VAOT Metric

CLOUGH, HARBOUR & ASSOCIATES LLP

Bennington-Hoosick D.P.J. 0146 (1)
SUBSURFACE LOG
HOLE NUMBER B-449
PAGE 1 OF 2

PROJECT NUMBER: 5163.4.12 October 1996
LOCATION: Station: 14+898 Offset: 12m Lt
CLIENT: VAOT
CONTRACTOR: New England Boring
DRILLER: M.S.J. INSPECTOR: C. Kavanaugh
START DATE: 10/31/96 FINISH DATE: 10/31/96
SURFACE ELEV.: 199.38m CHECKED BY: S. Pidgeon
DRILL FLUID: Water DRILLING METHOD: 10m F.J.C., Rollerbit

WATER LEVEL OBSERVATIONS DURING DRILLING	DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM
	10/31/96	3:30	4.27m	9.14m	16.76m

SAMP/CORE NUMBER	SAMP. ADV LEN CORE	RECOVERY	Blows per .152m on Split Spoon Sampler	N-VALUE	SAMPLE	DEPTH (Meters)	DESCRIPTION AND CLASSIFICATION	ELEVATION (Meters)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
S1	.61m	.30m	2-2-3-9	5		.5	Clayey SILT, trace f.m.c. sand, trace f. gravel, brown, m. stiff, moist (A-4)	199		
S2	.61m	.40m	14-15-9-12	26		1	CLAY and SILT, trace f.m.c. sand, trace f.c. gravel, gray, v. stiff, moist (A-6)	198.5		
S3	.61m	.49m	9-10-14-8	24		1.5	grades to no gravel, dk gray(A-6)	198		
S4	.61m	.55m	3-4-8-10	12		2	Silty CLAY, (slt in lenses), trace f. gravel, dk gray, stiff, moist (A-6)	197.5		
S5	.61m	.55m	7-21-10-7	31		2.5	CLAY and SILT, (lenses), trace f.m.c sand, dk gray, hard, moist (A-6)	197		
S6	.61m	.37m	8-8-17-29	28		3	Clayey Silt little f.m.c. sand, little f. gravel, dk gray, v. stiff, moist (A-6)	196.5	LABORATORY AASHTO CLASSIFICATION PERFORMED ON S6. LL=28, PL=13, PI=9	
						3.5		196		
						4		195.5		
						4.5		195		
S7	.61m	.37m	37-50-57-83	R		5	f. SAND , brown, v. dense, moist (A-3)	194.5		
						5.5		194		
						6		193.5		
S8	.81m	.15m	36-75/.03m	R		6.5	grades to trace f. gravel, brown,(A-3)	193		
						7		192.5		
						7.5		192		
S9	.61m	.55m	21-35-55-75	90		8	SILT and f. SAND , trace f. gravel, brown, v. hard, moist (A-4)	191.5		
						8.5		191		
						9		190.5		
S10	.61m	.24m	28-55-50-55	R		9.5	SILT , trace f.m.c. sand, lt. brown, v. hard, moist (A-4)	190		
						10		189.5		
						10.5		189		
S11	.61m	.30m	24-36-28-31	64		11	Similar soils(A-4)	188.5		
						11.5		188		
						12		187.5		
S12	.10m	.06m	105/.10m	R		12.5	grades to trace f. gravel(A-4)	187		
						13		186.5		
						13.5		186		
S13	.61m	.18m	26-59-55-51	R		14	Similar soils(A-4)	185.5		
						14.5		185		
						15		184.5		
S14	.61m	.55m	16-25-31-34	66		15.5	Similar soils(A-4)	184		
						16		183.5		
S15	.61m	.24m	46-75-53-95	R		16.5	Similar soils(A-4)	183		

Find Depth: 16.76 meters

BOT. OF MSE WALL
LEVELING PAD EL. 201.85

CLOUGH, HARBOUR & ASSOCIATES LLP

Bennington-Hoosick D.P.J. 0146 (1)
SUBSURFACE LOG
HOLE NUMBER B-451
PAGE 1 OF 1

PROJECT NUMBER: 5163.4.12 October 1996
LOCATION: Station: 14+905 Offset: 7.5
CLIENT: VAOT
CONTRACTOR: New England Boring
DRILLER: M.S.J. INSPECTOR: C. Kavanaugh
START DATE: 10/22/96 FINISH DATE: 10/23/96
SURFACE ELEV.: 204.14m CHECKED BY: S. Pidgeon
DRILL FLUID: Water DRILLING METHOD: F.J.C.

WATER LEVEL OBSERVATIONS DURING DRILLING	DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM

SAMP/CORE NUMBER	SAMP. ADV LEN CORE	RECOVERY	Blows per .152m on Split Spoon Sampler	N-VALUE	SAMPLE	DEPTH (Meters)	DESCRIPTION AND CLASSIFICATION	ELEVATION (Meters)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
S1	.61m	.46m	1-4-7-10	11		.5	SILT and f. SAND, little f.c. gravel, trace root and acorns, brown, stiff, moist A-4)	204		
S2	.61m	.46m	9-12-13-13	25		1	SILT and f. SAND some f.m.c. Sand, trace f.c. gravel, brown, v. stiff, moist(A-4)	203.5		
								203		
S3	.61m	.46m	15-62-40-20	R		1.5	becomes v. hard (A-4)	202.5		
S4	.61m	.61m	16-17-22-23	39		2	becomes hard(A-4)	202		
S5	.61m	.61m	13-27-28-40	55		2.5	Similar soils(A-4)	201.5		
S6	.61m	.43m	28-30-30-35	60		3	Similar soils(A-4)	201		
						3.5		200.5		
						4		200		
						4.5				
S7	.61m	NR	30-29-24-25	53		5	Silty CLAY, some f. Gravel, trace f.m.c. sand, gray, hard, moist (A-6)	199.5	No recovery 1st attempt. 0.15 m recovery in 2nd spoon.	
						5.5		199		
						6		198.5		
S8	.61m	.43m	18-13-13-17	26		6.5	Silty CLAY, some f.m.c. Sand, little f. gravel, brown, v. stiff, moist (A-6)	198	Laboratory AASHTO classification performed on S8. LL=31, PL=16, PI=15 boulder	
						7		197.5		
						7.5		197		
S9	.61m	NR	12-13-14-15	27		8	No recovery	196.5	2 attempts - no recovery - little gray clay on nose of spoon.	
						8.5		196		
						9		195.5		
S10	.61m	NR	10-8-16-18	27		9.5	Silty CLAY trace f. gravel, varved, dk gray, v. stiff, moist (A-6)	195	No recovery 1st attempt. 0.18m recovery in 2nd spoon.	
						10		194.5		
								194		
								193.5		
S11	.61m	.52m	12-20-30-51	50		11	CLAY and SILT little f. sand, trace f. gravel, gray, hard, moist (A-6)	193		
							f. SAND , gray, dense, moist (A-3)			

Find Depth: 11.3 meters

BOT. OF MSE LEVELING PAD EL. 201.85

BOT. OF FTG. EL. 214.25

CLOUGH, HARBOUR & ASSOCIATES LLP

Bennington-Hoosick D.P.J. 0146 (1)
SUBSURFACE LOG
HOLE NUMBER B-453
PAGE 1 OF 1

PROJECT NUMBER: 5163.4.12 October 1996
LOCATION: Station: 14+915 Offset: 5m Lt
CLIENT: VAOT
CONTRACTOR: New England Boring
DRILLER: M.S.J. INSPECTOR: J. Spollen
START DATE: 10/16/96 FINISH DATE: 10/16/96
SURFACE ELEV.: 204.18m CHECKED BY: S. Pidgeon
DRILL FLUID: Water DRILLING METHOD: S.S.A & HSA & R.B.

WATER LEVEL OBSERVATIONS DURING DRILLING	DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM

SAMP/CORE NUMBER	SAMP. ADV LEN CORE	RECOVERY	Blows per .152m on Split Spoon Sampler	N-VALUE	SAMPLE	DEPTH (Meters)	DESCRIPTION AND CLASSIFICATION	ELEVATION (Meters)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
S1	.61m	.30m	1-4-7-10	11		.5	Clayey SILT little f.m.c. sand and f. gravel, brown, stiff, moist(A-4)	204		
S2	.61m	.30m	10-12-26-29	38		1	becomes hard (A-4)	203.5		
S3	.61m	.46m	20-17-11-12	28		1.5	grades with little c. gravel, becomes v. stiff (A-4)	203		
S4	.61m	.61m	12-26-31-36	57		2	becomes hard (A-4)	202.5		
S5	.61m	.43m	30-31-52-27	83		2.5	becomes v. hard (A-4)	202		
S6	.61m	.43m	23-20-24-29	44		3	Clayey SILT some f.m.c. Sand and f. gravel, brown, hard, moist (A-4)	201.5	Used Solid Stem Augers to 3.05m, then used 10m F.J.C with rollerbit and water to advance boring to final depth	
						3.5		201	Laboratory AASHTO classification performed on S6. LL=25, PL=16, PI=9	
						4		200.5		
						4.5	no c. gravel, becomes gray (A-4)	200		
S7	.61m	NR	8-14-16-28	30		5		199.5	No recovery 1st attempt; Recovery for 2nd attempt not recorded	
						5.5		199		
						6		198.5		
S8	.61m	NR	36-18-19-24	37		6.5	CLAY and SILT little f.m.c. sand and f.c. gravel, gray, hard ,moist(A-6)	198	No recovery 1st attempt; Recovery for 2nd attempt not recorded	
						7		197.5		
						7.5		197		
S9	.61m	NR	12-18-26-27	45		8	Similar soils(A-6)	196.5	No recovery 1st attempt; Recovery for 2nd attempt not recorded	
						8.5		196		
						9		195.5		
S10	.61m	.43m	15-22-24-26	46		9.5	Similar soils(A-6)	195		
						10		194.5		
						10.5		194		
						11		193.5	Rollerbit from 10.2m to 11.2m, then core. Core barrel busts thru cobble at 11.2m. Stop advancement at 11.7m, no recovery.	
						11.5		193	occasional cobble	
S11	.46m	.37m	56-108-123	R		12	Clayey SILT and f. SAND little m.c. sand, trace f. gravel, light brown, v. dense, wet (A-4)	192.5		
S12	.61m	.43m	32-56-64-100	R		12.5	f. SAND and SILT , laminated, brown, v. dense, wet (A-4)	192	Rollerbit open hole to 12.19m after S11	
								191.5		

Find Depth: 12.8 meters

BOT. OF MSE WALL
LEVELING PAD EL. 201.85

CLOUGH, HARBOUR & ASSOCIATES LLP

Bennington-Hoosick D.P.J. 0146 (1)
SUBSURFACE LOG
HOLE NUMBER B-454
PAGE 1 OF 1

PROJECT NUMBER: 5163.4.11 March 1996
LOCATION: Station: 14+890 Offset: 18m Lt
CLIENT: VAOT
CONTRACTOR: NE Diamond Drilling
DRILLER: T.W. INSPECTOR: S. Pidgeon
START DATE: 3/19/96 FINISH DATE: 3/19/96
SURFACE ELEV.: 198.9m CHECKED BY: S. Pidgeon
DRILL FLUID: water DRILLING METHOD: F.J.C.

WATER LEVEL OBSERVATIONS DURING DRILLING	DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM
	3/19/96	12:00	0.79m	4.6m	6.1m

SAMP/CORE NUMBER	SAMP. ADV LEN CORE	RECOVERY	Blows per .152m on Split Spoon Sampler	N-VALUE	SAMPLE	DEPTH (Meters)	DESCRIPTION AND CLASSIFICATION	ELEVATION (METERS)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
S1	.61m	.03m	4-6-9-3	15		.5	f.c. GRAVEL , little f.m.c. sand, trace silt, brown-gray, m. dense , wet (A-1-a)	198.5		
S2	.61m	.37m	8-8-19-32	30		1	Clayey SILT , some f. sand, little m.c. sand, trace f.c.gravel, brown, v. stiff, moist(A-6)	198	0.10m casing advanced to 1.2 m. Open hole methods used from 1.2m to 3m. Hole collapsed after S5. Installed 0.76 m diameter casing to 3m. from 3.0m to 4.6m, 0.76m diameter casing was used.	
S3	.52m	.34m	25-48 47-50/0.06m	95		1.5	f.m SAND and Clayey SILT , some c. Sand, some f. Gravel, brown, v. hard, moist (A-4)	197.5		
S4	.30m	.03m	16-23-50/0	R		2	Similar soil(A-4)	197		
S5	.61m	.24m	24-23-18-29	41		2.5	f.c. GRAVEL and m.c. SAND , little f. sand, little clayey silt, brown, dense, wet (A-1-b)	196.5		
S6	.61m	.27m	14-12-8-15	20		3	f. SAND, little clayey silt, brown, m. dense, wet (A-2-4)	196	cobbles form L5 to 2.7m	
						3.5		195.5		
						4		195		
						4.5		194.5		
S7	.61m	.30m	18-20-18-26	38		5	f. SAND, trace clayey silt, brown, dense, moist (A-3)	194		
						5.5		193.5		
						6		193		
S8	.61m	.61m	18-38-40-48	78		6.5	f. SAND, little m.c.sand, little f.c. gravel, trace clayey silt, brown, v. dense, moist (A-3)	192.5		

Find Depth: 6.7 meters

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Bennington-Hoosick D.P.J. 0146 (1)
SUBSURFACE LOG
HOLE NUMBER B-450
Page 1 of 1

PROJECT NUMBER: 5163.4.11 March 1996
LOCATION: Station: 14+875 Offset: 10m Rt
CLIENT: NYSDOT & VAOT
CONTRACTOR: NE Diamond Drilling
DRILLER: T.W. INSPECTOR: S. Pidgeon
START DATE: 3/18/96 FINISH DATE: 3/18/96
SURFACE ELEV.: 196.69m CHECKED BY: S. Pidgeon
DRILL FLUID: None DRILLING METHOD: F.J.C.

WATER LEVEL OBSERVATIONS DURING DRILLING	DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM

SAMP/CORE NUMBER	SAMP. ADV LEN CORE	RECOVERY	Blows per .152m on Split Spoon Sampler	N-VALUE	SAMPLE	DEPTH (Meters)	DESCRIPTION AND CLASSIFICATION	ELEVATION (METERS)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
S1	.61m	.06m	7-14-19-24	33		.5	f.c. GRAVEL , some f.m.c. Sand, little clayey silt, brown, dense, wet (A-1-b)	196.5		
S2	.61m	.18m	9-8-8-17	19		1	CLAY and SILT , trace f.m.c sand, gray, moist, v. stiff(A-6)	196		
S3	.61m	.06m	19-18-20-43	38		1.5	f.c. GRAVEL , little f.m.c. sand, little clayey silt, gray, dense, moist (A-1-b)	195.5	CASING ADVANCED TO 1.2 M. OPEN HOLE METHODS USED BELOW 1.2 M.	
S4	.61m	.34m	8-9-9-16	18		2	CLAY and SILT , little f.m.c. sand, trace f. gravel, gray, v. stiff, moist(A-6)	195		
S4	.61m	.06m	4-9-12-14	21		2.5	Similar soils(A-6)	194.5		
S5	.61m	.06m	4-9-12-14	21		3	grades with trace f.m.c. sand(A-6)	194		
S6	.61m	.30m	9-10-10-12	20		3.5		193.5		
						4		193		
						4.5		192.5		
S7	.61m	.34m	8-7-13-16	20		5	CLAY and SILT , trace f. sand, gray, v. stiff, DRY (A-6)	192		
						5.5		191.5	COBBLE	
						6		191		
S8	.61m	.23m	29-24-28-33	51		6.5	Clayey SILT , some f. Sand, brown, hard, MOIST(A-4)	190.5		
								190		

Find Depth: 6.7 meters

BOT. OF MSE WALL
LEVELING PAD EL. 201.85

CLOUGH, HARBOUR & ASSOCIATES LLP

Bennington-Hoosick D.P.J. 0146 (1)
SUBSURFACE LOG
HOLE NUMBER B-452
Page 1 of 1

PROJECT NUMBER: 5163.4.11 March 1996
LOCATION: Station: 14+882 Offset: 2m Lt
CLIENT: VAOT
CONTRACTOR: NE Diamond Drilling
DRILLER: T.W. INSPECTOR: S. Pidgeon
START DATE: 3/18/96 FINISH DATE: 3/18/96
SURFACE ELEV.: 198.64m CHECKED BY: S. Pidgeon
DRILL FLUID: None DRILLING METHOD: F.J.C.

WATER LEVEL OBSERVATIONS DURING DRILLING	DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM
	3/18/96	16:45	0	1.21m	6.1m

SAMP/CORE NUMBER	SAMP. ADV LEN CORE	RECOVERY	BLOWS PER .152M ON SPLIT SPOON SAMPLER	N-VALUE	SAMPLE	DEPTH (METERS)	DESCRIPTION AND CLASSIFICATION	ELEVATION (METERS)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
S1	.61m	.03m	6-3-3-5	9		.5	f.c. GRAVEL , little f.m.c. Sand, gray-brown, loose, wet (A-1-a)	198.5		
S2	.61m	.24m	7-5-9-4	14		1	CLAY and SILT , trace f.m.c sand, gray, stiff, moist (A-6)	198		
S3	.61m	NR	10-7-8-12	18		1.5	becomes v.stiff(A-6)	197.5		
S4	.12m	.12m	50/0.12m	R		2	CLAY and SILT , little f.m.c. sand, little f.c. gravel, gray, v. hard, moist (A-6)	197		
S5	.61m	.34m	8-8-16-20	27		2.5	grades to trace c.gravel, v. stiff(A-6)	196.5	S3: NO RECOVERY ON 1ST ATTEMPT. RECOVERY ON 2ND ATTEMPT=0.24M CASING ADVANCED TO 1.2 M. OPEN HOLE METHODS USED BELOW 1.2 M.	
S6	.61m	.43m	5-8-12-20	20		3	CLAY and SILT , trace f.sand, gray-brown, v. stiff, moist(A-6)	196		
						3.5		195.5		
						4		195		
						4.5		194.5		
S7	.61m	.43m	19-23-21-22	44		5	Clayey SILT little f.m.c. sand, little f.c. gravel, gray, hard, dry (A-6)	194		
						5.5		193.5		
						6		193		
S8	.61m	.09m	30-43-61-50	R		6.5	Clayey SILT and f. SAND brown, v. hard, dry (A-6)	192.5		
								192		

Find Depth: 6.7 meters

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of	BENNINGTON	Bridge No.	BR500
Highway No.	VT. RTE. 9	Log Sta. / Surv. Sta.	14+900

VT. RTE. 9 OVER AIRPORT BROOK EAST

SOIL BORING LOGS

Designed By	W. HARRIS	Drawn by	M. CUEVAS
Checked By	M. QUINN Date 11/01	Bridge Design Supervisor	M. OLSTAD Date 11/01
PROJECT	BENNINGTON-HOOSICK	PROJECT NO.	D.P.J. 0146(1)
I.G.C. Info.			
Bridge Sheet No.	BR506	Sheet	236 OF 473

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
III WINNERS CIRCLE ALBANY, NEW YORK, 12205

FILE NAME =u:\3573\15\br500\blog2.PLT
DATE/TIME =10/21/2001
USER =5604