Illinois Department of Transportation

SOIL BORING LOG

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Date 10/3/2008

ROUTE FA 646 (IL-40) DESCRIPTION IL-40 over the Rock River LOGGED BY TC

SECTION 1B-2 LOCATION NE 1/4 SEC.28 TWP. 21N RNG. 7EPM 3

COUNTY Whiteside STRUCTURE NO. 098-0014 (Exist.)

BORING NO. ANW DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic SPT Hammer

Station 734+85
Offset 41 Lt
Ground Surface Elev. _____ (ft.)

Surface Water Elev. 628.11 (ft.)
Groundwater Elev.
First Encounter ____ (ft.)
Upon Completion ____ (ft.)
After ____ Hrs. ____ (ft.)

SOIL DESCRIPTION	ELEV. (ft.)	DEPTH (ft.)	SPT N (blows)	UCS Qu (tsf)	MOIST. (%)
Approx. 4.5 feet Water					
	623.61				
Very Loose Dark Brown, Fine to Coarse SAND, trace clay		-5	WHO WOH 1		32
	621.11				
Very Loose Dark Brown, Fine to Medium SILTY SAND, with WEATHERED LIMESTONE	619.11		1 WOH 2		35
WEATHERED LIMESTONE at 9 ft		-10			
Run 1 11.6' – 19.6' : REC 81/96, 84% RQD 9/96, 9%					
Drill time: 11.6'-14.6': 2 minutes 14.6'-19.6': 4 minutes					
		-15			
		-20			

SOIL DESCRIPTION (continued)	ELEV. (ft.)	DEPTH (ft.)	SPT N (blows)	UCS Qu (tsf)	MOIST. (%)
WEATHERED LIMESTONE (continued)				287	
Run 2 19.6' – 29.6' : REC 90/120, 75% RQD 45/120, 38%					
Drill time: 19.6'-24.6': 4 minutes 24.6'- 29.6': 5.5 minutes					
		-25			
Run 3 29.6' – 36.6' : REC 67/84, 80% RQD 27/84, 32%		-30			
Drill time: 29.6'-34.6': 4.5 minutes 34.6'-36.6': 1.5 minutes				245	
	591.51				
Bottom of Boring @ 591.51'		-35			
		-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer).
The Standard Penetration Test (SPT) N Value is per (AASHTO T206)

BBS 137 (9/05)

Illinois Department of Transportation

ROCK CORE LOG

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Date 10/3/2008

ROUTE FAP 646 (IL40) DESCRIPTION ILLINOIS 40 OVER ROCK RIVER STERLING – ROCK FALLS LOGGED BY G. Jamison

SECTION 1B-2 LOCATION NE ¼ SEC. 28 TWP. 21N RNG. 7E.3 PM

COUNTY Whiteside CORING METHOD Wireline

STRUCT. NO. 098-0014 CORING BARREL TYPE & SIZE NQ

Station 729+71.26 Core Diameter 1 7/8 in
Top of Rock Elev. 619.11 ft
Begin Core Elev. 616.51 ft

BORING NO. B-ANW
Station 734+85
Offset 41 Lt
River Water Surface Elev. 628.11 ft

	ELEV. (ft)	DEPTH (ft)	CORE (#)	RECOVERY (%)	RQD (%)	CORE TIME (min/ft)	STRENGTH (tsf)
Starting depth of Core 1 is 11.6 feet	616.51	-11.6					
DOLOMITE, yellow brown to brown, hard, broken, fine to medium, slightly to non-calcareous, occasional chert; occasional vugs, slightly vesicular; horizontal joints, partially remineralized, generally hard and little to no soil filling. More than 40 pieces ½"-7" long		-12	1	84	9		
Depth 11.6-14.6 feet took 2 minutes to core		-15				0.7	
Stiff yellow brown clay (3" thick) at base of recovered core run.							
Depth 14.6-19.6 feet took 4 minutes to core							
Ending depth of Core 1 is 19.6 feet	608.51	-19.6				0.8	
More than 50 pieces ¼"-7" long		-20	2	75	38		287
As above, somewhat less broken except at about 27-28 feet where highly fractured and broken; more vesicular and vuggy.							
Depth 19.6-24.6 feet took 4 minutes to core		-25				0.8	
Depth 24.6-29.6 feet took 5.5 minutes to core							
Ending depth of Core 2 is 29.6 feet	598.51	-29.6				1.1	
Brown to about 31 feet, then light yellow brown to white. Highly broken at about 29.6-30 feet, and at about 32-32.5 feet; More than 50 pieces ½"-8" long; vesicular and vugs still present		-30	3	80	32		

Color pictures of the cores Yes
Cores will be stored for examination until _____
The "Strength" column represents the unlaxial compressive strength of the core sample (ASTM D-2938)

BBS 138 (Rev. 3/01)

Illinois Department of Transportation

ROCK CORE LOG

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BORING NO. B-ANW
Station 734+85
Offset 41 Lt
River Water Surface Elev. 628.11 ft

	ELEV. (ft)	DEPTH (ft)	CORE (#)	RECOVERY (%)	RQD (%)	CORE TIME (min/ft)	STRENGTH (tsf)
							246
Depth 29.6-34.6 feet took 4.5 minutes to core		-35				0.9	
Depth 34.6-36.6 feet took 1.5 minutes to core							
Ending depth of Core 3 is 36.6 feet	591.51	-36.6				0.8	

Color pictures of the cores Yes
Cores will be stored for examination until _____
The "Strength" column represents the unlaxial compressive strength of the core sample (ASTM D-2938)

BBS 138 (Rev. 3/01)

FILE NAME = D264880-sht-borings21.dgn	USER NAME = dwozniarski	DESIGNED - ACB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOIL BORING AND ROCK CORE LOGS STRUCTURE NO. 098-0115
		CHECKED - JMB	REVISED -		
	PLOT SCALE = 1.0000 ' / IN.	DRAWN - RLK	REVISED -		SHEET NO. 103 OF 103 SHEETS
	PLOT DATE = 7/18/2011	CHECKED - ACB	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646	1B-2	WHITESIDE	257	206
		CONTRACT NO. 64B80		
	ILLINOIS FED. AID PROJECT			