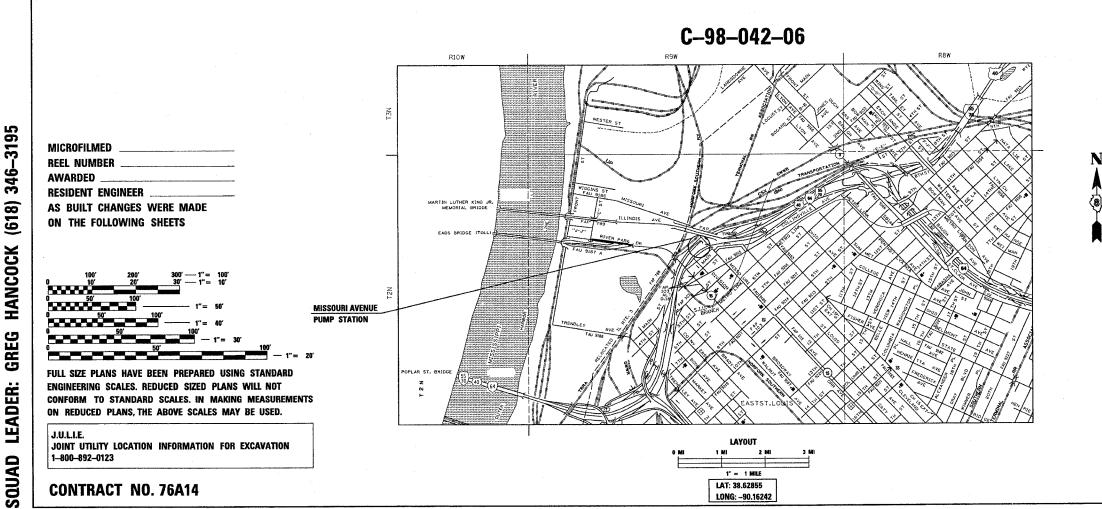
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION **DIVISION OF HIGHWAYS**

FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROPOSED HIGHWAY PLANS

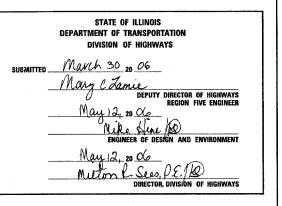
FA.U. ROUTE 9186 (MISSOURI AVE. PUMP STATION) SECTION DIST 8 DEEP WELLS 2006-2 ST. CLAIR COUNTY **DEEP WELL INSTALLATION**



COUNTY TOTAL SHEET NO.
ST. CLAIR 7 1

• FAU 91860 •• DIST 8 DEEP WELLS 2006-2





PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

SOUTHERLAND (618) 346-3159

PROJECT ENGINEER: WENDA

** DIST 8 DEEP WELLS 2006-2

INDEX OF SHEETS

- 1 COVER SHEET
- 2 INDEX OF SHEETS, HIGHWAY STANDARDS, AND GENERAL NOTES
 3 SUMMARY OF QUANTITIES
- 4 WELL ENCLOSURE BOX AND ACCESS HATCH DETAILS 5 WELL DETAILS
- 6 SITE PLAN (MAGNIFIED AND WELL DETAIL)
 7 SOIL BORING LOGS

GENERAL NOTES

- 1. THE STANDARDS AND REVISION NUMBERS LISTED SHALL APPLY TO THIS PROJECT.
- ILLINOIS STATE LAW REQUIRES A 48-HOUR NOTICE BE GIVEN TO UTILITIES BEFORE DIGGING. FIELD MARKING OF FACILITIES MAY BE OBTAINED BY CONTACTING JULI, I.E. OR FOR NON-MEMBERS, THE UTILITY COMPANY DIRECTLY, AGENCIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT AREA ARE AS FOLLOWS:

 - AMERENIP (GAS)
 AMERENCIPS (ELECTRIC)
 CHARTER COMMUNICATIONS (CABLE TV)
 CITY OF EAST ST. LOUIS (SANITARY SEWER)
 ILLINOIS AMERICAN WATER CO. (WATER)
 LEYEL 3 COMMUNICATIONS. LLC (COMMUNICATIONS)

 - LIGHT CORE (COMMUNICATIONS)
 MCI NETWORK SERVICES, INC. (COMMUNICATIONS)
 - MCLEOD USA TELECOMMUNICATIONS, INC. (COMMUNICATIONS)
 NETWORKS, 360 (COMMUNICATIONS)

 - QWEST COMMUNICATIONS (COMMUNICATIONS)
 SBC (COMMUNICATIONS)

(MEMBERS OF JULLIE. (800) 892-0123 ARE INDICATED BY .. NON-JULLIE. MEMBERS MUST BE NOTIFIED INDIVIDUALLY.)

- 3. THE RESIDENT ENGINEER SHALL LOCATE AND MARK THE EXACT LOCATIONS FOR ALL PROPOSED ITEMS PRIOR TO INSTALLATION BY THE CONTRACTOR.
- 4. WHERE SECTION OR SUB-SECTION MONUMENTS ARE ENCOUNTERED THE ENGINEER WHERE SECTION ON SUB-SECTION MORMENTS ARE ENCOUNTERED THE EMGINEER
 SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE DISTURBED. THE CONTRACTOR
 SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS AND
 MONUMENTS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR OR AGENT HAS
 WITNESSED OR OTHERWISE REFERENCED THE LOCATION.
- 5. EXCEPT WHERE DESIGNATED OTHERWISE, THE LOCATIONS AND/OR DEPTHS OF UNDERGROUND UTILITIES SHOWN HAVE BEEN TAKEN FROM OFFICE RECORD INFORMATION FURNISHED BY THE UTILITY OWNERS AND MUST BE CONSIDERED
- 6. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- 7. FOR EXACT SITE LOCATION CONTACT DAVE WALKER AT THE ILLINOIS DEPARTMENT OF TRANSPORTATION (618) 346-3274.

HIGHWAY STANDARDS

701301-02 702001-**06** 814001 000001-04

001006

COMMITMENTS NONE

> ILLINOIS DEPARTMENT OF TRANSPORTATION INDEX OF SHEETS, HIGHWAY STANDARDS AND GENERAL NOTES

VARIOUS ROUTES SECTION DIST 8 DEEP WELLS 2006-2 ST. CLAIR COUNTY

PLOT DATE: *DATE-TIME*

DRAWN BY:

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

VARIOUS
 DIST 8 DEEP WELLS 2006-2

FAP	SECTION	COUNTY TOTAL		SHEET HO
•	••	ST. CLAIR	7	3
STA.		TO STA.		
CONT	DACT NO. 76M	4		

		201/		I OI	QU/
CUMMARY OF QUANTITIES			CONS URBAN	TRUCTION TYPE C	ODE
SUMMARY OF QUANTITIES	UNIT	TOTAL QUANTITIES	STATE 100% Y007		
	FOOT	2	2		
44000500 COMBINATION CURB AND GUTTER REMOVAL	SQ YD	4	4		
44201349 CLASS C PATCHES, TYPE I, 10 INCH	FOOT	2	2		
GOGO4400 COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18	1001	_			
66900200 NON-SPECIAL WASTE DISPOSAL	CU YD	52	52		
66900450 SPECIAL WASTE PLANS AND REPORT	L SUM	1	1		
66900530 SOIL DISPOSAL ANALYSIS	EACH	1	1		
67100100 MOBILIZATION	L SUM	1	1		
80300100 LOCATING UNDERGROUND CABLE	FOOT	400	400		
X0322629 WELL ENCLOSURE BOX	EACH	4	4		
X0324960 LOCATING STORM SEWER	FOOT	300	300		ł
x0325379 DIRECTIONAL BORING	FOOT	200	200		
XX004550 HPD PIPE 12 INCH	FOOT	210	210		
X0325380 WELL NO. 2 WELL WORK	L SUM	1 .	1		,
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	CLIMANDY OF CHANTITIES			CONST	RUCTION TYPE CO	JUE.
	SUMMARY OF QUANTITIES		TOTAL			į
DDE NO	ITEM	UNIT	QUANTITIES			
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SEE ACCESS HATCH DETAIL (THIS SHEET) 5' × 10' × 7' *13 BARS ON 12" CENTERS BOTH DIRECTIONS (5) 12" HDPE 12" HDPE

WELL ENCLOSURE BOX DETAIL N.T.S.

NOTES

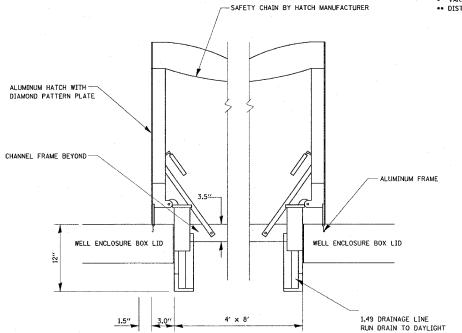
- DOG HOUSE BOX DESIGN WILL BE ACCEPTED.
- BOLTS, NUTS, AND WASHERS FOR CONNECTION OF VALVE TO PIPE LINE SHALL BE 304 S.S. OF THE SIZE RECOMMENDED BY THE MANUFACTURER.
- ALL EXCAVATION DIRT SHALL REMAIN ON SITE AND BE USED FOR GRADING AS PER DIRECTED BY THE ENGINEER.

LEGEND

- 1 12" FLANGE
- 2 12" KNIFE GATE VALVE S.S.
- $\langle 3 \rangle$ 12" SWINGFLEX CHECK VALVE S.S.
- 4 AIR/VAC VALVE WITH ISOLATING HALL VALVE
- 5 12" S.S. PIPE AND FLANGES
- 6 12" S.S. COUPLING (REPAIR CLAMP)
- 7 S.S. NIPPLE WELDED TO 12" S.S. PIPE
- 8 PIPE SUPPORTS

SECTION COUNTY TOTAL SHEETS SHEET NO ST. CLAIR 7 STA. TO STA. CONTRACT NO.: 76A14

• VARIOUS •• DIST 8 DEEP WELLS 2006-2



ACCESS HATCH DETAIL N.T.S.

NOTES

MATERIAL AND WORKMANSHIP:

ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED JANUARY 1, 2002.

CONCRETE STRENGTH, 4 ksi:, WITH REINFORCING BAR GRADE 60 STEEL = ASTM 36.

DESIGN:

AISC MANUAL OF STEEL CONSTRUCTION, 9th EDITION ACI 318-93: BUILDING CODE AND COMMENTARY.

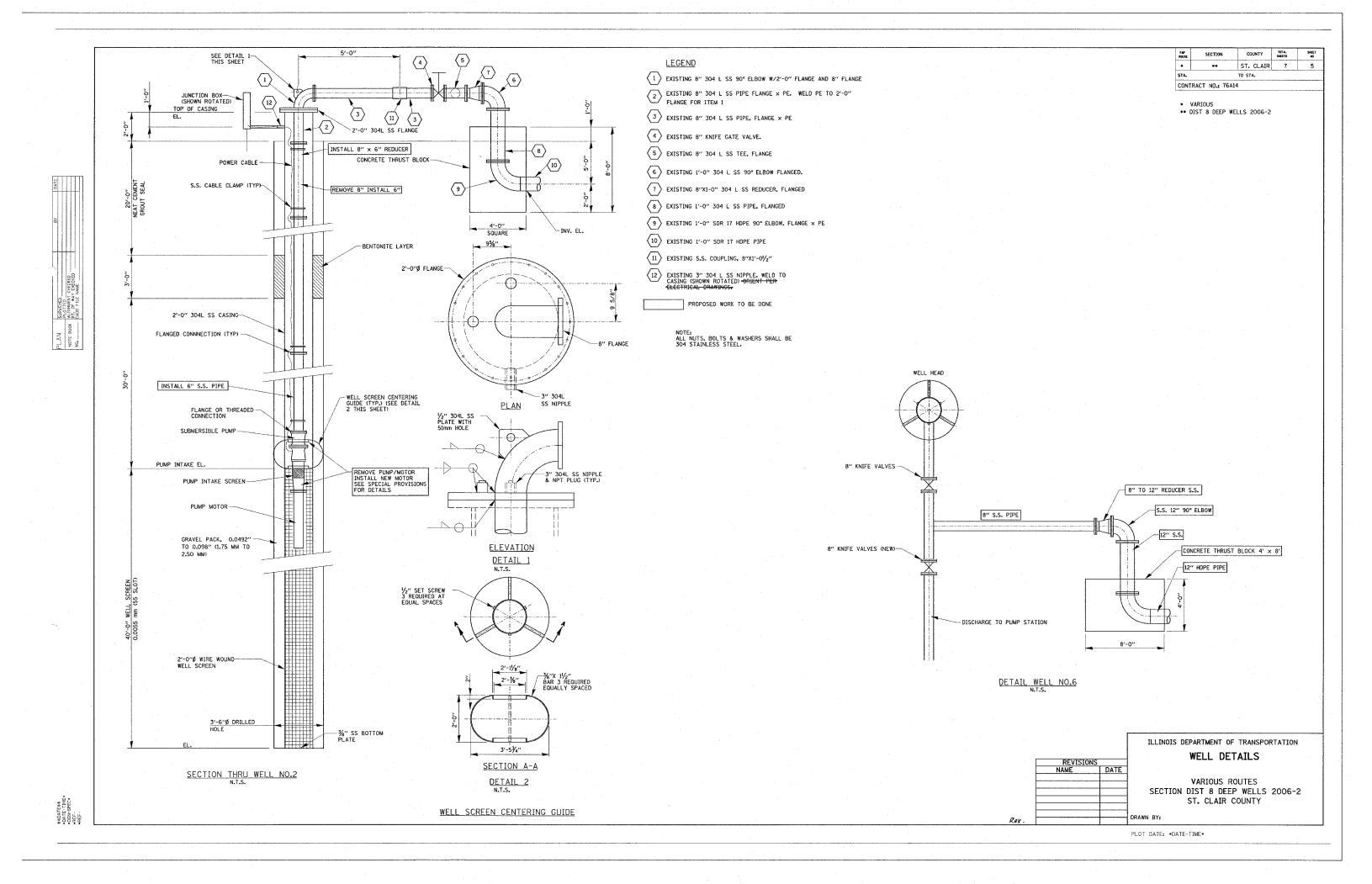
REVISIONS NAME

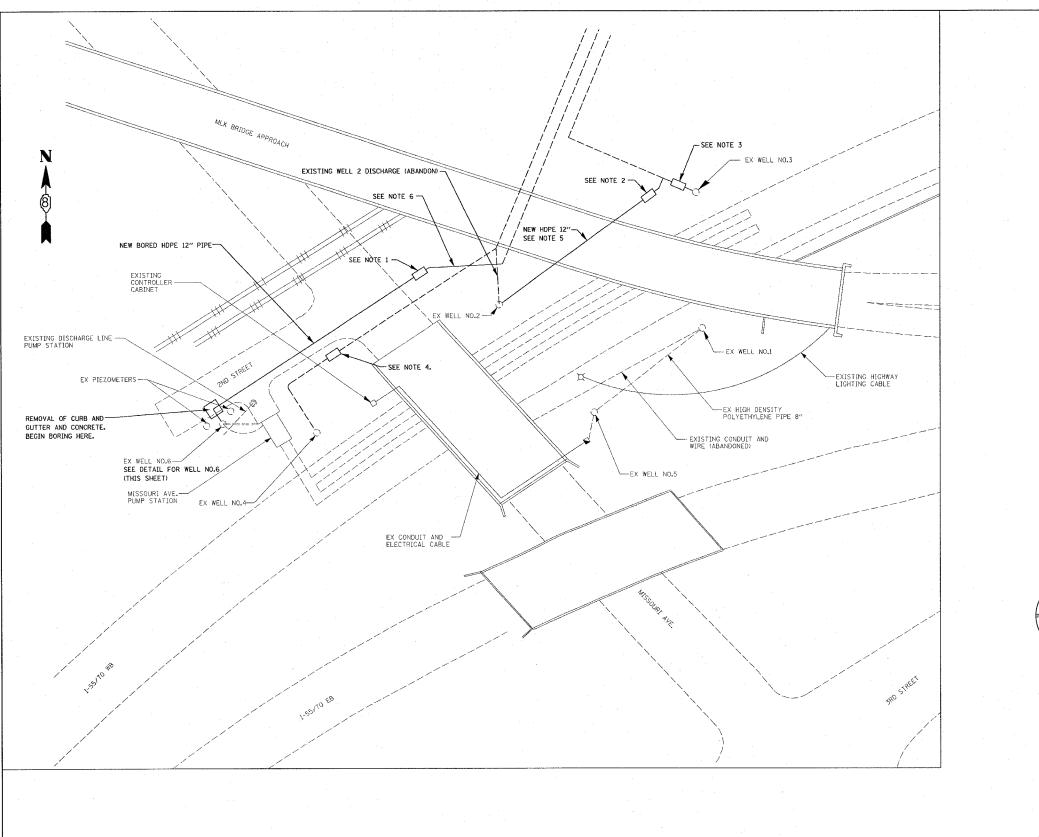
ILLINOIS DEPARTMENT OF TRANSPORTATION WELL ENCLOSURE BOX AND ACCESS HATCH DETAILS

VARIOUS ROUTES SECTION DIST 8 DEEP WELLS 2006-2 ST. CLAIR COUNTY

DRAWN BY:

PLOT DATE: *DATE-TIME*





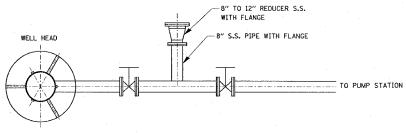
FAP ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET	
•	••	ST. CLAIR	7.	6	
STA.		TO STA.			

CONTRACT NO.: 76A14

* VARIOUS
** DIST 8 DEEP WELLS 2006-2

NOTES

- 1. WELL ENCLOSURE BOX FOR WELL NO.6.
- 2. WELL ENCLOSURE BOX FOR WELL NO.2.
- 3. WELL ENCLOSURE BOX FOR WELL NO.3.
- 4. WELL ENCLOSURE BOX FOR WELL NO.4.
- 5. INSTALL NEW 12" HDPE PIPE FROM WELL NO. 2 TO WELL NO. 3. PROVIDE AND INSTALL A COUPLER TO HOOK UP WELL NO.2 DISCHARGE PIPES INTO WELL NO. 3 TRENCH PIPE.
- 6. INSTALL 12" PIPE FROM WELL NO.6 ENCLOSURE BOX TO THE DISCHARGE LINE FOR WELL NO.2 TRENCH PIPE.



DETAIL WELL NO.6 (SEE SIDE VIEW ON SHEET 5)

ILLINOIS DEPARTMENT OF TRANSPORTATION SITE PLAN (MAGNIFIED) AND WELL DETAIL

VARIOUS ROUTES SECTION DIST 8 DEEP WELLS 2006-2 ST. CLAIR COUNTY

DRAWN BY:

PLOT DATE: *DATE-TIME*

Illinois Departmen of Transportation Division of Highways Hillinois Department of Transportation			S	OIL BORING LOG
		Mi	ssouri.	Avenue - Well Boring LOGGED BY Ford /Schread
SECTION 520-1,2 LOCATI	ON	, SEC.	, TWP.	, RNG. , PM
COUNTY St. Clair DRILLING ME	THOD		Holle	ow Stem Auger HAMMER TYPE 140# Automatic
STRUCT, NOD	В	U	м	Surface Water Elev. ft D B U M
Station E	ŗ	c	0	Stream Bed Elev. ft E L C O
	W		s	Groundwater Elev.: T W S
BORING NO. WB-11 T Station 5' East of Curb Offset	S	Qu	Т	First Encounter 59.5 ft ▼ H S Qu T
Ground Surface Elev. ft 100.0 ft (ft)	(/6")	(tsf)	(%)	After Hrs. ft (ft) (6") (tsf) (%
NO SAMPLES				NO SAMPLES (continued)
				-

				-
6				-25
				-
-				
				_30
·				
				
· <u>-</u>				66.0
15				Brown Fine to Medium SAND _35 5 See Gradation @ 35 feet 9 4
				22 NC
-				- 1 1 .
20				Brown Fine to Coarse SAND40 5

Bivision of Highways Illinois Department of Transportat						Date		250
ROUTE FAP 788 DESCRIPTION	_		Mi	sourl	Avenue - Well Boring LOGGED E	Y Forc	/Schi	read
SECTION 520-1,2 LO	CATI	ON	SEC.	, TWP.	, RNG. , PM			
COUNTY St. Clair DRILLING	ME	THOD		Holle	w Stem Auger HAMMER TYPE	140# A	Autome	tic
STRUCT. NO. Station BORING NO. WB-11 Station 5' East of Curb Offset Ground Surface Elev. ft 100.0 ft	D E P T H	B L O W S	U C S Ou (tsf)	M O S T (%)	Surface Water Elev. ft. Stream Bed Elev. ft. Groundwater Elev.: ft. First Encounter 59.5 ft. Upon Completion ft. After Hrs. ft.	B L O W S (6")	U C S Qu (tsf)	M O I S T (%)
Brown Fine SAND See Gradation @ 85 feet (continued)					Brown Medium to Coarse SAND with some Gravel See Gradation @ 95 feet (continued)	24		
	-85	39 50/5" -	NC	26	Gray Fine to Medium SAND See Gradation @ 105 feet -5.0 -10	44	NC	21
	_				End of Boring			
11.5		48			-	-		
Brown Medium to Coarse SAND with some Gravel See Gradation @ 95 feet	-90	39 32	NC	19				
some countries		21 18		14	-			
	-95	18	NC		<u>-11</u>	5		
	_							
	_	7		15]		
	-100	20	NC		121	5		

of Transportation Division of Highways Illinois Department of Transportation	gg on				OIL BORING	LUG		Date	10	25/04
ROUTE FAP 788 DESCRIPTION	Avenue - Well Boring	LOGGE	D B	Y Ford	/Sch	reader				
SECTION 520-1,2 LOC	ATIC	N _	, SEC.	, TWP	, RNG. , PM					-
COUNTY St. Clair DRILLING	MET	HOD	-	Holle	w Stem Auger HAM	MMER TYPE	1	40# <i>F</i>	utoma	rtic
STRUCT. NO.	D E	В	υc	M	Surface Water Elev.	ft	D E	В	. n	M
Station	P	ō	s	ī	Stream Bed Elev.	ft	P	ō	s	ī
BORING NO. WB-11 Station 5' East of Curb	T H	w	Qυ	S	Groundwater Elev.:	6 T	Ţ	W	Ou	S
Offset	- 1	-	au	'	First Encounter Upon Completion	59.5 ft .	1		_ CG	
Ground Surface Elev. ft 100.0 ft	(ft)	(6")	(tsf)	(%)	After Hrs.	ft	(ft)	(6")	(tsf)	(%)
(continue a)	¥	9 12	NC	17	Brown Fine to Coarse SAN See Gradation @		-			
See Gradation @ 45 feet	\exists				(continued)		_			
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	\exists							22	-	24
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51.5	-	15					-	7		
Brown Fine to Coarse SAND See Gradation @ 65 feet		20 25	NC	24				12 24	NC	19
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	ᅴ					26.5				
_	コ	12						23		
	-55	16 23	NC	21	Brown Medium to Coarse with some Gravel		-75	20 22	NC	16
			Ĩ		See Gradation @	75 feet	-/0			
	\exists						_			
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-	\dashv					21,5				
	_	16		22	Brown Fine SAND	and a second second		9		
		18 17	NC	22	See Gradation @	85 feet	===	42 50	NC	27

BBS, from 137 (Rev. 8-99)

ILLINOIS	DEPAR	RTMENT	OF	TRANSPORTATION
9	SOIL	BORI	NG	LOGS

SECTION COUNTY TOTAL SHEET NO ST. CLAIR 7 7 TO STA.

CONTRACT NO.: 76889 VARIOUS

VARIOUS

VARIOUS

VARIOUS

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VARIOUS ROUTES SECTION DIST 8 DEEP WELLS 2005-2 ST. CLAIR COUNTY