F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	*	MADISON	420	299
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

* 60-10K-1, 60-10HB

CONTRACT NO. 76709

Illinois Department of Transportation — SOIL BORING LOG

Division of Highways
Shively Geotechnical, Inc.

Page 1 of 2

Date 1/25/05

ROUTE 586 DESCRIPTION West Retaining Wall LOGGED BY MH/PMK

SECTION 60-10-4HB LOCATION SW 1/4, SEC. 5, TWP. 3N, RNG. 7W, 3rd PM

COUNTY Madison DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140-lb Hydraulic

STRUCT. NO. 060-W001
Station

BORING NO. SB-17
Station 1348+60
Offset 110.00ft Right
Ground Surface Elev. 562.06 ft

Surface Water Elev. NA ft
Stream Bed Elev. NA ft

Groundwater Elev.:
First Encounter 548.1 ft
Upon Completion 559.6 ft
After ___ Days ___ ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Very Dark Brown Silty Clay LOAM with Organics			2		
			3	1.2	29.4
			3	S/10	
			1		
		-5	2	0.7	33.3
			2	S/20	
	555.56		1		
Gray-Brown Silty Clay LOAM			2	0.5	30.7
			2	S/20	
-Very Dark Gray below 8.0 Feet			1		
		-10	1	0.3	32.4
			3	S/20	
	551.56		1		
Gray-Brown SILT			2	0.3	34.7
			2	B/20	
			1		
-Dark Gray-Brown below 14.0 with Organics 14.0 to 14.5 Feet		-15	1	0.3	66.8
			2	S/20	
			1		
			1	0.7	30.5
			2	B/20	
	544.06				
Dark Brown Silty Clay LOAM			1		
	542.56		2	0.7	27.4
Dark Gray-Brown CLAY		-20	4	B/15	

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Dark Gray-Brown CLAY (continued) -Gray below 20.5			2		
			3	1.0	24.2
			3	B/15	
			1		
		-35	2	1.1	39.8
			3	B/15	
			2		
			3	1.5	24.4
			3	S/20	
Gray Silty CLAY	534.06		2		
		-30	3	0.8	19.8
			5	S/20	
Gray-Brown Fine to Medium SAND	530.31				
Sand heaved into augers at 33.5 feet. Redrilled through sand zone to seal-off prior to additional sampling.		-35			15.9
Gray CLAY	525.31				
			3		
		-40	8	3.3	20.0
			8	S/20	

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, from 137 (Rev. 8-99)

Illinois Department of Transportation — SOIL BORING LOG

Division of Highways
Shively Geotechnical, Inc.

Page 2 of 2

Date 1/25/05

ROUTE 586 DESCRIPTION West Retaining Wall LOGGED BY MH/PMK

SECTION 60-10-4HB LOCATION SW 1/4, SEC. 5, TWP. 3N, RNG. 7W, 3rd PM

COUNTY Madison DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140-lb Hydraulic

STRUCT. NO. 060-W001
Station

BORING NO. SB-17
Station 1348+60
Offset 110.00ft Right
Ground Surface Elev. 562.06 ft

Surface Water Elev. NA ft
Stream Bed Elev. NA ft

Groundwater Elev.:
First Encounter 548.1 ft
Upon Completion 559.6 ft
After ___ Days ___ ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray CLAY (continued)					
-Gray-Brown below 42.0 Feet			3		
		-45	6	2.3	20.5
			9	S/20	
			5		
			9	2.9	18.0
	512.06	-50	12	S/20	
End of Boring					
		-55			
		-60			
		-65			
		-70			
		-75			
		-80			

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, from 137 (Rev. 8-99)

Illinois Department of Transportation — SOIL BORING LOG

Division of Highways
Shively Geotechnical, Inc.

Page 1 of 2

Date 1/20/05

ROUTE 586 DESCRIPTION West Retaining Wall LOGGED BY MH/PMK

SECTION 60-10-4HB LOCATION SW 1/4, SEC. 5, TWP. 3N, RNG. 7W, 3rd PM

COUNTY Madison DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140-lb Hydraulic

STRUCT. NO. 060-W001
Station

BORING NO. SB-18
Station 1347+10
Offset 100.00ft Right
Ground Surface Elev. 562.41 ft

Surface Water Elev. NA ft
Stream Bed Elev. NA ft

Groundwater Elev.:
First Encounter 552.4 ft
Upon Completion 556.9 ft
After 29 Days 561.9 ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Dark Brown Silty Clay LOAM			2		
			2	1.0	30.3
			4	B/20	
-Gray-Brown below 3.0 Feet			1		
		-5	2	0.6	29.2
			3	B/20	
Gray SILT	556.91				
			1		
			2	1.0	25.6
			4	S/20	
-Gray-Brown below 8.0 Feet			1		
		-10	2	0.4	26.5
			2	B/20	
Dark Gray-Brown Silty Clay LOAM	551.91				
			1		
			1	0.0	31.2
			2	B/20	
	548.41		1		
Very Dark Gray-Brown Silty Clay LOAM, with Organics		-15	1	0.4	67.3
			2	B/20	
			1		
			1	0.5	33.3
			2	B/15	
Dark Gray-Brown Silty Clay LOAM	544.41				
			1		
		-20	1	0.5	43.6
			2	B/20	

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Dark Gray-Brown Silty Clay LOAM (continued)			2		
			2	0.8	35.4
			3	B/20	
Gray CLAY	539.41				
			1		
		-25	3	1.4	25.4
			4	S/20	
			2		
			3	1.3	26.7
			5	S/20	
			2		
		-30	3	1.7	20.7
			4	S/15	
Gray Sandy GRAVEL	530.66				
Sand heaved into augers at 33.5 feet. Redrilled through sand zone to seal-off prior to additional sampling.		-35	3		13.9
			7		
			4		
			9		
		-40	11		9.6
			13		

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, from 137 (Rev. 8-99)

Illinois Department of Transportation — SOIL BORING LOG

Division of Highways
Shively Geotechnical, Inc.

Page 2 of 2

Date 1/20/05

ROUTE 586 DESCRIPTION West Retaining Wall LOGGED BY MH/PMK

SECTION 60-10-4HB LOCATION SW 1/4, SEC. 5, TWP. 3N, RNG. 7W, 3rd PM

COUNTY Madison DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140-lb Hydraulic

STRUCT. NO. 060-W001
Station

BORING NO. SB-18
Station 1347+10
Offset 100.00ft Right
Ground Surface Elev. 562.41 ft

Surface Water Elev. NA ft
Stream Bed Elev. NA ft

Groundwater Elev.:
First Encounter 552.4 ft
Upon Completion 556.9 ft
After 29 Days 561.9 ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray Sandy GRAVEL (continued)	520.66				
Gray CLAY			10		
			12	3.8	10.7
		-45	15	B/15	
Dark Gray below 47.0 Feet			4		
			5	1.9	22.1
	512.41	-50	9	B/15	
End of Boring					
		-55			
		-60			
		-65			
		-70			
		-75			
		-80			

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, from 137 (Rev. 8-99)

Illinois Department of Transportation — SOIL BORING LOG

Division of Highways
Shively Geotechnical, Inc.

Page 1 of 2

Date 1/24/05

ROUTE 586 DESCRIPTION West Retaining Wall LOGGED BY MH/PMK

SECTION 60-10-4HB LOCATION NW 1/4, SEC. 8, TWP. 3N, RNG. 7W, 3rd PM

COUNTY Madison DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140-lb Hydraulic

STRUCT. NO. 060-W001
Station

BORING NO. SB-27
Station 1355+30
Offset 105.00ft Right
Ground Surface Elev. 562.27 ft

Surface Water Elev. NA ft
Stream Bed Elev. NA ft

Groundwater Elev.:
First Encounter 546.3 ft
Upon Completion 517.3 ft
After 25 Days 562.3 ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
TOPSOIL	560.77				
			1		
Gray-Brown Silty Clay LOAM			3	2.1	26.2
			3	B/15	
Gray-Brown SILT	559.27				
			1		
		-5	2	0.6	27.7
			2	B/20	
Gray-Brown Silty Clay LOAM	555.77				
					50.6
Dark Gray Silt LOAM, with Organics	552.77				
Gray Silty Clay LOAM		-10			
Field shear vane test at 10.0 Feet					
					27.9
		-15			
Field shear vane test at 15.0 Feet					
			2		
			2	0.9	27.0
			3	B/20	
Gray Clay LOAM	544.27				
			1		
		-20	2	0.5	19.3
			4	S/20	

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray Clay LOAM (continued)	541.77				
Dark Gray-Brown Sandy LOAM			1		
			2	0.2	28.7
			2	S/20	
Dark Gray-Brown Silty CLAY	539.27				
			1		
		-25	3	0.8	16.5
			4	S/20	
			2		
			8	2.0	14.0
			9	S/20	
Brown CLAY	534.27				
			3		
			7	3.4	12.0
		-30	11	S/20	
Dark Gray SILT	530.52				
			6		
			12	8.5	15.0
		-35	20	S/20	
Brown CLAY	525.52				
			5		
		-40	8	2.8	17.4
			11	S/15	

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, from 137 (Rev. 8-99)

Illinois Department of Transportation — SOIL BORING LOG

Division of Highways
Shively Geotechnical, Inc.

Page 2 of 2

Date 1/24/05

ROUTE 586 DESCRIPTION West Retaining Wall LOGGED BY MH/PMK

SECTION 60-10-4HB LOCATION NW 1/4, SEC. 8, TWP. 3N, RNG. 7W, 3rd PM

COUNTY Madison DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140-lb Hydraulic

STRUCT. NO. 060-W001
Station

BORING NO. SB-27
Station 1355+30
Offset 105.00ft Right
Ground Surface Elev. 562.27 ft

Surface Water Elev. NA ft
Stream Bed Elev. NA ft

Groundwater Elev.:
First Encounter 546.3 ft
Upon Completion 517.3 ft
After 25 Days 562.3 ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Brown CLAY (continued)					
-Gray-Brown below 42.0 Feet			3		
		-45	6	2.9	16.2
			11	S/20	
			5		
			10	4.0	15.7
	512.27	-50	13	S/15	
End of Boring					
		-55			
		-60			
		-65			
		-70			
		-75			
		-80			

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, from 137 (Rev. 8-99)

NOTE:

1. Structure Number listed on boring logs as 060-W001 is SN 060-W004.

Sht. R-13 of R-14

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 162 OVER I-55/70 IN TROY
F.A.I ROUTE 70 SECTION 60-10K-1, 60-10HB
MADISON COUNTY STA. 18+50 TO STA. 17+00
STRUCTURE NO. 060-W004

BORING LOGS

DATE: 05/2006

DRAWN: BTO
CHECKED: JAN