Illinois Department of Transportation

SOIL BORING LOG

Date 07/01/08

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

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

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

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

Station 724+29
Offset 13 Rt
Ground Surface Elev. 647.24 (ft.)

Surface Water Elev. ____ (ft.)
Groundwater Elev.
First Encounter 18 (ft.)
Upon Completion 18 (ft.)
After ____ Hrs. ____ (ft.)

SOIL DESCRIPTION	ELEV. (ft.)	DEPTH (ft.)	SPT N (blows)	UCS Qu (tsf)	MOIST. (%)
Approx. 3" Asphaltic Concrete					
Approx. 12" Concrete			19		
			22		8
Approx. 15" Roadstone	644.74	-2.5	12		
Brown, Fine to Medium SAND (fill), trace to with gravel			5		
			4		11
		-5	4		
			4		
			4		8
	640.24				
Brown, Fine to Coarse CLAYEY SAND (fill), trace gravel and coal fragments			3		
			2		21
		-10	3		
			5		
			3		18
	634.24		5		
Brown, Fine to Medium SAND (fill)			3		
			3		12
		-15	3		
			4		
			4		11
Petroleum odor			3		
	629.24				
Dark Grey and Brown, Fine to Medium SAND (fill)			3		
			3		15
	627.24	-20	4		

SOIL DESCRIPTION	ELEV. (ft.)	DEPTH (ft.)	SPT N (blows)	UCS Qu (tsf)	MOIST. (%)
Brown, Grey, and White, Fine to Coarse GRAVELLY SAND (fill)					
	625.24		3		
			8		16
			17		
Very Dense Yellowish Brown GRAVEL (possible weathered bedrock), with sand	622.24	-25	8		
			24		10
			50/4"		
Yellowish Brown LIMESTONE					
				1004	
Run 1 24' – 32' : REC 84/84, 100% Drill time: 10 minutes					
		-30			
Run 2 32' - 42' : REC 120/120, 100% Drill time: 11 minutes					
		-35			
				840	
		-40			
	607.24				

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 (9/06)

Illinois Department of Transportation

SOIL BORING LOG

Date 07/01/08

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

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

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

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

Station 724+29
Offset 13 Rt
Ground Surface Elev. 647.24 (ft.)

Surface Water Elev. ____ (ft.)
Groundwater Elev.
First Encounter 18 (ft.)
Upon Completion 18 (ft.)
After ____ Hrs. ____ (ft.)

SOIL DESCRIPTION	ELEV. (ft.)	DEPTH (ft.)	SPT N (blows)	UCS Qu (tsf)	MOIST. (%)
Light Grey LIMESTONE					
Run 3 42' – 51' : REC 108/108, 100% Drill time: 10 minutes				796	
		-45			
		-50			
	596.24				
Bottom of Boring @ 596.24'					
		-55			
		-60			

SOIL DESCRIPTION	ELEV. (ft.)	DEPTH (ft.)	SPT N (blows)	UCS Qu (tsf)	MOIST. (%)
		-65			
		-70			
		-75			
		-80			

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 (9/06)

Illinois Department of Transportation

ROCK CORE LOG

Date 07/01/2008

ROUTE FAP 646 (IL 40) 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. 625.24 ft
Begin Core Elev. 623.24 ft

BORING NO. B-ASE
Station 724+29
Offset 13 Rt
Ground Surface Elev. 647.24 ft

DEPTH (ft)	CORE (#)	RECOVERY (%)	RQD (%)	CORE TIME (min/ft)	STRENGTH (tsf)
DOLOMITE: yellow brown to brown, hard, fine to medium, slightly to non-calcareous, occasional chert; occasional vugs, some partially filled; horizontal joints, partially remineralized, generally hard and little to no soil filling.	-25	1	100	35	0.8
Upper 2 feet more broken					1,004
Greater than 80 rock pieces ranging from ¼ -5 inches in length					
Slightly vesicular, hard, more broken zone from 29 – 30 feet	-30				
	615.24				
27 rock pieces ranging from ½ - 19 inches in length		2	100	76	1.1
	-35				
Light white between 36.1 – 36.2 feet					840
White at about 37' – 37.5 feet					
White below 39 feet Less joints with depth	-40				
	605.24				
22 rock pieces ranging from ½ - 15 inches in length		3	100	88	0.91	796

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 = 0264B80-sht-borings01.dgn	USER NAME = dwozniarski	DESIGNED - ACB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOIL BORING AND ROCK CORE LOGS STRUCTURE NO. 098-0115	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - JMB	REVISED -			646	1B-2	WHITESIDE	257	186
	PLOT SCALE = 1.0000 ' / IN.	DRAWN - RLK	REVISED -					CONTRACT NO. 64B80		
	PLOT DATE = 7/18/2011	CHECKED - ACB	REVISED -		SHEET NO. 83 OF 103 SHEETS			ILLINOIS	FED. AID PROJECT	