMENTS & GRAIN SIZE DISTRIBUTION (%)			
DESCRIPTION		Sample Type	Sample Number	Recovery (%)	SPT "N" Value			Shear Strength Testing (kPa)		Atterberg Limits							
Geodetic	0.0						229.7										
TOPSOIL: 180 mm	0.2						229.5										
WEATHERED/DISTURBED Firm, brown, moist		SS	1	100	6												
CLAY AND SILT GLACIAL TILL: Some sand, trace gravel, inferred cobbles and boulders, stiff, brown, moist	0.8						228.9										
--- Trace gravel, very stiff, grey/dark brown ---		SS	2	100	12												
		SS	3	100	22												
		SS	4	100	23												
		SS	5	100	20												
--- Stiff, greyish-brown ---		SS	6	0	11												
Borehole Terminated at 5.0 m	5.0						224.7										

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Groundwater depth encountered on completion of drilling: Dry

Groundwater depth observed on: Jul 11/23 at depth of: 1.33 m.



Cave depth after auger removal: Open

Groundwater Elevation: 228.4 m

Borehole details presented do not constitute a thorough understanding of all potential conditions present and require interpretative assistance from a qualified geotechnical engineer. Also, borehole information should be read in conjunction with the geotechnical report for which it was commissioned and the accompanying 'Explanation of Boring Log'.


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RECORD OF BOREHOLE No. 30-S



Project Number: **2100463**
 Project Client: **Wildfield Village Landowners Group Inc.**
 Project Name: **Wildfield Village**
 Project Location: **Town of Caledon, ON**
 Drilling Location: **See Borehole Location Plan**
 Local Benchmark: **Geodetic**

Drilling Method: **Solid Stem Augers** Drilling Machine: **Track Mount**
 Logged By: **FH** Northing: **4852437** Date Started: **Apr 28/23**
 Reviewed By: **RW** Easting: **601629.7** Date Completed: **Apr 28/23**

LITHOLOGY PROFILE		SOIL SAMPLING				DEPTH (m)	ELEVATION (m)	FIELD TESTING		LAB TESTING				Instrumentation Installation	COMMENTS & GRAIN SIZE DISTRIBUTION (%)				
Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT "N" Value			Shear Strength Testing (kPa)		Atterberg Limits					COMMENTS & GRAIN SIZE DISTRIBUTION (%)				
								Other Test	Penetration Testing	Combustible Organic Vapour (ppm)	Combustible Organic Vapour (%LEL)	Total Organic Vapour (ppm)	Water Content (%)		GR	SA	SI	CL	
	Geodetic																		
	0.2 TOPSOIL: 180 mm WEATHERED/DISTURBED Firm, brown, moist					0	229.5												
	0.8 CLAY AND SILT GLACIAL TILL: Some sand, trace gravel, inferred cobbles and boulders, stiff, brown, moist --- Trace gravel, very stiff, grey/dark brown ---					1.5	228												
	3.0 Borehole Terminated at 3.0 m						3												

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Groundwater depth encountered on completion of drilling: Dry Cave depth after auger removal: Open
 Groundwater depth observed on: Jul 11/23 at depth of: 0.64 m. Groundwater Elevation: 229.1 m

Borehole details presented do not constitute a thorough understanding of all potential conditions present and require interpretative assistance from a qualified geotechnical engineer. Also, borehole information should be read in conjunction with the geotechnical report for which it was commissioned and the accompanying 'Explanation of Boring Log'.

Scale: 1 : 75
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RECORD OF BOREHOLE No. 36



Project Number: **2100463**
 Project Client: **Wildfield Village Landowners Group Inc.**
 Project Name: **Wildfield Village**
 Project Location: **Town of Caledon, ON**
 Drilling Location: **See Borehole Location Plan**
 Local Benchmark: **Geodetic**

Drilling Method: **Solid Stem Augers** Drilling Machine: **Track Mount**
 Logged By: **FH** Northing: **4852605** Date Started: **Apr 28/23**
 Reviewed By: **RW** Easting: **601914.3** Date Completed: **Apr 28/23**

LITHOLOGY PROFILE		SOIL SAMPLING				DEPTH (m)	ELEVATION (m)	FIELD TESTING		LAB TESTING		Instrumentation Installation	COMMENTS & GRAIN SIZE DISTRIBUTION (%)			
Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value			Shear Strength Testing (kPa)		Atterberg Limits						
	Geodetic							Penetration Testing		Water Content (%)						
	0.0							○ SPT ● DCPT		PL LL						
	0.2							40 80 120 160		10 20 30 40						
	0.2	TOPSOIL: 255 mm				0	225	○ 9		○ 17						
	0.8	WEATHERED/DISTURBED Soft, mottled brown, moist	SS	1	100			○ 21		○ 18						
	0.8	CLAY AND SILT GLACIAL TILL: Trace sand, trace gravel, inferred cobbles and boulders, very stiff, mottled brown, moist	SS	2	100											
			SS	3	100	1.5	223.5	○ 24		○ 21						
			SS	4	100			○ 27		○ 19						
		--- Some gravel, dark brown ---	SS	5	100	3	222	○ 22		○ 18						
	4.9	SANDY SILT GLACIAL TILL: Some gravel, inferred cobbles and boulders, compact, grey, moist	SS	6	100	4.5	220.5	○ 27		○ 19						
	6.2					6				○ 17						
	6.4	INFERRED BEDROCK: Highly weathered shale, grey Borehole Terminated at 6.4 m	SS	7	100		219	50+		○ 17						

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Groundwater depth encountered on completion of drilling: Dry Cave depth after auger removal: Open
 Groundwater depth observed on: Jul 11/23 at depth of: 1.53 m. Groundwater Elevation: 223.6 m

Borehole details presented do not constitute a thorough understanding of all potential conditions present and require interpretative assistance from a qualified geotechnical engineer. Also, borehole information should be read in conjunction with the geotechnical report for which it was commissioned and the accompanying 'Explanation of Boring Log'.

Scale: 1 : 75
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RECORD OF BOREHOLE No. 38-D



Project Number: **2100463**
 Project Client: **Wildfield Village Landowners Group Inc.**
 Project Name: **Wildfield Village**
 Project Location: **Town of Caledon, ON**
 Drilling Location: **See Borehole Location Plan**
 Local Benchmark: **Geodetic**

Drilling Method: **Solid Stem Augers** Drilling Machine: **Track Mount**
 Logged By: **FH** Northing: **4852629** Date Started: **Apr 28/23**
 Reviewed By: **RW** Easting: **602168.9** Date Completed: **Apr 28/23**

LITHOLOGY PROFILE		SOIL SAMPLING				DEPTH (m)	ELEVATION (m)	FIELD TESTING		LAB TESTING		Instrumentation Installation	COMMENTS & GRAIN SIZE DISTRIBUTION (%)			
DESCRIPTION		Sample Type	Sample Number	Recovery (%)	SPT "N" Value			Shear Strength Testing (kPa)	Penetration Testing	Atterberg Limits	Water Content (%)		GR SA SI CL			
Geodetic						0.0	221.3									
TOPSOIL: 150 mm		SS	1	100	6	0.2	221.1									
WEATHERED/DISTURBED Firm, mottled brown, moist						0.8	220.5									
CLAY AND SILT GLACIAL TILL: Trace sand, trace gravel, inferred cobbles and boulders, very stiff, brown/grey, moist		SS	2	100	19											
		SS	3	100	20											
SANDY SILT GLACIAL TILL: Trace gravel, trace clay, cobbles and boulders, dense, brown, moist		SS	4	100	49	2.3	219.0									
--- Compact, wet ---		SS	5	100	24											
		SS	6	100	30											
SAND AND SILT GLACIAL TILL: Some shale fragments, trace gravel, trace clay, very dense, grey, moist		SS	7	100	66	6.1	215.2									
Borehole Terminated at 6.6 m						6.6										

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Groundwater depth encountered on completion of drilling: 3.5 m. Cave depth after auger removal: Open
 Groundwater depth observed on: Jul 11/23 at depth of: 0.64 m. Groundwater Elevation: 220.6 m

Borehole details presented do not constitute a thorough understanding of all potential conditions present and require interpretative assistance from a qualified geotechnical engineer. Also, borehole information should be read in conjunction with the geotechnical report for which it was commissioned and the accompanying 'Explanation of Boring Log'.

Scale: 1 : 75
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RECORD OF BOREHOLE No. 38-S



Project Number: **2100463**
 Project Client: **Wildfield Village Landowners Group Inc.**
 Project Name: **Wildfield Village**
 Project Location: **Town of Caledon, ON**
 Drilling Location: **See Borehole Location Plan**
 Local Benchmark: **Geodetic**

Drilling Method: **Solid Stem Augers** Drilling Machine: **Track Mount**
 Logged By: **FH** Northing: **4852629** Date Started: **Apr 28/23**
 Reviewed By: **RW** Easting: **602168.5** Date Completed: **Apr 28/23**

LITHOLOGY PROFILE		SOIL SAMPLING				DEPTH (m)	ELEVATION (m)	FIELD TESTING		LAB TESTING				Instrumentation Installation	COMMENTS & GRAIN SIZE DISTRIBUTION (%)					
Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT "N" Value			Shear Strength Testing (kPa)		Penetration Testing		Atterberg Limits			Water Content (%)		GR	SA	SI	CL
								×	+	▲	△	○	●		PL	LL				
	Geodetic 0.0 221.3					0														
	0.2 221.1 TOPSOIL: 150 mm																			
	WEATHERED/DISTURBED Firm, mottled brown, moist					220.5														
	0.8 220.5 CLAY AND SILT GLACIAL TILL: Trace sand, trace gravel, inferred cobbles and boulders, very stiff, brown/grey, moist					1.5														
	2.3 219.0 SANDY SILT GLACIAL TILL: Trace gravel, trace clay, inferred cobbles and boulders, dense, brown, moist					219														
	3.7 217.6 Borehole Terminated at 3.7 m					3														

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Groundwater depth encountered on completion of drilling: 3.5 m. Cave depth after auger removal: Open
 Groundwater depth observed on: Jul 11/23 at depth of: 0.64 m. Groundwater Elevation: 220.6 m

Borehole details presented do not constitute a thorough understanding of all potential conditions present and require interpretative assistance from a qualified geotechnical engineer. Also, borehole information should be read in conjunction with the geotechnical report for which it was commissioned and the accompanying 'Explanation of Boring Log'.

Scale: 1 : 75
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RECORD OF BOREHOLE No. 39-D



Project Number: **2100463**
 Project Client: **Wildfield Village Landowners Group Inc.**
 Project Name: **Wildfield Village**
 Project Location: **Town of Caledon, ON**
 Drilling Location: **See Borehole Location Plan**
 Local Benchmark: **Geodetic**

Drilling Method: **Solid Stem Augers** Drilling Machine: **Track Mount**
 Logged By: **FH** Northing: **4852542** Date Started: **Apr 28/23**
 Reviewed By: **RW** Easting: **602171.6** Date Completed: **Apr 28/23**

LITHOLOGY PROFILE		SOIL SAMPLING				DEPTH (m)	ELEVATION (m)	FIELD TESTING		LAB TESTING		Instrumentation Installation	COMMENTS & GRAIN SIZE DISTRIBUTION (%)				
DESCRIPTION		Sample Type	Sample Number	Recovery (%)	SPT "N" Value			Shear Strength Testing (kPa)		Atterberg Limits			GR SA SI CL				
Geodetic								X Other Test + Pocket Penetrometer ▲ Field Vane (Intact) △ Field Vane (Remolded) ○ SPT ● DCPT		△ Combustible Organic Vapour (ppm) ▲ Combustible Organic Vapour (%LEL) ◇ Total Organic Vapour (ppm)							
TOPSOIL: 150 mm		SS	1	100	6	0	221.5	6		14							
WEATHERED/DISTURBED Firm, mottled brown, moist								25		17							
CLAY AND SILT GLACIAL TILL: Trace sand, trace gravel, inferred cobbles and boulders, very stiff, brown, moist		SS	2	100	25	1.5	220.5	21		23							
---		SS	3	100	21			34		37							
Hard		SS	4	100	34	3	219	37		15							
Grey		SS	5	100	37	4.5	217.5	50+		16							
SANDY SILT: Trace clay, very dense, grey, moist		SS	6	100	50+	6	216	50+		8			2 53 36 9				
SAND AND SILT GLACIAL TILL: Trace clay, trace gravel, inferred cobbles and boulders, very dense, grey, moist		SS	7	100	50+												
Borehole Terminated at 6.4 m																	

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Groundwater depth encountered on completion of drilling: Dry Cave depth after auger removal: Open
 Groundwater depth observed on: Jul 11/23 at depth of: 0.49 m. Groundwater Elevation: 221.0 m

Borehole details presented do not constitute a thorough understanding of all potential conditions present and require interpretative assistance from a qualified geotechnical engineer. Also, borehole information should be read in conjunction with the geotechnical report for which it was commissioned and the accompanying 'Explanation of Boring Log'.

Scale: 1 : 75
 Page: 1 of 1

RECORD OF BOREHOLE No. 39-S



Project Number:	<u>2100463</u>
Project Client:	<u>Wildfield Village Landowners Group Inc.</u>
Project Name:	<u>Wildfield Village</u>
Project Location:	<u>Town of Caledon, ON</u>
Drilling Location:	<u>See Borehole Location Plan</u>
Local Benchmark:	<u>Geodetic</u>

Drilling Method:	<u>Solid Stem Augers</u>	Drilling Machine:	<u>Track Mount</u>
Logged By:	<u>FH</u>	Northing:	<u>4852543</u>
Reviewed By:	<u>RW</u>	Easting:	<u>602172.1</u>
		Date Started:	<u>Apr 28/23</u>
		Date Completed:	<u>Apr 28/23</u>

[illegible]

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	Groundwater depth encountered on completion of drilling: Dry		Cave depth after auger removal: Open
	Groundwater depth observed on: Jul 11/23 at depth of: 0.4 m.		Groundwater Elevation: 221.2 m

Borehole details presented do not constitute a thorough understanding of all potential conditions present and require interpretative assistance from a qualified geotechnical engineer. Also, borehole information should be read in conjunction with the geotechnical report for which it was commissioned and the accompanying 'Explanation of Boring Log'.

Scale: 1 : 75
Page: 1 of 1

RECORD OF BOREHOLE No. 40



Project Number: **2100463**
 Project Client: **Wildfield Village Landowners Group Inc.**
 Project Name: **Wildfield Village**
 Project Location: **Town of Caledon, ON**
 Drilling Location: **See Borehole Location Plan**
 Local Benchmark: **Geodetic**

Drilling Method: **Solid Stem Augers** Drilling Machine: **Track Mount**
 Logged By: **FH** Northing: **4852203** Date Started: **Apr 28/23**
 Reviewed By: **RW** Easting: **601919.2** Date Completed: **Apr 28/23**

LITHOLOGY PROFILE		SOIL SAMPLING				DEPTH (m)	ELEVATION (m)	FIELD TESTING		LAB TESTING		Instrumentation Installation	COMMENTS & GRAIN SIZE DISTRIBUTION (%)			
Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value			Shear Strength Testing (kPa)		Atterberg Limits			GR SA SI CL			
	Geodetic							X Other Test + Pocket Penetrometer ▲ Field Vane (Intact) △ Field Vane (Remolded)		△ Combustible Organic Vapour (ppm) ▲ Combustible Organic Vapour (%LEL) ◇ Total Organic Vapour (ppm)						
	0.0 225.7							40 80 120 160		PL Water Content (%) LL						
	0.2 225.5							Penetration Testing ○ SPT ● DCPT								
	0.8 224.9	SS	1	100	6			10 20 30 40		10 20 30 40						
	CLAY AND SILT GLACIAL TILL: Trace sand, trace gravel, inferred cobbles and boulders, very stiff, brown, moist	SS	2	100	19											
		SS	3	100	22											
		SS	4	100	22											
	--- Stiff ---	SS	5	100	9											
		SS	6	100	6											
	--- Firm ---															
	6.6 219.1	SS	7	100	8											
	Borehole Terminated at 6.6 m															

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Groundwater depth encountered on completion of drilling: Dry Cave depth after auger removal: Open
 Groundwater depth observed on: Jul 11/23 at depth of: 0.63 m. Groundwater Elevation: 225.0 m

Borehole details presented do not constitute a thorough understanding of all potential conditions present and require interpretative assistance from a qualified geotechnical engineer. Also, borehole information should be read in conjunction with the geotechnical report for which it was commissioned and the accompanying 'Explanation of Boring Log'.

Scale: 1 : 75
 Page: 1 of 1



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APPENDIX 'B'

MECP WATER WELL RECORDS SUMMARY

REFERENCE NO. 2508-W034

MECP Well Records Summary

WELL ID	MECP* WWR ID	Construction Method	Well Depth (m)**	Well Usage		Static Water Level (m)**	Top of Screen Depth (m)**	Bottom of Screen Depth (m)**	Date Completed
				Final Status	First Use				
1	4900125	Boring	15.2	Abandoned-Quality	Not Used	-	-	-	1961-09-12
2	4900126	Cable Tool	30.5	Water Supply	Domestic	20.7	-	-	1963-11-28
3	4900128	Boring	13.4	Water Supply	Domestic	4.6	-	-	1957-08-28
4	4900129	Boring	14.3	Water Supply	Domestic	6.7	-	-	1959-08-17
5	4900130	Cable Tool	12.8	Water Supply	Domestic	7.3	-	-	1959-10-20
6	4900131	Boring	15.8	Water Supply	Domestic	9.8	-	-	1964-11-05
7	4900196	Boring	11.6	Water Supply	Domestic	7.3	-	-	1960-03-04
8	4900197	Cable Tool	36.0	Abandoned-Quality	Not Used	24.4	-	-	1960-12-07
9	4900198	Boring	18.3	Water Supply	Domestic	9.8	-	-	1962-08-11
10	4900199	Boring	18.6	Water Supply	Domestic	9.1	-	-	1962-07-03
11	4900202	Boring	12.5	Water Supply	Domestic	9.1	-	-	1964-10-29
12	4900204	Boring	12.8	Water Supply	Domestic	6.7	-	-	1965-12-01
13	4902827	Boring	15.5	Water Supply	Public	7.9	-	-	1957-10-22
14	4902854	Cable Tool	18.9	Water Supply	Livestock	3.7	-	-	1947-06-17
15	4902855	Cable Tool	21.0	Water Supply	Domestic	11.6	20.4	21.0	1950-09-16
16	4902857	Boring	11.9	Water Supply	Domestic	4.6	-	-	1955-11-26
17	4902858	Boring	8.5	Water Supply	Domestic	5.5	-	-	1956-02-15
18	4902859	Boring	12.8	Water Supply	Domestic	2.4	-	-	1956-06-09
19	4903792	Cable Tool	42.7	Water Supply	Domestic	6.1	-	-	1972-03-19
20	4903873	Boring	12.8	Water Supply	Domestic	6.1	-	-	1972-07-19
21	4904529	Boring	15.2	Water Supply	Domestic	7.6	-	-	1974-10-25
22	4904722	Boring	13.7	Water Supply	Domestic	10.1	-	-	1975-08-11
23	4904853	Cable Tool	27.7	Water Supply	Domestic	4.6	-	-	1975-06-30
24	4904867	Boring	12.8	Water Supply	Domestic	4.6	-	-	1976-04-23
25	4904869	Boring	15.8	Water Supply	Domestic	6.1	-	-	1976-04-26
26	4906370	Boring	13.7	Water Supply	Domestic	4.6	-	-	1985-07-12
27	4906371	Boring	12.5	Water Supply	Domestic	4.6	-	-	1985-07-12
28	4908824	Other Method	-	Abandoned-Other	Not Used	-	-	-	2001-06-18
29	4910288	Boring	13.7	Observation Wells	-	-	12.2	13.7	2006-06-02
30	7148981	Rotary (Convent.)	7.6	Test Hole	Test Hole	-	4.6	7.6	2010-06-29
31	7191477	Direct Push	9.1	Test Hole	Monitoring and Test Hole	-	6.1	9.1	2012-11-05
32	7191478	Direct Push	8.5	Test Hole	Monitoring and Test Hole	-	5.5	8.5	2012-11-05
33	7191479	Direct Push	9.1	Test Hole	Monitoring and Test Hole	-	6.1	9.1	2012-11-05
34	7198372	-	-	Abandoned-Other	-	-	-	-	2012-06-28
35	7198373	-	-	Abandoned-Other	-	-	-	-	2012-07-18
36	7205178	Direct Push	7.3	Test Hole	Monitoring and Test Hole	-	4.3	7.3	2013-07-08
37	7205179	Other Method	6.7	Test Hole	Monitoring and Test Hole	-	3.7	6.7	2013-07-08
38	7205180	Other Method	6.4	Test Hole	Monitoring and Test Hole	-	4.9	6.4	1900-01-00
39	7245037	Rotary (Convent.)	5.5	Test Hole	Monitoring and Test Hole	-	2.4	5.5	2015-06-15

MECP Well Records Summary

WELL ID	MECP* WWR ID	Construction Method	Well Depth (m)**	Well Usage		Static Water Level (m)**	Top of Screen Depth (m)**	Bottom of Screen Depth (m)**	Date Completed
				Final Status	First Use				
40	7248969	Rotary (Convent.)	7.6	Monitoring and Test Hole	Monitoring and Test Hole	-	4.6	7.6	2015-06-26
41	7259056	-	-	-	-	-	-	-	2015-09-29
42	7267911	-	-	-	-	-	-	-	-
43	7296878	-	-	-	-	-	-	-	2017-08-25
44	7315997	-	-	Abandoned-Other	-	-	-	-	-
45	7318861	-	-	Abandoned-Other	-	-	4.6	6.1	-
46	7320492	Boring	4.6	Observation Wells	Test Hole	-	3.0	4.6	2018-08-30
47	7320493	Boring	4.6	Observation Wells	Test Hole	-	3.0	4.6	2018-08-30
48	7321465	Boring	9.1	Observation Wells	Test Hole	-	6.1	9.1	2018-09-24
49	7321466	Boring	9.1	Observation Wells	Test Hole	-	6.1	9.1	2018-09-21
50	7321467	Boring	9.1	Observation Wells	Test Hole	-	6.1	9.1	2018-09-21
51	7321468	Boring	9.1	Observation Wells	Test Hole	-	6.1	9.1	2018-09-20
52	7321469	Boring	9.1	Test Hole	Test Hole	-	6.1	9.1	2018-09-20
53	7321470	Boring	-	Test Hole	Test Hole	-	6.1	9.1	2018-09-24
54	7321471	Boring	-	Observation Wells	Test Hole	-	6.1	9.1	2018-09-27
55	7321472	Boring	-	Observation Wells	Test Hole	-	6.1	9.1	2018-09-27
56	7321473	Boring	-	Observation Wells	Test Hole	-	6.1	9.1	2018-09-26
57	7321474	Boring	-	Observation Wells	Test Hole	-	6.1	9.1	2018-09-26
58	7330714	Rotary (Convent.)	4.6	Monitoring and Test Hole	Test Hole	-	1.5	4.6	2019-03-06
59	7331384	Other Method	11.6	Observation Wells	Monitoring	-	8.5	11.6	2019-02-14
60	7331410	Other Method	15.2	Observation Wells	Monitoring	-	12.2	15.2	2019-02-20
61	7332677	Other Method	6.1	Observation Wells	Monitoring	-	3.0	6.1	2018-11-16
62	7338036	Other Method	12.2	Test Hole	Test Hole	-	9.1	12.2	2019-06-26
63	7338037	Other Method	12.2	Observation Wells	Test Hole	-	9.1	12.2	2019-06-25
64	7338038	Other Method	6.1	Test Hole	Test Hole	-	3.0	6.1	2019-06-24
65	7338039	Other Method	6.1	Test Hole	Monitoring	-	3.0	6.1	2019-06-24
66	7338040	Other Method	6.1	Test Hole	Test Hole	-	3.0	6.1	2019-06-27
67	7338041	Other Method	12.2	Test Hole	Test Hole	-	9.1	12.2	2019-06-25
68	7338042	Other Method	6.1	Test Hole	Test Hole	-	3.0	6.1	2019-06-24
69	7338043	Other Method	6.1	Test Hole	Test Hole	-	3.0	6.1	2019-06-27
70	7338044	Other Method	12.2	Test Hole	Test Hole	-	9.1	12.2	2019-06-25
71	7338045	Other Method	6.1	Monitoring and Test Hole	Test Hole	-	3.0	6.1	2019-06-27
72	7338046	Other Method	6.1	Test Hole	Test Hole	-	3.0	6.1	2019-06-29
73	7338047	Other Method	6.1	Test Hole	Test Hole	-	3.0	6.1	2019-06-24
74	7361427	-	-	-	-	-	-	-	2020-03-25
75	7362858	-	-	Abandoned-Other	-	-	-	-	2020-06-25
76	7374557	-	-	-	-	-	-	-	2020-03-25
77	7384379	-	-	Abandoned-Other	-	-	-	-	2021-03-25

MECP Well Records Summary

WELL ID	MECP* WWR ID	Construction Method	Well Depth (m)**	Well Usage		Static Water Level (m)**	Top of Screen Depth (m)**	Bottom of Screen Depth (m)**	Date Completed
				Final Status	First Use				
78	7384590	-	-	-	-	-	-	-	2021-03-15
79	7389740	-	-	Abandoned-Other	-	-	-	-	2021-06-03
80	7415978	-	-	-	-	-	-	-	2021-12-22

Notes:

*MECP WWID: Ministry of the Environment, Conservation and Parks Water Well Records Identification

**Metres below ground surface



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APPENDIX 'C'

IN-SITU HYDRAULIC CONDUCTIVITY TESTING DETAILS

REFERENCE NO. 2508-W034

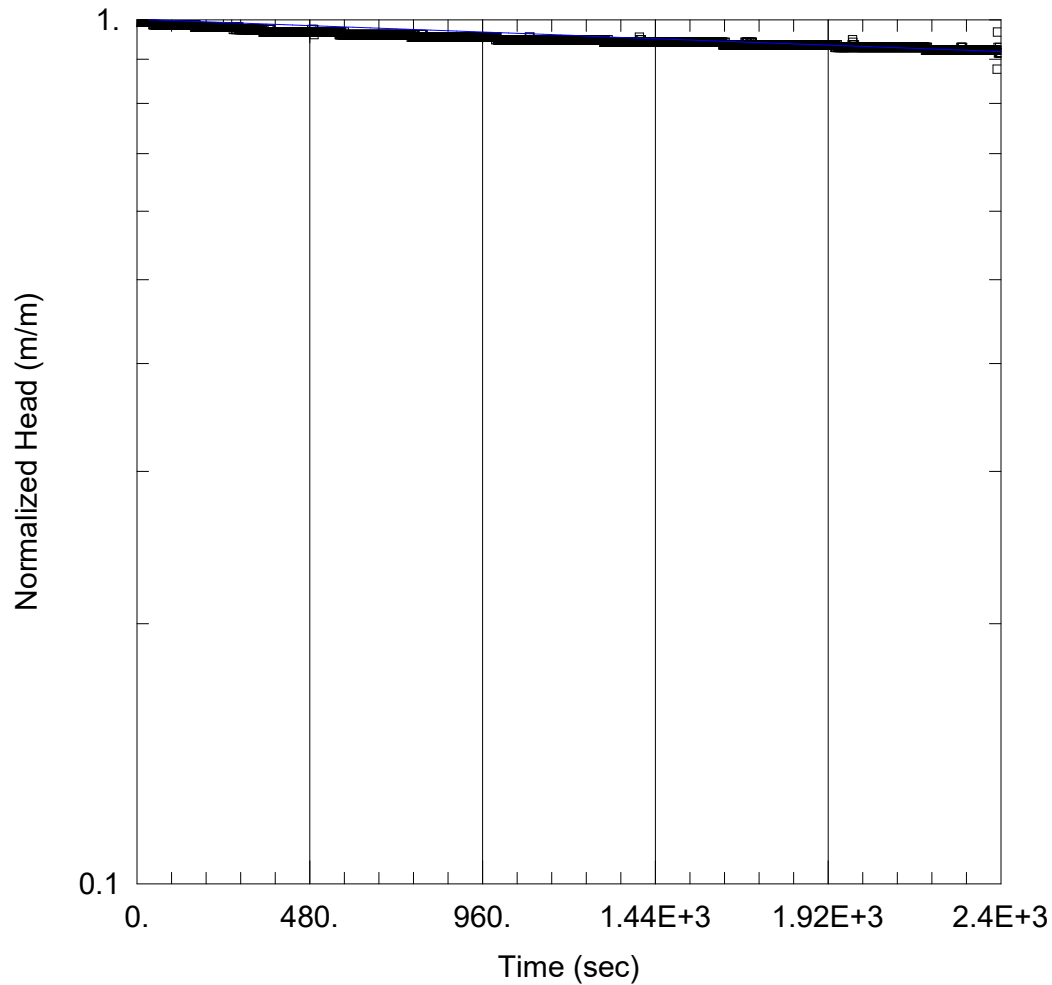
Falling Head SWRT of BHMW 25-02

Prepared By:
Soil Engineers Ltd.

Prepared For:
Trinity Field Inc.

Project:
2508-W034

Location:
The Gore Rd. and Mayfield Rd,



SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

$K = 2.726E-8$ m/sec $y_0 = 0.4625$ m

AQUIFER DATA

Saturated Thickness: 2.9 m Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (BHMW 2)

Initial Displacement: 0.462 m
Static Water Column Height: 2.9 m
Total Well Penetration Depth: 2.9 m
Screen Length: 1.5 m
Casing Radius: 0.0254 m
Well Radius: 0.0254 m

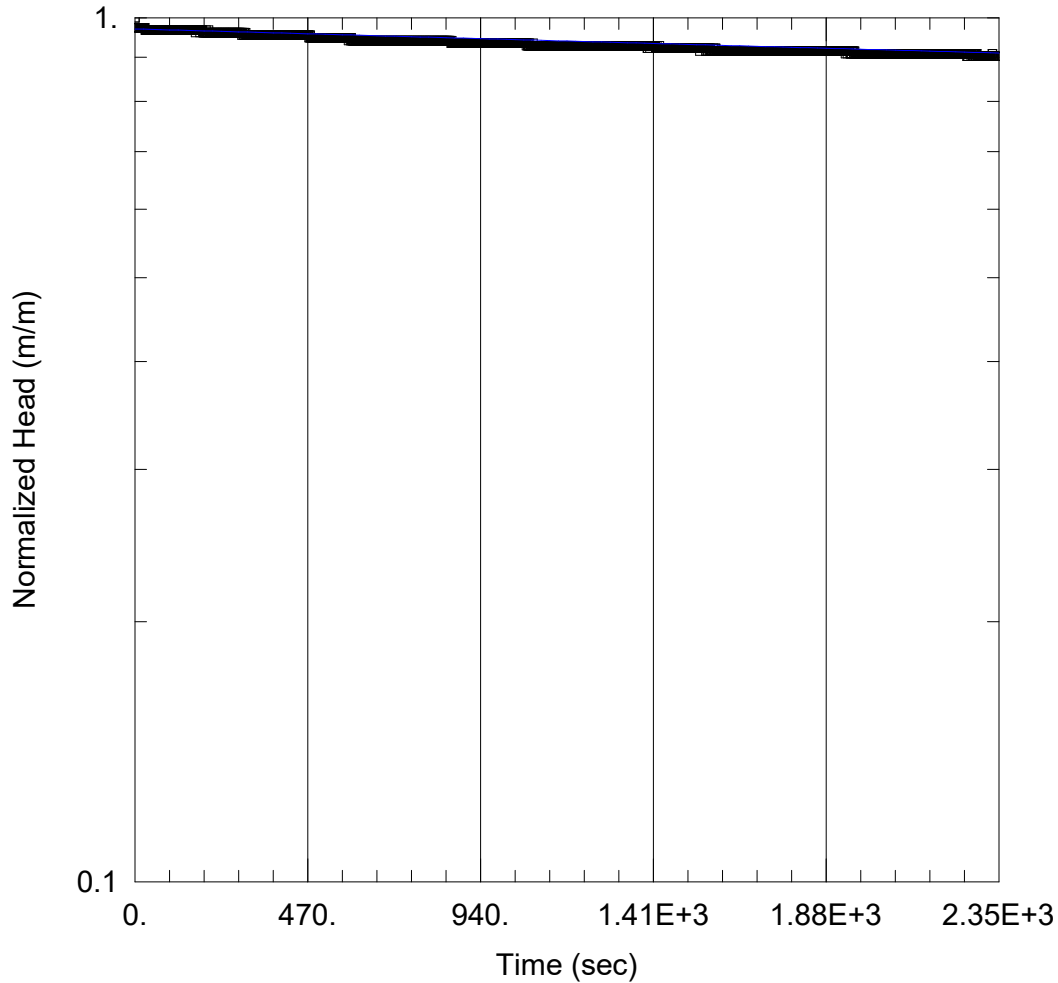
Falling Head SWRT of BHMW 25-06

Prepared By:
Soil Engineers Ltd.

Prepared For:
Trinity Field Inc.

Project:
2508-W034

Location:
The Gore Rd. and Mayfield Rd,



SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

$K = 2.068E-8$ m/sec $y_0 = 0.4454$ m

AQUIFER DATA

Saturated Thickness: 2.8 m Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (BHMW 6)

Initial Displacement: 0.459 m
Static Water Column Height: 2.8 m
Total Well Penetration Depth: 2.8 m
Screen Length: 1.5 m
Casing Radius: 0.0254 m
Well Radius: 0.0254 m

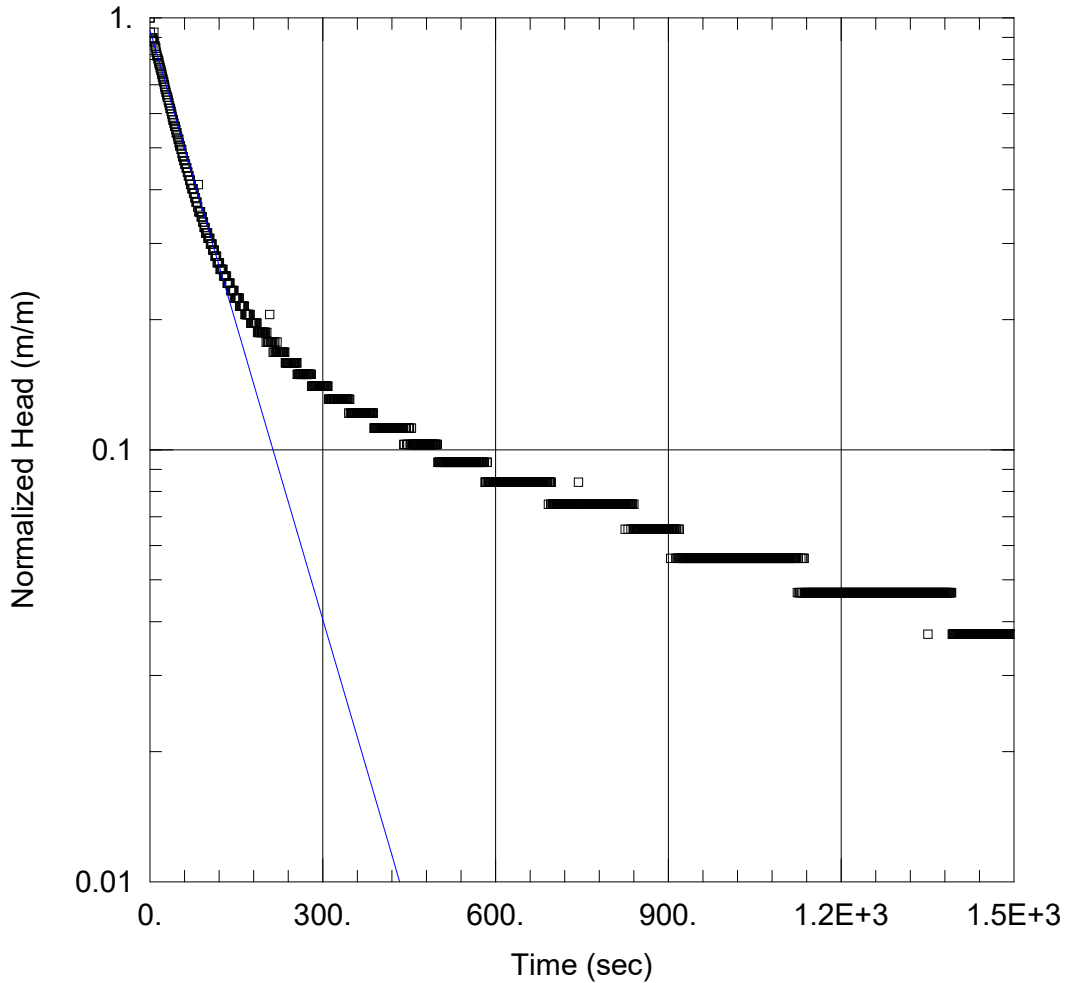
Falling Head SWRT of GEI-BHMW 29

Prepared By:
Soil Engineers Ltd.

Prepared For:
Trinity Field Inc.

Project:
2508-W034

Location:
The Gore Rd. and Mayfield Rd,



SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

$K = 8.021E-6$ m/sec $y_0 = 0.3$ m

AQUIFER DATA

Saturated Thickness: 3. m Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (BHMW 29)

Initial Displacement: 0.321 m
Static Water Column Height: 3. m
Total Well Penetration Depth: 3. m
Screen Length: 1.5 m
Casing Radius: 0.0254 m
Well Radius: 0.0254 m

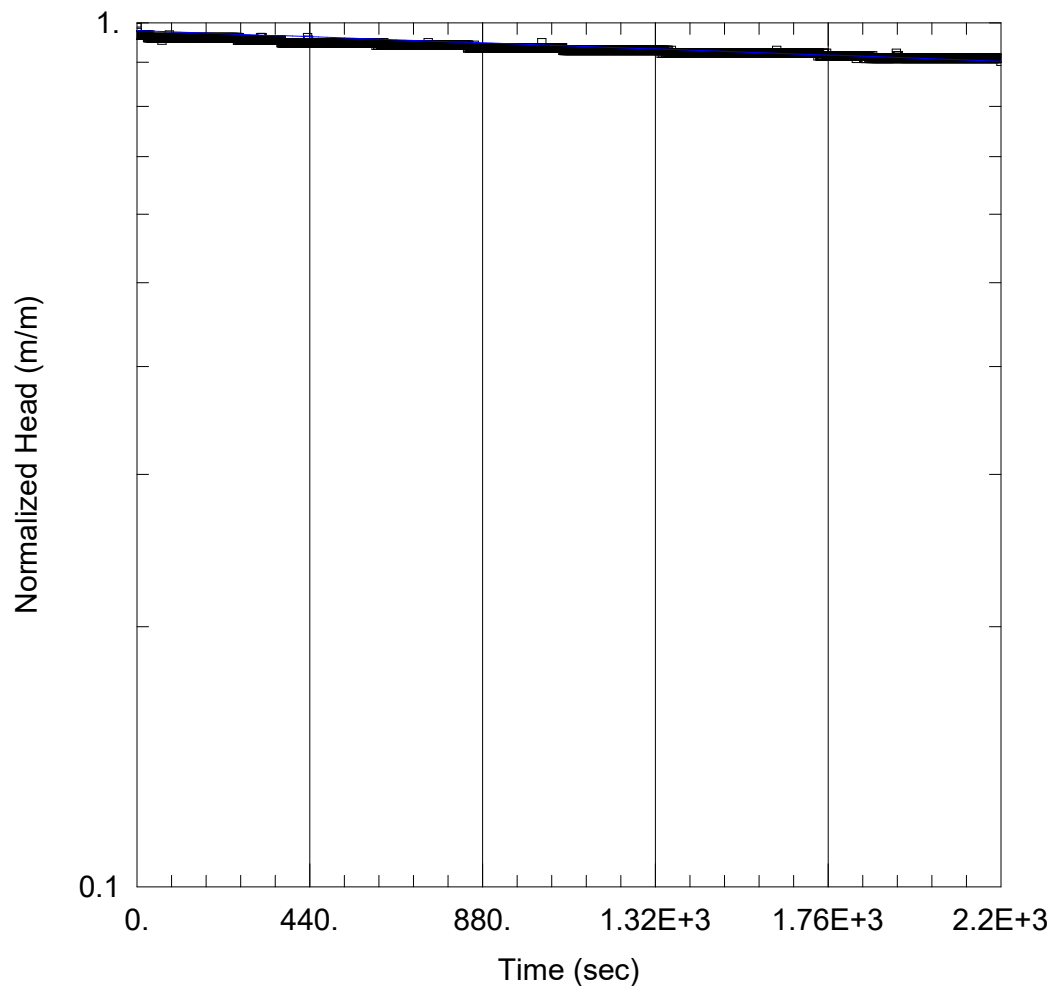
Falling Head SWRT of GEI-BHWM 36

Prepared By:
Soil Engineers Ltd.

Prepared For:
Trinity Field Inc.

Project:
2508-W034

Location:
The Gore Rd. and Mayfield Rd,



SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

$K = 2.815E-8$ m/sec $y_0 = 0.4523$ m

AQUIFER DATA

Saturated Thickness: 2.6 m Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (BHMW 36)

Initial Displacement: 0.462 m
Static Water Column Height: 4.1 m
Total Well Penetration Depth: 2.9 m
Screen Length: 1.5 m
Casing Radius: 0.0254 m
Well Radius: 0.0254 m

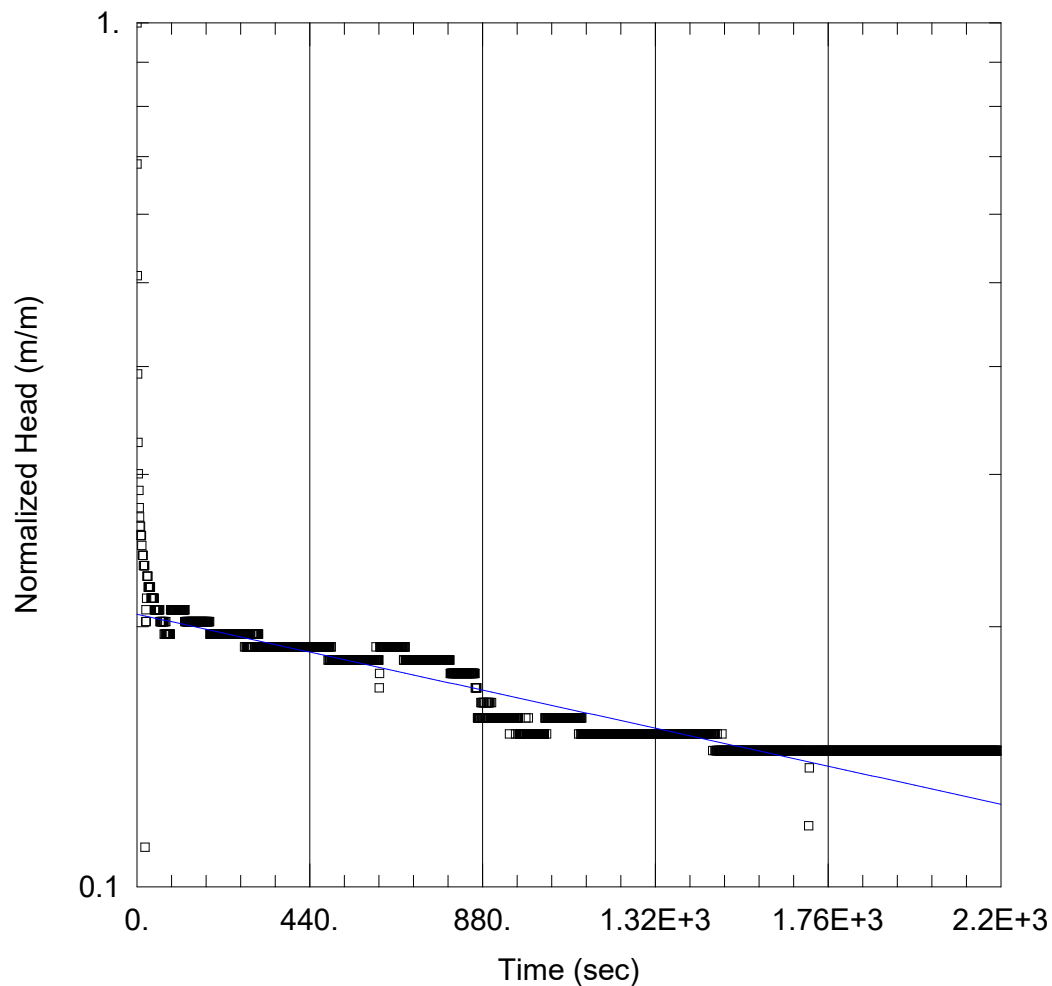
Falling Head SWRT of GEI-BHMW 38D

Prepared By:
Soil Engineers Ltd.

Prepared For:
Trinity Field Inc.

Project:
2508-W034

Location:
The Gore Rd. and Mayfield Rd,



SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

$K = 2.497E-7$ m/sec $y_0 = 0.09491$ m

AQUIFER DATA

Saturated Thickness: 1. m Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (BHMW 38D)

Initial Displacement: 0.459 m
Static Water Column Height: 0.315 m
Total Well Penetration Depth: 2.5 m
Screen Length: 1.5 m
Casing Radius: 0.0254 m
Well Radius: 0.0254 m

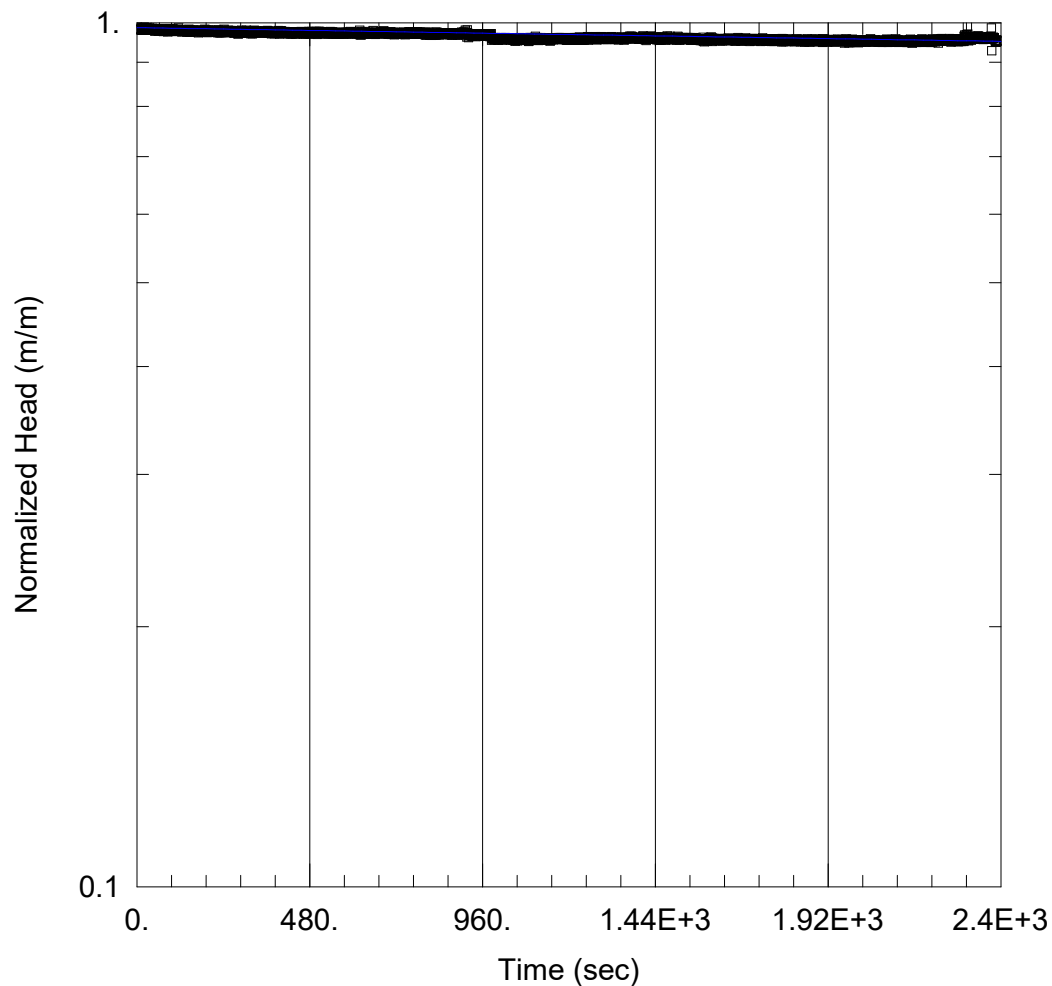
Falling Head SWRT of GEI-BHMW 40

Prepared By:
Soil Engineers Ltd.

Prepared For:
Trinity Field Inc.

Project:
2508-W034

Location:
The Gore Rd. and Mayfield Rd,



SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

$K = 1.128E-8$ m/sec $y_0 = 0.1513$ m

AQUIFER DATA

Saturated Thickness: 1.9 m Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (BHMW 40)

Initial Displacement: 0.1533 m
Static Water Column Height: 1.9 m
Total Well Penetration Depth: 2.5 m
Screen Length: 1.5 m
Casing Radius: 0.0254 m
Well Radius: 0.0254 m



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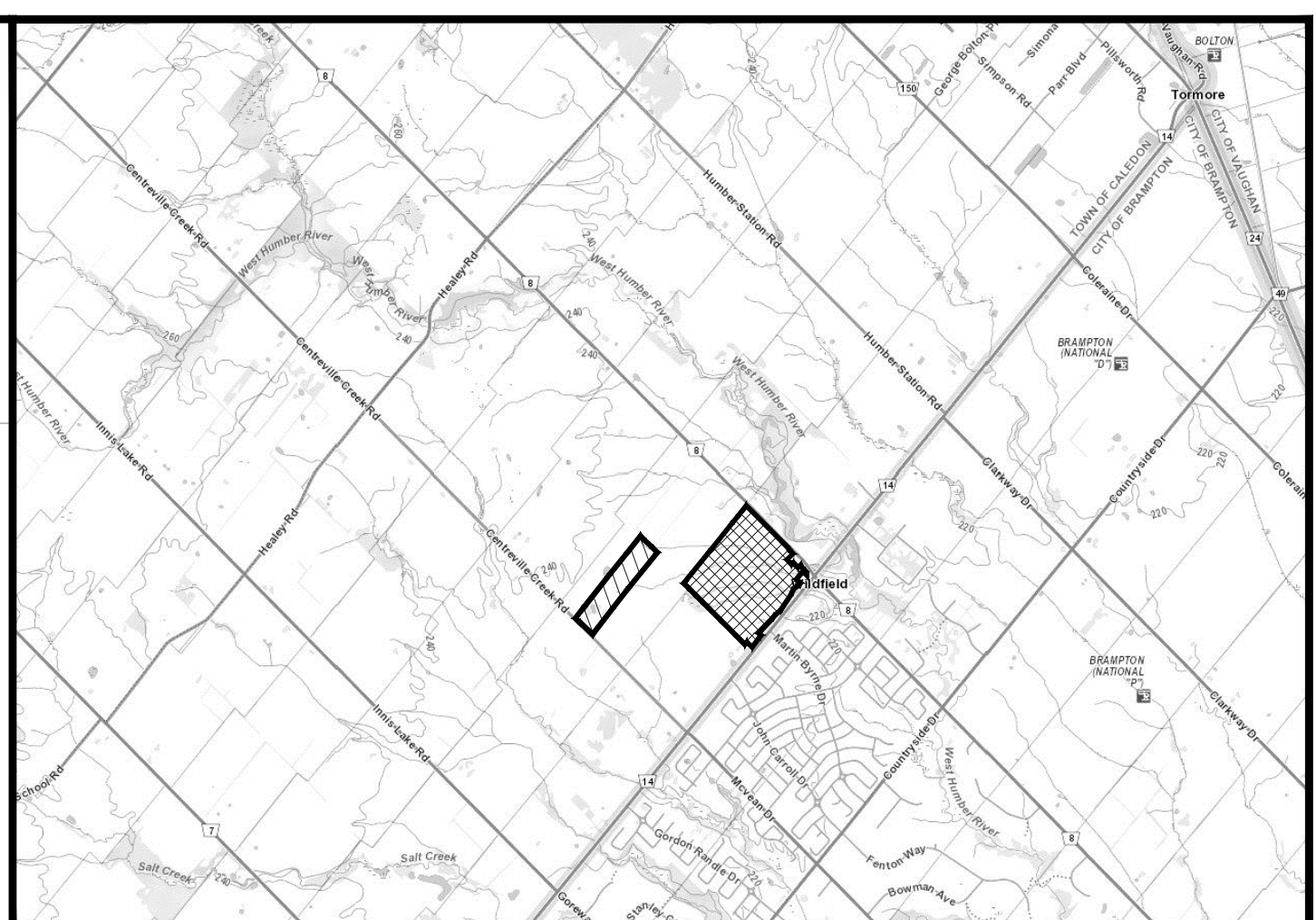
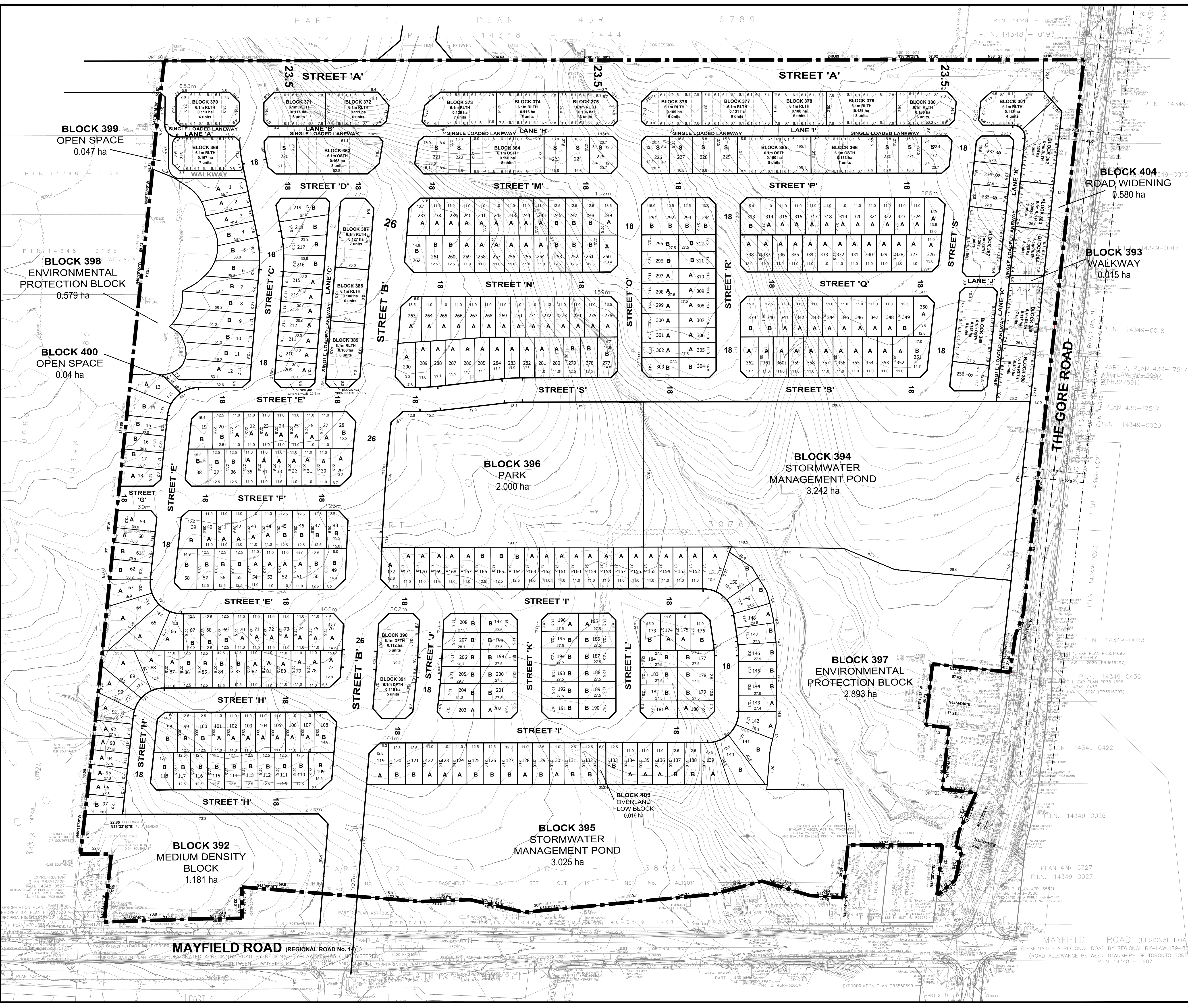
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APPENDIX 'D'

REVIEWED PLANS

REFERENCE NO. 2508-W034



LAND USE - AREA TABLE				
	24107-3A	27dp	Oct 6, 2025	
Single Family Residential	Lots	1-362	13.436	ha±
On-Street Townhouses	Blocks	363-368	0.893	
Rear Lane Townhouses	Blocks	369-389	2.402	
Double Frontage Townhouses	Blocks	390-391	0.027	
Medium Density Block	Block	392	1.181	
Walkway	Block	393	0.015	
Stormwater Management Ponds	Blocks	394-395	6.267	
Park	Block	396	2.000	
Environmental Protection	Blocks	397-398	3.472	
Open Space	Blocks	399-402	0.115	
Overland Flow Block	Block	403	0.019	
Road Widening	Block	404	0.580	
Roads and Lanes			10.692	
Total			41.299	ha±

ROADS		
26.0m Public R.O.W.	597	1.563
23.5m Public R.O.W.	653	1.537
18.0m Public R.O.W.	3.669	6.798
8.0m Public Lane	963	0.795
Total	5,882	10.692

PRELIMINARY UNIT COUNT		
11.0m Single Detached	A	211
12.5m Single Detached	B	134
8.4m Semi-Detached	S	34
On-Street Townhouses		46
Rear Lane Townhouses		131
Double Frontage Townhouses		10
Medium Density Apartment Units		TBD*
Total		566

* Final Unit Count to be determined at the time of Site Plan application

LEGEND

--- Subject Property

NOTES

All dimensions are in metres.
All area measurements are computer generated.
All elevations refer to Geodetic Datum.

ADDITIONAL INFORMATION REQUIRED UNDER SECTION 51(17) OF THE PLANNING ACT

A. B, E, F, G, J, L - As Shown on Plan
C. Additional lands owned by the applicant as shown on the key plan.
D. Residential Singles, Residential Semis, On-Street Townhouses, Rear-Lane Townhouses, Double Frontage Townhouses, Medium Density Blocks, Walkway, Stormwater Management Ponds, Park, Environmental Protection Blocks, Open Space, Roads and Lanes.
H. Piped water to be provided.
I. Clay loam soil.
K. Sanitary & storm sewers to be provided.

SURVEYOR'S CERTIFICATE

I certify that: the boundaries of the lands to be subdivided and their relationship to the adjacent lands are correctly shown.

Shan Gowneenders, O.L.S.
R.P.E. Surveying Ltd.

Day Month Year

OWNER'S AUTHORIZATION

I/we, **Trinity Field Inc.**
being the registered owner(s) of the subject lands hereby authorize **BOUSFIELDS INC.** to prepare and submit a draft plan of subdivision for approval.

Muhammad Baidassama
Day Month Year

DRAFT PLAN OF PROPOSED SUBDIVISION

PART OF LOT 1
CONCESSION 3
(GEOGRAPHIC TOWNSHIP OF ALBION)
TOWN OF CALEDON

BOUSFIELDS INC.

3 Church Street, Suite 200
Toronto, Ontario M5E 1M2
P (416) 947-9744
F (416) 947-0781

1 : 1250
Scale

October 6, 2025
Date

24107-3A 27dp
Drawing Number