



GOVE ENVIRONMENTAL SERVICES, INC

**SITE-SPECIFIC SOIL SURVEY REPORT**

**For**

**Raymond Road, Nottingham, NH**

**By**

**GES, Inc.**

**Project # 2023072**

**Date: 11-16-2023**

**1. MAPPING STANDARDS**

*Site-Specific Soil Mapping Standards for New Hampshire and Vermont.* SSSNNE Special Publication No. 3, Version 7.0, July, 2021.

This map product is within the technical standards of the National Cooperative Soil Survey. It is a special purpose product, intended for infiltration requirements by the NH DES Alteration of Terrain Bureau. The soil map was produced by a professional soil scientist and is not a product of the USDA Natural Resources Conservation Service. This report accompanies the soil map.

The site-specific soil map (SSSM) was produced 11-16-2023; prepared by JP Gove, CSS #004, GES, Inc.

Soils were identified with the New Hampshire State-wide Numerical Soils Legend, USDA NRCS, Durham, NH. Issue # 10, January 2011.

Hydrologic Soil Group was determined using SSSNNE Special Publication No. 5, Ksat Values for New Hampshire Soils, September 2009.

High Intensity Soil Map symbols, based upon SSSNNE Special Publication 1, December 2017, were added to the Soil Legend.

Scale of soil map: Approximately 1" = 50'.

Contours Interval: 2 feet

**2. LANDFORMS & EXISTING CONDITIONS:**

The site is located on a large drumlin hill that is wooded. The soils are uniformly glacial till with a dense substratum. The hard pan is gravelly sand. The northern border of the site has a perennial stream named the Pawtuckaway River. The southern border has a large marsh, Between the two water features is the steep to very steep hill.

**3. DATE SOIL MAP PRODUCED**

Date(s) of on-site field work: 11-16--2023  
Date(s) of test pits: 06-06-2023 & 11-14-2023  
Test pits recorded by: GES, Inc., James Gove, CSS#004

**4. GEOGRAPHIC LOCATION AND SIZE OF SITE**

City or town where soil mapping was conducted: Nottingham  
Location: TM 69, Lot 17  
Size of area: Approximately 90 acres  
Was the map for the entire lot? Yes  
If no, where was the mapping conducted on the parcel: n/a

**5. PURPOSE OF THE SOIL MAP**

Was the map prepared to meet the requirement of Alteration of Terrain? yes  
If no, what was the purpose of the map? n/a  
Who was the map prepared for? Beals Associates, Inc.





surface and subsoil and moderately low or moderately high in the dense sandy substratum.

Below are the test pit logs that were recorded on the site. They are virtually the same regardless of the elevation or topography. Inclusions are Newfields, where the hard pan becomes massive and friable. However the drainage class remains at moderately well drained. Inclusions are Newfields, and area of exposed bedrock near the southern base of the hill, and slope inclusions, 5%.

### TEST PIT DATA

Project            Raymond Road, Nottingham, NH  
 Client            Joe Falzone  
 GES Project No.    2023072  
 MM/DD/YY Staff   06/06/2023                    James Gove, CSS#004

**Test Pit No.**                    **1**  
 ESHWT::                        36"  
 Termination @                65"  
 Refusal:                        no  
 Obs. Water:                    none

Horizon	Color (Munsell)	Texture	Structure	Consistence	Redox
Ap 0-8"	10YR3/2	sandy loam	granular	friable	none
Bw 8-36"	10YR5/6	sandy loam	granular	friable	none
C 36-65"	2.5Y7/4	gr loamy sand	massive	friable	5%

**Test Pit No.**                    **2**  
 ESHWT::                        33"  
 Termination @                68"  
 Refusal:                        no  
 Obs. Water:                    none

Horizon	Color (Munsell)	Texture	Structure	Consistence	Redox
Ap 0-8"	10YR3/2	sandy loam	granular	friable	none
Bw 8-33"	10YR5/6	sandy loam	granular	friable	none
C 33-68"	2.5Y7/4	gr loamy sand	platy	firm	5%



**Test Pit No.**                    **3**  
 ESHWT::                        38"  
 Termination @                62"  
 Refusal:                        No  
 Obs. Water:                    none

Horizon	Color (Munsell)	Texture	Structure	Consistence	Redox
Ap 0-8"	10YR3/2	sandy loam	granular	friable	none
Bw 8-38"	10YR5/6	sandy loam	granular	friable	none
C 38-62"	2.5Y7/4	gr loamy sand	platy	firm	5%

**Test Pit No.**                    **4**  
 ESHWT::                        38"  
 Termination @                80"  
 Refusal:                        no  
 Obs. Water:                    none

Horizon	Color (Munsell)	Texture	Structure	Consistence	Redox
Ap 0-6"	10YR3/2	sandy loam	granular	friable	none
Bw 6-38"	10YR5/6	sandy loam	granular	friable	none
C 38-80"	2.5Y7/4	gr loamy sand	platy	firm	5%

**Test Pit No.**                    **5**  
 ESHWT::                        39"  
 Termination @                42"  
 Refusal:                        42"  
 Obs. Water:                    none

Horizon	Color (Munsell)	Texture	Structure	Consistence	Redox
Ap 0-4"	10YR3/2	sandy loam	granular	friable	none
Bw 4-39"	10YR5/6	sandy loam	granular	friable	none
C 39-42"	2.5Y7/3	gr loamy sand	platy	firm	5%

**Test Pit No.**                    **6**  
 ESHWT::                        36"  
 Termination @                60"  
 Refusal:                        No  
 Obs. Water:                    36"

Horizon	Color (Munsell)	Texture	Structure	Consistence	Redox
Ap 0-4"	10YR3/2	sandy loam	granular	friable	none
Bw 4-36"	10YR4/6	sandy loam	granular	friable	none
C 36-60"	2.5Y7/4	gr loamy sand	platy	firm	5%

**Test Pit No.** 7  
 ESHWT:: 31"  
 Termination @ 72"  
 Refusal: no  
 Obs. Water: 31"

Horizon	Color (Munsell)	Texture	Structure	Consistence	Redox
Ap 0-6"	10YR3/2	sandy loam	granular	friable	none
Bw 6-31"	10YR5/6	sandy loam	granular	friable	none
C 31-72"	2.5Y7/2	gr loamy sand	platy	firm	5%

**Test Pit No.** 8  
 ESHWT:: 27"  
 Termination @ 63"  
 Refusal: No  
 Obs. Water: none

Horizon	Color (Munsell)	Texture	Structure	Consistence	Redox
Ap 0-6"	10YR3/2	sandy loam	granular	friable	none
Bw 6-27"	10YR5/6	sandy loam	granular	friable	none
C 27-63"	2.5Y7/3	gr loamy sand	platy	firm	5%

**Test Pit No.** 9  
 ESHWT:: 33"  
 Termination @ 66"  
 Refusal: No  
 Obs. Water: none

Horizon	Color (Munsell)	Texture	Structure	Consistence	Redox
Ap 0-6"	10YR3/2	sandy loam	granular	friable	none
Bw 6-33"	10YR5/6	sandy loam	granular	friable	none
C 33-66"	2.5Y7/3	gr loamy sand	platy	firm	5%

**Test Pit No.** 10  
 ESHWT:: 31"  
 Termination @ 63"  
 Refusal: No  
 Obs. Water: none



Horizon	Color (Munsell)	Texture	Structure	Consistence	Redox
Ap 0-6"	10YR3/2	sandy loam	granular	friable	none
Bw 6-31"	10YR5/6	sandy loam	granular	friable	none
C 31-63"	2.5Y7/3	gr loamy sand	platy	firm	5%

**Test Pit No.** 11  
 ESHWT:: 31"  
 Termination @ 64"  
 Refusal: No  
 Obs. Water: none

Horizon	Color (Munsell)	Texture	Structure	Consistence	Redox
Ap 0-6"	10YR3/2	sandy loam	granular	friable	none
Bw 6-31"	10YR5/6	sandy loam	granular	friable	none
C 31-64"	2.5Y7/3	gr loamy sand	platy	firm	5%

**Test Pit No.** 12  
 ESHWT:: 28"  
 Termination @ 65"  
 Refusal: No  
 Obs. Water: none

Horizon	Color (Munsell)	Texture	Structure	Consistence	Redox
Ap 0-7"	10YR3/2	sandy loam	granular	friable	none
Bw 7-28"	10YR5/6	sandy loam	granular	friable	none
C 28-65"	2.5Y7/4	gr loamy sand	platy	firm	5%

**Test Pit No.** 13  
 ESHWT:: 34"  
 Termination @ 70"  
 Refusal: No  
 Obs. Water: none

Horizon	Color (Munsell)	Texture	Structure	Consistence	Redox
Ap 0-6"	10YR3/2	sandy loam	granular	friable	none
Bw 6-34"	10YR5/6	sandy loam	granular	friable	none
C 34-70"	2.5Y7/4	gr loamy sand	platy	firm	5%

**Test Pit No.** 14  
 ESHWT:: 32"  
 Termination @ 60"  
 Refusal: No

Obs. Water: none

Horizon	Color (Munsell)	Texture	Structure	Consistence	Redox
Ap 0-4"	10YR3/2	sandy loam	granular	friable	none
Bw 4-32"	10YR5/6	sandy loam	granular	friable	none
C 32-60"	2.5Y7/3	gr loamy sand	platy	firm	5%

**Test Pit No.** 15  
 ESHWT:: 26"  
 Termination @ 62"  
 Refusal: No  
 Obs. Water: none

Horizon	Color (Munsell)	Texture	Structure	Consistence	Redox
Ap 0-6"	10YR3/2	sandy loam	granular	friable	none
Bw 6-26"	10YR5/6	sandy loam	granular	friable	none
C 26-62"	2.5Y7/3	gr loamy sand	platy	firm	5%

**Test Pit No.** 16  
 ESHWT:: 32"  
 Termination @ 67"  
 Refusal: No  
 Obs. Water: none

Horizon	Color (Munsell)	Texture	Structure	Consistence	Redox
Ap 0-6"	10YR3/2	sandy loam	granular	friable	none
Bw 6-32"	10YR5/6	sandy loam	granular	friable	none
C 32-67"	2.5Y7/4	gr loamy sand	platy	firm	5%

**Test Pit No.** 17  
 ESHWT:: 26"  
 Termination @ 65"  
 Refusal: No  
 Obs. Water: none

Horizon	Color (Munsell)	Texture	Structure	Consistence	Redox
Ap 0-4"	10YR3/2	sandy loam	granular	friable	none
Bw 4-26"	10YR5/6	sandy loam	granular	friable	none
C 26-65"	2.5Y7/3	gr loamy sand	platy	firm	5%





**Test Pit No.**                    **18**  
 ESHWT::                        27"  
 Termination @                64"  
 Refusal:                        No  
 Obs. Water:                    none

Horizon	Color (Munsell)	Texture	Structure	Consistence	Redox
Ap 0-5"	10YR3/2	sandy loam	granular	friable	none
Bw 5-27"	10YR5/6	sandy loam	granular	friable	none
C 27-64"	2.5Y7/3	gr loamy sand	platy	firm	5%

**Test Pit No.**                    **19**  
 ESHWT::                        34"  
 Termination @                65"  
 Refusal:                        No  
 Obs. Water:                    none

Horizon	Color (Munsell)	Texture	Structure	Consistence	Redox
Ap 0-6"	10YR3/2	sandy loam	granular	friable	none
Bw 6-34"	10YR5/6	sandy loam	granular	friable	none
C 34-65"	2.5Y7/3	gr loamy sand	platy	firm	5%

**Test Pit No.**                    **20**  
 ESHWT::                        24"  
 Termination @                60"  
 Refusal:                        No  
 Obs. Water:                    none

Horizon	Color (Munsell)	Texture	Structure	Consistence	Redox
Ap 0-6"	10YR3/2	sandy loam	granular	friable	none
Bw 6-24"	10YR5/6	sandy loam	granular	friable	none
C 24-60"	2.5Y7/3	gr loamy sand	platy	firm	5%

**Test Pit No.**                    **21**  
 ESHWT::                        27"  
 Termination @                67"  
 Refusal:                        No  
 Obs. Water:                    none

Horizon	Color (Munsell)	Texture	Structure	Consistence	Redox
Ap 0-6"	10YR3/2	sandy loam	granular	friable	none
Bw 6-27"	10YR5/6	sandy loam	granular	friable	none
C 27-67"	2.5Y7/3	gr loamy sand	platy	firm	5%

**Test Pit No.**                    **22**  
 ESHWT::                        30"  
 Termination @                60"  
 Refusal:                        No  
 Obs. Water:                    none

Horizon	Color (Munsell)	Texture	Structure	Consistence	Redox
Ap 0-6"	10YR3/2	sandy loam	granular	friable	none
Bw 6-30"	10YR5/6	sandy loam	granular	friable	none
C 30-60"	2.5Y7/3	gr loamy sand	platy	firm	5%

**Test Pit No.**                    **23**  
 ESHWT::                        25"  
 Termination @                64"  
 Refusal:                        No  
 Obs. Water:                    63"

Horizon	Color (Munsell)	Texture	Structure	Consistence	Redox
Ap 0-6"	10YR3/2	sandy loam	granular	friable	none
Bw 6-25"	10YR5/6	sandy loam	granular	friable	none
C 25-64"	2.5Y7/3	gr loamy sand	platy	firm	5%

**Test Pit No.**                    **24**  
 ESHWT::                        28"  
 Termination @                70"  
 Refusal:                        No  
 Obs. Water:                    none

Horizon	Color (Munsell)	Texture	Structure	Consistence	Redox
Ap 0-5"	10YR3/2	sandy loam	granular	friable	none
Bw 5-28"	10YR5/6	sandy loam	granular	friable	none
C 28-70"	2.5Y7/3	gr loamy sand	platy	firm	5%



**Test Pit No.**                    **25**  
 ESHWT::                        30"  
 Termination @                66"  
 Refusal:                        No  
 Obs. Water:                    none

Horizon	Color (Munsell)	Texture	Structure	Consistence	Redox
Ap 0-5"	10YR3/2	sandy loam	granular	friable	none
Bw 5-30"	10YR5/6	sandy loam	granular	friable	none
C 30-66"	2.5Y7/4	gr loamy sand	platy	firm	5%

**Test Pit No.**                    **26**  
 ESHWT::                        24"  
 Termination @                68"  
 Refusal:                        No  
 Obs. Water:                    none

Horizon	Color (Munsell)	Texture	Structure	Consistence	Redox
Ap 0-4"	10YR3/2	sandy loam	granular	friable	none
Bw 4-24"	10YR5/6	sandy loam	granular	friable	none
C 24-68"	2.5Y7/4	gr loamy sand	platy	firm	5%

**Test Pit No.**                    **27**  
 ESHWT::                        24"  
 Termination @                60"  
 Refusal:                        No  
 Obs. Water:                    none

Horizon	Color (Munsell)	Texture	Structure	Consistence	Redox
Ap 0-6"	10YR3/2	sandy loam	granular	friable	none
Bw 6-24"	10YR5/6	sandy loam	granular	friable	none
C 24-60"	2.5Y7/3	gr loamy sand	platy	firm	5%

**Test Pit No.**                    **28**  
 ESHWT::                        24"  
 Termination @                62"  
 Refusal:                        No  
 Obs. Water:                    none

Horizon	Color (Munsell)	Texture	Structure	Consistence	Redox
Ap 0-6"	10YR3/2	sandy loam	granular	friable	none
Bw 6-24"	10YR5/6	sandy loam	granular	friable	none
C 24-62"	2.5Y7/3	gr loamy sand	platy	firm	5%

**Test Pit No.**                    **29**  
 ESHWT::                        21"  
 Termination @                72"  
 Refusal:                        no  
 Obs. Water:                    None

Horizon	Color (Munsell)	Texture	Structure	Consistence	Redox
Ap 0-4"	10YR3/2	sandy loam	granular	friable	none
Bw 4-21"	10YR5/6	sandy loam	granular	friable	none
C 21-62"	2.5Y7/4	gr loamy sand	platy	firm	5%

**Test Pit No.**                    **30**  
 ESHWT::                        34"  
 Termination @                68"  
 Refusal:                        No  
 Obs. Water:                    none

Horizon	Color (Munsell)	Texture	Structure	Consistence	Redox
Ap 0-5"	10YR3/2	sandy loam	granular	friable	none
Bw 5-34"	10YR5/6	sandy loam	granular	friable	none
C 34-68"	2.5Y7/4	gr loamy sand	platy	firm	5%



**Test Pit No.**                    **31**  
ESHWT::                         30"  
Termination @                 65"  
Refusal:                         No  
Obs. Water:                    none

Horizon	Color (Munsell)	Texture	Structure	Consistence	Redox
Ap 0-6"	10YR3/2	sandy loam	granular	friable	none
Bw 6-30"	10YR5/6	sandy loam	granular	friable	none
C 30-65"	2.5Y7/3	gr loamy sand	platy	firm	5%

**Test Pit No.**                    **32**  
ESHWT::                         33"  
Termination @                 62"  
Refusal:                         no  
Obs. Water:                    none

Horizon	Color (Munsell)	Texture	Structure	Consistence	Redox
Ap 0-4"	10YR3/2	sandy loam	granular	friable	none
Bw 4-33"	10YR5/6	sandy loam	granular	friable	none
C 33-62"	2.5Y7/3	gr loamy sand	platy	firm	5%

**Test Pit No.**                    **33**  
ESHWT::                         27"  
Termination @                 65"  
Refusal:                         No  
Obs. Water:                    none

Horizon	Color (Munsell)	Texture	Structure	Consistence	Redox
Ap 0-6"	10YR3/2	sandy loam	granular	friable	none
Bw 6-27"	10YR5/6	sandy loam	granular	friable	none
C 27-65"	2.5Y7/3	gr loamy sand	platy	firm	5%

TEST PIT DATA

Project Raymond Road, Nottingham, NH

Client Joe Falzone

GES Project No. 2023072

MM/DD/YY Staff 11-14-2023 James Gove, CSS#004, Aspynn Kutz

<b>Test Pit No.</b>	<b>2A</b>	Soils Series:
ESHWT:	37"	Landscape:
Termination @	62"	Slope:
Refusal:	no	Parent Material:
Obs. Water:	None	Hydrologic Soil Group:

Horizon	Color (Munsell)	Texture	Structure-Consistence-Redox
A	0-8" 10YR3/2	fine sandy loam	granular-friable-none
Bw	8-37" 10YR5/6	fine sandy loam	granular-friable-none
Cd	37-62" 2.5Y5/3	Gravelly loamy sand	platy-firm-10% redox

<b>Test Pit No.</b>	<b>3A</b>	Soils Series:
ESHWT::	31"	Landscape:
Termination @	54"	Slope:
Refusal:	No	Parent Material:
Obs. Water:	None	Hydrologic Soil Group:



Horizon Color (Munsell)		Texture	Structure-Consistence-Redox
A 0-5"	10YR3/2	fine sandy loam	granular-friable-none
Bw 5-31"	10YR5/6	fine sandy loam	granular-friable-none
Cd 31-54"	2.5Y5/4	gravelly loamy sand	platy-firm-10% redox

<b>Test Pit No.</b>	<b>3B</b>	Soils Series:
ESHWT::	27"	Landscape:
Termination @	61"	Slope:
Refusal:	No	Parent Material:
Obs. Water:	None	Hydrologic Soil Group:

Horizon Color (Munsell)		Texture	Structure-Consistence-Redox
A 0-5"	10YR3/2	fine sandy loam	granular-friable-none
Bw 5-27"	10YR5/6	fine sandy loam	granular-friable-none
Cd 27-61"	2.5Y5/4	gravelly loamy sand	platy-firm-10% redox

<b>Test Pit No.</b>	<b>4A</b>	Soils Series:
ESHWT::	32"	Landscape:
Termination @	70"	Slope:
Refusal:	No	Parent Material:
Obs. Water:	64"	Hydrologic Soil Group:

Horizon Color (Munsell)		Texture	Structure-Consistence-Redox
A 0-7"	10YR3/2	fine sandy loam	granular-friable-none
Bw 7-32"	10YR5/6	fine sandy loam	granular-friable-none
Cd 32-70"	2.5Y5/4	gravelly loamy sand	platy-firm-10% redox

<b>Test Pit No.</b>	<b>4B</b>	Soils Series:
ESHWT::	30"	Landscape:
Termination @	59"	Slope:
Refusal:	No	Parent Material:
Obs. Water:	none	Hydrologic Soil Group:

Horizon Color (Munsell)		Texture	Structure-Consistence-Redox
A 0-6"	10YR3/2	fine sandy loam	granular-friable-none
Bw 6-30"	10YR5/6	fine sandy loam	granular-friable-none
Cd 30-59"	2.5Y5/3	gravelly loamy sand	platy-firm-10% redox

<b>Test Pit No.</b>	<b>5A</b>	Soils Series:
ESHWT::	26"	Landscape:
Termination @	63"	Slope:
Refusal:	No	Parent Material:
Obs. Water:	none	Hydrologic Soil Group:





Horizon Color (Munsell)		Texture	Structure-Consistence-Redox
A 0-8"	10YR3/2	fine sandy loam	granular-friable-none
Bw 8-26"	10YR5/6	fine sandy loam	granular-friable-none
Cd 26-63"	2.5Y5/4	gravelly loamy sand	platy-firm-10% redox

**Test Pit No.**                      **5B**                      Soils Series:  
 ESHWT::                              32"                      Landscape:  
 Termination @                      67"                      Slope:  
 Refusal:                              No                      Parent Material:  
 Obs. Water:                          none                      Hydrologic Soil Group:

Horizon Color (Munsell)		Texture	Structure-Consistence-Redox
A 0-8"	10YR3/2	fine sandy loam	granular-friable-none
Bw 8-32"	10YR5/6	fine sandy loam	granular-friable-none
Cd 32-67"	2.5Y5/3	gravelly loamy sand	platy-firm-10% redox

**Test Pit No.**                      **17A**                      Soils Series:  
 ESHWT::                              25"                      Landscape:  
 Termination @                      66"                      Slope:  
 Refusal:                              No                      Parent Material:  
 Obs. Water:                          none                      Hydrologic Soil Group:

Horizon Color (Munsell)		Texture	Structure-Consistence-Redox
A 0-5"	10YR3/2	fine sandy loam	granular-friable-none
Bw 5-25"	10YR4/6	fine sandy loam	granular-friable-none
Cd 25-66"	2.5Y5/4	gravelly loamy sand	platy-firm-10% redox

<b>Test Pit No.</b>	<b>17B</b>	Soils Series:
ESHWT::	24"	Landscape:
Termination @	58"	Slope:
Refusal:	No	Parent Material:
Obs. Water:	none	Hydrologic Soil Group:

Horizon Color (Munsell)		Texture	Structure-Consistence-Redox
A 0-7"	10YR3/2	fine sandy loam	granular-friable-none
Bw 7-24"	10YR4/6	fine sandy loam	granular-friable-none
Cd 24-58"	2.5Y5/3	gravelly loamy sand	platy-firm-10% redox

<b>Test Pit No.</b>	<b>18A</b>	Soils Series:
ESHWT::	26"	Landscape:
Termination @	63"	Slope:
Refusal:	No	Parent Material:
Obs. Water:	none	Hydrologic Soil Group:



Horizon Color (Munsell)	Texture	Structure-Consistence-Redox
A 0-5"      10YR3/2	fine sandy loam	granular-friable-none
Bw 5-26"    10YR4/6	fine sandy loam	granular-friable-none
Cd 25-63"    2.5Y5/2	gravelly loamy sand	massive- friable-10% redox

**Test Pit No.**                      **18B**                      Soils Series:  
ESHWT::                              25"                              Landscape:  
Termination @                      66"                              Slope:  
Refusal:                                No                                Parent Material:  
Obs. Water:                            none                              Hydrologic Soil Group:

Horizon Color (Munsell)	Texture	Structure-Consistence-Redox
A 0-7"      10YR3/2	fine sandy loam	granular-friable-none
Bw 7-25"    10YR5/6	fine sandy loam	granular-friable-none
Cd 25-66"    2.5Y5/3	gravelly loamy sand	platy-firm-10% redox

**Test Pit No.**                      **19A**                      Soils Series:  
ESHWT::                              28"                              Landscape:  
Termination @                      59"                              Slope:  
Refusal:                                No                                Parent Material:  
Obs. Water:                            none                              Hydrologic Soil Group:

Horizon Color (Munsell)	Texture	Structure-Consistence-Redox
A 0-8"      10YR3/2	fine sandy loam	granular-friable-none
Bw 8-28"    10YR5/6	fine sandy loam	granular-friable-none
Cd 28-59"    2.5Y5/3	gravelly loamy sand	platy-firm-10% redox

<b>Test Pit No.</b>	<b>19B</b>	Soils Series:
ESHWT::	28"	Landscape:
Termination @	68"	Slope:
Refusal:	No	Parent Material:
Obs. Water:	none	Hydrologic Soil Group:

Horizon Color (Munsell)		Texture	Structure-Consistence-Redox
A 0-8"	10YR3/2	fine sandy loam	granular-friable-none
Bw 8-28"	10YR5/6	fine sandy loam	granular-friable-none
Cd 28-68"	2.5Y5/3	gravelly loamy sand	platy-firm-10% redox

<b>Test Pit No.</b>	<b>20A</b>	Soils Series:
ESHWT::	29"	Landscape:
Termination @	64"	Slope:
Refusal:	No	Parent Material:
Obs. Water:	none	Hydrologic Soil Group:

Horizon Color (Munsell)		Texture	Structure-Consistence-Redox
A 0-9"	10YR3/2	fine sandy loam	granular-friable-none
Bw 9-29"	10YR5/6	fine sandy loam	granular-friable-none
Cd 29-64"	2.5Y5/3	gravelly loamy sand	platy-firm-10% redox



<b>Test Pit No.</b>	<b>21A</b>	Soils Series:
ESHWT::	25"	Landscape:
Termination @	63"	Slope:
Refusal:	No	Parent Material:
Obs. Water:	none	Hydrologic Soil Group:

Horizon	Color (Munsell)	Texture	Structure-Consistence-Redox	
A	0-5"	10YR3/2	fine sandy loam	granular-friable-none
Bw	5-25"	10YR4/6	fine sandy loam	granular-friable-none
Cd	25-63"	2.5Y5/4	gravelly loamy sand	platy-firm-10% redox

<b>Test Pit No.</b>	<b>22A</b>	Soils Series:
ESHWT::	23"	Landscape:
Termination @	60"	Slope:
Refusal:	No	Parent Material:
Obs. Water:	none	Hydrologic Soil Group:

Horizon	Color (Munsell)	Texture	Structure-Consistence-Redox	
A	0-7"	10YR3/2	fine sandy loam	granular-friable-none
Bw	7-23"	10YR5/6	fine sandy loam	granular-friable-none
Cd	23-60"	2.5Y5/4	gravelly loamy sand	platy-firm-10% redox

<b>Test Pit No.</b>	<b>22B</b>	Soils Series:
ESHWT::	31"	Landscape:
Termination @	64"	Slope:
Refusal:	No	Parent Material:
Obs. Water:	none	Hydrologic Soil Group:

Horizon Color (Munsell)		Texture	Structure-Consistence-Redox
A 0-8"	10YR3/2	fine sandy loam	granular-friable-none
Bw 8-31"	10YR5/6	fine sandy loam	granular-friable-none
Cd 31-64"	2.5Y5/4	gravelly loamy sand	platy-firm-10% redox

<b>Test Pit No.</b>	<b>23A</b>	Soils Series:
ESHWT::	31"	Landscape:
Termination @	65"	Slope:
Refusal:	No	Parent Material:
Obs. Water:	none	Hydrologic Soil Group:

Horizon Color (Munsell)		Texture	Structure-Consistence-Redox
A 0-10"	10YR3/2	fine sandy loam	granular-friable-none
Bw 10-31"	10YR5/6	fine sandy loam	granular-friable-none
Cd 31-65"	2.5Y5/4	gravelly loamy sand	platy-firm-10% redox



<b>Test Pit No.</b>	<b>23B</b>	Soils Series:
ESHWT::	30"	Landscape:
Termination @	64"	Slope:
Refusal:	No	Parent Material:
Obs. Water:	none	Hydrologic Soil Group:

Horizon Color (Munsell)		Texture	Structure-Consistence-Redox
A 0-6"	10YR3/2	fine sandy loam	granular-friable-none
Bw 6-30"	10YR5/6	fine sandy loam	granular-friable-none
Cd 30-64"	2.5Y5/4	gravelly loamy sand	platy-firm-10% redox

<b>Test Pit No.</b>	<b>24A</b>	Soils Series:
ESHWT::	27"	Landscape:
Termination @	60"	Slope:
Refusal:	No	Parent Material:
Obs. Water:	none	Hydrologic Soil Group:

Horizon Color (Munsell)		Texture	Structure-Consistence-Redox
A 0-8"	10YR3/2	fine sandy loam	granular-friable-none
Bw 8-27"	10YR4/6	fine sandy loam	granular-friable-none
Cd 27-60"	2.5Y5/4	gravelly loamy sand	platy-firm-10% redox

<b>Test Pit No.</b>	<b>35</b>	Soils Series:
ESHWT::	38"	Landscape:
Termination @	54"	Slope:
Refusal:	No	Parent Material:
Obs. Water:	none	Hydrologic Soil Group:

Horizon Color (Munsell)		Texture	Structure-Consistence-Redox
A 0-10"	10YR3/2	fine sandy loam	granular-friable-none
Bw 10-38"	10YR4/6	fine sandy loam	granular-friable-none
Cd 38-54"	2.5Y5/4	gravelly loamy sand	platy-firm-10% redox-10% Conc.

<b>Test Pit No.</b>	<b>36</b>	Soils Series:
ESHWT::	29"	Landscape:
Termination @	70"	Slope:
Refusal:	No	Parent Material:
Obs. Water:	none	Hydrologic Soil Group:

Horizon Color (Munsell)		Texture	Structure-Consistence-Redox
A 0-9"	10YR3/2	fine sandy loam	granular-friable-none
Bw 9-29"	10YR5/6	fine sandy loam	granular-friable-none
Cd 29-70"	2.5Y5/3	gravelly loamy sand	platy-firm-10% redox





<b>Test Pit No.</b>	<b>40A</b>	Soils Series:
ESHWT::	31"	Landscape:
Termination @	64"	Slope:
Refusal:	No	Parent Material:
Obs. Water:	none	Hydrologic Soil Group:

Horizon Color (Munsell)		Texture	Structure-Consistence-Redox
A 0-9"	10YR3/2	fine sandy loam	granular-friable-none
Bw 9-31"	10YR5/6	fine sandy loam	granular-friable-none
Cd 31-64"	2.5Y5/3	gravelly loamy sand	platy-firm-10% redox

<b>Test Pit No.</b>	<b>40B</b>	Soils Series:
ESHWT::	35"	Landscape:
Termination @	67"	Slope:
Refusal:	No	Parent Material:
Obs. Water:	none	Hydrologic Soil Group:

Horizon Color (Munsell)		Texture	Structure-Consistence-Redox
A 0-8"	10YR3/2	fine sandy loam	granular-friable-none
Bw 8-35"	10YR5/6	fine sandy loam	granular-friable-none
Cd 35-67"	2.5Y5/3	gravelly loamy sand	platy-firm-10% redox

<b>Test Pit No.</b>	<b>41A</b>	Soils Series:
ESHWT::	28"	Landscape:
Termination @	52"	Slope:
Refusal:	No	Parent Material:
Obs. Water:	none	Hydrologic Soil Group:

Horizon Color (Munsell)		Texture	Structure-Consistence-Redox
A 0-9"	10YR3/2	fine sandy loam	granular-friable-none
Bw 9-28"	10YR4/6	fine sandy loam	granular-friable-none
Cd 28-52"	2.5Y5/4	gravelly loamy sand	platy-firm-10% redox

<b>Test Pit No.</b>	<b>41B</b>	Soils Series:
ESHWT::	27"	Landscape:
Termination @	70"	Slope:
Refusal:	No	Parent Material:
Obs. Water:	none	Hydrologic Soil Group:

Horizon Color (Munsell)		Texture	Structure-Consistence-Redox
A 0-7"	10YR3/2	fine sandy loam	granular-friable-none
Bw 7-27"	10YR4/6	fine sandy loam	granular-friable-none
Cd 27-70"	2.5Y5/3	gravelly loamy sand	platy-firm-10% redox



<b>Test Pit No.</b>	<b>42A</b>	Soils Series:
ESHWT::	27"	Landscape:
Termination @	67"	Slope:
Refusal:	No	Parent Material:
Obs. Water:	none	Hydrologic Soil Group:

Horizon Color (Munsell)		Texture	Structure-Consistence-Redox
A 0-6"	10YR3/2	fine sandy loam	granular-friable-none
Bw 6-27"	10YR4/6	fine sandy loam	granular-friable-none
Cd 27-67"	2.5Y5/3	gravelly loamy sand	platy-firm-10% redox

<b>Test Pit No.</b>	<b>42B</b>	Soils Series:
ESHWT::	26"	Landscape:
Termination @	61"	Slope:
Refusal:	No	Parent Material:
Obs. Water:	none	Hydrologic Soil Group:

Horizon Color (Munsell)		Texture	Structure-Consistence-Redox
A 0-10"	10YR3/2	fine sandy loam	granular-friable-none
Bw 10-26"	10YR4/6	fine sandy loam	granular-friable-none
Cd 26-61"	2.5Y5/3	gravelly loamy sand	platy-firm-10% redox

<b>Test Pit No.</b>	<b>43A</b>	Soils Series:
ESHWT::	28"	Landscape:
Termination @	60"	Slope:
Refusal:	No	Parent Material:
Obs. Water:	none	Hydrologic Soil Group:

Horizon Color (Munsell)		Texture	Structure-Consistence-Redox
A 0-6"	10YR3/2	fine sandy loam	granular-friable-none
Bw 6-28"	10YR4/6	fine sandy loam	granular-friable-none
Cd 28-60"	2.5Y5/4	gravelly loamy sand	platy-firm-10% redox

<b>Test Pit No.</b>	<b>43B</b>	Soils Series:
ESHWT::	25"	Landscape:
Termination @	65"	Slope:
Refusal:	No	Parent Material:
Obs. Water:	none	Hydrologic Soil Group:

Horizon Color (Munsell)		Texture	Structure-Consistence-Redox
A 0-5"	10YR3/2	fine sandy loam	granular-friable-none
Bw 5-25"	10YR4/6	fine sandy loam	granular-friable-none
Cd 25-65"	2.5Y5/4	gravelly loamy sand	platy-firm-10% redox



<b>Test Pit No.</b>	<b>44A</b>	Soils Series:
ESHWT::	30"	Landscape:
Termination @	62"	Slope:
Refusal:	No	Parent Material:
Obs. Water:	none	Hydrologic Soil Group:

Horizon Color (Munsell)		Texture	Structure-Consistence-Redox
A 0-8"	10YR3/2	fine sandy loam	granular-friable-none
Bw 8-30"	10YR4/4	fine sandy loam	granular-friable-none
Cd 30-62"	2.5Y5/3	gravelly loamy sand	platy-firm-10% redox

<b>Test Pit No.</b>	<b>44B</b>	Soils Series:
ESHWT::	25"	Landscape:
Termination @	59"	Slope:
Refusal:	No	Parent Material:
Obs. Water:	none	Hydrologic Soil Group:

Horizon Color (Munsell)		Texture	Structure-Consistence-Redox
A 0-8"	10YR3/2	fine sandy loam	granular-friable-none
Bw 8-25"	10YR4/6	fine sandy loam	granular-friable-none
Cd 25-59"	2.5Y5/3	gravelly loamy sand	platy-firm-10% redox

<b>Test Pit No.</b>	<b>D1</b>	Soils Series:
ESHWT::	31"	Landscape:
Termination @	72"	Slope:
Refusal:	No	Parent Material:
Obs. Water:	none	Hydrologic Soil Group:

Horizon Color (Munsell)		Texture	Structure-Consistence-Redox
A 0-8"	10YR3/2	fine sandy loam	granular-friable-none
Bw 8-31"	10YR4/4	fine sandy loam	granular-friable-20% redox
Cd 31-72"	2.5Y5/3	gravelly loamy sand	platy-firm-none

<b>Test Pit No.</b>	<b>D2</b>	Soils Series:
ESHWT::	24"	Landscape:
Termination @	57"	Slope:
Refusal:	No	Parent Material:
Obs. Water:	none	Hydrologic Soil Group:

Horizon Color (Munsell)		Texture	Structure-Consistence-Redox
A 0-7"	10YR3/2	fine sandy loam	granular-friable-none
Bw 7-24"	10YR5/6	fine sandy loam	granular-friable-none
Cd 24-57"	7.5Y5/4	gravelly loamy sand	platy-firm-20% redox



<b>Test Pit No.</b>	<b>D3</b>	Soils Series:
ESHWT::	32"	Landscape:
Termination @	62"	Slope:
Refusal:	No	Parent Material:
Obs. Water:	none	Hydrologic Soil Group:

Horizon Color (Munsell)		Texture	Structure-Consistence-Redox
A 0-9"	10YR3/2	fine sandy loam	granular-friable-none
Bw 9-32"	10YR5/6	fine sandy loam	granular-friable-none
Cd 32-62"	7.5Y5/4	gravelly loamy sand	platy-firm-10% redox

<b>Test Pit No.</b>	<b>D4</b>	Soils Series:
ESHWT:	38"	Landscape:
Termination @	61"	Slope:
Refusal:	No	Parent Material:
Obs. Water:	none	Hydrologic Soil Group:

Horizon Color (Munsell)		Texture	Structure-Consistence-Redox
A 0-7"	10YR3/2	fine sandy loam	granular-friable-none
Bw 7-38"	10YR5/6	fine sandy loam	granular-friable-none
Cd 38-61"	7.5Y5/4	gravelly loamy sand	platy-firm-10% redox

<b>Test Pit No.</b>	<b>D5</b>	Soils Series:
ESHWT:	32"	Landscape:
Termination @	65"	Slope:
Refusal:	No	Parent Material:
Obs. Water:	none	Hydrologic Soil Group:

Horizon Color (Munsell)		Texture	Structure-Consistence-Redox
A 0-8"	10YR3/2	fine sandy loam	granular-friable-none
Bw 8-32"	10YR4/6	gravelly loamy sand	granular-friable-none
Cd 32-65"	7.5Y5/4	gravelly loamy sand	platy-firm-10% redox

<b>Test Pit No.</b>	<b>D5B</b>	Soils Series:
ESHWT:	29"	Landscape:
Termination @	65"	Slope:
Refusal:	No	Parent Material:
Obs. Water:	none	Hydrologic Soil Group:

Horizon Color (Munsell)		Texture	Structure-Consistence-Redox
A 0-5"	10YR3/2	loamy sand	granular-friable-none
Bw 5-29"	10YR4/4	loamy sand	granular-friable-none
Cd 29-65"	7.5Y5/4	loamy sand	platy-firm-20% redox





<b>Test Pit No.</b>	<b>2-3</b>	Soils Series:
ESHWT:	33"	Landscape:
Termination @	68"	Slope:
Refusal:	No	Parent Material:
Obs. Water:	none	Hydrologic Soil Group:

Horizon	Color (Munsell)	Texture	Structure-Consistence-Redox
A 0-10"	10YR3/2	fine sandy loam	granular-friable-none
Bw 10-33"	10YR5/6	fine sandy loam	granular-friable-none
Cd 33-68"	7.5Y5/4	loamy sand	platy-firm-10% redox

**656 Ridgebury fine sandy loam (poorly drained) 523 C**

**RIDGEBURY SERIES**

The Ridgebury series 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. Slope ranges from 0 to 15 percent. Saturated hydraulic conductivity is moderately high or high in the solum and very low to moderately low in the substratum.

TYPICAL ONSITE PEDON:

A--0 to 6 inches black (N 2/0) fine sandy loam; weak medium and coarse granular structure; friable; many very fine, fine and medium tree roots; 5 percent gravel and 5 percent cobbles.

Bg—6 to 15 inches; dark gray (10YR 4/1) gravelly sandy loam; massive; friable; 10 percent gravel and 5 percent cobbles; common fine prominent yellowish brown (10YR 5/6) and common medium distinct reddish brown (5YR 4/4) masses of iron accumulation.

Cd—15 to 30 inches; gray (5Y 5/1) gravelly sandy loam; massive; firm; 10 percent gravel and 5 percent cobbles; common fine prominent reddish yellow (7.5YR 6/8) masses of iron accumulation.

Inclusions would be slope phases (steeper than B slopes) and small hummocks of somewhat poorly drained soils, 5%. Found in the isolated wetlands and the drainage ways flowing off the hillside.

5                      Rippowam frequently flooded                      571                      C

**RIPPOWAM SERIES**

The Rippowam series consists of very deep, poorly drained loamy soils formed in alluvial sediments. They are nearly level soils on flood plains subject to frequent flooding. Slope ranges from 0 to 3 percent. Saturated hydraulic conductivity ranges from moderately high or high in the loamy upper part and high or very high in the underlying sandy materials.

A small narrow floodplain adjacent the Pawtuckaway River. Inclusions would be Ridgebury at 5%.

**A**--0 to 5 inches; very dark grayish brown (10YR 3/2) fine sandy loam; weak medium granular structure; friable; common fine and medium roots.

**Bg**--5 to 12 inches; dark grayish brown (10YR 4/2) fine sandy loam; weak medium subangular blocky structure; friable; common fine and medium roots; common medium prominent strong brown (7.5YR 5/6) masses of iron accumulation.

**Cg**--12 to 19 inches; dark gray (10YR 4/1) fine sandy loam; weak medium subangular blocky structure; friable; few fine and medium roots; many medium prominent yellowish red (5YR 4/6) masses of iron accumulation.



496

Natchaug Variant (Haplohemits)

683

D

## **NATCHAUG SERIES**

The Natchaug series consists of very deep, very poorly drained soils formed in woody and herbaceous organic materials overlying loamy deposits in depressions on lake plains, outwash plains, till plains, moraines, and flood plains. Saturated hydraulic conductivity is moderately high or high in the organic layers and moderately low to high in the loamy material. Slope ranges from 0 to 2 percent.

Inclusions are small knobs of poorly drained soils and along the edges of the marsh, 5%.

**Oa1**--0 to 10 inches; very dark brown (10YR 2/2) rubbed and black (10YR 2/1) broken face muck; 15 percent fibers, 5 percent rubbed; moderate fine granular structure; friable, nonsticky, and slightly plastic; common medium roots.

**Oa2**--10 to 30 inches; dark reddish brown (5YR 2/2) broken face muck; 30 percent fibers, 8 percent rubbed; massive; friable, moderately sticky, slightly plastic; 10 percent mineral soil material.

**2Cg**--30 to 40 inches; dark gray (10YR 4/1) sandy loam; platy; firm.

### **8. RESPONSIBLE SOIL SCIENTIST**

Name: James Gove

Certified Soil Scientist Number: 004

### **9. OTHER DISTINGUISHING FEATURES OF SITE**

Is the site in a natural condition? Yes

If no, what is the nature of the disturbance? n/a