

VT logo		STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH SECTION SUBSURFACE INFORMATION			BORING NUMBER: BB-LC-204 SHEET 1 of 1 DATE STARTED: 1/29/13 DATE COMPLETED: 1/29/13		
PROJECT NAME: CLD Lunenburg Culvert SITE NAME: STATION: 429+28 OFFSET: 10 RT VTSPG: N 724789.97 ft E 1867976.29 ft		PROJECT NUMBER: 123-87438 SITE NUMBER: BR 126 GROUND ELEVATION: 854.0 ft GROUNDWATER DEPTH: NE 1/29/13 PROJECT PIN NUMBER: Lunenburg NH Culv (27)		BORING CREW: DRILLER: D. Palmer LOGGER: M. Henrick BORING RIG: Diedrich D-50 Track		BORING TYPE: WASH BORE SAMPLE TYPE: SPLIT BARREL HAMMER TYPE: CHECKED BY: JDL	
DEPTH (ft)	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER 6 IN (N VALUE)	M.C. (%)	AASHTO GRAVEL (%)	AASHTO SAND (%)	AASHTO FINES (%)
0.0 - 9.0	XXXX	Asphalt at roadway surface, no samples collected until 9 ft.					
2.5	XXXX	4.0 ft. Gravel and small cobbles at 5 ft based on drill behavior.					
5.0	XXXX						
7.5	XXXX						
10.0	XXXX	9.0 ft - 11.0 ft, SiSiGr, Light brown, Wet, (GM) Silty coarse GRAVEL, some fine to coarse sand, medium dense [Sample 1D], Rec. = 0.2 ft	24-12-14 (23)				
12.5	XXXX	11.0 ft - 13.0 ft, SaGrSi, Light brown, Wet, (ML) Gravelly SILT, some fine to medium sand, dense [Sample 2D], Rec. = 0.9 ft	44-20-27-13 (47)				
15.0	XXXX	13.0 ft - 15.0 ft, No recovery - suspect spoon pushed cobble [Sample 3D], Rec. = 0.0 ft	35-21-17-12 (38)				
17.5	XXXX	15.0 ft - 16.3 ft, SaSiGr, Tan, Wet, (GM) Silty, fine to medium sandy, GRAVEL, dense [Sample 4D]. Hit refusal at 16.3 ft., Rec. = 0.2 ft	15-21-100 (121)				
20.0	XXXX	16.3 ft - 17.2 ft, Triconed through concrete culvert. Abandoned hole at 17.2 ft. Plugged hole with bentonite chips and soil cuttings from 7 ft. Placed and compacted approximately 10 inches of cold patch at surface. Hole stopped @ 17.2 ft					
22.5	XXXX	Notes: - Boring location estimated from swing ties. Location not surveyed.					

VT logo		STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH SECTION SUBSURFACE INFORMATION			BORING NUMBER: BB-LC-204A SHEET 1 of 2 DATE STARTED: 2/01/13 DATE COMPLETED: 2/01/13				
PROJECT NAME: CLD Lunenburg Culvert SITE NAME: STATION: 429+48 OFFSET: 15 RT VTSPG: N 724779.77 ft E 1867995.92 ft		PROJECT NUMBER: 123-87438 SITE NUMBER: BR 126 GROUND ELEVATION: 854.0 ft GROUNDWATER DEPTH: 19.0 ft 2/01/13 PROJECT PIN NUMBER: Lunenburg NH Culv (27)		BORING CREW: DRILLER: D. Palmer LOGGER: M. Henrick BORING RIG: Diedrich D-50 Track		BORING TYPE: WASH BORE SAMPLE TYPE: SPLIT BARREL & TUBE HAMMER TYPE: CHECKED BY: JDL			
DEPTH (ft)	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER 6 IN (N VALUE)	M.C. (%)	AASHTO GRAVEL (%)	AASHTO SAND (%)	AASHTO FINES (%)	LL (%)	PI (%)
0.0 - 15.0	XXXX	Embankment fill, no samples collected.							
2.5	XXXX								
5.0	XXXX								
7.5	XXXX								
10.0	XXXX								
12.5	XXXX								
15.0	XXXX	15.0 ft - 17.0 ft, No recovery, suspect spoon pushed cobbles/gravel [Sample 1D]. Failed vane attempt at 15 ft, could not push vane., Rec. = 0.0 ft	11-7-6-3 (13)						
17.5	XXXX	17.0 ft - 19.0 ft, GrSiCl, Gray, Wet, (CL) Silty gravelly CLAY, [Sample 2D], low recovery, suspect spoon pushed cobble/gravel. Failed vane attempt at 17 ft, could not push vane., Rec. = 0.2 ft	5-3-7-6 (10)						
20.0	XXXX	19.0 ft, Driller reported gravel in wash to 20 ft.							
22.5	XXXX	20.0 ft - 22.0 ft, SiCl, Gray, Wet, No recovery, gray silty clay on outside of spoon [Sample 3D]. Suspect spoon pushed a cobble. Failed vane attempt at 20 ft, could not push vane., Rec. = 0.0 ft	19-21-16-16 (3" Spoon)						
		22.0 ft - 24.0 ft, SiCl, Gray, Wet, (CL) Silty CLAY, faintly varved in 1/2-inch layers [Sample 4D]. 1126 psf from FVT at 23 ft, 1071 psf from FVT at 24 ft with the 65x130mm vane. A-6, Rec. = 2.0 ft		35.0				34	14

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PROJECT NAME: CLD Lunenburg Culvert SITE NAME: STATION: 429+48 OFFSET: 15 RT VTSPG: N 724779.77 ft E 1867995.92 ft		PROJECT NUMBER: 123-87438 SITE NUMBER: BR 126 GROUND ELEVATION: 854.0 ft GROUNDWATER DEPTH: 19.0 ft 2/01/13 PROJECT PIN NUMBER: Lunenburg NH Culv (27)		BORING CREW: DRILLER: D. Palmer LOGGER: M. Henrick BORING RIG: Diedrich D-50 Track		BORING TYPE: WASH BORE SAMPLE TYPE: SPLIT BARREL & TUBE HAMMER TYPE: CHECKED BY: JDL			
DEPTH (ft)	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER 6 IN (N VALUE)	M.C. (%)	AASHTO GRAVEL (%)	AASHTO SAND (%)	AASHTO FINES (%)	LL (%)	PI (%)
25.0 - 27.0	XXXX	25.0 ft - 27.0 ft, SiCl, Gray, Wet, (CL) Silty CLAY, Shelby tube sample with GUS sampler [Sample 1U]. A-6, Rec. = 2.0 ft	NA (Tube)	38.0				34	13
27.0 - 29.0	XXXX	27.0 ft - 29.0 ft, SiCl, Gray, Wet, No spoon collected. 1049 psf from FVT at 28 ft, 1027 psf from FVT at 29 ft with the 55x110mm vane.	NA (FVT)						
32.0 - 34.0	XXXX	32.0 ft - 34.0 ft, Driller reported sand and gravel lenses from 32 to 34 ft.							
34.0 - 36.0	XXXX	34.0 ft - 36.0 ft, Till based on drill behavior from 34 to 36 ft. End of boring at 36.0 ft in Glacial Till. Boring backfilled with soil cuttings upon completion. Placed and compacted approximately 8 inches of cold patch at surface. Hole stopped @ 36.0 ft							
Notes: - Boring location estimated from swing ties. Location not surveyed.									

BOTTOM OF
MAT FOUNDATION
EL. 827.20 +/-

CLD_12-0106 MODEL: Bor-09

PROJECT NAME: LUNENBURG	PLOT DATE: 8/6/2015
PROJECT NUMBER: NH CULV(27)	DRAWN BY: M. SMITH
FILE NAME: Iib294/cos/zlib294bor.dgn	CHECKED BY: J. BYATT
PROJECT LEADER: J. BYATT	SHEET 40 OF 74
DESIGNED BY: S. BEAUMONT	
BORING LOGS SHEET 8	

