Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 5/27/09

ROUTE FAP 828 (IL 121) DESCRIPTION Box Culvert over Un-named Stream LOGGED BY E. Sandschafer

SECTION (108,109,110)RS-3 LOCATION Sec 27 – SW 1/4, Sec 34 – NW 1/4, SEC., TWP. 10 N, RNG. 8 E, 3 PM

COUNTY Cumberland DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. 018-8638
Station 545+02.84

BORING NO. 1 West Side
Station 544+72
Offset 8.50ft Rt
Ground Surface Elev. 594.06 ft

Surface Water Elev. 573.59 ft
Stream Bed Elev. 571.84 ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion 574.9 ft
After 24 Hrs. 576.1 ft

DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)
593.16 5 1/8" asphalt on 6" concrete pavement.			
Medium, damp, gray, CLAY.	1		
	2 3	0.9 B	21
-5	1		
	1 1	0.8 B	23
587.06			
Soft, damp, red mottled gray, SILTY CLAY.	1		
	1 1	0.4 B	23
584.56			
Stiff, damp, gray, CLAY. -10	0		
	1 2	1.8 B	25
582.06			
Medium, damp, gray, CLAY w/ Silt.	0		
	1 1	0.8 B	36
-15	1		
	1 1	0.7 B	23
577.06			
Stiff, damp, gray, SILTY CLAY.	0		
	1 3	1.5 B	17
574.56			
Soft, damp, gray, SANDY LOAM. -20	0		

DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)
Soft, damp, gray, SANDY LOAM. (continued)	1 2	0.3 B	22
572.06			
Very soft, very damp, gray, SILT. 571.56	0		
Very loose, damp, gray, SILTY CLAY w/Sandstone fragments.	2 2		11
569.06 -25	26		
Very dense, moist, gray, SANDY CLAY SHALE.	50/3" 50/1"		9
566.56	50/4"		8
Extent of exploration.	50/2" 50/1"		
Benchmark: BM 308A Chiseled square on top center of concrete headwall at private entrance South of culvert, Sta 547+00, 23' Rt = 594.26' elevation. Provided by Program Development. -30			
-35			
-40			

Latitude W 88 deg 17.832 min, Longitude N 39 deg 16.362 min, Map Datum WGS 84

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

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COUNTY Cumberland DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. 018-8638
Station 545+02.84

BORING NO. 2 East Side
Station 545+28
Offset 9.00ft Lt
Ground Surface Elev. 593.88 ft

Surface Water Elev. 573.59 ft
Stream Bed Elev. 571.84 ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After 24 Hrs. Dry ft

DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)
593.88 4 7/8" asphalt on 8 3/4" concrete pavement.			
592.78 Stiff to medium, damp, red mottled gray, SILTY CLAY.	1		
	1 1	1.2 B	19
-5	1		
	1 1	1.0 B	20
586.88			
Medium to soft, damp, gray, CLAY w/Silt and wood.	0		
	1 1	0.7 B	27
-10	0		
	1 2	0.5 B	24
581.88			
Medium to stiff, damp, gray mottled brown, CLAY.	0		
	1 2	1.0 B	25
-15	0		
	1 2	1.2 B	28
576.88			
Stiff, damp, gray, SANDY CLAY LOAM.	1		
	3 4	1.2 S	13
574.38 -20	2		

DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)
573.38 Stiff, damp, gray marbled red. SANDY CLAY TILL. (continued)	6 50/2"	1.3 S	16
Gray, SANDSTONE. 571.88			
571.38 Very dense, moist, brown, SANDY CLAY SHALE.	50/5" 50/2" 50/0"		8
Extent of exploration. -25			
Benchmark: BM 308A Chiseled square on top center of concrete headwall at private entrance South of culvert, Sta 547+00, 23' Rt = 594.26' elevation. Provided by Program Development. -30			
-35			
-40			

Latitude W 88 deg 17.821 min, Longitude N 39 deg 16.364 min, Map Datum WGS 84

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

DESIGNED - DAVID L. GREIFZU	EXAMINED	Thomas J. Domagalski	DATE - August 1, 2011	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**SOIL BORING LOGS STRUCTURE NO. 018-8311**	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - MICHAEL D. ROLAPE		ENGINEER OF BRIDGE DESIGN				828	(108,109,110)RS-3	CUMBERLAND	56	44
DRAWN - MICHAEL B. MOSSMAN	PASSED	A. Carl Preuss			SHEET NO. 6 OF 6 SHEETS			CONTRACT NO. 74252		
CHECKED - D.L.G. / M.D.R.		ENGINEER OF BRIDGES AND STRUCTURES						ILLINOIS FED. AID PROJECT		