

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 327	(51-23) B-3	LAWRENCE	56	45
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

Contract No. 94967

SHEET NO. 28  
29 SHEETS

**Illinois Department of Transportation SOIL BORING LOG** Page 1 of 2  
Date 5/30/06

ROUTE FAP 327 (US 50) DESCRIPTION Embarras River LOGGED BY E. Sandschafer

SECTION (51-23)B-3 LOCATION SEC. 36, TWP. 4 N, RNG. 12 W, 3 PM

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

STRUCT. NO. 051-0011  
Station 554+17

BORING NO. 2  
Station 553+25  
Offset 9.00ft RL  
Ground Surface Elev. 434.50 ft

DEPTH (ft)	SOIL DESCRIPTION	DRILLING METHOD	SP. GRAV.	WATER CONTENT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX	UNCONSOLIDATED COMPRESSIVE STRENGTH (tsf)
0-1	2 7/8" Asphalt on 12" Concrete pavement.						19
1-3	Void.						0.7
3-4	6" Aggregate subbase.						3
4-18	Very stiff, damp, brown, CLAY LOAM.	3.5 PP					23
18-40	Medium to stiff, damp, red mottled gray, CLAY w/trace gravel.	0.8 B					19
40-42	Stiff to medium, damp, gray mottled red, CLAY LOAM.						1.2
42-45	Brown	1.2 B					0.7
45-48	Stiff, damp, gray, CLAY LOAM.	1.1 B					0.6
48-50	Very loose, very damp, brown, fine grained, SAND. 4% passing #200 sieve.						0.2
50-52	Medium to stiff, damp, brown to red, SILTY CLAY.	0.9 B					0.7
52-53	Medium, 1% passing #200 sieve.	1.4 B					2.3
53-54	Medium to stiff, damp, brown marbled gray, CLAY.	1.0 B					2.0
54-55	Estimated natural ground elevation.						
55-56	Gray, SANDY CLAY SHALE.						50.2

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 T208)

**Illinois Department of Transportation ROCK BORING LOG** Page 2 of 2  
Date 5/30/06

ROUTE FAP 327 (US 50) DESCRIPTION Embarras River LOGGED BY E. Sandschafer

SECTION (51-23)B-3 LOCATION SEC. 36, TWP. 4 N, RNG. 12 W, 3 PM

COUNTY Lawrence CORING METHOD Rotary, surf set diamond bit

STRUCT. NO. 051-0011  
Station 554+17

BORING NO. 2  
Station 556+25  
Offset 9.00ft RL  
Ground Surface Elev. 434.50 ft

DEPTH (ft)	ROCK DESCRIPTION	CORING METHOD	RECOVERED (%)	ROCK QUALITY INDEX	CORE TYPE	STRENGTH (tsf)
0-394.70	Gray, SANDY CLAY SHALE.		80	72	0.6	
394.70-393.50	Black, CLAY SHALE.					
393.50-390.50	Gray, estimated LIMESTONE.					
390.50-389.70	Rock Core B2a 44.0' to 44.8' = 1190 tsf		100	84	0.6	
389.70-46	Gray, slightly weathered, SANDY CLAY SHALE.					
46-50	Rock Core B2b 48.0' to 48.5' = 90 tsf		100	86	0.8	
50-55	Extent of exploration.					
55-56	Benchmark: BM 204 Chiseled square on SE corner of existing bridge, Sta 556+28, 18.6' Lt = 434.66' Provided by Program Development.					
56-57	Stationing of borings based on center of existing bridge = 554+17.					

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

**Illinois Department of Transportation SOIL BORING LOG** Page 1 of 2  
Date 5/23/06

ROUTE FAP 327 (US 50) DESCRIPTION Embarras River LOGGED BY E. Sandschafer

SECTION (51-23)B-3 LOCATION SEC. 36, TWP. 4 N, RNG. 12 W, 3 PM

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

STRUCT. NO. 051-0011  
Station 554+17

BORING NO. 3  
Station 552+67  
Offset 6.00ft RL  
Ground Surface Elev. 434.87 ft

DEPTH (ft)	SOIL DESCRIPTION	DRILLING METHOD	SP. GRAV.	WATER CONTENT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX	UNCONSOLIDATED COMPRESSIVE STRENGTH (tsf)
0-434.17	Bridge deck.						
434.17-434.87	Air.						
434.87-405.37	Air, (continued)						
405.37-30	Medium, very damp, gray, SILTY CLAY LOAM.						0.6
30-402.87	Medium, very damp, gray mottled red, CLAY.						0.7
402.87-400.37	Hard, very moist, gray, CLAY SHALE.						4.4
400.37-399.27	Borehole continued with rock coring.						50.1
399.27-40	Extent of exploration.						

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 T208)

**Illinois Department of Transportation ROCK BORING LOG** Page 2 of 2  
Date 5/23/06

ROUTE FAP 327 (US 50) DESCRIPTION Embarras River LOGGED BY E. Sandschafer

SECTION (51-23)B-3 LOCATION SEC. 36, TWP. 4 N, RNG. 12 W, 3 PM

COUNTY Lawrence CORING METHOD Rotary, surf set diamond bit

STRUCT. NO. 051-0011  
Station 554+17

BORING NO. 3  
Station 552+67  
Offset 6.00ft RL  
Ground Surface Elev. 434.87 ft

DEPTH (ft)	ROCK DESCRIPTION	CORING METHOD	RECOVERED (%)	ROCK QUALITY INDEX	CORE TYPE	STRENGTH (tsf)
0-399.27	Gray, slightly weathered, SANDY CLAY SHALE.		90	89	0.8	
399.27-40	Rock core B2c 40.2' to 40.6' = 75 tsf		100	88	0.8	
40-393.57	Dark gray, CLAY SHALE.					
393.57-392.67	Gray, estimated LIMESTONE.					
392.67-46	Rock core B2d 41.5' to 42.0' = 963 tsf		100	100	0.8	
46-50	Gray, slightly weathered, SANDY CLAY SHALE.					
50-56	Rock core B3c 49.0' to 49.5' = 46 tsf					
56-57	Extent of exploration.					
57-58	Benchmark: BM 204 Chiseled square on SE corner of existing bridge, Sta 556+28, 18.6' Lt = 434.66' Provided by Program Development.					
58-59	Stationing of borings based on center of existing bridge = 554+17.					

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

**BORING LOGS**  
**F.A.P. RT. 327 - SEC. (51-23)B-3**  
**LAWRENCE COUNTY**  
**STATION 553+95.50**  
**STRUCTURE NO. 051-0063**