To: Becky Marruffo Attn: Michael Kuehn

From: Dave von Kaenel By: Amy Harms

Subject: Structure Borings

Date: January 24, 2023

Route: I-39 Section: (201-3)K County: Winnebago Job No.: P92-111-06

Description: Overhead sign structures located about 0.5 miles south of Linden

Road and also 300 feet west of Mulford Road

Attached are the boring logs for the overhead sign structure.

The elevation datum was taken from the pavement crown at the center of the structure, which has been arbitrarily assigned an elevation of 100.0. This datum should be converted to USGS datum, and calculations for structural design adjusted accordingly.

If you have any questions or require additional information, please contact Byron Wetzell at extension 45439.

BW01-24-23 1 Attachment c: Consultant Soils File



## **SOIL BORING LOG**

Page  $\underline{1}$  of  $\underline{1}$ 

**Date** 12/12/22

ROUTE	I-39		DESCRIPTION			P9	<u> 92-111-06 - Overhead si</u>	LOGGED BY W. Garza				
SECTION	ECTION (201-3)K		L	_OCAT	ION _	Cherry	Valley, SW 1/4 9, SEC.	. , <b>TWP</b> . 43N, <b>I</b>	<b>RNG.</b> 2E			
COUNTY Winnebago DRIL			LING METHOD			<u>Hol</u>	llow Stem Auger	_ HAMMER 1	Automatic			
STRUCT. NO.		_				12' 36 ° 00' 42		Northing Easting				
BORING NO Station Offset	B-1 335+05 56.00ft Lt of CL NB ice Elev. 97.80		D E P T H	B L O W S	U C S Qu	M O I S T	Groundwater Elev.: First Encounter Upon Completion	93.3 Dry	_ ft <u>▼</u> _ ft <u>▼</u>			
	ght brown LOAM	_ ``	(ft)	(/6")	(tsf)	(%)	After Hrs.		_ ft			
		95.80			0.2 P	26.0						
HARD tan SAN ROCK (FILL)	NDY LOAM with	94.30		3 35 22	4.5 P	11.0						
VERY DENSE with limestone f	_	91.80		18 33 34		9.0						
VERY STIFF g CLAY LOAM w	ray/tan SANDY			5 11 17	2.9 B	10.0						
No Recovery		88.30	-10	25 45 49								
VERY DENSE LIMESTONE	tan WEATHERED	85.80		100 for 3"								
		84.30		-								
LIMESTONE		82.80	- <u>15</u>	100 for 1"/								
Auger refusal @ End of Boring	<u>y</u> 15'											



## **SOIL BORING LOG**

Page  $\underline{1}$  of  $\underline{1}$ 

**Date** 12/20/23

ROUTE	I-39		SCRI	PTION	P92-111-06 - Overhead sign truss					LOGGED BY _W. Garza						
SECTION	(201-3)K		LOCATIO			Cherry	Valley, SW 1/4 9, <b>SEC.</b>	. , <b>TWP.</b> 43N, I	<b>TWP.</b> 43N, <b>RNG.</b> 2E							
COUNTY Winnebago DRIL		ILLING	LING METHOD			Hol	llow Stem Auger	_ HAMMER	TYPE CME-45 Automatic							
STRUCT. NO.			Latitude Longitude			12' 36 ° 00' 40	5.50" 0.65"	Northing Easting		2,021,219.5841 2,609,585.0514						
BORING NO. Station Offset	B-2 335+00 50.00ft Rt of NB CL ce Elev. 100.60	<u> </u>	D E P T H	S	U C S Qu (tsf)	M O I S T (%)	Surface Water Elev. Stream Bed Elev.  Groundwater Elev.: First Encounter Upon Completion After Hrs.	None Dry	_ ft _ ft _ ft	D E P T H	B L O W S	U C S Qu (tsf)	M O I S T (%)			
VERY SOFT b LOAM	rown SILTY CLAY			(/6 )	0.2 P	17.0	LIMESTONE  Auger refusal @ 20' End of Boring		_ "	(ft)	(76 ) (for 3"/	(tsi)	(70)			
MEDIUM brow LOAM	n SILTY CLAY	98.60 97.10		11 10 8	0.5 B	22.0										
STIFF light bro TILL	wn SANDY CLAY	94.60		4 3 6	1.1 B	14.0				- <u>25</u>						
VERY STIFF to with GRAVEL	an SANDY LOAM	92.10		7 9 6	2.5 P	10.0										
HARD gray CL	AY LOAM TILL	89.60		4 6 8	5.0 B	17.0				-30						
No Recovery				5 5 8												
MEDIUM tan V SAND	ERY FINE SILTY	86.10 84.60	<u>-15</u>	3 5 7		12.0				- <u>35</u>						
DENSE tan DI MEDIUM GRA	RTY SAND with VEL	82.10		12 20 29												
VERY DENSE	tan WEATHERED	80 60	20	100												



## **SOIL BORING LOG**

Page  $\underline{1}$  of  $\underline{1}$ 

**Date** 12/20/22

ROUTE	US By	US Byp 20 DE			PTION	l	Pg	92-111-06 - Overhead sign truss			LOGGED BY			Garza	
SECTION _	SECTION         (201-3)K         LOCATION         Cherry Valley, NE 1/4 9, SEC. , TWP. 43N, RNG. 2E														
COUNTY _	RILLING	MET	THOD		Hol	ollow Stem Auger HAMMER		TYPE .	CI	ME-45	Auton	natic			
STRUCT. NO.								56" 8.86"		2,024,911.9173 2,612,680.2244					
BORING NO Station Offset	). 	B-1 03+00 00ft CL		D E P T H	B L O W S	U C S Qu	M O I S T	Surface Water Elev. Stream Bed Elev.  Groundwater Elev.: First Encounter Upon Completion	75.1	_ft _ft <u>▼</u>	D E P T H	B L O W S	U C S	M O I S T	
	rface Elev.		ft	(ft)	(/6")	(tsf)	(%)	After Hrs.			(ft)		(tsf)	(%)	
MEDIUM bro	own SILTY (	CLAY				0.6 P	16.0	DENSE tan MOIST S/ GRAVEL (continued)		76.10	_	18 20			
STIFF light (	gray SILTY C	CLAY	95.10 93.60		4 4 5	1.0 B	27.0	STIFF tan SANDY GR bottom 4" SILTY LOAI		73.60	<u> </u>	12 15 28	1.8 P	15.0	
VERY SOFT tan SANDY LOAM with LIMESTONE FRAGMENTS			91.10		3 5 6	0.2 15.0 P	15.0	HARD tan/light gray F wtih SILTY CLAY LEN	INE SAND IS	E SAND 71.10	-	20 24 29	4.2 S	15.0	
SOFT tan M with GRAVE	IOIST SAND EL	YLOAM	88.60	_	3 4 6	0.3 P	12.0	DENSE tan FINE SAN	ND	68.60		10 18 28			
VERY STIFI	F tan SAND\	/ LOAM			6 8	2.2	10.0	DENSE tan FINE SAN	ND		-30	20 17			
			86.10		9	S		End of Boring		66.10		18			
STIFF tan S GRAVEL	ANDY LOAN	/I with	83.60		6 10 12	1.1 S	8.0								
VERY STIFI with GRAVE	F tan SAND) EL	/ LOAM	81.10	<u>-15</u>	9 11 11	2.4 S	8.0				-35				
				_							_				
SOFT tan S GRAVEL	ANDY LOAN	/I with			5 8 11	0.3 P	10.0				_				
			77.60		40										
I				00	13	1	1	II.			40	1	1	1	



## **SOIL BORING LOG**

Page  $\underline{1}$  of  $\underline{1}$ 

**Date** 1/9/23

ROUTE	US Byr	20	_ DE	ESCRIPTION			P92-111-06 - Overhead sign truss				LOGGED BY _W. Garz					
SECTION _	<b>CTION</b> (201-3)K				OCAT	ION _	Cherry	Valley, NE 1/4 9, SEC.	, <b>TWP.</b> 43N, <b>F</b>	RNG. 2E						
COUNTY _	Winnebag	jo DR	RILLING	MET	THOD		Hol	low Stem Auger	_ HAMMER	TYPE .	CI	ME-45	/IE-45 Automatic			
STRUCT. NO.					_atitude _ongitude					2,024,832.4676 2,612,680.7701						
				D E P	B L O	U C S	M O I	Surface Water Elev. Stream Bed Elev.		_ ft _ ft	D E P	B L O	U C S	M O		
BORING NO Station Offset	·260	B-2 02+98		Т	W		S	Groundwater Elev.: First Encounter	93.0	# ▼	Т	W		S		
Offset	79.	00ft Rt		Н	S	Qu	Т	Upon Completion	os. <u>ย</u> Wash	_n. <u>¥</u> ft	Н	S	Qu	Т		
Ground Su	rface Elev.	95.90	π	(ft)	(/6")	(tsf)	(%)	After Hrs.			(ft)	(/6")	(tsf)	(%)		
MEDIUM ligh LOAM	nt brown SIL	TY CLAY				0.8	20.0	VERY DENSE tan DIF GRAVEL	RTY SANDY	74.90		35 49				
			02.00	_		P	<b>'</b>	Hand drilling (continue	d)							
STIFF light b	orown SAND	Y CLAY	93.90	_	5	1.1	18.0	VERY DENSE tan BIO	GRAVEL		_	100 for 1"				
			92.40		6	Р					_					
OOFT! M								VEDVOTIES ( OAN)	DVLOAM	71.40						
SOFT tan MOIST SANDY LOAM			89.90	<u>-5</u>	4 3 10	0.3 P	12.0	VERY STIFF tan SAN TILL GRAVEL	DY LOAM		- <u>25</u>	30 100 for 9"	3.5 S	9.0		
			69.90								_	10.0				
STIFF tan S	ANDY LOAM	1 with			3			5' Run		68.90						
GRAVEL			87.40		7 7	1.1 P	10.0	VERY DENSE tan ME	EDIUM							
			67.40		-	-		GRAVEL BIG TILL								
DENSE tan	SANDY LOA	.M with		<u>-10</u>						65.90	<u>-30</u>	100				
GRAVEL			84.90	_	16 22		12.0	End of Boring			_	for 1"/				
			,								_					
HARD tan S	ANDY LOAN	I with BIG	-	<u>*</u>	12	F 0	11.0									
GIVAVEL					52 52	5.0 B	11.0									
			81.40													
MEDIUM tan FINE SAND			01.40	- <u>15</u>	1						- <u>35</u>					
				_	8 9						_					
			78.90	_							_					
VERY STIFF			10.90		7						_					
TILL with FIN	NE SAND LE	CNI			8 11	3.1 B	14.0									
			76.40		18						40					