

TEST BORING LOG																
GZA GeoEnvironmental, Inc. Engineers and Scientists			Taftsville Covered Bridge Woodstock, Vermont			EXPLORATION NO.: B-101 SHEET: 1 of 1 PROJECT NO: 04.0029444.00 REVIEWED BY: DGL			Type of Rig: Acker Rig Model: HMD 2350 Drilling Method: ODEX			Boring Location: See Plan Ground Surface Elev. (ft.): Final Boring Depth (ft.): 25.8 Date Start - Finish: 10/24/2011 - 10/24/2011			H. Datum: V. Datum:	
Logged By: Mike Devold Drilling Co.: New Hampshire Boring Foreman: Mike Misloszek			Hammer Type: Donut Hammer Weight (lb.): 140 Hammer Fall (in.): 30 Auger or Casing O.D./I.D Dia (in.): 4			Sampler Type: SS Sampler O.D. (in.): 2.0 Sampler Length (in.): 24 Rock Core Size:			Groundwater Depth (ft.)			Date			Time	
Depth (ft)	Casing Blows/ Core Rate	No.	Sample		Blows (per 6 in.)	SPT Value	Sample Description and Identification (Modified Burmister Procedure)	Remark	Field Test Data	Depth (ft)	Stratum Description	Elev. (ft.)	Date		Time	
			Depth (ft.)	Pen. (in.)									Rec. (in.)	Time	Water Depth	Stab. Time
0.25							S-1: Loose, brown, fine to coarse SAND, some Gravel, trace Silt. Dry.				ASPHALT					
5		S-1	1-3	24	5	3 3 5 5										
		S-2	5-7	24	0	2 2 4 5	S-2: No Recovery.	1			FILL					
10		S-3	10-12	24	4	9 10 8 9	S-3: Medium dense, brown, fine to coarse SAND, some Gravel, little Silt. Dry.									
15		S-4	15- 15.7	9	6	17 100/3*	S-4: Top 3 inches: Very dense, brown, fine to medium SAND, little Silt. Bottom 3 inches: Very dense, brown, fine to coarse SAND, trace Gravel, trace Silt. Wet.			15.2	GLACIAL TILL					
20		S-5	20- 20.8	10	10	75 150/4*	S-5: Very dense, gray, fine to coarse SAND, little Gravel, little Silt. Damp.	2		21	WEATHERED ROCK					
										23	BEDROCK					
							End of exploration at 25.8 feet.			25.8						
REMARKS 1 - Cobbles and boulders encountered throughout Fill and Glacial Till deposits. 2 - Possibly fractured/weathered rock (small <1-inch seams/fractures) at 21 feet to 23 feet below ground surface. Hard drilling at 23 feet below ground surface. See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil and bedrock types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.																
												Exploration No.: B-101				

TEST BORING LOG																
GZA GeoEnvironmental, Inc. Engineers and Scientists			Taftsville Covered Bridge Woodstock, Vermont			EXPLORATION NO.: B-103 SHEET: 1 of 1 PROJECT NO: 04.0029444.00 REVIEWED BY: DGL			Type of Rig: Acker Rig Model: HMD 2350 Drilling Method: ODEX			Boring Location: See Plan Ground Surface Elev. (ft.): Final Boring Depth (ft.): 28.5 Date Start - Finish: 10/26/2011 - 10/26/2011			H. Datum: V. Datum:	
Logged By: Mike Devold Drilling Co.: New Hampshire Boring Foreman: Mike Misloszek			Hammer Type: Donut Hammer Weight (lb.): 140 Hammer Fall (in.): 30 Auger or Casing O.D./I.D Dia (in.): 4			Sampler Type: SS Sampler O.D. (in.): 2.0 Sampler Length (in.): 24 Rock Core Size:			Groundwater Depth (ft.)			Date			Time	
Depth (ft)	Casing Blows/ Core Rate	No.	Sample		Blows (per 6 in.)	SPT Value	Sample Description and Identification (Modified Burmister Procedure)	Remark	Field Test Data	Depth (ft)	Stratum Description	Elev. (ft.)	Date		Time	
			Depth (ft.)	Pen. (in.)									Rec. (in.)	Time	Water Depth	Stab. Time
5.9											CONCRETE					
5																
										5.9	VOID					
										7	VOID					
10		S-1	10-12	24	1	2 3 2 4	S-1: Loose, brown, fine to coarse SAND and Gravel, trace Silt. Rock stuck in tip. Dry.									
15		S-2	15-17	24	7	7 4 4 7	S-2: Loose, brown, fine to coarse SAND, some Gravel, some Silt. Dry.	3			FILL					
20		S-3	20- 20.8	10	2	22 100/4*	S-3: Very dense, brown, fine to coarse SAND, little Gravel, trace Silt. Rock stuck in tip. Dry.									
25		S-4	25-27	24	14	27 44 40 41	S-4: Very dense, brown to brown-gray, fine to coarse SAND, little Gravel, trace Silt. Damp.				GLACIAL TILL					
							End of exploration at 28.5 feet.			28.5	BEDROCK					
REMARKS 1 - Cored top 5.9 feet concrete using 5.5-inch OD/4.25-inch ID, 5-foot-long core barrel. Broke through concrete at 5.9 feet below ground surface. 2 - Void encountered below concrete from approximately 5.9 to 7.0 feet below ground surface. 3 - Cobbles and boulders encountered throughout Fill and Glacial Till deposits. 4 - Very hard drilling at 28 feet below ground surface.																
												Exploration No.: B-103				

TEST BORING LOG																
GZA GeoEnvironmental, Inc. Engineers and Scientists			Taftsville Covered Bridge Woodstock, Vermont			EXPLORATION NO.: B-104 SHEET: 1 of 1 PROJECT NO: 04.0029444.00 REVIEWED BY: DGL			Type of Rig: Acker Rig Model: HMD 2350 Drilling Method: ODEX			Boring Location: See Plan Ground Surface Elev. (ft.): Final Boring Depth (ft.): 27.5 Date Start - Finish: 10/26/2011 - 10/27/2011			H. Datum: V. Datum:	
Logged By: Mike Devold Drilling Co.: New Hampshire Boring Foreman: Mike Misloszek			Hammer Type: Donut Hammer Weight (lb.): 140 Hammer Fall (in.): 30 Auger or Casing O.D./I.D Dia (in.): 4			Sampler Type: SS Sampler O.D. (in.): 2.0 Sampler Length (in.): 24 Rock Core Size:			Groundwater Depth (ft.)			Date			Time	
Depth (ft)	Casing Blows/ Core Rate	No.	Sample		Blows (per 6 in.)	SPT Value	Sample Description and Identification (Modified Burmister Procedure)	Remark	Field Test Data	Depth (ft)	Stratum Description	Elev. (ft.)	Date		Time	
			Depth (ft.)	Pen. (in.)									Rec. (in.)	Time	Water Depth	Stab. Time
1											CONCRETE					
5																
										5.5	VOID					
										7	VOID					
10		S-1	10-12	24	6	2 3 3 3	S-1: Loose, brown, fine to coarse SAND, some Gravel, some Silt. Dry.									
15		S-2	15-17	24	3	9 11 38 26	S-2: Dense, brown, fine to coarse SAND and Gravel, some Silt. Dry.				FILL					
20		S-3	20-22	24	7	75 51 51 29	S-3: Very dense, brown, fine to coarse SAND, some Gravel, some Silt. Damp.									
25		S-4	25- 26.7	20	17	15 35 46 100/0.2'	S-4: Very dense, brown-gray, fine to coarse SAND, little Silt, trace Gravel.				GLACIAL TILL					
							End of exploration at 27.5 feet.			27.5	BEDROCK					
REMARKS 1 - Cored top 5.5 feet concrete using 5.5-inch OD/4.25-inch ID, 5-foot-long core barrel. Broke through concrete at 5.5 feet below ground surface. 2 - Void encountered below concrete from approximately 5.5 to 7.0 feet below ground surface. 3 - Cobbles and boulders encountered throughout Fill and Glacial Till deposits. 4 - Very hard drilling at 27.2 feet below ground surface.																
												Exploration No.: B-104				

\* BOTTOM OF ABUTMENT NO. 1 (WEST) SUBFOOTING

LOG KEY (3 OF 4)				
BURMISTER SOIL CLASSIFICATION (INORGANIC)				
COMPONENT	NAME	PROPORTIONAL TERM	PERCENT BY WEIGHT	IDENTIFICATION OF FINES
MAJOR	GRAVEL, SAND, FINES*		>50	SILT 0 Cannot Roll
Minor	Gravel, Sand, Fines*	and some little	35 - 50	Clayey SILT 1-5 1/4"
		trace	10-20	SILT & CLAY 5-10 1/8"
			0-10	CLAY & SILT 10-20 1/16"
				Silty CLAY 20-40 1/32"
				CLAY >40 1/64"
GRADATION DESIGNATION		PROPORTION OF COMPONENT	PLASTIC SOILS Consistency Blows/Ft. SPT N-Value	GRAVEL & SAND Density Blows/Ft. SPT N-Value
5	Fine to coarse Medium to coarse Fine to medium Coarse Medium Fine	All fractions > 10% <10% fine <10% coarse <10% fine and medium <10% coarse and fine <10% coarse and medium	Very Soft < 2 Soft 2 - 4 Medium Stiff 4 - 8 Stiff 8 - 15 Very Stiff 15 - 30 Hard >30	Very Loose < 4 Loose 4 - 10 Medium Dense 10 - 30 Dense 30 - 50 Very Dense > 50

LOG KEY (4 OF 4)				
BURMISTER SOIL CLASSIFICATION (ORGANIC)				
Fibrous PEAT (Pt) - Lightweight, spongy, mostly visible organic matter, water squeezes readily from sample. Typically near top of deposit.				
Fine Grained PEAT (P) - Lightweight, spongy, little visible organic matter, water squeezes readily from sample. Typically below fibrous peat.				
Organic Silt (OL) - Typically gray to dark gray, often has strong H2S odor. Typically contains shells or shell fragments. Lightweight. Usually found near coastal regions. May contain wide range of sand fractions.				
Organic Clay (OH) - Typically gray to dark gray, high plasticity. Usually found near coastal regions. May contain wide range of sand fractions. Need organic content test for final identification.				

PROJECT NAME: WOODSTOCK WOODSTOCK  
PROJECT NUMBER: BHO 1444(52) ST 1444(58)  
FILE NAME: z96j262log.dgn PLOT DATE: 29-JUN-2012  
PROJECT LEADER: M. Sargent DRAWN BY: P. Dustin  
DESIGNED BY: S. Della CHECKED BY: R. Joy  
BORING LOGS (2 OF 2) SHEET 21 OF 68

