SOIL BORING LOGS

GEODESIGN INCORPORATED
P.O. Box 699, Windsor, VT 05089, Tel: (802) 674-2033
1233 Shelburne Road, Suite E-1, South Burlington, VT 05403, Tel: (802) 652-5140

BORING LOG

Project Name: Shelburne-South Burlington NH EGC 019-4(19)

Boring No.: B-202B
Page No.: 1 of 1
File No.: 750-03.8
Checked By: RSA

Boring Company: M&W Soils Engineering
Foreman: Mike Hitchcock
GeoDesign Rep.: Aaron Humphrey
Date Started: September 9, 2002 Date Finished: September 9, 2002
N. Coordinate: E. Coordinate:
Ground Surface Elevation (feet): 173.8
Station: 28865 Offset: 51.0 ft R

	Casing:	Sampler:
Type:	H.S.A.	SS
I.D./O.D.:	3.25 in.	2.0 in.
Hammer Wt.:	NA	140 lbs
Hammer Fall:	NA	30 in.
Rig Type:	Acker Soil Max	
Other:	Truck mounted	

Groundwater Observations	Depth (ft)	Elevation (ft)	Notes
Date and Time			
▽ 9/9/02 2:00 PM			rmrk (14')

Depth (ft)	Casing Blows/ft	Sample Information: Number	Type	Penetration (inches)	Recovery (inches)	Depth (ft)	Blows / 6 inch Interval: 0 - 6	6 - 12	12 - 18	18 - 24	Coring Time (min./ft)	PID Result	Sample Description (Classification System: Burmister)	Symbol	Strata Description (Elevation & Depth (feet))
															SILT and SAND (Fill)
															171.8
															2.0 CLAY and SILT
5															
10		1	SS	24.0	24.0	10.0	4	5	5	6		-	S-1) Top 20" - Stiff brown-gray SILT and CLAY, laminated, moist. Bottom 4" - Gray Silty CLAY, moist.		
		2	SS	24.0	24.0	12.0	5	6	5	5		-	S-2) Similar to bottom of S-1, except stiff and moist.		159.8
15															14.0 Bottom of Borehole at 14.0 ft
20															
25															
30															

Remarks: (0'): Groundsurface elevation based on hand level survey from proposed VAOT staked boring location. Location is estimated from site plan based on locations taped from proposed VAOT staked boring location and plotted by GeoDesign.
(0-10'): Boring advanced without sampling to identify depth at which overlying stiff clay and silt changes to soft silty clay. Refer to boring B-202A located 5 ft south for sample description 10 feet and below 14 feet.
(14'): Groundwater was not encountered during drilling.

Notes:
1) Soil Samples screened in the field using a thermal Environmental Systems Model 580S Photoionization Detector. The meter was calibrated relative to a benzene-in-air standard. ND = None Detected, - = Sample Not Screened
2) Stratification Lines Represent Approximate Boundary Between Material Types, Transitions May Be Gradual.
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. AC = After Coring, Rock
4) Sample Type Coding: A = Auger; C = Core; PS = Piston Sampler; SS = Split Barrel (Split Spoon); ST = Shelby Tube; V = Vane
5) Proportions Used: Trace = 1-10%; Little = 10-20%; Some = 20-35%; And = 35-50%

Boring No.: **B-202B**

OFFICES LOG WL 750-03.8.GPJ GEODSGN.GDT 1/22/03

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BORING LOG

Project Name: Shelburne-South Burlington NH EGC 019-4(19)

Boring No.: B-203
Page No.: 1 of 1
File No.: 750-03.8
Checked By: RSA

Boring Company: M&W Soils Engineering
Foreman: Mike Hitchcock
GeoDesign Rep.: Aaron Humphrey
Date Started: September 11, 2002 Date Finished: September 11, 2002
N. Coordinate: E. Coordinate:
Ground Surface Elevation (feet): 152.2
Station: 32329 Offset: 51.0 ft L

	Casing:	Sampler:
Type:	H.S.A.	SS
I.D./O.D.:	3.25 in.	2.0 in.
Hammer Wt.:	NA	140 lbs
Hammer Fall:	NA	30 in.
Rig Type:	Acker Soil Max	
Other:	Truck mounted	

Groundwater Observations	Depth (ft)	Elevation (ft)	Notes
Date and Time			
▽ 9/11/02 12:00 AM			rmrk(19.3')
▽ 9/11/02 1:40 PM	9.0	143.2	open hole
▽			
▽			

Depth (ft)	Casing Blows/ft	Sample Information: Number	Type	Penetration (inches)	Recovery (inches)	Depth (ft)	Blows / 6 inch Interval: 0 - 6	6 - 12	12 - 18	18 - 24	Coring Time (min./ft)	PID Result	Sample Description (Classification System: Burmister)	Symbol	Strata Description (Elevation & Depth (feet))
						0.0							Surface: 4" of Asphalt with Gravel base.		SILT and SAND (Fill)
		1	SS	24.0	15.0	1.0	6	3	2	3		-	S-1) Top 4" - Fine to Coarse Gravel (Pavement Base). Bottom 6" - Brown fine SAND, some Silt, trace fine Gravel, moist.		149.2
		2	SS	24.0	14.0	3.0	3	6	9	13		-			3.0 SILT and SAND (Possible Fill)
5															
		3	SS	24.0	19.0	5.0	7	10	10	10		-	S-2) Medium dense, brown fine to medium SAND and SILT, trace fine Gravel, moist.		
													S-3) Similar to S-2.		
		4	SS	24.0	19.0	7.0	7	12	12	14		-	S-4) Similar to S-2, except with more gray SILT, moist.		143.2 ▽
10		5	SS	24.0	19.0	9.0	19	32	35	40		-	S-5) Very dense, brown SILT and fine SAND, little fine to coarse Gravel, moist.		9.0 SILT and SAND
15		6	SS	24.0	13.0	14.0	35	64	100/1"			-	S-6) Very dense, gray SILT and fine SAND, trace fine Gravel, moist.		
20		7	SS	24.0	4.0	19.0	100/4"					-	S-7) Similar to S-6.		132.9
															19.3 Bottom of Borehole at 19.3 ft
25															
30															

Remarks: (0): Boring performed at proposed VAOT staked boring location. Groundsurface elevation and station/offset based on VAOT survey data.
(7-9'): Observed black staining and possible petroleum odor of soils in SS sampler.
(13'): Depth of strata change based on observed higher drilling resistance.
(19.3'): Observed SS refusal on possible cobble, boulder, or bedrock.
(19.3'): Groundwater was not encountered during drilling. Borehole was left open for groundwater observations for the remainder of the drilling day.

Notes:
1) Soil Samples screened in the field using a thermal Environmental Systems Model 580S Photoionization Detector. The meter was calibrated relative to a benzene-in-air standard. ND = None Detected, - = Sample Not Screened
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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. AC = After Coring, Rock
4) Sample Type Coding: A = Auger; C = Core; PS = Piston Sampler; SS = Split Barrel (Split Spoon); ST = Shelby Tube; V = Vane
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Boring No.: **B-203**

OFFICES LOG WL 750-03.8.GPJ GEODSGN.GDT 1/22/03

DATUM
VERTICAL NGVD 1929
HORIZONTAL NAD 1927

SHELBURNE

SURVEYED BY V.S.C. INC. DATE
DRAWN BY E.A.A. INC. DATE
TRACED BY E.A.A. INC. DATE

PROJECT NH-EGC-019-4(27)
SOIL BORING DRAWING NO. 2
SHEET NO. 428 OF 537

4/13/04