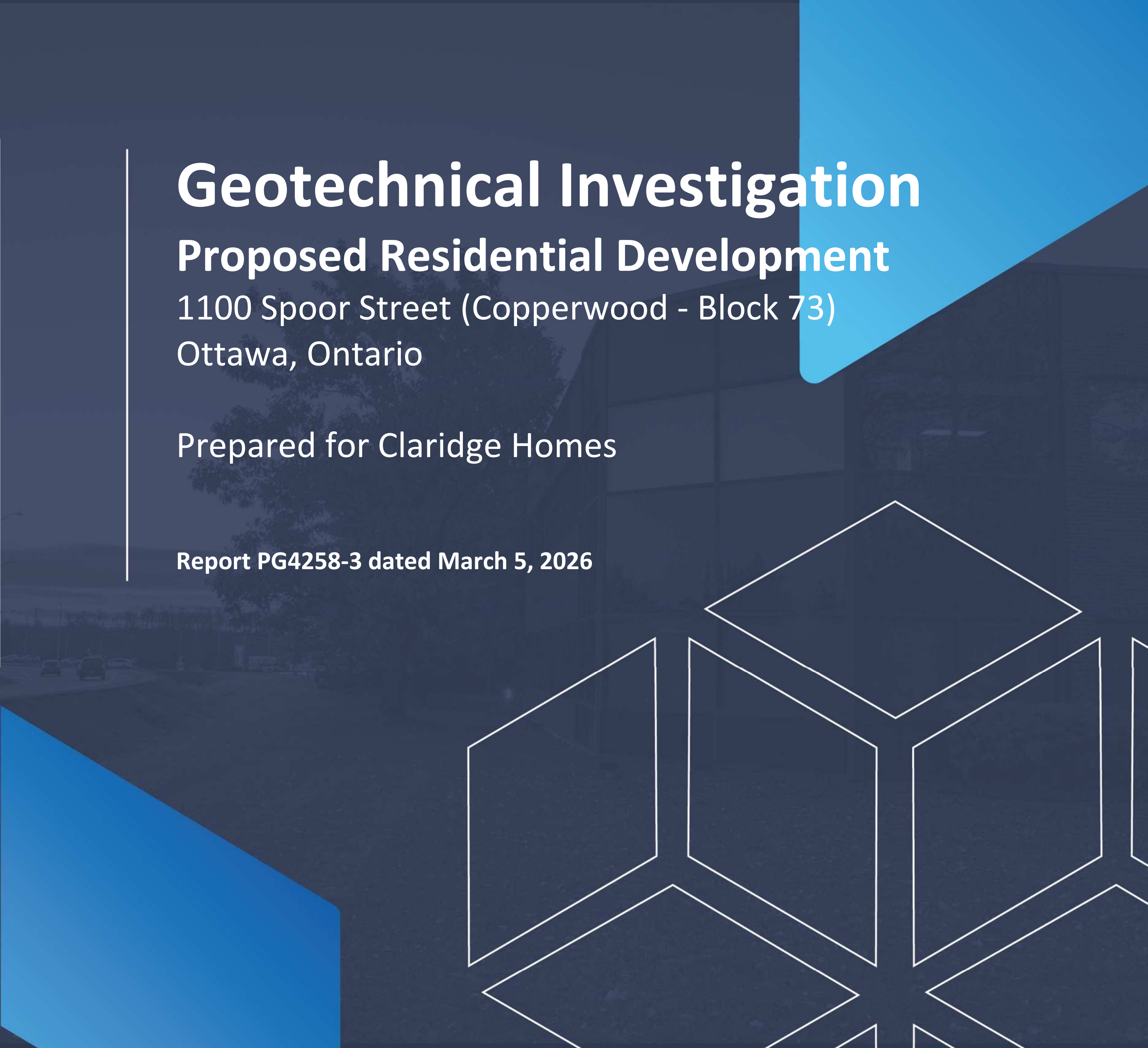

Geotechnical Investigation

Proposed Residential Development

1100 Spoor Street (Copperwood - Block 73)
Ottawa, Ontario

Prepared for Claridge Homes

Report PG4258-3 dated March 5, 2026

Table of Contents

Appendices

Appendix 1	Soil Profile and Test Data Sheets Symbols and Terms Analytical Testing Results
Appendix 2	Figure 1 - Key Plan Drawing PG4258-10 - Test Hole Location Plan Drawing PG4258-11 - Bedrock Contour Plan

1.0 Introduction

Paterson Group (Paterson) was commissioned by Claridge Homes to conduct a geotechnical investigation for the proposed residential development to be located at 1100 Spoor Street (Copperwood - Block 73) in the City of Ottawa (reference should be made to Figure 1 - Key Plan in Appendix 2 of this report for the general site location).

The objectives of the geotechnical investigation were to:

☐ Determine the subsoil and groundwater conditions at this site by means of Test holes and to;

☐ Provide geotechnical recommendations pertaining to the design of the proposed development including construction considerations which may affect the design.

The following report has been prepared specifically and solely for the aforementioned project which is described herein. It contains our findings and includes geotechnical recommendations pertaining to the design and construction of the subject development as they are understood at the time of writing this report.

Investigating for the presence or potential presence of contamination on the subject property was not part of the scope of work of the present investigation. Therefore, the present report does not address environmental issues.

2.0 Proposed Development

Based on the available drawings, it is understood that the proposed development will consist of five residential buildings (Building A, B, C, D, and E), each having 3 storeys above grade with a partial basement level. It is further understood that the proposed buildings will be surrounded by asphalt-paved access lanes and parking areas, with a landscaped courtyard between them and an amenity area situated at the southwestern corner of the site.

It is also expected that the proposed development will be municipally serviced.

3.0 Method of Investigation

3.1 Field Investigation

Field Program

The field program for the current geotechnical investigation was conducted on February 19, 2026. The current investigation consisted of excavating a total of 10 test pits, excavated down to a maximum depth of 1.4 m below the existing ground surface. Paterson also conducted previous investigations, which included 3 test holes (BH 3-22, TP 1, and TP 32) at, or in the vicinity of, the subject site. The test holes were distributed in a manner to provide general coverage of the subject site, taking into consideration underground utilities and site features.

The test hole locations for the current investigation are presented on Drawing PG4258-10 - Test Hole Location Plan, included in Appendix 2.

All test pits were excavated using a backhoe, and the previous borehole was advanced using a track-mounted drill rig. All fieldwork was conducted under the full-time supervision of our personnel under the direction of a senior engineer. The subsurface conditions observed in the test holes were recorded in detail in the field.

Sampling and In Situ Testing

Soil samples from the test pits were recovered from the side walls of the open excavation and all soil samples were initially classified on site. All samples were transported to our laboratory for further examination and classification. The depths at which the grab samples were recovered from the test pits are shown as G on the Soil Profile and Test Data sheets in Appendix 1.

The subsurface conditions observed at the test pits were recorded in detail in the field. The soil profiles are presented on the Soil Profile and Test Data sheets in Appendix 1.

Groundwater

The open hole groundwater infiltration levels were observed at the time of excavation at each test pit location. Our observations are presented in the Soil Profile and Test Data sheets in Appendix 1.

3.2 Field Survey

The test hole locations and ground surface elevation at each test hole location were surveyed by Paterson with respect to a geodetic datum. The locations of the test holes and ground surface elevation at each test hole location are presented on Drawing PG4258-10 - Test Hole Location Plan in Appendix 2.

3.3 Laboratory Testing

Soil samples recovered from the subject site were visually examined in our laboratory to review the field logs. The results are discussed in Section 4.2 and are provided in Appendix 1 of this report.

All samples from the recent investigation will be stored in the laboratory for a period of 1 month after issuance of this report. They will then be discarded unless we are directed otherwise.

3.4 Analytical Testing

One (1) soil sample was submitted for analytical testing to assess the corrosion potential for exposed ferrous metals and the potential of sulphate attacks against subsurface concrete structures. The sample was submitted to determine the concentration of sulphate and chloride, the resistivity, and the pH of the sample. The results are presented in Appendix 1 and are discussed further in Section 6.7.

4.0 Observations

4.1 Surface Conditions

The subject site is currently undeveloped and used as agricultural land. The site is bordered to the north by Buckbean Avenue, to the south by vacant land, to the east by Spoor Street, and to the west by Dandelion Mews.

The ground surface slopes gently downward from northwest to southeast from approximate geodetic elevations of 86.8 m to 84.0 m.

4.2 Subsurface Profile

Generally, the subsurface profile at the test pit locations consists of topsoil or fill overlying hard to stiff, brown silty clay and/or dense glacial till, which is underlain by bedrock. The fill layer was observed to consist of brown silty sand with gravel, trace to some clay, and cobbles and boulders.

The glacial till was generally observed to consist of hard to stiff brown silty clay or very dense to dense brown silty sand with gravel, cobbles and boulders, extending to depths ranging from 0.6 to 1.2 m below the ground surface.

Practical refusal was encountered in all the test hole locations at depths ranging from 0.7 to 1.4 m. Reference should be made to the Soil Profile and Test Data sheets in Appendix 1 for specific details of the soil profiles encountered at each test hole location.

Bedrock

Within BH 3-22, grey limestone bedrock was encountered underneath the overburden material at an approximate 1.2 m depth. Generally, the bedrock quality is very poor within the upper 3.0 m and improves to good quality at greater depths, based on the RQD values.

Based on available geological mapping and refusal to augering/excavation, the bedrock in the subject area consists of sandstone and dolomite of the March Formation, with an overburden thickness of 1 to 2 m.

4.3 Groundwater

Groundwater infiltration into the test pits was observed during the current investigation at each test hole location. The results are presented in Table 1 and in the Soil Profile and Test Data sheets attached in Appendix 1.

Table 1 – Summary of Groundwater Levels

Borehole Number	Ground Surface Elevation (m)	Measured Groundwater Level		Dated Recorded
		Depth (m)	Elevation (m)	
TP 1-26	86.48	Dry	-	February 19, 2026
TP 2-26	86.07	Dry	-	
TP 3-26	85.54	Dry	-	
TP 4-26	85.66	Dry	-	
TP 5-26	86.26	Dry	-	
TP 6-26	86.30	Dry	-	
TP 7-26	86.66	Dry	-	
TP 8-26	86.90	Dry	-	
TP 9-26	86.72	Dry	-	
TP 10-26	85.75	Dry	-	
BH 3-22	86.05	1.92	84.13	March 17, 2022
TP 1	85.22	Dry	-	October 19, 2017
TP 32	86.81	Dry	-	March 21, 2013

Note: The ground surface elevation at each test hole location during the current investigation was surveyed using a handheld GPS using a geodetic datum.

Based on groundwater levels measured in the monitoring well from our previous site investigation, the long-term groundwater table is estimated to be about 1.5 to 2.5 m below the existing ground surface. However, it should be noted that groundwater levels are subject to seasonal fluctuations and may vary at the time of construction.

5.0 Discussion

5.1 Geotechnical Assessment

From a geotechnical perspective, the subject site is considered suitable for the proposed development. It is expected that low-rise buildings could be founded on conventional shallow footings placed on undisturbed very dense glacial till deposit or clean surface-sounded bedrock.

It is anticipated that bedrock removal will be required for site services and foundation construction. This is discussed further in Section 5.2.

The above and other considerations are discussed in the following sections.

5.2 Site Grading and Preparation

Stripping Depth

Topsoil and fill, such as those containing organic or deleterious materials, should be stripped from under any buildings and other settlement-sensitive structures.

Bedrock Removal

Based on the bedrock encountered in the area, it is expected that hoe-ramming or controlled blasting will be required to remove the bedrock. In areas of weathered bedrock and where only a small quantity of bedrock is to be removed, bedrock removal may be possible by hoe-ramming.

Prior to considering blasting operations, the effects for any nearby existing buildings or structures should be addressed. A pre-blast or construction survey located in proximity to the blasting operations should be conducted prior to commencing construction. The extent of the survey should be determined by the blasting consultant and be sufficient to respond to any inquiries/claims related to the blasting operations.

As a general guideline, peak particle velocities (measured at the structures) should not exceed 25 mm/s during the blasting program to reduce the risks of damage to the existing structures.

The blasting operations should be planned and carried out under the supervision of a licensed professional engineer who is also a blasting expert.

Any bedrock removed via the hoe-ramming or blasting method may be stockpiled at the site and reviewed by the geotechnical consultant for potential use as backfill.

Vibration Considerations

Construction operations are also the cause of vibrations and possibly sources of nuisance to the community. Therefore, means to reduce the vibration levels should be incorporated in the construction operations to maintain, as much as possible, a cooperative environment with the residents.

The following construction equipment could be the source of vibrations: piling rig, hoe ram, compactor, dozer, crane, truck traffic, etc. Vibrations, whether caused by blasting operations or by construction operations, could be the source of detrimental vibrations on the adjoining buildings and structures. Therefore, it is recommended that all vibrations be limited.

Two parameters are used to determine the possible vibrations, namely, the maximum peak particle velocity and the frequency. For low-frequency vibrations, the maximum allowable peak particle velocity is less than that for high-frequency vibrations. As a guideline, the peak particle velocity should be less than 15 mm/s between frequencies of 4 to 12 Hz, and 50 mm/s above a frequency of 40 Hz (interpolate between 12 and 40 Hz). It should be noted that these guidelines are for today’s construction standards. Considering that these guidelines are above perceptible human level and, in some cases, could be very disturbing to some people, it is recommended that pre-construction survey be complete to minimize the risks of claims during or following the construction of the proposed building.

Overbreak in Bedrock

Sedimentary bedrock formation, such as limestone and dolomite, contains bedding planes, joints and fractures, and mud seams, which create natural planes of weakness within the rock mass. Although several factors of a blast may be controlled to reduce overbreak, upon blasting, the rock mass will tend to break along natural planes of weakness that may be present beyond the designed blast profile. Due to this, estimating the exact amount of overbreak that may occur is not possible with conventional construction drill and blast methods.

Overbreak is expected to occur throughout the lowest lifts of blasting due to the variable bedding planes and planes of weakness in the in-situ bedrock. It is very difficult to mitigate significant over-blasting given the constraints posed by footing geometry and spacing with respect to the zone of influence of blasts and the bedrocks in-situ characteristics.

Depending on the methodology undertaken by the contractor, efforts taken to minimize overbreak may add significant time and costs to the excavation operations and is not guaranteed to completely eliminate the potential for overbreak. Overbreak below footings should be in-filled with lean-concrete and approved by Paterson prior to placing concrete.

As such, volume estimates of bedrock to be removed may not be reflective of the actual volume of bedrock that may be required to be removed at the time of construction. This may result in additional materials, such as imported fill and concrete, to make up for additional rock loss. It is recommended that the blasting operations be planned and conducted under the supervision of a licensed professional engineer who is an experienced blasting consultant.

Lean Concrete Placement

Where foundation support for the proposed buildings consists of conventional spread footings bearing on clean, surface sounded bedrock, and where rock overbreak occurs at the underside of footing (USF) elevation, lean concrete (minimum 17 MPa compressive strength at 28 days) can be used to re-instate the subgrade from the bedrock surface to the USF elevation. Typically, the excavation side walls will be used as the form to support the concrete. The lean concrete placement should be at least 150 mm wider than all sides of the footing (strip and pad footings) at the base of the excavation. The additional width of the concrete poured will suffice in providing a direct transfer of the footing load to the underlying bedrock.

Fill Placement

Fill used for grading beneath any settlement sensitive structures should consist, unless otherwise specified, of clean imported granular fill, such as Ontario Provincial Standard Specifications (OPSS) Granular A or Granular B Type II. This material should be tested and approved prior to delivery to the site. The fill should be placed in lifts no greater than 300 mm thick and compacted using suitable compaction equipment for the lift thickness. Fill placed beneath the proposed building areas should be compacted to at least 98% of the material’s standard Proctor maximum dry density (SPMDD).

Non-specified existing fill, along with site-excavated soil, can be used as general landscaping fill where settlement of the ground surface is of minor concern. In landscaped areas, these materials should be spread in thin lifts and at least compacted by the tracks of the spreading equipment to minimize voids. If these material are to be used to build up the subgrade level for areas to be paved, they should be compacted in thin lifts to at least 95% of the material’s SPMDD. Non-specified existing fill and site-excavated soils are not suitable for use as backfill against foundation walls unless used in conjunction with a composite drainage membrane.

If excavated rock is to be used as fill, it should be suitably fragmented to produce a well-graded material with a maximum particle size of 150 mm. In this case, the approved fragmented site-excavated rock material can be used as granular subbase for pavements or as engineered backfill below building footprint provided the material is tested and approved by Paterson prior to placement. Paterson shall complete testing on the material to ensure that the material is well graded and can be placed and compacted as per our construction recommendations included herein. **It is expected that increased inspections should be completed during placement to ensure that the material is consistent and well-graded.** Where the material is found to be open-graded, a layer of Granular A and/or a woven geotextile may be required to prevent adjacent finer materials from migrating into the voids, with associated loss of ground and settlements. This can be assessed at the time of construction.

5.3 Foundation Design

Bearing Resistance Values

Conventional spread footings placed on an undisturbed, dense glacial till bearing surface can be designed using a bearing resistance value at serviceability limit states (SLS) of **200 kPa** and a factored bearing resistance value at ultimate limit states (ULS) of **300 kPa**. A geotechnical resistance factor of 0.5 was applied to the above noted bearing resistance value at ULS.

An undisturbed soil bearing surface consists of a surface from which all topsoil and deleterious materials, such as loose or disturbed soil, whether in situ or not, have been removed, in the dry, prior to placement of concrete footings.

Footings bearing on the undisturbed, dense glacial till and designed using the bearing resistance values provided herein will be subjected to potential post-construction total and differential settlements of 25 and 20 mm, respectively.

Footings placed on clean, surface sounded bedrock can be designed using a factored bearing resistance SLS and ULS of **1,000 kPa**.

A clean, surface-sounded bedrock bearing surface should be free of loose materials, and have no near surface seams, voids, fissures or open joints which can be detected from surface sounding with a rock hammer.

Footings bearing on an acceptable bedrock bearing surface and designed for the bearing resistance values provided herein will be subjected to negligible potential post-construction total and differential settlements.

Lateral Support

The bearing medium under footing-supported structures is required to be provided with adequate lateral support with respect to excavations and different foundation levels. Adequate lateral support is provided to a sound bedrock bearing medium when a plane extending horizontally and vertically from the footing perimeter at a minimum of 1H:6V (or shallower) passes through sound bedrock or a material of the same or higher capacity as the bedrock, such as concrete.

5.4 Design for Earthquakes

The site class for seismic site response can be taken as **Class X_C** for foundations at this site. A higher site class may be applicable for the subject site, but would need to be confirmed with site-specific shear wave velocity testing, as presented in Table 4.1.8.4.A of the Ontario Building Code (OBC) 2024. The soils at this site are not considered susceptible to liquefaction.

5.5 Basement Slab Construction

With the removal of all topsoil and deleterious fill, such as those containing organic materials, from within the footprints of the proposed buildings, the native soil surface or approved engineered fill surface will be considered an acceptable subgrade on which to commence backfilling for floor slab construction.

Any soft areas should be removed and backfilled with appropriate backfill material prior to placing any fill. OPSS Granular B Type II, with a maximum particle size of 50 mm, are recommended for backfilling below the floor slab. It is recommended that the upper 200 mm of sub-floor fill consists of 19 mm clear crushed stone. All backfill material within the footprints of the proposed buildings should be placed in maximum 300 mm thick loose layers and compacted to at least 98% of its SPMDD.

5.6 Pavement Design

For design purposes, local access roads, paved walkways and car parking areas are anticipated for the proposed development. The proposed pavement structures are presented in the tables below.

Table 2 - Recommended Pavement Structure - Paved Walkways and Car only Parking Areas

Thickness (mm)	Material Description
50	**Wear Course** - Superpave 12.5 Asphaltic Concrete
150	**Base** - OPSS Granular A Crushed Stone
300	**Subbase** - OPSS Granular B Type II
SUBGRADE - Either fill, in situ soil or OPSS Granular B Type I or II material placed over in situ soil or fill.	

Table 3 - Recommended Pavement Structure – Local Roadways and Heavy Truck Parking Areas

Thickness (mm)	Material Description
40	**Wear Course** - Superpave 12.5 Asphaltic Concrete
50	**Binder Course** - Superpave 19.0 Asphaltic Concrete
150	**Base** - OPSS Granular A Crushed Stone
450	**Subbase** - OPSS Granular B Type II
SUBGRADE - Either fill, in situ soil or OPSS Granular B Type I or II material placed over in situ soil or fill.	

Minimum Performance Graded (PG) 58-34 asphalt cement should be used for this project.

If soft spots develop in the subgrade during compaction or due to construction traffic, the affected areas should be excavated and replaced with OPSS Granular B Type II material. Weak subgrade conditions may be experienced over service trench fill materials. This may require the use of a geotextile, such as Terratrack 200 or equivalent thicker subbase or other measures that can be recommended at the time of construction as part of the field observation program.

For areas where the bedrock surface conflicts with the recommended pavement structure, then the subbase layer can be reduced to 150 mm thickness provided that the bedrock surface is suitable fragmented/fractured. The upper 300 mm of the bedrock surface should be reviewed and approved by Paterson prior to placing the base and subbase materials.

The pavement granular base and subbase should be placed in maximum 300 mm thick lifts and compacted to a minimum of 99% of the SPMDD using suitable vibratory equipment.

6.0 Design and Construction Precautions

6.1 Foundation Drainage and Backfill

Foundation Drainage

It is recommended that perimeter foundation drainage systems be provided for the proposed structures. The systems should consist of a 150 mm diameter perforated and corrugated plastic pipe, surrounded on all sides by 150 mm of 19 mm clear crushed stone, placed at the footing level around the exterior perimeter of the structure. The pipe should have a positive outlet, such as a gravity connection to the storm sewer.

Foundation Backfill

Backfill against the exterior sides of the foundation walls should consist of free-draining non frost susceptible granular materials. The greater part of the site excavated materials will be frost susceptible and, as such, are not recommended for placement as backfill against the foundation walls unless used in conjunction with a composite drainage system, such as Delta Drain 6000 or Miradrain G100N. Imported granular materials, such as clean sand or OPSS Granular B Type I granular material, should be placed for this purpose.

6.2 Protection of Footings Against Frost Action

Perimeter footings of heated structures are recommended to be insulated against the deleterious effects of frost action. A minimum 1.5 m thick soil cover, or an equivalent combination of soil cover and foundation insulation, should be provided in this regard.

Exterior unheated footings, such as isolated piers, are more prone to deleterious movement associated with frost action than the exterior walls of the structure, and require additional protection, such as soil cover of 2.1 m, or an equivalent combination of soil cover and foundation insulation.

6.3 Excavation Side Slopes

The temporary excavation side slopes anticipated should either be excavated to acceptable slopes or retained by shoring systems from the beginning of the excavation until the structure is backfilled. It is expected that sufficient room will be available for the greater part of the excavation to be undertake by open-cut methods (i.e. unsupported excavations).

The excavation side slopes above the groundwater level extending to a maximum depth of 3 m should be cut back at 1H:1V or flatter. The flatter slope is required for excavation below groundwater level. The subsurface soil is considered to be mainly a Type 3 soil according to the Occupational Health and Safety Act and Regulations for Construction Projects.

Excavated soil should not be stockpiled directly at the top of excavations and heavy equipment should maintain safe working distance from the excavation sides.

Slopes in excess of 3 m in height should be periodically inspected by the geotechnical consultant in order to detect if the slopes are exhibiting signs of distress.

It is recommended that a trench box be used at all times to protect personnel working in trenches with steep or vertical sides. It is expected that services will be installed by “cut and cover” methods and excavations will not be left open for extended periods of time.

6.4 Pipe Bedding and Backfill

Bedding and backfill materials should be in accordance with the most recent material specifications and standard detail drawings from the department of public works and services, infrastructure services branch of the City of Ottawa.

A minimum of 150 mm of OPSS Granular A should be placed for bedding for sewer or water pipes when placed on a soil subgrade. The bedding should extend to the spring line of the pipe. Cover material, from the spring line to a minimum of 300 mm above the obvert of the pipe, should consist of OPSS Granular A (concrete or PSM PVC pipes) or sand (concrete pipe). The bedding and cover materials should be placed in maximum 225 mm thick lifts and compacted to 98% of the SPMDD.

It should generally be possible to re-use the moist (not wet) site-generated fill and glacial till above the cover material if the excavation and filling operations are carried out in dry weather conditions. Wet silty clay materials will be difficult to re-use, as the high water contents make compacting impractical without an extensive drying period.

Well fractured bedrock should be acceptable as backfill for the lower portion of the trenches when the excavation is within bedrock provided the rock fill is placed only from at least 300 mm above the top of the service pipe and that all stones are 300 mm or smaller in their longest dimension.

Where hard surface areas are considered above the trench backfill, the trench backfill material within the frost zone (about 1.8 m below finished grade) should match the soils exposed at the trench walls to minimize differential frost heaving. The trench backfill should be placed in maximum 300 mm thick loose lifts and compacted to a minimum of 95% of the material's SPMDD.

All cobbles larger than 200 mm in their longest direction should be segregated from re-use as trench backfill.

6.5 Groundwater Control

Based on our observations, it is anticipated that groundwater infiltration into the excavations should be low to moderate and controllable using open sumps. Pumping from open sumps should be sufficient to control the groundwater influx through the sides of shallow excavations. The contractor should be prepared to direct water away from all bearing surfaces and subgrades, regardless of the source, to prevent disturbance to the founding medium.

Groundwater Control for Building Construction

Under the current regulations enacted by the Ministry of Environment, Conservation and Parks (MECP), any dewatering in excess of 50,000 L/day requires a registration on the Environmental Activity and Sector Registry (EASR), provided that dewatering is related to construction. If the dewatering is not related to construction, a Permit to Take Water obtained from the MECP will be required.

In the event that an EASR is required to facilitate dewatering of the proposed development, a minimum of 3 to 4 weeks should be allotted for completion of the EASR registration and the Water Taking and Discharge Plan, to be prepared by a Qualified Person as stipulated under O.Reg. 63/16. Should a Permit to Take Water be required, a minimum of 5 to6 months should be allotted for completion of the permit, due to the minimum review period imposed by the MECP

6.6 Winter Construction

Precautions must be taken if winter construction is considered for this project.

The subsoil conditions at this site consist of frost susceptible materials. In the presence of water and freezing conditions, ice could form within the soil mass. Heaving and settlement upon thawing could occur.

In the event of construction during below zero temperatures, the founding stratum should be protected from freezing temperatures by the use of straw, propane heaters and tarpaulins or other suitable means. In this regard, the base of the excavations should be insulated from sub-zero temperatures immediately upon exposure and until such time as heat is adequately supplied to the building and the footings are protected with sufficient soil cover to prevent freezing at founding level.

Trench excavations and pavement construction are also difficult activities to complete during freezing conditions without introducing frost in the subgrade or in the excavation walls and bottoms. Precautions should be taken if such activities are to be carried out during freezing conditions. Additional information could be provided, if required.

6.7 Corrosion Potential and Sulphate

The results of analytical testing show that the sulphate content is less than 0.1%. This result is indicative that Type 10 Portland cement (GU – General Use cement) would be appropriate for this site. The chloride content and pH of the sample indicate that they are not a significant factor in creating a corrosive environment for exposed ferrous metals at this site, whereas the resistivity is indicative of a moderate to aggressive corrosive environment.

7.0 Recommendations

A materials testing and observation services program is a requirement for the provided foundation design data to be applicable. The following aspects of the program should be performed by the geotechnical consultant:

☐ Observation of all bearing surfaces prior to the placement of concrete.

☐ Sampling and testing of the concrete and fill materials used.

☐ Periodic observation of the condition of unsupported excavation side slopes in excess of 3 m in height, if applicable.

☐ Observation of all subgrades prior to backfilling.

☐ Field density tests to determine the level of compaction achieved.

☐ Sampling and testing of the bituminous concrete including mix design reviews.

A report confirming that these works have been conducted in general accordance with our recommendations could be issued upon the completion of a satisfactory inspection program by the geotechnical consultant.

All excess soils, with the exception of engineered crushed stone fill, generated by construction activities that will be transported on-site or off-site should be handled as per *Ontario Regulation 406/19: On-Site and Excess Soil Management.*

8.0 Statement of Limitations

The recommendations provided are in accordance with the present understanding of the project. Paterson requests permission to review the recommendations when the drawings and specifications are completed.

A soils investigation is a limited sampling of a site. Should any conditions at the site be encountered which differ from those at the test locations, Paterson requests immediate notification to permit reassessment of our recommendations.

The recommendations provided herein should only be used by the design professionals associated with this project. They are not intended for contractors bidding on or undertaking the work. The latter should evaluate the factual information provided in this report and determine the suitability and completeness for their intended construction schedule and methods. Additional testing may be required for their purposes.

The present report applies only to the project described in this document. Use of this report for purposes other than those described herein or by person(s) other than Claridge Homes, or their agents, is not authorized without review by Paterson for the applicability of our recommendations to the alternative use of the report.

Paterson Group Inc.

LICENSED PROFESSIONAL ENGINEER
Mar. 5, 2026
S. S. DENNIS
100519516
Scott Dennis
PROVINCE OF ONTARIO

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Zubaida Al-Moselly, Ph.D., P.Eng.

Scott S. Dennis, P.Eng.

Report Distribution:

☐ Claridge Homes (Email Copy)
☐ Paterson Group (1 Copy)

APPENDIX 1

SOIL PROFILE AND TEST DATA SHEETS

SYMBOLS AND TERMS

ANALYTICAL TESTING RESULTS

SOIL PROFILE AND TEST DATA

Geotechnical Investigation

Spoor Street at Buckbean Avenue – Ottawa, Ontario

COORD. SYS.: MTM ZONE 9 **EASTING:** 347949.01 **NORTHING:** 5025098.20 **ELEVATION:** 86.48

PROJECT: Proposed residential development

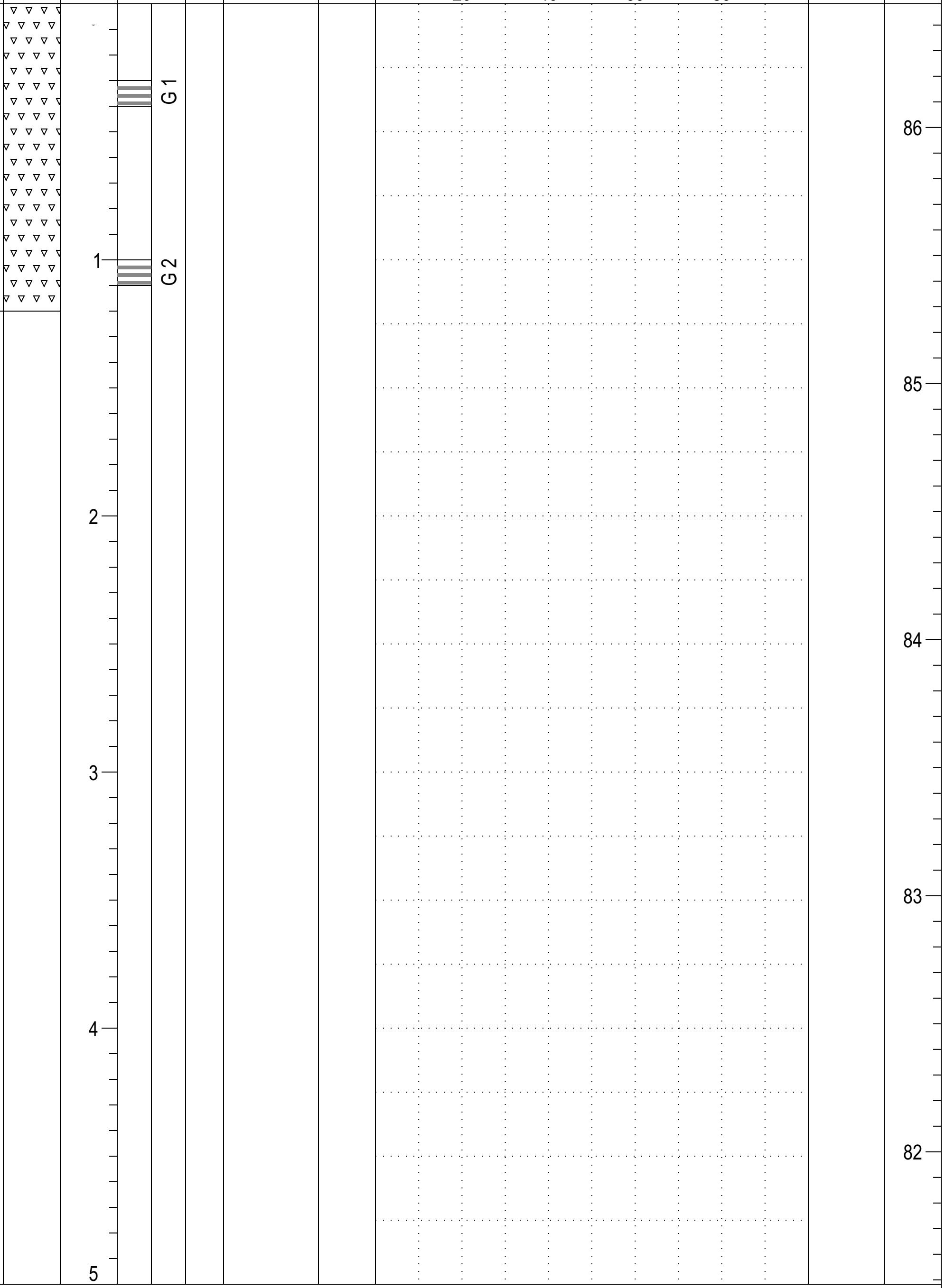
ADVANCED BY: Excavator

REMARKS: Datum: NAD1983 (Canada) Geoid: HT2-2010 **DATE:** February 19, 2026

FILE NO. : PG4258

HOLE NO. : TP 1-26

SAMPLE DESCRIPTION	STRATA PLOT	DEPTH (m)	SAMPLE: TYPE AND NO.	SAMPLE: RECOVERY (%)	SAMPLE: N OR RQD	SAMPLE: WATER CONTENT (%)	■ PEN. RESIST. (BLOWS/0.3m) DCPT (50mm DIA. CONE) 20 40 60 80 △ REMOULDED SHEAR STRENGTH (kPa) ▲ UNDRAINED SHEAR STRENGTH (kPa) 20 40 60 80 PL (%) WATER CONTENT (%) LL (%) 20 40 60 80	PIEZOMETER CONSTRUCTION	ELEVATION (m)
GROUND SURFACE									
GLACIAL TILL: Hard, brown silty clay, with sand, gravel, cobbles and boulders - Sand content increasing with depth 1.20m [85.28m]			G 1 G 2						
End of Test Pit Practical refusal on bedrock surface at 1.20 m depth Test pit dry upon completion of excavation									



P:/AutoCAD Drawings/Test Hole Data Files/PG42xx/PG4258/data.sqlite 2026-03-04, 15:03 Paterson_Template AE

SOIL PROFILE AND TEST DATA

Geotechnical Investigation

Spoor Street at Buckbean Avenue – Ottawa, Ontario

COORD. SYS.: MTM ZONE 9 **EASTING:** 347959.28 **NORTHING:** 5025051.40 **ELEVATION:** 86.07

PROJECT: Proposed residential development

ADVANCED BY: Excavator

REMARKS: Datum: NAD1983 (Canada) Geoid: HT2-2010 **DATE:** February 19, 2026

FILE NO. : PG4258

HOLE NO. : TP 2-26

SAMPLE DESCRIPTION

GROUND SURFACE

FILL: Brown silty sand, with gravel, some clay, occasional cobbles

0.60m [85.47m]

TOPSOIL and organics, trace sand and tree roots

0.85m [85.22m]

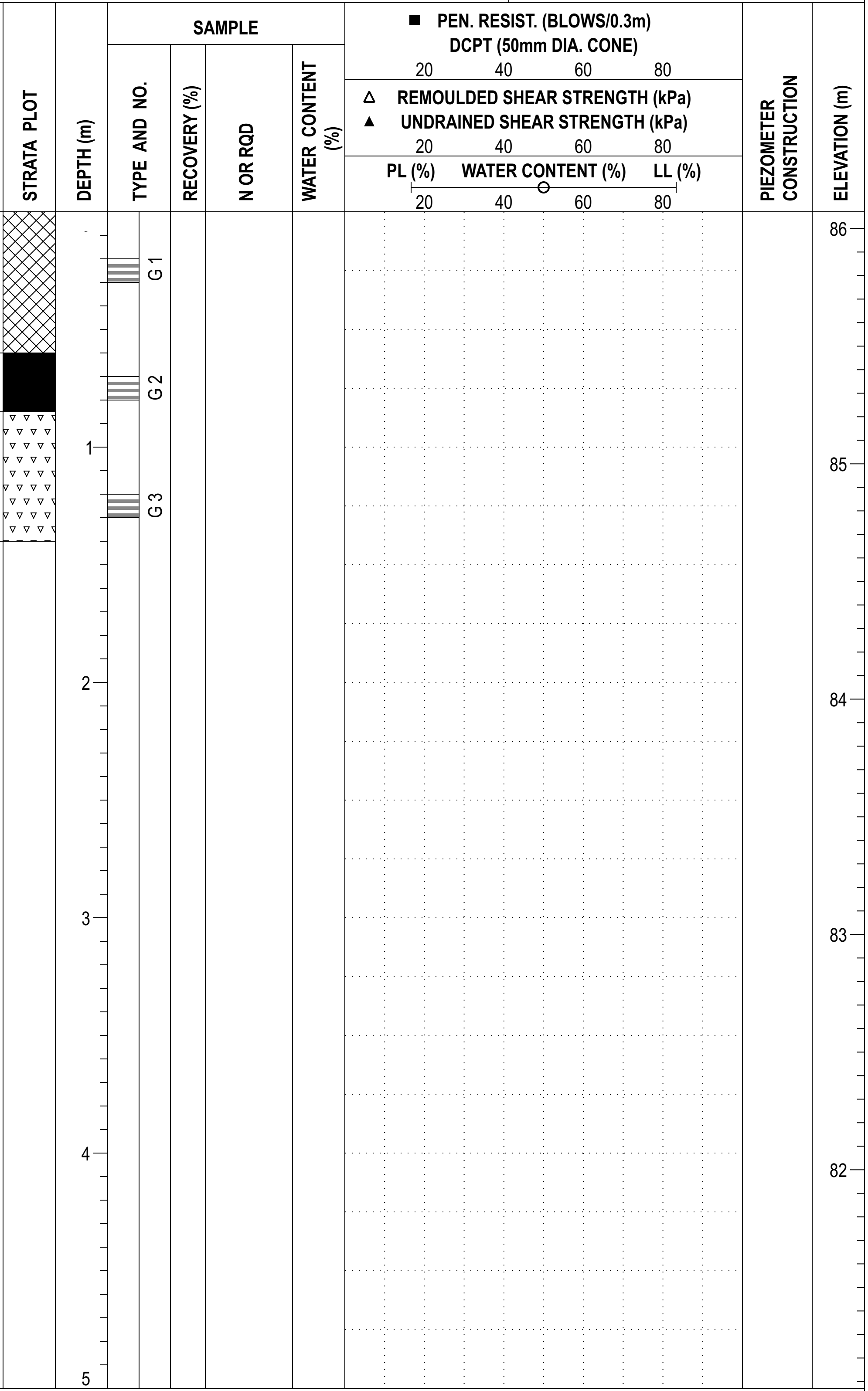
GLACIAL TILL: Hard, brown silty clay, with gravel, cobbles and boulders

1.40m [84.67m]

End of Test Pit

Practical refusal on bedrock surface at 1.40 m depth

Test pit dry upon completion of excavation



PATERSON GROUP

SOIL PROFILE AND TEST DATA

Geotechnical Investigation

Spoor Street at Buckbean Avenue – Ottawa, Ontario

COORD. SYS.: MTM ZONE 9 **EASTING:** 347951.13 **NORTHING:** 5025022.54 **ELEVATION:** 85.54

PROJECT: Proposed residential development

ADVANCED BY: Excavator

REMARKS: Datum: NAD1983 (Canada) Geoid: HT2-2010 **DATE:** February 19, 2026

FILE NO. : PG4258

HOLE NO. : TP 3-26

SAMPLE DESCRIPTION GROUND SURFACE	STRATA PLOT	DEPTH (m)	SAMPLE TYPE AND NO.	SAMPLE RECOVERY (%)	SAMPLE N OR RQD	SAMPLE WATER CONTENT (%)	■ PEN. RESIST. (BLOWS/0.3m) DCPT (50mm DIA. CONE) 20 40 60 80 △ REMOULDED SHEAR STRENGTH (kPa) ▲ UNDRAINED SHEAR STRENGTH (kPa) 20 40 60 80 PL (%) WATER CONTENT (%) LL (%) 20 40 60 80	PIEZOMETER CONSTRUCTION	ELEVATION (m)
FILL: Brown silty sand, with gravel and cobbles, trace clay 0.60m [84.94m]	▨		G 1						
TOPSOIL and organics, trace sand and tree roots 0.80m [84.74m]	■		G 2						85
GLACIAL TILL: Hard, brown silty clay, with sand, gravel, cobbles and boulders 1.30m [84.24m]	▽	1	G 3						
End of Test Pit Practical refusal on bedrock surface at 1.30 m depth Test pit dry upon completion of excavation		2 3 4 5							84 83 82 81

P:/AutoCAD Drawings/Test Hole Data Files/PG42xx/PG4258/data.sqlite 2026-03-04, 15:03 Paterson_Template AE

SOIL PROFILE AND TEST DATA

Geotechnical Investigation

Spoor Street at Buckbean Avenue – Ottawa, Ontario

COORD. SYS.: MTM ZONE 9 **EASTING:** 347910.41 **NORTHING:** 5025028.48 **ELEVATION:** 85.66

PROJECT: Proposed residential development

ADVANCED BY: Excavator

REMARKS: Datum: NAD1983 (Canada) Geoid: HT2-2010 **DATE:** February 19, 2026

FILE NO. : PG4258

HOLE NO. : TP 4-26

SAMPLE DESCRIPTION

GROUND SURFACE

TOPSOIL

0.15m [85.51m]

GLACIAL TILL: Hard, brown silty clay, with sand and gravel

0.80m [84.86m]

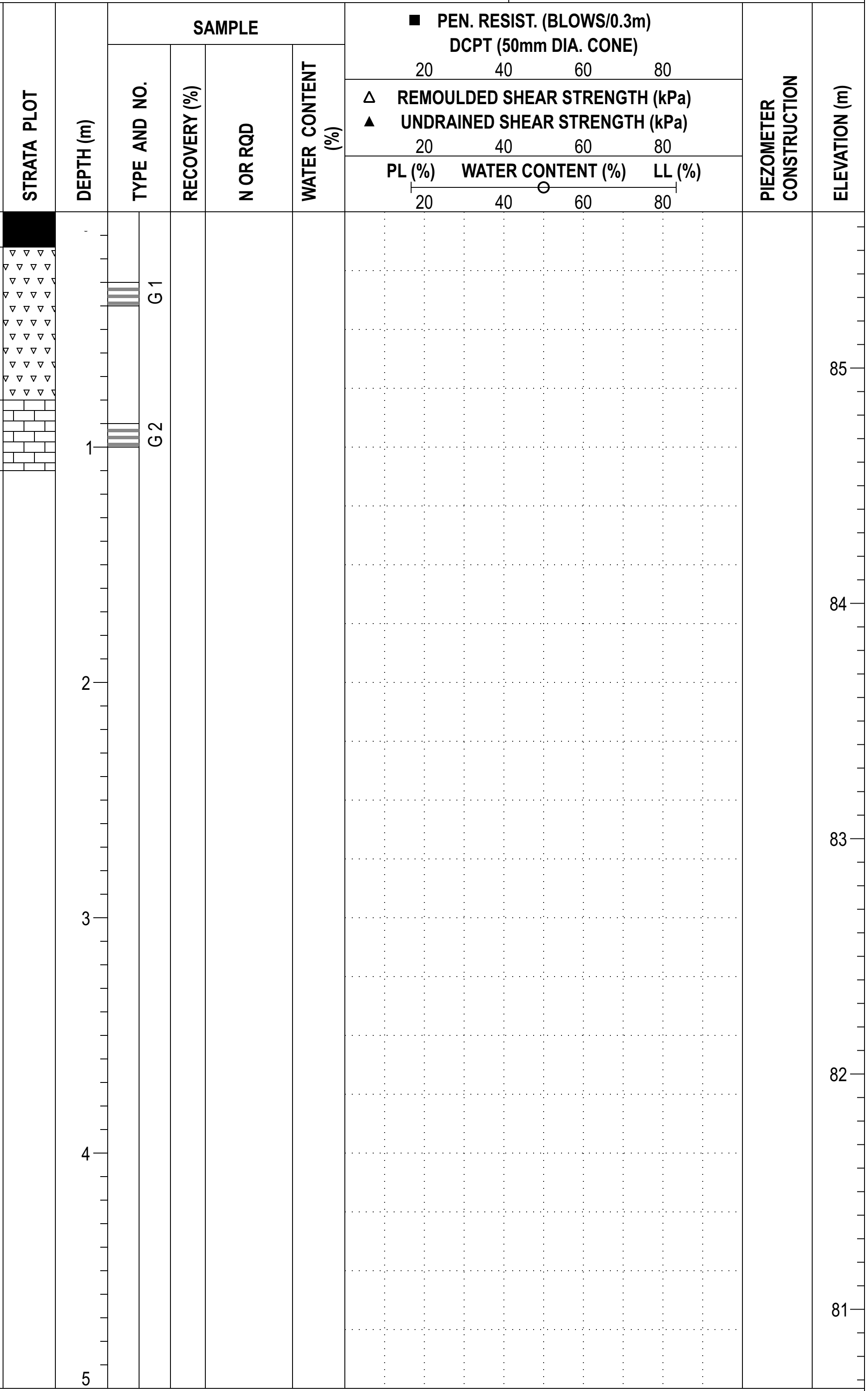
Weathered rock

1.10m [84.56m]

End of Test Pit

Practical refusal on bedrock surface at 1.10 m depth

Test pit dry upon completion of excavation



SOIL PROFILE AND TEST DATA

Geotechnical Investigation

Spoor Street at Buckbean Avenue – Ottawa, Ontario

COORD. SYS.: MTM ZONE 9 **EASTING:** 347925.16 **NORTHING:** 5025065.96 **ELEVATION:** 86.26

PROJECT: Proposed residential development

ADVANCED BY: Excavator

REMARKS: Datum: NAD1983 (Canada) Geoid: HT2-2010 **DATE:** February 19, 2026

FILE NO. : PG4258

HOLE NO. : TP 5-26

SAMPLE DESCRIPTION GROUND SURFACE	STRATA PLOT	DEPTH (m)	SAMPLE TYPE AND NO.	SAMPLE RECOVERY (%)	SAMPLE N OR RQD	SAMPLE WATER CONTENT (%)	■ PEN. RESIST. (BLOWS/0.3m) DCPT (50mm DIA. CONE) 20 40 60 80 △ REMOULDED SHEAR STRENGTH (kPa) ▲ UNDRAINED SHEAR STRENGTH (kPa) 20 40 60 80 PL (%) WATER CONTENT (%) LL (%) 20 40 60 80	PIEZOMETER CONSTRUCTION	ELEVATION (m)
TOPSOIL 0.25m [86.01m]									86
GLACIAL TILL: Compact, brown silty sand, trace clay and gravel 0.70m [85.56m]			G 1						
End of Test Pit Practical refusal on bedrock surface at 0.70 m depth Test pit dry upon completion of excavation		1							85
		2							84
		3							83
		4							82
		5							

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PATERSON GROUP

SOIL PROFILE AND TEST DATA

Geotechnical Investigation

Spoor Street at Buckbean Avenue – Ottawa, Ontario

COORD. SYS.: MTM ZONE 9 **EASTING:** 347894.16 **NORTHING:** 5025046.97 **ELEVATION:** 86.30

PROJECT: Proposed residential development

ADVANCED BY: Excavator

REMARKS: Datum: NAD1983 (Canada) Geoid: HT2-2010 **DATE:** February 19, 2026

FILE NO. : PG4258

HOLE NO. : TP 6-26

SAMPLE DESCRIPTION	STRATA PLOT	DEPTH (m)	SAMPLE: TYPE AND NO.	SAMPLE: RECOVERY (%)	SAMPLE: N OR RQD	SAMPLE: WATER CONTENT (%)	■ PEN. RESIST. (BLOWS/0.3m) DCPT (50mm DIA. CONE) 20 40 60 80 △ REMOULDED SHEAR STRENGTH (kPa) ▲ UNDRAINED SHEAR STRENGTH (kPa) 20 40 60 80 PL (%) WATER CONTENT (%) LL (%) 20 40 60 80	PIEZOMETER CONSTRUCTION	ELEVATION (m)
GROUND SURFACE									
FILL: Brown silty sand, with gravel, some clay, cobbles and roots, trace topsoil 0.60m [85.70m]			G 1						86
GLACIAL TILL: Very dense, brown silty sand, some clay, gravel and cobbles 0.90m [85.40m]			G 2						
Weathered rock 1.00m [85.30m]		1	G 3						
End of Test Pit									85
Practical refusal on bedrock surface at 1.00 m depth									
Test pit dry upon completion of excavation		2							84
		3							83
		4							82
		5							

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SOIL PROFILE AND TEST DATA

Geotechnical Investigation

Spoor Street at Buckbean Avenue – Ottawa, Ontario

COORD. SYS.: MTM ZONE 9 **EASTING:** 347899.09 **NORTHING:** 5025082.42 **ELEVATION:** 86.66

PROJECT: Proposed residential development

ADVANCED BY: Excavator

REMARKS: Datum: NAD1983 (Canada) Geoid: HT2-2010

DATE: February 19, 2026

FILE NO. : PG4258

HOLE NO. : TP 7-26

SAMPLE DESCRIPTION	STRATA PLOT	DEPTH (m)	SAMPLE TYPE AND NO.	SAMPLE RECOVERY (%)	SAMPLE N OR RQD	SAMPLE WATER CONTENT (%)	■ PEN. RESIST. (BLOWS/0.3m) DCPT (50mm DIA. CONE) 20 40 60 80 △ REMOULDED SHEAR STRENGTH (kPa) ▲ UNDRAINED SHEAR STRENGTH (kPa) 20 40 60 80 PL (%) WATER CONTENT (%) LL (%) 20 40 60 80	PIEZOMETER CONSTRUCTION	ELEVATION (m)
GROUND SURFACE									
FILL: Brown silty clay, with sand, trace gravel and topsoil 0.50m [86.16m]	▨		G 1						
GLACIAL TILL: Very dense, brown silty sand, some gravel and cobbles, trace clay 0.90m [85.75m]	▽		G 2						86
End of Test Pit Practical refusal on bedrock surface at 0.90 m depth Test pit dry upon completion of excavation		1							
									85
		2							
									84
		3							
									83
		4							
									82
		5							

SOIL PROFILE AND TEST DATA

Geotechnical Investigation

Spoor Street at Buckbean Avenue – Ottawa, Ontario

COORD. SYS.: MTM ZONE 9 **EASTING:** 347903.84 **NORTHING:** 5025114.05 **ELEVATION:** 86.90

PROJECT: Proposed residential development

ADVANCED BY: Excavator

REMARKS: Datum: NAD1983 (Canada) Geoid: HT2-2010 **DATE:** February 19, 2026

FILE NO. : PG4258

HOLE NO. : TP 8-26

SAMPLE DESCRIPTION

GROUND SURFACE

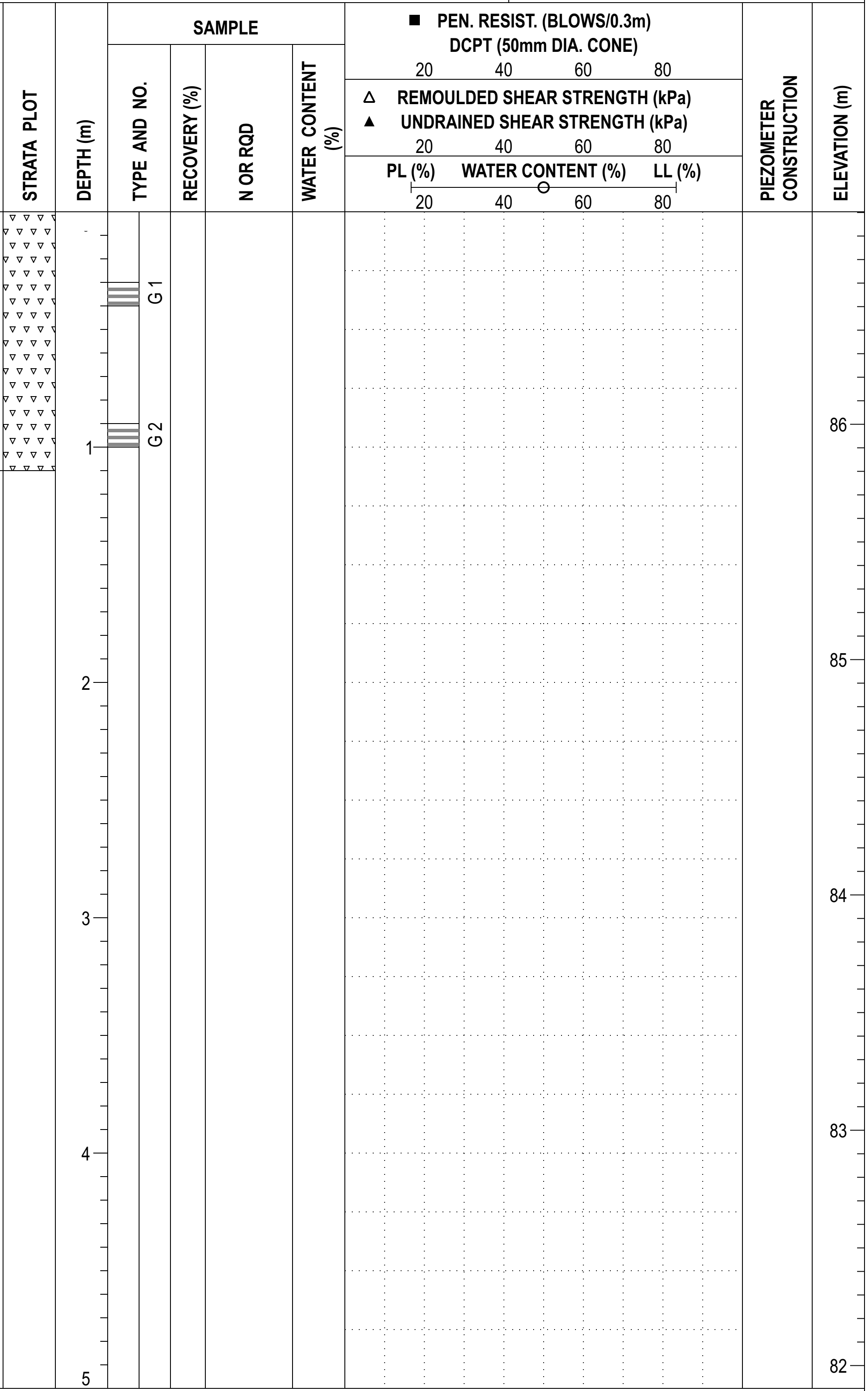
GLACIAL TILL: Very stiff to hard, brown silty clay, with sand, gravel, cobbles and boulders

1.10m [85.80m]

End of Test Pit

Practical refusal on bedrock surface at 1.10 m depth

Test pit dry upon completion of excavation



DISCLAIMER: THE DATA PRESENTED IN THIS SHEET IS THE PROPERTY OF PATERSON GROUP AND THE CLIENT FOR WHOM IT WAS PRODUCED. THIS SHEET SHOULD BE READ IN CONJUNCTION WITH ITS CORRESPONDING REPORT. PATERSON GROUP IS NOT RESPONSIBLE FOR THE UNAUTHORIZED USE OF THIS DATA.

PATERSON GROUP

SOIL PROFILE AND TEST DATA

Geotechnical Investigation

Spoor Street at Buckbean Avenue – Ottawa, Ontario

COORD. SYS.: MTM ZONE 9 **EASTING:** 347920.98 **NORTHING:** 5025087.29 **ELEVATION:** 86.72

PROJECT: Proposed residential development

ADVANCED BY: Excavator

REMARKS: Datum: NAD1983 (Canada) Geoid: HT2-2010 **DATE:** February 19, 2026

FILE NO. : PG4258

HOLE NO. : TP 9-26

SAMPLE DESCRIPTION

GROUND SURFACE

STRATA PLOT | DEPTH (m) | SAMPLE: TYPE AND NO. | RECOVERY (%) | N OR RQD | WATER CONTENT (%)

■ PEN. RESIST. (BLOWS/0.3m) DCPT (50mm DIA. CONE) 20 40 60 80

△ REMOULDED SHEAR STRENGTH (kPa)

▲ UNDRAINED SHEAR STRENGTH (kPa) 20 40 60 80

PL (%) WATER CONTENT (%) LL (%) 20 40 60 80

PIEZOMETER CONSTRUCTION | ELEVATION (m)

FILL: Brown silty clay, with sand and gravel, trace topsoil and roots

0.90m [85.82m]

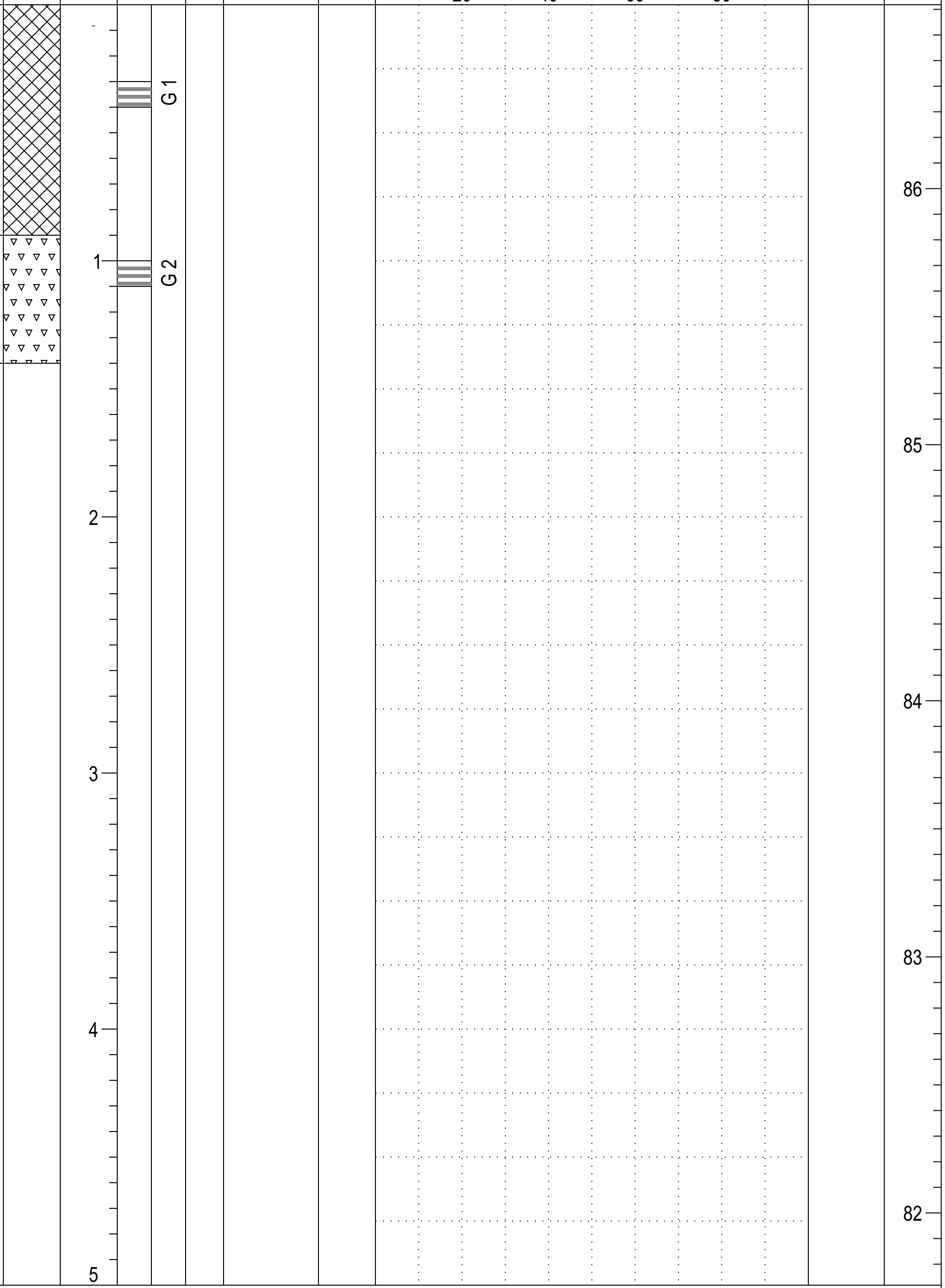
GLACIAL TILL: Dense, brown silty sand, with gravel and cobbles, trace clay

1.40m [85.32m]

End of Test Pit

Practical refusal on bedrock surface at 1.40 m depth

Test pit dry upon completion of excavation



SOIL PROFILE AND TEST DATA

Geotechnical Investigation

Spoor Street at Buckbean Avenue – Ottawa, Ontario

COORD. SYS.: MTM ZONE 9 **EASTING:** 347934.47 **NORTHING:** 5025043.99 **ELEVATION:** 85.75

PROJECT: Proposed residential development

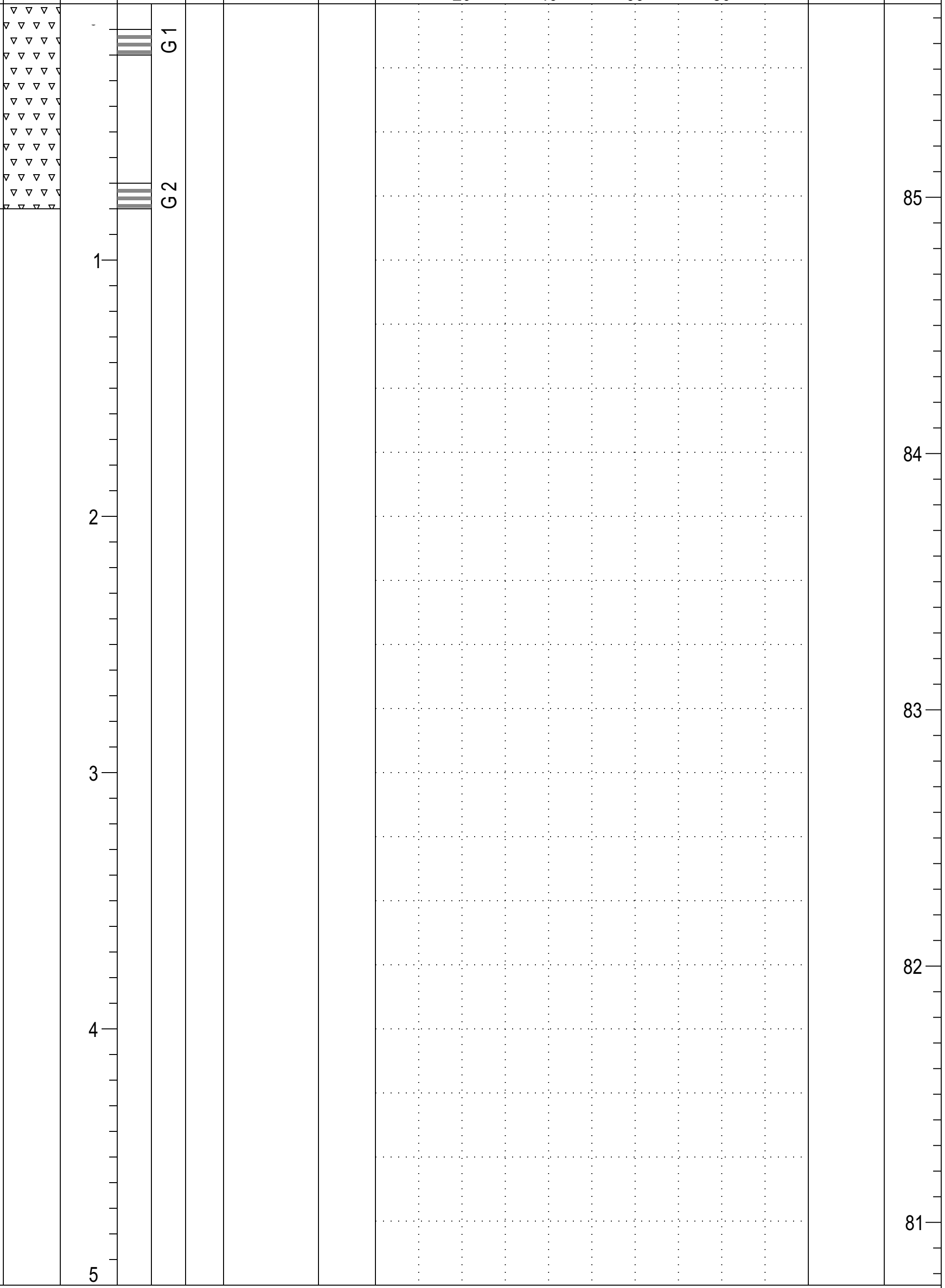
ADVANCED BY: Excavator

REMARKS: Datum: NAD1983 (Canada) Geoid: HT2-2010 **DATE:** February 19, 2026

FILE NO. : PG4258

HOLE NO. : TP10-26

SAMPLE DESCRIPTION	STRATA PLOT	DEPTH (m)	SAMPLE: TYPE AND NO.	SAMPLE: RECOVERY (%)	SAMPLE: N OR RQD	SAMPLE: WATER CONTENT (%)	■ PEN. RESIST. (BLOWS/0.3m) DCPT (50mm DIA. CONE) 20 40 60 80 △ REMOULDED SHEAR STRENGTH (kPa) ▲ UNDRAINED SHEAR STRENGTH (kPa) 20 40 60 80 PL (%) WATER CONTENT (%) LL (%) 20 40 60 80	PIEZOMETER CONSTRUCTION	ELEVATION (m)
GROUND SURFACE									



GLACIAL TILL: Very dense, brown silty sand, with clay, gravel and cobbles

- Clay content increasing with depth

0.80m [84.95m]

End of Test Pit

Practical refusal on bedrock surface at 1.40 m depth

Test pit dry upon completion of excavation

patersongroup Consulting Engineers

154 Colonnade Road South, Ottawa, Ontario K2E 7J5

SOIL PROFILE AND TEST DATA

Geotechnical Investigation
Proposed Stormwater Management Facility
1075 March Road, Ottawa, Ontario

DATUM Geodetic

REMARKS

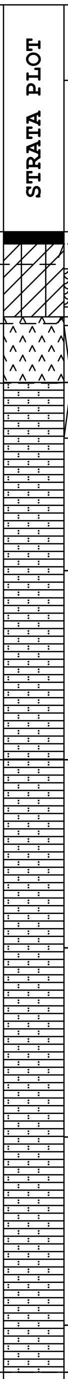
BORINGS BY CME 55 Power Auger

DATE March 15, 2022

FILE NO. PG4258

HOLE NO. BH3-22

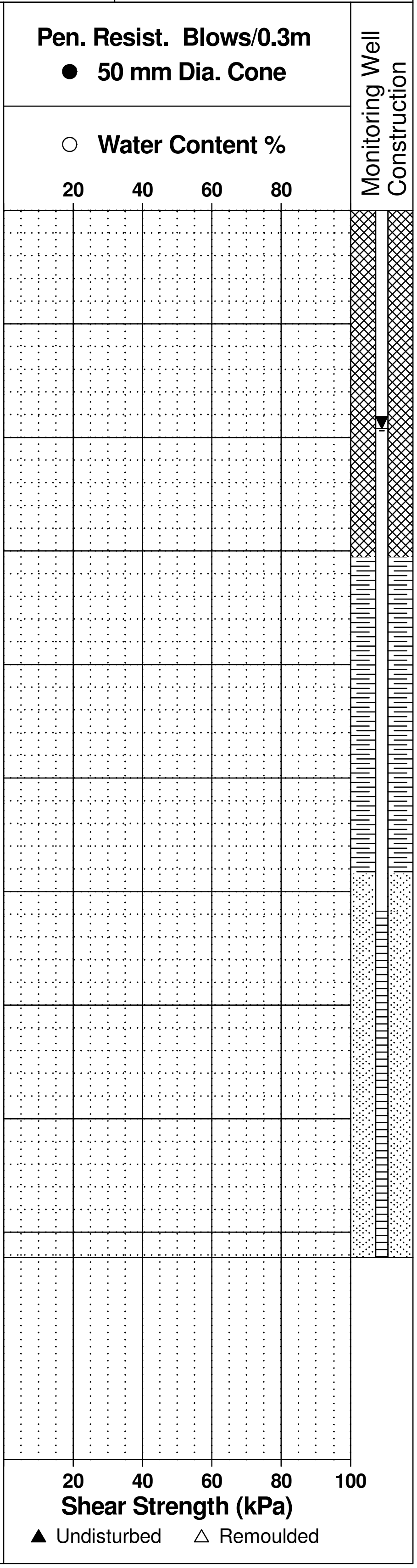
SOIL DESCRIPTION	
GROUND SURFACE	
TOPSOIL	0.10
Very stiff, brown **SILTY CLAY,** trace sand	0.69
GLACIAL TILL: Brown silty clay with gravel, trace cobbles and boulders	1.22
BEDROCK: Very poor quality, grey limestone	4.27
BEDROCK: Good quality, grey limestone	9.22
End of Borehole	
(GWL @ 1.92m - March 17, 2022)	



SAMPLE

TYPE	NUMBER	% RECOVERY	N VALUE or RQD
AU	1		
SS	2		
RC	1	100	13
RC	2	100	7
RC	3	100	75
RC	4	100	80
RC	5	100	78
RC	6	100	47

DEPTH (m)	ELEV. (m)
0	86.05
1	85.05
2	84.05
3	83.05
4	82.05
5	81.05
6	80.05
7	79.05
8	78.05
9	77.05



patersongroup Consulting Engineers

154 Colonnade Road South, Ottawa, Ontario K2E 7J5

SOIL PROFILE AND TEST DATA

Geotechnical investigation
Proposed Stormwater Management Facility
1053 March Road, Ottawa, Ontario

DATUM Ground surface elevations provided by Novatech Engineering Consultants Ltd.

REMARKS

BORINGS BY Backhoe

DATE October 19, 2017

FILE NO. PG4258

HOLE NO. TP 1

SOIL DESCRIPTION	STRATA PLOT	SAMPLE				DEPTH (m)	ELEV. (m)	Pen. Resist. Blows/0.3m ● 50 mm Dia. Cone ○ Water Content % 20 40 60 80	Piezometer Construction
		TYPE	NUMBER	% RECOVERY	N VALUE or RQD				
GROUND SURFACE						0	85.22		
TOPSOIL 0.40									
Stiff, brown **SILTY CLAY,** trace sand 0.56									
BEDROCK: Grey limestone 0.66									
End of Test Pit (TP dry upon completion)									

20 40 60 80 100
Shear Strength (kPa)
▲ Undisturbed △ Remoulded

patersongroup Consulting Engineers

154 Colonnade Road South, Ottawa, Ontario K2E 7J5

SOIL PROFILE AND TEST DATA

Preliminary Geotechnical Investigation
Future Development Lands - March Road
Ottawa, Ontario

DATUM Ground surface elevations provided by Annis, O'Sullivan, Vollebekk Ltd.

FILE NO. PG2878

REMARKS 18T 0425629; 5023917

HOLE NO. TP32

BORINGS BY Hydraulic Excavator

DATE March 21, 2013

SOIL DESCRIPTION	STRATA PLOT	SAMPLE TYPE	SAMPLE NUMBER	SAMPLE % RECOVERY	SAMPLE N VALUE or RQD	DEPTH (m)	ELEV. (m)	Pen. Resist. Blows/0.3m ● 50 mm Dia. Cone / ○ Water Content % (20, 40, 60, 80)	Piezometer Construction
GROUND SURFACE						0	86.81		
TOPSOIL 0.66	■								
End of Test Pit Practical refusal to excavation on inferred bedrock surface at 0.66m depth (TP dry upon completion)									

20 40 60 80 100
Shear Strength (kPa)
▲ Undisturbed △ Remoulded

SYMBOLS AND TERMS

SOIL DESCRIPTION

Behavioural properties, such as structure and strength, take precedence over particle gradation in describing soils. Terminology describing soil structure are as follows:

Desiccated	-	having visible signs of weathering by oxidation of clay minerals, shrinkage cracks, etc.
Fissured	-	having cracks, and hence a blocky structure.
Varved	-	composed of regular alternating layers of silt and clay.
Stratified	-	composed of alternating layers of different soil types, e.g. silt and sand or silt and clay.
Well-Graded	-	Having wide range in grain sizes and substantial amounts of all intermediate particle sizes (see Grain Size Distribution).
Uniformly-Graded	-	Predominantly of one grain size (see Grain Size Distribution).

The standard terminology to describe the strength of cohesionless soils is the relative density, usually inferred from the results of the Standard Penetration Test (SPT) 'N' value. The SPT N value is the number of blows of a 63.5 kg hammer, falling 760 mm, required to drive a 51 mm O.D. split spoon sampler 300 mm into the soil after an initial penetration of 150 mm.

Relative Density	'N' Value	Relative Density %
Very Loose	<4	<15
Loose	4-10	15-35
Compact	10-30	35-65
Dense	30-50	65-85
Very Dense	>50	>85

The standard terminology to describe the strength of cohesive soils is the consistency, which is based on the undisturbed undrained shear strength as measured by the in situ or laboratory vane tests, penetrometer tests, unconfined compression tests, or occasionally by Standard Penetration Tests.

Consistency	Undrained Shear Strength (kPa)	'N' Value
Very Soft	<12	<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

SYMBOLS AND TERMS (continued)

SOIL DESCRIPTION (continued)

Cohesive soils can also be classified according to their “sensitivity”. The sensitivity is the ratio between the undisturbed undrained shear strength and the remoulded undrained shear strength of the soil.

Terminology used for describing soil strata based upon texture, or the proportion of individual particle sizes present is provided on the Textural Soil Classification Chart at the end of this information package.

ROCK DESCRIPTION

The structural description of the bedrock mass is based on the Rock Quality Designation (RQD).

The RQD classification is based on a modified core recovery percentage in which all pieces of sound core over 100 mm long are counted as recovery. The smaller pieces are considered to be a result of closely-spaced discontinuities (resulting from shearing, jointing, faulting, or weathering) in the rock mass and are not counted. RQD is ideally determined from NXL size core. However, it can be used on smaller core sizes, such as BX, if the bulk of the fractures caused by drilling stresses (called “mechanical breaks”) are easily distinguishable from the normal in situ fractures.

RQD %	**ROCK QUALITY**
90-100	Excellent, intact, very sound
75-90	Good, massive, moderately jointed or sound
50-75	Fair, blocky and seamy, fractured
25-50	Poor, shattered and very seamy or blocky, severely fractured
0-25	Very poor, crushed, very severely fractured

SAMPLE TYPES

SS	-	Split spoon sample (obtained in conjunction with the performing of the Standard Penetration Test (SPT))
TW	-	Thin wall tube or Shelby tube
PS	-	Piston sample
AU	-	Auger sample or bulk sample
WS	-	Wash sample
RC	-	Rock core sample (Core bit size AXT, BXL, etc.). Rock core samples are obtained with the use of standard diamond drilling bits.

SYMBOLS AND TERMS (continued)

GRAIN SIZE DISTRIBUTION

MC% - Natural moisture content or water content of sample, %
LL - Liquid Limit, % (water content above which soil behaves as a liquid)
PL - Plastic limit, % (water content above which soil behaves plastically)
PI - Plasticity index, % (difference between LL and PL)

Dxx - Grain size which xx% of the soil, by weight, is of finer grain sizes
These grain size descriptions are not used below 0.075 mm grain size
D10 - Grain size at which 10% of the soil is finer (effective grain size)
D60 - Grain size at which 60% of the soil is finer

Cc - Concavity coefficient = $(D30)^2 / (D10 \times D60)$
Cu - Uniformity coefficient = D60 / D10

Cc and Cu are used to assess the grading of sands and gravels:
Well-graded gravels have: $1 < Cc < 3$ and $Cu > 4$
Well-graded sands have: $1 < Cc < 3$ and $Cu > 6$
Sands and gravels not meeting the above requirements are poorly-graded or uniformly-graded.
Cc and Cu are not applicable for the description of soils with more than 10% silt and clay
(more than 10% finer than 0.075 mm or the #200 sieve)

CONSOLIDATION TEST

p'_o - Present effective overburden pressure at sample depth
p'_c - Preconsolidation pressure of (maximum past pressure on) sample
Ccr - Recompression index (in effect at pressures below p'_c)
Cc - Compression index (in effect at pressures above p'_c)

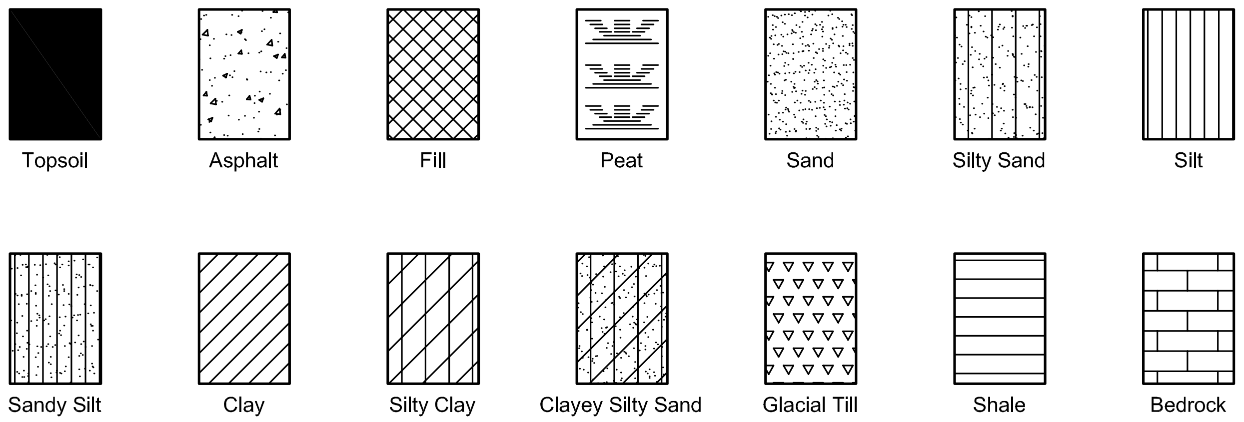
OC Ratio Overconsolidaton ratio = p'_c / p'_o
Void Ratio Initial sample void ratio = volume of voids / volume of solids
Wo - Initial water content (at start of consolidation test)

PERMEABILITY TEST

k - Coefficient of permeability or hydraulic conductivity is a measure of the ability of water to flow through the sample. The value of k is measured at a specified unit weight for (remoulded) cohesionless soil samples, because its value will vary with the unit weight or density of the sample during the test.

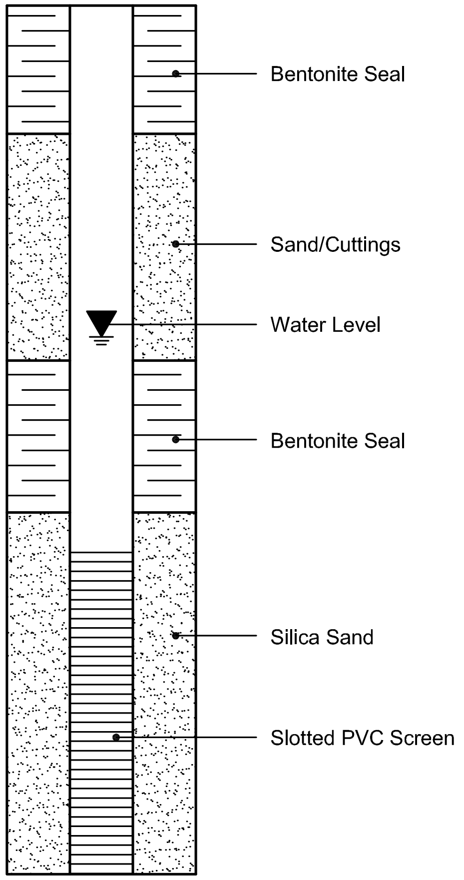
SYMBOLS AND TERMS (continued)

STRATA PLOT

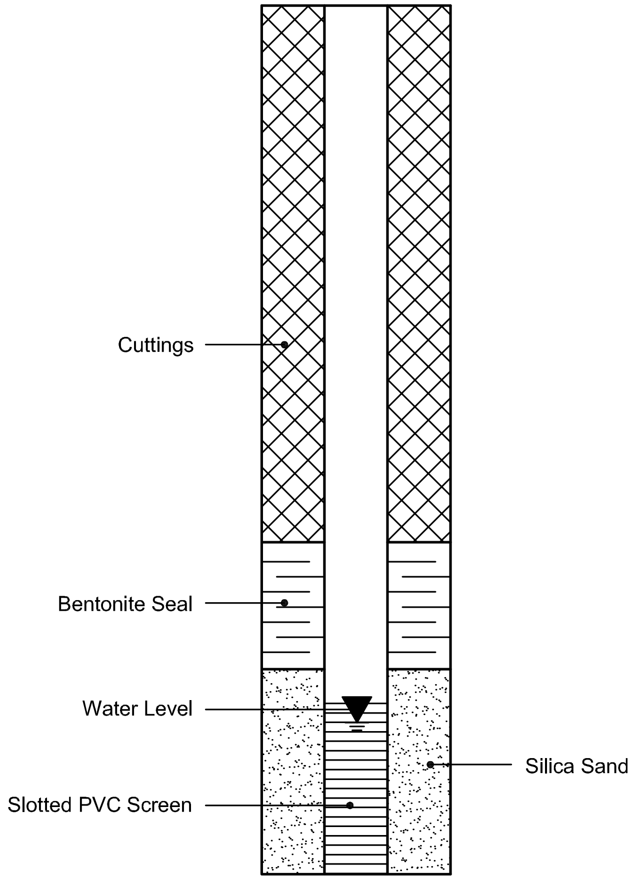


MONITORING WELL AND PIEZOMETER CONSTRUCTION

MONITORING WELL CONSTRUCTION



PIEZOMETER CONSTRUCTION



Certificate of Analysis

Report Date: 26-Feb-2026

Client: **Paterson Group Consulting Engineers (Ottawa)**

Order Date: 20-Feb-2026

Client PO: 65177

Project Description: PG4258

	Client ID:	TP1-26 G2	-	-	-	-	-
	Sample Date:	19-Feb-26 09:00	-	-	-		
	Sample ID:	2608416-01	-	-	-		
	Matrix:	Soil	-	-	-		
	MDL/Units						
Physical Characteristics							
% Solids	0.1 % by Wt.	90.6	-	-	-	-	-
General Inorganics							
pH	0.05 pH Units	7.51	-	-	-	-	-
Resistivity	0.1 Ohm.m	35.9	-	-	-	-	-
Anions							
Chloride	10 ug/g	<10	-	-	-	-	-
Sulphate	10 ug/g	137	-	-	-	-	-

APPENDIX 2

FIGURE 1 - KEY PLAN

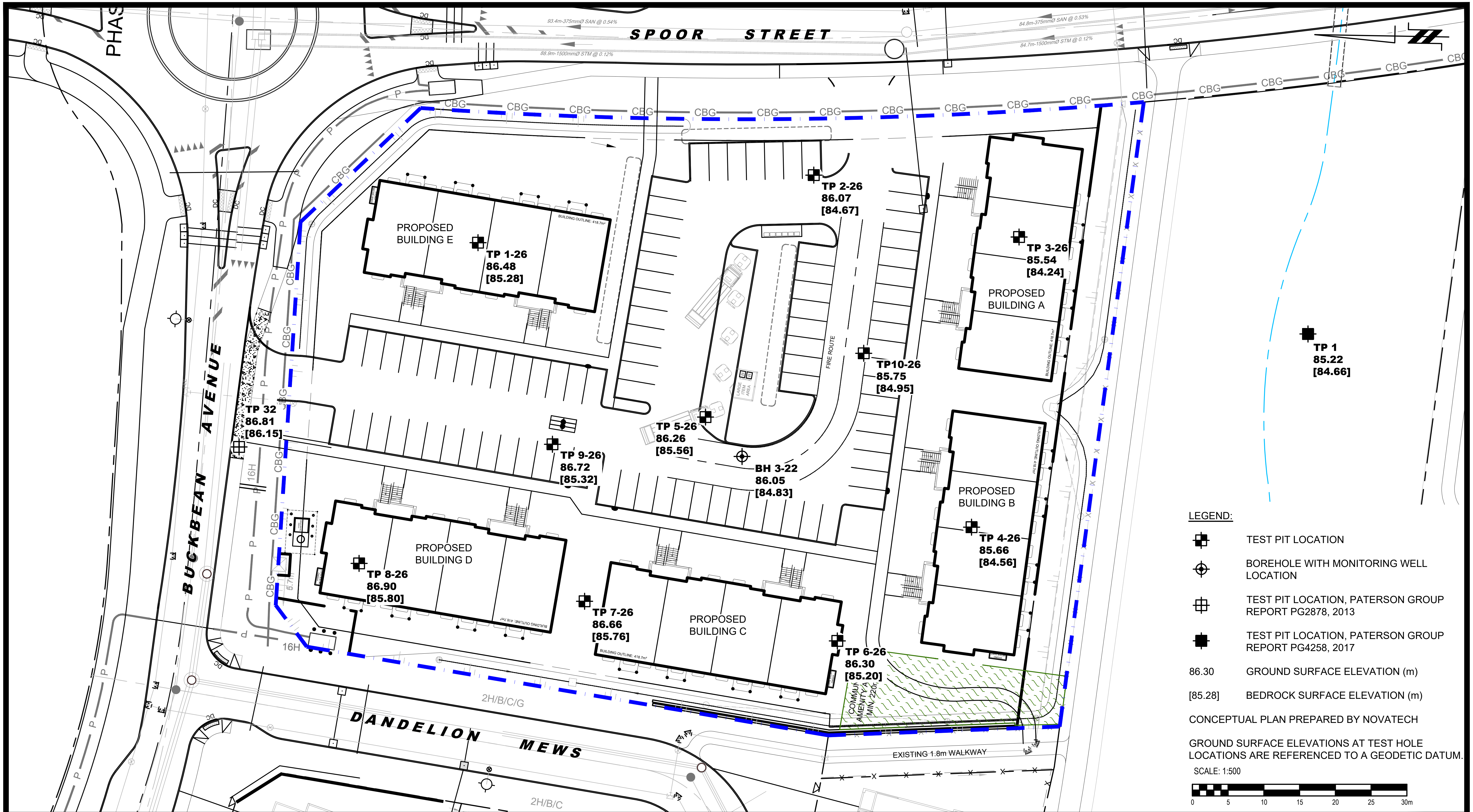
DRAWING PG4258-10 - TEST HOLE LOCATION PLAN

DRAWING PG4258-11 – BEDROCK CONTOUR PLAN

FIGURE 1

KEY PLAN

PATERSON
GROUP



LEGEND:

▣	TEST PIT LOCATION
⌖	BOREHOLE WITH MONITORING WELL LOCATION
⊞	TEST PIT LOCATION, PATERSON GROUP REPORT PG2878, 2013
■	TEST PIT LOCATION, PATERSON GROUP REPORT PG4258, 2017
86.30	GROUND SURFACE ELEVATION (m)
[85.28]	BEDROCK SURFACE ELEVATION (m)

CONCEPTUAL PLAN PREPARED BY NOVATECH

GROUND SURFACE ELEVATIONS AT TEST HOLE LOCATIONS ARE REFERENCED TO A GEODETIC DATUM.

SCALE: 1:500

0 5 10 15 20 25 30m

PATERSON GROUP

9 AURIGA DRIVE
OTTAWA, ON
K2E 7T9
TEL: (613) 226-7381

NO.	REVISIONS	DD/MM/YYYY	INITIAL

CLARIDGE HOMES
GEOTECHNICAL INVESTIGATION
PROPOSED RESIDENTIAL DEVELOPMENT
1100 SPOOR STREET (COPPERWOOD - BLOCK 73)
OTTAWA, ONTARIO

Title:

TEST HOLE LOCATION PLAN

Scale: 1:500
Date: 03/2026
Drawn by: ZS
Report No.: PG4258-REP.03
Checked by: ZA
Dwg. No.: PG4258-10
Approved by: SD
Revision No.:

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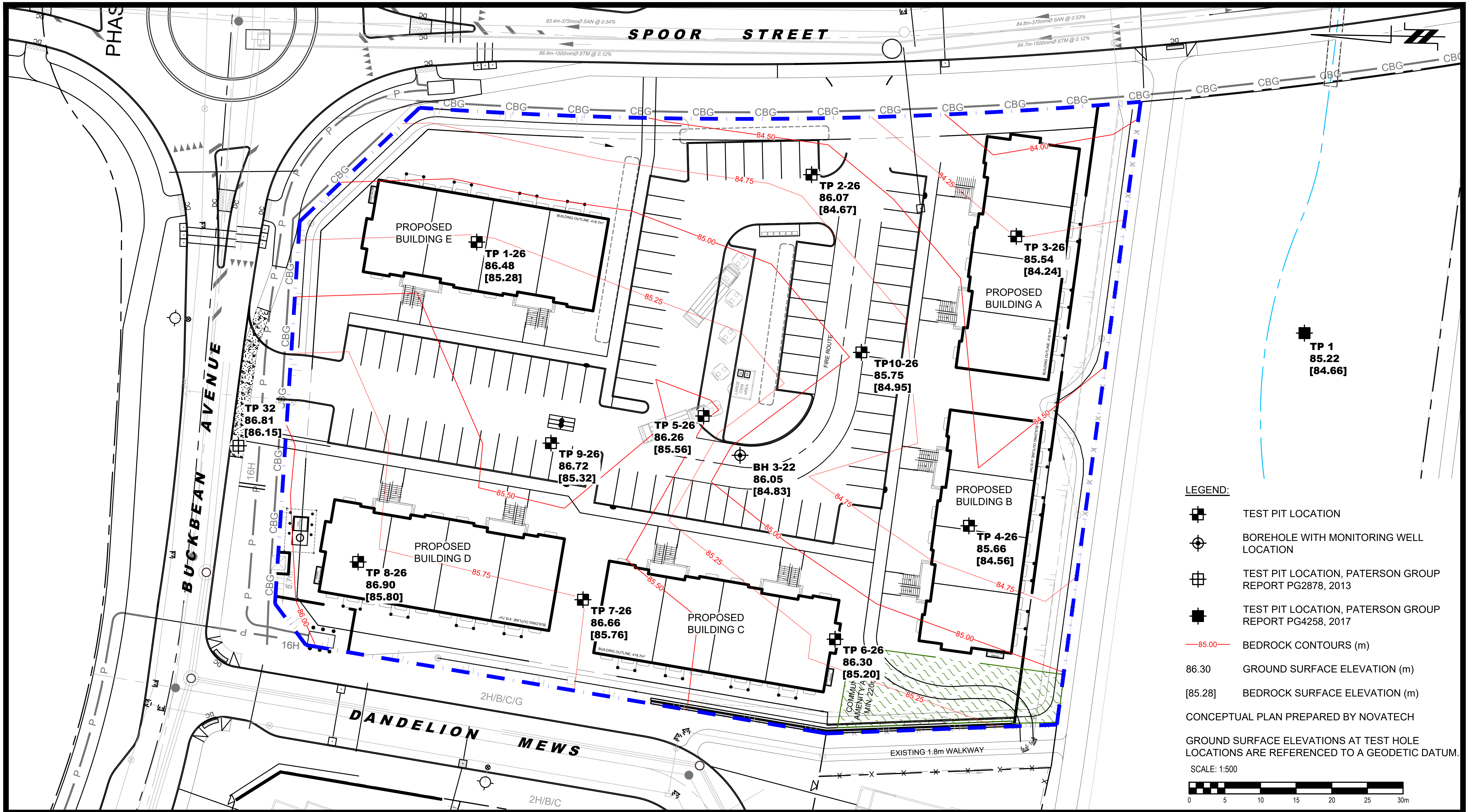
11x17



LEGEND:

⊞	TEST PIT LOCATION
⌖	BOREHOLE WITH MONITORING WELL LOCATION
⊞	TEST PIT LOCATION, PATERSON GROUP REPORT PG2878, 2013
■	TEST PIT LOCATION, PATERSON GROUP REPORT PG4258, 2017
—85.00—	BEDROCK CONTOURS (m)
86.30	GROUND SURFACE ELEVATION (m)
[85.28]	BEDROCK SURFACE ELEVATION (m)

CONCEPTUAL PLAN PREPARED BY NOVATECH

GROUND SURFACE ELEVATIONS AT TEST HOLE LOCATIONS ARE REFERENCED TO A GEODETIC DATUM.

SCALE: 1:500

PATERSON GROUP

9 AURIGA DRIVE
OTTAWA, ON
K2E 7T9
TEL: (613) 226-7381

NO.	REVISIONS	DD/MM/YYYY	INITIAL

CLARIDGE HOMES
GEOTECHNICAL INVESTIGATION
PROPOSED RESIDENTIAL DEVELOPMENT
1100 SPOOR STREET (COPPERWOOD - BLOCK 73)

OTTAWA, ONTARIO

Title:

BEDROCK CONTOUR PLAN

Scale: 1:500
Date: 03/2026
Drawn by: ZS
Report No.: PG4258-REP.03
Checked by: ZA
Dwg. No.: PG4258-11
Approved by: SD
Revision No.:

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11x17