Metric

BORING LOG

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

Project Name: Lyndon BHF 0269 (10), Lyndon, VT

Boring No.: GB-2
Page No.: 1 of 3
File No.: 837-05
Checked By: RSA

Boring Company: M+W Soils Engineering
Foreman: Mike Hitchcock
GeoDesign Rep.: Andrew Elms
Date Started: July 16, 2002 — Date Finished: July 16, 2002
N. Coordinate: — E. Coordinate:
Ground Surface Elevation (meters): 218.30
Station: +223 — Offset: 3.00 m Left

	Casing:	Sampler:
Type:	H.S.A.	SS
I.D./O.D.:	11 cm	5 cm
Hammer Wt.:	NA	63.5 kg
Hammer Fall:	NA	76 cm
Rig Type:	Acker Truck Mounted	
Other:		

Groundwater Observations			
Date and Time	Depth (m)	Elevation (m)	Notes
7/16/02 10:20 AM	6.10	212.20	wet soils

Sample Information

Depth (m)	Casing Blows/0.3m	Number	Type	Penetration (cm)	Recovery (cm)	Depth (m)	Blows / 0.15 m Interval 0-0.15	0.15-0.30	0.30-0.45	0.45-0.60	Casing Time (min/0.3m)	PID Result
1												
		S1	SS	61	33	1.52	11	9	12	10		-
2												
3												
		S2	SS	61	28	3.05	14	7	5	7		-
4												
		S3	SS	61	28	4.57	7	8	7	4		-
5												
6												
		S4	SS	61	0	6.10	17	9	3	4		-
7												
		S5	SS	61	20	7.62	14	16	19	15		-
8												
9												

Sample Description (Classification System: Burmister)	Symbol	Strata Description (Elevation & Depth (meters))
		Granular Fill
(S1): Medium dense, brown, fine to coarse SAND, some fine Gravel, trace Silt, moist.		
(S2): Medium dense, brown, fine to coarse SAND, little fine Gravel, trace Silt, moist.		
(S3): Medium dense, brown, fine to coarse SAND, trace Silt, trace fine Gravel, moist.		212.20
(S4): Loose, no recovery.		6.10 Silty Gravelly SAND
(S5): Dense, brown, fine to coarse SAND, little Silt, little fine Gravel, wet.		

Remarks: (0 m): Ground surface elevation is estimated from preliminary plan submission cross-sections based on locations taped from existing features and plotted by GeoDesign. Elevations should be considered accurate only to the degree implied by the method used.
(3-0.1 m): Bituminous concrete
(6.1 m): Observed change in drilling resistance through possible strata change.
(7.9-8.2 m): Observed higher drilling resistance through possible cobble/ boulder.

837-05M.GPJ GEODESIGN.GDT 1/17/03

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Date and Time	Depth (m)	Elevation (m)	Notes
7/16/02 10:20 AM	6.10	212.20	wet soils

Sample Information

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		S6	SS	61	18	9.14	7	5	10	11		-
10												
11		S7	SS	61	18	10.67	67	20	15	12		-
12												
		S8	SS	61	8	12.19	34	17	12	11		-
13												
14		S9	SS	61	18	13.72	28	9	10	10		-
15												
		S10	SS	61	38	14.94	13	17	14	16		-
16												
		S11	SS	61	18	16.46	27	21	25	28		-
17												
18												

Sample Description (Classification System: Burmister)	Symbol	Strata Description (Elevation & Depth (meters))
		209.16 9.14 Gravelly SAND
(S6): Medium dense, brown, fine to coarse SAND, trace Silt, trace fine to coarse Gravel, wet.		
(S7): Dense, brown, fine to coarse SAND and fine to coarse GRAVEL, trace Silt, slight oxidation, wet.		
(S8): Medium dense, similar to S7, except with no oxidation.		
(S9): Medium dense, brown fine to coarse SAND, trace Silt, trace fine Gravel, wet.		
(S10): Dense, gray, fine to coarse SAND, trace Silt, trace fine Gravel, wet.		
(S11): Dense, gray, fine to coarse SAND, some fine to coarse Gravel, little Silt, wet.		

Remarks: (10.7-10.8 m): Observed SS sampler bouncing on probable cobble.
(15.7): 76.2 mm I.D. F.J. casing lowered inside HSA to 13.7 meters. HSA augers removed from the borehole. Borehole was advanced below 13.7 meters' using roller bit and casing and with a mixture of water and bentonite powder (drilling mud).

837-05M.GPJ GEODESIGN.GDT 1/17/03

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Sample Information

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		S12	SS	61	18	17.98	28	31	25	36		-
19												
		S13	SS	61	18	19.51	24	24	16	11		-
20												
21												
		S14	SS	61	13	21.03	28	44	56	39		-
22												
23												
24												
25												
26												
27												

Sample Description (Classification System: Burmister)	Symbol	Strata Description (Elevation & Depth (meters))
(S12): Very dense, similar to S11.		Gravelly SAND *(Continued)*
(S13): Dense, gray, fine to coarse SAND, little Silt, trace fine Gravel, wet.		
(S14): Very dense, fine to coarse SAND, little to some Silt, little fine to coarse Gravel, wet.		196.66 21.64 Bottom of Borehole at 21.64 m

Remarks

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ESTIMATED PILE TIP ELEVATION AT ABUTMENT 1 = 195.68

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of LYNDON	Bridge No. 2
	Log Sta.
Highway No. VT 114	Surv. Sta.
VT 114 OVER PASSUMPSIC RIVER	
BORING LOGS & INFORMATION (2 OF 4)	
Designed By GEODESIGN, INC.	Drawn By B.J. MASSE
Checked By M.A. COLGAN Date 3/06	Bridge Design Supervisor M.A. COLGAN Date 3/06
PROJECT LYNDON	PROJECT NO. BRF 0269(10)
I.G.C. Info.	
Bridge Sheet No. 50544BOR	Sheet 21 of 72

VHB Vanasse Hangen Brustlin, Inc.

PLOTTED 3-14-2006