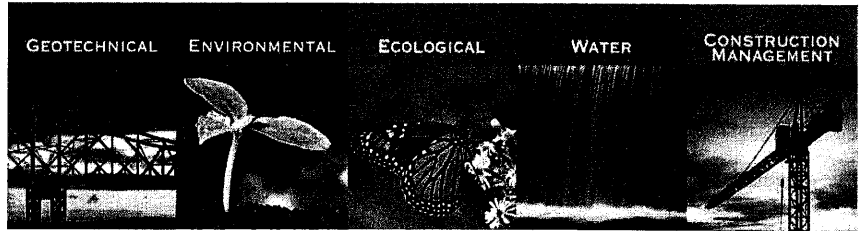




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SITE-SPECIFIC SOIL MAPPING REPORT

Stevens Hill Road

Tax Map 46, Lot 7

Nottingham, New Hampshire

August 2022

File No. 04.0191429.00



PREPARED FOR:

Mr. Joseph Falzone
Stratham, New Hampshire

GZA GeoEnvironmental, Inc.

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VIA EMAIL

August 11, 2022
File No. 04.0191429.00

Mr. Joseph Falzone
7B Emery Lane
Stratham, New Hampshire 03885

Re: Site-Specific Soil Mapping Report
Stevens Hill Road
Tax Map 46, Lot 7
Nottingham, New Hampshire

Dear Mr. Falzone:

This report presents the findings of Site-Specific Soil Mapping conducted on Tax Map 46, Lot 7, located on Stevens Hill Road in Nottingham, New Hampshire. This report summarizes the results of the field work completed during May and July 2022 to identify Site soils and develop mapping.

Should you have any questions, please feel free to contact Conor Madison at 603-232-8784 or conor.madison@gza.com.

Very truly yours,

GZA GEOENVIRONMENTAL, INC.

Conor Madison, CPESC, CESSWI
Project Manager

Deborah M. Zarta Gier, CNRP
Consultant/Reviewer

Tracy L. Tarr, CWS, CWB, CESSWI
Associate Principal

James Long, CWS, CSS
Soil Scientist

Attachment: Site-Specific Soil Mapping Report



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1.0 INTRODUCTION

This report presents the findings of Site-Specific Soil and High Intensity Site Survey Mapping field work conducted by GZA GeoEnvironmental, Inc. (GZA) on Stevens Hill Road in Nottingham, New Hampshire (i.e. Tax Map 46, Lot 7, Site) during May and July 2022. The Site is approximately 60 acres and is bordered to the south and west by Stevens Hill Road, to the north by undeveloped forested land, and to the east by the Bean River. The Site is undeveloped and predominately forested. Based on correspondence with you, we understand you hold a purchase and sales agreement with the property owners (George Williams and Ann Kelley Day) and are proposing to subdivide eight frontage lots.

GZA understands homes associated with the proposed residential development are proposed to be located in close proximity to Stevens Hill Road to facilitate the establishment of a conservation easement bordering the Bean River. GZA also understands a site-specific soil map is required to support lot and septic design for the development of the Site, to be completed by others (see **Figure 1 – Site Specific Soil Map**). This report is subject to the Limitations in **Appendix A**.

2.0 METHODOLOGY

The soil mapping of the Site was conducted in accordance with the standards set forth in the Society of Soil Scientists of Northern New England (SSSNE) Publication No. 3 "Site-Specific Soil Mapping Standards for New Hampshire and Vermont, Version 7.0" dated July 2021 by New Hampshire Certified Soil Scientist (CSS) James H. Long (CSS #15). The Site-Specific Soil Mapping Standards are based on a universally recognized taxonomic system of soil classification and are supported by national soil mapping standards established by the USDA National Cooperative Soil Survey.

This investigation has been prepared based on a combination of publicly available databases and site-specific data collected by on-site observations. This report provides soil information including soil drainage, soil classification, physical characteristics, and depth to bedrock (if encountered). GZA assessed soil characteristics through the evaluation of hand-dug test pits conducted during wetland delineation on May 6 and 7, 2022. Hand-dug test pits were completed with a tile spade and soil auger and were dug to a minimum depth of 40 inches for the purpose of evaluating and identifying the soils' characteristics. In addition, GZA evaluated 18 machine excavated test pits on July 11 and 12, 2022. Each machine excavated test pit was logged to a minimum depth of 40 inches for supporting data to be used by others in septic design. Locations were selected when changes in slope, vegetation or soil surface were observed. When changes were noted from one hole to the next involving soil drainage or parent material, a soil boundary was placed on the map between the holes to reflect the transition between the soils as it occurs on the landscape. The slopes of the soil map units were measured in the field using a clinometer and augmented by the topography shown on the Site Plan prepared by Beals Associates., dated June, 2022 (see **Figure 1 – Site Specific Soil Map**). For the purposes of this report, GZA considered the minimum size delineation area of a Site-Specific Soil Survey map unit as 2,000 square feet, with the exception being poorly or very poorly drained soil areas that are jurisdictional wetlands, as derived from the *High Intensity Soil Mapping Standards for New Hampshire*, July 2021 by the Society of Soil Scientists of Northern New England.



GZA used the following resources during data collection to supplement on-site observations:

- Natural Resource Conservation Service (NRCS) Web Soil Survey;¹ and
- New Hampshire Statewide Geographic Information System Clearinghouse (NH GRANIT)² LiDAR- Based Bare Earth Hillshade of the Site.

The Web Soil Survey (WSS) provides soil data and information produced by the National Cooperative Soil Survey. The WSS data was used to gather information prior to field work to use as a baseline of soil units that may be observed during field investigations. Use of the online resource NH GRANIT LiDAR- Based Bare Earth Hillshade of the project area provided imagery to assist in soil unit delineation, to identify changes in topography to help identify ideal locations to dig auger holes and test pits and identify potential disturbed units.

The on-site investigation was conducted on May 6 and 7, and July 11 and 12, 2022, using a base plan with a 1:50 scale and 2-foot topographic contours. In accordance with the Site-Specific Soil Mapping standards, the identified individual soil map units were correlated to the New Hampshire State-Wide Numerical Soils Legend maintained by the New Hampshire State office of the NRCS. Soil characteristics for each of the units comply with the Range in Characteristics described in the Official Series Descriptions for each map unit. In addition, GZA has provided High Intensity Soil Survey (HISS) soil unit correlations in the event local or state agencies request this data.

3.0 RESULTS

3.1 SITE DESCRIPTION

Based on field observations, the Site is predominantly undeveloped forest underlain by sandy loam and lodgement till, and the northern part of the Site borders a portion of the Bean River. GZA did not observe disturbed soil units on Site (see Figure 1 – Site-Specific Soil Map).

3.2 SOIL MAP UNIT DESCRIPTIONS

Individual soil map units are summarized in Table 1 – Soil Map Units below:

Soil ID (SSSM)	Soil Type	Soil ID (HISS)
45	Montauk, very stony	223
49	Whitman (very poorly drained), stony	623
449	Scituate, very stony	323
657	Ridgebury (poorly drained), stony	623

Slope designations differ slightly between SSSM standards and HISS standards and are broken out below for conversion purposes in Table 2.

Slope Class	SSSM	HISS
A	0-3%	-
B	3-8%	0-8%

¹ www.websoilsurvey.sc.egov.usda.gov/App/HomePage.htm

² <https://granitview.unh.edu/>



C	8-15%	8-15%
D	15-25%	15-25%
E	25-50%	25-35%
F	>50%	>35%

The individual soil map unit descriptions of the soils identified on the Site and summarized in Table 1 are as follows.

45B – Montauk, very stony, 3 to 8 percent slopes

This map unit typically consists of well drained soils formed in lodgment or flow till derived primarily from granitic materials with lesser amounts of gneiss and schist. The soils are very deep to bedrock and moderately deep to a densic contact. These soils are typically located upland hills and moraines.

Typically, the surface layer is very dark gray loam about 4 inches thick. The subsoil is brown loam and up to 34 inches thick. The substratum, to a depth of 72 inches or more, is strong brown to dark yellowish brown gravelly loamy sand.

Included with this mapping are small areas of slopes less than 3 percent and greater than 8 percent; and moderately well drained Scituate and poorly drained Ridgebury. These inclusions make up as much as 10 percent of the map unit.

45C - Montauk, very stony, 8 to 15 percent slopes

This map unit typically consists of well drained soils formed in lodgment or flow till derived primarily from granitic materials with lesser amounts of gneiss and schist. The soils are very deep to bedrock and moderately deep to a densic contact. These soils are typically located upland hills and moraines.

Typically, the surface layer is very dark gray loam about 4 inches thick. The subsoil is brown loam and up to 34 inches thick. The substratum, to a depth of 72 inches or more, is strong brown to dark yellowish brown gravelly loamy sand.

Included with this mapping are small areas of slopes less than 8 percent and greater than 15 percent; and moderately well drained Scituate and poorly drained Ridgebury. These inclusions make up as much as 10 percent of the map unit.

45D – Montauk, very stony, 15 to 25 percent slopes

This map unit typically consists of well drained soils formed in lodgment or flow till derived primarily from granitic materials with lesser amounts of gneiss and schist. The soils are very deep to bedrock and moderately deep to a densic contact. These soils are typically located upland hills and moraines.

Typically, the surface layer is very dark gray loam about 4 inches thick. The subsoil is brown loam and up to 34 inches thick. The substratum, to a depth of 72 inches or more, is strong brown to dark yellowish brown gravelly loamy sand.



Included with this mapping are small areas of slopes less than 15 percent and greater than 25 percent; and moderately well drained Scituate and poorly drained Ridgebury. These inclusions make up as much as 10 percent of the map unit.

45E – Montauk, very stony, 25 to 50 percent slopes

This map unit typically consists of well drained soils formed in lodgment or flow till derived primarily from granitic materials with lesser amounts of gneiss and schist. The soils are very deep to bedrock and moderately deep to a densic contact. These soils are typically located upland hills and moraines.

Typically, the surface layer is very dark gray loam about 4 inches thick. The subsoil is brown loam and up to 34 inches thick. The substratum, to a depth of 72 inches or more, is strong brown to dark yellowish brown gravelly loamy sand.

Included with this mapping are small areas of slopes less than 25 percent and greater than 50 percent; and moderately well drained Scituate and poorly drained Ridgebury. These inclusions make up as much as 10 percent of the map unit.

49A - Whitman (very poorly drained), loam, 0 to 3 percent slopes

This map unit consists of very deep, very poorly drained soils formed in lodgment till derived mainly from granite, gneiss, and schist. They are shallow to a densic contact. These soils are nearly level or gently sloping soils in depressions and drainageways on uplands.

Typically, the loamy surface layer is black and dark gray about 10 inches thick. The subsoil is gray fine sandy loam and about 18 inches thick. The substratum, to a depth of 65 inches or more, is light olive gray fine sandy loam.

Included with this mapping are small areas of slopes greater than 3 percent; and moderately well drained Scituate and poorly drained Ridgebury soils. These inclusions make up as much as 10 percent of the map unit.

449B – Scituate, very stony, 3 to 8 percent slopes

This map unit consists of moderately well drained soils formed in a loamy eolian influenced mantle of till underlain by sandy lodgement till. The soils are very deep to bedrock and moderately deep to a densic contact. They are nearly level through moderately steep soils on glaciated uplands.

Typically, the fine sandy loam surface layer is black and about 2 inches thick. The subsoil is strong brown and about 8 inches thick. The substratum, to a depth of 65 inches or more, is yellowish brown very gravelly loamy sand.

Included with this mapping are small areas of slopes less than 3 percent and greater than 8 percent; and moderately well drained Scituate and poorly drained Ridgebury soils. These inclusions make up as much as 10 percent of the map unit.

449C – Scituate, very stony, 8 to 15 percent slopes



This map unit consists of moderately well drained soils formed in a loamy eolian influenced mantle of till underlain by sandy lodgement till. The soils are very deep to bedrock and moderately deep to a densic contact. They are nearly level through moderately steep soils on glaciated uplands.

Typically, the fine sandy loam surface layer is black and about 2 inches thick. The subsoil is strong brown and about 8 inches thick. The substratum, to a depth of 65 inches or more, is yellowish brown very gravelly loamy sand.

Included with this mapping are small areas of slopes less than 8 percent and greater than 15 percent; and moderately well drained Scituate and poorly drained Ridgebury soils. These inclusions make up as much as 10 percent of the map unit.

449D – Scituate, very stony, 15 to 25 percent slopes

This map unit consists of moderately well drained soils formed in a loamy eolian influenced mantle of till underlain by sandy lodgement till. The soils are very deep to bedrock and moderately deep to a densic contact. They are nearly level through moderately steep soils on glaciated uplands.

Typically, the fine sandy loam surface layer is black and about 2 inches thick. The subsoil is strong brown and about 8 inches thick. The substratum, to a depth of 65 inches or more, is yellowish brown very gravelly loamy sand.

Included with this mapping are small areas of slopes less than 15 percent and greater than 25 percent; and moderately well drained Scituate and poorly drained Ridgebury soils. These inclusions make up as much as 10 percent of the map unit.

449E – Scituate, very stony, 25 to 50 percent slopes

This map unit consists of moderately well drained soils formed in a loamy eolian influenced mantle of till underlain by sandy lodgement till. The soils are very deep to bedrock and moderately deep to a densic contact. They are nearly level through moderately steep soils on glaciated uplands.

Typically, the fine sandy loam surface layer is black and about 2 inches thick. The subsoil is strong brown and about 8 inches thick. The substratum, to a depth of 65 inches or more, is yellowish brown very gravelly loamy sand.

Included with this mapping are small areas of slopes less than 25 percent and greater than 50 percent; and moderately well drained Scituate and poorly drained Ridgebury soils. These inclusions make up as much as 10 percent of the map unit.

657A - Ridgebury (poorly drained), fine sandy loam, 0 to 3 percent slopes

This map unit consists of very deep, somewhat poorly and poorly drained soils formed in lodgment till derived mainly from granite, gneiss and/or schist. They are commonly shallow to a densic contact. They are nearly level to gently sloping soils in depressions in uplands. They also occur in drainageways in uplands, in toeslope positions of hills, drumlins, and ground moraines, and in till plains.



Typically, the fine sandy loam surface layer is black and about 5 inches thick. The subsoil is brown and about 18 inches thick. The substratum, to a depth of 64 inches or more, is gray gravelly sandy loam.

Included with this mapping are small areas of slopes greater than 3 percent; and moderately well drained Scituate and poorly drained Ridgebury soils. These inclusions make up as much as 10 percent of the map unit.

657B - Ridgebury (poorly drained), fine sandy loam, 3 to 8 percent slopes

This map unit consists of very deep, somewhat poorly and poorly drained soils formed in lodgment till derived mainly from granite, gneiss and/or schist. They are commonly shallow to a densic contact. They are nearly level to gently sloping soils in depressions in uplands. They also occur in drainageways in uplands, in toeslope positions of hills, drumlins, and ground moraines, and in till plains.

Typically, the fine sandy loam surface layer is black and about 5 inches thick. The subsoil is brown and about 18 inches thick. The substratum, to a depth of 64 inches or more, is gray gravelly sandy loam.

Included with this mapping are small areas of slopes less than 3 percent and greater than 8 percent; and moderately well drained Scituate and poorly drained Ridgebury soils. These inclusions make up as much as 10 percent of the map unit.

3.3 HYDROLOGIC SOIL GROUP CORRELATION

In order to correlate the soil map units identified, as part of this soil survey, to the appropriate hydrologic soil group, we referenced the Society of Soil Scientists of Northern New England “Ksat Values for New Hampshire Soils, Special Publication No. 5, September 2009.”³ Table 2 – Hydrologic Soil Group Correlation provides the correlation of the identified soil map units to the appropriate hydrologic soil group. Identification of correlating hydrologic soil group provides context for infiltration rates for stormwater management planning.

Soil ID (SSSM)	Soil Type	Soil ID (HISS)	Hydrologic Soil Group	Ksat Value (low C) Inch/Hour
45	Montauk, very stony	223	C	0.06
49	Whitman (very poorly drained), stony	623	D	0.00
449	Scituate, very stony	323	C	0.06
657	Ridgebury (poorly drained), stony	623	C	0.00

4.0 FINDINGS AND CONCLUSIONS

GZA has completed Site-Specific Soil Mapping of the Site in support of the proposed residential subdivision project. The following is a summary of our findings and conclusions:

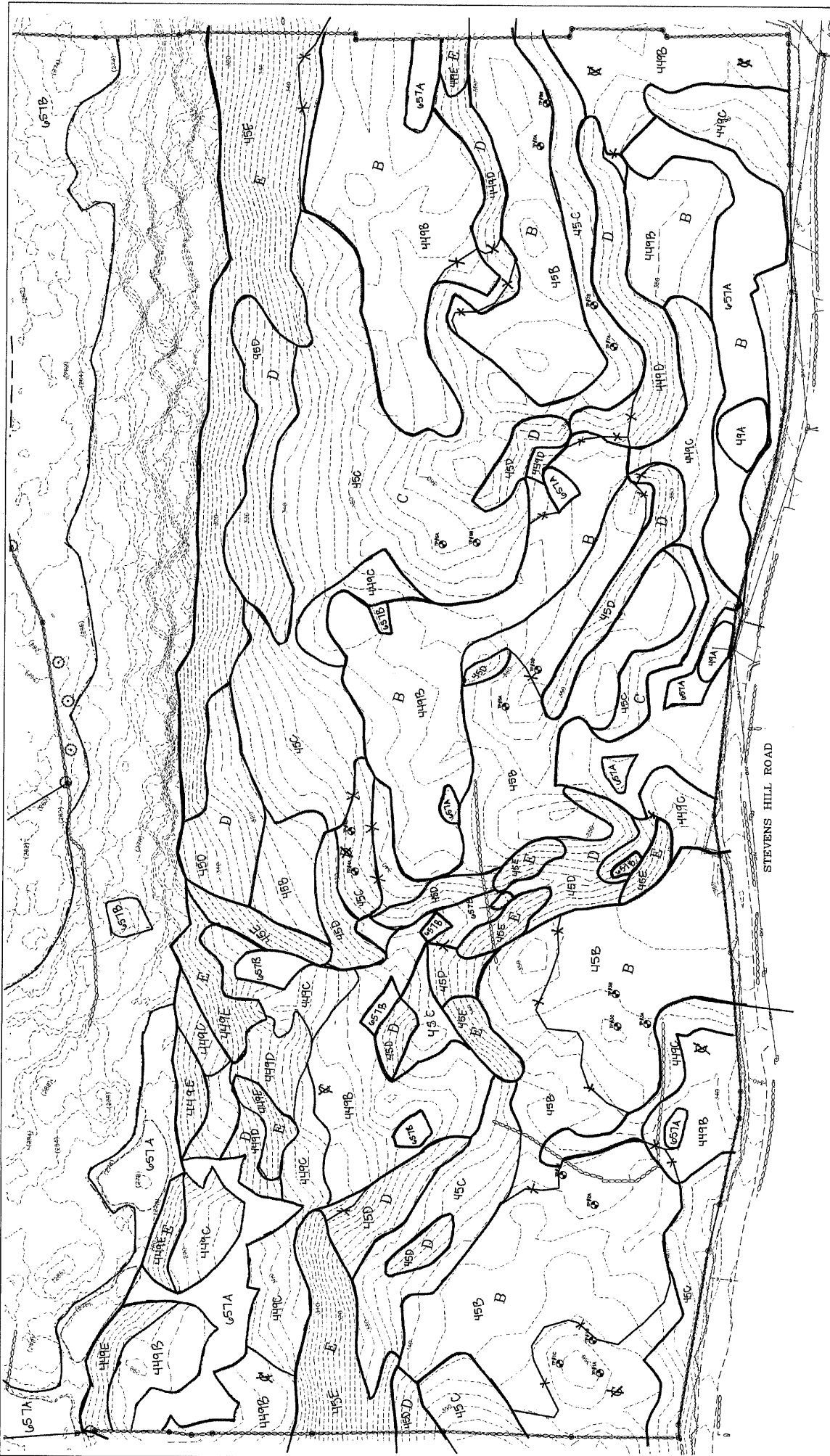
³ www.sssnne.org/publications.html



- The Site is predominantly forested and consists of a mix of sandy loam and lodgment till, with no evidence of human disturbed soils at the Site Specific Soil Map scale.
 - a. Upland soils consist of Montauk and Scituate soils located in the southern and southeastern portion of the Site bordering Stevens Hill Road.
 - b. Poorly drained soils (Ridgebury) were identified along the eastern portion of the Site bordering the Bean River.
 - c. Very poorly drained soils (Whitman) were identified in the southern portion of the Site near Stevens Hill Road associated with confirmed vernal pools (see “Wetland Delineation and Vernal Pool Assessment Report” prepared by GZA dated July 26, 2022). The observed very poorly drained soils are bordered by poorly drained soils (Ridgebury).



Figure 1 (Hand Annotated)– Site Specific Soil Map



FOR:
RESIDENTIAL DEVELOPMENT
OF
NOTTINGHAM, NH

DATE: JUNE 2022 SCALE: 1"=100'
PROJ. NO: NH-1435 SHEET NO: 8 OF 9

REVISIONS:

NO.	DATE	DESCRIPTION

APPROVAL BLOCK

APPROVED TOWN OF NOTTINGHAM PLANNING BOARD

COMMISSIONER _____ DATE _____

1" = 50'



Appendix A - Natural Resource Limitations



USE OF REPORT

1. GZA GeoEnvironmental, Inc. (GZA) has prepared this report on behalf of, and for the exclusive use of Joseph Falzone ("Client") for the stated purpose(s) and location(s) identified in the report. Use of this report, in whole or in part, at other locations, or for other purposes, may lead to inappropriate conclusions; and we do not accept any responsibility for the consequences of such use(s). Further, reliance by any party not identified in the agreement, for any use, without our prior written permission, shall be at that party's risk, and without any liability to GZA.

STANDARD OF CARE

2. GZA's findings and conclusions are based on the work conducted as part of the Scope of Services set forth in the Report and/or proposal, and reflect our professional judgment. These findings and conclusions must be considered not as scientific or engineering certainties, but rather as our professional opinions concerning the data gathered and observations made during the course of our work. Conditions other than described in this report may be found at the subject location(s).
3. GZA's services were performed using the degree of skill and care ordinarily exercised by qualified professionals performing the same type of services, at the same time, under similar conditions, at the same or a similar property. No warranty, expressed or implied, is made.

LIMITS TO OBSERVATIONS

4. Natural resource characteristics are inherently variable. Biological community composition and diversity can be affected by seasonal, annual or anthropogenic influences. In addition, soil conditions are reflective of subsurface geologic materials, the composition and distribution of which vary spatially.
5. The observations described in this report were made on the dates referenced and under the conditions stated therein. Conditions observed and reported by GZA reflect the conditions that could be reasonably observed based upon the visual observations of surface conditions and/or a limited observation of subsurface conditions at the specific time of observation. Such conditions are subject to environmental and circumstantial alteration and may not reflect conditions observable at another time.
6. The conclusions and recommendations contained in this report are based upon the data obtained from a limited number of surveys performed during the course of our work on the site, as described in the Report. There may be variations between these surveys and other past or future surveys due to inherent environmental and circumstantial variability.

RELIANCE ON INFORMATION FROM OTHERS

7. Preparation of this Report may have relied upon information made available by Federal, state and local authorities; and/or work products prepared by other professionals as specified in the report. Unless specifically stated, GZA did not attempt to independently verify the accuracy or completeness of that information.

COMPLIANCE WITH REGULATIONS AND CODES

8. GZA's services were performed to render an opinion on the presence and/or condition of natural resources as described in the Report. Standards used to identify or assess these resources as well as regulatory jurisdiction, if any, are stated in the Report. Standards for identification of jurisdictional resources and regulatory control over them may vary between governmental agencies at Federal, state and local levels and are subject to change over time which may affect the conclusions and findings of this report.



NEW INFORMATION

9. In the event that the Client or others authorized to use this report obtain information on environmental regulatory compliance issues at the site not contained in this report, such information shall be brought to GZA's attention forthwith. GZA will evaluate such information and, on the basis of this work, may modify the conclusions stated in this report.

ADDITIONAL SERVICES

10. GZA recommends that we be retained to provide further investigation, if necessary, which would allow GZA to (1) observe compliance with the concepts and recommendations contained herein; (2) evaluate whether the manner of implementation creates a potential new finding; and (3) evaluate whether the manner of implementation affects or changes the conditions on which our opinions were made.



Appendix B - Disturbed Soil Mapping Unit Supplement for DES AOT

Supplemental Symbols

The five components of the Disturbed Soil Mapping Unit Supplement are as follows:

Symbol 1: Drainage Class

- a - Excessively Drained
- b - Somewhat Excessively Drained
- c - Well Drained
- d - Moderately Well Drained
- e - Somewhat Poorly Drained
- f - Poorly Drained
- g - Very Poorly Drained
- h - Not Determined

Symbol 2: Parent Material (of naturally formed soil only, if present)

- a - No natural soil within 60"
- b - Glaciofluvial Deposits (outwash/terraces of sand or sand and gravel)
- c - Glacial Till Material (active ice)
- d - Glaciolacustrine very fine sand and silt deposits (glacial lakes)
- e - Loamy/sandy over Silt/Clay deposits
- f - Marine Silt and Clay deposits (ocean waters)
- g - Alluvial Deposits (floodplains)
- h - Organic Materials-Fresh water Bogs, etc.
- j - Organic Materials-Tidal Marsh

Symbol 3: Restrictive/Impervious Layers

- a - None
- b - Boulderly surface with more than 15% of the surface covered with boulders
- c - Mineral restrictive layer(s) are present in the soil profile less than 40 inches below the soil surface such as hard pan, platy structure or clayey texture with consistence of at least firm (i.e. more than 20 newtons). For other examples of soil characteristics that qualify for restrictive layers, see "Soil Manual for Site evaluations in NH" 2nd Ed., (page 3-17, figure 3-14)
- d - Bedrock in the soil profile; 0-20 inches
- e - Bedrock in the soil profile; 20-60 inches
- f - Areas where depth to bedrock is so variable that a single soil type cannot be applied, will be mapped as a complex of soil types
- g - Subject to Flooding
- h - Man-made impervious surface including pavement, concrete, or built-up surfaces (i.e. buildings) with no morphological restrictive layer within control section

Symbol 4: Estimated Ksat* (most limiting layer excluding symbol 3h above).

- a - High.
- b - Moderate
- c - Low
- d - Not determined

*See "Guidelines for Ksat Class Placement" in Chapter 3 of the Soil Survey Manual, USDA

Symbol 5: Hydrologic Soil Group*

- a - Group A
- b - Group B
- c - Group C
- d - Group D
- e - Not determined

*excluding man-made surface impervious/restrictive layers



Appendix C - Photo Log

PHOTO LOG
Stevens Hill Road
Nottingham, New Hampshire

Photos Taken: May 6, 7, and July 11, 12, 2022



Photograph No. 1: Looking easterly across the Site from the northwestern portion of the Site.



Photograph No. 2: Looking westerly across the Site from the northeastern portion of the Site.

PHOTO LOG
Stevens Hill Road
Nottingham, New Hampshire

Photos Taken: May 6, 7, and July 11, 12, 2022



Photograph No. 3: Looking at Test Pit 1C, showing Montauk, very stony soil.



Photograph No. 4: Looking at Test Pit 3B, showing Montauk, very stony soil

PHOTO LOG
Stevens Hill Road
Nottingham, New Hampshire

Photos Taken: May 6, 7, and July 11, 12, 2022



Photograph No. 5: Looking at Test Pit 5B showing Montauk, very stony soil.



Photograph No. 6: Looking at Test Pit 6B, showing Montauk, very stony soil.

PHOTO LOG
Stevens Hill Road
Nottingham, New Hampshire

Photos Taken: May 6, 7, and July 11, 12, 2022



Photograph No. 7: View of Test Pit 8A, showing Montauk, very stony soil.



Appendix D – Test Pit Logs



TEST PIT EVALUATION REPORT
Stevens Hill Road, Tax Map 46, Lot 7
Nottingham, New Hampshire

File No. 04.0191429.00

Evaluated by: James H. Long, CSS

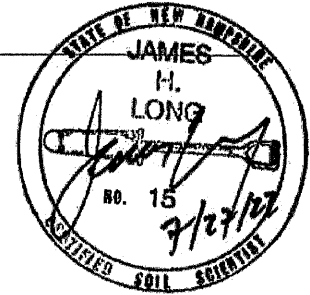
Designer: 988

Date: 7/12/22

Test Pit No. 1A

NOTES: Some large boulders

Depth (inches)	Description
2-0	Forest mat
0-4	10YR4/2 Dark grayish brown, fine sandy loam, granular, friable
4-18	10YR5/6 Yellowish brown, fine sandy loam, granular, friable
18-32	10YR6/4 Light yellowish brown, fine sandy loam, granular, friable
32-62	2.5Y5/3 Light olive brown, loamy sand, massive, firm, with 2.5Y6/2 Light brownish gray and 7.5YR4/6 Strong brown redoximorphic features

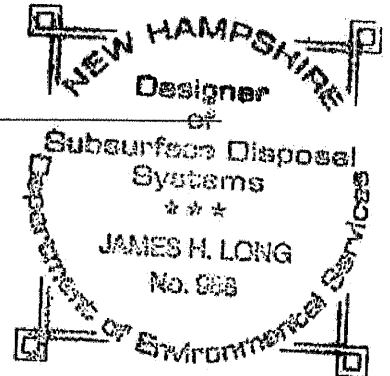


Estimated Seasonal High Water Table @	32	inches	Observed Water Table @	none	inches
Restrictive @	32	inches	Roots @	36	inches
Refusal @	none	inches			
Percolation Rate =	8	Minutes / Inch @ 30			

Test Pit No. 1B

NOTES: Some large boulders

Depth (inches)	Description
2-0	Forest mat
0-4	10YR4/2 Dark grayish brown, fine sandy loam, granular, friable
4-18	10YR5/6 Yellowish brown, fine sandy loam, granular, friable
18-36	10YR6/4 Light yellowish brown, fine sandy loam, granular, friable
36-72	2.5Y5/3 Light olive brown, loamy sand, massive, firm, with 2.5Y6/2 Light brownish gray and 7.5YR4/6 Strong brown redoximorphic features



Estimated Seasonal High Water Table @	36	inches	Observed Water Table @	none	inches
Restrictive @	36	inches	Roots @	36	inches
Refusal @	None	inches			
Percolation Rate =	8	Minutes / Inch @ 30			



TEST PIT EVALUATION REPORT
Stevens Hill Road, Tax Map 46, Lot 7
Nottingham, New Hampshire

File No. 04.0191429.00

Evaluated by: James H. Long, CSS

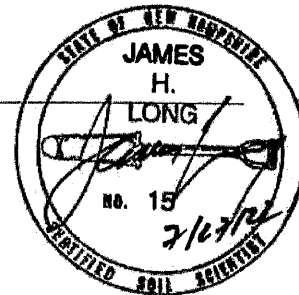
Designer: 988

Date: 7/12/22

Test Pit No. 1C

NOTES: Some large boulders

Depth (inches)	Description
2-0	Forest mat
0-4	10YR4/2 Dark grayish brown, fine sandy loam, granular, friable
4-16	10YR5/6 Yellowish brown, fine sandy loam, granular, friable
16-32	10YR6/4 Light yellowish brown, fine sandy loam, granular, friable
32-66	2.5Y5/3 Light olive brown, loamy sand, massive, firm, with 2.5Y6/2 Light brownish gray and 7.5YR4/6 Strong brown redoximorphic features

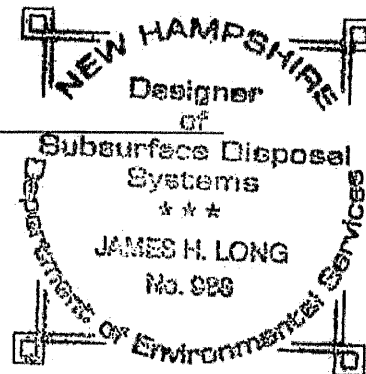


Estimated Seasonal High Water Table @	32	inches	Observed Water Table @	none	inches
Restrictive @	32	inches	Roots @	20	inches
Refusal @	none	inches			
Percolation Rate =	8	Minutes / Inch @ 30			

Test Pit No. 2A

NOTES: Some large boulders

Depth (inches)	Description
2-0	Forest mat
0-4	10YR4/2 Dark grayish brown, fine sandy loam, granular, friable
4-16	10YR5/6 Yellowish brown, fine sandy loam, granular, friable
16-32	10YR6/4 Light yellowish brown, fine sandy loam, granular, friable
32-76	2.5Y5/3 Light olive brown, loamy sand, massive, firm, with 2.5Y6/2 Light brownish gray and 7.5YR4/6 Strong brown redoximorphic features



Estimated Seasonal High Water Table @	32	inches	Observed Water Table @	none	inches
Restrictive @	32	inches	Roots @	32	inches
Refusal @	none	inches			
Percolation Rate =	8	Minutes / Inch @ 30			



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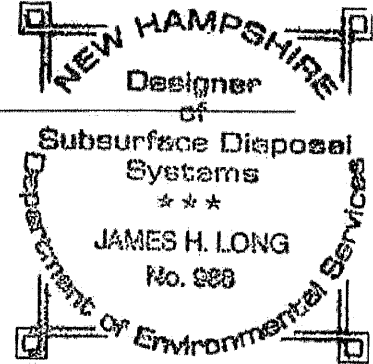
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Evaluated by: James H. Long, CSS Designer: 988

Date: 7/12/22

Test Pit No. 2B NOTES: Some large boulders

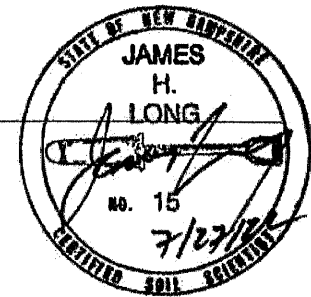
Depth (inches)	Description
2-0	Forest mat
0-4	10YR4/2 Dark grayish brown, fine sandy loam, granular, friable
4-16	10YR5/6 Yellowish brown, fine sandy loam, granular, friable
16-32	10YR6/4 Light yellowish brown, fine sandy loam, granular, friable
32-	2.5Y5/3 Light olive brown, loamy sand, massive, firm, with 2.5Y6/2 Light brownish gray and 7.5YR4/6 Strong brown redoximorphic features



Estimated Seasonal High Water Table @	32	inches	Observed Water Table @	none	inches
Restrictive @	32	inches	Roots @	36	inches
Refusal @	none	inches			
Percolation Rate =	8	Minutes / Inch @ 30			

Test Pit No. 3A NOTES: Some large boulders

Depth (inches)	Description
2-0	Forest mat
0-4	10YR4/2 Dark grayish brown, fine sandy loam, granular, friable
4-14	10YR5/6 Yellowish brown, fine sandy loam, granular, friable
14-28	10YR6/4 Light yellowish brown, fine sandy loam, granular, friable
28-74	2.5Y5/3 Light olive brown, loamy sand, massive, firm, with 2.5Y6/2 Light brownish gray and 7.5YR4/6 Strong brown redoximorphic features



Estimated Seasonal High Water Table @	28	inches	Observed Water Table @	none	inches
Restrictive @	28	inches	Roots @	30	inches
Refusal @	none	inches			
Percolation Rate =	8	Minutes / Inch @ 32			



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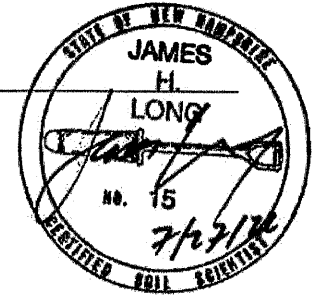
Evaluated by: James H. Long, CSS Designer: 988

Date: 7/12/22

Test Pit No. 3B

NOTES: Some large boulders, large white pine stump therefore, added TP 3C

Depth (inches)	Description
2-0	Forest mat
0-4	10YR4/2 Dark grayish brown, fine sandy loam, granular, friable
4-16	10YR5/6 Yellowish brown, fine sandy loam, granular, friable
16-30	10YR6/4 Light yellowish brown, fine sandy loam, granular, friable
30-48	2.5Y5/3 Light olive brown, loamy sand, massive, firm, with 2.5Y6/2 Light brownish gray and 7.5YR4/6 Strong brown redoximorphic features

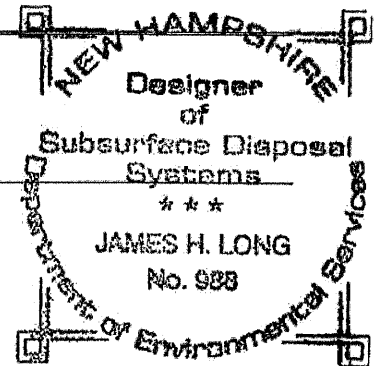


Estimated Seasonal High Water Table @	28	inches	Observed Water Table @	none	inches
Restrictive @	28	inches	Roots @	30	inches
Refusal @	72	inches			
Percolation Rate =	none	Minutes / Inch @ 28			

Test Pit No. 3C

NOTES: Large boulders

Depth (inches)	Description
2-0	Forest mat
0-4	10YR4/2 Dark grayish brown, fine sandy loam, granular, friable
4-16	10YR5/6 Yellowish brown, fine sandy loam, granular, friable
16-30	10YR6/4 Light yellowish brown, fine sandy loam, granular, friable
30-62	2.5Y5/3 Light olive brown, loamy sand, massive, firm, with 2.5Y6/2 Light brownish gray and 7.5YR4/6 Strong brown redoximorphic features



Estimated Seasonal High Water Table @	30	inches	Observed Water Table @	none	inches
Restrictive @	30	inches	Roots @	36	inches
Refusal @	none	inches			
Percolation Rate =	8	Minutes / Inch @ 30			



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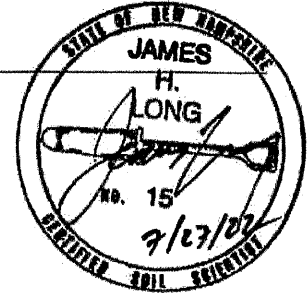
Designer: 988

Date: 7/12/22

Test Pit No. 4A

NOTES: Some large boulders

Depth (inches)	Description
2-0	Forest mat
0-4	10YR4/2 Dark grayish brown, fine sandy loam, granular, friable
4-16	10YR5/6 Yellowish brown, fine sandy loam, granular, friable
16-32	10YR6/4 Light yellowish brown, fine sandy loam, granular, friable
32-72	2.5Y5/3 Light olive brown, loamy sand, massive, firm, with 2.5Y6/2 Light brownish gray and 7.5YR4/6 Strong brown redoximorphic features

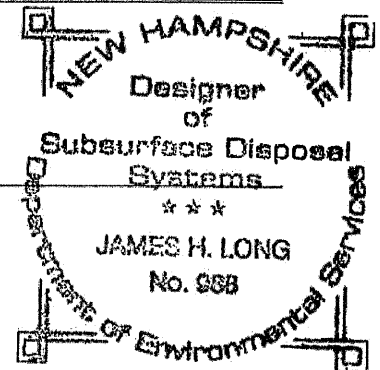


Estimated Seasonal High Water Table @	32	inches	Observed Water Table @	none	inches
Restrictive @	32	inches	Roots @	32	inches
Refusal @	none	inches			
Percolation Rate =	8	Minutes / Inch @ 30			

Test Pit No. 4B

NOTES: Some large boulders

Depth (inches)	Description
2-0	Forest mat
0-4	10YR4/2 Dark grayish brown, fine sandy loam, granular, friable
4-14	10YR5/6 Yellowish brown, fine sandy loam, granular, friable
14-30	10YR6/4 Light yellowish brown, fine sandy loam, granular, friable
30-74	2.5Y5/3 Light olive brown, loamy sand, massive, firm, with 2.5Y6/2 Light brownish gray and 7.5YR4/6 Strong brown redoximorphic features



Estimated Seasonal High Water Table @	30	inches	Observed Water Table @	none	inches
Restrictive @	32	inches	Roots @	32	inches
Refusal @	none	inches			
Percolation Rate =	8	Minutes / Inch @ 30			



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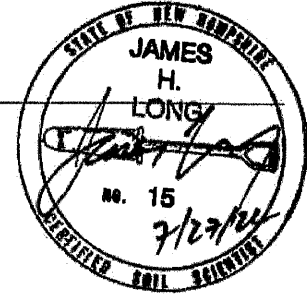
Designer: 988

Date: 7/12/22

Test Pit No. 5A

NOTES: Large boulders

Depth (inches)	Description
2-0	Forest mat
0-4	10YR4/2 Dark grayish brown, fine sandy loam, granular, friable
4-14	10YR5/6 Yellowish brown, fine sandy loam, granular, friable
14-30	10YR6/4 Light yellowish brown, fine sandy loam, granular, friable
30-76	2.5Y5/3 Light olive brown, loamy sand, massive, firm, with 2.5Y6/2 Light brownish gray and 7.5YR4/6 Strong brown redoximorphic features

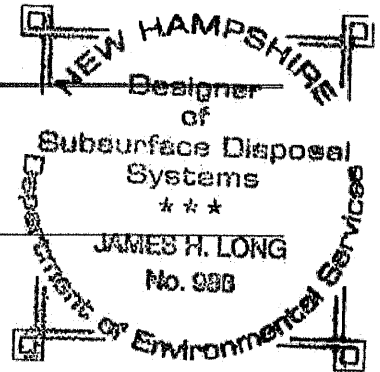


Estimated Seasonal High Water Table @	30	inches	Observed Water Table @	none	inches
Restrictive @	30	inches	Roots @	34	inches
Refusal @	none	inches			
Percolation Rate =	8	Minutes / Inch @ 30			

Test Pit No. 5B

NOTES: Large boulders

Depth (inches)	Description
2-0	Forest mat
0-4	10YR3/3 Dark grayish brown, fine sandy loam, granular, friable
4-14	10YR5/6 Yellowish brown, fine sandy loam, granular, friable
14-28	10YR6/4 Light yellowish brown, fine sandy loam, granular, friable
28-64	2.5Y5/3 Light olive brown, loamy sand, massive, firm, with 2.5Y6/2 Light brownish gray and 7.5YR4/6 Strong brown redoximorphic features



Estimated Seasonal High Water Table @	28	inches	Observed Water Table @	none	inches
Restrictive @	28	inches	Roots @	36	inches
Refusal @	None	inches			
Percolation Rate =	8	Minutes / Inch @ 30			



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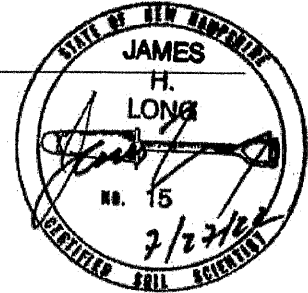
Designer: 988

Date: 7/12/22

Test Pit No. 6A

NOTES: Large boulders

Depth (inches)	Description
2-0	Forest mat
0-4	10YR3/3 Dark brown, fine sandy loam, granular, friable
4-16	10YR5/6 Yellowish brown, fine sandy loam, granular, friable
16-30	10YR6/4 Light yellowish brown, fine sandy loam, granular, friable
30-72	2.5Y5/3 Light olive brown, loamy sand, massive, firm, with 2.5Y6/2 Light brownish gray and 7.5YR4/6 Strong brown redoximorphic features

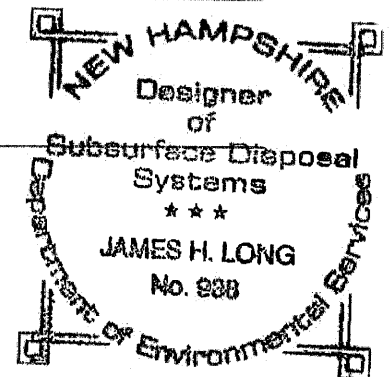


Estimated Seasonal High Water Table @	30	inches	Observed Water Table @	none	inches
Restrictive @	30	inches	Roots @	36	inches
Refusal @	none	inches			
Percolation Rate =	10	Minutes / Inch @ 30			

Test Pit No. 6B

NOTES: Large boulders

Depth (inches)	Description
2-0	Forest mat
0-4	10YR3/3 Dark brown, fine sandy loam, granular, friable
4-16	10YR5/6 Yellowish brown, fine sandy loam, granular, friable
16-30	10YR6/4 Light yellowish brown, fine sandy loam, granular, friable
30-72	2.5Y5/3 Light olive brown, loamy sand, massive, firm, with 2.5Y6/2 Light brownish gray and 7.5YR4/6 Strong brown redoximorphic features



Estimated Seasonal High Water Table @	30	inches	Observed Water Table @	none	inches
Restrictive @	30	inches	Roots @	36	inches
Refusal @	none	inches			
Percolation Rate =	10	Minutes / Inch @ 30			



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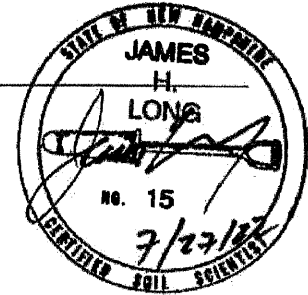
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Evaluated by: James H. Long, CSS Designer: 988

Date: 7/12/22

Test Pit No. 7A NOTES: Large boulders

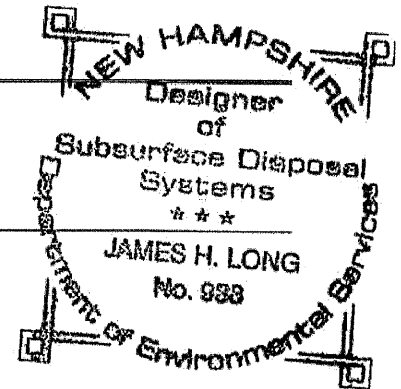
Depth (inches)	Description
2-0	Forest mat
0-4	10YR4/2 Dark grayish brown, fine sandy loam, granular, friable
4-14	10YR5/6 Yellowish brown, fine sandy loam, granular, friable
14-32	10YR6/4 Light yellowish brown, fine sandy loam, granular, friable
32-62	2.5Y6/3 Light yellowish brown, silty sand, massive, firm, with 2.5Y6/2 Light brownish gray and 7.5YR4/6 Strong brown redoximorphic features



Estimated Seasonal High Water Table @	32	inches	Observed Water Table @	none	inches
Restrictive @	32	inches	Roots @	36	inches
Refusal @	68	inches			
Percolation Rate =	10	Minutes / Inch @ 30			

Test Pit No. 7B NOTES: Large boulders

Depth (inches)	Description
2-0	Forest mat
0-4	10YR4/2 Dark grayish brown, fine sandy loam, granular, friable
4-16	10YR5/6 Yellowish brown, fine sandy loam, granular, friable
16-32	10YR6/4 Light yellowish brown, fine sandy loam, granular, friable
32-60	2.5Y6/3 Light yellowish brown, loamy sand, massive, firm, with 2.5Y6/2 Light brownish gray and 7.5YR4/6 Strong brown redoximorphic features



Estimated Seasonal High Water Table @	30	inches	Observed Water Table @	34	inches
Restrictive @	30	inches	Roots @	20	inches
Refusal @	60	inches			
Percolation Rate =	none	Minutes / Inch @ 28			



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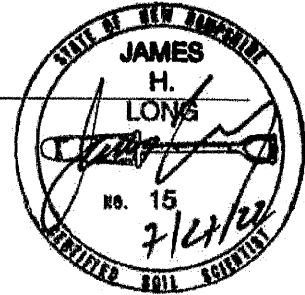
Designer: 988

Date: 7/12/22

Test Pit No. 8A

NOTES: Some boulders

Depth (inches)	Description
2-0	Forest mat
0-4	10YR4/2 Dark grayish brown, fine sandy loam, granular, friable
4-16	10YR5/6 Yellowish brown, fine sandy loam, granular, friable
16-32	10YR6/4 Light yellowish brown, fine sandy loam, granular, friable
32-62	2.5Y6/3 Light yellowish brown, loamy sand, massive, firm, with 2.5Y6/2 Light brownish gray and 7.5YR4/6 Strong brown redoximorphic features

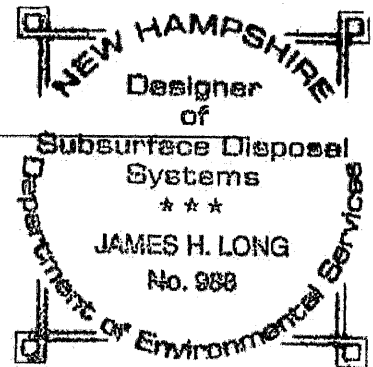


Estimated Seasonal High Water Table @	32	inches	Observed Water Table @	32	inches
Restrictive @	32	inches	Roots @	32	inches
Refusal @	62	inches			
Percolation Rate =	8	Minutes / Inch @ 30			

Test Pit No. 8B

NOTES: Some boulders

Depth (inches)	Description
2-0	Forest mat
0-4	10YR4/2 Dark grayish brown, fine sandy loam, granular, friable
4-16	10YR5/6 Yellowish brown, fine sandy loam, granular, friable
16-30	10YR6/4 Light yellowish brown, fine sandy loam, granular, friable
30-64	2.5Y6/3 Light yellowish brown, loamy sand, massive, firm, with 2.5Y6/2 Light brownish gray and 7.5YR4/6 Strong brown redoximorphic features



Estimated Seasonal High Water Table @	30	inches	Observed Water Table @	30	inches
Restrictive @	30	inches	Roots @	30	inches
Refusal @	none	inches			
Percolation Rate =	8	Minutes / Inch @ 28			