

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 1312	0707-B	Cook	80	62
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

Contract # 60B98

Geo Services, Inc. Geotechnical, Environmental & Civil Engineering  
805 Arden - Cur Lane 204 Naperville, Illinois 60565 (830) 351-2238

SOIL BORING LOG PAGE 1 of 3  
DATE June 25-26, 2007  
LOGGED BY RH  
GSI JOB No. 07005

ROUTE FAU 1312 DESCRIPTION IDOT Project No. D-91-065-07, Contract No. 60B98  
SECTION 0707-B LOCATION Evanston Street Bridge over North Shore Channel, Cook County, Illinois  
COUNTY Cook DRILLING METHOD 3.25" Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. XX Station 100+31.5 to 105+70  
BORING NO. BR-1 Station: 101+39  
Offset: 22.0' Left  
Ground Surface Elev. 601.5

DEPTH (ft)	LOG DESCRIPTION	UCS (tsf)	MOISTURE (%)	WATER CONTENT (%)	UNIT WEIGHT (pcf)	VS (psi)	ST (psi)	DRILLER'S OBSERVATION
0-5.0	ASPHALT, 13.0" CONCRETE							
5.0-5.99	CLAYEY TOPSOIL-black	3	107					
5.99-5.99	CLAY-brown & gray-very stiff (A-6)	5	3.2B	19				
5.99-5.99		598.0						
5.99-5.99	CLAY-brown & gray-stiff to very stiff (A-6) Wet	4	96					
5.99-5.99		576.0						
5.99-5.99	Torvane @ -25.0' Shear Strength=287psf	5	2.0P	21				
5.99-5.99		576.0						
5.99-5.99	Torvane @ -27.5' Shear Strength=512psf	5	3.1B	27				
5.99-5.99	CLAY-gray-soft to medium stiff (A-6)	4	106					
5.99-5.99		549.5						
5.99-5.99	Torvane @ -30.0' Shear Strength=410psf	6	3.1B	29				
5.99-5.99		549.5						
5.99-5.99	Torvane @ -35.0' Shear Strength=1372psf	3	101					
5.99-5.99		588.5						
5.99-5.99	Torvane @ -15.0' Shear Strength=430psf	15	3	0.4B	22			
5.99-5.99	CLAY-gray-very soft to soft (A-6) Wet	0	93					
5.99-5.99		524.5						
5.99-5.99	Torvane @ -17.5' Shear Strength=512psf	0	0.4B	27				
5.99-5.99		524.5						
5.99-5.99	Torvane @ -20.0' Shear Strength=328psf	0	0.2B	28				
5.99-5.99		524.5						
5.99-5.99	Torvane @ -40.0' Shear Strength=1024psf	0	0.2B	28				
5.99-5.99		524.5						

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-Shelby Tube Sample VS-Vane Shear Test  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in italics above moist (%)  
NR-No Recovery

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5.99-5.99	CLAY-gray-soft to medium stiff (A-6)	3	111					
5.99-5.99		549.5						
5.99-5.99	Torvane @ -45.0' Shear Strength=778psf	45	5	0.5B	19			
5.99-5.99		549.5						
5.99-5.99	Torvane @ -50.0' Shear Strength=901psf	50	4	0.6B	21			
5.99-5.99		549.5						
5.99-5.99	CLAY-gray-stiff (A-6)	4	109					
5.99-5.99		524.5						
5.99-5.99	Torvane @ -55.0' Shear Strength=1372psf	55	10	1.1B	20			
5.99-5.99		524.5						
5.99-5.99	CLAY-gray-medium stiff (A-6)	4	105					
5.99-5.99		503.0						
5.99-5.99	Torvane @ -60.0' Shear Strength=1475psf	60	7	1.25B	22			
5.99-5.99		503.0						
5.99-5.99	Torvane @ -80.0' Shear Strength=635psf	80	5	0.25P	15			
5.99-5.99		503.0						

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5.99-5.99	CLAY-gray-medium stiff (A-6)	5	114					
5.99-5.99		519.5						
5.99-5.99	SANDY CLAY to SANDY CLAY LOAM-gray-dense to very dense (A-4)	23	1.5P	13				
5.99-5.99		519.5						
5.99-5.99	CLAY-gray-hard (A-6)	34	5.7B	15				
5.99-5.99		503.0						
5.99-5.99	CLAY-gray-medium stiff (A-6)	4	113					
5.99-5.99		503.0						
5.99-5.99	CLAY-gray-medium stiff (A-6)	5	104					
5.99-5.99		503.0						
5.99-5.99	Torvane @ -80.0' Shear Strength=635psf	80	5	0.25P	15			
5.99-5.99		503.0						

Drillers Observation: Fractured rock from -98.5' to -99.5'.  
503.0  
502.0  
501.5-100

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DESIGNED	SRT
CHECKED	JJI
DRAWN	JSS
CHECKED	JJI

**B** Bollinger, Lach & Associates, Inc.

SOIL BORING LOG BR-1  
EMERSON STREET OVER  
NORTH SHORE CHANNEL  
(PUBLIC BODY OF WATER)  
F.A.U. ROUTE 1312 SECTION 0707-B  
COOK COUNTY STA. 102+84.62  
STRUCTURE NUMBER 016-2858