VTrans Working to Get You There — Vermont Agency of Transportation	STATE OF VERMONT AGENCY OF TRANSPORTATION CONSTRUCTION AND MATERIALS BUREAU CENTRAL LABORATORY	BORING LOG [illegible] HES 0??-1(??) (GeoDesign [illegible]) [illegible], VT	Boring No.: B7 Page No.: 1 of 3 Pin No.: [illegible] Checked By: JHW

Boring Crew: C. Aldrich (Platform), M. [illegible] (GeoDesign)
Date Started: 5/27/15 Date Finished: 5/27/15
VSPC NAD83: N [illegible] ft E [illegible] ft
Station: 289+07 Offset: 60' LT
Ground Elevation: 387 ft

	Casing	Sampler
Type:	HW/SW	SS
I.D.:	2.25 in	1.38 in
Hammer Wt:	N/A	140 lb.
Hammer Fall:	N/A	30 in.
Hammer/Rod Type:	Auto/AWJ	
Rig:	Geoprobe 7822DT	CE = 1.35

Groundwater Observations (3)

Date	Depth (ft)	Notes
05/27/15	15.0	Wet Sample.
05/27/15	7.0	In augers.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL	PI
		S1 (0' - 2'): Top 2" Topsoil. Bottom 22" - Very soft, brown CLAY & SILT, little fine to medium Sand, little Grass fibers, moist, (Re-worked Clay fill) Rec. = 1.1 ft (AASHTO M145 Classification: A-4.)	WOH-WOH-1-1 (1)	28.8	0.4	11.1	88.5	31	10
2.5		S2 (2' - 4'): Soft, brown CLAY & SILT, trace fine to medium Sand, moist. Rec. = 2.0 ft (AASHTO M145 Classification: A-7-6.)	1-1-2-2 (3)	37.1	0.1	2.1	97.8	41	19
5.0		S3 (4' - 6'): Soft, brown Silty CLAY, trace (-) fine Sand, trace Organics, moist. Rec. = 2.0 ft (AASHTO M145 Classification: A-7-6.)	WOH-1-1-2 (2)	38.7		1.2	98.8	39	33
7.5		S4 (6' - 8'): Very soft, brown Silty CLAY, trace (-) fine Sand, moist. Rec. = 2.0 ft (AASHTO M145 Classification: A-7-6.)	WOH-1/12"-1 (1)	47.1		0.8	99.2	38	31
		S5 (8' - 10'): Very soft, brown Silty CLAY, trace fine (-) Sand, moist. Rec. = 2.0 ft (AASHTO M145 Classification: A-7-6.)	WOH-WOH-WOH-WOH (WOH)	46.1		1.8	98.2	48	25
10.0		S6 (10' - 12'): Very soft, grey CLAY & SILT, occasional Silt seams, trace (-) fine Sand, moist. (Torvane: 0.?0 - 0.?8 tsf) Rec. = 2.0 ft (AASHTO M145 Classification: A-6.)	WOH-WOH-WOH-WOH (WOH)	47.2		0.4	99.6	38	17
12.5									
15.0		S7 (15' - 17'): Very soft, grey Clayey SILT and fine to coarse SAND, little fine Gravel, wet. Rec. = 2.0 ft (AASHTO M145 Classification: A-4.)	WOH-WOH-WOH-2 (WOH)	12.1	20.5	30.7	48.8	16	2
17.5									

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. CE is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

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Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL	PI
		S8 (20' - 21.5'): Refusal, grey SILT and fine to coarse SAND, little fine to coarse Gravel, moist. Rec. = 1.0 ft (AASHTO M145 Classification: A-4.)	17-[illegible] ([illegible])	7.3	24.9	31.9	43.2	NP	NP
22.5									
25.0		S9 (25' - 26.5'): Refusal, grey SILT and fine to coarse SAND, little fine to coarse Gravel, moist. Rec. = 0.8 ft (AASHTO M145 Classification: A-4.)	31-[illegible] ([illegible])	9.9	21.0	28.4	50.6	NP	NP
27.5									
30.0		S10 (30' - 30.8'): Refusal, grey SILT and fine to coarse SAND, trace fine Gravel, moist. Rec. = 0.8 ft (AASHTO M145 Classification: A-4.)	29-50/4" ([illegible])	8.1	15.4	31.9	52.7	NP	NP
32.5									
35.0		S11 (34' - 35.3'): Refusal, grey SILT, some fine to coarse SAND, little fine to coarse Gravel, wet. Rec. = 1.3 ft (AASHTO M145 Classification: A-4.)	38-60-[illegible] ([illegible])	9.6	23.1	25.1	51.8	NP	NP

Hole stopped @ 35.3 ft
Split spoon refusal.

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Remarks:
1. Ground surface elevation, northing, easting, station, and offset shown are approximated from tie measurements made from existing features in the field by GeoDesign personnel, the Preliminary Plan Set prepared by [illegible] and dated 4/30/2015, and an electronic site plan titled "[illegible].dgn" provided by [illegible] via email on June 26, 2015.
2. Visual soil descriptions are per the Burmister system. Laboratory gradations where applicable were performed by VTrans and are per AASHTO M145.
3. Soft/very soft soils unable to get readings with Pocket Penetrometer.
4. Auger grinding at 17.5' deep at the inferred transition to glacial till soils.
5. Auger grinding from 20' - 22' deep with heavier grinding noted at 31' deep.
6. Backfilled with a mixture of bentonite chips and cuttings from hole. Approximately 1.5 bags of chips used.
7. Hammer energy is assumed.

Notes: 1. Stratification lines represent approximate boundary between material types. Transition may be gradual. 2. N Values have not been corrected for hammer energy. CE is the hammer energy correction factor. 3. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.