)					PAGE 1	of _	4				
Geo Services Inc	S	OII	L B	OF	RING LOG DATE _6/	DATE 6/13/2012					
Geo Services Inc. Geotechnical, Environmental & Civil Engineering 805 Amherst Court, Sulte 204 Nuperville, Jilinoja 60565 (630) 355-2838	_					LOGGED BY DR					
Naperville, Illinois 60565 (630) 355-2838		GSI JOB No. <u>09174</u>									
	DESCRIB.	пом	116.6	2011+0	30 © EJ&E/CN Railroad, IDOT Job No.						
						D-31-040-	-12				
SECTION 11-Y-A											
COUNTY Cook DRILLING METHOD Hollow Stern Auger/Rotary HAMMER TYPE CME Automatic											
STRUCT. NO Station		В	U	м	Surface Water Elev. n/a Stream Bed Elev. n/a	- D B	U	м			
BORING NO. BS-11	Ϊ́	L	C S	0	Groundwater Elevation:	- E L P 0	c	0			
Station 282+11	T H	₩ S	Qu	S	First Encounter Dry To -10.0'	1 1 W	Qu	S			
Offset 30.6' Left	. ''				Upon Completion n/a	z					
Ground Surface Elev. 631.9	(ft)		(tsf)		After Hrs	Z (ft) (/6")	(tsf)	(%			
8.0" TOPSOIL 6	31.3 —	AS	_	13		-					
	-	5		98		$-$ _2		L			
	_	1 1	3.1S 0			2					
CLAY LOAM-dark brown & gray-	_	8	11.3%	27		5	NP	22			
stiff to very stiff (Fill) Wet	_										
		2		Ш		2		L			
	_	2	1.25P	25		3 25_4	NP	24			
6	326.4	ŕ	1.25	25		-23 4	NE	-			
					SILTY LOAM-gray-						
SANDY LOAM-brown & gray-	_	5			loose to medium dense (A-4)	4		⊢			
medium dense (A-2)	-	6	NP	18		<u> </u>	NP	21			
6	323.9							Г			
	_	5				\dashv					
	_	5				3		Т			
	_10	7	NP	22		-30 4	NP	23			
	_					-					
SILTY LOAM-brown & gray-	_	2									
loose to medium dense (A-4)	_	2						Г			
	-	4	NP	26		+		⊢			
		2				2		L			
	_15	5	NP	22		-35 4	NP	22			
6	316.4	Ė					,,,	<u> </u>			
						_		l			
SANDY LOAM-brown & gray- medium dense (A-2)	_	5		\vdash	59-	4.9	\vdash	\vdash			
•	_	7	NP	23				L			
6	313.9					-					
SILTY LOAM-gray-	_	4			SAND & GRAVEL-gray- medium dense (A-1)	- 5					
loose to medium dense (A-4)		4			mediam delise (A-1)	6		Г			
			NP		ge, S—Shear, P—Penetrometer) ST—Shelby Tube San	-40 6	NP	20			

				PAC	¥ 2	of	4			
	SOL		PAGE <u>2</u> of <u>4</u> DATE <u>6/13/2012</u>							
Geo Services Inc. SOIL BORING LOG leotechnical, Environmental & Civil Engineering 803 Amperille, Inc. (803, Maperille, Inc.) (804, Maperille, Inc.) (805, Maperille, Inc.) (806, Maperille, Inc.)					LOGGED BY DR					
Naperville, Ulinois 60565 (630) 355+2838					-		:	_		
					JOB No(_		
ROUTE <u>FAP 353 (US 30)</u>					b No. D-91	<u>-046</u>	-12	—		
SECTION 11-Y-A	LOCATION _S	EC 20	& 2	29. T 35 N. R 15 E. 3rd PM				—		
COUNTY Cook	DRILLING ME	THOD _	Holl	ow Stern Auger/Rotary HAMMER T	YPE <u>CME A</u>	utom	atic	_		
STRUCT. NO	DВ	U	м	Surface Water Elev. <u>n/a</u>	—— I _D	В	U	м		
Station	E L	c	Ö	Stream Bed Elev. <u>n/a</u>	— Ē	L	c	0		
BORING NO. BS-11 Station 282+11	TW		S	Groundwater Elevation: First Encounter Dry To -1		W		Ś		
Offset 30.6' Left	H S	Qu	T	Upon Completion $\frac{D/a}{n/a}$	\Box		Qu	1		
Ground Surface Elev631.9	(ft) (/6*	(tsf)	(%)	After Hrs	▼ (ft	(/6	(tsf)	(%)		
	_				-	4		Г		
	-				_	┨		l		
			П		_	┰		Т		
SAND & CRANEL	_		_		_	+	\vdash	⊢		
SAND & GRAVEL-gray- medium dense (A-1)	-				_	┨		l		
					_	15		上		
	7		١	SAND-gray- dense to very dense (A-3)	=	21	l	١		
	<u>-45 12</u>	NP	16	action to very action (x o)		5 26	NP	21		
	コ				_	1		l		
	84.9		\vdash		-	+	\vdash	⊢		
36					_	1				
					_	1		Г		
	۱ ا				_	15		l		
	14				_	26		Т		
	<u>-50 16</u>	NP	20		<u>7</u>	0 36	NP	18		
	-				-	1		l		
	—					1		┖		
	,				559.9	-		l		
SAND-gray- dense to very dense (A-3)								T		
delice to very delice (A e)						-		l.,		
	11		\vdash	SILTY CLAY LOAM-gray-	_	10	\vdash	114		
	_55 17	NP	19	very stiff (A-4/A-6)	7	5 18	2.28	18		
	-				-	4				
	-				_	┨				
					554.9	\top		П		
			\vdash		-	+	\vdash	₩		
				SANDY LOAM-gray-very dense (A-2)	1		1		
	14		_	SANDI LOAM-gray-very dense (^-2) <u> </u>	21	_	oxdot		
	18				=	39	,,,			
The Unconfined Compressive Strength (UCS) Failure	-60 21 e Mode is indicat	NP ed by (23 B-Bul	ge, S—Shear, P—Penetrometer) ST—Shelby 1		0 47 S=Van	NP e Shear	Test		

PAGE <u>3</u> of <u>4</u> SOIL BORING LOG Geo Services, Inc.
cchnical, Environmental & Civil Engine
805 Amherst - Court, Suite 204
Naperville, Jilinipis 60565
(630) 355-2838 DATE 6/14/2012 LOGGED BY DR GSI JOB No. <u>09174</u> ROUTE FAP 353 (US 30) DESCRIPTION US Route 30 © EJ&E/CN Railroad, IDOT Job No. D-91-046-12 LOCATION SEC 20 & 29, T 35 N, R 15 E, 3rd PM SECTION 11-Y-A DRILLING METHOD Hollow Stern Auger/Rotary HAMMER TYPE CME Automatic COUNTY Cook STRUCT. NO. _---Surface Water Elev. <u>n/a</u> Stream Bed Elev. n/aBORING NO. BS-11 Groundwater Elevation: Station 282+11
Offset 30.6' Left W S Qu First Encounter $\underline{Dry To -10.0}$ Upon Completion $\underline{n/a}$ S Qu (ft) (/6") (tsf) (%) After _____ Hrs. ____ ▼ (ft) (/6") (tsf) (%) 631.9 Ground Surface Elev. __ SANDY LOAM-gray-very dense (A-2) 549.9 SAND-gray-very dense (A-3) SANDY CLAY LOAM-gray-dense to very dense (A-4/A-6) -105 39 3.3B 14 Drillers Observation: Apparent Bedrock. 521. Silurian System, Niagaran Series Dolomite RUN 1 (-110.5' to -120.5') Gray & fine grained with horizontal bedding becoming light gray mottled gray & -113.0'. Porous from -113.0' to -116.8'. Horizontal fractures & -110.8', -111.1', -113.0' & -116.8'. SANDY CLAY LOAM-gray-dense to very dense (A-4/A-6) 22 -95 30 4.5+P 11 -115.5'. Horizontal fractures @ -115.8' -115.8' -116.5'. RUN 1 Recovery=100.0% RQD=78.5%

-1004 48 14.54 PT | 3 |

-1004 48 14.54 PT | 3

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-Shelby Tube Sample	
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in	italics above moist (%)
NR-No Recovery	

	USER NAME =	DESIGNED - WJV	REVISED		SOIL BORING LOGS	F.A.P.	SECTION	COUNTY	TOTAL SHEET
7325 Janes Avenue Woodridge, IL 60517		CHECKED - CJB	REVISED	STATE OF ILLINOIS		353	11-Y-A	соок	354 217
630.724.9200 phone 630.724.9202 fax	PLOT SCALE =	DRAWN - WJV	REVISED	DEPARTMENT OF TRANSPORTATION	STRUCTURE NO. 016-1350				T NO. 60R19
www.v3co.com	PLOT DATE =	CHECKED - CJB	REVISED		SHEET NO. 32 OF 35 SHEETS	ILLINOIS FED. AID PROJECT			