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BORING LOG

Project Name

Route 125 Bridge
RS 0174 (8)
Middlebury, VT

Boring No.: B-1B
Page No.: 1 of 1
File No.: 750-04.1
Checked By: JEL

Boring Company: M & W Soils Engineering, Inc.
Foreman: Myron Domingue
GeoDesign Rep.: Jason Gaudette
Date Started: June 30, 2003 Date Finished: June 30, 2003
N. Coordinate: E. Coordinate:
Ground Surface Elevation (feet): 530
Station: 13+46.20 Offset: 19.1 ft RT

	Casing:	Sampler:
Type:	FJ	SS
I.D.:	3.0 in.	1.38 in.
Hammer Wt.:	300 lbs	140 lbs
Hammer Fall:	30 in.	30 in.
Rig Type:	B-47 Mobile Drill Track	
Other:	BX-size Core Barrel	

Groundwater Observations

Date	Depth (ft)	Elev. (ft)	Notes
▼ 6/30/03, 11:30	12.5	517.5	Wet Soil
▼			
▼			
▼			

Depth (ft)	Casing Blows/ft	Sample Info: Number	Type	Penetration (inches)	Recovery (inches)	Depth (ft)	Blows / 6 inch interval: 0 - 6	6 - 12	12 - 18	18 - 24	Coring Time (min./ft)	Moisture Content (%)	Strata Description (Depth & Elevation(feet))	Symbol	Sample Description (Classification System: Burmister)
													Bituminous CONCRETE 529.6		
													SAND and GRAVEL FILL (with Cobbles and Boulders)		
5															
		S1	SS	24	8	7	6	4	3	3					S1): Loose, light brown to black (with 0.5" layer oxidized orange), fine to coarse Sand, little Gray Silt.
10															
		S2	SS	24	10	10	9	16	16	12					S2): Dense. Top 6": Brown-gray, fine SAND, little Silt, little Gravel, moist. Bottom 4": Dark brown, fine to coarse SAND and GRAVEL, trace to little Silt.
		S3	SS	18	10	12	52	14	65				▼		S3): Very dense, similar to bottom of S2 except with little Silt and piece of black slag, wetter.
		C1	C	12	9	13.5					16		13.8 Silty SAND and GRAVEL 516.2		C1): Cored through Cobble (between 13.5' to 13.8' deep) and Boulder (between 14.2' to 14.7' deep).
15		S4	SS	24	6	15	2	4	5	8					S4): Loose, dark brown to gray (with orange red oxidation), layered fine to medium SAND, little Silt, trace Gravel, moist.
		S5	SS	9	2	17	10	50/3.5"					17.8 BEDROCK (Quartzite) 512.2		S5): Refusal. Gray rock pieces in spoon tip.
		C2	C	60	57	17.8					14				C2): Very hard, light gray, slightly weathered orange along fracture planes, closely jointed, poor quality QUARTZITE (RQD=47%). Fractures typically <15 and >80 degrees from horizontal. One 1cm thick Phyllite bed noted.
20											16				
											38				
											18				
											19				
		C3	C	42	41	22.8					18				C3): Similar rock type to C2, except more buff colored and close to very closely jointed, fair quality (RQD=52%). Fractures typically <10 degrees from horizontal.
25											26				
											46				
											29		26.3 Bottom of Exploration at 26.3 ft 503.7		
30															

Remarks

1) Ground surface elevation estimated in the field using a hand level.
2) Refer to boring log B-1A for soil descriptions above 6.2' deep.
3) Cobbles and small Boulders estimated up to 12" diameter during solid stem auger advance between 3' to 6' deep. Split spoon sample attempted at 7' deep.
4) Cobbles and small boulders estimated up to 12" diameter during solid stem auger advance between 11' and 14' deep. Core C1 recovered cobbles/boulders. Solid stem auger refusal at 17.8' deep. Attempted core C2.
5) Observed complete loss of water during coring C2, possibly below casing (estimated at 4 gpm).

Notes:

1) Stratification Lines Represent Approximate Boundary Between Material Types, Transitions May Be Gradual.
2) 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. A.C. = After caring; N/A = Not Recorded.
3) Sample Type Codings: A=Auger; C=Core; D=Driven; G=Grab; PS=Piston Samplers; SS=Split Barrel (Split Spoon); ST=Shelby Tube; Geo=GeoProbe V=Vane; WOR/W=Weight of Rod/Hammer
4) Proportions Used: Trace = 1-10%; Little = 10-20%; Some = 20-35%; And = 35-50%
5) Stratification lines represent approximate boundary between material types, transitions may be gradual.

Boring No.: B-1B