

**LEGEND - RSV ENGINEERING INC. (NOW BLOOM CONSULTANTS, LLC) TEST BORING LOGS**

A-1 to A-7 (and subgroups) Engineering classifications of soil samples in accordance with AASHTO M 145 standard specification.

BLOWS/150mm Number of blows required to drive a standard soil sampling device 150 mm as conducted in accordance with AASHTO T 206 standard specification.

q<sub>u</sub>, kPa Unconfined compression strength of soil sample in kilopascals determined in accordance with AASHTO T 208 standard specification.

STRAIN, % Actual strain of soil sample at failure (15 percent maximum allowed) during unconfined compression strength test (see AASHTO T 208 specification).

WATER CONTENT, % Natural moisture content of soil sample in percent determined in accordance with AASHTO T 265 standard specification.

Penetrometer Estimate An approximation of the unconfined compressive strength of the soil sample in kilopascals obtained with the use of a calibrated hand penetrometer device.

50 mm ST 50 mm diameter thin-walled tube (Shelby Tube) relatively undisturbed soil sample obtained in accordance with AASHTO T 207 standard specification.

γ<sub>d</sub> Dry unit weight of soil specimen in kilograms per cubic meter.

REC. Length of sample recovered in millimeters.

ROUTE NO.	SECT.	COUNTY	SHEET NO.	TOTAL SHEETS
F.A.I. 74	(72-7) R-3	PEORIA	586	1360
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT	CONTRACT NO. 68200	

RSV ENGINEERING, INC.		SCHAUMBURG, ILLINOIS						
BORING LOG								
JOB NO: 98600	CLIENT: ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING NO: RWA3S-2	STATION: 10436					
PROJECT: Interstate Route 74 Improvements - Peoria, Illinois		LOCATION: Retaining Wall Ramp A-3 SN 072-8556	OFFSET: 7.0m Lt					
BORING RIG & METHOD: CME-75 w/Hollow Stem Augers			SURF ELEV: 190.66					
SOIL DESCRIPTION	ELEV.	DEPTH	SAMPLE FROM - TO	REC. mm	BLOWS/150mm	q <sub>u</sub> kPa	STRAIN %	WATER CONTENT %
125mm Root Zone Material: Black Silty Loam A-4; Organic matter noted	190.53		0.00-0.30	Auger 4				
			0.30-0.76	356	7-8	297	15	22
Very Stiff to Stiff Br Loam A-4			1.07-1.52	457	6-8	153	15	17
	188.22		1.83-2.29	457	5	124	15	15
Very Stiff Br Clay Loam A-4	187.46		2.59-3.05	457	8-15	345	15	14
Dense Br Sand A-1-b	186.70		3.35-3.81	381	12-18			17
Dense Br Sand A-1-a	185.93		4.11-4.57	406	18-30			13
Medium Dense Br Sand A-1-b	185.17	5	4.88-5.33	457	12-13			12
			5.64-6.10	457	10-15	393	15	12
			6.40-6.86	457	12-14	306	15	10
			7.16-7.62	457	11-16	335	15	11
Hard to Very Stiff Br Loam A-4			7.92-8.38	457	9-12	239	15	12
			8.69-9.14	457	9-14	220	15	12
			9.45-9.91	457	13-16	306	15	11
		10	10.21-10.67	457	11-14	259	15	12
	179.84		10.97-11.43	457	10-13	172	15	13
Stiff to Very Stiff Br Loam A-4			11.73-12.19	457	11-12	201	15	13
REMARKS				*Denotes Calibrated Penetrometer Estimate				
WATER	5.3m ELEV.	185.32 DURING DRILLING	∅ CORE SIZE	mm	DATE:	Mar 13, 00		
WATER	m ELEV.	AT COMPLETION	∅ CASING LENGTH	m	DRILLER:	Fehl		
WATER	13.1m ELEV.	177.55 AFTER 1/4 HRS.	∅ CASING DIAMETER	mm	INSPECTOR:	Shock		

RSV ENGINEERING, INC.		SCHAUMBURG, ILLINOIS						
BORING LOG								
JOB NO: 98600	CLIENT: ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING NO: RWA3S-2	STATION: 10436					
PROJECT: Interstate Route 74 Improvements - Peoria, Illinois		LOCATION: Retaining Wall Ramp A-3 SN 072-8556	OFFSET: 7.0m Lt					
BORING RIG & METHOD: CME-75 w/Hollow Stem Augers			SURF ELEV: 190.66					
SOIL DESCRIPTION	ELEV.	DEPTH	SAMPLE FROM - TO	REC. mm	BLOWS/150mm	q <sub>u</sub> kPa	STRAIN %	WATER CONTENT %
Stiff to Very Stiff Br Loam A-4			12.50-12.95	457	4	239	15	13
			13.26-13.72	457	8-10	201	15	13
Stiff Br Loam A-4	178.79		14.02-14.48	457	4	172	15	13
			14.78-15.24	457	4	172	15	13
Boring terminated at 15.2m								
REMARKS				*Denotes Calibrated Penetrometer Estimate				
WATER	5.3m ELEV.	185.32 DURING DRILLING	∅ CORE SIZE	mm	DATE:	Mar 13, 00		
WATER	m ELEV.	AT COMPLETION	∅ CASING LENGTH	m	DRILLER:	Fehl		
WATER	13.1m ELEV.	177.55 AFTER 1/4 HRS.	∅ CASING DIAMETER	mm	INSPECTOR:	Shock		

RSV ENGINEERING, INC.		SCHAUMBURG, ILLINOIS						
BORING LOG								
JOB NO: 98600	CLIENT: ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING NO: RWA3S-3	STATION: 10460					
PROJECT: Interstate Route 74 Improvements - Peoria, Illinois		LOCATION: Retaining Wall Ramp A-3 SN 072-8556	OFFSET: 7.0m Lt					
BORING RIG & METHOD: CME-55 w/Hollow Stem Augers			SURF ELEV: 190.57					
SOIL DESCRIPTION	ELEV.	DEPTH	SAMPLE FROM - TO	REC. mm	BLOWS/150mm	q <sub>u</sub> kPa	STRAIN %	WATER CONTENT %
			0.00-0.30	Auger 3				
			0.30-0.76	457	5-6	345	15	16
Very Stiff to Hard Br Loam A-4			1.07-1.52	457	3	345	15	15
			1.83-2.29	457	4	239	15	17
	187.21		2.59-3.05	457	4	393	15	13
Medium Dense Br Sand A-1-b	186.79		3.35-3.81	457	8			20
			4.11-4.57	457	6	43		14
Hard to Very Stiff Br to Gr Silty Clay Loam A-4		5	4.88-5.33	457	3	201	15	13
			5.64-6.10	457	5	335	15	13
	184.32		6.40-6.86	457	3	96	15	14
Stiff Gr Sandy Loam A-4			7.16-7.62	457	2	96	15	10
			7.92-8.38	457	5	134	15	12
	181.73		8.69-9.14	406	6	172	15	12
Medium Dense Gr Sand A-1-b	181.58		9.45-9.91	152	5			17
Stiff Gr Silty Clay Loam A-4	180.81		10.21-10.67	432	5	259	15	14
Medium Dense Gr Silty Loam A-4	180.14	10	10.97-11.43	457	6	297	15	15
Very Stiff to Hard Gr Loam A-4			11.73-12.19	457	7	239	15	13
REMARKS				CME Automatic Hammer Used. *Denotes Calibrated Penetrometer Estimate				
WATER	3.7m ELEV.	186.91 DURING DRILLING	∅ CORE SIZE	mm	DATE:	Mar 10, 00		
WATER	m ELEV.	AT COMPLETION	∅ CASING LENGTH	m	DRILLER:	Winslow		
WATER	6.1m ELEV.	184.47 AFTER 1/2 HRS.	∅ CASING DIAMETER	mm	INSPECTOR:	Reed		

**STATE OF ILLINOIS**  
DEPARTMENT OF TRANSPORTATION

**BORING LOGS I**

MSE WALL NO. 8 - RAMP A-3  
F.A.I. ROUTE 74 SECTION (72-7) R-3  
PEORIA COUNTY  
STA. 10+426.116 TO STA. 10+673.439 (RAMP A-3)  
STRUCTURE NUMBER 072-8556

PARSONS TRANSPORTATION GROUP  
CHICAGO, ILLINOIS

DRAWING NO. 10	SCALE N.T.S.	DATE 6-25-04	SHEET NO. 10
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Date: 11/22/2004 Time: 11:59:31 AM

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