DLZ Ohio, Inc. * 6121 Huntley Road, Columbus, Ohio 43229 * (614) 888-0040

Client: ms consultants | *Project:* FRA-70-8.93 | *Job No.* 0221-1004.01

LOG OF: Boring B-034-0-08 | *Location:* Sta. 203+85.26, 56.62' LT., BL I-70 WB | *Date Drilled:* 8/7/2008 to 8/14/2008

WATER OBSERVATIONS:
Water seepage at: 5.5', 10.5', 20.5', 25.5', 62.0'
Water level at completion: 43.3' (measured inside casing)
At beginning of shift: 8/8 28.5, BOH 45.0'

FIELD NOTES:
Advanced boring using 4.0" diameter flush joint casing.

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery	Sample No. Drive	Sample No. Press / Core	Hand Penetrometer (tsf)	DESCRIPTION	Graphic Log	GRADATION % Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	STANDARD PENETRATION (N60) Natural Moisture Content, % - ● PL ⊢ LL Blows per foot - ○ / Non-Plastic - NP
	751.5														10 20 30 40
0.3	751.2						Topsoil - 3"								
		19 35 14	8	1			Brick Fragments								
3.5	748.0														
5		5 7 9	3	2		1.5	FILL: Stiff brown SANDY SILT (A-4a), little fine to coarse sand, little gravel; contains numerous 1/8"-1/4" size brick fragments; moist.								
6.0	745.5														
		2 5 6	16	3			FILL: Medium dense brown GRAVEL WITH SAND (A-1-b), little silt; contains numerous 1/8"-1/4" size brick fragments; wet.		41	32	---	12	--15--		NP
8.5	743.0														
10		2 4 WOH	8	4			Brick Fragments								
11.0	740.5														
		4 6 20	10	5		1.75	FILL: Stiff brown and gray SANDY SILT (A-4a), some fine to coarse sand, some gravel; contains brick and rock fragments; moist.								
15		15 25 27	18	6		--									55
16.0	735.5														
		6 2 4	6	7			FILL: Loose brown GRAVEL WITH SAND (A-1-b), little silt; contains few 1/8'-1/2' size brick fragments; wet.								
18.5	733.0														
20		11 13 16	13	8		4.5+	Hard gray SILT AND CLAY (A-6a), some fine to coarse sand, trace gravel; contains few 1/8'-1/2' size brick fragments; damp.								
21.0	730.5														
		28 45 50/5	2	9			Very dense gray GRAVEL WITH SAND (A-1-b), trace silt; possible cobbles; wet.								50+
23.5	728.0														
25	726.5	13 23 49	2	10		4.5+	Hard gray SANDY SILT (A-4a), some fine to coarse sand, little gravel; damp.								76