

August 22, 2022 *via email:* ahamad@visionrep.com

Amer Hamad
WRV Nurseries LLC
1 Bloomfield Avenue
Mountain Lakes, NJ 07046

Principals

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RE: **Preliminary Geotechnical Investigation Report
Proposed Mixed-Use Development at Princeton Nurseries
South Brunswick Township and Plainsboro Township, New Jersey
SESI Project No. 12506**

Dear Mr. Hamad:

In accordance with our Professional Service Agreement dated May 26, 2022, we have completed our preliminary geotechnical investigation for the above referenced site. This report contains a description of our investigation, an evaluation of the subsurface soil and groundwater characteristics and presents recommendations for general site preparation procedures and foundation design criteria for the proposed development.

If you have any questions, please call.

Sincerely,

SESI CONSULTING ENGINEERS



Jeffrey Van Grouw, E.I.T.
Assistant Project Engineer I

PRELIMINARY GEOTECHNICAL INVESTIGATION REPORT

FOR

**Proposed Mixed-Use Development at Princeton Nurseries
Nursery Road
South Brunswick Township and Plainsboro Township, NJ**

PREPARED FOR:

**WRV NURSERIES LLC
1 Bloomfield Avenue
Mountain Lakes, NJ 07046**

PREPARED BY:

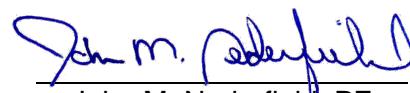
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959 Route 46E, 3rd Floor
Parsippany, NJ 07054**

Job No.: 12506

**DATE:
August 22, 2022**



Jeffrey Van Grouw, E.I.T.



John M. Nederfield, PE
NJ Lic. No. 50000

INTRODUCTION AND PROPOSED CONSTRUCTION

This report presents the results of our preliminary geotechnical investigation for the proposed construction of a mixed-use development to be located in South Brunswick Township and Plainsboro Township, New Jersey. The proposed development will occupy Block 99 Lots 3.213, 8.041, and 14.04 in South Brunswick Township and Block 102 Lots 5 and 6 and Block 106 Lot 1 in Plainsboro Township. The proposed development occupies approximately 162 acres in South Brunswick Township and approximately 109 acres in Plainsboro Township. The overall site is bounded to the north by an undeveloped farm parcel with Ridge Road further beyond, to the east by US Route 1, to the south by Seminary Drive, and to the west by Barclay Square, a residential development.

The site currently consists of farmland with several wooded areas scattered throughout the site. A brook (Harry's Brook) bisects the site and runs in a northwest to southeast direction. An existing paved entrance with curbing leading into the Plainsboro portion of the site was observed along Seminary Drive. Some utility installations were also observed. Based on a review of historic aerial photography and published records, the site was previously occupied by an active farm. We understand that pesticides were used were used on the farm and will require remedial measures for approximately 32 acres of the South Brunswick portion of the project site. The remedial measures are discussed in greater detail later in this report.

Based on our review of *Conceptual Site Plan - SB* (CSP20) prepared by Russo Development, dated May 20, 2022, the northern portion of the proposed development, which is located in South Brunswick Township, will consist of four (4) flex storage buildings (Buildings A, C, D, and E), one (1) Data building (Building B), one (1) office building (Building F), and a 5-story parking structure, with six stormwater management basins, and associated parking and roadway areas. Building A will consist of a 111,250 square feet (SF) 2-story flex building, with 124 car parking spaces and 25 truck loading docks. Building B will consist of a 283,973 SF 2-story Data building with 92 car parking spaces and 3 truck loading docks. Building C will consist of a 155,601 SF one-story storage building with 386 car parking spaces, 48 truck loading docks, and 28 trailer parking spaces. Building D will consist of a 201,161 SF storage building with 390 car parking spaces, 45 truck loading docks, and 15 trailer parking spaces. Building E will consist of a 371,089 SF one-story storage building with 470 car parking spaces, and 68 truck loading docks. Building F will consist of a 449,774 SF 5-story office building (ground floor consisting of 92,006 SF and floors 2 through 5 consisting of 89,442 SF per floor) with 171 car parking spaces. The 5-story parking structure will have 1,252 parking spaces.

Based on our review of *Conceptual Site Plan* (CSP30) prepared by Russo Development, dated July 28, 2022, the southern portion of the proposed development, which is located in Plainsboro Township, will consist of the construction of eight (8) mixed use commercial buildings (Buildings A, B, C1, D1, D2, D3, E1, and E2), three (3) office buildings (Buildings C2, C3, and C4), a hotel/restaurant, and 950 residential units consisting of 374 for-sale residential units (21 single-family homes, 128 Type 1 stacked townhomes, 105 Type 2 conventional townhomes, 66 Type 3 conventional townhomes and 54 Type 1 triplex townhomes), 376 mixed residential units, and 200 age-restricted residential units (150 rentals and 50 for-sale) with associated outdoor recreational areas, parking lots and roadways. Building A will consist of 25,618 SF of retail, (71) 1-bedroom units, (86) 2-bedroom units, and (16) 3-bedroom units. Building B will consist of 29,770 SF of

retail, (66) 1-bedroom units, (79) 2-bedroom units, and (16) 3-bedroom units. Building C1 will consist of 11,563 SF of retail. Office Building C2 will consist of four (4) floors with 21,890 SF typical per floor. Office Building C3 will consist of four (4) floors with 6,909 SF typical per floor. Office Building C4 will consist of four (4) floors with 7,055 SF typical per floor. Buildings D1 and D2 will consist of 24,750 SF of combined retail and a combination of (8) 1-bedroom units, (25) 2-bedroom units, and (9) 3-bedroom units. Building D3 (Grocer) will consist of 22,718 SF. Buildings E1 and E2 will consist of 22,750 SF of combined retail. Building E2 will consist of four (4) floors with 40,500 SF typical per floor of assisted living/memory care. The hotel is noted to have 125 keys and will have an attached restaurant.

Based on a review of the *Topo and Soils Plan*, prepared by Van Note-Harvey Associates, Inc., dated January 10, 2018, the site topography generally slopes upwards to the northeast and southeast, away from Harry's Brook, which traverses in a northwest to southeast direction through the center of the project site. The elevations at the brook range from an approximate EL 72± in the northwest to approximate EL 84± in the southeast. The southwest portion of the site slopes upwards from a low EL 72± at the brook to a high EL of 124± in the south. The northeastern portion of the site slopes upward from a low EL 72 at the brook to a high EL 108± in the northeast portion of the site. The site also slopes downward to a low of EL 64± in the northwest corner of the site.

At the time this report was prepared, the final site grades, and final structure layout had not been determined. Once the final plans have been completed, we should be provided an opportunity to review the plans and loading conditions to confirm that our recommendations remain valid. For this report, SESI has assumed minimal cuts and fills will be required to reach the final site grades and has assumed typical column and floor loads based on the proposed construction.

PREVIOUS STUDIES

Melick-Tully and Associates, P.C. (Melick-Tully) previously completed three (3) geotechnical investigations within the site. The first and second investigations consisted of excavating twenty-four (24) test pits for the preliminary investigation and an additional seven (7) test pits for the final investigation, which are provided in the November 2007 and January 2008 reports. The test pits were located in the northern portion of the project site adjacent to Greenwood Avenue and Ridge Road. The test pits extended to depths ranging from 3 to 19± feet below the ground surface.

A third geotechnical investigation was performed by Melick-Tully and consisted of excavating nine (9) test pits in August 2008. The test pits were performed in the southeast portion of the project site along a proposed roadway connecting US Route 1 and College Road West. The test pits extended to depths ranging from 11 to 12± feet below the ground surface.

Based on a review of all the test pits logs, the surface materials encountered consisted of a layer of topsoil extending to approximately 6 to 20 inches, followed by silty and clayey sand and clayey silts with varying amounts of gravel and cobbles to the depths explored of 19 feet below the ground surface. Groundwater was encountered at elevations ranging from EL 63 to EL 76.

SOR Testing Laboratories, Inc. previously completed a Supplemental Geotechnical Investigation Report dated April 27, 2004 for a proposed bridge and loop road. The investigation consisted of excavating four (4) test pits along the future loop road alignment and bridge location. The test pits

extended to a depth of 8 to 13 feet below the ground surface. Two test pits were performed at the proposed bridge location. The test pit excavated on the western side of the stream encountered a 16 inch thick topsoil layer at the surface, followed by fill consisting of yellowish brown to reddish brown to gray silty sand with gravel, cobbles, trace roots, organics and wire to a depth of 7 feet, followed by gray to yellowish brown clayey silt and coarse to fine sand, some coarse to fine gravel that extended to the completion depth of 13 feet. Groundwater was noted at 3 to 5 feet below the ground surface. The test pit excavated on the eastern side of the stream encountered silty sand/sandy silt with cobbles and boulders to 6 feet followed by gravelly silty clayey sand to the completion depth of the test pit at 10 feet. Two test pits were excavated in the Loop Road area and encountered 5 to 8 inches of topsoil at the surface underlain by sandy silt/ silty sand with varying amounts of gravel to the completion depths of 8 feet. Groundwater seepage was encountered in TP-534 at a depth of 4 feet.

The test pit and boring logs and location plans performed for the previous investigations above are provided in **Appendix A**.

FIELD INVESTIGATION AND LABORATORY TESTING PROGRAM

Our engineering study consisted of a review of published geologic data, a review of previous investigations at the site, and a field investigation consisting of drilling seven (7) soil borings and excavating seventy-nine (79) test pits throughout the site. The borings were drilled to depths of up to 24± feet below the ground surface with an ATV-mounted drill rig utilizing mud rotary drilling techniques on July 25 and 26, 2022. The test pits were excavated to depths of up to 14± feet below the ground surface with a Link-Belt 145 excavator from July 13 to 19, 2022.

The location of the borings and test pits completed during our investigation and the previous investigations noted above, are shown on the *Exploration Location Plan*, which is included as **Figure 1**. Individual boring and test pit logs, which describe the materials encountered, are presented as **Figure 2** through **Figure 92**. A key to soil terminology is included as **Figure 93**.

All field work was performed under the direct technical observation of a geotechnical engineer from SESI Consulting Engineers. Our representatives located the borings and test pits in the field, maintained continuous logs of the explorations as work proceeded, and coordinated the soil sampling operations in order to develop the required subsurface information. The boring and test pit locations were located in the field by GPS. The boring and test pit locations were cleared by the New Jersey One-Call mark-out system prior to the investigation to reduce the risk of encountering buried utilities. Ground surface elevations were interpolated from the topographical information provided on the *Topo and Soils Plan*, prepared by Van Note-Harvey Associates, Inc., dated January 10, 2018.

Soil samples suitable for identification purposes were extracted from the borings at closely spaced intervals in accordance with the Standard Penetration Test (ASTM D1586-11). For this test, a standard split-spoon sampler (2 inches outside diameter, one and three-eighths inches inside diameter) is driven into the soil by a 140-pound weight falling 30 inches. After discounting the initial 6 inches of penetration due to possible disturbance of the material resulting from the drilling operation, the number of blows required to advance the sampler through 2 additional 6-inch intervals (a total distance of 12 inches) is recorded and designated as the standard penetration resistance or "N" value. The "N" value is an indication of the relative compactness of the in-situ

soil. Soil samples suitable for identification purposes were extracted from the test pit excavations at various depths.

All soil samples were taken to our soils laboratory for classification and appropriate geotechnical testing. Laboratory testing consisted of seven (7) mechanical grain size analysis, seven (7) percent passing sieve No. 200 tests, and six (6) moisture content determinations. The results of the percent passing sieve No. 200 tests and the moisture content determinations are presented on the individual boring and test pit logs. The results of the mechanical grain size analyses are presented on the individual boring and test pit logs and in graphical form as **Figure 94** through **Figure 100**.

GENERALIZED SUBSURFACE CONDITIONS

According to the *Rutgers University Engineering Soil Survey of New Jersey* by Franklyn C. Rogers et.al., the site is situated within the Pensauken formation with material deposited during the Quaternary period. These deposits generally consist of assorted, relatively homogeneous material composed of stratified silt and sand, with varying amounts of intermixed gravel. A central portion of the project site bordering Harry's Brook is noted as recent alluvium composed of stream deposits. These deposits typically range in size from clay and silt to sand and gravel. Both of these area deposits are underlain by rock that is typically greater than ten feet below the existing ground surface. The rock is mapped as sandstone and shale.

The natural soils encountered in our exploration generally agreed with the published geological records. The following generalized strata are listed in the order of increasing depth.

Surface Materials: The test pits and borings encountered a layer of tilled soil at the surface of the farm fields, with thicknesses ranging from 6 to 24 inches, which consists of light brown clayey silt, some coarse to fine sand, little coarse to fine gravel with trace organics. The test pits and borings, performed in the wooded areas, encountered topsoil at the surface with thicknesses ranging from 12 to 24 inches.

Fill: Uncontrolled fill was encountered below the surface materials in borings B-3 and B-7 and test pit TP-15 to a depth of 2 feet below the ground surface and consisted of brown coarse to fine sand, some coarse to fine gravel, little silt. In boring B-3 and test pit TP-15, a geofabric was observed below the fill materials. In test pits TP-59, uncontrolled fill, 3.4-inch stone and geogrid were observed at the rear of the test pit excavation to a depth of approximately 2.5 feet below the ground surface.

Natural Soils: Stratified layers of silts and sands with gravel were encountered beneath the topsoil and tilled soil in all of the borings and test pits. The granular soils consist of brown/red-brown/gray coarse to fine sand with varying amounts of silt and gravel. The fine-grained soils consist of gray/brown silt with varying amounts of sand and gravel. Occasional layers of gravel with varying amounts of sand and silt were also observed within the natural soil strata. Boulders and cobbles were encountered at varying depths within the natural soil stratum. The natural soils extend to the completion depths of the borings and test pits which ranged from approximately $10\pm$ to $24\pm$ feet below the ground surface. Based on the blow counts obtained from the borings and the bucket resistance and sidewall stability of the test pits, the granular materials were generally found to be in a medium dense to very dense condition and the fine-grained materials were generally found to be in a medium stiff to stiff condition.

Refusal: Split spoon refusal was encountered in borings B-1, B-2, B-3 and B-7 on possible bedrock at depths ranging from 22 to $23.8\pm$ feet below the ground surface, which correlates to EL 94.2 to EL $100\pm$. Excavator refusal was encountered in test pits TP-2, TP-30, TP-33, TP-37 and TP-60 on possible bedrock at depth ranging from 10 to $12\pm$ feet below the ground surface, which correlates to EL 90 to EL 100. Test pit TP-37 was noted to encounter refusal on boulders. It should be noted that it was difficult to determine whether the refusal was due to encountering boulders or bedrock. Additional borings with rock core could be performed if necessary.

Groundwater: Groundwater was not observed in any of the borings or in the majority of the test pits during the short period of time that the holes were left open. Groundwater was observed in test pits TP-29, TP-32, TP-33, and TP-35 at depths ranging from approximately 10 to $12.5\pm$ feet below the ground surface, which correlates to elevations ranging from EL 89 to $94.5\pm$. It should be noted that some of the site soils have discoloration and appear to be mottled; however, it may not be an indication of the seasonal high groundwater levels where observed at shallow depths, but rather an indication of perched/trapped water conditions.

EVALUATION AND RECOMMENDATIONS

The recommended building area preparation procedures and support considerations discussed in this report are based on our geotechnical subsurface investigation and 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.

We researched and reviewed the preliminary FEMA Flood Insurance Rate Map (FIRM), Community Panel Number 34023C0226F (published by FEMA on July 6, 2010). The map indicates the Site is within Zone X, which indicates an area of minimal flood hazard.

General

From a soils and foundation standpoint, this Site can be considered good with respect to providing satisfactory support of the planned building. Based on the results of our study, it is our opinion that the natural soils underlying the topsoil and tilled soil are suitable for support of the proposed structures on conventional spread foundations with a slab on grade. The primary negative aspects of the subsurface conditions are the relatively high silt content of some of the site soils, making them moisture sensitive. Uncontrolled fills were encountered during our investigation in borings B-3 and B-7 and in test pits TP-15 and TP-59 to depths ranging from 1.5 to 2.5 feet below the ground surface. If any uncontrolled fill is encountered in the proposed building area, it should be removed and replaced. All footings must be founded on the natural soils or on a controlled compacted fill.

SITE PREPARATION PROCEDURES

General

In general, the site preparation procedures should consist of clearing the trees, stripping the surface vegetation and topsoil and removing and replacing the uncontrolled fill, if encountered from within the proposed building areas and then cutting and filling the site to grade. Depending on the final site grades, it may be possible to leave the tilled surface soils in-place after proofrolling

and further evaluation by SESI. The tilled soils can be reused as structural fill; however, these soils possess a high silt/clay content and will rut and weave when over optimum moisture content. Therefore, we strongly recommend that these soils be kept a minimum of 2 feet below the building slab or footing subgrades. In order to reuse these materials, it may be necessary to treat the tilled soils with lime/cement to achieve the required moisture contents and densities.

Prior to placing any fill material in areas requiring fills to achieve the proposed subgrade elevation, the entire area should be graded level and proofrolled with a large vibratory roller (minimum 10-ton static drum weight) under the observation of a qualified geotechnical engineer. The proofrolling operation should consist of making a minimum of 4 complete coverages of the area. Any soft areas disclosed during the proofrolling should be excavated to stable material and backfilled with suitable material in compacted lifts in accordance with the Fill Placement section of this report. The compaction/proofrolling operations should be inspected by a qualified soils engineer. After completion of the proofrolling operations, the construction of the controlled fills and building foundation elements can commence. Uncontrolled fill soils that are encountered outside of the building areas should be proofrolled and evaluated by a qualified geotechnical engineer to determine if they need to be removed and replaced with a controlled compacted fill or can remain in place.

Soil Blending

We understand that an approximately 32-acre portion of the property requires remediation due to an insecticide (Dieldrin) that was previously used for agricultural purposes. The delineation of the contaminated area is shown on the *Sample Location Map* prepared by EcolSciences, Inc., dated 6/16/22 and is provided in **Appendix B**. In order to dilute the contamination levels in these areas, an excavation and blending of the upper 3 to 4 feet is recommended by EcolSciences. We recommend using dozers and large excavators to excavate and blend to the required depth determined by the environmental engineer. After the excavation and blending is complete, these soils should be placed in compacted lifts in accordance with the Fill Placement procedures outlined in this report.

Fill Placement

Controlled fill, when required, should be placed in maximum 12-inch-thick lifts, with each layer compacted to the required density using a large vibratory roller (minimum 10-ton static drum weight). In areas not accessible by the large vibratory roller, smaller compaction equipment (i.e. a double drum walk-behind vibratory roller) may be used. The use of smaller compaction equipment may require a thinner lift thickness and/or an increase in the number of equipment passes to achieve the required compaction. Building area fills should be compacted to a minimum of 92 percent with an average of greater than 95 percent of the Modified Proctor density (ASTM D 1557). Areas which will not have any foundations, pavement or other structural loads may be compacted to a minimum of 90 percent of the maximum Modified Proctor density (ASTM D 1557).

The fill materials may be obtained from suitable excavated existing soils or from off-site borrow. While we anticipate that a majority of the existing onsite soils are reusable, the excavated materials should be segregated to isolate reusable materials from those that need to be disposed. All wood, metal or otherwise decomposable materials should be removed from the fill soil prior to reuse within the compacted fill. It should be noted that some of the onsite soils contain high percentages of silt/clay and are highly moisture sensitive, and once wet, will require drying time

or modification before reuse. Some of these soils are also over-optimum moisture content in their present condition and will require drying time prior to their reuse.

Offsite borrow material, if required, should have a maximum particle size of three (3) inches and the maximum amount of fines (percentage passing a No. 200 mesh sieve) should be 15% to help facilitate construction during wet weather. The “fines” should be non-plastic.

Backfill in confined areas such as utility trenches and foundations within load bearing or paved areas should be placed in maximum 6-inch-thick layers and compacted to a minimum of 92 percent and an average of greater than 95 percent density.

The subgrade should be graded to drain and tight-rolled at the end of the day, particularly if wet weather is anticipated. If stormwater seepage is encountered during construction, gravel filled sumps with pumps should be installed below the subgrade elevation to allow for dewatering of the excavation.

Slopes and 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 OSHA requirements, including but not limited to, temporary shoring, trench boxes and benching and be evaluated by a qualified geotechnical engineer.

Utility Lines

The site soils will provide suitable support for the proposed utility lines. Cobbles greater than four (4) 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 the bottom of the excavation for any utility line falls within soft soils, the excavation should be extended an additional 12 inches and replaced with $\frac{3}{4}$ -inch clean crushed stone or clean sand and gravel.

Backfill material placed around utility lines to six (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 Modified Proctor density (ASTM D1557).

Control of Groundwater

Groundwater was encountered in test pits TP-29, TP-32, TP-33 and TP-35 at depths ranging from 10 to 12.5 feet below the ground surface. The remaining test pits and borings did not encounter groundwater. If the final building grades indicate groundwater could be at or near the lowest floor grade, additional investigations including groundwater monitoring wells could be warranted.

If stormwater runoff or groundwater seepage is encountered during construction, gravel filled sumps with pumps should be installed below the subgrade elevation to allow for dewatering of the excavation.

Retaining Walls

If retaining walls are required to reach the anticipated final site grades, the retaining wall leveling coarse subgrade may be placed on the natural inorganic soil or controlled compacted fill. The retaining wall foundation and backfill material should be placed in accordance with the design specifications. Retaining wall backfill should consist of a free-draining granular material with less than 15 percent non-plastic fines. The maximum particle size for the retaining wall backfill should be 3 inches or as specified by the design engineer. Retaining wall backfill should be placed in maximum 8-inch lifts and compacted with hand-operated compactors to achieve 95 percent of the Modified Proctor density (ASTM D1557). All retaining walls should be provided with positive drainage behind the wall to preclude hydrostatic pressures from developing.

The backfill material for the wall must meet the design specifications. The proposed retaining walls should be designed by a licensed New Jersey Professional Engineer. SESI can provide the retaining wall engineering design services, if required.

FOUNDATION DESIGN CRITERIA

After satisfactory completion of the site preparation procedures described above, conventional spread/strip footings may be constructed within the medium dense to very dense sand deposits, the medium stiff to very stiff silt deposits and/or the controlled compacted fill. Foundations bearing within the natural soils and/or controlled compacted fill can be designed for a maximum net allowable soil bearing pressure of 4,000 pounds per square foot (psf). The minimum footing widths for continuous wall footings shall be no less than 24 inches and column foundations should be no less than 36 inches.

Exterior footings and footings in unheated portions of the building potentially exposed to frost action, should be founded a minimum of 3.0 feet below adjacent grade or as required by the local building code. Interior footings within heated building areas may be founded at conventional depths below the slab provided they are placed on the natural soils or controlled compacted fill.

We recommend that a minimum 6-inch-thick layer of sand and gravel, dense graded aggregate (DGA), $\frac{3}{4}$ -inch clean crushed stone, or recycled concrete aggregate (RCA) be placed beneath the floor slab. The material should have a maximum particle size of 1.5 inches and a maximum of 12 percent non-plastic fines (percent passing a number 200 mesh sieve). The subgrade modulus for floor slab design may be 175 pci assuming that a minimum 6-inch layer of granular material is placed beneath the slab.

Some of the site soils contain high percentages of silt and are moisture sensitive, they will readily degrade under construction traffic and if left open to the weather. Excavations should therefore be left open for as short a time as practical to avoid excessive disturbance to the exposed subgrade. Should the bottom of an excavation become softened during construction, the soft material should be excavated and replaced with $\frac{3}{4}$ -inch clean crushed stone. We recommend that all footings that are founded in the predominantly fine grained soils be over-excavated a minimum of six (6) inches and replaced with a minimum of 6 inches of $\frac{3}{4}$ -inch clean crushed stone. The stone will provide a stable working mat and a medium through which to pump stormwater runoff. If water is encountered, it should be controlled locally with gravel-filled sumps.

All foundation walls should be provided with positive drainage behind the wall to preclude hydrostatic pressures from developing.

After satisfactory completion of the outlined building area preparation procedures, footings and floor slabs founded on the natural soils or compacted fills should have post-construction settlements less than 1-inch with less than ½-inch differential settlement over a 30-foot span.

Seismic Design

In accordance with ASCE 7-16 and the IBC 2018 – New Jersey edition, Seismic Site Class D can be used for seismic design purposes. Based on a structural occupancy/risk category of II/III and information provided by the American Society of Civil Engineers, the following seismic design criteria should be used for the site:

Mapped Spectral Response Acceleration for Short Periods	S_S = 0.234g
Mapped Spectral Response Acceleration for 1-Second Period	S_1 = 0.053g
Site Coefficient	F_a = 1.6
Site Coefficient	F_v = 2.4
Spectral Response for short periods	S_{MS} = 0.375g
Spectral Response for 1 second period	S_{M1} = 0.128g
Design Spectral Response Acceleration for Short Periods	S_{DS} = 0.25g
Design Spectral Response Accelerations for 1-Second Period	S_{D1} = 0.085g

A summary of recommended soil design parameters is included in **Table 1**.

PAVEMENT AREAS

After stripping the surface materials, the parking lot/roadway area subgrade should be proofrolled using a large vibratory roller (minimum 10-ton static weight). The proofrolling should consist of making 4 complete coverages of the area. If any soft areas are encountered during the proofrolling, they should be excavated to stable material and replaced with a controlled compacted fill. Visual observations and in-place field density tests should be made to determine the adequacy of the compaction. The proofrolling should be inspected by a qualified geotechnical engineer prior to placing any compacted fill.

Upon completion of the stripping/excavation/proofrolling operations, the fill required to attain finished subgrade elevation should be placed in lifts and compacted with the same or similar compactor as used for the proofrolling. The fill materials may be obtained from the existing inorganic onsite soils, or from offsite borrow.

It should be noted that some of the soils are moisture sensitive and possess a high silt/clay content and will rut and weave under construction equipment when they become over optimum moisture content. The upper tilled soils are also highly moisture sensitive. Therefore, we recommend that these soils be kept a minimum of 2 feet below the pavement subgrade, if possible. These soils could also be treated with lime/cement to achieve the required moisture contents and densities. A triaxial geogrid could also be used to bridge the marginal soils and/or reduce the pavement section.

If offsite borrow material is required, it should have a maximum particle size of 6 inches and the maximum amount of fines (percentages passing a No. 200 mesh sieve) should be 15% to help facilitate construction during wet weather. The “fines” should be non-plastic.

The thickness of the individual lifts of soil should be limited to 12 inches. The fill should be compacted using a large vibratory roller to achieve a minimum dry density of 92 percent and an average density of greater than 95 percent of Modified Proctor density as determined from laboratory test ASTM D 1557, except in the uppermost 2 feet, where a minimum of 95 percent is required to provide suitable pavement support. Visual observations and in-place field density tests should be made to determine the adequacy of the compaction. Wetting or drying of the fill material should be accomplished as necessary to achieve the required density.

PAVEMENT DESIGN CRITERIA

We estimate that the subgrade soils will have a conservative CBR (California Bearing Ratio) value on the order of 8 to 10 percent. We should inspect the pavement subgrade prior to the placement of the pavement section in order to determine if it is in accordance with our estimated design criteria. The pavement subgrade soils should be compacted to an unyielding condition and within ± 2 percent of optimum moisture to achieve 95 percent of Modified Proctor density (ASTM D 1557).

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 for all building pad, parking, and roadway subgrade fills. Additionally, SESI recommends utility trench and footing backfill compaction be visually observed, and in-place density tests be performed, where deemed necessary, by the geotechnical engineer. 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.

Parking/Roadway Areas: Minimum of 3 tests per 12-inch lift; spacing not to exceed 100 feet between test locations.

Utility Trenches: Minimum of 1 test per 6-inch lift; spacing not to exceed 50 feet between test locations.

Minimum density requirements are outlined in the Fill Placement section of this report. Density tests shall not be performed in area deemed unsafe for entry such as excavations not meeting OSHA safe excavation requirements.

INSPECTION

The recommendations presented in the previous sections of this report assume that the site preparation procedures will be done under engineering inspection by a representative of SESI. SESI should inspect the proofrolling of the subgrade, evaluation of the tilled soils, the installation of utilities, the removal of uncontrolled fill, where encountered, the placement of the compacted fill, the blending and replacement of the remediated soils, the bottom of the footing excavations prior to the placement of concrete and/or stone, the pavement subgrade, and the placement of

asphalt pavement. 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.

ADDITIONAL INVESTIGATIONS

This preliminary geotechnical report is based on the proposed building information provided on the *Conceptual Site Plan - SB* (CSP20) and *Conceptual Site Plan* (CSP30). SESI should be provided with the final Site and Grading Plans upon completion in order to review the validity of this report as it pertains to the updated plans.

Further geotechnical investigations should consist of the excavation of test pits, drilling of borings with potentially rock cores and the installation of groundwater monitoring wells, if necessary.

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 in order to minimize the risks associated with unanticipated conditions.

This report should not be used:

1. When the nature of the proposed buildings is changed;
2. When the size or configuration of the proposed buildings is altered;
3. When the location or orientation of the proposed buildings 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, which 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 in order to minimize the possibility of soil log misinterpretation.

DISCLAIMER

This Report was prepared by SESI for the sole and exclusive use of WRV Nurseries LLC. Nothing under the Professional Services Agreement between SESI and its Client, WRV Nurseries 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.

TABLE 1
SUMMARY OF SOIL DESIGN PARAMETERS

PARAMETER	VALUE
1. Allowable Bearing Capacity (net) Natural soils/improved or compacted fills	4,000psf
2. Total Unit Weight	125 pcf
3. Angle of Internal Friction - Backfill against Structures	32 degrees
4. Earth Pressure Coefficients (See Note 1) Active Earth Pressure (Ka) Earth Pressure @ Rest (Ko) Passive Earth Pressure (Kp)	0.31 0.47 3.25
5. Subgrade Modulus for Floor Slab Design Granular Fill (after Controlled fill Placement)	175 pci
6. Slopes (above groundwater) Maximum Cut Slope in Soil Maximum Fill Slope in Soil	2.0 H:1V 2.0 H:1V
7. Seismic Design Criteria- Site Class	D
8. Minimum Footing Depth (exterior footings)	3.0 feet

Notes:

- 1.) A drainage medium should be installed along all retaining walls to avoid hydrostatic pressures from developing.
- 2.) Compaction equipment used within 5± feet of permanent walls should not weigh more than 5,000 pounds.
- 3.) Recommended slopes in #7 above do not consider surcharge loading above. Any slopes greater than 15 feet high and/or have surcharge loading should be further evaluated by a geotechnical engineer.



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information of SESI CONSULTING ENGINEERS and may not be copied or
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permission of SESI CONSULTING ENGINEERS.

LEGEND:

- TP-1 - APPROXIMATE LOCATION AND NUMBER OF TEST PIT
- B-3 - APPROXIMATE LOCATION AND NUMBER OF BORING
- (2') - APPROXIMATE DEPTH TO BOTTOM OF FILL
- TP-523 - SOR TESTING LABS, INC. TEST PITS, APRIL 2004
- TP-1 - MELLICK TULLEY, ASSOCIATES TEST PITS, NOVEMBER 2007
- TP-4 - MELLICK TULLEY, ASSOCIATES TEST PITS, AUGUST 2008
- TP-28 - MELLICK TULLEY, ASSOCIATES TEST PITS, JANUARY 2008
- B - BUILDING NUMBERS

SCALE: 1"=500'
0 500 1,000

project: PROPOSED MIXED-USE DEVELOPMENT AT PRINCETON NURSERIES
ROUTE 1
PLAINSBORO & SOUTH BRUNSWICK TOWNSHIP, NEW JERSEY
title:
job no: 12506
drawing no:

SES CONSULTING ENGINEERS
ENVIRONMENTAL
12A MAPLE AVE, PINE BROOK, N.J. 07058 PH: 973-808-9050
CERT. OF AUTH. # 24GA27934700
SOILS / FOUNDATIONS
SITE DESIGN
ENVIRONMENTAL
date: 08/18/2022

FIG-1

BORING LOG

Job: Project: Location:		12506	Boring:	B-1	Client:	WRV Nurseries						
		Proposed Mixed-Use Development			Observer:	M. Lopez Trujillo						
		S. Brunswick/Plainsboro, NJ			Elevation:	122.0±						
Date Started:	July 26, 2022	Date Completed:	July 26, 2022	Boring Location Offset:	NA							
Contractor:	Craig		Type of Rig:	ATV - CME 55	Weather:	Part Cloudy	Temperature:	80°F				
Driller:	Brian		Helper:	Jim	Rotary Bit Diameter:	3 7/8						
Casing Dia.:	4	Inches	Casing Depth:	5	Feet	Auger Diameter:	OD:	Inches	ID:	Inches		
Drilling Mud Utilized:	<input type="checkbox"/> None		<input type="checkbox"/> Water		<input checked="" type="checkbox"/> Quickgel	<input type="checkbox"/> Bentonite		<input type="checkbox"/> Revert	<input type="checkbox"/> Ez Mud	<input type="checkbox"/> Other		
SAMPLING EQUIPMENT (type and size)	Split Spoon Sampler:		<input checked="" type="checkbox"/> 2-inch Diameter				<input type="checkbox"/> 3-inch Diameter					
	U-tube Sampler:		<input type="checkbox"/> Piston		<input type="checkbox"/> Shelby		<input type="checkbox"/> Other					
	Core Barrel:		Core Bit:									
	Sampler Hammer:		<input type="checkbox"/> External Anvil		<input type="checkbox"/> Mobile Safety		<input checked="" type="checkbox"/> Auto		<input type="checkbox"/> Mechanical Trip			
	Weight:	140		lbs.	Drop Height: 30		Inches					
WATER LEVEL OBSERVATIONS												
Date	Time	Depth of Hole		Depth of Casing	Depth to Water	Remarks						
7/28/2022		22±		5±	NE	Not Observed						
SAMPLE				SAMPLE DESCRIPTION				Depth	Strata	Rec.	REMARKS	
Number	Interval	Blows/6"		N-Value	Light brown medium to fine SAND, little Silt with trace organics (6-inch tilled soil)				5	15"	19"	20"
		4	4									
S-2	2-4'	5	4	10	Red-brown/orange-brown Clayey SILT, some medium to fine Gravel, little coarse to fine Sand				5	10"	16"	19"
		6	6									
S-3	4-6'	5	6	12	Red-brown/orange-brown coarse to fine Sand, some Silt, some medium to fine Gravel (-200) = 27.1% W.C. = 13.2%				5	10"	16"	20"
		6	7									
S-4	6-8'	5	9	15	Red-brown/orange-brown Clayey SILT, some medium to fine Gravel, little coarse to fine Sand				5	10"	16"	19"
		6	7									
S-5	8-10'	6	6	12	Yellow-brown Clayey SILT, little coarse to fine Sand, trace Gravel				5	10"	16"	19"
		6	7									
S-6	10-12'	2	4	10	Yellow-brown Clayey SILT, little coarse to fine Sand				5	10"	16"	19"
		6	8									
S-7	15-17'	4	7	18	Yellow-brown Clayey SILT, trace Gravel				5	10"	16"	19"
		11	14									
S-8	20-21.8'	12	23	56	Dark-brown/black coarse to fine Sand, and fine Gravel, little Clayey Silt				5	10"	16"	19"
		33	50/4"									
S-9	22-22'	50/0"	-	-	BORING COMPLETED AT 22± FEET DUE TO SPLIT SPOON REFUSAL				5	10"	16"	19"
		-	-									
										20	21"	Spoon bouncing
										25	0"	Spoon bouncing, no recovery
										30		
Page 1 of 1										Figure No.: 2		

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 engineers recommendations contained in the report from which these logs were extracted.

Pp: Pocket Penetrometer; WOH: Weight of Hammer; WOR: Weight of Rod

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

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

BORING LOG

SESI CONSULTING ENGINEERS		BORING LOG		Job:	12506	Boring:	B-2	Client:	WRV Nurseries					
				Project:	Proposed Mixed-Use Development			Observer:	M. Lopez Trujillo					
				Location:	S. Brunswick/Plainsboro, NJ			Elevation:	118.0±					
Date Started:	July 26, 2022	Date Completed:	July 26, 2022	Boring Location Offset:	NA									
Contractor:	Craig		Type of Rig:	ATV - CME 55	Weather:	Cloudy		Temperature:	84°F					
Driller:	Brian		Helper:	Jim	Rotary Bit Diameter:	3 7/8								
Casing Dia.:	4	Inches	Casing Depth:	5	Feet	Auger Diameter:	OD:	Inches	ID: Inches					
Drilling Mud Utilized:	<input type="checkbox"/> None		<input type="checkbox"/> Water		<input checked="" type="checkbox"/> Quickgel	<input type="checkbox"/> Bentonite		<input type="checkbox"/> Revert	<input type="checkbox"/> Ez Mud <input type="checkbox"/> Other					
SAMPLING EQUIPMENT (type and size)	Split Spoon Sampler:		<input checked="" type="checkbox"/> 2-inch Diameter			<input type="checkbox"/> 3-inch Diameter								
	U-tube Sampler:		<input type="checkbox"/> Piston		<input type="checkbox"/> Shelby		<input type="checkbox"/> Other							
	Core Barrel:					Core Bit:								
	Sampler Hammer:		<input type="checkbox"/> External Anvil		<input type="checkbox"/> Mobile Safety		<input checked="" type="checkbox"/> Auto		<input type="checkbox"/> Mechanical Trip					
	Weight:	140		lbs.		Drop Height: 30		Inches						
WATER LEVEL OBSERVATIONS														
Date	Time	Depth of Hole		Depth of Casing		Depth to Water		Remarks						
7/26/2022		23.8±		5±		NE		Not Observed						
SAMPLE				SAMPLE DESCRIPTION					Depth	Strata	Rec.	REMARKS		
Number	Interval	Blows/6"		N-Value	Light brown medium to fine SAND, little Silt with trace organics (6-inch tilled soil)							20"		
		6	4											
S-1	0-2'	6	4	10	Red-brown coarse to fine SAND, some coarse to fine Gravel, little Clayey Silt							16"		
		6	5											
S-2	2-4'	10	6	17	Yellow-brown/red-brown Clayey SILT, little coarse to fine Sand							5		
		11	8											
S-3	5-7'	2	4	10	Same as above, orange-brown							18"		
		6	7											
S-4	7-9'	6	6	16	Same as above							16"		
		10	8											
S-5	10-12'	3	6	15	Same as above							10		
		9	9											
S-6	15-17'	4	8	18	Same as above							17"		
		10	8											
S-7	20-22'	6	11	23	Yellow-brown/brown/dark gray coarse to fine Gravel, and Silt, some coarse to fine Sand (-200) = 39.4% W.C. = 31.2%							15"		
		12	10											
S-9	22-23.8'	12	10	47	Dark gray/dark brown Clayey SILT, little medium to fine Gravel, little coarse to fine Sand							16"		
		37	50/3"											
BORING COMPLETED AT 23.8± FEET DUE TO SPLIT SPOON REFUSAL										25				
										30				

Page 1 of 1

Figure No.: 3

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Pp: Pocket Penetrometer; WOH: Weight of Hammer; WOR: Weight of Rod

Approximate Change in Strata: ----- Inferred Change in Strata: -----

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

BORING LOG

SESI CONSULTING ENGINEERS		BORING LOG		Job:	12506	Boring:	B-3	Client:	WRV Nurseries		
				Project:	Proposed Mixed-Use Development			Observer:	M. Lopez Trujillo		
				Location:	S. Brunswick/Plainsboro, NJ			Elevation:	119.0±		
Date Started:	July 26, 2022	Date Completed:	July 26, 2022	Boring Location Offset:		NA					
Contractor:	Craig	Type of Rig:	ATV - CME 55	Weather:		Part Cloudy		Temperature:	72°F		
Driller:	Brian	Helper:	Jim	Rotary Bit Diameter:		3 7/8					
Casing Dia.:	4 Inches	Casing Depth:	5 Feet	Auger Diameter:	OD:	Inches	ID:	Inches			
Drilling Mud Utilized:	<input type="checkbox"/> None	<input type="checkbox"/> Water	<input checked="" type="checkbox"/> Quickgel	<input type="checkbox"/> Bentonite	<input type="checkbox"/> Revert	<input type="checkbox"/> Ez Mud	<input type="checkbox"/> Other				
SAMPLING EQUIPMENT (type and size)	Split Spoon Sampler:		<input checked="" type="checkbox"/> 2-inch Diameter			<input type="checkbox"/> 3-inch Diameter					
	U-tube Sampler:		<input type="checkbox"/> Piston		<input type="checkbox"/> Shelby		<input type="checkbox"/> Other				
	Core Barrel:					Core Bit:					
	Sampler Hammer:		<input type="checkbox"/> External Anvil		<input type="checkbox"/> Mobile Safety		<input checked="" type="checkbox"/> Auto		<input type="checkbox"/> Mechanical Trip		
	Weight:	140 lbs.		Drop Height:		30 Inches					
WATER LEVEL OBSERVATIONS											
Date	Time	Depth of Hole		Depth of Casing		Depth to Water		Remarks			
7/26/2022		22±		5±		NE		Not Observed			
SAMPLE				SAMPLE DESCRIPTION				Depth	Strata	Rec.	REMARKS
Number	Interval	Blows/6"	N-Value								
S-1	0-2'	12	23	Fill: Gray/brown coarse to fine GRAVEL, some coarse to fine Sand, little Clayey Silt, with Geofabric						12"	
		13	10								
S-2	2-4'	8	5	Brown coarse to fine Gravel, and Silt, some coarse to fine Sand (-200) = 45.1% W.C. = 12.7%						12"	
		7	6								
S-3	4-6'	6	6	Orange-brown/red-brown Clayey SILT, little medium to fine Sand				5		11"	
		7	3								
S-4	6-8'	2	3	Dark brown Clayey SILT, little coarse to fine Sand, trace Gravel						18"	
		3	4								
S-5	8-10'	3	4	Same as above						15"	
		4	4					10			
S-6	10-12'	2	5	Same as above						18"	
		4	4								
										15	
S-7	15-15'	50/0"	-	... Cobbles and Boulders						0"	No recovery
		-	-								Boulders from 15-20'
								20			
S-8	20-20.25'	50/3"	-	Dark gray coarse to fine GRAVEL, little coarse to fine Sand, little Silt						2"	Spoon bouncing
		-	-								
S-9	22-22'	50/0"	-	BORING COMPLETED AT 22± FEET DUE TO SPLIT SPOON REFUSAL						0"	Spoon bouncing, no recovery
		-	-								
								25			
								30			

Page 1 of 1

Figure No.: 4

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Pp: Pocket Penetrometer; WOH: Weight of Hammer; WOR: Weight of Rod

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

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

BORING LOG

Job:	12506	Boring:	B-4	Client:	WRV Nurseries
Project:	Proposed Mixed-Use Development			Observer:	M. Lopez Trujillo
Location:	S. Brunswick/Plainsboro, NJ			Elevation:	118.0±

Date Started:	July 25, 2022	Date Completed:	July 25, 2022	Boring Location Offset:	NA					
Contractor:	Craig	Type of Rig:	ATV - CME 55	Weather:	Cloudy, Windy		Temperature:	94°F		
Driller:	Brian	Helper:	Jim	Rotary Bit Diameter:	3 7/8					
Casing Dia.:	4	Inches	Casing Depth:	10	Feet	Auger Diameter:	OD:	Inches		
Drilling Mud Utilized:	<input type="checkbox"/> None	<input type="checkbox"/> Water	<input checked="" type="checkbox"/> Quickgel	<input type="checkbox"/> Bentonite	<input type="checkbox"/> Revert	<input type="checkbox"/> Ez Mud	<input type="checkbox"/> Other			
SAMPLING EQUIPMENT (type and size)	Split Spoon Sampler:		<input checked="" type="checkbox"/> 2-inch Diameter			<input type="checkbox"/> 3-inch Diameter				
	U-tube Sampler:		<input type="checkbox"/> Piston	<input type="checkbox"/> Shelby	<input type="checkbox"/> Other					
	Core Barrel:			Core Bit:						
	Sampler Hammer:		<input type="checkbox"/> External Anvil	<input type="checkbox"/> Mobile Safety	<input checked="" type="checkbox"/> Auto	<input type="checkbox"/> Mechanical Trip				
	Weight:	140	lbs.	Drop Height:	30	Inches				

WATER LEVEL OBSERVATIONS

Date	Time	Depth of Hole	Depth of Casing	Depth to Water	Remarks
7/25/2022		24±	10±	NE	Not Observed

SAMPLE				SAMPLE DESCRIPTION				Depth	Strata	Rec.	REMARKS			
Number	Interval	Blows/6"	N- Value											
S-1	0-2'	11	13	25	Brown Clayey SILT, some coarse to fine Sand, little medium to fine Gravel (6-inch topsoil)				21"	18"	Rig chatter from 7 to 10ft			
		12	11		Same as above									
S-2	2-4'	5	7	17	Brown medium to fine Gravel, some coarse to fine Sand, some Silt (-200) = 28.4% W.C. = 11.6%				3"	14"	Rig chatter from 7 to 10ft			
		10	10		Same as above									
S-3	4-6'	18	29	43	Yellow-brown/orange-brown coarse to fine SAND, some coarse to fine Gravel, little Clayey Silt with Cobbles				10	10"	Rig chatter from 12 to 14ft			
		14	12		Same as above									
S-4	6-8'	8	10	19	Yellow-brown/red-brown/dark brown coarse to fine SAND, some coarse to fine Gravel, little Clayey Silt with Cobbles				15	12"	Rig chatter from 16 to 18ft			
		9	9		Same as above									
S-5	8-10'	49	19	33	Yellow-brown/red-brown/dark brown coarse to fine SAND, some coarse to fine Gravel, little Clayey Silt with Cobbles				20	21"	Rig chatter from 16 to 18ft			
		14	13		Same as above									
S-6	10-12'	6	7	15	Yellow-brown/black coarse to fine SAND, little medium to fine Gravel, little Clayey Silt				25	23"	Rig chatter from 12 to 14ft			
		8	7		Dark brown/black coarse to fine Sand, and Clayey Silt, trace Gravel with Cobbles									
S-7	15-17'	8	9	18	Yellow-brown/red-brown/dark brown coarse to fine SAND, some coarse to fine Gravel, some Clayey Silt with Cobbles				30	25"	Rig chatter from 16 to 18ft			
		9	6		Same as above									
S-8	20-22'	12	11	21	Yellow-brown/red-brown/dark brown coarse to fine Sand, and Clayey Silt, trace Gravel				30	27"	Rig chatter from 16 to 18ft			
		10	13		Same as above									
S-9	22-24'	10	11	23	Yellow-brown/red-brown/dark brown Clayey SILT, little coarse to fine Gravel, little coarse to fine Sand				30	29"	Rig chatter from 16 to 18ft			
		12	11		Same as above									
BORING COMPLETED AT 24± FEET														

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Pp: Pocket Penetrometer; WOH: Weight of Hammer; WOR: Weight of Rod

Approximate Change in Strata: ----- Inferred Change in Strata: -----

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

Job:	12506	Boring:	B-5	Client:	WRV Nurseries
Project:	Proposed Mixed-Use Development			Observer:	M. Lopez Trujillo
Location:	S. Brunswick/Plainsboro, NJ			Elevation:	95.0±

Date Started:	July 25, 2022	Date Completed:	July 25, 2022	Boring Location Offset:	NA		
Contractor:	Craig	Type of Rig:	ATV - CME 55	Weather:	Cloudy, Windy		Temperature: 88°F
Driller:	Brian	Helper:	Jim	Rotary Bit Diameter:	3 7/8		
Casing Dia.:	4 Inches	Casing Depth:	15 Feet	Auger Diameter:	OD:	Inches	ID: Inches
Drilling Mud Utilized:	<input type="checkbox"/> None	<input type="checkbox"/> Water	<input checked="" type="checkbox"/> Quickgel	<input type="checkbox"/> Bentonite	<input type="checkbox"/> Revert	<input type="checkbox"/> Ez Mud	<input type="checkbox"/> Other
SAMPLING EQUIPMENT (type and size)	Split Spoon Sampler:		<input checked="" type="checkbox"/> 2-inch Diameter	<input type="checkbox"/> 3-inch Diameter			
	U-tube Sampler:		<input type="checkbox"/> Piston	<input type="checkbox"/> Shelby	<input type="checkbox"/> Other		
	Core Barrel:			Core Bit:			
	Sampler Hammer:		<input type="checkbox"/> External Anvil	<input type="checkbox"/> Mobile Safety	<input checked="" type="checkbox"/> Auto	<input type="checkbox"/> Mechanical Trip	
	Weight:	140 lbs.	Drop Height: 30 Inches				

WATER LEVEL OBSERVATIONS

Date	Time	Depth of Hole	Depth of Casing	Depth to Water	Remarks
7/25/2022		24±	15±	NE	Not Observed

Number	Interval	SAMPLE		SAMPLE DESCRIPTION			Depth	Strata	Rec.	REMARKS	
		Blows/6"	N- Value								
S-1	0-2'	6	4	10	Brown medium to fine SAND, little Silt, trace Gravel with trace organics (12-inch tilled soil)			20"			
		6	4					16"			
S-2	2-4'	6	7	16	Brown/light brown coarse to fine SAND, some coarse to fine Gravel, little Clayey Silt						
		9	7								
S-3	4-6'	9	7	16	Brown/yellow-brown coarse to fine SAND, some coarse to fine Gravel, little Silt (-200) = 14.1% W.C. = 6.5%			5			
		9	8								
S-4	6-8'	8	12	25	Yellow-brown/brown medium to fine Gravel, and coarse to fine Sand, some Clayey Silt						
		13	12					5"			
S-5	8-10'	12	8	18	Yellow-brown/gray- fine Gravel, some Clayey Silt with Cobbles						
		10	9					12"		Rig chatter from 9 to 10ft	
S-6	10-12'	3	6	14	Same as above						
		8	7					7"			
S-7	15-17'	7	24	35	Same as above						
		11	15					14"			
S-8	20-22'	8	10	22	Brown/yellow-brown coarse to fine SAND, little medium to fine Gravel, little Clayey Silt						
		12	18					9"			
S-9	22-24'	12	11	23	Same as above						
		12	16					22"			
					BORING COMPLETED AT 24± FEET						
								25			
								30			

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Pp: Pocket Penetrometer; WOH: Weight of Hammer; WOR: Weight of Rod

Approximate Change in Strata:

Inferred Change in Strata:

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

BORING LOG

Project:		Job:	12506	Boring:	B-6	Client:	WRV Nurseries				
		Proposed Mixed-Use Development			Observer:	M. Lopez Trujillo					
		S. Brunswick/Plainsboro, NJ			Elevation:	121.0±					
Date Started:	July 25, 2022	Date Completed:	July 25, 2022	Boring Location Offset:	NA						
Contractor:	Craig	Type of Rig:	ATV - CME 55	Weather:	Cloudy	Temperature:	84°F				
Driller:	Brian	Helper:	Jim	Rotary Bit Diameter:	3 7/8						
Casing Dia.:	4 Inches	Casing Depth:	5 Feet	Auger Diameter:	OD:	Inches	ID: Inches				
Drilling Mud Utilized:	<input type="checkbox"/> None	<input type="checkbox"/> Water	<input checked="" type="checkbox"/> Quickgel	<input type="checkbox"/> Bentonite	<input type="checkbox"/> Revert	<input type="checkbox"/> Ez Mud	<input type="checkbox"/> Other				
SAMPLING EQUIPMENT (type and size)	Split Spoon Sampler:		<input checked="" type="checkbox"/> 2-inch Diameter		<input type="checkbox"/> 3-inch Diameter						
	U-tube Sampler:		<input type="checkbox"/> Piston	<input type="checkbox"/> Shelby	<input type="checkbox"/> Other						
	Core Barrel:			Core Bit:							
	Sampler Hammer:		<input type="checkbox"/> External Anvil	<input type="checkbox"/> Mobile Safety	<input checked="" type="checkbox"/> Auto	<input type="checkbox"/> Mechanical Trip					
	Weight:	140 lbs.	Drop Height: 30 inches								
WATER LEVEL OBSERVATIONS											
Date	Time	Depth of Hole		Depth of Casing	Depth to Water	Remarks					
7/25/2022		24±		5±	NE	Not Observed					
SAMPLE				SAMPLE DESCRIPTION			Depth	Strata	Rec.	REMARKS	
Number	Interval	Blows/6"	N- Value								
S-1	0-2'	2	3	5	Yellow-brown medium to fine SAND, little Silt with trace organics (6-inch tilled soil)						
		2	2								
S-2	2-4'	2	5	11	Brown Clayey SILT, little coarse to fine Sand, trace Gravel						
		6	9								
S-3	5-7'	8	8	18	Brown/gray-brown coarse to fine SAND, some Clayey Silt, little fine Gravel			5			
		10	8								
S-4	7-9'	9	10	21	Brown/yellow-brown/gray-brown coarse to fine SAND, some Clayey Silt, little medium to fine						
		11	11								
S-5	10-12'	7	7	14	Yellow-brown/dark brown coarse to fine SAND, some medium to fine Gravel, little Clayey Silt			10			
		7	6								
S-6	15-17'	7	12	26	Same as above			15			
		14	9								
S-7	20-22'	10	10	27	Yellow-brown/gray-brown/dark brown coarse to fine Gravel, some coarse to fine Sand, some Clayey Silt			20			
		17	17		(-200) = 30.4% W.C. = 23.8%						
S-8	22-24'	14	38	68	Yellow-brown/gray-brown/dark brown coarse to fine Gravel, and coarse to fine Sand, some Clayey Silt						
		30	19								
					BORING COMPLETED AT 24± FEET			25			
								30			
Page 1 of 1								Figure No.: 7			

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Pp: Pocket Penetrometer; WOH: Weight of Hammer; WOR: Weight of Rod

Approximate Change in Strata:

Inferred Change in Strata: -----

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



BORING LOG

SESI CONSULTING ENGINEERS		BORING LOG		Job:	12506	Boring:	B-7	Client:	WRV Nurseries												
				Project:	Proposed Mixed-Use Development			Observer:	M. Lopez Trujillo												
				Location:	S. Brunswick/Plainsboro, NJ			Elevation:	123.0±												
Date Started:	July 26, 2022		Date Completed:	July 26, 2022		Boring Location Offset:	NA														
Contractor:	Craig		Type of Rig:	ATV - CME 55		Weather:	Cloudy		Temperature:	84°F											
Driller:	Brian		Helper:	Jim		Rotary Bit Diameter:	3 7/8														
Casing Dia.:	4	Inches	Casing Depth:	5	Feet	Auger Diameter:	OD:	_inches	ID:	Inches											
Drilling Mud Utilized:	<input type="checkbox"/> None		<input type="checkbox"/> Water		<input checked="" type="checkbox"/> Quickgel	<input type="checkbox"/> Bentonite		<input type="checkbox"/> Revert	<input type="checkbox"/> Ez Mud	<input type="checkbox"/> Other											
SAMPLING EQUIPMENT (type and size)	Split Spoon Sampler:		<input checked="" type="checkbox"/> 2-inch Diameter			<input type="checkbox"/> 3-inch Diameter															
	U-tube Sampler:		<input type="checkbox"/> Piston		<input type="checkbox"/> Shelby		<input type="checkbox"/> Other														
	Core Barrel:				Core Bit:																
	Sampler Hammer:		<input type="checkbox"/> External Anvil		<input type="checkbox"/> Mobile Safety		<input checked="" type="checkbox"/> Auto		<input type="checkbox"/> Mechanical Trip												
	Weight:	140 lbs.		Drop Height:		30 Inches															
WATER LEVEL OBSERVATIONS																					
Date	Time	Depth of Hole		Depth of Casing		Depth to Water		Remarks													
7/26/2022		23.4±		5±		NE		Not Observed													
SAMPLE				SAMPLE DESCRIPTION					Depth	Strata	Rec.	REMARKS									
Number	Interval	Blows/6"	N- Value	Fill: Brown coarse to fine SAND, some coarse to fine Gravel, little Silt Brown/gray-brown medium to fine SAND, some Clayey Silt Brown/red-brown coarse to fine SAND, some Clayey Silt, little medium to fine Gravel Yellow-brown/red-brown Clayey SILT, some coarse to fine Sand, trace Gravel Yellow-brown/red-brown Clayey SILT, little coarse to fine Sand Yellow-brown Clayey SILT, little coarse to fine Sand Yellow-brown/dark gray Clayey SILT, some medium to fine Gravel, little coarse to fine Sand Yellow-brown Clayey SILT, little medium to fine Gravel, little coarse to fine Sand					W.C. = 56.5%	19"	19"	6-inch DGA (fill)									
S-1	0-2'	10	21														8"	8"			
		16	19																		
S-2	2-4'	13	12														5	16"			
		6	5																		
S-3	5-7'	2	4														10	10"			
		6	8																		
S-4	7-9'	6	6														15	22"			
		6	8																		
S-5	10-12'	2	3														20	20"			
		3	3																		
S-6	15-17'	1	2	5						25	30										
		3	4																		
S-7	20-22'	9	6	14																	
		8	16																		
S-9	22-23.4'	28	38	-																	
		50/5"	-																		
BORING COMPLETED AT 23.4± FEET DUE TO SPLIT SPOON REFUSAL																					

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Pn: Pocket Penetrometer; WOH: Weight of Hammer; WOR: Weight of Rod

Approximate Change in Strata:

Inferred Change in Strata: -----

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

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-1
LOCATION	See Fig. 1	APPROX. ELEV.	111.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/13/2022
DEPTH FT.	DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY	
0	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)				
1					
2	Brown coarse to fine SAND, little coarse to fine Gravel, little Silt			Medium Dense	
3					
4					
5					
6					
7	Dark brown coarse to fine GRAVEL, some coarse to fine Sand, little Clayey Silt			Dense	
8					
9	Gray/brown coarse to fine SAND, some coarse to fine Gravel, some Clayey Silt			Dense	
10					
11					
12	TEST PIT COMPLETED AT 12± FEET				
13					
14					

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-2
LOCATION	See Fig. 1	APPROX. ELEV.	111.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/13/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY
0	—	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1	—	Brown/gray coarse to fine SAND, some coarse to fine Gravel, little Clayey Silt, with occasional Cobbles and Boulders			Medium Dense
2	—				to
3	—				Dense
4	—				
5	—				
6	—	Brown/gray coarse to fine GRAVEL, some coarse to fine Sand, little Clayey Silt, with occasional Cobbles and Boulders			Dense
7	—				to
8	—				Very Dense
9	—				
10	—				
11	—	TEST PIT COMPLETED AT 11± FEET DUE TO EXCAVATOR REFUSAL			
12	—				
13	—				
14	—				

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-3
LOCATION	See Fig. 1	APPROX. ELEV.	112.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/13/2022
DEPTH FT.	DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY	
0	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)				
1	Brown coarse to fine Sand, and clayey Silt, little medium to fine Gravel			Medium Dense	
2				to	
3				Dense	
4					
5					
6					
7					
8					
9	Dark brown coarse to fine GRAVEL, some coarse to fine Sand, little Clayey Silt, with Cobbles			Medium Dense	
10				to	
11				Dense	
12					
13					
14	TEST PIT COMPLETED AT 14± FEET				

NOTE:

Fig. 11

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-4
LOCATION	See Fig. 1	APPROX. ELEV.	115.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/13/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY
0	—	24-inch Topsoil			
1	—				
2	—				
3	—	Red-brown coarse to fine Sand, and Clayey Silt, little coarse to fine Gravel			Medium Dense
4	—				
5	—				
6	—				
7	—				
8	—				
9	—	Gray/brown coarse to fine Gravel, and coarse to fine Sand, little Clayey Silt, with Cobbles and Boulders			Dense to Very Dense
10	—				
11	—				
12	—				
13	—	TEST PIT COMPLETED AT 13± FEET			
14	—				

NOTE:

Fig. 12

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-5
LOCATION	See Fig. 1	APPROX. ELEV.	118.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/13/2022
DEPTH FT.	DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY	
0	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)				
1					
2	Red-brown coarse to fine SAND, some coarse to fine Gravel, little Clayey Silt, with occasional Cobbles			Medium Dense to Dense	
3					
4					
5					
6					
7					
8					
9					
10	Gray/brown Clayey SILT, some coarse to fine Sand, little medium to fine Gravel			Stiff	
11					
12					
13	TEST PIT COMPLETED AT 13± FEET				
14					

NOTE:

Fig. 13

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-6
LOCATION	See Fig. 1	APPROX. ELEV.	116.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/13/2022
DEPTH FT.	DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY	
0	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)				
1					
2	Red-brown coarse to fine SAND, some Clayey Silt, little coarse to fine Gravel, with occasional Cobbles			Medium Dense to Dense	
3					
4					
5					
6					
7	Gray/brown coarse to fine SAND, some coarse to fine Gravel, little Clayey Silt, with occasional Cobbles			Medium Dense to Dense	
8					
9					
10					
11					
12					
13	Boulders encountered 13± feet				
14	TEST PIT COMPLETED AT 14± FEET				

NOTE:

Fig. 14

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-7
LOCATION	See Fig. 1	APPROX. ELEV.	123.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/13/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY
0	—	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1	—	Red-brown coarse to fine SAND, some coarse to fine Gravel, little Clayey Silt with occasional Cobbles			Medium Dense
2	—				to
3	—				Dense
4	—				
5	—				
6	—				
7	—				
8	—				
9	—				
10	—	Brown coarse to fine Gravel, and coarse to fine Sand, little Clayey Silt, with occasional Cobbles			Dense
11	—				
12	—				
13	—	TEST PIT COMPLETED AT 13± FEET			
14	—				

NOTE:

Fig. 15

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-8
LOCATION	See Fig. 1	APPROX. ELEV.	115.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/13/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY
0	—	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1	—				
2	—				
3	—	Brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel			Stiff
4	—				
5	—				
6	—	Dark brown coarse to fine Gravel, and coarse to fine Sand, little Clayey Silt, with occasional Cobbles			Dense
7	—				
8	—				
9	—				
10	—				
11	—				
12	—				
13	—				
14	—	TEST PIT COMPLETED AT 14± FEET			

NOTE:

Fig. 16

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-9
LOCATION	See Fig. 1	APPROX. ELEV.	111.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/13/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION		RELATIVE DENSITY OR CONSISTENCY	
0	—	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1	—	Brown coarse to fine SAND, some coarse to fine Gravel, little Clayey Silt, with occasional Cobbles			Medium Dense
2	—				to
3	—				Dense
4	—				
5	—				
6	—				
7	—	Dark brown coarse to fine GRAVEL, some coarse to fine Sand, little Clayey Silt, with occasional Cobbles			Dense
8	—				to
9	—				Very Dense
10	—				
11	—				
12	—	TEST PIT COMPLETED AT 12± FEET			
13	—				
14	—				

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-10
LOCATION	See Fig. 1	APPROX. ELEV.	109.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/13/2022
DEPTH FT.	DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY	
0	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)				
1					
2	Brown coarse to fine SAND, some coarse to fine Gravel, little Clayey Silt, with occasional Cobbles			Medium Dense to Dense	
3					
4					
5					
6					
7	Gray/brown coarse to fine GRAVEL, some coarse to fine Sand, some Clayey Silt			Dense	
8					
9					
10					
11					
12					
13	TEST PIT COMPLETED AT 13± FEET				
14					

NOTE:

Fig. 18

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-11
LOCATION	See Fig. 1	APPROX. ELEV.	102.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/13/2022
DEPTH FT.	DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY	
0	Topsoil				
1					
2	Brown coarse to fine SAND, little coarse to fine Gravel, little Silt			Medium Dense to Dense	
3					
4					
5					
6					
7					
8					
9					
10	Gray/orange-brown coarse to fine GRAVEL, some coarse to fine Sand, some Clayey Silt			Dense	
11					
12					
13					
14	TEST PIT COMPLETED AT 14± FEET				

NOTE:

Fig. 19

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-12
LOCATION	See Fig. 1	APPROX. ELEV.	95.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/13/2022
DEPTH FT.	DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY	
0	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)				
1					
2	Brown coarse to fine Sand, some coarse to fine Gravel, little Silt, with trace Roots			Medium Dense	
3					
4	Gray/brown coarse to fine GRAVEL some coarse to fine Sand, some Clayey Silt			Dense	
5					
6					
7					
8					
9					
10					
	TEST PIT COMPLETED AT 10± FEET				
11					
12					
13					
14					

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-13
LOCATION	See Fig. 1	APPROX. ELEV.	106.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/13/2022
DEPTH FT.	DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY	
0	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)				
1					
2	Brown coarse to fine SAND, some coarse to fine Gravel, little Silt, with occasional Cobbles and Boulders			Medium Dense to Dense	
3					
4	Orange-brown/gray coarse to fine GRAVEL, some coarse to fine Sand, little Clayey Silt, with occasional Cobbles and Boulders			Dense to Very Dense	
5					
6					
7					
8					
9					
10					
11					
12					
13	TEST PIT COMPLETED AT 13± FEET				
14					

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-14
LOCATION	See Fig. 1	APPROX. ELEV.	112.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/13/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY
0	—	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1	—	Brown coarse to fine SAND, some coarse to fine Gravel, little Silt			Medium Dense
2	—				to
3	—				Dense
4	—				
5	—				
6	—	Orange-brown/red-brown Clayey SILT, little coarse to fine Sand, little coarse to fine Gravel			Medium Stiff
7	—				to
8	—				Stiff
9	—				
10	—	Dark brown/orange-brown coarse to fine GRAVEL, some Clayey Silt, little coarse to fine Sand, with occasional Cobbles			Medium Dense
11	—				to
12	—				Dense
13	—	TEST PIT COMPLETED AT 13± FEET			
14	—				

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-15
LOCATION	See Fig. 1	APPROX. ELEV.	117.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/14/2022
DEPTH FT.	DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY	
0	Fill: Yellow-brown coarse to fine SAND, some coarse to fine Gravel, little Silt			Medium Dense	
1	Geofabric encountered at 1.5± Feet				
2	Gray coarse to fine SAND, little Silt, trace Gravel, with Roots			Dense	
3	Red-brown/yellow-brown coarse to fine GRAVEL, some Silt, little coarse to fine Sand			Dense	
4				(-200) = 26.4% W.C. = 18.1%	
5					
6					
7	Yellow-brown coarse to fine SAND, some coarse to fine Gravel, little Clayey Silt			Dense	
8					
9					
10					
11					
12					
13	TEST PIT COMPLETED AT 12.5± FEET				
14					

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-16
LOCATION	See Fig. 1	APPROX. ELEV.	114.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/13/2022
DEPTH FT.	DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY	
0	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)				
1	Brown coarse to fine SAND, little coarse to fine Gravel, little Silt			Medium Dense to Dense	
2					
3					
4					
5	Yellow-brown/red-brown Clayey SILT, little coarse to fine Sand, trace Gravel			Medium Stiff to Stiff	
6					
7					
8	Gray-brown coarse to fine GRAVEL, some coarse to fine Sand, little Clayey Silt			Dense to Very Dense	
9					
10					
11					
12	TEST PIT COMPLETED AT 12± FEET				
13					
14					

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-17
LOCATION	See Fig. 1	APPROX. ELEV.	113.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/14/2022
DEPTH FT.	DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY	
0	Topsoil				
1					
2	Brown coarse to fine SAND, some coarse to fine Gravel, little Clayey Silt			Medium Dense to Dense	
3					
4					
5	Brown coarse to fine Gravel, and coarse to fine Sand, little Clayey Silt			Dense	
6					
7					
8	Brown/yellow-brown/gray/dark brown Clayey SILT, little coarse to fine Gravel, little coarse to fine Sand			Stiff	
9					
10				W.C. = 27.1%	
11					
12	TEST PIT COMPLETED AT 12± FEET				
13					
14					

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-18
LOCATION	See Fig. 1	APPROX. ELEV.	118.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/14/2022
DEPTH FT.	DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY	
0	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)				
1	Light brown/yellow-brown coarse to fine SAND, trace Silt			Medium Dense	
2				to	
3				Dense	
4					
5	Dark brown coarse to fine SAND, little Clayey Silt, trace Gravel			Dense	
6					
7	Yellow-brown/red-brown Clayey SILT, little coarse to fine Sand, trace Gravel with occasional Cobbles			Stiff	
8					
9					
10					
11					
12					
13	TEST PIT COMPLETED AT 13± FEET				
14					

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-19
LOCATION	See Fig. 1	APPROX. ELEV.	136.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/19/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY
0	—	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1	—	Red-brown coarse to fine SAND, little coarse to fine Gravel, little Clayey Silt			Medium Dense
2	—				to
3	—				Dense
4	—				
5	—				
6	—				
7	—				
8	—	Red-brown/dark brown coarse to fine Gravel, and coarse to fine Sand, some Clayey Silt, with Cobbles			Dense
9	—				to
10	—				Very Dense
11	—				
12	—	TEST PIT COMPLETED AT 12± FEET			
13	—				
14	—				

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-20
LOCATION	See Fig. 1	APPROX. ELEV.	134.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/19/2022
DEPTH FT.	DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY	
0	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)				
1	Red-brown coarse to fine SAND, little coarse to fine Gravel, little Clayey Silt			Medium Dense to Dense	
2					
3					
4					
5					
6	... Grading to some Clayey Silt				
7					
8	Gray-brown/red-brown coarse to fine Sand, and Clayey Silt, little coarse to fine Gravel, with occasional Cobbles			Medium Dense to Dense	
9					
10					
11					
12	TEST PIT COMPLETED AT 12± FEET				
13					
14					

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-21
LOCATION	See Fig. 1	APPROX. ELEV.	128.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/19/2022
DEPTH FT.	DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY	
0	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)				
1					
2	Red-brown/brown coarse to fine SAND, some Clayey Silt, little coarse to fine Gravel, with occasional Cobbles			Medium Dense to Dense	
3					
4					
5					
6	... Grading to some Clayey Silt			W.C. = 24.1%	
7					
8	Gray-brown/red-brown coarse to fine Gravel, and Clayey Silt, little coarse to fine Sand, with Cobbles			Dense	
9					
10					
11					
12	TEST PIT COMPLETED AT 12± FEET				
13					
14					

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-22
LOCATION	See Fig. 1	APPROX. ELEV.	125.0±	INSPECTED BY	
WATER OBSERVATION				DATE EXCAVATED	
DEPTH FT.	DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY	
0	TEST PIT NOT EXCAVATED				
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-23
LOCATION	See Fig. 1	APPROX. ELEV.	137.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/19/2022
DEPTH FT.	DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY	
0	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)				
1	Brown coarse to fine SAND, some Clayey Silt, little coarse to fine Gravel			Medium Dense to Dense	
2					
3					
4	Brown coarse to fine Sand, and Clayey Silt, little coarse to fine Gravel			Medium Dense	
5				to Dense	
6					
7					
8	Gray-brown/brown/orange-brown coarse to fine GRAVEL, some Clayey Silt, little coarse to fine Sand, with Cobbles			Dense to Very Dense	
9					
10	Gray-brown coarse to fine GRAVEL, some Clayey Silt, little coarse to fine Sand			Dense	
11				to Very Dense	
12					
13					
14	TEST PIT COMPLETED AT 14± FEET				

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-24
LOCATION	See Fig. 1	APPROX. ELEV.	122.0±	INSPECTED BY	
WATER OBSERVATION					DATE EXCAVATED
DEPTH FT.	DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY	
0	TEST PIT NOT EXCAVATED				
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-25
LOCATION	See Fig. 1	APPROX. ELEV.	109.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/19/2022
DEPTH FT.	DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY	
0	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)				
1	Brown coarse to fine Sand, and Clayey Silt, little coarse to fine Gravel			Medium Dense	
2				to	
3				Dense	
4					
5	Gray-brown/brown/orange-brown Clayey SILT, some coarse to fine Gravel, little coarse to fine Sand			Medium Stiff	
6				to	
7	Gray-brown/brown coarse to fine Gravel, and Clayey Silt, little coarse to fine Sand, with Cobbles			Very Stiff	
8					
9					
10	Dark brown coarse to fine GRAVEL, some Clayey Silt, little coarse to fine Sand, with Cobbles			Very Dense	
11					
12	TEST PIT COMPLETED AT 12± FEET				
13					
14					

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-26
LOCATION	See Fig. 1	APPROX. ELEV.	109.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/19/2022
DEPTH FT.	DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY	
0	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)				
1					
2	Brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel			Medium Sifff to Stiff	
3					
4					
5					
6	Brown Clayey SILT, little coarse to fine Gravel, little coarse to fine Sand				
7					
8					
9					
10					
11	Gray-brown coarse to fine GRAVEL, some Clayey Silt, little coarse to fine Sand			Dense to Very Dense	
12					
13					
14	TEST PIT COMPLETED AT 14± FEET				

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-27
LOCATION	See Fig. 1	APPROX. ELEV.	130.0±	INSPECTED BY	
WATER OBSERVATION				DATE EXCAVATED	
DEPTH FT.	DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY	
0	TEST PIT NOT EXCAVATED				
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-28
LOCATION	See Fig. 1	APPROX. ELEV.	109.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/19/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY
0	—	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1	—	Brown coarse to fine SAND, little Clayey Silt, trace Gravel			Medium Dense
2	—				
3	—	Gray-brown/orange-brown Clayey SILT, some coarse to fine Gravel, little coarse to fine Sand			Medium Sitff to Sitff
4	—				
5	—				
6	—				
7	—				
8	—	Dark gray/gray-brown/orange-brown coarse to fine Gravel, and Clayey Silt, little coarse to fine Sand			
9	—				
10	—				
11	—				
12	—				
13	—				
14	—	TEST PIT COMPLETED AT 14± FEET			

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-29
LOCATION	See Fig. 1	APPROX. ELEV.	107.0±	INSPECTED BY	MLT
WATER OBSERVATION	Groundwater encountered at 12.5± Feet			DATE EXCAVATED	7/19/2022
DEPTH FT.	DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY	
0	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)				
1	Brown Clayey SILT, some coarse to fine Sand, trace Gravel			Medium Stiff	
2				to	
3				Very Stiff	
4					
5					
6					
7	Gray-brown/brown coarse to fine Gravel, and Clayey Silt, little coarse to fine Sand, with Cobbles			Dense	
8				to	
9				Very Dense	
10					
11					
12					
13					
14	TEST PIT COMPLETED AT 14± FEET				

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-30
LOCATION	See Fig. 1	APPROX. ELEV.	105.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/19/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY
0	—	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1	—	Brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel, with occasional Cobbles			Medium Stiff to Very Stiff
2	—				
3	—				
4	—				
5	—				
6	—				
7	—				
8	—	Dark brown/brown/orange-brown coarse to fine GRAVEL, some Clayey Silt, little coarse to fine Sand, with Cobbles			Very Dense
9	—				
10	—				
11	—	TEST PIT COMPLETED AT 11± FEET DUE TO EXCAVATOR REFUSAL			
12	—				
13	—				
14	—				

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-31
LOCATION	See Fig. 1	APPROX. ELEV.	108.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/19/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY
0	—	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1	—	Brown coarse to fine SAND, little coarse to fine Gravel, little Clayey Silt, with occasional Cobbles			Medium Dense
2	—				to
3	—				Dense
4	—				
5	—				
6	—				
7	—				
8	—	Gray-brown/brown/dark brown Clayey SILT, little coarse to fine Gravel, little coarse to fine Sand			Medium Stiff
9	—				to
10	—	... Grading to some coarse to fine Gravel			Very Stiff
11	—				
12	—				
13	—	TEST PIT COMPLETED AT 13± FEET			
14	—				

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-32
LOCATION	See Fig. 1	APPROX. ELEV.	104.0±	INSPECTED BY	MLT
WATER OBSERVATION	Groundwater encountered at 12.5± Feet			DATE EXCAVATED	7/19/2022
DEPTH FT.	DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY	
0	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)				
1					
2	Brown coarse to fine SAND, some Clayey Silt, little coarse to fine Gravel, with occasional Cobbles			Medium Dense to Dense	
3					
4					
5					
6					
7					
8	Gray-brown/dark brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel			Stiff to Hard	
9					
10	... Grading to some coarse to fine Gravel				
11					
12					
13					
14	TEST PIT COMPLETED AT 14± FEET				

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-33
LOCATION	See Fig. 1	APPROX. ELEV.	102.0±	INSPECTED BY	MLT
WATER OBSERVATION	Groundwater encountered at 10± Feet			DATE EXCAVATED	7/19/2022
DEPTH FT.	DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY	
0	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)				
1	Brown coarse to fine SAND, little coarse to fine Gravel, little Silt			Medium Dense	
2					
3	Brown coarse to fine SAND, some Clayey Silt, little coarse to fine Gravel, with Cobbles and occasional Boulders			Dense to Very Dense	
4					
5					
6					
7	Gray-brown/brown coarse to fine Gravel, and Clayey Silt, little coarse to fine Sand, with Cobbles and Boulders			Very Dense	
8					
9					
10					
11					
12	TEST PIT COMPLETED AT 11± FEET DUE TO EXCAVATOR REFUSAL				
13					
14					

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-34
LOCATION	See Fig. 1	APPROX. ELEV.	105.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/19/2022
DEPTH FT.	DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY	
0	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)				
1					
2	Brown coarse to fine SAND, little Silt, trace Gravel, with occasional Cobbles			Medium Dense	
3	Brown/gray-brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel			Medium Stiff to Stiff	
4					
5					
6					
7					
8	Gray-brown/brown/black coarse to fine Gravel, and Clayey Silt, little coarse to fine Sand			Dense to Very Dense	
9					
10					
11					
12					
13					
14	TEST PIT COMPLETED AT 14± FEET				

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-35
LOCATION	See Fig. 1	APPROX. ELEV.	101.0±	INSPECTED BY	MLT
WATER OBSERVATION	Groundwater encountered at 12± Feet			DATE EXCAVATED	7/19/2022
DEPTH FT.	DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY	
0	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)				
1	Brown coarse to fine SAND, some coarse to fine Gravel, little Clayey Silt			Medium Dense	
2				to	
3				Dense	
4					
5	Gray-brown/brown/dark brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel			Stiff	
6				to	
7				Very Stiff	
8	... Grading to some coarse to fine Gravel, some coarse to fine Sand				
9					
10					
11					
12					
13	TEST PIT COMPLETED AT 13± FEET				
14					

NOTE:

Fig. 43

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-36
LOCATION	See Fig. 1	APPROX. ELEV.	107.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/19/2022
DEPTH FT.	DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY	
0	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)				
1				Medium Dense	
2	Brown coarse to fine SAND, little coarse to fine Gravel, little Silt, with occasional Cobbles			to Dense	
3					
4					
5					
6					
7	Dark brown/brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel			Stiff	
8					
9					
10	... Same as above, Dark brown/gray-brown				
11					
12					
13					
14					
TEST PIT COMPLETED AT 14± FEET					

NOTE:

Fig. 44

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PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-37
LOCATION	See Fig. 1	APPROX. ELEV.	100.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/19/2022
DEPTH FT.	DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY	
0	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)				
1	Brown coarse to fine SAND, little coarse to fine Gravel, little Silt			Medium Dense	
2					
3					
4					
5	Dark brown coarse to fine SAND, some coarse to fine Gravel, some Clayey Silt			Dense	
6				to	
7				Very Dense	
8					
9					
10					
11	TEST PIT COMPLETED AT 10± FEET DUE TO EXCAVATOR REFUSAL ON BOULDERS				
12					
13					
14					

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-38
LOCATION	See Fig. 1	APPROX. ELEV.	107.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/19/2022
DEPTH FT.	DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY	
0	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)				
1	Brown coarse to fine Sand, and Silt, little coarse to fine Gravel			Medium Dense	
2	(-200) = 40.0% W.C. = 14.2%			to Dense	
3					
4	Brown/orange-brown coarse to fine SAND, some Clayey Silt, little coarse to fine			Dense	
5	Gravel, with occasional Cobbles and Boulders				
6					
7					
8					
9					
10					
11	Yellow-brown/brown/gray-brown Clayey SILT, some coarse to fine Gravel, little coarse to fine Sand, with occasional Cobbles and Boulders			Stiff	
12					
13	TEST PIT COMPLETED AT 13± FEET				
14					

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-39
LOCATION	See Fig. 1	APPROX. ELEV.	134.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/14/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY
0	Topsoil				
1					
2					
3	Brown coarse to fine SAND, little coarse to fine Gravel, little Silt				Medium Dense to Dense
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

NOTE:

Fig. 47

TEST PIT COMPLETED AT 12± FEET

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-40
LOCATION	See Fig. 1	APPROX. ELEV.	107.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/14/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION		RELATIVE DENSITY OR CONSISTENCY	
0	Topsoil				
1					
2	Brown coarse to fine SAND, some coarse to fine Gravel, little Clayey Silt				Medium Dense
3					to
4					Dense
5					
6	Orange-brown coarse to fine Sand, and coal occasional Cobbles	South Brunswick			Dense
7					to
8					Very Dense
9					
10	Dark brown coarse to fine GRAVEL, some coarse to fine Sand, little Clayey Silt, with Cobbles and Boulders				
11		TEST PIT COMPLETED AT 11± FEET			
12					
13					
14					

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-41
LOCATION	See Fig. 1	APPROX. ELEV.	107.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/14/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION		RELATIVE DENSITY OR CONSISTENCY	
0		Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1					
2		Brown/red-brown coarse to fine SAND, some coarse to fine Gravel, little Clayey Silt with occasional Cobbles and Boulders			Medium Dense to Dense
3					
4					
5					
6		South Brunswick			
7					
8					
9					
10		Dark brown/dark gray coarse to fine GRAVEL, trace Sand, trace Silt with occasional Cobbles and Boulders			Very Dense
11					
12		Brown/red-brown coarse to fine SAND, some coarse to fine Gravel, little Clayey Silt with occasional Cobbles and Boulders			Dense
13		TEST PIT COMPLETED AT 13± FEET			
14					

NOTE:

Fig. 49

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-42
LOCATION	See Fig. 1	APPROX. ELEV.	103.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/18/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION		RELATIVE DENSITY OR CONSISTENCY	
0		Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1					
2		Brown/orange-brown coarse to fine GRAVEL, some coarse to fine Sand, little Clayey Silt with occasional Cobbles and Boulders			Medium Dense to Very Dense
3					
4					
5					
6		South Brunswick			
7					
8					
9					
10					
11					
12					
13		TEST PIT COMPLETED AT 13± FEET			
14					

NOTE:

Fig. 50

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-43
LOCATION	See Fig. 1	APPROX. ELEV.	101.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/14/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION		RELATIVE DENSITY OR CONSISTENCY	
0	Topsoil				
1					
2	Brown coarse to fine SAND, some Clayey Silt, little coarse to fine Gravel with occasional Cobbles				Medium Dense to Very Dense
3		W.C. = 11.8%			
4					
5					
6					
7					
8					
9					
10					
11					
12	Yellow-brown/brown coarse to fine SAND, some coarse to fine Gravel, little Clayey Silt, with Cobbles and Boulders				Very Dense
13		TEST PIT COMPLETED AT 13± FEET			
14					

NOTE:

Fig. 51

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-44
LOCATION	See Fig. 1	APPROX. ELEV.	90.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/14/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION		RELATIVE DENSITY OR CONSISTENCY	
0		Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1					
2					
3		Brown/yellow-brown coarse to fine SAND, some coarse to fine Gravel, little Silt with occasional Cobbles			Medium Dense to Very Dense
4					
5					
6		South Brunswick			
7					
8					
9					
10					
11					
12		Dark gray coarse to fine Gravel, and coarse to fine Sand, little Clayey Silt with Cobbles and occasional Boulders			
13		TEST PIT COMPLETED AT 13± FEET			
14					

NOTE:

Fig. 52

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-45
LOCATION	See Fig. 1	APPROX. ELEV.	93.0±	INSPECTED BY	
WATER OBSERVATION					DATE EXCAVATED
DEPTH FT.	DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY	
0	TEST PIT NOT EXCAVATED				
1					
2					
3					
4					
5					
6	South Brunswick				
7					
8					
9					
10					
11					
12					
13					
14					

NOTE:

Fig. 53

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-46
LOCATION	See Fig. 1	APPROX. ELEV.	96.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/17/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION		RELATIVE DENSITY OR CONSISTENCY	
0		Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1					
2		Brown coarse to fine SAND, some coarse to fine Gravel, trace Silt with occasional Roots			Medium Dense
3					
4		Brown/red-brown coarse to fine Gravel, and coarse to fine Sand, little Silt			Medium Dense to Dense
5					
6		South Brunswick			
7					
8					
9					
10					
11		Dark brown/yellow-brown coarse to fine SAND, some coarse to fine Gravel, little Silt			Dense
12					
13		TEST PIT COMPLETED AT 13± FEET			
14					

NOTE: Garbage at the bottom from excavation operation

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-47
LOCATION	See Fig. 1	APPROX. ELEV.	99.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/14/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION		RELATIVE DENSITY OR CONSISTENCY	
0		Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1					
2		Brown/red-brown coarse to fine SAND, little coarse to fine Gravel, little Clayey Silt, with occasional Cobbles			Medium Dense to Dense
3					
4					
5					
6		South Brunswick			
7					
8		Brown/orange-brown coarse to fine SAND, some coarse to fine Gravel, little Clayey Silt			Medium Dense to Dense
9					
10					
11					
12					
13					
14		TEST PIT COMPLETED AT 14± FEET			

NOTE:

Fig. 55

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-48
LOCATION	See Fig. 1	APPROX. ELEV.	133.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/15/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION		RELATIVE DENSITY OR CONSISTENCY	
0	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)				
1					
2	Yellow-brown/orange-brown coarse to fine Gravel, and coarse to fine Sand, little Clayey Silt, with Cobbles				Medium Dense to Dense
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13		TEST PIT COMPLETED AT 13± FEET			
14					

NOTE:

Fig. 56

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-49
LOCATION	See Fig. 1	APPROX. ELEV.	135.0±	INSPECTED BY	
WATER OBSERVATION					DATE EXCAVATED
DEPTH FT.	DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY	
0	TEST PIT NOT EXCAVATED				
1					
2					
3					
4					
5					
6	South Brunswick				
7					
8					
9					
10					
11					
12					
13					
14					

NOTE:

Fig. 57

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-50
LOCATION	See Fig. 1	APPROX. ELEV.	101.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/19/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY
0		Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1		Brown coarse to fine SAND, some coarse to fine Gravel, little Silt, with occasional Cobbles			Medium Dense
2					
3					
4					
5					
6		South Brunswick			
7		Brown/red-brown coarse to fine SAND, some coarse to fine Gravel, little Clayey Silt, with occasional Cobbles			Medium Dense to Dense
8					
9					
10					
11					
12					
13		TEST PIT COMPLETED AT 13± FEET			
14					

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-51
LOCATION	See Fig. 1	APPROX. ELEV.	91.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/15/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY
0	Topsoil				
1					
2	Brown coarse to fine SAND, some coarse to fine Gravel, little Silt, with occasional Cobbles				Medium Dense
2					
4					
5	Red-brown coarse to fine Gravel, and coarse to fine Sand, little Clayey Silt, with Cobbles				Medium Dense
5					to
6					Dense
6	South Brunswick				
7					
8	Brown/orange-brown coarse to fine Gravel, and coarse to fine Sand, little Silt, with Cobbles				Dense
9					
10					
11					
12					
13					
14					
TEST PIT COMPLETED AT 14± FEET					

NOTE:

Fig. 59

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-52
LOCATION	See Fig. 1	APPROX. ELEV.	94.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/15/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION		RELATIVE DENSITY OR CONSISTENCY	
0	—	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1	—				
2	—	Brown/yellow-brown coarse to fine Sand, and coarse to fine Gravel, trace Silt, with occasional Cobbles			Medium Dense
3	—				to
4	—				Dense
5	—	... Grading to some coarse to fine Gravel			
6	—	South Brunswick			
7	—				
8	—				
9	—				
10	—				
11	—				
12	—				
13	—				
14	—	TEST PIT COMPLETED AT 14± FEET			

NOTE:

Fig. 60

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-53
LOCATION	See Fig. 1	APPROX. ELEV.	101.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/15/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY
0	Topsoil				
1					
2					
3	Orange-brown/yellow-brown coarse to fine Gravel, and coarse to fine Sand, little Clayey Silt with Cobbles				Medium Dense to Dense
4					
5					
6		South Brunswick			
7					
8	Yellow-brown/brown coarse to fine Gravel, and coarse to fine Sand, trace Silt with occasional Cobbles				Dense
9					
10					
11					
12					
13					
14					
TEST PIT COMPLETED AT 14± FEET					

NOTE:

Fig. 61

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-54
LOCATION	See Fig. 1	APPROX. ELEV.	105.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/14/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY
0	Topsoil				
1					
2	Red-brown/orange-brown coarse to fine Gravel, and coarse to fine Sand, little Silt, with occasional Cobbles				Medium Dense to Dense
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13		TEST PIT COMPLETED AT 13± FEET			
14					

NOTE:

Fig. 62

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-55
LOCATION	See Fig. 1	APPROX. ELEV.	106.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/15/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY
0	—	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1	—				
2	—	Red-brown/brown coarse to fine SAND, some coarse to fine Gravel, little Clayey Silt, with occasional Cobbles			Medium Dense to Dense
3	—				
4	—				
5	—				
6	—	South Brunswick			
7	—	Yellow-brown coarse to fine SAND, little coarse to fine Gravel, little Silt			Medium Dense to Dense
8	—				
9	—				
10	—				
11	—				
12	—				
13	—	TEST PIT COMPLETED AT 13± FEET			
14	—				

NOTE:

Fig. 63

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-56
LOCATION	See Fig. 1	APPROX. ELEV.	106.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/15/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION		RELATIVE DENSITY OR CONSISTENCY	
0	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)				
1					
2	Red-brown/orange-brown coarse to fine Gravel, and coarse to fine Sand, little Clayey Silt, with occasional Cobbles				Medium Dense to Dense
3					
4					
5					
6		South Brunswick			
7					
8					
9					
10					
11					
12		TEST PIT COMPLETED AT 12± FEET			
13					
14					

NOTE:

Fig. 64

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-57
LOCATION	See Fig. 1	APPROX. ELEV.	101.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/15/2022
DEPTH FT.	DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY	
0	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)				
1	Brown medium to fine SAND, little coarse to fine Gravel, little Silt, with occasional Cobbles			Medium Dense	
2					
3					
4					
5	Brown/red-brown/yellow-brown coarse to fine Gravel, and coarse to fine Sand, little Clayey Silt, with occasional Cobbles			Medium Dense	
6				to Dense	
7					
8					
9					
10					
11					
12	TEST PIT COMPLETED AT 12± FEET				
13					
14					

NOTE:

Fig. 65

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-58
LOCATION	See Fig. 1	APPROX. ELEV.	103.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/15/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION		RELATIVE DENSITY OR CONSISTENCY	
0		Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1		Brown coarse to fine Sand, and Silt, trace medium to fine Gravel			Medium Dense
2					(-200) = 44.1% W.C. = 11.2%
3					
4		Orange-brown/red-brown coarse to fine Gravel, and coarse to fine Sand, little Clayey Silt, with occasional Cobbles			Medium Dense
5					to Dense
6		South Brunswick			
7					
8					
9					
10					
11					
12		TEST PIT COMPLETED AT 12± FEET			
13					
14					

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-59
LOCATION	See Fig. 1	APPROX. ELEV.	106.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/18/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY
0		Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1		Brown coarse to fine SAND, little coarse to fine Gravel, trace Silt, with occasional Cobbles			Medium Dense
2		... Same as above (Geogrid and Fill: 3/4-inch stone present at backwall of test pit at 2.5')			to Dense
3					
4		Brown coarse to fine SAND, little coarse to fine Gravel, trace Silt, with occasional Cobbles			Medium Dense
5					
6		Red-brown/brown coarse to fine SAND, soil South Brunswick little Silt, with Cobbles			Medium Dense
7					to Dense
8					
9					
10					
11		Yellow-brown coarse to fine SAND, little coarse to fine Gravel, little Silt, with Cobbles			Dense
12					
13		TEST PIT COMPLETED AT 13± FEET			
14					

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-60
LOCATION	See Fig. 1	APPROX. ELEV.	105.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/18/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION		RELATIVE DENSITY OR CONSISTENCY	
0		Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1		Brown coarse to fine SAND, some Silt, little coarse to fine Gravel			Medium Dense
2					to
3					Dense
3		(-200) = 30.4% W.C. = 9.5%			
4					
5		Red-brown/brown coarse to fine SAND, some coarse to fine Gravel, little Clayey Silt, with			Dense
6	Cobbles	South Brunswick			
7					
8					
9					
10					
11		Yellow-brown Clayey SILT, little coarse to fine Sand, trace Gravel, with Cobbles			Very Stiff
12					
13		TEST PIT COMPLETED AT 12± FEET DUE TO EXCAVATOR REFUSAL			
14					

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-61
LOCATION	See Fig. 1	APPROX. ELEV.	103.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/18/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION		RELATIVE DENSITY OR CONSISTENCY	
0	—	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1	—	Brown/yellow-brown medium to fine SAND, trace Gravel, trace Silt, with occasional Cobbles			Medium Dense
2	—				to Dense
3	—				
4	—				
5	—				
6	—	Orange-brown/red-brown coarse to fine SAND, little coarse to fine Gravel, with occasional Cobbles			Dense
7	—				
8	—				
9	—				
10	—				
11	—				
12	—				
13	—	TEST PIT COMPLETED AT 13± FEET			
14	—				

NOTE:

Fig. 69

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-62
LOCATION	See Fig. 1	APPROX. ELEV.	111.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/18/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION		RELATIVE DENSITY OR CONSISTENCY	
0	—	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1	—	Brown medium to fine SAND, little medium to fine Gravel, little Silt			Medium Dense
2	—				to
3	—				Dense
4	—				
5	—	Red-brown/brown coarse to fine SAND, some coarse to fine Gravel, little Clayey Silt, with occasional Cobbles			Dense
6	—	South Brunswick			
7	—				
8	—				
9	—	Red-brown/yellow-brown coarse to fine Gravel, and coarse to fine Sand, little Clayey Silt, with occasional Cobbles			Dense
10	—				to
11	—				Very Dense
12	—				
13	—	TEST PIT COMPLETED AT 13± FEET			
14	—				

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-63
LOCATION	See Fig. 1	APPROX. ELEV.	107.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/18/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY
0		Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1		Brown medium to fine SAND, trace Gravel, trace Silt			Medium Dense to Dense
2					
3					
4					
5		Orange-brown/red-brown coarse to fine SAND, little coarse to fine Gravel, little Clayey			Medium Dense
6	Silt	South Brunswick			to Dense
7					
8					
9					
10					
11					
12					
13		TEST PIT COMPLETED AT 13± FEET			
14					

NOTE:

Fig. 71

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-64
LOCATION	See Fig. 1	APPROX. ELEV.	107.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/18/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY
0		Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1		Brown/yellow-brown medium to fine SAND, trace Gravel, trace Silt			Medium Dense
2					to
3					Dense
4					
5		Orange-brown/red-brown coarse to fine SAND, some coarse to fine Gravel, little Clayey			Medium Dense
6		Silt, with occasional Cobbles			to
		South Brunswick			Dense
7					
8					
9					
10					
11					
12					
13					
14		TEST PIT COMPLETED AT 14± FEET			

NOTE:

Fig. 72

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-65
LOCATION	See Fig. 1	APPROX. ELEV.	117.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/18/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION		RELATIVE DENSITY OR CONSISTENCY	
0	—	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1	—				
2	—	Brown/red-brown coarse to fine SAND, little coarse to fine Gravel, little Clayey Silt, with occasional Cobbles			Medium Dense
3	—				to
4	—				Dense
5	—				
6	—	South Brunswick			
7	—				
8	—	... Grading to some Clayey Silt			
9	—				
10	—				
11	—	Yellow-brown/red-brown Clayey SILT, little coarse to fine Sand, trace Gravel, with occasional Cobbles			Stiff
12	—				to
13	—	TEST PIT COMPLETED AT 13± FEET			Very Stiff
14	—				

NOTE:

Fig. 73

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-66
LOCATION	See Fig. 1	APPROX. ELEV.	110.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/18/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION		RELATIVE DENSITY OR CONSISTENCY	
0	—	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1	—				
2	—	Brown/orange-brown coarse to fine SAND, some coarse to fine Gravel, little Clayey Silt, with Cobbles and Boulders			Medium Dense to Dense
3	—				
4	—	Red-brown/orange-brown coarse to fine SAND, some coarse to fine Gravel, little Clayey Silt, with Cobbles and occasional Boulders			Dense to Very Dense
5	—				
6	—	South Brunswick			
7	—				
8	—				
9	—				
10	—				
11	—				
12	—				
13	—	TEST PIT COMPLETED AT 13± FEET			
14	—				

NOTE:

Fig. 74

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-67
LOCATION	See Fig. 1	APPROX. ELEV.	107.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/18/2022
DEPTH FT.	DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY	
0	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)				
1	Brown Silt, and coarse to fine Sand, trace Gravel			Medium Dense	
2	(-200) = 49.2% W.C. = 8.4%			to	
3				Dense	
4					
5					
6	Red-brown/brown coarse to fine SAND, some coarse to fine Gravel, little Clayey Silt, with occasional Cobbles			Dense	
7					
8					
9					
10					
11	Red-brown/yellow-brown coarse to fine SAND, some coarse to fine Gravel, trace Silt, with occasional Cobbles			Dense	
12				to	
13				Very Dense	
14					
TEST PIT COMPLETED AT 13± FEET					

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-68
LOCATION	See Fig. 1	APPROX. ELEV.	111.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/18/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY
0		Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1					
2		Brown coarse to fine SAND, little coarse to fine Gravel, little Silt			Medium Dense
3					to Dense
4					
5					
6		South Brunswick			
7		Red-brown/brown coarse to fine SAND, some coarse to fine Gravel, little Clayey Silt, with occasional Cobbles			Dense
8					
9					
10					
11					
12					
13		TEST PIT COMPLETED AT 13± FEET			
14					

NOTE:

Fig. 76

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-69
LOCATION	See Fig. 1	APPROX. ELEV.	112.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/18/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY
0		Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1					
2		Brown medium to fine SAND, trace Gravel, trace Silt, with occasional Cobbles			Medium Dense
3					to Dense
4					
5					
6		Yellow-brown coarse to fine SAND, little coarse to fine Gravel, trace Silt, with occasional Cobbles			Medium Dense
7					to Dense
8					
9		Red-brown/brown coarse to fine Gravel, and coarse to fine Sand, little Clayey Silt, with occasional Cobbles			Dense
10					
11					
12					
13		TEST PIT COMPLETED AT 12.5± FEET			
14					

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-70
LOCATION	See Fig. 1	APPROX. ELEV.	99.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/18/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY
0		Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1					
2		Brown/red-brown coarse to fine Gravel, and coarse to fine Sand, little Clayey Silt, with occasional Cobbles			Medium Dense to Dense
3					
4					
5					
6		South Brunswick			
7					
8		Yellow-brown/orange-brown coarse to fine Gravel, and coarse to fine Sand, trace Silt, with occasional Cobbles and Boulders			Dense
9					
10					
11					
12					
13		TEST PIT COMPLETED AT 13± FEET			
14					

NOTE:

Fig. 78

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-71
LOCATION	See Fig. 1	APPROX. ELEV.	103.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/15/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION		RELATIVE DENSITY OR CONSISTENCY	
0		Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1					
2		Orange-brown/red-brown coarse to fine Gravel, and coarse to fine Sand, little Clayey Silt, with occasional Cobbles			Medium Dense
3					to
4					Dense
5					
6		South Brunswick			
7					
8					
9					
10					
11					
12					
13					
14		TEST PIT COMPLETED AT 14± FEET			

NOTE:

Fig. 79

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-72
LOCATION	See Fig. 1	APPROX. ELEV.	109.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/15/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY
0		Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1		Brown coarse to fine SAND, little coarse to fine Gravel, trace Silt, with occasional Cobbles			Medium Dense
2					to
3					Dense
4					
5					
6		Red-brown/brown coarse to fine SAND, some coarse to fine Gravel, little Clayey Silt, with occasional Cobbles and Boulders			Dense
		South Brunswick			
7					
8					
9					
10					
11					
12					
13					
14					
TEST PIT COMPLETED AT 14± FEET					

NOTE:

Fig. 80

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-73
LOCATION	See Fig. 1	APPROX. ELEV.	110.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/15/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY
0		Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1		Brown coarse to fine SAND, little medium to fine Gravel, trace Silt, with occasional Cobbles			Medium Dense
2					to
3					Dense
4					
5					
6		Red-brown/brown coarse to fine SAND, some coarse to fine Gravel, little Silt, with occasional Cobbles			Dense
		South Brunswick			
7					
8					
9					
10					
11					
12					
13		TEST PIT COMPLETED AT 13± FEET			
14					

NOTE:

Fig. 81

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-74
LOCATION	See Fig. 1	APPROX. ELEV.	99.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/15/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION		RELATIVE DENSITY OR CONSISTENCY	
0		Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1					
2					
3		Orange-brown/yellow-brown/brown coarse to fine GRAVEL, some coarse to fine Sand, little Silt			Medium Dense to
4			(-200) = 17.4% W.C. = 17.2%		Very Dense
5					
6					
7					
8					
9					
10					
11					
12					
13					
14		TEST PIT COMPLETED AT 14± FEET			

NOTE:

Fig. 82

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-75
LOCATION	See Fig. 1	APPROX. ELEV.	103.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/15/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION		RELATIVE DENSITY OR CONSISTENCY	
0	—	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1	—				
2	—	Orange-brown/yellow-brown coarse to fine Gravel, and coarse to fine Sand, little Clayey Silt, with Cobbles			Medium Dense
3	—				to
4	—				Very Dense
5	—				
6	—	South Brunswick			
7	—				
8	—				
9	—				
10	—				
11	—				
12	—				
13	—				
14	—	TEST PIT COMPLETED AT 14± FEET			

NOTE:

Fig. 83

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-76
LOCATION	See Fig. 1	APPROX. ELEV.	109.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/15/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION		RELATIVE DENSITY OR CONSISTENCY	
0		Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1					
2		Brown coarse to fine SAND, some coarse to fine Gravel, little Silt with Cobbles			Medium Dense to Dense
3					
4		Red-brown/yellow-brown coarse to fine Gravel, and coarse to fine Sand, little Clayey Silt			Dense
5					
6		South Brunswick			
7					
8					
9					
10					
11					
12		TEST PIT COMPLETED AT 12± FEET			
13					
14					

NOTE:

Fig. 84

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-77
LOCATION	See Fig. 1	APPROX. ELEV.	102.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/18/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION		RELATIVE DENSITY OR CONSISTENCY	
0	—	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1	—	Brown coarse to fine SAND, some coarse to fine Gravel, little Silt			Medium Dense
2	—				
3	—	Brown/red-brown coarse to fine Gravel, and coarse to fine Sand, little Clayey Silt			Medium Dense
4	—				to
5	—				Dense
6	—	South Brunswick			
7	—				
8	—				
9	—				
10	—				
11	—				
12	—	TEST PIT COMPLETED AT 12± FEET			
13	—				
14	—				

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-78
LOCATION	See Fig. 1	APPROX. ELEV.	94.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/15/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY
0		Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1		Brown coarse to fine SAND, some coarse to fine Gravel, little Silt with occasional Cobbles			Medium Dense
2					to
3					Dense
4					
5					
6		Orange-brown/yellow-brown/brown coarse to fine Gravel, and coarse to fine Sand, little Clayey Silt, with Cobbles and Boulders			Dense
		South Brunswick			to
7					Very Dense
8					
9					
10					
11					
12					
13		TEST PIT COMPLETED AT 13± FEET			
14					

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-79
LOCATION	See Fig. 1	APPROX. ELEV.	99.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/15/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION		RELATIVE DENSITY OR CONSISTENCY	
0		Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1					
2					
3		Brown/red-brown/yellow-brown coarse to fine Gravel, and coarse to fine Sand, little Clayey Silt, with Cobbles and Boulders			Medium Dense to Very Dense
4					
5					
6		South Brunswick			
7					
8					
9					
10					
11					
12		TEST PIT COMPLETED AT 12± FEET			
13					
14					

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-80
LOCATION	See Fig. 1	APPROX. ELEV.	101.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/15/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY
0		Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1		Brown coarse to fine SAND, little medium to fine Gravel, little Silt			Medium Dense
2					
3					
4		Orange-brown/red-brown coarse to fine Gravel, and coarse to fine Sand, little Clayey Silt, with Cobbles and Boulders			Dense to Very Dense
5					
6					
7					
8					
9					
10					
11					
12					
13		TEST PIT COMPLETED AT 13± FEET			
14					

NOTE:

Fig. 88

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-81
LOCATION	See Fig. 1	APPROX. ELEV.	99.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/18/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY
0		Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1					
2		Brown coarse to fine SAND, little coarse to fine Gravel, little Silt			Medium Dense
3					
4					
5		Red-brown/brown/yellow-brown coarse to fine Gravel, and coarse to fine Sand, little Clayey Silt, with Cobbles and occasional Boulders			Medium Dense
6		South Brunswick			to Dense
7					
8					
9		... Same as above, with Cobbles and Boulders			
10					
11					
12					
13					
14		TEST PIT COMPLETED AT 14± FEET			

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-82
LOCATION	See Fig. 1	APPROX. ELEV.	122.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/18/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY
0	—	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1	—	Brown coarse to fine SAND, little coarse to fine Gravel, little Silt			Medium Dense
2	—				
3	—				
4	—	Red-brown/yellow-brown coarse to fine SAND, some coarse to fine Gravel, little Clayey Silt, with occasional Cobbles			Medium Dense to Dense
5	—				
6	—				
7	—				
8	—				
9	—				
10	—	Gray-brown coarse to fine Gravel, and coarse to fine Sand, little Clayey Silt, with occasional Cobbles			Medium Dense
11	—				to Dense
12	—				
13	—	TEST PIT COMPLETED AT 13± FEET			
14	—				

NOTE:

Fig. 90

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-83
LOCATION	See Fig. 1	APPROX. ELEV.	102.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/18/2022
DEPTH FT.	DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY	
0	Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)				
1					
2	Red-brown/brown medium to fine GRAVEL, some coarse to fine Sand, trace Clayey Silt			Medium Dense	
3				to	
4				Dense	
5				(-200) = 8.1% W.C. = 11.9%	
6	South Brunswick				
7					
8					
9					
10	Yellow-brown/red-brown coarse to fine SAND, some coarse to fine Gravel, little Clayey Silt, with Cobbles and occasional Boulders			Dense	
11					
12					
13	TEST PIT COMPLETED AT 13± FEET				
14					

NOTE:

PROJECT NO.	12506	PROJECT	Prop. Mixed Use Development	TEST PIT NO.	TP-84
LOCATION	See Fig. 1	APPROX. ELEV.	101.0±	INSPECTED BY	MLT
WATER OBSERVATION	Not Encountered			DATE EXCAVATED	7/18/2022
DEPTH FT.		DESCRIPTION / SOIL CLASSIFICATION			RELATIVE DENSITY OR CONSISTENCY
0		Light brown Clayey SILT, some coarse to fine Sand, little coarse to fine Gravel with trace organics (Tilled soil)			
1		Brown/red-brown/yellow-brown coarse to fine SAND, little coarse to fine Gravel, little Clayey Silt, with occasional Cobbles			Medium Dense to Dense
2					
3					
4					
5		Yellow-brown/red-brown coarse to fine SAND, some coarse to fine Gravel, little Clayey Silt, with Cobbles			Medium Dense to Dense
6					
7					
8					
9		Yellow-brown/light brown coarse to fine SAND, little Clayey Silt, trace Gravel, with Cobbles			Dense
10					
11					
12		Light brown/yellow-brown Clayey SILT, some coarse to fine Sand, trace Gravel, with occasional Cobbles			Stiff
13		TEST PIT COMPLETED AT 13± FEET			
14					

NOTE:

Definitions of Identification Terms for Granular Soils

Our experience has shown that the following field identification system, which is patterned 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.

Principal Component (All Capitalized)

- GRAVEL More than 50% of the sample by weight is Gravel
- SAND More than 50% of the sample by weight is Sand
- SILT More than 50% of the sample by weight is Silt

Minor Component (Proper Case)

- Gravel Less than 50% of the sample by weight is Gravel
- Sand Less than 50% of the sample by weight is Sand
- Silt Less than 50% of the sample by weight is Silt

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

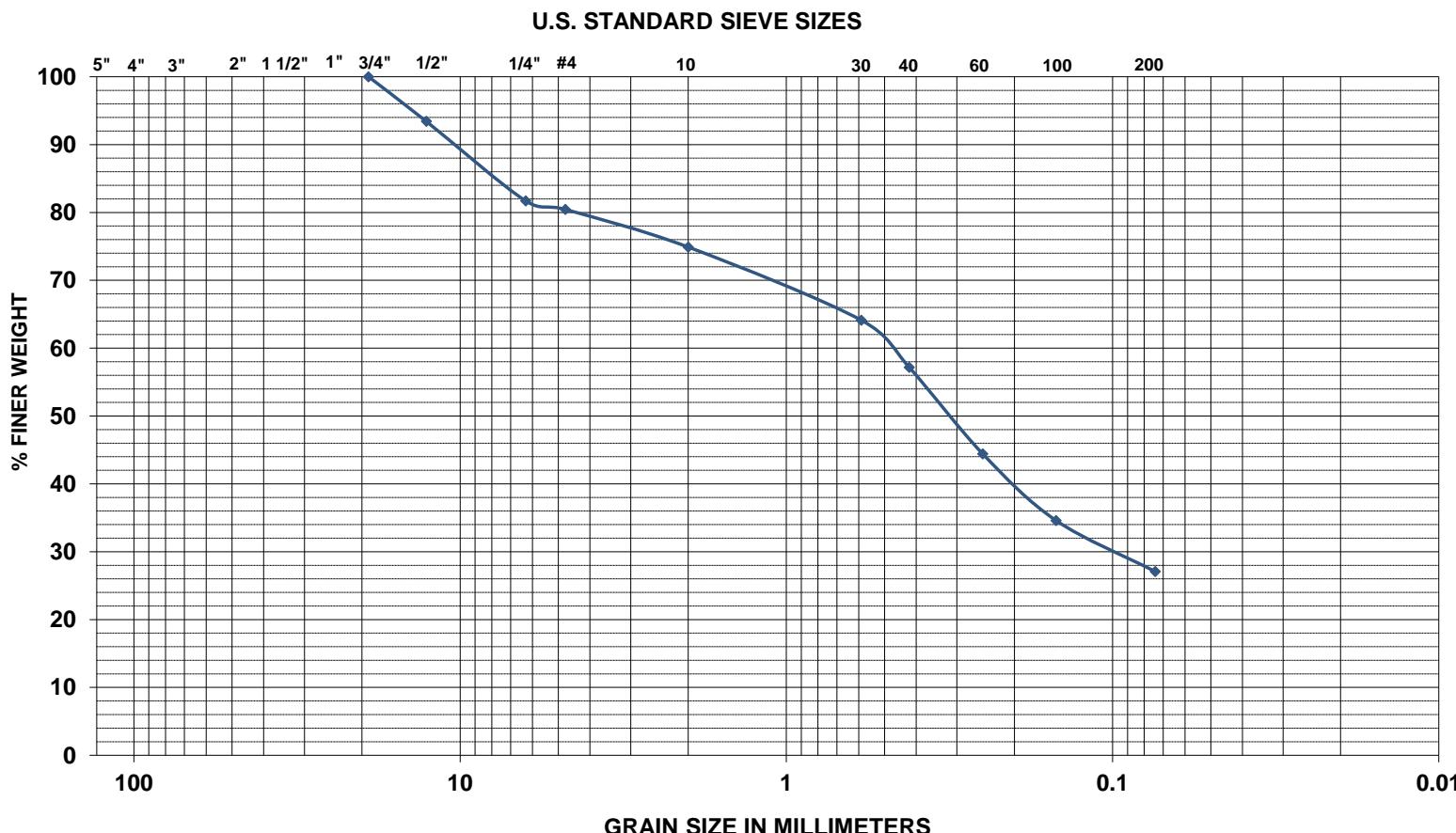
Size of Soil Components

- Gravel
 - Coarse gravel ranges from 3 inches to 1 inch
 - Medium gravel ranges from 1 inch to 3/8 inch
 - Fine gravel ranges from 3/8 inch to No. 10 sieve
- Sand
 - Coarse sand ranges from No. 10 sieve to No. 30 sieve
 - Medium sand ranges from No. 30 sieve to No. 60 sieve
 - Fine sand ranges from No. 60 sieve to No. 200 sieve
- Silt
 - Material which passes the No. 200 sieve
- Clay
 - Material which passes the No. 200 sieve
 - Exhibits varying degrees of plasticity

Gradation Designations

- 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 and fine
- Medium (m) Less than 10% of the component is coarse and fine
- Fine (f) Less than 10% of the component is coarse and medium

GRAVEL			SAND			SILT OR CLAY		
COARSE	MEDIUM	FINE	COARSE	MEDIUM	FINE	COARSE	MEDIUM	FINE



Symbol	◆
Boring	B-1
Sample	S-3
Depth	4-6'
% +3"	
% Gravel	25.1
% Sand	47.8
% Fines	27.1
Maximum Dry Density, (PCF)	
Optimum Moisture Content, (%)	
Liquid Limit, LL	
Plastic Limit, PL	
Plasticity Index, PI	
Water Content (%)	13.2
Particle Size Sieve #	Percent Finer Than
5"	-
4"	-
3"	-
2"	-
1 1/2"	-
1 1/4"	-
1"	-
3/4"	100.00
1/2"	93.43
1/4"	81.71
4	80.44
10	74.90
30	64.13
40	57.17
60	44.42
100	34.60
200	27.08

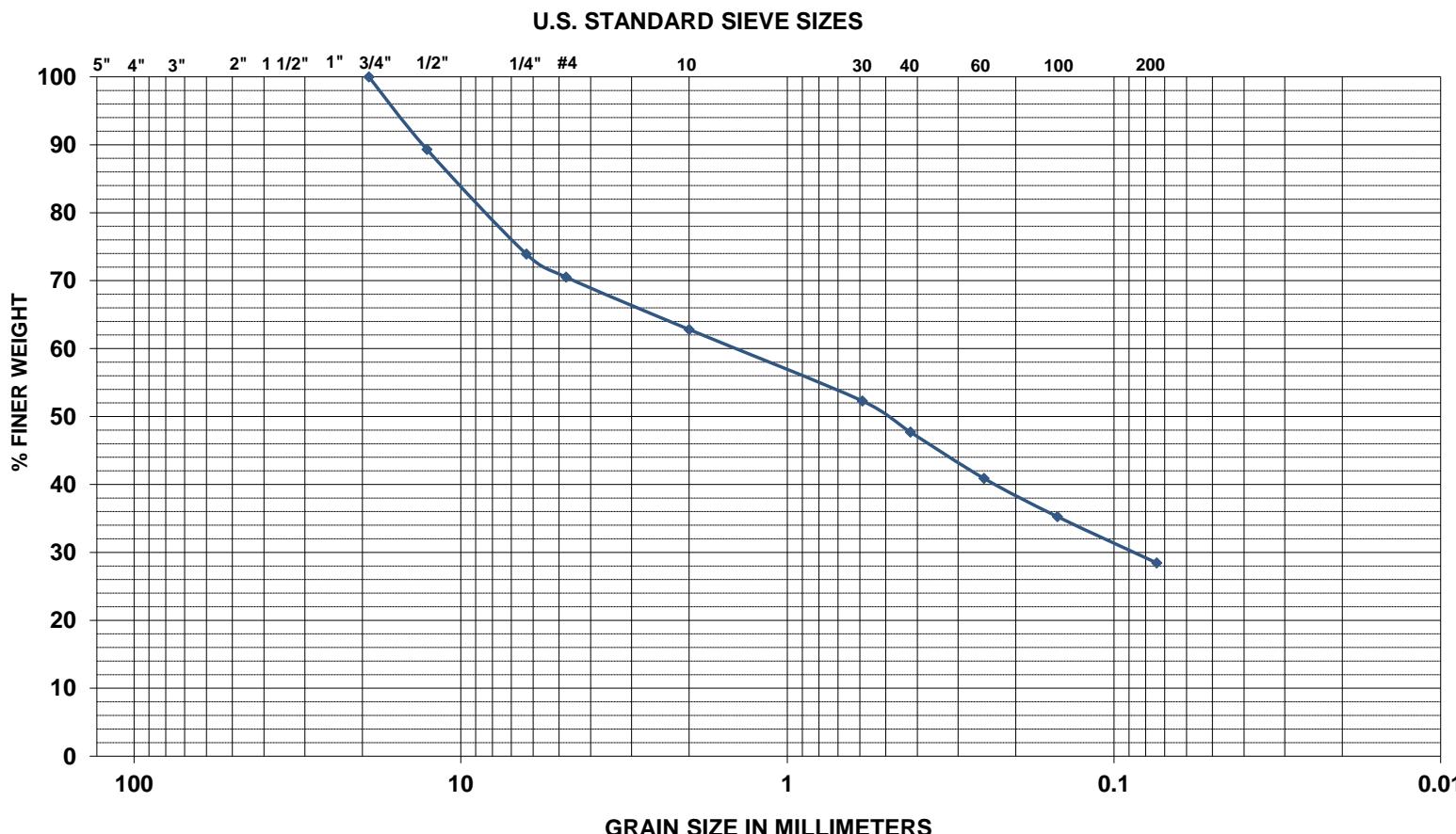
PARTICLE SIZE DISTRIBUTION

CLIENT: WRV Nurseries
 PROJECT: Proposed Mixed-Use Develop.
 DATE: August 4, 2022
 JOB NO. 12506 FIGURE No 94

SYMBOL	DESCRIPTION AND REMARKS
◆	Red-brown/orange-brown coarse to fine Sand, some Silt, some medium to fine Gravel

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GRAVEL			SAND			SILT OR CLAY		
COARSE	MEDIUM	FINE	COARSE	MEDIUM	FINE	COARSE	MEDIUM	FINE



Symbol	◆
Boring	B-4
Sample	S-3
Depth	4-6'
% +3"	
% Gravel	37.2
% Sand	34.4
% Fines	28.4
Maximum Dry Density, (PCF)	
Optimum Moisture Content, (%)	
Liquid Limit, LL	
Plastic Limit, PL	
Plasticity Index, PI	
Water Content (%)	11.6
Particle Size Sieve #	Percent Finer Than
5"	-
4"	-
3"	-
2"	-
1 1/2"	-
1 1/4"	-
1"	-
3/4"	100.00
1/2"	89.33
1/4"	73.93
4	70.52
10	62.81
30	52.30
40	47.70
60	40.89
100	35.26
200	28.44

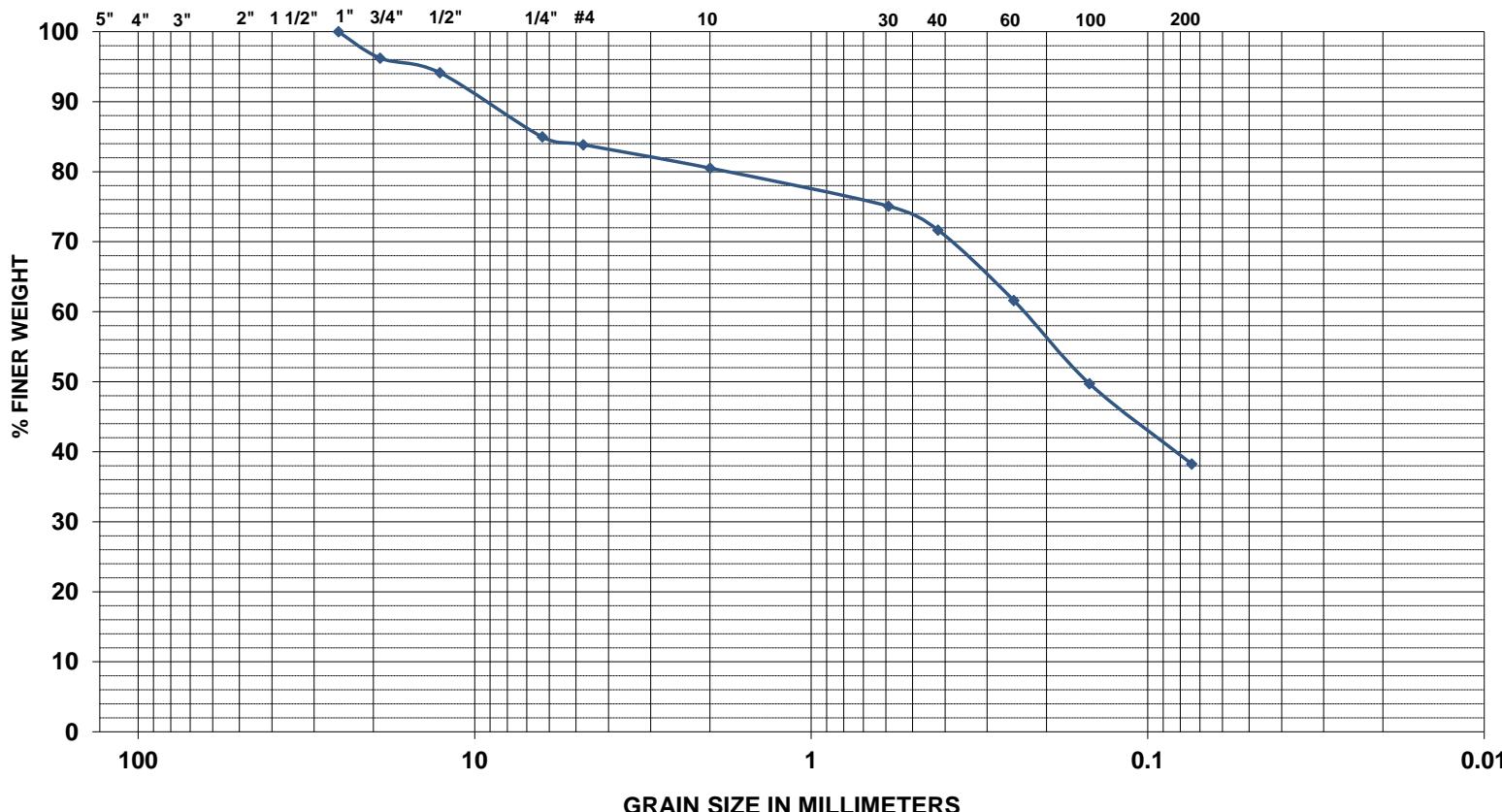
PARTICLE SIZE DISTRIBUTION

CLIENT: WRV Nurseries
 PROJECT: Proposed Mixed-Use Develop.
 DATE: August 4, 2022
 JOB NO. 12506 FIGURE No 95

SYMBOL	DESCRIPTION AND REMARKS
◆	Brown medium to fine Gravel, some coarse to fine Sand, some Silt

GRAVEL			SAND			SILT OR CLAY		
COARSE	MEDIUM	FINE	COARSE	MEDIUM	FINE	COARSE	MEDIUM	FINE

U.S. STANDARD SIEVE SIZES



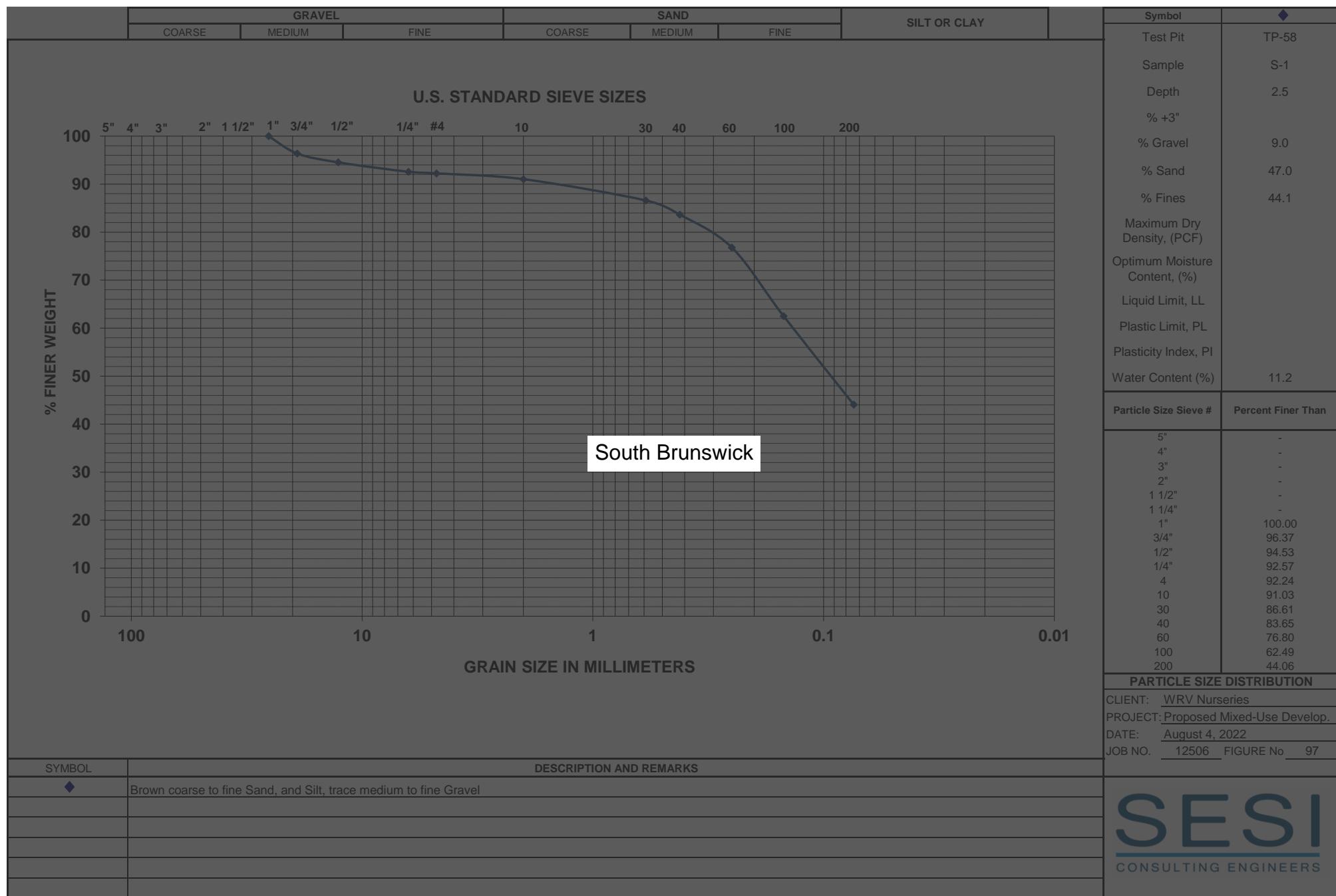
Symbol	TP-3
Test Pit	
Sample	S-1
Depth	4'
% +3"	
% Gravel	19.5
% Sand	42.3
% Fines	38.3
Maximum Dry Density, (PCF)	
Optimum Moisture Content, (%)	
Liquid Limit, LL	
Plastic Limit, PL	
Plasticity Index, PI	
Water Content (%)	9.9
Particle Size Sieve #	Percent Finer Than
5"	-
4"	-
3"	-
2"	-
1 1/2"	-
1 1/4"	-
1"	100.00
3/4"	96.22
1/2"	94.14
1/4"	84.97
4	83.85
10	80.51
30	75.08
40	71.66
60	61.60
100	49.73
200	38.26

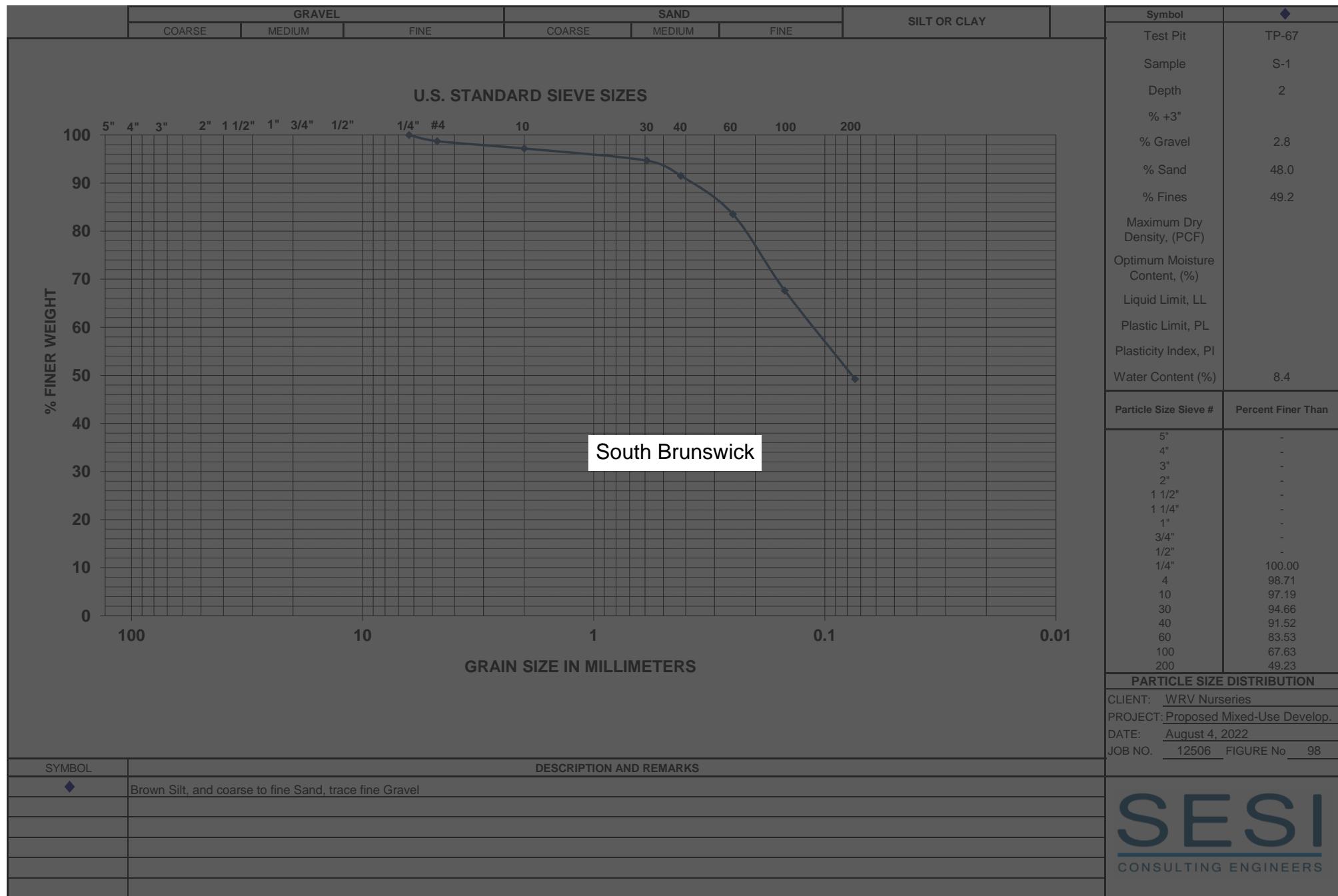
PARTICLE SIZE DISTRIBUTION

CLIENT: WRV Nurseries
 PROJECT: Proposed Mixed-Use Develop.
 DATE: August 4, 2022
 JOB NO. 12506 FIGURE No. 96

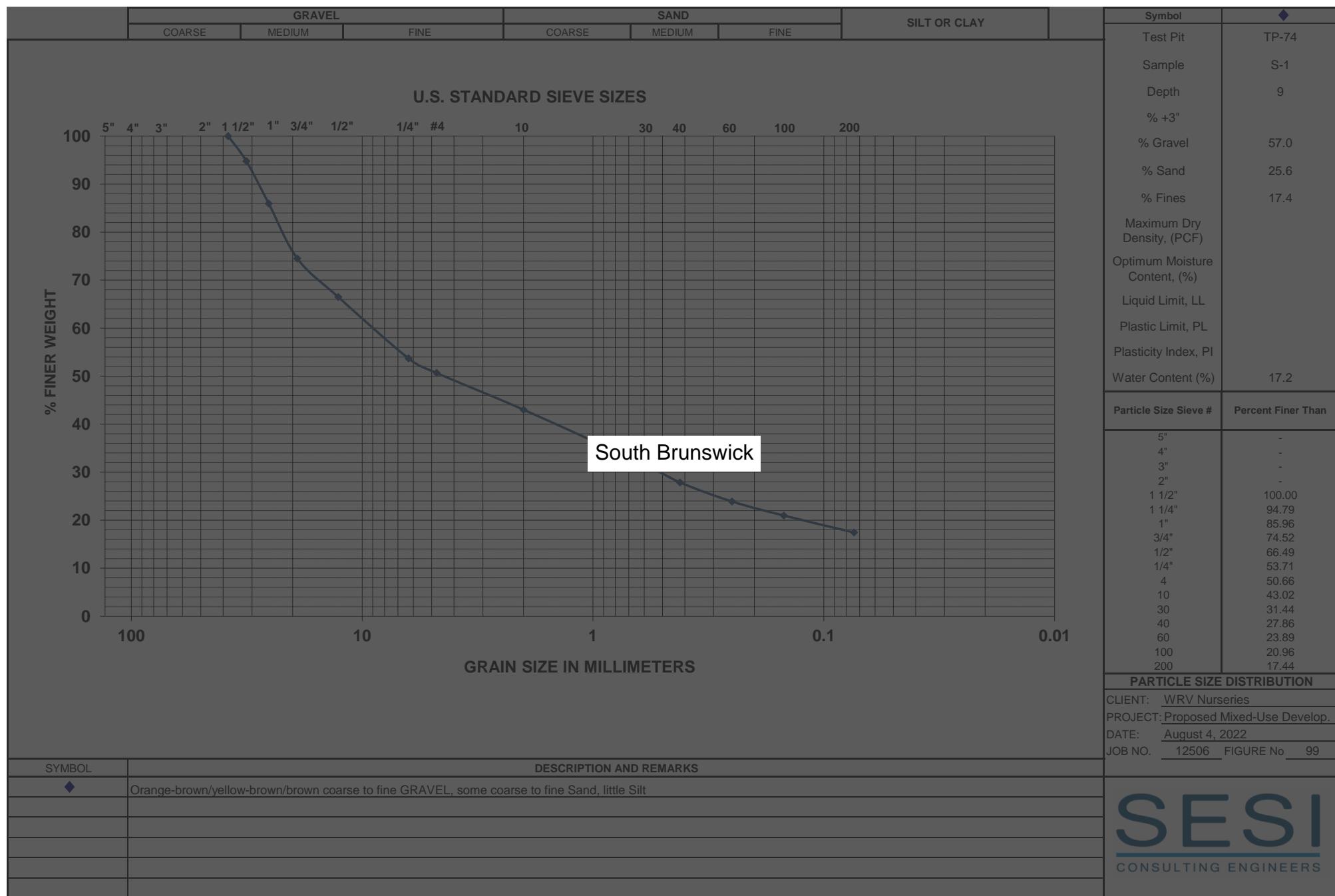
SYMBOL	DESCRIPTION AND REMARKS
◆	Brown coarse to fine Sand, and clayey Silt, little medium to fine Gravel

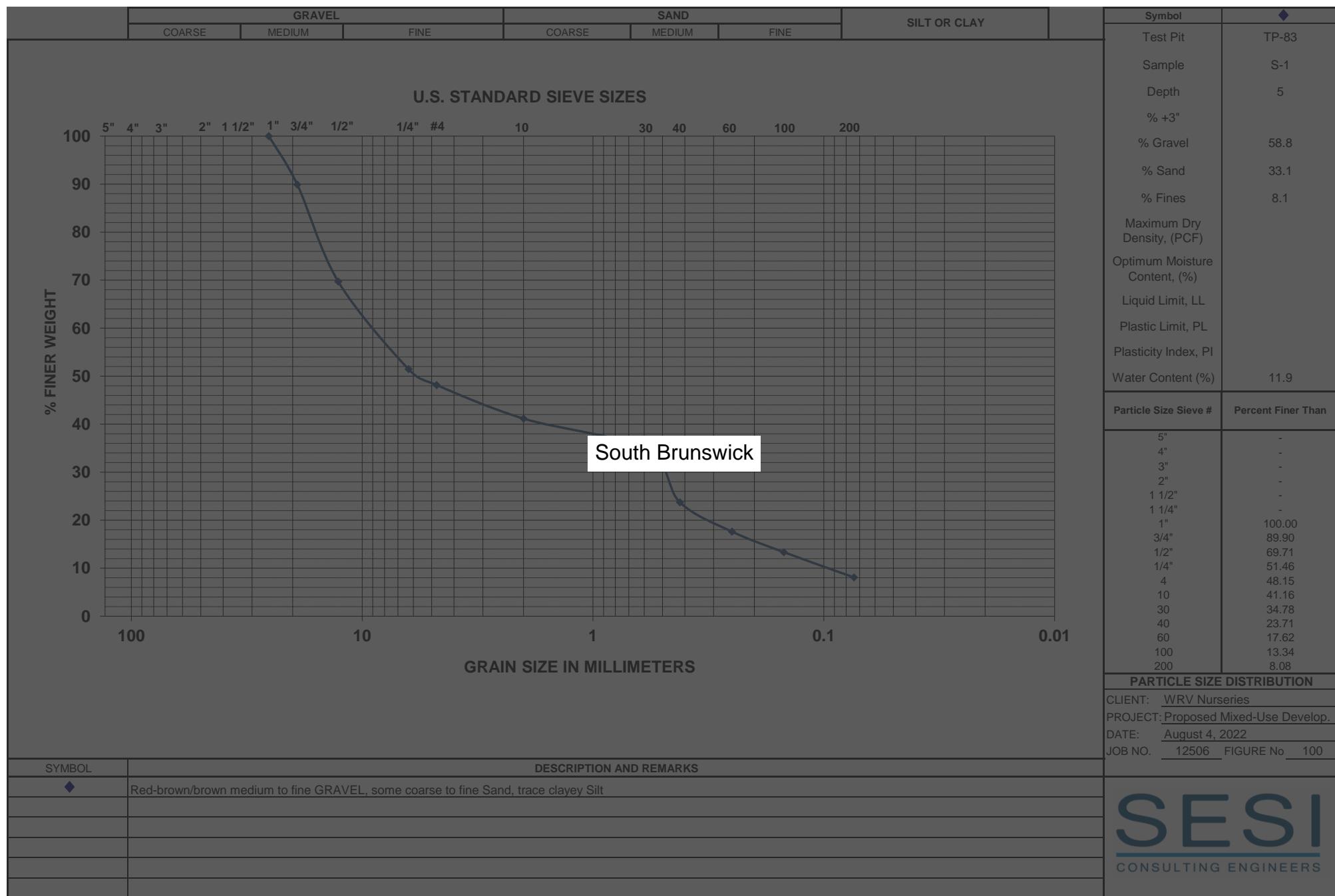
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


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APPENDIX A



LOG OF TEST PIT

TEST PIT NO. 1

COMPLETION DATE: 10/24/07

SURFACE ELEVATION: +109 ft (±)

WATER LEVEL: *

JOB NUMBER: 3313-011*1D

READING DATE: 10/24/07

DEPTH	SAMPLES (1)	MOISTURE CONTENT (%)	SYMBOL	DESCRIPTION	DEPTH
				20" Topsoil	
5	S1	12	SM	Light brown fine to coarse sand, and silt, trace fine gravel (moist)(medium dense)	5
5	S2		SM	Dark orange-brown fine to medium sand, some silt, little fine to coarse gravel (moist)(medium dense)	5
10			SM	Reddish brown fine to medium sand, some silt, little fine to coarse gravel, with occasional cobbles (moist)(medium dense)	10
10			SP	Orange-brown fine to medium sand, trace silt, little fine to coarse gravel (moist)(medium dense) - mottled @ 13'	10
15					15
20					20
25					25

NOTES FOR COLUMNS:

1. SAMPLE AT AVERAGE SAMPLING DEPTH

SOIL DESCRIPTION MODIFIERS:

TRACE 0 - 10%

LITTLE 10 - 20%

SOME 20 - 35%

AND OVER 35%

Typist/Date: pr/mh 11/07

Sheet: 1 of 1

PLATE: 3A



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LOG OF TEST PIT

TEST PIT NO. 2

COMPLETION DATE: 10/26/07
JOB NUMBER: 3313-011*1D

SURFACE ELEVATION: +108 ft (\pm)

WATER LEVEL: *
READING DATE: 10/26/07

DEPTH	SAMPLES (1)	MOISTURE CONTENT (%)	SYMBOL	DESCRIPTION	DEPTH
				13" Topsoil	
	S1		SM	Orange-brown fine sand, some silt (moist)(medium dense)	
5			SM	Light brown fine to medium sand, little to some silt (mottled)(moist)(medium dense)	5
10	S2	17	SM	Orange-brown fine sand, little silt (moist)(medium dense)	10
15			SM	Reddish brown fine to medium sand, some clayey silt, some fine to coarse gravel (moist)(medium dense)	15
20			SM	Orange-brown fine to medium sand, some silt, some fine to coarse gravel (moist)(medium dense)	20
25			SP	Light orange-brown fine to medium sand, trace silt, some fine to coarse gravel (moist)(medium dense)	25
				Test pit completed @ 17'	
				*Groundwater not encountered	
				Possible perched seasonal water @ 13'-5"	

NOTES FOR COLUMNS:

1. SAMPLE AT AVERAGE SAMPLING DEPTH

SOIL DESCRIPTION MODIFIERS:

TRACE 0 - 10%

LITTLE 10 - 20%

SOME 20 - 35%

Typist/Date: pr/mh 11/07

Sheet: 1 of 1

PLATE: 3B



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LOG OF TEST PIT

TEST PIT NO. 3

COMPLETION DATE: 10/26/07
JOB NUMBER: 3313-011*1D

SURFACE ELEVATION: +105.5 ft (±)

WATER LEVEL: *
READING DATE: 10/26/07

DEPTH	SAMPLES (1)	MOISTURE CONTENT (%)	SYMBOL	DESCRIPTION	DEPTH
				12" Topsoil	
			SM	Dark orange-brown fine sand, some silt (moist)(medium dense)	
			SM	Pale brown fine sand, some silt (moist)(medium dense) - mottled from 2' to 4'	
5			SM	Light brown fine sand, some silt, little fine gravel (moist)(medium dense)	5
	S2	4	SP/SM	Orange-brown fine sand, trace to little silt, little fine to coarse gravel (moist)(medium dense)	
			SM	Red-brown fine to medium sand, some silt, some fine to coarse gravel (moist)(medium dense)	
10			SM	Orange-brown fine to medium sand, little silt, some fine to coarse gravel (moist)(medium dense)	10
			SM	South Brunswick	
15			SP	Light orange-brown fine to medium sand, trace silt, little fine gravel (moist)(medium dense)	15
20				Test pit completed @ 17.5'	20
25				*Groundwater not encountered Possible perched seasonal water @ 2' to 4'	25

NOTES FOR COLUMNS:

1. SAMPLE AT AVERAGE SAMPLING DEPTH

SOIL DESCRIPTION MODIFIERS:

TRACE 0 - 10%

LITTLE 10 - 20%

SOME 20 - 35%

AND OVER 35%

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Sheet: 1 of 1

PLATE: 3C



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LOG OF TEST PIT

TEST PIT NO. 4

COMPLETION DATE: 10/26/07
JOB NUMBER: 3313-011*1D

SURFACE ELEVATION: +108 ft (±)

WATER LEVEL: *
READING DATE: 10/26/07

DEPTH	SAMPLES (1)	MOISTURE CONTENT (%)	SYMBOL	DESCRIPTION	DEPTH		
S1	13			13" Topsoil			
			SM	Orange-brown fine sand, and silt (moist)(medium dense)			
			SM	Light brown fine sand, and silt (moist)(medium dense) - mottled from 2' to 4'			
			SM	Brown fine sand, some silt, little fine to coarse gravel (moist)(medium dense)	5		
			ML	Red-brown clayey silt, some fine to coarse sand, some fine to coarse gravel (moist)(medium dense) South Brunswick	10		
S2	13		SP	Orange-brown fine to coarse sand, trace silt, some fine to coarse gravel (moist)(medium dense)	15		
					20		
Test pit completed @ 17'							
*Groundwater not encountered							
Possible perched shallow groundwater @ 2' to 4"							
25					25		

NOTES FOR COLUMNS:

1. SAMPLE AT AVERAGE SAMPLING DEPTH

SOIL DESCRIPTION MODIFIERS:

TRACE 0 - 10%
LITTLE 10 - 20%
SOME 20 - 35%
AND OVER 35%

Typist/Date: pr/mh 11/07

Sheet: 1 of 1

PLATE: 3D

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LOG OF TEST PIT

TEST PIT NO. 5

COMPLETION DATE: 10/24/07
JOB NUMBER: 3313-011*1D

SURFACE ELEVATION: +108 ft (±)

WATER LEVEL: *
READING DATE: 10/24/07

DEPTH	SAMPLES (1)	MOISTURE CONTENT (%)	SYMBOL	DESCRIPTION	DEPTH			
5	S1			15" Topsoil	5			
			ML	Orange-brown fine to medium sand, and silt, trace fine gravel (dry)(medium dense)				
			SM	Dark orange-brown fine to medium sand, some silt, little fine to coarse gravel (moist)(dense)				
			SM	Red-brown fine to medium sand, some silt, little fine to coarse gravel, with occasional cobbles (moist)(medium dense) - grading (mottled) @ 9.5' - color variegation				
10	S2		SP/SM	Orange-brown fine to medium sand, trace to little silt, some fine to coarse gravel (medium dense) South Brunswick	10			
			ML	Light brown clayey silt, trace fine sand (moist)(stiff)				
				Test pit completed @ 17.5'				
*Groundwater not encountered								
NOTES FOR COLUMNS:			SOIL DESCRIPTION MODIFIERS:					
1. SAMPLE AT AVERAGE SAMPLING DEPTH			TRACE 0 - 10%					
			LITTLE 10 - 20%					
			SOME 20 - 35%					
			AND OVER 35%					
Typist/Date: pr/mh 11/07			Sheet: 1 of 1					
			PLATE: 3E					



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LOG OF TEST PIT

TEST PIT NO. 6

COMPLETION DATE: 10/24/07
JOB NUMBER: 3313-011*1D

SURFACE ELEVATION: +105 ft (±)

WATER LEVEL: *
READING DATE: 10/24/07

DEPTH	SAMPLES (1)	MOISTURE CONTENT (%)	SYMBOL	DESCRIPTION	DEPTH
5	S1	3		9" Topsoil	5
			SM	Light brown fine to medium sand, little silt (moist)(medium dense)	
			SM	Brown fine sand, and silt (moist)(medium dense)	
			SP	Yellow-brown fine sand, trace silt (moist)(medium dense)	
			SM	Dark orange brown fine to medium sand, little silt, little fine to coarse gravel (moist)(medium dense)	
			SM	Red-brown fine to medium sand, some silt, some fine to coarse gravel, with occasional cobbles (moist)(dense)	
10	S2	25	ML	Light brown fine to medium sand (very moist) South Brunswick	10
15					15
20					20
25					25

NOTES FOR COLUMNS:

1. SAMPLE AT AVERAGE SAMPLING DEPTH

SOIL DESCRIPTION MODIFIERS:

TRACE 0 - 10%

LITTLE 10 - 20%

SOME 20 - 35%

AND OVER 35%

Typist/Date: pr/mh 11/07

Sheet: 1 of 1 PLATE: 3F



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LOG OF TEST PIT

TEST PIT NO. 7

COMPLETION DATE:

SURFACE ELEVATION:

WATER LEVEL:

JOB NUMBER: 3313-011*1D

READING DATE:

DEPTH	SAMPLES (1)	MOISTURE CONTENT (%)	SYMBOL	DESCRIPTION	DEPTH
5				Test pit omitted	5
10					10
15					15
20					20
25					25

NOTES FOR COLUMNS:

1. SAMPLE AT AVERAGE SAMPLING DEPTH

SOIL DESCRIPTION MODIFIERS:

TRACE 0 - 10%

LITTLE 10 - 20%

SOME 20 - 35%

AND OVER 35%

Typist/Date: pr/mh 11/07

Sheet: 1 of 1 PLATE: 3G



MELICK-TULLY AND ASSOCIATES, P.C.
Geotechnical Engineers and Environmental Consultants

LOG OF TEST PIT

TEST PIT NO. 8

COMPLETION DATE: 10/24/07
JOB NUMBER: 3313-011*1D

SURFACE ELEVATION: +107 ft (±)

WATER LEVEL: *
READING DATE: 10/24/07

DEPTH	SAMPLES (1)	MOISTURE CONTENT (%)	SYMBOL	DESCRIPTION	DEPTH
				12" Topsoil	
S1	7		SM	Light brown fine to medium sand, and silt, trace fine gravel (moist)(medium dense) - mottled @ 2'-9" to 3'-6" (seasonal perched saturation)	
			SM	Orange-brown fine to medium sand, some silt, little fine to coarse gravel (moist)(medium dense) - grading to red-brown with occasional cobbles	5
S2	12		SM	Orange-brown fine to medium sand, little silt, some fine to coarse gravel with occasional cobbles (moist)(medium dense)	10
			SP	South Brunswick	
			SP	Orange-brown fine to medium sand, trace silt, some fine to coarse gravel (moist)(medium dense)	15
					20
				Test pit completed @ 17'	20
				*Groundwater not encountered	25
					25

NOTES FOR COLUMNS:

1. SAMPLE AT AVERAGE SAMPLING DEPTH

SOIL DESCRIPTION MODIFIERS:

TRACE 0 - 10%
LITTLE 10 - 20%
SOME 20 - 35%
AND OVER 35%

Typist/Date: pr/mh 11/07

Sheet: 1 of 1 PLATE: 3H

MELICK-TULLY AND ASSOCIATES, P.C.
Geotechnical Engineers and Environmental Consultants

LOG OF TEST PIT

TEST PIT NO. 9

COMPLETION DATE: 10/24/07
JOB NUMBER: 3313-011*1D

SURFACE ELEVATION: +102 ft (±)

WATER LEVEL: *
READING DATE: 10/24/07

DEPTH	SAMPLES (1)	MOISTURE CONTENT (%)	SYMBOL	DESCRIPTION	DEPTH
				14" Topsoil	
			SM/ML	Light orange-brown fine sand, and silt, trace fine gravel (moist)(medium dense) - mottled @ 3.5' to 4' (perched seasonal saturation)	
5	S1	20	SP/SM	Light brown fine sand, trace silt interbedded with fine sand, some silt (moist)(medium dense)	5
			SM	Dark orange-brown fine to medium sand, some silt, some fine gravel (moist)(dense)	
10	S2	20	CL	Red silty clay, little fine to coarse sand, trace fine to coarse gravel (mottled)(very moist)(stiff)	10
			ML	South Brunswick Brown silt, some fine sand (moist)(stiff)	
15					15
20					20
25				Test pit completed @ 18' *Groundwater not encountered	25

NOTES FOR COLUMNS:

1. SAMPLE AT AVERAGE SAMPLING DEPTH

SOIL DESCRIPTION MODIFIERS:

TRACE 0 - 10%
LITTLE 10 - 20%
SOME 20 - 35%
AND OVER 35%

Typist/Date: pr/mh 11/07

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MELICK-TULLY AND ASSOCIATES, P.C.
Geotechnical Engineers and Environmental Consultants

LOG OF TEST PIT

TEST PIT NO. 10

COMPLETION DATE: 10/26/07
JOB NUMBER: 3313-011*1D

SURFACE ELEVATION: +101 ft (±)

WATER LEVEL: *
READING DATE: 10/26/07

DEPTH	SAMPLES (1)	MOISTURE CONTENT (%)	SYMBOL	DESCRIPTION	DEPTH
				11" Topsoil	
			SM	Orange-brown fine sand, and silt, some fine gravel (moist)(medium dense)	
			SM	Orange-brown fine sand, some silt, little fine gravel (moist)(medium dense)	
5	S1	22	SM	Red-brown fine to coarse sand, and silt, trace fine gravel (moist)(medium dense)	5
	S2			Orange-brown fine to coarse sand, trace silt, little fine gravel (moist)(medium dense)	
10			SP		10
				South Brunswick	
				- possible mottling @ 14'	
15			SP	Brown fine to medium sand, some fine to coarse gravel, trace silt, with occasional cobbles (moist)(dense)	15
20					20
				Test pit completed @ 18'	
				*Groundwater not encountered	
25					25

NOTES FOR COLUMNS:

1. SAMPLE AT AVERAGE SAMPLING DEPTH

SOIL DESCRIPTION MODIFIERS:

TRACE 0 - 10%

LITTLE 10 - 20%

SOME 20 - 35%

AND OVER 35%

Typist/Date: pr/mh 11/07

Sheet: 1 of 1 PLATE: 3J



MELICK-TULLY AND ASSOCIATES, P.C.
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LOG OF TEST PIT

TEST PIT NO. 11

COMPLETION DATE:

SURFACE ELEVATION:

WATER LEVEL:

JOB NUMBER: 3313-011*1D

READING DATE:

DEPTH	SAMPLES (1)	MOISTURE CONTENT (%)	SYMBOL	DESCRIPTION	DEPTH
5				Test pit omitted	5
10					10
15					15
20					20
25					25

NOTES FOR COLUMNS:

1. SAMPLE AT AVERAGE SAMPLING DEPTH

SOIL DESCRIPTION MODIFIERS:

TRACE 0 - 10%

LITTLE 10 - 20%

SOME 20 - 35%

AND OVER 35%

Typist/Date: pr/mh 11/07

Sheet: 1 of 1 PLATE: 3K



MELICK-TULLY AND ASSOCIATES, P.C.

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LOG OF TEST PIT

TEST PIT NO. 12

COMPLETION DATE: 10/24/07
JOB NUMBER: 3313-011*1D

SURFACE ELEVATION: +105 ft (±)

WATER LEVEL: *
READING DATE: 10/24/07

DEPTH	SAMPLES (1)	MOISTURE CONTENT (%)	SYMBOL	DESCRIPTION	DEPTH				
5	S1	10		11" Topsoil	5				
			ML	Light brown silt, and fine sand, trace fine gravel (moist)(stiff)					
			SM	Red-brown fine to coarse sand, some fine to coarse gravel, some silt (moist)(medium dense)					
				Orange-brown fine to medium sand, some fine to coarse gravel, trace silt (moist)(medium dense)					
10	S2	10	SP	- grading with occasional cobbles	10				
				South Brunswick					
Test pit completed @ 17.5'									
*Groundwater not encountered									
NOTES FOR COLUMNS:			SOIL DESCRIPTION MODIFIERS:						
1. SAMPLE AT AVERAGE SAMPLING DEPTH			TRACE 0 - 10% LITTLE 10 - 20% SOME 20 - 35% AND OVER 35%						
Typist/Date: pr/mh 11/07			Sheet: 1 of 1 PLATE: 3L						



MELICK-TULLY AND ASSOCIATES, P.C.
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LOG OF TEST PIT

TEST PIT NO. 13

COMPLETION DATE: 10/26/07
JOB NUMBER: 3313-011*1D

SURFACE ELEVATION: +90.5 ft (±)

WATER LEVEL: *
READING DATE: 10/26/07

DEPTH	SAMPLES (1)	MOISTURE CONTENT (%)	SYMBOL	DESCRIPTION	DEPTH
				14" Topsoil	
			ML	Light brown silt, little fine sand (moist)(stiff)	
			SM	Dark brown fine to coarse sand, and silt, little fine gravel (moist)(medium dense)	
5			SM	Dark orange-brown, fine to medium sand, little silt, some fine to coarse gravel (moist)(medium dense)	5
S2	11			Orange-brown fine to medium sand, trace silt, trace fine gravel (moist)(medium dense)	
				- grading with occasional gravel	10
			SP	South Brunswick	
				- grading (mottled)	15
					15
					20
					20
				Test pit completed @ 17'	
				*Groundwater not encountered	
25					25

NOTES FOR COLUMNS:

1. SAMPLE AT AVERAGE SAMPLING DEPTH

SOIL DESCRIPTION MODIFIERS:

TRACE 0 - 10%

LITTLE 10 - 20%

SOME 20 - 35%

AND OVER 35%

Typist/Date: pr/mh 11/07

Sheet: 1 of 1

PLATE: 3M



MELICK-TULLY AND ASSOCIATES, P.C.
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LOG OF TEST PIT

TEST PIT NO. 14

COMPLETION DATE: 10/26/07
JOB NUMBER: 3313-011*1D

SURFACE ELEVATION: +101.5 ft (±)

WATER LEVEL: *
READING DATE: 10/26/07

DEPTH	SAMPLE (1)	MOISTURE CONTENT (%)	SYMBOL	DESCRIPTION	DEPTH
				13" Topsoil	
			ML/SM	Light brown fine sand, and silt, trace fine gravel (moist)(medium dense)	
			SM	Light brown fine to medium sand, some silt, some fine gravel (moist)(dense)	
5	S1	7	SM	Red-brown fine to medium sand, some silt, some fine to coarse gravel (moist)(dense)	5
			SP	Orange-brown fine to medium sand, trace silt, some fine to coarse gravel (moist)(medium dense)	
10			SP	South Brunswick	10
			SP	Orange-brown fine to medium sand, trace silt, little fine gravel (moist)(medium dense)	15
15					15
20				Test pit completed @ 17'	20
25				*Groundwater not encountered	25

NOTES FOR COLUMNS:

1. SAMPLE AT AVERAGE SAMPLING DEPTH

SOIL DESCRIPTION MODIFIERS:

TRACE 0 - 10%

LITTLE 10 - 20%

SOME 20 - 35%

AND OVER 35%

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Sheet: 1 of 1

PLATE: 3N

MELICK-TULLY AND ASSOCIATES, P.C.
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LOG OF TEST PIT

TEST PIT NO. 15

COMPLETION DATE: 10/26/07
JOB NUMBER: 3313-011*1D

SURFACE ELEVATION: +99 ft (±)

WATER LEVEL: *
READING DATE: 10/26/07

DEPTH	SAMPLES (1)	MOISTURE CONTENT (%)	SYMBOL	DESCRIPTION	DEPTH
				16" Topsoil	
	S1	11	SM/ML	Light brown fine sand, and silt (moist)(medium dense) - mottles 3' to 4' (perched seasonal saturation)	
5	S2	11	SM	Reddish brown fine to coarse sand, some silt, some fine to coarse gravel (moist)(medium dense)	5
10				Orange brown fine to medium sand, little silt, some fine to coarse gravel (moist)(medium dense)	10
15			SM	South Brunswick	15
20				Test pit completed @ 17'	20
25				*Groundwater not encountered	25

NOTES FOR COLUMNS:

1. SAMPLE AT AVERAGE SAMPLING DEPTH

SOIL DESCRIPTION MODIFIERS:

TRACE 0 - 10%

LITTLE 10 - 20%

SOME 20 - 35%

AND OVER 35%

Typist/Date: pr/mh 11/07

Sheet: 1 of 1

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MELICK-TULLY AND ASSOCIATES, P.C.
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LOG OF TEST PIT

TEST PIT NO. 16

COMPLETION DATE: 10/24/07
JOB NUMBER: 3313-011*1D

SURFACE ELEVATION: +94 ft (±)

WATER LEVEL: *
READING DATE: 10/24/07

DEPTH	SAMPLES (1)	MOISTURE CONTENT (%)	SYMBOL	DESCRIPTION	DEPTH
				12" Topsoil	
S1	10		SM	Reddish brown fine to coarse sand, little silt, some fine to coarse gravel (moist)(dense)	5
S2			SP/SM	Orange-brown fine to medium sand, trace to little silt, some fine to coarse gravel (moist)(medium dense)	10
			SP	South Brunswick	15
				Yellow-brown fine to medium sand, trace silt, little fine to coarse gravel (moist)(medium dense)	20
				Test pit completed @ 19'	25
				*Groundwater not encountered	

NOTES FOR COLUMNS:

1. SAMPLE AT AVERAGE SAMPLING DEPTH

SOIL DESCRIPTION MODIFIERS:

TRACE 0 - 10%

LITTLE 10 - 20%

SOME 20 - 35%

AND OVER 35%

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PLATE: 3P



MELICK-TULLY AND ASSOCIATES, P.C.
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LOG OF TEST PIT

TEST PIT NO. 17

COMPLETION DATE: 10/26/07
JOB NUMBER: 3313-011*1D

SURFACE ELEVATION: +102 ft (±)

WATER LEVEL: *
READING DATE: 10/26/07

DEPTH	SAMPLES (1)	MOISTURE CONTENT (%)	SYMBOL	DESCRIPTION	DEPTH
			ML	7" Topsoil Light brown silt, some fine sand (moist)(stiff)	
S1	12		SM	Red-brown fine to coarse sand, some silt, some fine to coarse gravel (moist)(medium dense)	5
S2	8		SP	Orange-brown fine to coarse sand, trace silt, some fine gravel (moist)(medium dense)	10
				South Brunswick	
20				Test pit completed @ 16'	20
25				*Groundwater not encountered	25

NOTES FOR COLUMNS:

1. SAMPLE AT AVERAGE SAMPLING DEPTH

SOIL DESCRIPTION MODIFIERS:

TRACE 0 - 10%

LITTLE 10 - 20%

SOME 20 - 35%

AND OVER 35%

Typist/Date: pr/mh 11/07

Sheet: 1 of 1

PLATE: 3Q

MELICK-TULLY AND ASSOCIATES, P.C.
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LOG OF TEST PIT

TEST PIT NO. 18

COMPLETION DATE: 10/24/07
JOB NUMBER: 3313-011*1D

SURFACE ELEVATION: +85 ft (±)

WATER LEVEL: 15.5'
READING DATE: 10/24/07

DEPTH	SAMPLES (1)	MOISTURE CONTENT (%)	SYMBOL	DESCRIPTION	DEPTH
				13" Topsoil	
			ML	Brown silt, some fine sand (moist)(stiff)	
			SM	Brown fine to medium sand, little silt, some fine to coarse gravel (moist)(medium dense)	
			SM	Dark orange-brown fine to medium sand, little silt (moist)(medium dense)	
5	S1	7	SM	Dark orange-brown fine to medium sand, some silt, some fine gravel (moist)(medium dense)	5
10	S2			Orange-brown fine to medium sand, trace silt, little fine to coarse gravel (moist)(medium dense)	10
			SP	South Brunswick	
				- grading (mottled)	
				- grading (wet)	
20				Test pit completed @ 17'	20
25				Groundwater encountered @ 15.5'	25
				Estimated seasonal water @ 13'	

NOTES FOR COLUMNS:

1. SAMPLE AT AVERAGE SAMPLING DEPTH

SOIL DESCRIPTION MODIFIERS:

TRACE 0 - 10%

LITTLE 10 - 20%

SOME 20 - 35%

AND OVER 35%

Typist/Date: pr/mh 11/07

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PLATE: 3R



MELICK-TULLY AND ASSOCIATES, P.C.
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LOG OF TEST PIT

TEST PIT NO. 19

COMPLETION DATE: 10/24/07
JOB NUMBER: 3313-011*1D

SURFACE ELEVATION: +83 ft (±)

WATER LEVEL: 14'
READING DATE: 10/24/07

DEPTH	SAMPLES (1)	MOISTURE CONTENT (%)	SYMBOL	DESCRIPTION	DEPTH
				12" Topsoil	
	S1	14	SM	Orange-brown fine sand, and silt, little fine to coarse gravel (moist)(medium dense)	
5	S2		SM	Dark brown fine to coarse sand, some clayey silt, some fine to coarse gravel (moist)(medium dense)	5
10			SP	Orange-brown fine to medium sand, trace silt, some fine to coarse gravel, with occasional cobbles (moist)(medium dense)	10
				South Brunswick - grading (mottled)	
15	S3		SM	Orange-brown fine to medium sand, little silt (wet)(medium dense)	15
20				Test pit completed @ 16.5' Rapid groundwater seepage encountered @ 14' Estimated seasonal water @ 12'	20
25					25

NOTES FOR COLUMNS:

1. SAMPLE AT AVERAGE SAMPLING DEPTH

SOIL DESCRIPTION MODIFIERS:

TRACE 0 - 10%

LITTLE 10 - 20%

SOME 20 - 35%

AND OVER 35%

Typist/Date: pr/mh 11/07

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PLATE: 3S



MELICK-TULLY AND ASSOCIATES, P.C.
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LOG OF TEST PIT

TEST PIT NO. 20

COMPLETION DATE: 10/24/07
JOB NUMBER: 3313-011*1D

SURFACE ELEVATION: +90 ft (\pm)

WATER LEVEL: *
READING DATE: 10/24/07

NOTES FOR COLUMNS:

1. SAMPLE AT AVERAGE SAMPLING DEPTH

SOIL DESCRIPTION MODIFIERS:

TRACE 0 - 10%

LITTLE 10 - 20%

SOME 20 - 35%

Typist/Date: pr/mh 11/07

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PLATE: 3T



MEUICK-TULLY AND ASSOCIATES, P.C.

MEEICK-TUETT AND ASSOCIATES, P.C.
Geotechnical Engineers and Environmental Consultants

LOG OF TEST PIT

TEST PIT NO. 21

COMPLETION DATE: 10/26/07
JOB NUMBER: 3313-011*1D

SURFACE ELEVATION: +103 ft (±)

WATER LEVEL: *
READING DATE: 10/26/07

DEPTH	SAMPLE (1)	MOISTURE CONTENT (%)	SYMBOL	DESCRIPTION	DEPTH
				7" Topsoil	
			ML	Light brown silt, some fine sand, little fine to coarse gravel (moist)(very stiff)	
	S1	18	SM	Red-brown fine to coarse sand, and silt, little fine to coarse gravel (moist)(dense)	5
5					
	S2	21		Orange-brown fine to medium sand, some silt, some fine to coarse gravel, with occasional cobbles (moist)(medium dense)	10
10					
			SM	South Brunswick	15
15					
					20
20					
				Test pit completed @ 17'	25
25				*Groundwater not encountered	

NOTES FOR COLUMNS:

1. SAMPLE AT AVERAGE SAMPLING DEPTH

SOIL DESCRIPTION MODIFIERS:

TRACE 0 - 10%

LITTLE 10 - 20%

SOME 20 - 35%

AND OVER 35%

Typist/Date: pr/mh 11/07

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PLATE: 3U

MELICK-TULLY AND ASSOCIATES, P.C.
Geotechnical Engineers and Environmental Consultants

LOG OF TEST PIT

TEST PIT NO. 22

COMPLETION DATE: 10/26/07
JOB NUMBER: 3313-011*1D

SURFACE ELEVATION: +102 ft (±)

WATER LEVEL: *
READING DATE: 10/26/07

DEPTH	SAMPLES (1)	MOISTURE CONTENT (%)	SYMBOL	DESCRIPTION	DEPTH
				12" Topsoil	
			SM/ML	Light brown fine sand, and silt, little fine gravel (moist)(medium dense)	
5	S1	19	SM	Reddish brown fine to medium sand, and clayey silt, some fine to coarse gravel, with occasional cobbles (moist)(dense)	5
10				Orange-brown fine to coarse sand, some silt, some fine to coarse gravel, with occasional cobbles (moist)(dense)	10
15			SM		15
20	S2	22	SM		20
25				Test pit completed @ 18' *Groundwater not encountered	25

NOTES FOR COLUMNS:

1. SAMPLE AT AVERAGE SAMPLING DEPTH

SOIL DESCRIPTION MODIFIERS:

TRACE 0 - 10%

LITTLE 10 - 20%

SOME 20 - 35%

AND OVER 35%

Typist/Date: pr/mh 11/07

Sheet: 1 of 1

PLATE: 3V

MELICK-TULLY AND ASSOCIATES, P.C.
Geotechnical Engineers and Environmental Consultants

LOG OF TEST PIT

TEST PIT NO. 23

COMPLETION DATE: 10/26/07
JOB NUMBER: 3313-011*1D

SURFACE ELEVATION: +111 ft (±)

WATER LEVEL: *
READING DATE: 10/26/07

DEPTH	SAMPLES (1)	MOISTURE CONTENT (%)	SYMBOL	DESCRIPTION	DEPTH
				12" Topsoil	
			ML	Light brown clayey silt, and fine sand (moist)(stiff)	
			SM	Red-brown fine to coarse sand, and silt, little fine gravel, with occasional cobbles (very moist)(dense)	
5	S1	25			5
10				Orange-brown fine to medium sand, some silt, some fine to coarse gravel, with occasional cobbles (moist)(medium dense)	10
15			SM	South Brunswick	15
20				Test pit completed @ 16'	20
25				*Groundwater not encountered	25

NOTES FOR COLUMNS:

1. SAMPLE AT AVERAGE SAMPLING DEPTH

SOIL DESCRIPTION MODIFIERS:

TRACE 0 - 10%

LITTLE 10 - 20%

SOME 20 - 35%

AND OVER 35%

Typist/Date: pr/mh 11/07

Sheet: 1 of 1

PLATE: 3W

MELICK-TULLY AND ASSOCIATES, P.C.
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LOG OF TEST PIT

TEST PIT NO. 24

COMPLETION DATE: 10/26/07
JOB NUMBER: 3313-011*1D

SURFACE ELEVATION: +110 ft (±)

WATER LEVEL: *
READING DATE: 10/26/07

DEPTH	SAMPLES (1)	MOISTURE CONTENT (%)	SYMBOL	DESCRIPTION	DEPTH
				10" Topsoil	
			ML	Light brown silt, some fine sand (dry)(stiff)	
5	S1	2	SM	Light brown fine sand, little silt, trace fine gravel (dry)(dense)	5
5	S2	25	SM	Reddish brown fine to coarse sand, some clayey silt, some fine to coarse gravel, with occasional cobbles (very moist)(dense)	5
10				Orange-brown fine to medium sand, little silt, little fine to coarse gravel, with occasional cobbles (moist)(dense)	10
10				South Brunswick	10
15			SM		15
15					15
20				Test pit completed @ 17'	20
20				*Groundwater not encountered	20
25					25

NOTES FOR COLUMNS:

1. SAMPLE AT AVERAGE SAMPLING DEPTH

SOIL DESCRIPTION MODIFIERS:

TRACE 0 - 10%

LITTLE 10 - 20%

SOME 20 - 35%

AND OVER 35%

Typist/Date: pr/mh 11/07

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MELICK-TULLY AND ASSOCIATES, P.C.
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LOG OF TEST PIT

TEST PIT NO: 25

COMPLETION DATE: 1/21/08
JOB NUMBER: 3313-011*1D

SURFACE ELEVATION: +67.4 ft (±)

WATER LEVEL: 2'
READING DATE: 1/21/08

DEPTH	SAMPLES (1)	MOISTURE CONTENT (%)	SYMBOL	DESCRIPTION	DEPTH
				16" Topsoil	
	S1		ML	Brown silt, some fine sand (very moist to wet)(medium) - mottled @ 16"	
5					5
10					10
15					15
20					20

South Brunswick

Test pit completed @ 3'

Rapid groundwater seepage
encountered @ 2'-4"

NOTES FOR COLUMNS:

1. SAMPLE AT AVERAGE SAMPLING DEPTH

SOIL DESCRIPTION MODIFIERS:

TRACE 0 - 10%

LITTLE 10 - 20%

SOME 20 - 35%

AND OVER 35%

Typist/Date: pr/mh 01/08

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MELICK-TULLY AND ASSOCIATES, P.C.
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LOG OF TEST PIT

TEST PIT NO: 26

COMPLETION DATE: 1/21/08
JOB NUMBER: 3313-011*1D

SURFACE ELEVATION: +70.4 ft (±)

WATER LEVEL: 5'-6"
READING DATE: 1/21/08

DEPTH	SAMPLES (1)	MOISTURE CONTENT (%)	SYMBOL	DESCRIPTION	DEPTH				
5	S1			10" Topsoil	10				
			ML	Brown silt, some fine sand (very moist) - mottled @ 18"					
			SM	Brown fine to medium sand, some fine gravel, little silt (mottled)(moist)(medium dense)					
	S2		SM	Orange-brown fine to medium sand, some fine gravel, little silt (mottled)(moist)(medium dense)					
			SP	Orange-brown fine sand, trace silt (wet)(medium dense)					
South Brunswick									
Test pit completed @ 7'									
Moderate groundwater seepage encountered @ 5'-6"									
10					15				
15					20				
20									

NOTES FOR COLUMNS:

1. SAMPLE AT AVERAGE SAMPLING DEPTH

SOIL DESCRIPTION MODIFIERS:

TRACE 0 - 10%

LITTLE 10 - 20%

SOME 20 - 35%

AND OVER 35%

Typist/Date: pr/mh 01/08

Sheet: 1 of 1

PLATE: 2B



MELICK-TULLY AND ASSOCIATES, P.C.

Geotechnical Engineers and Environmental Consultants

LOG OF TEST PIT

TEST PIT NO: 27

COMPLETION DATE: 1/21/08
JOB NUMBER: 3313-011*1D

SURFACE ELEVATION: +77.5 ft (±)

WATER LEVEL: 10'
READING DATE: 1/21/08

DEPTH	SAMPLES (1)	MOISTURE CONTENT (%)	SYMBOL	DESCRIPTION	DEPTH
	S1		ML	18" Topsoil	
				Brown clayey silt, little fine sand (moist)(medium)	
				Brown fine to medium sand, some silt, little fine gravel (moist)(medium dense)	
5	S2		SM		5
	S3		SM	South Brunswick	
10				dium sand, little silt, trace fine gravel (moderate (wet)) (moderate) (medium dense) - grading (wet)	10
15				Test pit completed @ 11'	15
				Moderate groundwater seepage encountered @ 10'	15
20					20

NOTES FOR COLUMNS:

1. SAMPLE AT AVERAGE SAMPLING DEPTH

SOIL DESCRIPTION MODIFIERS:

TRACE 0 - 10%

LITTLE 10 - 20%

SOME 20 - 35%

AND OVER 35%

Typist/Date: pr/mh 01/08

Sheet 1 of 1

PLATE: 2C

MELICK-TULLY AND ASSOCIATES, P.C.
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LOG OF TEST PIT

TEST PIT NO: 28

COMPLETION DATE: 1/21/08
JOB NUMBER: 3313-011*1D

SURFACE ELEVATION: +82.7 ft (±)

WATER LEVEL: 14'
READING DATE: 1/21/08

DEPTH	SAMPLES (1)	MOISTURE CONTENT (%)	SYMBOL	DESCRIPTION	DEPTH
				12" Topsoil	
	S1		ML	Brown variegated clayey silt, little fine sand (moist)(stiff)	
	S2		SM	Brown fine sand, little silt (moist)(medium dense)	
5	S3		SM	Orange-brown fine to coarse sand, some silt, some fine to coarse gravel (moist)(medium dense)	5
	S4		SP	South Brunswick medium sand, trace silt, trace fine gravel (moist)(medium dense)	
10				- mottled @ 13'	10
				- grading (wet) @ 14'	
15				Test pit completed @ 16'	15
				Rapid groundwater seepage encountered @ 15'	
20					20

NOTES FOR COLUMNS:

1. SAMPLE AT AVERAGE SAMPLING DEPTH

SOIL DESCRIPTION MODIFIERS:

TRACE 0 - 10%

LITTLE 10 - 20%

SOME 20 - 35%

AND OVER 35%

Typist/Date: pr/mh 01/08

Sheet: 1 of 1 PLATE: 2D

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Geotechnical Engineers and Environmental Consultants

LOG OF TEST PIT

TEST PIT NO: 29

COMPLETION DATE: 1/21/08
JOB NUMBER: 3313-011*1D

SURFACE ELEVATION: +67.4 ft (±)

WATER LEVEL: 3'
READING DATE: 1/21/08

DEPTH	SAMPLES (1)	MOISTURE CONTENT (%)	SYMBOL	DESCRIPTION	DEPTH
				16" Topsoil	
	S1		ML	Light brown silt, some fine sand (moist)(medium) - mottled @ 18"	
	S2		SM	Brown fine to medium sand, little silt, some fine to coarse gravel (mottled)(moist to wet)(medium dense)	
5					5
10					10
15					15
20					20
South Brunswick					
Test pit completed @ 5'					
Moderate groundwater seepage encountered @ 3'					

NOTES FOR COLUMNS:

1. SAMPLE AT AVERAGE SAMPLING DEPTH

SOIL DESCRIPTION MODIFIERS:

TRACE 0 - 10%

LITTLE 10 - 20%

SOME 20 - 35%

AND OVER 35%

Typist/Date: pr/mh 01/08

Sheet: 1 of 1

PLATE: 2E

MELICK-TULLY AND ASSOCIATES, P.C.
Geotechnical Engineers and Environmental Consultants

LOG OF TEST PIT

TEST PIT NO: 30

COMPLETION DATE: 1/21/08
JOB NUMBER: 3313-011*1D

SURFACE ELEVATION: +71.7 ft (±)

WATER LEVEL: 6'
READING DATE: 1/21/08

DEPTH	SAMPLES (1)	MOISTURE CONTENT (%)	SYMBOL	DESCRIPTION	DEPTH
				14" Topsoil	
			ML	Light brown silt, little fine sand (moist)(medium)	
			SM	Brown fine to medium sand, some silt, little fine gravel (moist)(medium dense) - mottled @ 4'	
5	S1				
5	S2		SP	Yellow-brown fine to medium sand, trace silt, some fine to coarse gravel (mottled)(moist)(medium dense)	5
10					10
15					15
20					20
South Brunswick					
Test pit completed @ 7'					
Moderate groundwater seepage encountered @ 6'					

NOTES FOR COLUMNS:

1. SAMPLE AT AVERAGE SAMPLING DEPTH

SOIL DESCRIPTION MODIFIERS:

TRACE 0 - 10%

LITTLE 10 - 20%

SOME 20 - 35%

AND OVER 35%

Typist/Date: pr/mh 01/08

Sheet 1 of 1 PLATE: 2F

MELICK-TULLY AND ASSOCIATES, P.C.
Geotechnical Engineers and Environmental Consultants

LOG OF TEST PIT

TEST PIT NO: 31

COMPLETION DATE: 1/21/08
JOB NUMBER: 3313-011*1D

SURFACE ELEVATION: +76.5 ft (±)

WATER LEVEL: 9.5'
READING DATE: 1/21/08

DEPTH	SAMPLES (1)	MOISTURE CONTENT (%)	SYMBOL	DESCRIPTION	DEPTH
				11" Topsoil	
			ML	Brown clayey silt, little fine sand (moist)(soft)	
			SM	Brown fine to medium sand, some silt, some fine to coarse gravel (moist)(medium dense)	
5	S1			Orange-brown fine to medium sand, trace silt (moist)(medium dense)	5
			SP	- mottled @ 7'	
				South Brunswick	
10	S2		SP	Dark reddish brown fine to medium sand, trace silt, some fine gravel (wet)(medium dense)	10
15				Test pit completed @ 11'	15
				Rapid groundwater seepage encountered @ 9.5'	
				Sidewalls collapsed @ 7'	
20					20

NOTES FOR COLUMNS:

1. SAMPLE AT AVERAGE SAMPLING DEPTH

SOIL DESCRIPTION MODIFIERS:

TRACE 0 - 10%

LITTLE 10 - 20%

SOME 20 - 35%

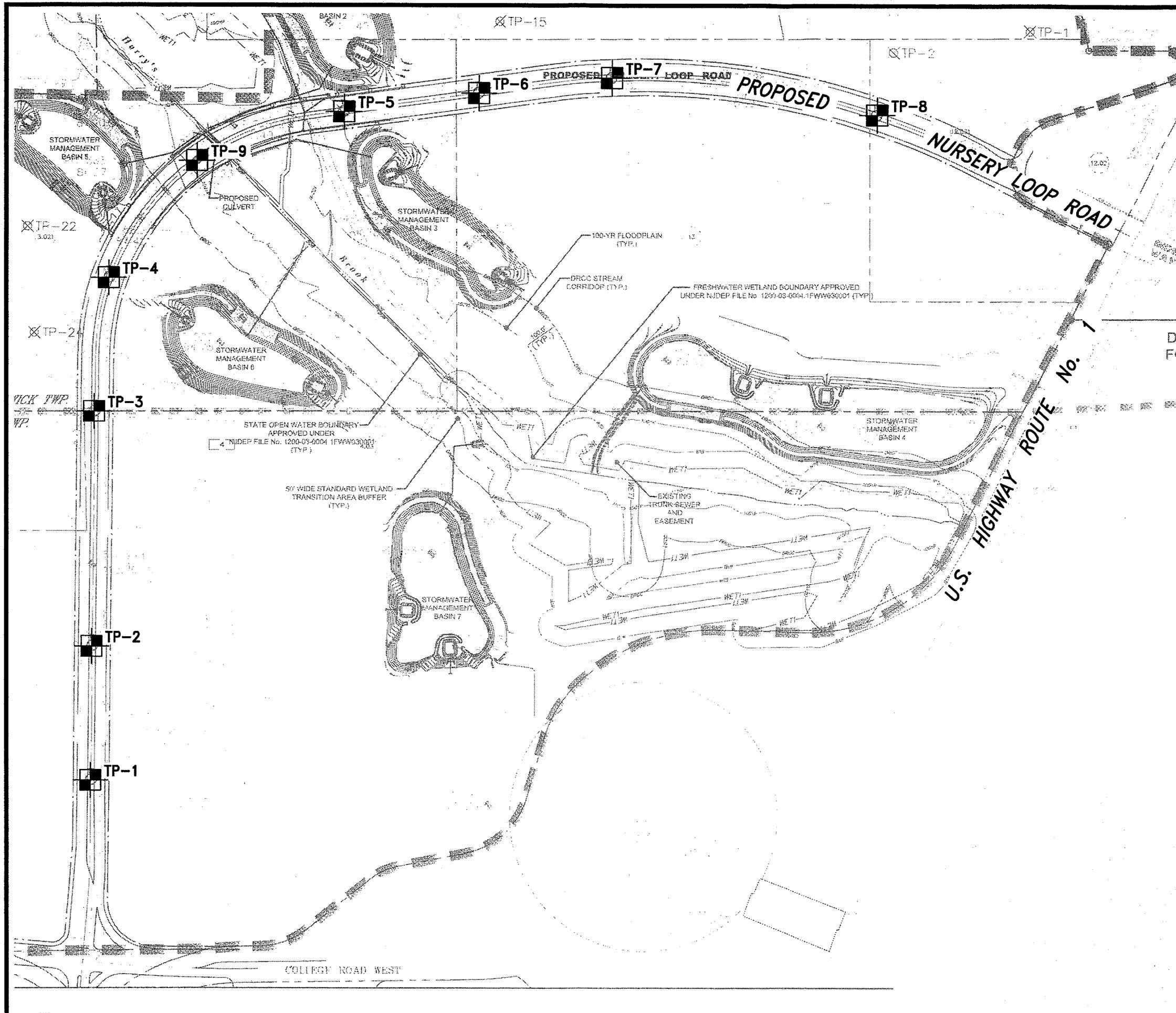
AND OVER 35%

Typist/Date: pr/mh 01/08

Sheet: 1 of 1

PLATE: 2G

MELICK-TULLY AND ASSOCIATES, P.C.
Geotechnical Engineers and Environmental Consultants



PLOT PLAN			
PROPOSED NURSERY ROAD SOUTH BRUNSWICK, NEW JERSEY PRINCETON FORRESTAL CENTER			
 MELICK-TULLY AND ASSOCIATES, P.C. Geotechnical Engineers & Environmental Consultants 117 Canal Road South Bound Brook, New Jersey 08880 (732) 356-3400			
JOB NO.		FILE NO.	23681
DR. BY YJD	CHK. BY SLD	DATE 6-27-08	SCALE 1"=300' PLATE 2

LOG OF TEST PIT

TEST PIT NO: 1

COMPLETION DATE: 6/23/08
JOB NUMBER: 4760-006*1D

SURFACE ELEVATION: +119.5 ft (±)

WATER LEVEL: *
READING DATE: 6/23/08

DEPTH	SAMPLES (1)	MOISTURE CONTENT (%)	SYMBOL	DESCRIPTION	DEPTH
				12" Topsoil	
	S1	14.6	SM	Red-brown fine to coarse sand, some clayey silt, trace fine gravel (moist)(medium dense)	
5	S2				5
	S3		SM	Red-brown (mottled) fine to coarse sand, little silt, little fine to coarse gravel (moist)(medium dense)	
	S4	45.5	SM	Brown (mottled) fine to coarse sand, some silt, some fine gravel (moist)(medium dense)	10
10					
15				- grading (wet)	15
				Test pit completed @ 12' *Groundwater seepage not encountered Mottling observed @ 8' to 12'	

NOTES FOR COLUMNS:

1. SAMPLE AT AVERAGE SAMPLING DEPTH

SOIL DESCRIPTION MODIFIERS:

TRACE 0 - 10%

LITTLE 10 - 20%

SOME 20 - 35%

AND OVER 35%

Typist/Date: sjs/mh 06/08

Sheet: 1 of 1

PLATE: 3A



MELICK-TULLY AND ASSOCIATES, P.C.

Geotechnical Engineers and Environmental Consultants

LOG OF TEST PIT

TEST PIT NO: 2

COMPLETION DATE: 6/23/08
JOB NUMBER: 4760-006*1D

SURFACE ELEVATION: +114 ft (±)

WATER LEVEL: *
READING DATE: 6/23/08

DEPTH	SAMPLES (1)	MOISTURE CONTENT (%)	SYMBOL	DESCRIPTION	DEPTH
				8" Topsoil	
	S1	17.1		Brown clayey silt, trace fine gravel (very moist)(medium)	
	S2	49.2	ML	- mottling (hanging water) observed @ 2-1/2' (wet)	
5			SM	Red-brown fine to coarse sand, some silt, little fine to coarse gravel (moist)(medium dense)	5
	S3		SM	Brown (mottled) clayey silt, trace fine sand (moist)(stiff)	
10			SM	Brown (mottled) fine to coarse sand, some clayey silt, some fine to coarse gravel (moist)(medium dense)	10
15				Test pit completed @ 12' *Groundwater seepage not encountered Mottling observed @ 8' to 12' Wet soils, hanging water observed @ 2-1/2'	15

NOTES FOR COLUMNS:

1. SAMPLE AT AVERAGE SAMPLING DEPTH

SOIL DESCRIPTION MODIFIERS:

TRACE 0 - 10%

LITTLE 10 - 20%

SOME 20 - 35%

AND OVER 35%

Typist/Date: sjs/mh 06/08

Sheet: 1 of 1

PLATE: 3B



MELICK-TULLY AND ASSOCIATES, P.C.

Geotechnical Engineers and Environmental Consultants

LOG OF TEST PIT

TEST PIT NO: 3

COMPLETION DATE: 6/23/08
JOB NUMBER: 4760-006*1D

SURFACE ELEVATION: +111 ft (±)

WATER LEVEL: *
READING DATE: 6/23/08

DEPTH	SAMPLE (1)	MOISTURE CONTENT (%)	SYMBOL	DESCRIPTION	DEPTH
				12" Topsoil	
S1		17.9	ML	Brown clayey silt, some fine to coarse gravel (very moist)(stiff)	
S2				Red-brown fine to medium sand, some clayey silt, trace fine gravel (moist)(medium dense)	
S3		9.7	SM		
S4			SM	Brown fine to coarse sand, some silt, some fine to coarse gravel, with cobbles and boulders (moist)(medium dense)	
S5			SM	Red-brown fine to medium sand, little silt (moist)(medium dense)	
				Test pit completed @ 11' *Groundwater seepage not encountered	
15					15

NOTES FOR COLUMNS:

1. SAMPLE AT AVERAGE SAMPLING DEPTH

SOIL DESCRIPTION MODIFIERS:

TRACE 0 - 10%

LITTLE 10 - 20%

SOME 20 - 35%

AND OVER 35%

Typist/Date: sjs/mh 06/08

Sheet: 1 of 1

PLATE: 3C

MELICK-TULLY AND ASSOCIATES, P.C.
Geotechnical Engineers and Environmental Consultants

LOG OF TEST PIT

TEST PIT NO: 4

COMPLETION DATE: 6/23/08
JOB NUMBER: 4760-006*1D

SURFACE ELEVATION: +97.5 ft (±)

WATER LEVEL: *
READING DATE: 6/23/08

DEPTH	SAMPLE (1)	MOISTURE CONTENT (%)	SYMBOL	DESCRIPTION	DEPTH
5.0	S1	5.0		6" Topsoil	
				FILL - Brown fine to coarse sand, little silt, some fine gravel (moist)(medium dense)	
				FILL - Red-brown fine to medium sand, some clayey silt, little fine to coarse gravel (moist)(medium dense)	
5	S2			- 8" diameter steel pipe	5
10	S3		SM	Red-brown fine to medium sand, some clayey silt, little fine to coarse gravel (moist)(medium dense)	10
15				South Brunswick	15
				- mottling @ 8-1/2'	
			ML	Red-brown (mottled) clayey silt, some fine to medium sand, little fine to coarse gravel (moist)(stiff)	
				Test pit completed @ 11-1/2'	
				*Groundwater seepage not encountered	
				Mottling observed @ 8-1/2'	

NOTES FOR COLUMNS:

1. SAMPLE AT AVERAGE SAMPLING DEPTH

SOIL DESCRIPTION MODIFIERS:

TRACE 0 - 10%

LITTLE 10 - 20%

SOME 20 - 35%

AND OVER 35%

Typist/Date: sjs/mh 06/08

Sheet: 1 of 1

PLATE: 3D



MELICK-TULLY AND ASSOCIATES, P.C.
Geotechnical Engineers and Environmental Consultants

LOG OF TEST PIT

TEST PIT NO: 5

COMPLETION DATE: 6/23/08
JOB NUMBER: 4760-006*1D

SURFACE ELEVATION: +83 ft (±)

WATER LEVEL: 8.5'
READING DATE: 6/23/08

DEPTH	SAMPLES (1)	MOISTURE CONTENT (%)	SYMBOL	DESCRIPTION	DEPTH
				12" Topsoil	
	S1	9.1		Brown fine sand, and silt (moist)(medium dense)	
	S2	10.9	SM	- grading with cobbles @ 3-1/2'	
5	S3	11.9	SM	Red-brown fine to coarse sand, some silt, some fine to coarse gravel, with cobbles (moist)(medium dense)	5
				South Brunswick	
	S4		SM	Yellow-brown (mottled) fine to coarse sand, little silt, little fine to coarse gravel (moist)(medium dense) - slight groundwater seepage @ 8'	
10					10
15				Test pit completed @ 11' Slight groundwater seepage @ 8-1/2' Mottling observed @ 7'	15

NOTES FOR COLUMNS:

1. SAMPLE AT AVERAGE SAMPLING DEPTH

SOIL DESCRIPTION MODIFIERS:

TRACE 0 - 10%

LITTLE 10 - 20%

SOME 20 - 35%

AND OVER 35%

Typist/Date: sjm/mh 06/08

Sheet: 1 of 1

PLATE: 3E



MELICK-TULLY AND ASSOCIATES, P.C.
Geotechnical Engineers and Environmental Consultants

LOG OF TEST PIT

TEST PIT NO: 6

COMPLETION DATE: 6/23/08
JOB NUMBER: 4760-006*1D

SURFACE ELEVATION: +95.5 ft (±)

WATER LEVEL: *
READING DATE: 6/23/08

DEPTH	SAMPLES (1)	MOISTURE CONTENT (%)	SYMBOL	DESCRIPTION	DEPTH
				6" Topsoil	
	S1	10.1	SM/ML	Brown fine sand, and silt (moist)(medium dense)	
5	S2	11.1	SM	Red-orange-brown fine to coarse sand, some silt, some fine gravel (moist)(medium dense)	5
				South Brunswick	
10			SM	Brown fine to coarse sand, little silt, little fine to coarse gravel (moist)(medium dense)	10
15				Test pit completed @ 11-1/2' *Groundwater seepage not encountered	15

NOTES FOR COLUMNS:

1. SAMPLE AT AVERAGE SAMPLING DEPTH

SOIL DESCRIPTION MODIFIERS:

TRACE 0 - 10%

LITTLE 10 - 20%

SOME 20 - 35%

AND OVER 35%

Typist/Date: sjs/mh 06/08

Sheet: 1 of 1

PLATE: 3F

MELICK-TULLY AND ASSOCIATES, P.C.
Geotechnical Engineers and Environmental Consultants

LOG OF TEST PIT

TEST PIT NO: 7

COMPLETION DATE: 6/23/08

SURFACE ELEVATION: +98 ft (±)

WATER LEVEL: *

JOB NUMBER: 4760-006*1D

READING DATE: 6/23/08

DEPTH	SAMPLES (1)	MOISTURE CONTENT (%)	SYMBOL	DESCRIPTION	DEPTH
				12" Topsoil	
	S1	14.3	SM	Brown fine to medium sand, and silt (moist)(medium dense)	
5				Red-brown fine to coarse sand, little silt, some fine to coarse gravel (moist)(medium dense)	5
10			SM	South Brunswick	10
15				- mottling @ 10' Test pit completed @ 12' *Groundwater seepage not encountered Mottling observed @ 10'	15

NOTES FOR COLUMNS:

1. SAMPLE AT AVERAGE SAMPLING DEPTH

SOIL DESCRIPTION MODIFIERS:

TRACE 0 - 10%

LITTLE 10 - 20%

SOME 20 - 35%

AND OVER 35%

Typist/Date: sjs/mh 06/08

Sheet: 1 of 1

PLATE: 3G



MELICK-TULLY AND ASSOCIATES, P.C.
Geotechnical Engineers and Environmental Consultants

LOG OF TEST PIT

TEST PIT NO: 8

COMPLETION DATE: 6/23/08

SURFACE ELEVATION: +108.5 ft (±)

WATER LEVEL: *

JOB NUMBER: 4760-006*1D

READING DATE: 6/23/08

DEPTH	SAMPLES (1)	MOISTURE CONTENT (%)	SYMBOL	DESCRIPTION	DEPTH
				36" Topsoil	
	S1				
5	S2		SM	Brown fine sand, and silt, trace fine gravel (moist)(medium dense) - hanging mottling observed @ 5'	5
10			SM	Red-brown fine to coarse sand, some silt (moist)(medium dense)	10
15				Test pit completed @ 11' *Groundwater seepage not encountered Hanging mottling observed @ 5'	15

NOTES FOR COLUMNS:

1. SAMPLE AT AVERAGE SAMPLING DEPTH

SOIL DESCRIPTION MODIFIERS:

TRACE 0 - 10%

LITTLE 10 - 20%

SOME 20 - 35%

AND OVER 35%

Typist/Date: sjs/mh 06/08

Sheet: 1 of 1

PLATE: 3H



MELICK-TULLY AND ASSOCIATES, P.C.
Geotechnical Engineers and Environmental Consultants

LOG OF TEST PIT

TEST PIT NO: 9

COMPLETION DATE: 6/26/08
JOB NUMBER: 4760-006*1D

SURFACE ELEVATION: +81 ft (±)

WATER LEVEL: 5'
READING DATE: 6/26/08

DEPTH	SAMPLES (1)	MOISTURE CONTENT (%)	SYMBOL	DESCRIPTION	DEPTH
	S1			30" Topsoil	
	S2	24.2	SM	Dark brown fine sand, and clayey silt, little fine to coarse gravel (wet)(dense)	
5			SM	Gray-brown (mottled) fine to medium sand, some silt, some fine to coarse gravel, with cobbles and boulders (wet)(medium dense)	5
	S3			South Brunswick page @ 5'	
	S4		ML	Dark brown clayey silt, little fine to coarse sand, little fine to coarse gravel (wet)(very stiff)	
10					10
				Test pit completed @ 11' Groundwater seepage encountered @ 5' Mottling observed @ 5'	
15					15

NOTES FOR COLUMNS:

1. SAMPLE AT AVERAGE SAMPLING DEPTH

SOIL DESCRIPTION MODIFIERS:

TRACE 0 - 10%

LITTLE 10 - 20%

SOME 20 - 35%

AND OVER 35%

Typist/Date: sjs/mh 06/08

Sheet: 1 of 1

PLATE: 31



MELICK-TULLY AND ASSOCIATES, P.C.
Geotechnical Engineers and Environmental Consultants



LEGEND

- TP-562 TEST PITS PERFORMED PREVIOUSLY
- TP-523 TEST PITS PERFORMED FOR THIS STUDY

NOTES

GENERAL LAYOUT WAS OBTAINED FROM A DRAWING PREPARED
BY VAN NOTE HARVEY ASSOC., DATED 3-24-2004

TEST PIT LOCATION PLAN		
PRINCETON FORRESTAL CENTER		
PRINCETON FORRESTAL CENTER NURSERY-BRIDGE AND LOOP ROAD		
SOUTH BRUNSWICK, NEW JERSEY		
SOR TESTING LABORATORIES, INC.		
Geotechnical Engineering - Materials Testing - Forensic Studies		
98 Sand Park Road, Cedar Grove, New Jersey 07009		
Prepared By: A.S.	Approved By: P.G.M.	DRAWING NO.
Date: 4-13-2004	Date: 4-14-2004	04-101
Scale: N.T.S.	Report No.: 04 04-1232	Sheet No. 1 of 1

**SOR TESTING
LABORATORIES, INC.**

TEST PIT LOG

**TEST
PIT NO. 522**

CLIENT	GSE	+77.4'
Princeton Forrestal Center	WATER LEVEL	See Below
PROJECT	DATE	3-31-04
Princeton Forrestal Center Nursery – Proposed Bridge	JOB NO.	04-101
LOCATION	REPORT NO.	04-1232
South Brunswick, New Jersey		

DEPTH FT.	DENSITY	MOISTURE	DESCRIPTION	REMARKS
1			Topsoil 16"	
2		Moist	Mottled Yellow brown to Gray coarse to fine SAND, and SILT, trace medium to fine Gravel	
3		Moist	Pale brown to Gray SILT, some fine Sand	3'-0"
4			Boulders @ 4' – 6'	6'-0"
5				Seepage @ 5', 7'
6				
7		Moist	Yellowish brown to Grayish brown coarse to fine Sand, some Silt, some coarse to fine Gravel/Cobbles	
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

South Brunswick

EXCAVATOR: R. Wagner

EQUIPMENT: Track Backhoe

STL REPRESENTATIVE: A. Sencar

**SOR TESTING
LABORATORIES, INC.**

TEST PIT LOG

**TEST
PIT NO. 523**

CLIENT
Princeton Forrestal Center

GSE +79.1'

WATER LEVEL See Below

PROJECT
Princeton Forrestal Center Nursery – Proposed Bridge

DATE 3-31-04

LOCATION
South Brunswick, New Jersey

JOB NO. 04-101

REPORT NO. 04-1232

DEPTH FT.	DENSITY	MOISTURE	DESCRIPTION	REMARKS
1			Topsoil 16"	
2				
3		Moist	Yellowish brown and gray coarse to fine Sand, some Clayey Silt, and coarse to fine Gravel, trace roots (Fill) 3'-0"	
4		Moist	Red brown, Gray, Yellow brown coarse to fine Sand, some coarse to fine Gravel/Cobbles. w/re (Fill)	
5				Seepage 3', 5', 6', 8'
6				
7				
8		Moist	Mottled Gray to Yellowish brown Clayey SILT, and coarse to fine Sand, some coarse to fine Gravel	
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

South Brunswick

EXCAVATOR: R. Wagner

EQUIPMENT: Backhoe

STL REPRESENTATIVE: A. Sencar

**SOR TESTING
LABORATORIES, INC.**

TEST PIT LOG

**TEST
PIT NO. 528**

CLIENT	GSE	+101.0'
Princeton Forrestal Center	WATER LEVEL	NE
PROJECT	DATE	3-31-04
Princeton Forrestal Center Nursery -- Proposed Loop Road	JOB NO.	04-101
LOCATION	REPORT NO.	041232
South Brunswick, New Jersey		

DEPTH FT.	DENSITY	MOISTURE	DESCRIPTION	REMARKS
1			Topsoil 5"	
2			Yellowish brown medium to fine SAND, and Silt, trace medium to fine Gravel	
3				
4				4'-0"
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

Test Pit completed @ 8'-0"

South Brunswick

EXCAVATOR: R. Wagner

EQUIPMENT: Backhoe

STL REPRESENTATIVE: A. Sencar

**SOR TESTING
LABORATORIES, INC.**

TEST PIT LOG

**TEST
PIT NO. 534**

CLIENT	GSE	+112.8'
Princeton Forrestal Center	WATER LEVEL	See Below
PROJECT	DATE	3-31-04
Princeton Forrestal Center Nursery - Proposed Loop Road	JOB NO.	04-101
LOCATION	REPORT NO.	04-1232
South Brunswick, New Jersey		

DEPTH FT.	DENSITY	MOISTURE	DESCRIPTION	REMARKS
1		Moist	Topsoil 8"	
2		Moist	Pale Brown SILT, some fine Sand	
3		Moist		
4		Moist		Seepage @ 4'
5		Moist	Mottled Gray to Yellowish brown Clayey SILT, some medium to fine Sand	
6		Moist		6'-0"
7		Moist	Gray Clayey SILT, some medium to fine Sand, little coarse to fine Gravel	
8		Moist		
9		Moist	Test Pit completed @ 8'-0"	
10		Moist		
11		Moist		
12		Moist		
13		Moist		
14		Moist		
15		Moist		
16		Moist		
17		Moist		
18		Moist		
19		Moist		
20		Moist		

EXCAVATOR: R. Wagner

EQUIPMENT: Track Backhoe

STL REPRESENTATIVE: A. Sencar

SOR TESTING LABORATORIES, INC.		TEST PIT LOG	TEST PIT NO. 562
CLIENT	Princeton Forrestal Center	GSE	NA
PROJECT	Princeton Forrestal Center Nursery	WATER LEVEL	10'
LOCATION	South Brunswick, New Jersey	DATE	7-9-03
		JOB NO.	03-265
		REPORT NO.	03-4024
DEPTH FT.	DENSITY	MOISTURE	DESCRIPTION
1			Topsoll 6"
2			Brown coarse fine Sand, and Silt, some coarse to fine Gravel
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			-@ 12' becoming more sandy
14			
15			
16			
17			
18			
19			
20			
		Test Pit Location: 557545.0867 461044.7170	
South Brunswick			
soilpage @ 10'			
S-1 2' - 8'			
S-2 8' - 13'			

EXCAVATOR: R. Wagner

EQUIPMENT: Backhoe

STL REPRESENTATIVE: A. Sencar

APPENDIX B



Scale

0 200 400
Feet

Legend

- Remediation Area
- Sample Locations

Note:

Remedial areas are not delineated. The approximate dimensions shown on this map are based on limited data and review of historic aerial photographs / farm layout. Delineation of these areas is required, and the actual extent of the remediation will depend on the results of delineation sampling. This map is only for preliminary approximation.

Sample Location Map

Princeton Nurseries Site
Plainsboro, New Jersey

Source: NJOIT, OGIS. 2021. NJ 2020 High Resolution Orthophotography.

EcolSciences, Inc.
Environmental Management & Regulatory Compliance

Date: 6/16/22

Scale 1:9,224