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PRELIMINARY GEOTECHNICAL INVESTIGATION REPORT

FOR

Proposed Mixed-Use Building
418 N. Division Street, Peekskill NY 10566

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Prepared for:

STAGG Group
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DRAWING

DRAWING NO. 1 Exploration Location Plan

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APPENDIX A SESI Boring and Test Pit Logs
SESI Environmental Borings
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1.0 INTRODUCTION

SESI Consulting Engineers (SESI) recently completed a preliminary geotechnical investigation for the proposed mixed-used development at 418 N. Division Street, Peekskill, NY, herein reference as “the Site.” This geotechnical investigation report summarizes SESI’s geotechnical investigation, our findings, and our preliminary foundation design recommendations for the proposed development. The report also presents recommendations regarding other construction-related aspects of the proposed development, such as site preparation, groundwater control, excavation support and utility support.

All elevations given in this report are referenced to the 1988 North American Vertical datum (NAVD88), unless otherwise noted.

2.0 PROJECT DESCRIPTION

2.1 Site and Surrounding Conditions

Based on the November 18, 2024, *Topographic Survey of Property* prepared by Geologic Land Surveying, PLLC, the site is an approximately 1.068-acre parcel located on Tax Lots 23.78-1-9, 23.78-1-10A, 23.78-1-10B, 23.78-1-11 and 23.78-1-11 in Peekskill, New York. The site is bordered to the north by Constant Avenue, to the west by Highland Avenue, to the east by North Division Street, residential and commercial buildings, and lastly, to the south by residential and commercial buildings.

A 25-foot-wide ingress and egress easement traverses the northern portion of the site in a north-south orientation for a total approximate length of 93 feet. The easement is most likely to service the utility valve located on-site at the end of the easement. At the time of our visit, the utility valve was observed to be removed and the utility line was sealed with end caps. We recommend additional information is obtained from the easement owner prior to the start of the redevelopment design phase.

Topographically, based on information provided in the November 18, 2024, *Topographic Survey of Property* prepared by Geologic Land Surveying, PLLC, the project area generally slopes downward from a high point in the northeastern portion of the site, with an approximate elevation of ±198, to a low point in the northwestern portion of the project area, with an approximate elevation of ±174. Additionally, the site slopes downward from a high point in the southwestern portion of the site, with an approximate elevation of ±177.5, to the low point in the northwestern portion of the site, with an approximate elevation of ±174.

2.2 Proposed Development

Based on recent discussions with the project team and the latest architectural plans prepared by Marin Architects, dated January 6, 2025, we understand that the proposed development will involve demolishing the existing on-site buildings and constructing a six-story mixed-use building with multiple cellar levels. Based on the aforementioned architectural plans, we understand the cellars will be fully and partially below grade as follows:

- The cellars are up to three (3) stories beneath the existing ground at the northeastern portion of the site. The cellars are partially and gradually exposed, from three (3) stories to one (1) story beneath the ground, along the northern face of the building, running parallel to Constant Avenue from N. Division Street towards Highland Avenue.
- The cellar is one (1) story beneath the existing ground at the intersection of Constant Avenue and Highland Avenue.

- The cellars are up to two (2) stories beneath the existing ground at the southwestern portion of the site. The cellars are partially and gradually exposed, from two (2) stories to one (1) story beneath the ground, along the western face of the proposed building, running parallel to Highland Avenue towards Constant Avenue.

The proposed building will comprise of five (5) residential levels, two (2) commercial levels and garage levels. Additionally, the southeastern portion of the site will consist of landscape area. We understand the lowest finished floor slab elevation for the proposed structure will be at an approximate elevation of ±164.4. We understand the existing site grades need to be cut approximately 10 to 26 feet in order to meet the proposed finished floor elevations.

At this time, structural plans have not been provided, nor have we received any information regarding wall, floor, or column loads for the proposed construction. Once the structural plans are finalized, we recommend SESI reviews them to ensure that our recommendations remain applicable. For the purposes of this report, we have assumed typical residential wall, floor, and column loads for the proposed structures.

3.0 AVAILABLE INFORMATION REVIEW

We obtained and reviewed available historic aerial photographs, geologic maps, and FEMA flood map for the Site.

- FEMA Flood Insurance Rate Map - We researched and reviewed the FEMA Preliminary Flood Insurance Rate Map, Map Number 36119C0016F (effective as of 9/28/2007) which indicates that the Site is located within “Zone X” which is determined to be outside the 0.2% annual chance floodplain. This should be confirmed by the site civil engineer.
- Historic Aerial Photographs – Historic aerial photographs indicate that the existing buildings located on the site predate 1964. No further redevelopments seem to have occurred from 1964 to present time.
- Geological Mapping – We reviewed the Geologic Map of New York – Lower Hudson Sheet compiled and edited by Donald W. Fisher, Yngvar W. Isachsen and Lawrence V. Rickard in March 1970, and the Surficial Geologic Map of New York – Lower Hudson Sheet compiled and edited by Donald H. Cadwell in 1989. The surficial geology map indicates that the surficial geology of the site consists of till of variable texture, usually poorly sorted diamict and relatively impervious. The bedrock geology map indicates that the bedrock geology consists of biotite-hornblende granite and granitic gneiss.

4.0 PRELIMINARY SUBSURFACE INVESTIGATION AND LABORATORY PROGRAM

4.1 Field Investigation

Our geotechnical subsurface investigation consisted of six (6) drilled borings (GT-1 through GT-6). A location plan showing the approximate locations of the drilled borings is attached as ***Drawing 1***. Individual boring logs, which describe the materials encountered along with a key to SESI soil terminology, are presented in **Appendix A**.

Before drilling the borings, a private utility mark-out was performed at the site by PG Environmental Services, Inc. to identify areas free of detectable subsurface utilities. The geotechnical borings were drilled by PG Environmental Services, Inc. on January 29 through January 31, 2025, using a track-mounted drill rig to depths ranging from ±six (6) to ±24 feet below the existing grade elevation.

In each boring, conventional mud-rotary drilling techniques were used to advance the boring. Near continuous soil sampling was performed below the existing site grade to the approximate depth of the bedrock and/or weathered rock. The soil samples were typically obtained using Standard Penetration Test (SPT) procedures in general accordance with the provisions of ASTM D1586; a 140-pound automatic hammer was used to advance the SPT sampler in all borings. The drilled borings were backfilled with soil cuttings. Our field engineer identified soil classifications for each soil sample. The samples were transported to our Parsippany, New Jersey office, where soil classifications were confirmed by our office project personnel.

During our geotechnical investigation, SESI also observed twenty (20) supplemental environmental borings throughout the site ranging from approximately two (2) feet to ten (10) feet below ground surface on January 28 through January 31, 2025. These are indicated as SB-100 through SB-119. Additionally, SESI installed two (2) monitoring wells to depths of ten (10) feet and thirteen (13) feet below grade, TW-1 and TW-2, respectively. The environmental borings were performed using direct push methods to advance the sampling sleeve. Our field engineer identified and classified the soils for each sampled interval. Our field engineer screened for organic vapors using a photo-ionization detector (PID) and took soil samples at select locations. Additionally, we collected soil vapor samples under the existing concrete slabs located throughout the site. The location of these explorations and wells are shown on the *Exploration Location Plan*, which is included as **Drawing 1**. The environmental logs are attached in Appendix A of this report. A summary of our environmental investigation will be provided under a separate report.

The fieldwork was conducted under the direct technical observation of a geotechnical engineer from SESI Consulting Engineers. Our representative located the exploration points in the field, maintained continuous logs of the exploration activities as the work progressed, and coordinated the soil sampling operations to obtain the desired subsurface information. The boring locations were laid out in the field using Google Earth mapping software and an electronic device. Ground surface locations and elevation at each exploration point were obtained from the November 18, 2024, *Topographic Survey of Property* prepared by Geologic Land Surveying, PLLC, using nearby landmarks as reference points. The actual boring locations may vary by several feet and should be confirmed by a survey if required.

Previously, SESI observed twelve (12) environmental borings throughout the site on December 19 and 20, 2024 during an initial environmental Phase II investigation. The environmental borings were performed to depths ranging from two (2) feet to ten (10) feet below ground surface. During this investigation we performed soil sampling, soil vapor sampling and soil identification as previously stated. These are indicated as SB-1 through SB-15 on **Drawing 1.** Individual environmental logs are presented in **Appendix A**.

4.2 Geotechnical Laboratory Program

Soil samples suitable for identification purposes were extracted from the borings. The soil samples were brought to our soil mechanics laboratory for additional classification and appropriate geotechnical testing. The laboratory testing program consisted of one (1) mechanical grain size analysis and one (1) water content determination. The results of the percent passing sieve No. 200 tests and the water content determinations are presented on the individual boring logs. The results of the mechanical grain size analysis are presented on the individual boring logs and in graphical form in **Appendix B**.

4.3 Subsurface Conditions

The investigation data indicates the subsurface conditions at the site generally consist of surficial materials, underlain by granular fill, underlain by till, and underlain further by Gneiss bedrock. The

surface materials consisted of asphalt, concrete and sub-base granular materials. The granular fill consisted of sands and gravels with little to trace amount of fines. The natural till consisted predominantly of sands, with little to trace amounts of silts and clays with variable amounts of medium to fine gravel. The bedrock in this area consisted of Gneiss and/or Granitic Gneiss. The bedrock was found to be excessively weathered within the upper portions. The natural soils and bedrock encountered in our borings generally agreed with the published geological records. The following generalized strata are listed in order of increasing depth.

4.3.1 Surface Materials

Asphalt pavement was observed in borings GT-2, GT-4 and GT-5. The asphalt layer thickness was measured to be approximately six (6) inches. Concrete was observed in borings GT-1, GT-3 and GT-6. The concrete thickness was observed to be approximately six (6) inches.

4.3.2 Granular Fill

Below the surface materials in borings GT-1, GT-4, GT-5 and GT-6 granular fill was encountered. The granular fill extended to about 2 feet below existing grades. The granular fill generally consisted of coarse to fine sand, little to trace amounts of silt, clay and little to some amounts of coarse to fine gravel, with concrete debris. Based on the recorded SPT N-values, the granular fill was observed in a loose to very dense condition, which is typical of fill material.

4.3.3 Till

Natural soils were encountered beneath the granular fill or surface material in all boring locations at depths ranging from approximately six (6) inches to six (6) feet below existing surface grade. The natural soils extended to the top of weathered rock and/or bedrock in all borings with a layer thickness of approximately 1.5 feet to 12 feet. The natural soils generally consisted of coarse to fine sand with trace to little amounts of silt and clay, and little amounts of coarse to fine gravel. Based on the observed SPT N-values, the natural till was generally observed in a medium dense to very dense condition.

4.3.4 Decomposed/Weathered Bedrock:

Weathered/decomposed rock material was encountered in GT-3, GT-4 and GT-5 at depths ranging from approximately 4 to 6 feet below ground surface. The decomposed bedrock extended to top of competent bedrock with a layer thickness of approximately 2 to 7.5 feet. The weathered rock was augered through using conventional mud rotary drilling techniques and was observed to consist of heavily weathered Gneiss gravel and cobble-sized fragments, little to some amounts of coarse to fine sand and trace amounts of silt and clay.

4.3.5 Bedrock

Bedrock was encountered in GT-1, GT-2, GT-4 and GT-6 at depths ranging from approximately 5 to 16 feet below the existing ground surface. A total of six (6) 5-foot rock cores and one (1) 3-foot rock core were collected at boring locations GT-1, GT-2, GT-4 and GT-6 upon encountering auger refusal. The bedrock generally consisted of Granitic Gneiss. Rock core recovery ranged from approximately 60 to 100 percent, with a Rock Quality Designation (RQD) ranging from approximately 17 to 78 percent. The upper portions of the bedrock are generally more weathered and RQD generally increases with depth. See the table below for the relationship between RQD and Rock Quality.

RELATIONSHIP OF RQD AND ROCK QUALTIY:

ROCK QUALITY DESIGNATION (RQD)[1]	DESCRIPTION OF ROCK QUALITY
0 – 25	VERY POOR
25 – 50	POOR
50 – 75	FAIR
75 – 90	GOOD
90 – 100	EXCELLENT

Rock Quality Designation" is defined as a modified core recovery ratio that considers only pieces of the core that are at least 4 inches long. Obvious mechanical fractures caused by drilling are ignored in this system.

4.3.6 Groundwater

During our preliminary geotechnical investigation, groundwater was observed in boring GT-6 at an approximate depth of 10 feet below surface grade. Additionally, during our supplemental environmental and preliminary geotechnical investigation, we installed two (2) monitoring wells, TW-101 and TW-102, to an approximate depth of 10 and 13 feet below surface grades, respectively**.** The monitoring wells were pumped dry and allowed to recharge for a minimum of 24 hours. SESI returned to the site to observe monitoring wells, TW-101 and TW-102, on February 7, 2025, and noted the installed monitoring wells were dry. As such, the groundwater encountered in GT-6 is most likely a perched water condition. Fluctuations of a few feet in the perched water elevations should be anticipated based on the time of year and amount of recent precipitation.

We previously installed three (3) monitoring wells, TW-1 through TW-3, during our preliminary Phase II Site Assessment on December 19 and December 20, 2024. The monitoring wells were installed up to 10 feet below surface grades. The monitoring wells installed during the Phase II encountered groundwater in the overburden zone at approximately 5 feet below ground surface (bgs). However, groundwater was not observed in the overburden zone in the eastern portion of the Site during the preliminary Phase II investigation.

Based on the observations of our geotechnical investigation and review of the previous environmental Phase II information, it is likely that groundwater encountered is trapped water in the till soils over the less permeable bedrock. However, we recommend this is confirmed during the demolition and/or with additional monitoring wells once the final lowest level slab elevation is known.

The location of the monitoring wells can be observed in the attached **Drawing 1.**

During construction, groundwater may be observed, likely trapped water inside rock fractures or on top of the rock. It should also be noted that localized zones of perched water may be encountered within the fill, and above zones with high percentages of fine-grained soils.

5.0 EVALUATION AND RECOMMENDATIONS

5.1 Introduction

The recommended building area preparation procedures and support considerations discussed in this report are based primarily on geotechnical engineering considerations. Our geotechnical design considerations may require modifications to address environmental and/or legal considerations. This may include reuse of on-site materials, handling and disposal of soils, pumping/treating of groundwater, etc.

From a foundation support standpoint, this site can be considered good with respect to providing satisfactory support for the planned building. The bedrock will provide suitable support for conventional shallow foundations with moderate allowable bearing capacities. The primary negative aspects of the project site include the following:

- Rock Excavation: Rock removal will be required to reach the proposed bottom of excavation elevation. It is anticipated that rock will be encountered approximately five (5) feet from existing grades in the central portion of the site, approximately six (6) feet from existing grades in the northwestern and northern portion of the site and approximately sixteen (16) feet from existing grades in the northeastern portion of the site. This indicates the need to remove up to twenty-two (22) feet of rock in some areas. It is recommended that line drilling is performed along the property line or excavation limits prior to excavation of any bedrock to control the limits of rock removal and to prevent overbreak.
- Partial Over-excavation of Overburden: Depending on the proposed footing elevation relative to the top of bedrock, over-excavation may be necessary to reach a suitable bearing stratum (i.e., bedrock), specifically on the northwestern portion of the site. The proposed footing must extend to the top of bedrock to prevent differential settlement of the proposed structure. Perched groundwater may be encountered during over-excavation operations. The Contractor should implement proper dewatering techniques and consider any required environmental requirements for treating and disposing of the groundwater.

5.2 Site Preparation Procedures

5.2.1 Demolition

Site preparation should begin by demolishing the existing structures and removing all existing surface improvements within the site. All foundations, subsurface walls, concrete slabs, asphalt and all subsurface utilities that will be abandoned should be completely removed from within the limits of the proposed building areas. Following demolition and prior to the excavation for the proposed cellars, a support of excavation (SOE) system should be installed. The support of excavation system may be required prior to removing some existing site features, especially near the property line.

5.2.2 Specific Building Area Procedures

In general, the building area preparation procedures should consist of the installation of the temporary excavation support system, followed by mass excavating the existing building foundations within the proposed building limits. Following the existing building removal, the rock excavation for the proposed basement levels can be performed to the top of bedrock. A rock stabilization and/or rockfall prevention system may need to be installed on areas of the exposed

rock face showing inadequate rock competencies. The bedrock competency should be evaluated by a qualified geotechnical engineer.

5.2.3 Rock Excavation

The quality of rock to be removed is expected to be fair to good below the weathered / decomposed rock stratum and highly fractured upper portions of the bedrock. We expect rock excavation can be accomplished using hydraulic hoe rams, splitters, and excavators fitted with special ripping teeth. Rock excavation should be controlled to prevent excessive rock over-break and vibrations that may adversely affect the existing neighboring structures and roadways. If the Contractor elects to use blasting to expedite the rock excavation process, the Contractor should strictly comply with all applicable monitoring requirements. Rock excavation work will need to be performed very carefully to ensure vibration and movement threshold levels established for the adjacent structures and utilities are not exceeded, and neighboring structures and utilities are not adversely impacted or damaged. Vibration and rock over-break control methods should be used during excavation. These methods typically include line and channel drilling to control the over-break, and pre-splitting and smooth wall blasting to control vibrations. The purpose of these methods is to ensure an air cushion and to establish a crack plane between the peripheral holes to thereby minimize the propagation of primary vibrations and strain cracking in the rock mass beyond the excavation perimeter. The method and procedure selected will depend upon the relative location of the excavation work with respect to the neighboring structures. Line drilling should consist of 2-to-3-inch-diameter holes spaced center-to-center at no more than three times their diameter. Channel drilling should consist of 2-to-3-inch-diameter holes drilled intersecting one another. Excavation vibration control can also be achieved by limiting the equipment's impact energy, or in case of blasting, by reducing the charge per delay, to a value that would produce non-damaging levels of ground vibrations. The ground vibrations and adjacent building movements should be monitored and carefully reviewed during the work. The Contractor's soil and rock excavation, removal, and associated monitoring plan should be prepared by the Contractor's Professional Engineer licensed in the State of New York (with the necessary input from a licensed blaster) and experienced in similar controlled rock excavation and removal activities. This plan should be submitted to the Owner and the Geotechnical Engineer for review.

5.3 Fill Placement

In any areas, if any, that require soil compaction, a trench roller exerting a minimum of 5,000-pounds-force shall be used. A minimum of four passes per lift shall be observed by a qualified geotechnical engineer. Lifts should be placed in a maximum 12-inch loose lift. In-place field density tests should be performed to determine the adequacy of the compacted soil fill. Structural fill should be compacted to a minimum of 92% of the Modified Proctor (ASTM D1557), and an average of 95% of the Modified Proctor (ASTM D1557). Fills located within three (3) feet vertically of a bearing structural element (i.e. footing, pavement, etc.) should achieve a minimum of 95% of the Modified Proctor Density (ASTM D1557). Wetting or drying of the fill material should be accomplished as necessary to achieve adequate compaction.

Areas with no structural loads may be compacted to a minimum of 90% of the Modified Proctor Density (ASTM D1557).

Backfill in confined and load bearing areas should be placed in a maximum eight (8) inch loose lift and compacted to 95% of the Modified Proctor Density (ASTM D1557).

Crushed stone/bedrock can be used as structural fill given a maximum particle size of six (6) inches. If offsite borrow material is required, it should consist of a granular material with the maximum particle size of 6 inches and a maximum amount of fines (percentage passing a No. 200 mesh sieve) of 15% to help facilitate construction during wet weather. The “fines” should be non-plastic.

5.4 Control of Groundwater

We anticipate groundwater seepage will be encountered during construction, trapped throughout the overburden soils, at the soil/rock interface, and from rock fractures, especially during periods of wet weather. During construction, gravel filled sumps with pumps should be installed below the subgrade elevation to allow for temporary dewatering of the excavation. Dewatering should be done in accordance with all applicable regulations.

5.5 Slopes and Excavations

OSHA requires that all excavation in excess of 4 feet be shored, braced, or adequately benched/sloped in order to provide protection from sidewall collapses, with all excavations conducted in accordance with 29 CFR Part 1926 “Safety and Health Regulations for Construction,” Subpart P “Excavations.”

All temporary excavations greater than 4 feet in depth should have the sides sloped back or be appropriately sheeted and braced in accordance with all applicable codes and be evaluated by a qualified geotechnical engineer. This is discussed further in the Temporary Support of Excavation section of this report.

5.6 Utility Lines

The site soils will provide suitable support for utility lines. Cobbles greater than 3 inches in diameter should be removed from the utility line subgrade or a minimum 4-inch thick sand layer placed beneath the utility lines. If utility lines fall within soft soils, the excavation should be extended an additional 12 inches and replaced with ¾-inch clean crushed stone or clean sand and gravel.

Backfill material placed around utility lines to 6 inches above the utility line should have a maximum particle size of 1.5 inches. Backfill of utility trenches that fall within load-bearing areas should be placed in maximum 6-inch-thick lifts and compacted to the same density requirements as in the building/parking areas. Trench backfill in non-load bearing areas should be compacted to 90 percent of the Modified Proctor density (ASTM D1557).

6.0 FOUNDATION DESIGN CRITERIA

6.1 Shallow Conventional Footings

After the site preparation procedures described above are completed, the building foundation can be conventional spread/strip footings bearing on bedrock. The rock surface should be relatively flat, or a leveling mat of concrete (mud-mat) placed to create a level working surface. If a leveled surface cannot be obtained, the footings may need to be pinned to the rock surface and should be designed on a case-by-case basis. For a sound rock, the surface is to be blown clean and free of any standing water, soil or loose rock. Any decomposed rock should be removed, and the bearing surface should be inspected by a qualified SESI engineer. The footings may be designed for a maximum net allowable bearing pressure of 10 tsf (20,000 psf) within sound bedrock or 6 tsf (12,000 psf) on weathered/fractured bedrock. The maximum allowable bearing capacities recommended herein are higher than the presumptive bearing capacities provided in Table

1806.2 *Presumptive Load-Bearing Values* of the 2020 New York State Building Code and may require approval of the local building department.

Regardless of the loads, the minimum plan dimension of isolated footings should be 36 inches, and the minimum width of continuous footings should be 24 inches. A base coefficient of sliding of 0.45 may be used for shallow foundation founded on bedrock.

6.2 Below-Grade Slab and Walls

The slab-on-grade floor system can be designed using a subgrade modulus of 175 pci, assuming that a 6-inch-thick layer of granular material with a maximum particle size of 1.5 inches and a maximum percent passing the No. 200 mesh sieve of 12 percent is placed beneath the floor slab.

SESI recommends that an exterior drainage system be installed to mitigate hydrostatic pressure along the below grade exterior walls. The exterior drains should extend to the bottom of the foundation and consist of 4-inch ADS piping wrapped in filter fabric, backfilled with 12-inches of ¾-inch diameter clean crushed stone. The use of drainage boards along the exterior walls could also facilitate the drainage of perched groundwater near the foundation walls. The exterior drains should be gravity fed to follow the natural bedrock surface slope, a sump pit within the basement or to the local sewer system. This should be coordinated with the project civil engineer and confirm what is permitted by the City of Peekskill. The installation of a one-way valve could mitigate the risk of storm sewer backup into the drainage piping if the drainage is fed to the sewer system.

SESI recommends that below grade walls be waterproofed, and water-stop should be placed at all below-grade joints. The waterproofing could include the use of a membrane such as Preprufe/Bituthene waterproofing system by W.R. Grace and Co. extending to the bottom of the below grade wall footings. We recommend that a sub slab drainage system be installed below the basement slabs to allow for any rise in the perched groundwater elevation during precipitation events. The sub-slab drainage system should be gravity fed to follow the natural bedrock surface slope, a sump pit within the basement or to the local sewer system. This should be coordinated with the project civil engineer and confirm what is permitted by the City of Peekskill. A vapor barrier should also be installed to protect the cellar floor slab from damage due to water vapor in areas that are finished or are moisture sensitive.

6.3 Seismic Design

Based on a structural occupancy/risk category of I/II/III and information provided by the ASCE Hazard Tool, the following seismic design criteria should be used for this project. Site Class D can be used for seismic design purposes in accordance with the 2020 New York State Building Code.

Mapped Spectral Response Acceleration for Short Periods	S_S = 0.28g
Mapped Spectral Response Acceleration for 1-Second Period	S_1 = 0.061g
Site Coefficient	F_a = 1.6
Site Coefficient	F_v = 2.4
Spectral Response for short periods	S_{MS} = 0.441g
Spectral Response for 1 second period	S_{M1} = 0.145g
Design Spectral Response Acceleration for Short Periods	S_{DS} = 0.294g
Design Spectral Response Accelerations for 1-Second Period	S_{D1} = 0.097g

7.0 TESTING AND INSPECTION REQUIREMENTS

7.1 Testing Requirements

During the placement of all fills, visual observations and in-place density tests shall be performed to determine the adequacy of the compacted fill. In-place density testing shall be conducted in accordance with appropriate ASTM testing standards. Density testing should be done in accordance with the following minimum frequency requirements; or as determined by the geotechnical engineer.

Building Pad Subgrade Areas: Minimum of 4 tests per 12-inch lift; spacing not to exceed 50 feet between test locations, or as determined by the geotechnical engineer.

Parking/Roadway Areas: Minimum of 3 tests per 12-inch lift; spacing not to exceed 100 feet between test locations, or as determined by the geotechnical engineer.

Utility Trenches: Minimum of 1 test per 6-inch lift; spacing not to exceed 50 feet between test locations, or as determined by the geotechnical engineer.

7.2 Inspection

The recommendations presented in the previous sections of this report are based on the assumption that the site preparation procedures will be done under engineering inspection by a representative of this office. SESI should inspect the excavation support systems, subgrades, deep foundation elements (if required) and fill placement. Visual observations and in-place density testing should be done throughout fill construction to determine that the work is done in accordance with our recommendations.

Additionally, we should inspect and approve the bottom of all footing excavations prior to placement of concrete to determine that the founding materials can support the anticipated foundation loads.

8.0 ADDITIONAL RECOMMENDATIONS

8.1 Temporary Support of Excavation

Stabilizing the upper portion of the foundation excavation would initially require stabilization of the soil overburden and likely a portion of the decomposed rock above the rock excavation. Soldier piles with timber lagging is one recommended support system to cut the areas adjacent to the roadways and adjacent structures. H-Pile sections or pipe piles would be installed by drilling though the overburden soils and decomposed rock and into the competent bedrock. The drilled piles would require casing up to the competent bedrock surface and then embedded into the competent bedrock as required. Timber lagging would then be installed off the back face of the soldier piles as excavation of the Site progresses in a top-down construction sequence. If groundwater seepage is observed during the SOE installation, gravel filled sump pumps can be utilized to allow proper construction. Dewatering should be performed in accordance with all pertaining environmental regulations.

Unless access agreements and easements are obtained to install the temporary SOE piles outside of the property, the SOE piles will be installed within the property. This will result in needing to embed the SOE piles within the foundation walls or offset the foundation wall from property line, reducing the total cellar floor area.

The soldier pile wall should be supported, as needed, using rakers and/or struts attached to the soldier piles by a Steel H-beam waler. In areas where the raker and waler system are not appropriate, the wall can be supported by installing tieback anchors, drilling into the soils behind

the wall and grouting the anchors in-place. Installation of tieback anchors beyond the property line will require access agreements with adjacent properties or the City of Peekskill. Design of the soldier pile retaining wall should limit the deflection at the top of the wall to less than 1-inch when in service adjacent to sidewalks. Depending on the proximity, depth, and condition of existing neighboring building foundations, the SOE system may need to be designed with more stringent lateral movement requirements.

Once the soldier pile and lagging sections attain the top of competent rock, an open cut within the rock would begin as required. Stabilization of the rock face would be accomplished using temporary rock bolts and/or shotcrete, as necessary. Alternatively, the lagging section could continue to the bottom of the excavation to provide stabilization of the rock face, if needed.

Some alternate support of excavation systems could be designed as a dual-purpose temporary SOE and permanent foundation element in coordination with the project structural engineer of record. These systems usually include a drilled concrete secant pile wall or steel sheeting wall. Although the steel sheeting wall may not be an effective solution due to the high elevation of rock and proposed rock excavation, a drilled secant pile wall may provide a more constructable alternative solution. Drilled secant piles consist of overlapping drilled concrete shafts typically 24 inches in diameter, with a steel core beam installed in every other secant pile. A secant system may be designed to serve as the temporary support of excavation system as well as the exterior perimeter foundation walls.

8.2 Underpinning

Excavation adjacent to neighboring buildings could require underpinning and should be further evaluated. The selection of the SOE and underpinning systems is contingent on the proximity of the buildings in relation to the proposed excavation, the elevation of the neighboring building's footings, and the condition of the footings. Pending further evaluation of the adjacent existing building foundations in relation to the proposed construction, SESI can provide additional underpinning recommendations such as push piles, jet grouting, compaction grouting, concrete piers, etc. to be performed under the neighboring buildings to allow for the construction of the proposed building foundations. These underpinning techniques will require access agreements be implemented with neighboring property owners.

8.3 Preconstruction Survey and Monitoring Program

A preconstruction survey (existing conditions survey) of all neighboring structures, sidewalks and utilities in nearby areas should be performed prior to demolition. The pre-construction survey would provide the Owner, the SOE designer, and the foundation contractor with documentation of the existing condition in the event of a future damage claim. The pre-construction survey should be made by a qualified Progressional Engineer experienced in such documentation work. The pre-construction survey should include photographs and notes on existing cracks, damage, and wear of existing building and infrastructure. The pre-construction survey would serve as a pictorial and quantitative reference document to assess conditions prior to construction. A construction monitoring program should be designed for monitoring the responses of adjacent structures and evaluating construction procedures based on the pre-construction survey. This program should consist of monitoring horizontal and vertical movements by optical surveying and vibration monitoring using threshold-type seismographs to measure construction-induced vibrations and crack gauges. Crack reference line and settlement reference points should be established on existing fractures for monitoring during construction. Ambient vibration level at the Site and at the neighboring structures should be measured as part of the documentation work.

8.4 Supplemental Investigation Recommendations

The scope of our investigation was to provide the preliminary recommendations presented within this report; therefore, we recommend that the Site be further investigation once the existing building have been demolished. The supplemental investigation should consist of performing test pit excavation within the footprint of the demolished buildings and adjacent to the existing neighboring building to further evaluate the SOE and underpinning requirements.

9.0 LIMITATIONS

The subsurface investigation performed identifies the subsurface conditions only at the locations of the explorations and at the depths where the samples were taken. SESI Consulting Engineers reviews the published geologic data and the field and laboratory data and uses their professional judgment and experience to render an opinion on the subsurface conditions throughout the Site. Because the actual subsurface conditions may differ, we recommend that SESI be retained to provide construction inspection to minimize the risks associated with unanticipated conditions.

This report should not be used:

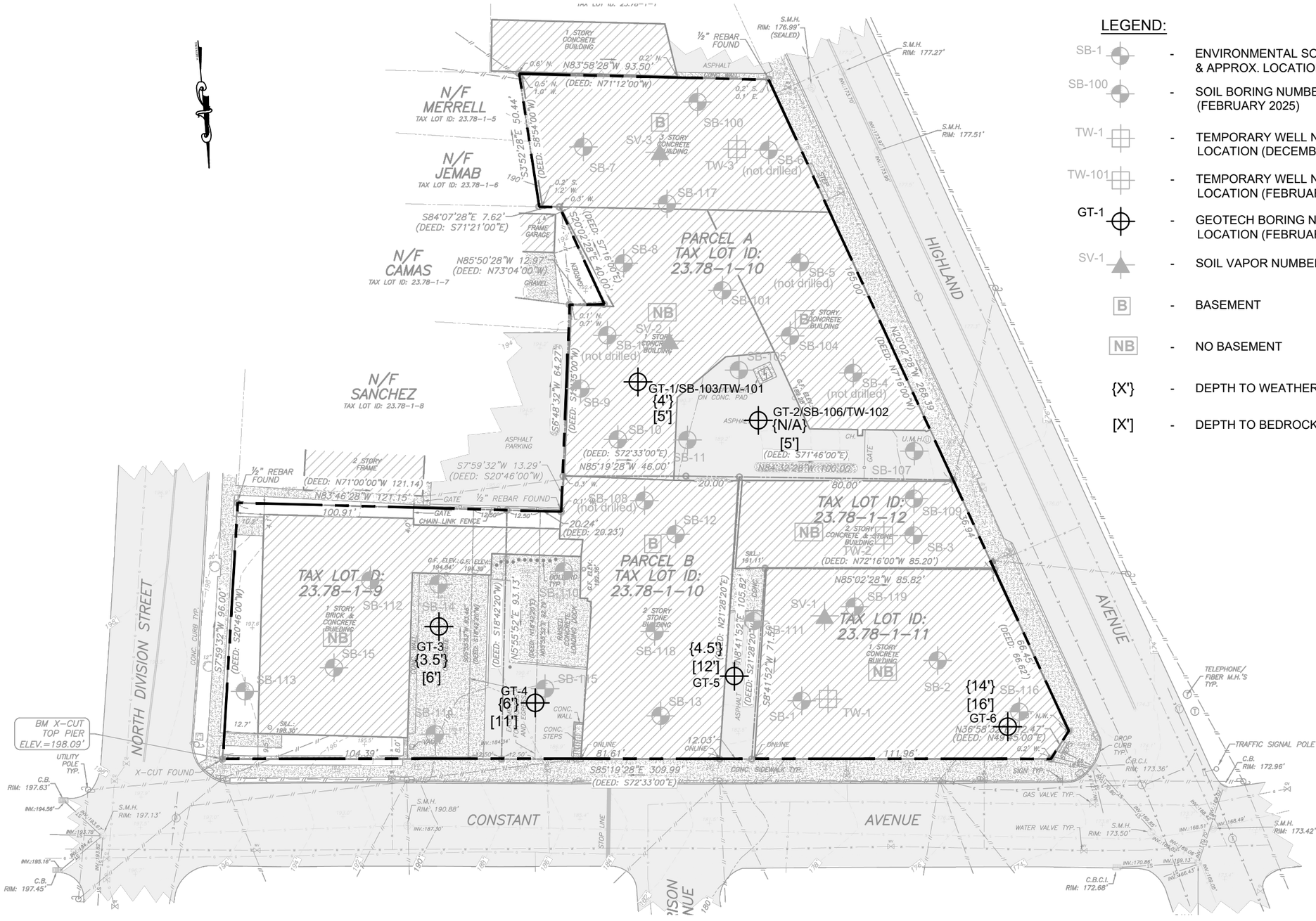
1. When the nature of the proposed building is changed;
2. When the size or configuration of the proposed building is altered;
3. When the location or orientation of the proposed building is modified;
4. When there is a change in ownership; or
5. For application to an adjacent or any other site.

SESI shall not accept any responsibility for problems that may occur if SESI is not consulted when there are changes to the factors considered in this report's development. The soil logs should not be separated from the Engineering Report to minimize the possibility of soil log misinterpretation.

10.0 DISCLAIMER

This Report was prepared by SESI for the sole and exclusive use of STAGG Group. Nothing under the Professional Services Agreement between SESI and its client STAGG Group, LLC shall be construed to give any rights or benefits to anyone other than Client and SESI, and all duties and responsibilities undertaken pursuant to the Agreement will be for the sole and exclusive benefit of Client and SESI and not for the benefit of any other party. This Report has been prepared and issued subject to the express condition that same is not to be disseminated to anyone other than Client, without the advance written consent of SESI (which SESI, in its sole discretion, is free to grant or withhold). Use of the Report by any other person is unauthorized and such use is at the sole risk of the user.

DRAWING 1



LEGEND:

SB-1	-	ENVIRONMENTAL SOIL BORING NUMBER & APPROX. LOCATION (DECEMBER, 2024)
SB-100	-	SOIL BORING NUMBER & APPROX. LOCATION (FEBRUARY 2025)
TW-1	-	TEMPORARY WELL NUMBER & APPROX. LOCATION (DECEMBER 2024)
TW-101	-	TEMPORARY WELL NUMBER & APPROX. LOCATION (FEBRUARY 2025)
GT-1	-	GEOTECH BORING NUMBER & APPROX. LOCATION (FEBRUARY 2025)
SV-1	-	SOIL VAPOR NUMBER & APPROX. LOCATION
B	-	BASEMENT
NB	-	NO BASEMENT
{X'}	-	DEPTH TO WEATHERED BEDROCK
[X']	-	DEPTH TO BEDROCK

NOTE:
THIS PLAN IS FOR LOCATING BORINGS & SOIL VAPOR POINTS ONLY.
OTHER SITE WORK SHOWN HERE IS NOT INTENDED FOR CONSTRUCTION.

REFERENCE
1. EXISTING CONDITIONS & BOUNDARY ARE TAKEN FROM "TOPOGRAPHIC SURVEY OF PROPERTY" PREPARED BY GEOLOGIC LAND SURVEYING, PLLC, DATED NOVEMBER 18, 2024.

SCALE: 1"=40'
0 40 80

dwg by: AW
chk by: SL
scale: AS NOTED
date: 02/25/2025

SESI CONSULTING ENGINEERS
GEOTECHNICAL | ENVIRONMENTAL | SITE CIVIL
959 ROUTE 46E, 3RD FLOOR, PARSIPPANY, NJ 07054 PH: 973.808.9050

project:
418 NORTH DIVISION STREET
CITY OF PEEKSKILL
WESTCHESTER COUNTY, NEW YORK

title:
EXPLORATION LOCATION PLAN

job no: 13904
drawing no:
DWG 1.0

APPENDIX A

SESI CONSULTING ENGINEERS
GEOTECHNICAL | ENVIRONMENTAL | SITE CIVIL

BOREHOLE NUMBER: GT-1

PROJECT NAME Proposed Mixed Use Building
PROJECT NO. 13904
DATE STARTED 01-29-2025 **COMPLETED** 01-29-2025
DRILLING CONTRACTOR PG Environmental
SAMPLER 2" Split Spoon
EQUIPMENT Geoprobe 7822DT
DRILLING FOREMAN Angel **HELPER**
LOGGED BY E. Diaz **CHECKED BY** J. Alvarez
LATITUDE 41.295622 **LONGITUDE** -73.919318

PROJECT LOCATION 418 North Division Street, Peekskill, NY
ELEVATION DATUM NAVD 88 **GROUND ELEVATION** 190.5±
DRILLING METHOD Mud Rotary
SAMPLE HAMMER Auto
AUGER INNER DIAMETER **OUTER DIAMETER**
ROTARY BIT DIAMETER **DEPTH TO GROUNDWATER:**
CASING DIAMETER ▽ **AT TIME OF DRILLING** Not Encountered
CASING DEPTH ▼ **AT END OF DRILLING** Not Encountered
FINAL DEPTH 10.0± ft ⧩ **24 HR AFTER DRILLING** Not Encountered

Material Symbol	EL (ft)	Sample Description	Depth (ft)	Sample Data: Number	Type	Rec. (in)	Moisture	Blows/6-in Core time/ft	N-Value (Blows/ft) 20 40 60 80	Remarks
		6" Concrete Slab					Moist			
		Fill: Dark gray/brown coarse to fine SAND, some medium to fine Gravel, little Silt, with Concrete pieces		S-1		10		26-15-50/4"		
		Light brown coarse to fine SAND, little coarse to fine Gravel, little Silt		S-2		14	Moist	46-50-39-34 (89)	•	
	186	Light brown coarse to fine SAND, little coarse to fine Gravel, little Silt, with Bedrock pieces		S-3		2		50/2"		AT 4' auger to 5' (weathered Bedrock)
		RC-1 (Poor Rock Quality)	5					03:40		
		5-10 Feet: Gray-white banded GNEISS; medium to coarse grained; moderately weathered; very close to close fracture spacing; narrow to wide fracture separation; stained fracture filling; near vertical to shallow dipping; strong to very strong strength						03:33		
				RC-1		REC = 60%; RQD = 17%		04:15		
								04:21		
	181							04:29		TW-101 installed at 10' below ground
		BORING COMPLETED AT 10± FEET	10							Pipe sticks out 5 feet
	176		15							
	171		20							
	166		25							
	161		30							
	156									

SESI CONSULTING ENGINEERS
GEOTECHNICAL | ENVIRONMENTAL | SITE CIVIL

BOREHOLE NUMBER: GT-2

PROJECT NAME Proposed Mixed Use Building
PROJECT NO. 13904
DATE STARTED 01-30-2025 **COMPLETED** 01-30-2025
DRILLING CONTRACTOR PG Environmental
SAMPLER 2" Split Spoon
EQUIPMENT Geoprobe 7822DT
DRILLING FOREMAN Angel **HELPER**
LOGGED BY E. Diaz **CHECKED BY** J. Alvarez
LATITUDE 41.295676 **LONGITUDE** -73.919479

PROJECT LOCATION 418 North Division Street, Peekskill, NY
ELEVATION DATUM NAVD 88 **GROUND ELEVATION** 189.5±
DRILLING METHOD Mud Rotary
SAMPLE HAMMER Auto
AUGER INNER DIAMETER **OUTER DIAMETER**
ROTARY BIT DIAMETER **DEPTH TO GROUNDWATER:**
CASING DIAMETER ▽ **AT TIME OF DRILLING** Not Encountered
CASING DEPTH ▼ **AT END OF DRILLING** Not Encountered
FINAL DEPTH 13.0± ft ⧨ **24 HR AFTER DRILLING** Not Encountered

Material Symbol	EL (ft)	Sample Description	Depth (ft)	Sample Data: Number	Type	Rec. (in)	Moisture	Blows/6-in Core time/ft	N-Value (Blows/ft) 20 40 60 80	Remarks
	185		0							6" Asphalt
		RC-1 (Poor Rock Quality) 5-9 Feet: Gray-white banded GNEISS; medium to coarse grained; moderately weathered; very close to close fracture spacing; narrow to wide fracture separation; stained fracture filling; near vertical to shallow dipping; strong to very strong strength	5	RC-1		REC = 60%; RQD = 25%		03:15 04:38 04:18 04:44		Auger to 5'
	180	RC-2(Poor Rock Quality) 9-13 Feet: Gray-white banded GNEISS; medium to coarse grained; moderately weathered; very close to close fracture spacing; narrow to wide fracture separation; stained fracture filling; near vertical to shallow dipping; medium weak to strong strength	10	RC-2		REC = 87%; RQD = 44%		04:12 04:16 05:40 06:12		TW-102 installed at 13' below grade Pipe sticks out 1'
		BORING COMPLETED AT 13± FEET								
	175		15							
	170		20							
	165		25							
	160		30							
	155									

SESI CONSULTING ENGINEERS
GEOTECHNICAL | ENVIRONMENTAL | SITE CIVIL

BOREHOLE NUMBER: GT-3

PROJECT NAME Proposed Mixed Use Building
PROJECT NO. 13904
DATE STARTED 01-31-2025 **COMPLETED** 01-31-2025
DRILLING CONTRACTOR PG Environmental
SAMPLER 2" Split Spoon
EQUIPMENT Geoprobe 7822DT
DRILLING FOREMAN Angel **HELPER**
LOGGED BY E. Diaz **CHECKED BY** J. Alvarez
LATITUDE 41.295862 **LONGITUDE** -73.919064

PROJECT LOCATION 418 North Division Street, Peekskill, NY
ELEVATION DATUM NAVD 88 **GROUND ELEVATION** 190.7±
DRILLING METHOD Mud Rotary
SAMPLE HAMMER Auto
AUGER INNER DIAMETER **OUTER DIAMETER**
ROTARY BIT DIAMETER **DEPTH TO GROUNDWATER:**
CASING DIAMETER ▽ **AT TIME OF DRILLING** Not Encountered
CASING DEPTH ▼ **AT END OF DRILLING** Not Encountered
FINAL DEPTH 6.0± ft ⧩ **24 HR AFTER DRILLING** Not Encountered

Material Symbol	EL (ft)	Sample Description	Depth (ft)	Sample Data: Number	Type	Rec. (in)	Moisture	Blows/6-in Core time/ft	N-Value (Blows/ft) 20 40 60 80	Remarks
		6" Concrete Slab								
		Brown and gray coarse to fine SAND, little medium to fine Gravel, little Silt		S-1		14		11-14-17-15 (31)	•	
		Brown and gray medium to fine Sand, some medium to fine Gravel, little Silt		S-2		8		23-21-40/2"		At 3.5' auger up to 6'
	186	Weathered Bedrock	5							
		BORING COMPLETED AT 6± FEET								
	181		10							
	176		15							
	171		20							
	166		25							
	161		30							

SESI CONSULTING ENGINEERS
GEOTECHNICAL | ENVIRONMENTAL | SITE CIVIL

BOREHOLE NUMBER: GT-4

PROJECT NAME Proposed Mixed Use Building
PROJECT NO. 13904
DATE STARTED 01-30-2025 **COMPLETED** 01-30-2025
DRILLING CONTRACTOR PG Environmental
SAMPLER 2" Split Spoon
EQUIPMENT Geoprobe 7822DT
DRILLING FOREMAN Angel **HELPER**
LOGGED BY E. Diaz **CHECKED BY** J. Alvarez
LATITUDE 41.295955 **LONGITUDE** -73.919184

PROJECT LOCATION 418 North Division Street, Peekskill, NY
ELEVATION DATUM NAVD 88 **GROUND ELEVATION** 190.0±
DRILLING METHOD Mud Rotary
SAMPLE HAMMER Auto
AUGER INNER DIAMETER **OUTER DIAMETER**
ROTARY BIT DIAMETER **DEPTH TO GROUNDWATER:**
CASING DIAMETER ▽ **AT TIME OF DRILLING** Not Encountered
CASING DEPTH ▼ **AT END OF DRILLING** Not Encountered
FINAL DEPTH 21.0± ft ⧩ **24 HR AFTER DRILLING** Not Encountered

Material Symbol	EL (ft)	Sample Description	Depth (ft)	Sample Data: Number	Type	Rec. (in)	Moisture	Blows/6-in Core time/ft	N-Value (Blows/ft) 20 40 60 80	Remarks
		6" Asphalt								
		Fill: Dark brown-light brown coarse to fine SAND, some medium to fine Gravel, little Silt, with Asphalt pieces		S-1		16	Dry	11-8-10 (18)		
		Gray/light brown coarse to fine Sand, and medium to fine Gravel, trace Silt		S-2		26	Moist	40-50-50 (100)		
	185	Dark brown coarse to fine Sand, and medium to fine Gravel, trace Silt with bedrock pieces	5	S-3		2		50/5"		Refusal at 5 ft Auger clean up to 11 ft
	180	Weathered Rock	10							
		RC-1 (Fair Rock Quality) 11-16 Feet: Gray-white banded GNEISS; fine to medium grained; slightly weathered; moderate to close fracture spacing; narrow to wide fracture separation; clean fracture filling; near vertical to shallow dipping; strong to very strong strength		RC-1		REC = 100%; RQD = 60%		03:47 03:44 03:09 04:04 06:21		
	175	RC-2 (Fair Rock Quality) 16-21 Feet: Gray-white banded GNEISS; fine to medium grained; slightly weathered; moderate to close fracture spacing; narrow to wide fracture separation; clean fracture filling; near vertical to shallow dipping; strong to very strong strength	15	RC-2		REC = 100%; RQD = 60%		03:54 03:21 04:19 04:26 04:52		
	170		20							
		BORING COMPLETED AT 21± FEET								
	165		25							
	160		30							

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GEOTECHNICAL | ENVIRONMENTAL | SITE CIVIL

BOREHOLE NUMBER: GT-5

PROJECT NAME Proposed Mixed Use Building
PROJECT NO. 13904
DATE STARTED 01-31-2025 **COMPLETED** 01-31-2025
DRILLING CONTRACTOR PG Environmental
SAMPLER 2" Split Spoon
EQUIPMENT Geoprobe 7822DT
DRILLING FOREMAN Angel **HELPER**
LOGGED BY E. Diaz **CHECKED BY** J. Alvarez
LATITUDE 41.295928 **LONGITUDE** -73.919418

PROJECT LOCATION 418 North Division Street, Peekskill, NY
ELEVATION DATUM NAVD 88 **GROUND ELEVATION** 183.0±
DRILLING METHOD Mud Rotary
SAMPLE HAMMER Auto
AUGER INNER DIAMETER **OUTER DIAMETER**
ROTARY BIT DIAMETER **DEPTH TO GROUNDWATER:**
CASING DIAMETER **AT TIME OF DRILLING** Not Encountered
CASING DEPTH **AT END OF DRILLING** Not Encountered
FINAL DEPTH 12.0± ft **24 HR AFTER DRILLING** Not Encountered

Material Symbol	EL (ft)	Sample Description	Depth (ft)	Sample Data: Number	Type	Rec. (in)	Moisture	Blows/6-in Core time/ft	N-Value (Blows/ft) 20 40 60 80	Remarks
		Asphalt								
		Possible Fill: Gray-brown medium to fine SAND, some Silt, trace medium to fine Gravel, with Concrete pieces		S-1		11	Moist	14-6-4-2 (10)		
		Gray-brown coarse to fine Sand, some Silt, little medium to fine Gravel		S-2		12	Moist	2-8-11-15 (19)		-200 = 27.4%
				S-3		3		50/3"		Split spoon refusal at 4 ft Possible bedrock
	178	Weathered bedrock	5							
	173		10							Auger up to 12 ft (weathered bedrock)
		BORING COMPLETED AT 12± FEET								
	168		15							
	163		20							
	158		25							
	153		30							

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GEOTECHNICAL | ENVIRONMENTAL | SITE CIVIL

BOREHOLE NUMBER: GT-6

PROJECT NAME Proposed Mixed Use Building
PROJECT NO. 13904
DATE STARTED 01-29-2025 **COMPLETED** 01-30-2025
DRILLING CONTRACTOR PG Environmental
SAMPLER 2" Split Spoon
EQUIPMENT Geoprobe 7822DT
DRILLING FOREMAN Angel **HELPER**
LOGGED BY E. Diaz **CHECKED BY** J. Alvarez
LATITUDE 41.296011 **LONGITUDE** -73.919774

PROJECT LOCATION 418 North Division Street, Peekskill, NY
ELEVATION DATUM NAVD 88 **GROUND ELEVATION** 175.5±
DRILLING METHOD Mud Rotary
SAMPLE HAMMER Auto
AUGER INNER DIAMETER **OUTER DIAMETER**
ROTARY BIT DIAMETER **DEPTH TO GROUNDWATER:**
CASING DIAMETER **AT TIME OF DRILLING** 10.00± ft
CASING DEPTH **AT END OF DRILLING** Not Measured
FINAL DEPTH 24.0± ft **24 HR AFTER DRILLING** Not Measured

Material Symbol	EL (ft)	Sample Description	Depth (ft)	Sample Data: Number	Type	Rec. (in)	Moisture	Blows/6-in Core time/ft	N-Value (Blows/ft) 20 40 60 80	Remarks
		6" Concrete					Dry			
		Fill: Light brown coarse to fine Sand, and medium to fine Gravel, trace Silt, with Concrete pieces		S-1		6	Dry	22-10-WOH-WOH		
		No Recovery		S-2		0		1-1-1-2 (2)		
	171	Fill: Light brown/gray-brown coarse to fine SAND, little Silt, little medium to fine Gravel	5	S-3		5	Moist	4-1-1-1 (2)		
		Brown medium to fine SAND, some Silt, little coarse to fine Gravel		S-4		4	Moist	2-3-8-18 (11)		
		Light brown coarse to fine SAND, some coarse to fine Gravel, some Silt		S-5		18		18-18-12-12 (30)		Light mottled
	166	Light brown coarse to fine SAND, some coarse to fine Gravel, some Silt	10	S-6		14	Wet	11-12-26-21 (38)		W= 11.8% -200 = 20.9%
		Light brown coarse to fine SAND, little medium to fine Gravel, some Silt		S-7		22	Wet	1-13-13-24 (26)		
	161	Brown coarse to fine Sand, some coarse to fine Gravel, some Silt	15	S-8		8	Wet	10-50/2"		Split spoon refusal at 14' Auger up to 16'
	156	RC-1 (Very Poor Rock Quality) 16-21 Feet: Gray-white banded GNEISS; medium to coarse grained; moderately weathered; very close to close fracture spacing; narrow to wide fracture separation; stained fracture filling; near vertical to shallow dipping; strong to very strong strength	20	RC-1		REC = 48%; RQD = 13%		03:11 05:19 08:18 08:21 08:59		20-21' The drill went down 4 inches
		RC-2 (Very Poor Rock Quality) 21-24 Feet: Gray-white banded GNEISS; medium to coarse grained; moderately weathered; very close to close fracture spacing; narrow to wide fracture separation; stained fracture filling; near vertical to shallow dipping; strong to very strong strength		RC-2		REC = 72%; RQD = 12%		05:21 04:42 08:05		Bedrock pieces getting stuck in sampler
	151	BORING COMPLETED AT 24± FEET	25							
	146		30							
	141									

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GEOTECHNICAL | ENVIRONMENTAL | SITE CIVIL

SOILS CLASSIFICATION AND EXPLORATION LOG KEY

Our experience has shown that the following field identification system, which is pattered somewhat after the Burmister System, permits a more detailed breakdown of the components within a soil sample than other identification systems allow. It also compels the supervising technician to examine a sample quite closely in order to accurately describe the components within the sample.

Grain Size and Classifications

Gravel:
Coarse gravel ranges from 3-in to 1-in
Medium gravel ranges from 1-in to 3/8-in
Fine gravel ranges from 3/8-in to No. 10 sieve

Sand:
Coarse sand ranges from No. 10 to No. 30 sieve
Medium sand ranges from No. 30 to No. 60 sieve
Fine sand ranges from No. 60 to No. 200 sieve

Silt:
Material which passes the No. 200 sieve
Exhibits little to no plasticity

Clay:
Material which passes the No. 200 Sieve
Exhibits varying degrees of plasticity

Component Classification

CAPITALS	More than 50% of the sample by weight
Proper Case	Less than 50% of the sample by weight

Proportion Terms

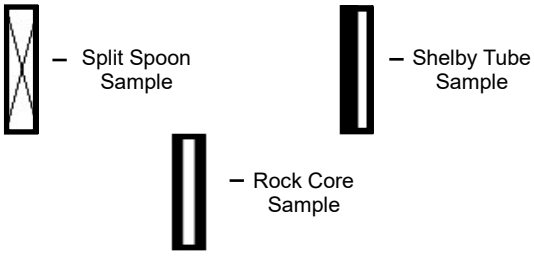
and	Component ranges from 35% to 50% of the sample by weight
some	Component ranges from 20% to 35% of the sample by weight
little	Component ranges from 10% to 20% of the sample by weight
trace	Component ranges from 0% to 10% of the sample by weight

Gradation Designation

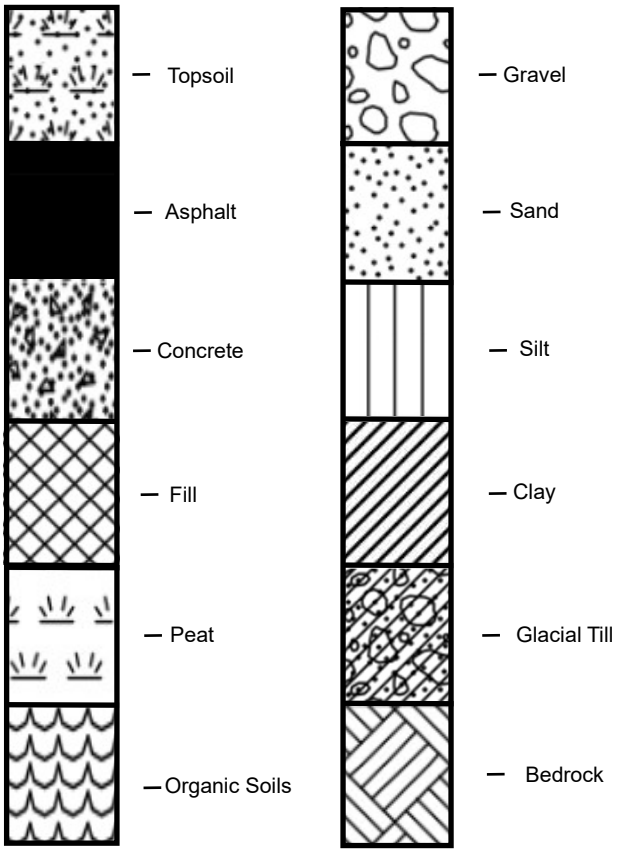
Coarse to fine (c-f)	All fractions greater than 10% of the component
Coarse to Medium (c-m)	Less than 10% of the component is fine
Medium to fine (m-f)	Less than 10% of the component is coarse
Coarse (c)	Less than 10% of the component is medium or fine
Medium (m)	Less than 10% of the component is coarse or fine
Fine (f)	Less than 10% of the component is coarse or medium

The subsurface information shown hereon was obtained for the design and estimating purposes for our client. It is made available to authorized users only that they may have access to the same information available to our client. It is presented in good faith, but it is not intended as a substitute for investigations, interpretations or judgement of such authorized users. Information on the logs should not be relied upon without the geotechnical engineer's recommendations contained in the report from which these logs were extracted.

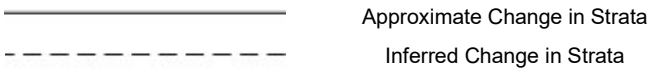
Sampling Types



Generalized Stratum Types



Strata Separation



SESI CONSULTING ENGINEERS

PROJECT NAME:	418 N Division st	GEOPROBE NO.	**SB-1**
LOCATION:	Peekskill, NY	JOB NO.	13904
METHOD:	Direct Push	GROUND ELEVATION:	
GEOPROBE BY: PG Environmental	DATE STARTED:	12/19/2024	GROUNDWATER TABLE DEPTH:
INSPECTOR: CB	DATE COMPLETED:	12/19/2024	0 Hr. / 24 Hr. / Date

DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH FROM (ft)	DEPTH TO (ft)	ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID
0	30	1	0			(0-0.5) concrete	0
						(0.5-2.5) Fill: Black coarse to fine SAND, some coarse to fine gravel, little silt	0
					SB-1 (3.5-4)	(2.5-3) Fill: red brick	13
							0
5				5		(3-5) Gray/ yellow coarse to fine SAND and GRAVEL, little silt	1
	27	2	5				2
						(5-8) Gray/ red coarse to fine SAND and GRAVEL, little silt. wet at 5'	3
							4
							0
10				10		(8-10) Gray coarse to fine SAND and GRAVEL, little silt	0
						EOB refusal +/- 10 ft Bgs	0
15							
20							
25							
30							
35							
40							

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	1⅜ in

The subsurface information shown hereon was obtained for the design and estimating purposes for our client. It is made available to authorized users only that they may have access to the same information available to our client. It is presented in good faith, but it is not intended as a substitute for investigations, interpretations or judgment of such authorized users. Information on the logs should not be relied upon without the geotechnical engineers recommendations contained in the report from which these logs were extracted.

Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _ _ _ _ _ _ _ _ _ _ _ _

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE #

SESI CONSULTING ENGINEERS

PROJECT NAME:	418 N Division st	GEOPROBE NO.	**SB-2**
LOCATION:	Peekskill, NY	JOB NO.	13904
METHOD:	Direct Push	GROUND ELEVATION:	
GEOPROBE BY: PG Environmental	DATE STARTED: 12/19/2024	GROUNDWATER TABLE DEPTH:	
INSPECTOR: CB	DATE COMPLETED: 12/19/2024	0 Hr. / 24 Hr. / Date	

DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH FROM (ft)	DEPTH TO (ft)	ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID
0							
	30	1	0		SB-2 (0.5-1)	(0-0.5) concrete	0
							0
							0
						(0.5-5) Fill: Brown/ gray coarse to fine SAND and GRAVEL, some silt	0
							0
5				5			0
	47	2	5				0
							0
						(5-9) Brown/yellow coarse to fine SAND and GRAVEL, some silt. wet at 7'	0
							0
10				10		(9-10) Gray silty CLAY, little coarse to fine SAND	0
						EOB +/- 10 ft Bgs	
15							
20							
25							
30							
35							
40							

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	1⅜ in

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Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _ _ _ _ _ _ _ _ _ _ _ _

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE #

SESI CONSULTING ENGINEERS

PROJECT NAME:	418 N Division st	GEOPROBE NO.	**SB-3**
LOCATION:	Peekskill, NY	JOB NO.	13904
METHOD:	Direct Push	GROUND ELEVATION:	
GEOPROBE BY: PG Environmental	DATE STARTED:	12/19/2024	GROUNDWATER TABLE DEPTH:
INSPECTOR: CB	DATE COMPLETED:	12/19/2024	0 Hr. / 24 Hr. / Date

DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH FROM (ft)	DEPTH TO (ft)	ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID
0	20	1	0			(0-0.5) concrete	0
							0
						(0.5-4) Fill: Black/ gray coarse to fine SAND and GRAVEL, little silt	0
							0
5				5		(4-5) Brown coarse to fine SAND and GRAVEL, little silt	2
	54	2	5		SB-3 (5-5.5)		4
						(5-7) Brown/ gray coarse to fine SAND, some coarse to fine gravel, little silt	0
				8		(7-8) Gray/ white rock	0
						EOB (refusal) +/- 8 ft Bgs	
10							
15							
20							
25							
30							
35							
40							

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	1⅜ in

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Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _ _ _ _ _ _ _ _ _ _ _ _

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE #

SESI CONSULTING ENGINEERS

PROJECT NAME:	418 N Division st	GEOPROBE NO.	**SB-4**
LOCATION:	Peekskill, NY	JOB NO.	13904
METHOD:		GROUND ELEVATION:	
GEOPROBE BY:	DATE STARTED:	GROUNDWATER TABLE DEPTH:	
INSPECTOR:	DATE COMPLETED:	0 Hr. / 24 Hr. / Date	

DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH FROM (ft)	DEPTH TO (ft)	ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID
0						SB-4 was not drilled	
5							
10							
15							
20							
25							
30							
35							
40							

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	1⅜ in

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Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _ _ _ _ _ _ _ _ _ _ _ _

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE #

SESI CONSULTING ENGINEERS

PROJECT NAME:	418 N Division st	GEOPROBE NO.	**SB-5**
LOCATION:	Peekskill, NY	JOB NO.	13904
METHOD:		GROUND ELEVATION:	
GEOPROBE BY:	DATE STARTED:	GROUNDWATER TABLE DEPTH:	
INSPECTOR:	DATE COMPLETED:	0 Hr. / 24 Hr. / Date	

DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH FROM (ft)	DEPTH TO (ft)	ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID
0						SB-5 was not drilled	
5							
10							
15							
20							
25							
30							
35							
40							

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	1⅜ in

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Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _ _ _ _ _ _ _ _ _ _ _ _

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE #

SESI CONSULTING ENGINEERS

PROJECT NAME:	418 N Division st	GEOPROBE NO.	**SB-6**
LOCATION:	Peekskill, NY	JOB NO.	13904
METHOD:		GROUND ELEVATION:	
GEOPROBE BY:	DATE STARTED:	GROUNDWATER TABLE DEPTH:	
INSPECTOR:	DATE COMPLETED:	0 Hr. / 24 Hr. / Date	

DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH FROM (ft)	DEPTH TO (ft)	ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID
0						SB-6 was not drilled	
5							
10							
15							
20							
25							
30							
35							
40							

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	1⅜ in

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Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _ _ _ _ _ _ _ _ _ _ _ _

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE #

SESI CONSULTING ENGINEERS

PROJECT NAME:	418 N Division st	GEOPROBE NO.	**SB-7**
LOCATION:	Peekskill, NY	JOB NO.	13904
METHOD:	Direct Push	GROUND ELEVATION:	
GEOPROBE BY: PG Environmental	DATE STARTED:	12/20/2024	GROUNDWATER TABLE DEPTH:
INSPECTOR: CB	DATE COMPLETED:	12/20/2024	0 Hr. / 24 Hr. / Date

DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH FROM (ft)	DEPTH TO (ft)	ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID
0	26	1	0		SB-7 (0.5-1)	(0-0.5) concrete	0
						(0.5-2) black/brown coarse to fine SAND, some coarse to fine gravel, some silt, staining	0
				3			0
	36	2	3			(2-6) gray/brown coarse to fine SAND and GRAVEL, some silt	0
5							0
				6			0
	12	3	6			(6-9) gray/brown coarse to medium SAND, some coarse to fine gravel, little silt	0
							0
							0
10				9		EOB +/- 9 (refusal)	
15							
20							
25							
30							
35							
40							

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	1⅜ in

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Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _ _ _ _ _ _ _ _ _ _ _ _

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE #

SESI CONSULTING ENGINEERS

PROJECT NAME:	418 N Division st	GEOPROBE NO.	**SB-8**
LOCATION:	Peekskill, NY	JOB NO.	13904
METHOD:	Direct Push	GROUND ELEVATION:	
GEOPROBE BY: PG Environmental	DATE STARTED:	12/20/2024	GROUNDWATER TABLE DEPTH:
INSPECTOR: CB	DATE COMPLETED:	12/20/2024	0 Hr. / 24 Hr. / Date

DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH FROM (ft)	DEPTH TO (ft)	ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID
0	36	1	0		SB-7 (0.5-1)	(0-0.5) concrete	0
						(0.5-2) Fill: Dark brown coarse to fine SAND, some coarse to fine gravel, little silt	0
							0
						(2-5) light brown/gray coarse to fine SAND and GRAVEL, some silt	0
5							0
	16	2	5			(5-7) brown/gray coarse to fine SAND and GRAVEL, little silt	0
				7			0
						EOB (refusal) +/- 7ft Bgs	
10							
15							
20							
25							
30							
35							
40							

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	1⅜ in

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Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _ _ _ _ _ _ _ _ _ _ _ _

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE #

SESI CONSULTING ENGINEERS

PROJECT NAME:	418 N Division st	GEOPROBE NO.	**SB-9**
LOCATION:	Peekskill, NY	JOB NO.	13904
METHOD:	Direct Push	GROUND ELEVATION:	
GEOPROBE BY: PG Environmental	DATE STARTED:	12/19/2024	GROUNDWATER TABLE DEPTH:
INSPECTOR: CB	DATE COMPLETED:	12/19/2024	0 Hr. / 24 Hr. / Date

DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH FROM (ft)	DEPTH TO (ft)	ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID
0							
	44	1	0		SB-9 (0.5-1)	(0-0.5) concrete	0
						(0.5-1.5) Black coarse to fine SAND, some coarse to fine gravel, little silt, trace clay	0
							0
						(1.5-5) light brown/ gray coarse to fine SAND, some coarse t fine gravel and silt, trace clay	0
5				5			0
						EOB +/- 5 ft Bgs	
10							
15				15		f	
20							
25							
30							
35							
40							

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	1⅜ in

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Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _ _ _ _ _ _ _ _ _ _ _ _

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE #

SESI CONSULTING ENGINEERS

PROJECT NAME:	418 N Division st	GEOPROBE NO.	**SB-10**
LOCATION:	Peekskill, NY	JOB NO.	13904
METHOD:	Direct Push	GROUND ELEVATION:	
GEOPROBE BY: PG Environmental	DATE STARTED:	12/19/2024	GROUNDWATER TABLE DEPTH:
INSPECTOR: CB	DATE COMPLETED:	12/19/2024	0 Hr. / 24 Hr. / Date

DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH FROM (ft)	DEPTH TO (ft)	ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID
0		1	0		SB-10 (0.5-1)	(0-0.5) concrete	0
						(0.5-1) Fill: Brown coarse to fine SAND, some coarse to fine gravel and silt	0
						(1-1.5) Brown coarse to fine SAND, some coarse to fine gravel and silt	0
							0
5				5		(1.5-6) Brown coarse to fine SAND, some coarse to fine gravel, little silt	0
			5				0
							0
						(6-8) Brown / gray coarse to fine SAND and SILT, some coarse to fine gravel	0
						(8-9.5) crushed rock, coarse to fine gravel	0
10				10		(9.5-10) weathered bedrock	0
						EOB +/- 10 ft Bgs	
15							
20							
25							
30							
35							
40							

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	1⅜ in

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Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _ _ _ _ _ _ _ _ _ _ _ _

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE #

SESI CONSULTING ENGINEERS

PROJECT NAME:	418 N Division st	GEOPROBE NO.	**SB-11**
LOCATION:	Peekskill, NY	JOB NO.	13904
METHOD:	Direct Push	GROUND ELEVATION:	
GEOPROBE BY: PG Environmental	DATE STARTED:	12/19/2024	GROUNDWATER TABLE DEPTH:
INSPECTOR: CB	DATE COMPLETED:	12/19/2024	0 Hr. / 24 Hr. / Date

DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH FROM (ft)	DEPTH TO (ft)	ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID
0							
	36	1	0		SB-11 (0.5-1)	(0-0.5) concrete	0
						(0.5-1.5) Black coarse to fine SAND and SILT, some coarse to fine gravel, trace clay	0
						(1.5-4) Brown coarse to fine SAND, some silt, little coarse to fine gravel, trace clay	0
							0
5				5		(4-5) rock: coarse to fine GRAVEL	0
						EOB (refusal) +/- 5 ft Bgs	
10							
15							
20							
25							
30							
35							
40							

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	1⅜ in

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Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _ _ _ _ _ _ _ _ _ _ _ _

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE #

SESI CONSULTING ENGINEERS

PROJECT NAME:	418 N Division st	GEOPROBE NO.	**SB-12**
LOCATION:	Peekskill, NY	JOB NO.	13904
METHOD:	Direct Push	GROUND ELEVATION:	
GEOPROBE BY: PG Environmental	DATE STARTED: 12/19/2024	GROUNDWATER TABLE DEPTH:	
INSPECTOR: CB	DATE COMPLETED: 12/19/2024	0 Hr. / 24 Hr. / Date	

DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH FROM (ft)	DEPTH TO (ft)	ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID
0							
	35	1	0		SB-12 (0.5-1)	(0-0.5) concrete	0
							0
							0
							0
5				5		(0.5-7) Brown coarse to fine SAND, some coarse to fine gravel and silt	0
	36	2	5				0
							0
						(7-8) Brown/black/ gray coarse to fine SAND and GRAVEL, little silt	0
						(8-10) Yellow coarse to fine SAND and GRAVEL, little silt	0
10				10			0
						EOB +/- 10 ft Bgs	
15							
20							
25							
30							
35							
40							

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	1⅜ in

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Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _ _ _ _ _ _ _ _ _ _ _ _

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE #

SESI CONSULTING ENGINEERS

PROJECT NAME:	418 N Division st	GEOPROBE NO.	**SB-13**
LOCATION:	Peekskill, NY	JOB NO.	13904
METHOD:	Direct Push	GROUND ELEVATION:	
GEOPROBE BY: PG Environmental	DATE STARTED:	12/19/2024	GROUNDWATER TABLE DEPTH:
INSPECTOR: CB	DATE COMPLETED:	12/19/2024	0 Hr. | 24 Hr. | Date

DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH FROM (ft)	DEPTH TO (ft)	ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID
0	22	1	0		SB-13 (1-1.5)	(0-0.5) concrete	8
				2		(0.5-1.5) Fill: Black coarse to fine SAND, some coarse to fine gravel, little silt, trace clay	0
						(1.5-2) Brown coarse to fine SAND, some coarse to fine gravel, little silt, trace clay	
						EOB Refusal (bedrock) +/- 2 ft Bgs	
5							
10							
15							
20							
25							
30							
35							
40							

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	1⅜ in

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Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _ _ _ _ _ _ _ _ _ _ _ _

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE #

SESI CONSULTING ENGINEERS

PROJECT NAME:	418 N Division st	GEOPROBE NO.	**SB-14**
LOCATION:	Peekskill, NY	JOB NO.	13904
METHOD:	Direct Push	GROUND ELEVATION:	
GEOPROBE BY: PG Environmental	DATE STARTED:	12/19/2024	GROUNDWATER TABLE DEPTH:
INSPECTOR: CB	DATE COMPLETED:	12/19/2024	0 Hr. | 24 Hr. | Date

DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH FROM (ft)	DEPTH TO (ft)	ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID
0	30	1	0		SB-14 (0.5-1)	(0-1.5) concrete	0
						(1.5-2.5) Brown coarse to fine SAND and SILT, some coarse to fine gravel, trace clay	0
				2.5		EOD Refusal (bedrock) +/- 2.5 ft bgs	0
5							
10							
15							
20							
25							
30							
35							
40							

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	1⅜ in

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Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _ _ _ _ _ _ _ _ _ _ _ _

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE #

SESI CONSULTING ENGINEERS

PROJECT NAME:	418 N Division st	GEOPROBE NO.	**SB-15**
LOCATION:	Peekskill, NY	JOB NO.	13904
METHOD:	Direct Push	GROUND ELEVATION:	
GEOPROBE BY: PG Environmental	DATE STARTED:	12/20/2024	GROUNDWATER TABLE DEPTH:
INSPECTOR: CB	DATE COMPLETED:	12/20/2024	0 Hr. / 24 Hr. / Date

DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH FROM (ft)	DEPTH TO (ft)	ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID
0							
	24	1	0		SB-15 (0.5-1)	(0-.5) concrete	0
							0
				3		(0.5-4) Fill: brick, dark brown coarse to fine SAND, some coarse to fine gravel, little silt, trace clay	0
			3				0
5	10			5		(4-5) crushed rock, tan/white coarse to fine SAND, some coarse to fine gravel ,trace silt and clay	0
						EOB (refusal) +/- 5 ft Bgs	
10							
15							
20							
25							
30							
35							
40							

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	1⅜ in

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Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _ _ _ _ _ _ _ _ _ _ _ _

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE #

SESI CONSULTING ENGINEERS

PROJECT NAME:	13904	GEOPROBE NO.	**SB-100**
LOCATION:	418 N. Division St., Peekskill, NY	JOB NO.	13904
METHOD:	Direct Push	GROUND ELEVATION:	
GEOPROBE BY: PG Environmental	DATE STARTED:	1/31/2025	GROUNDWATER TABLE DEPTH: none
INSPECTOR: Eliana Diaz	DATE COMPLETED:	1/31/2025	0 Hr. ___ 24 Hr. Date 1/31/25

DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH FROM (ft)	DEPTH TO (ft)	ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID
0	22	1	0		SB-100 (1.0-1.8)	(0" - 6") concrete slab pieces	0
						(6" - 3') light brown medium to fine SAND, little coarse to fine gravel, trace silt	10.5
						no odor, dry	38.2
				3			38.2
5						EOB (refusal) +/- 3 ft Bgs	
10							
15							
20							
25							
30							
35							
40							

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	1⅜ in

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Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _ _ _ _ _ _ _ _ _ _ _ _ _

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE #

SESI CONSULTING ENGINEERS

PROJECT NAME:	13904	GEOPROBE NO.	**SB-101**
LOCATION:	418 N. Division St., Peekskill, NY	JOB NO.	13904
METHOD:	Direct Push	GROUND ELEVATION:	
GEOPROBE BY: PG Environmental	DATE STARTED: 1/31/2025	GROUNDWATER TABLE DEPTH: none	
INSPECTOR: Eliana Diaz	DATE COMPLETED: 1/31/2025	0 Hr.	24 Hr. Date 1/31/25

DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH FROM (ft)	DEPTH TO (ft)	ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID
0	11	1	0		SB-101 (0.5-1.0)	(0" - 6") concrete slab pieces	0
						(6" - 3') Fill: Brown medium to fine SAND, little medium to fine gravel, little silt	0
						with brick pieces, no odor, dry	0
				3			0
5						EOB (refusal) +/- 3 ft Bgs	
10							
15							
20							
25							
30							
35							
40							

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	1⅜ in

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Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _ _ _ _ _ _ _ _ _ _ _ _ _

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE #

SESI CONSULTING ENGINEERS

PROJECT NAME:	418 N Division st	GEOPROBE NO.	SB-102
LOCATION:	Peekskill, NY	JOB NO.	13904
METHOD:		GROUND ELEVATION:	
GEOPROBE BY:	DATE STARTED:	GROUNDWATER TABLE DEPTH:	
INSPECTOR:	DATE COMPLETED:	0 Hr. / 24 Hr. / Date	

DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH FROM (ft)	DEPTH TO (ft)	ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID
0						SB-102 was not drilled	
5							
10							
15							
20							
25							
30							
35							
40							

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	1⅜ in

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Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _ _ _ _ _ _ _ _ _ _ _ _

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE #

SESI CONSULTING ENGINEERS

PROJECT NAME:	13904	GEOPROBE NO.	**SB-103**
LOCATION:	418 N. Division St., Peekskill, NY	JOB NO.	13904
METHOD:	Direct Push	GROUND ELEVATION:	
GEOPROBE BY:	PG Environmental	DATE STARTED:	1/29/2025
INSPECTOR:	Eliana Diaz	DATE COMPLETED:	1/29/2025

GROUNDWATER TABLE DEPTH: none (0 Hr. | 24 Hr. | Date 1/29/25)

DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH FROM (ft)	DEPTH TO (ft)	ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID
0							
	24	1	0		SB-103 (1.0-1.5)	(0' - 1') concrete shavings/fragments	0
						(1' - 5') brown to light brown fine SAND, some coarse to fine gravel	0.1
						little silt, no odor, no staining, dry	0.2
							0.1
5				5			0
						EOB (refusal) +/- 5 ft Bgs	
10							
15							
20							
25							
30							
35							
40							

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	1⅜ in

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Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _ _ _ _ _ _ _ _ _ _ _ _ _

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE #

SESI CONSULTING ENGINEERS

PROJECT NAME:	13904	GEOPROBE NO.	**SB-104**
LOCATION:	418 N. Division St., Peekskill, NY	JOB NO.	13904
METHOD:	Direct Push	GROUND ELEVATION:	
GEOPROBE BY: PG Environmental	DATE STARTED: 1/31/2025	GROUNDWATER TABLE DEPTH: none	
INSPECTOR: Eliana Diaz	DATE COMPLETED: 1/31/2025	0 Hr. / 24 Hr.	Date 1/31/25

DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH FROM (ft)	DEPTH TO (ft)	ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID
0	11	1	0		SB-104 (0.5-1.0)	(0" - 6") concrete slab pieces	0
						(6" - 2') Fill: brown/gray medium to fine SAND, little silt, little medium to fine gravel	0
				2		no odor, dry	0
						EOB (refusal) +/- 2 ft Bgs	
5							
10							
15							
20							
25							
30							
35							
40							

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	1⅜ in

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Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _ _ _ _ _ _ _ _ _ _ _ _ _

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE #

SESI CONSULTING ENGINEERS

PROJECT NAME:	13904	GEOPROBE NO.	**SB-105**
LOCATION:	418 N. Division St., Peekskill, NY	JOB NO.	13904
METHOD:	Direct Push	GROUND ELEVATION:	
GEOPROBE BY:	PG Environmental	DATE STARTED:	1/31/2025
INSPECTOR:	Eliana Diaz	DATE COMPLETED:	1/31/2025

GROUNDWATER TABLE DEPTH: none (0 Hr. | 24 Hr. | Date 1/31/25)

DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH FROM (ft)	DEPTH TO (ft)	ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID
0	23	1	0		SB-105 (0.5-1.0)	(0" - 2") asphalt pieces	0
						(2"-5") gray coarse to fine gravel, little medium to fine sand	0
						(5" - 4') light brown medium to fine SAND, little silt, little medium to fine gravel	0
				4		no odor, moist throughout	0
5							
						EOB (refusal) +/- 4 ft Bgs	
10							
15							
20							
25							
30							
35							
40							

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	1⅜ in

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Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _ _ _ _ _ _ _ _ _ _ _ _ _

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE #

SESI CONSULTING ENGINEERS

PROJECT NAME:	13904	GEOPROBE NO.	**SB-106**
LOCATION:	418 N. Division St., Peekskill, NY	JOB NO.	13904
METHOD:	Direct Push	GROUND ELEVATION:	
GEOPROBE BY:	PG Environmental	DATE STARTED:	1/31/2025
INSPECTOR:	Eliana Diaz	DATE COMPLETED:	1/31/2025

GROUNDWATER TABLE DEPTH: none (0 Hr. / 24 Hr. / Date 1/31/25)

DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH FROM (ft)	DEPTH TO (ft)	ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID
0							
	29	1	0		SB-106 (0.5-1.0)	(0" - 2") asphalt pieces	0
						(2"-6") gray coarse to fine gravel, little medium to fine sand, trace silt	0
						(6" - 5') light brown medium to fine SAND, little silt, little medium to fine gravel	0
						no odor, moist throughout	0
5				5			0
						EOB (refusal) +/- 5 ft Bgs	
10							
15							
20							
25							
30							
35							
40							

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	1⅜ in

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Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _ _ _ _ _ _ _ _ _ _ _ _ _

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE #

SESI CONSULTING ENGINEERS

PROJECT NAME:	Peekskill (STAGG)	GEOPROBE NO.	**SB-107**
LOCATION:	Peekskill, NY	JOB NO.	13904
METHOD:	D.Push	GROUND ELEVATION:	+/-
GEOPROBE BY: PG Environmental: Angel +2	DATE STARTED: 1/28/2025	GROUNDWATER TABLE DEPTH: No water observed in overburden	
INSPECTOR: Ronnie Reynoso	DATE COMPLETED: 1/28/2025	0 Hr.	24 Hr. Date 1/28/2025

DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH FROM (ft)	DEPTH TO (ft)	ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID
0	30	1	0		SB-107 (0.5-1)	(0-.5)' Approximately 4" inches of Asphalt (0.5-4)' Possible Fill: Dark brown to browm coasre to fine SAND, little medium to fine Gravel, with wetahered bedrock fragments. No visual impacts. No odor. Mostly dry.	0
							0
							0
							0
3				4			0
						End of Boring at +/- 4 feet BGS due to bedrock refusal.	0
							0
							0
							0
6							0
9							
12							
15							
30							
35							
40							
45							

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	

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Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _ _ _ _ _ _ _ _ _ _ _ _ _

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE 4.1

SESI CONSULTING ENGINEERS

PROJECT NAME:	418 N Division st	GEOPROBE NO.	**SB-108**
LOCATION:	Peekskill, NY	JOB NO.	13904
METHOD:		GROUND ELEVATION:	
GEOPROBE BY:	DATE STARTED:	GROUNDWATER TABLE DEPTH:	
INSPECTOR:	DATE COMPLETED:	0 Hr. / 24 Hr. / Date	

DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH FROM (ft)	DEPTH TO (ft)	ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID
0						SB-108 was not drilled	
5							
10							
15							
20							
25							
30							
35							
40							

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	1⅜ in

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Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _ _ _ _ _ _ _ _ _ _ _ _

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE #

SESI CONSULTING ENGINEERS

PROJECT NAME:	13904	GEOPROBE NO.	**SB-109**
LOCATION:	418 N. Division St., Peekskill, NY	JOB NO.	13904
METHOD:	Direct Push	GROUND ELEVATION:	
GEOPROBE BY: PG Environmental	DATE STARTED:	1/31/2025	GROUNDWATER TABLE DEPTH: none
INSPECTOR: Eliana Diaz	DATE COMPLETED:	1/31/2025	0 Hr. / 24 Hr. / Date 1/31/25

DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH FROM (ft)	DEPTH TO (ft)	ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID
0	28	1	0		SB-109 (0.5-1.0)	(0" - 6") concrete slab pieces	0
						(6" - 3') Fill: brown medium to fine SAND, little silt, little coarse to fine gravel	0
				3		no odor, moist beneath concrete slab pieces	0
			3			(3' - 7') light brown medium to fine SAND, some coarse to fine gravel, little silt	0
5						no odor, moist throughout	0
							0
				7			0
						EOB (refusal) +/- 7 ft Bgs	
10							
15							
20							
25							
30							
35							
40							

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	1⅜ in

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Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _ _ _ _ _ _ _ _ _ _ _ _ _

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE #

SESI CONSULTING ENGINEERS

PROJECT NAME:	Peekskill (STAGG)	GEOPROBE NO.	**SB-110**
LOCATION:	Peekskill, NY	JOB NO.	13904
METHOD:	D.Push	GROUND ELEVATION:	+/-
GEOPROBE BY: PG Environmental: Angel +2	DATE STARTED: 1/28/2025	GROUNDWATER TABLE DEPTH: No water observed in overburden	
INSPECTOR: Ronnie Reynoso	DATE COMPLETED: 1/28/2025	0 Hr.	24 Hr. Date 1/28/2025

DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH FROM (ft)	DEPTH TO (ft)	ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID
0							
	17	1	0		SB-110 (0.5-1)	(0-.5)' Approximately 6 inches of concrete slab fragments (0.5-3)' Fill: Dark brown medium to fine SAND, little medium to fine Gravel, little Silt w/ ceramic and brick. No visual impacts. No odor. Mostly dry.	0
							0
							0
							0
3				3			0
	22	2	3			(3-7)' Possible fill: Dark brown to brown medium to fine SAND, little Silt, little medium to fine Gravel, No visual impacts. No odor. Mostly dry.	0
							0
							0
							0
6				7			0
						End of Boring at +/- 7 feet BGS due to bedrock refusal.	
9							
12							
15							
30							
35							
40							
45							

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	

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Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _ _ _ _ _ _ _ _ _ _ _ _ _

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE 4.1

SESI CONSULTING ENGINEERS

PROJECT NAME:	Peekskill (STAGG)	GEOPROBE NO.	**SB-111**
LOCATION:	Peekskill, NY	JOB NO.	13904
METHOD:	D.Push	GROUND ELEVATION:	+/-
GEOPROBE BY: PG Environmental: Angel +2	DATE STARTED: 1/28/2025	GROUNDWATER TABLE DEPTH: No water observed in overburden	
INSPECTOR: Ronnie Reynoso	DATE COMPLETED: 1/28/2025	0 Hr. / 24 Hr. / Date 1/28/2025	

DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH FROM (ft)	DEPTH TO (ft)	ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID
0							
	25	1	0		SB-111 (0.5-1)	(0-.5) Approximately 4-inches of Asphalt fragments	0
						(0.5-3)' Fill: Black to dark brown coarse to fine SAND, little coarse to fine Gravel, trace Silt. moderate dark staining, faint fuel odor, Mostly dry.	1.6
							0.5
							2.2
3				3			0
	14	2	3			(3-9)' Possible fill: Light brown fine SAND, some Silt, little coarse to medium Gravel. No visual impacts. No odor, with some pid readings above 0 ppm. Mostly dry.	0
							0
							0
							0
6				6			0
	20		6			End of Boring at +/-9 feet BGS due to bedrock refusal.	
9				9			
			9				
12				12			
15							
30							
35							
40							
45							

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	

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Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _ _ _ _ _ _ _ _ _ _ _ _ _

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE 4.1

SESI CONSULTING ENGINEERS

PROJECT NAME:	Peekskill (STAGG)	GEOPROBE NO.	**SB-112**
LOCATION:	Peekskill, NY	JOB NO.	13904
METHOD:	D.Push	GROUND ELEVATION:	+/-
GEOPROBE BY: PG Environmental: Angel +2	DATE STARTED: 1/28/2025	GROUNDWATER TABLE DEPTH: No water observed in overburden	
INSPECTOR: Ronnie Reynoso	DATE COMPLETED: 1/28/2025	0 Hr.	24 Hr. Date 1/28/2025

DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH FROM (ft)	DEPTH TO (ft)	ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID
0							
	22	1	0		SB-112 (0.5-1)	(0-.5) Approximately 6 inches of concrete slab fragments	0
						(0.5-3)' Fill: Light brown medium to fine SAND, little medium to fine Gravel, little Silt. No visual impacts. No odor. Mostly dry.	0
							0
						(3-6)' Possible fll: Light brown medium to fine SAND, some coarse to fine Gravel, little Silt. No visual impacts. No odor. Mostly dry.	0
3				3			0
	18	2	3			End of Boring at +/- 6 feet BGS due to bedrock refusal.	0
							0
							0
							0
6				6			0
9							
12							
15							
30							
35							
40							
45							

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	

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Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _ _ _ _ _ _ _ _ _ _ _ _ _

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE 4.1

SESI CONSULTING ENGINEERS

PROJECT NAME:	Peekskill (STAGG)	GEOPROBE NO.	**SB-113**
LOCATION:	Peekskill, NY	JOB NO.	13904
METHOD:	D.Push	GROUND ELEVATION:	+/-
GEOPROBE BY: PG Environmental: Angel +2	DATE STARTED: 1/28/2025	GROUNDWATER TABLE DEPTH: No water observed in overburden	
INSPECTOR: Ronnie Reynoso	DATE COMPLETED: 1/28/2025	0 Hr.	24 Hr. Date 1/28/2025

DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH FROM (ft)	DEPTH TO (ft)	ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID
0							
	23	1	0		SB-113 (0.5-1)	(0-.5) Approximately 6 inches of concrete fragments	0
						(0.5-5)' Fill: Light brown to brown medium to fine SAND, some coarse to fine	0
						Gravel, trace Silt. No visual impacts. No odor. Mostly dry.	0
							0
3				3			0
	18	2	3			End of Boring at +/-5 feet BGS due to bedrock refusal.	0
							0
							0
							0
6				5			0
9							
12							
15							
30							
35							
40							
45							

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	

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Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _ _ _ _ _ _ _ _ _ _ _ _ _

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE 4.1

SESI CONSULTING ENGINEERS

PROJECT NAME:	Peekskill (STAGG)	GEOPROBE NO.	**SB-114**
LOCATION:	Peekskill, NY	JOB NO.	13904
METHOD:	D.Push	GROUND ELEVATION:	+/-
GEOPROBE BY: PG Environmental: Angel +2	DATE STARTED: 1/28/2025	GROUNDWATER TABLE DEPTH: No water observed in overburden	
INSPECTOR: Ronnie Reynoso	DATE COMPLETED: 1/28/2025	0 Hr.	24 Hr. Date 1/28/2025

DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH FROM (ft)	DEPTH TO (ft)	ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID
0							
	20	1	0		SB-114 (0.5-1)	(0-.5)' Approximately 6 inches of concrete slab fragments (0.5-3)' Fill: Light browm to brown medium fne SAND, little medium to fine Gravel, little Silt. No visual impacts. No odor. Mostly dry.	0
							0
							0
							0.1
3				3			0
	25	2	3			(3-6)' Possible fill: Light brown to brown medium to fine, little medium to fine Gravel, little Silt. No visual impacts. No odor. Mostly dry.	0
							0
							0
							0
6				6			0
	16	3	6			(6-9)' Possible fill: Light brown fine SAND, some coarse to fine Gravel, little silt, with red brick historic fill. bedrock fragments. No visual impacts. No odor. Mostly dry	
9				9			
						End of Boring at +/- 9 feet BGS due to bedrock refusal.	
12							
15							
30							
35							
40							
45							

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	

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Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _ _ _ _ _ _ _ _ _ _ _ _ _

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE 4.1

SESI CONSULTING ENGINEERS

PROJECT NAME:	Peekskill (STAGG)	GEOPROBE NO.	**SB-115**
LOCATION:	Peekskill, NY	JOB NO.	13904
METHOD:	D.Push	GROUND ELEVATION:	+/-
GEOPROBE BY: PG Environmental: Angel +2	DATE STARTED: 1/28/2025	GROUNDWATER TABLE DEPTH: No water observed in overburden	
INSPECTOR: Ronnie Reynoso	DATE COMPLETED: 1/28/2025	0 Hr. / 24 Hr.	Date 1/28/2025

DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH FROM (ft)	DEPTH TO (ft)	ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID
0							
	24	1	0		SB-115 (0.5-1)	(0-.5)' Approximately 6 inches of concrete slab fragments	0
						(0.5-1.5)' Fill: Black to dark brown coarse to fine SAND, little fine Gravel, trace Silt, with glass and ceramic historic fill. No visual impacts. No odor. dry.	0
						(1.5-2)' Possible fill:Tan brick/ceramic historic fill fragments, and brown medium to fine SAND, trace fine Gravel, Trace Silt. No visual impacts. No odor. dry.	0
							0
3				3			0
	21	2	3			(2-3)' Possible fill: Light brown fine SAND, some coarse to medium Gravel, little silt. No visual impacts. No odor. Mostly dry.	0
						(3-6)' Possible fill: Light brown medium to fine SAND, trace fine Gravel, little Silt. No visual impacts. No odor. Mostly dry.	0
							0
							0
6				6			0
						End of Boring at +/- 6 feet BGS due to bedrock refusal.	
9							
12							
15							
30							
35							
40							
45							

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	

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Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _ _ _ _ _ _ _ _ _ _ _ _ _

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE 4.1

SESI CONSULTING ENGINEERS

PROJECT NAME:	Peekskill (STAGG)	GEOPROBE NO.	SB-116
LOCATION:	Peekskill, NY	JOB NO.	13904
METHOD:	D.Push	GROUND ELEVATION:	+/-
GEOPROBE BY: PG Environmental: Angel +2	DATE STARTED: 1/28/2025	GROUNDWATER TABLE DEPTH: No water observed in overburden	
INSPECTOR: Ronnie Reynoso	DATE COMPLETED: 1/28/2025	0 Hr.	24 Hr. Date 1/28/2025

DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH FROM (ft)	DEPTH TO (ft)	ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID
0							
	10	1	0		SB-116 (2-2.5)	(0-.5)' Approximately 4 inches of concrete slab fragments	0
					Low recovery	(0.5-3)' Fill: Brown medium to fine SAND, little medium to fine Gravel, trace Silt. No visual impacts. No odor. Mostly dry.	0
							0
							0
3				3			0
	17	2	3			(3-4.5)' Possible fill: Dark brown medium to fine SAND, little medium to fine Gravel, little Silt. No visual impacts. No odor. Mostly dry.	0
						(4.5-10)' Possible fill: Brown to light brown fine SAND, little fine Gravel, little Silt, trace Clay. No visual impacts. Faint organic decompostion odor. Slightly moist.	0
							0
							0
6				6			0
				10			13.4 (8'-8.5')
						End of Boring at +/- 10 feet BGS.	0 ppm to 10'
12							
15							
30							
35							
40							
45							

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	

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Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _ _ _ _ _ _ _ _ _ _ _ _ _

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE 4.1

SESI CONSULTING ENGINEERS

PROJECT NAME:	13904	GEOPROBE NO.	**SB-117**
LOCATION:	418 N. Division St., Peekskill, NY	JOB NO.	13904
METHOD:	Direct Push	GROUND ELEVATION:	
GEOPROBE BY: PG Environmental	DATE STARTED: 1/31/2025	GROUNDWATER TABLE DEPTH: none	
INSPECTOR: Eliana Diaz	DATE COMPLETED: 1/31/2025	0 Hr. / 24 Hr.	Date 1/31/25

DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH FROM (ft)	DEPTH TO (ft)	ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID
0	12	1	0		SB-117 (0.5-1.0)	(0" - 6") concrete slab pieces	0
						(6" - 2') brown medium - fine SAND, little silt, little coarse - fine gravel	0
				2		no odor, dry	0
						EOB (refusal) +/- 2 ft Bgs	
5							
10							
15							
20							
25							
30							
35							
40							

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	1⅜ in

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Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _ _ _ _ _ _ _ _ _ _ _ _ _

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE #

SESI CONSULTING ENGINEERS

PROJECT NAME:	Peekskill (STAGG)	GEOPROBE NO.	**SB-118**
LOCATION:	Peekskill, NY	JOB NO.	13904
METHOD:	D.Push	GROUND ELEVATION:	+/-
GEOPROBE BY: PG Environmental: Angel +2	DATE STARTED: 1/28/2025	GROUNDWATER TABLE DEPTH: No water observed in overburden	
INSPECTOR: Ronnie Reynoso	DATE COMPLETED: 1/28/2025	0 Hr.	24 Hr. Date 1/28/2025

DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH FROM (ft)	DEPTH TO (ft)	ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID
0							
	15	1	0		SB-118 (3.5-4)	(0-0.5) Approximately 4-inches of Asphalt fragments	2
						(0.5-3)' Fill:: Brown to dark brown medium to fine SAND, little medium to fine Gravel, little Silt, moderate dark staining, faint fuel odor, Mostly dry.	9.3
							8.3
						(3-5)' Possible fill: Brown to dark brown medium to fine SAND, little medium to fine Gravel, little silt. No visual impacts. No odor. Mostly dry.	5.2
3				3			35
	21	2	3				5
							0
							0
							0
6				5			0
						End of Boring at +/-5 feet BGS due to bedrock refusal	
9							
12							
15							
30							
35							
40							
45							

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	

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Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _ _ _ _ _ _ _ _ _ _ _ _ _

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE 4.1

SESI CONSULTING ENGINEERS

PROJECT NAME:	Peekskill (STAGG)	GEOPROBE NO.	**SB-119**
LOCATION:	Peekskill, NY	JOB NO.	13904
METHOD:	D.Push	GROUND ELEVATION:	+/-
GEOPROBE BY: PG Environmental: Angel +2	DATE STARTED: 1/28/2025	GROUNDWATER TABLE DEPTH: No water observed in overburden	
INSPECTOR: Ronnie Reynoso	DATE COMPLETED: 1/28/2025	0 Hr. / 24 Hr. / Date 1/28/2025	

DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH FROM (ft)	DEPTH TO (ft)	ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID
0							
	28	1	0		SB-119 (8-8.5)	(0-.5)' Approximately 4 inches of concrete slab fragments	0
						(0.5-3)' Fill: Light brown medium to fine SAND, little Silt, little medium Gravel.	0
						No visual impacts. No odor. Mostly dry.	0
							0
3				3			0
	32	2	3			(3-10)' Possible fill: Tan medium to fine SAND, little medium to fine Gravel,	0
						little Silt. Dark staining observed below 6'. Faint fuel odor, Mostly dry.	0
							0
							0
6	19			6			0
			6				3.2 (6')
							0
							0
							10 (7.5)
9				10			13.4 (8'-8.5')
						End of Boring at +/- 10 feet BGS	0 ppm to 10'
12							
15							
30							
35							
40							
45							

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	

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Pp: Pocket Penetrometer; DP: Direct Push

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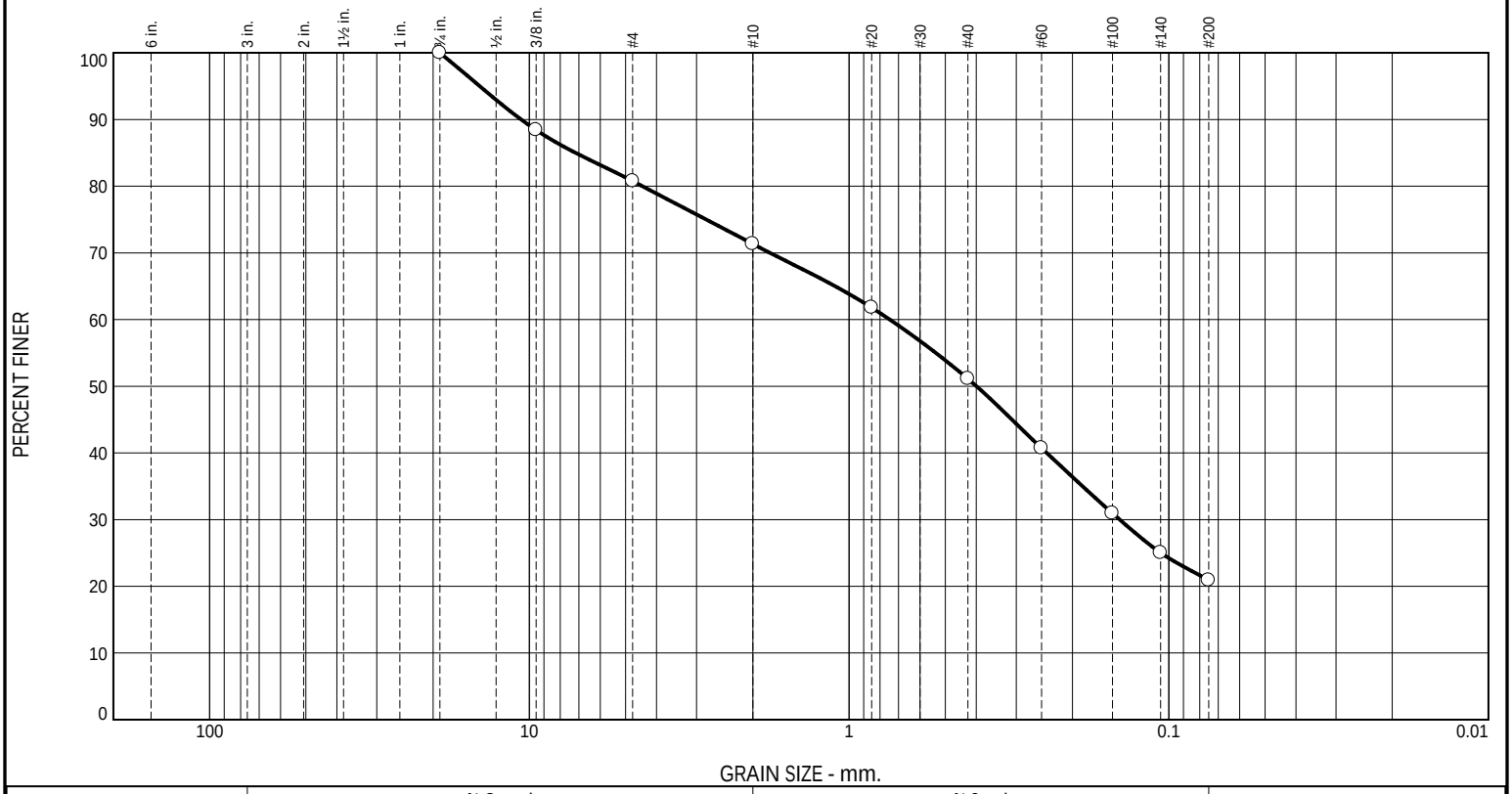
FIGURE 4.1

APPENDIX B

Particle Size Distribution Report

ASTM D6913



% +3"	% Gravel=**28.7**			% Sand=**50.4**			% Fines
	Coarse	Medium	Fine	Coarse	Medium	Fine	
0.0	0.0	11.6	17.1	14.5	16.1	19.8	20.9

Test Results (ASTM D6913)

Sieve Size or Diam. (**in.**)	Finer (%)	Spec.* (%)	Out of Spec. (%)	Pct. of Fines
.75	100.0			
.375	88.4			
#4	80.8			
#10	71.3			
#20	61.8			
#40	51.1			
#60	40.7			
#100	31.0			
#140	25.0			
#200	20.9			

* (no specification provided)

Material Description

Light brown coarse to fine SAND, some medium to fine Gravel, some Silt

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 10.6033 D_{85}= 7.1618 D_{60}= 0.7456
D_{50}= 0.3993 D_{30}= 0.1423 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Test Remarks

Water Content(%)= 11.8

Location: GT-6
Sample Number: S-6 Depth: 10-12 Sample Date: 02/05/2025

SESI CONSULTING ENGINEERS

Client: STAGG Group
Project: Proposed Mixed-Use Building

Project No: 13904 Figure 1

Tested By: MLT Checked By: MLT