06-10-2016 LETTING ITEM 143

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	D9 ITS SIGNING 2013-1	JEFFERSON/ WILLIAMSON	38	1
	ILLINOIS	CONTRACT NO. 78337		

INDEX OF SHEETS

HIGHWAY STANDARDS

000001-06	701401-09
280001-07	701406-10
630201-06	701428-01
701101-05	701901-05
701400-08	878001-10

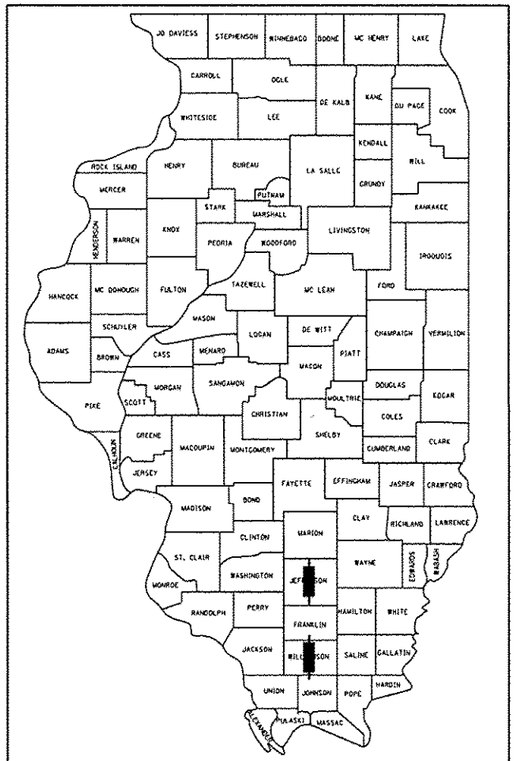
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED
HIGHWAY PLANS

FAI ROUTE 57 (I-57)
SECTION D9 ITS SIGNING 2013-1
PROJECT
CHANGEABLE MESSAGE SIGNS SURVEILLANCE
JEFFERSON /WILLIAMSON COUNTY

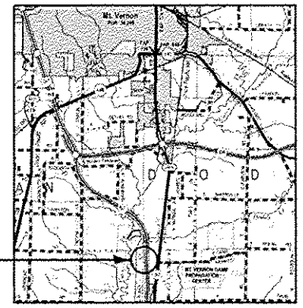
C-99-013-13

D-99-011-13



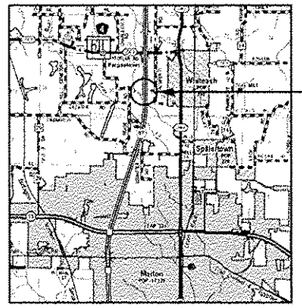
LOCATION OF SECTION INDICATED THUS: –

LOCATION MAPS
NOT TO SCALE



I-57 SOUTHBOUND
STA. 432+50 MM 88.63
STR. NO. 9S041I057L088.6

JEFFERSON COUNTY



WILLIAMSON COUNTY

I-57 NORTHBOUND
STA. 292+50 MM 56.56
STR. NO. 9S100I057R056.6

EFK•Moen, LLC
Civil Engineering Design

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED March 14 20 16
Jeffrey L Kern
REGION FIVE ENGINEER

May 6 20 16
Maureen M. Addis P.E. /BR
acting ENGINEER OF DESIGN AND ENVIRONMENT

May 6 20 16
DIRECTOR OF PROGRAM DEVELOPMENT

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER: CHARLES STEIN, PE (618-351-5210)
PROJECT DESIGNER

CONTRACT NO. 78337

LICENSED PROFESSIONAL ENGINEER SHELLEY L DINTELMAN 062-055901 STATE OF ILLINOIS

Shelley L. Dintelman, P.E. 3/14/2016 Date
License Expires 11/30/2017

THE SEAL SHOWN ABOVE IS VALID FOR THE FOLLOWING SHEETS IN THESE PLANS WHICH WERE PREPARED UNDER MY DIRECT SUPERVISION:
SHEETS 1, 3-7, 9-10, 13-14, 17-28, 33-38

RANDAL A. GRUBERMAN 062-064180 LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

Randal A. Gruberman, P.E. 3/14/16 Date
License Expires 11/30/2017

THE SEAL SHOWN ABOVE IS VALID FOR THE FOLLOWING SHEETS IN THESE PLANS WHICH WERE PREPARED UNDER MY DIRECT SUPERVISION:
SHEETS 2, 12, 16, 29-32

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

INTELLIGENT TRANSPORTATION SYSTEMS (ITS) ITEMS

	EXISTING (EX)	PROPOSED (PR)
CCTV POLE	○	●
CLOSED CIRCUIT TV	C	C
DYNAMIC MESSAGE SIGN		DMS
CELLULAR MODEM		

UNDERGROUND UTILITY ITEMS

	EX	PR	ABANDONED
ELECTRIC CABLE	E	E	E
FIBER OPTIC CONDUIT (SPARE)	FO	FO	FO
DATA CABLE	D	D	D

UTILITIES ITEMS

	EX	PR
ITS CABINET		
HANDHOLE		
HEAVY DUTY HANDHOLE		
JUNCTION BOX		
LIGHT POLE		
ELECTRIC METER	M	M
POWER POLE		
ELECTRICAL DISCONNECT		
PAD MOUNTED TRANSFORMER (480V/240V)		
POLE MOUNTED TRANSFORMER	T	T

GENERAL NOTES

1. THE COST OF SPLICES, MARKERS, PATCH PANELS AND PATCH CHORDS SHALL BE INCLUDED IN THE UNIT COST OF EACH EQUIPMENT CABINET PER THE SPECIAL PROVISIONS.

2. DYNAMIC MESSAGE SIGN (DMS) SUPPORTING SIGN STRUCTURE AND FOUNDATION WORK IS SHOWN ON STRUCTURAL DRAWINGS. THE INSTALLATION OF THESE AND OTHER FOUNDATIONS, INCLUDING BUT NOT LIMITED TO CONDUITS AND GROUNDING, SHALL BE COORDINATED WITH THE ELECTRICAL WORK FOR DMS, CCTV VERIFICATION CAMERA AND OTHER RELATED EQUIPMENT.

3. FOR ALL INTELLIGENT TRANSPORTATIONS SYSTEMS (ITS) ASSEMBLIES/EQUIPMENT, SPECIAL LABELING FOR ENCLOSURES, CABLES (POWER AND COMMUNICATIONS), EQUIPMENT, ETC. SHALL BE PROVIDED. THE LABELING IS REQUIRED AT BOTH ENDS OF THE ITS ASSEMBLY COMPONENT (E.G. INSIDE ENCLOSURES AT THE ITS ASSEMBLY/COMPONENT) AS WELL AS AT THE OTHER CONNECTING END (E.G. EQUIPMENT CABINET/ SERVICE ENTRANCE). THE LABELING IS ALSO REQUIRED WHERE CABLES ARE SPLICED IN HANDHOLES AND JUNCTION BOXES. ADDITIONALLY, SPARE CONDUITS INSIDE CABINETS AND FACILITIES SHALL BE LABELED AS SPARE AND A DESIGNATION OF THE OTHER END SHALL BE PROVIDED. THE COST OF LABELING SHALL BE INCLUDED IN THE WORK INCLUDING CONVERSIONS OF THE ITS ASSEMBLY/COMPONENT AS STATED IN THE RESPECTIVE ITS ASSEMBLY/COMPONENT SPECIAL PROVISION.

4. ANY CONDUIT, FOR ITS POWER OR COMMUNICATIONS CABLING ENTERING A POLE MOUNTED OR ABOVE GROUND ENCLOSURE, EQUIPMENT FOUNDATION, OPERATIONAL BUILDING, MAINTENANCE FACILITY SHALL BE GALVANIZED STEEL CONDUIT. THE GALVANIZED STEEL CONDUIT SHALL EXTEND A MINIMUM OF FIVE FEET (5') OUTSIDE CONCRETE FOUNDATIONS, AND A MINIMUM OF TEN FEET (10') OUTSIDE POLE MOUNTED/ABOVE GROUND ENCLOSURES. THE COST OF SUCH GALVANIZED STEEL CONDUIT SHALL BE INCLUDED IN THE ELECTRICAL WORK FOR THE EQUIPMENT BEING CONNECTED.

5. THE CONTRACTOR SHALL COORDINATE WITH THE CONSTRUCTION MANAGER AND THE IT DATA COMMUNICATION MANAGER, IN ADVANCE OF, ANY IMPACT TO ITS EQUIPMENT BY CONSTRUCTION (INSTALL, REMOVE, RELOCATE, DISCONNECT OR MODIFY).

6. EXISTING SURFACE DISTURBED DURING EXCAVATION FOR FOUNDATIONS AND PUSH PITS SHALL BE RESTORED TO THE LIMITS AND CONDITION SPECIFIED BY THE ENGINEER OR AS SHOWN ON THE PLANS. UNLESS NOTED OTHERWISE ON THE PLANS THE REMOVAL AND RESTORATION SHALL BE INCLUDED IN THE CONTRACT.

7. UTILITIES ARE SHOWN IN ACCORDANCE WITH THE BEST AVAILABLE INFORMATION AND THEIR TRUE LOCATIONS ARE NOT GUARANTEED TO BE SHOWN IN THE PLANS.

8. EXISTING UNDERGROUND AND ABOVE-GRADE FACILITIES, STRUCTURES, AND UTILITIES HAVE BEEN PLOTTED ON THESE CONTRACT DOCUMENTS BASED UPON THE INFORMATION AND SURVEYS AVAILABLE AT THE TIME OF DRAWING PREPARATION. THE LOCATION OF THESE FEATURES MUST, THEREFORE, BE CONSIDERED APPROXIMATE ONLY. IN ADDITION, THERE MAY BE OTHER FACILITIES, STRUCTURES, AND UTILITIES WHICH DID NOT EXIST OR THE EXISTENCE OF WHICH WAS NOT KNOWN AT THE TIME OF DRAWING PREPARATION. IT IS THE SOLE RESPONSIBILITY OF CONTRACTOR(S) TO HAVE ALL EXISTING FACILITIES, STRUCTURES, AND UTILITIES LOCATED IN THE FIELD PRIOR TO ANY EXCAVATION OR CONSTRUCTION ACTIVITY; AND TO PROTECT ALL SUCH EXISTING FEATURES DURING CONSTRUCTION.

9. GRADING SHALL BE DONE BY HAND AROUND LIGHT POLE, UTILITY POLES, SIGN POSTS, TREES OR OTHER NATURAL OR MAN-MADE OBJECTS WHERE SHALLOW FILLS OR CUTS ARE ADJACENT TO THE ITEMS. IT IS THE INTENT THAT THE LIMITS OF CONSTRUCTION BE SUCH AS TO PRESERVE IN THE ORIGINAL STATE AS MUCH AREA AS POSSIBLE. THE DECISION AS TO ITEMS TO REMAIN IN PLACE SHALL BE DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER SQUARE YARD FOR GRADING AND SHAPING FORESLOPES AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED. EARTHWORK COMPACTION SHALL BE TO THE SATISFACTION OF THE ENGINEER.

10. SEEDING SHALL BE DONE ON ALL AREAS THAT ARE DISTURBED BY CONSTRUCTION OPERATIONS AS DIRECTED BY THE ENGINEER. SEEDING SHALL BE PAID FOR ONLY WITHIN THE PROPOSED CONSTRUCTION LIMITS, RIGHT-OF-WAY, OR EASEMENT LIMITS. ALL AREAS DISTURBED BY THE CONTRACTOR OUTSIDE THE PROPOSED CONSTRUCTION LIMITS SHALL BE SEEDED, AS DIRECTED BY THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

11. IF ASH TREES ARE REMOVED ON THE PROJECT, THE CONTRACTOR SHALL BECOME FAMILIAR WITH AND COMPLY WITH MEASURES SPECIFIED BY THE ILLINOIS DEPARTMENT OF AGRICULTURE (IDOA) TO PREVENT THE SPREAD OF THE EMERALD ASH BORER. THE IDOA INFORMATION FOR ASH TREE REMOVAL CAN BE FOUND ON THE IDOA WEBSITE AT WWW.AGR.STATE.IL.US/EAB.

12. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING FIELD DIMENSIONS AND CONDITIONS PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.

ITS NOTES

1. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO PERFORMING ANY EXCAVATION, INSTALLING GROUND ROD AND/OR FOUNDATIONS.

2. LOCATIONS OF ITS AND POWER ELEMENTS ARE APPROXIMATE. FINAL LOCATIONS WILL BE APPROVED BY THE DEPARTMENT. THE CONTRACTOR SHALL STAKE FIELD LOCATIONS AND THE DEPARTMENT WILL VERIFY AND APPROVE FINAL LOCATIONS.

3. THE CONTRACTOR IS RESPONSIBLE FOR OPERATING AND MAINTAINING PROPOSED ITS EQUIPMENT. THE COST OF SUCH MAINTENANCE AND OPERATION IS INCLUDED IN EACH TYPE OF PROPOSED ITS EQUIPMENT UNTIL FINAL ACCEPTANCE.

4. THE CONTRACTOR SHALL NOT DISTURB WETLAND AREAS AND/OR WATERS OF THE U.S.

5. THE CONTRACTOR SHALL PROVIDE THE MINIMUM SPECIFIED SLACK LENGTH OF COMMUNICATIONS LOOPED IN EACH HANDHOLE OR JUNCTION BOX. RESPECTIVE MINIMUM SLACK LENGTHS SHALL BE AS SPECIFIED IN THE SPECIAL PROVISIONS, OR AS DIRECTED BY THE ENGINEER.

6. CATEGORY 6 CABLE SHALL BE PULLED UN-SPLICED FROM CCTV VERIFICATION CAMERA TO ITS CABINET.

7. THE CONTRACTOR IS RESPONSIBLE FOR ALL DMS AND CCTV LICENSING FOR A COMPLETE AND OPERATIONAL SYSTEM.

8. THE CONTRACTOR IS RESPONSIBLE FOR ALL PROGRAMMING AND VIRTUAL PRIVATE NETWORK CONFIGURATION FROM THE DESIGNATED REMOTE OPERATIONS TO THE DMS AND CCTV CAMERAS. CONTRACTOR SHALL COORDINATE WITH THE DEPARTMENT IT FOR ALL PROGRAMMING AND INTEGRATION OF DMS AND CCTV CAMERAS INTO THE EXISTING DEPARTMENT NETWORK.

9. THE CONTRACTOR IS RESPONSIBLE FOR THE SETUP OF CELLULAR MODEMS AT EACH DMS SITE LOCATION. CONTRACTOR SHALL VERIFY 4G CELLULAR DATA SERVICE IS AVAILABLE AT EACH LOCATION WITH CELLULAR DATA SERVICE PROVIDER.

10. THE CONTRACTOR SHALL PROVIDE (1) ONE YEAR OF CELLULAR DATA SERVICE VIA CONTRACTOR PROVIDED CELLULAR 4G MODEM AT BOTH DMS SITE LOCATIONS.

11. THE CONTRACTOR IS RESPONSIBLE FOR THE SETUP OF ALL DMS AND CCTV CAMERA SOFTWARE FOR REMOTE OPERATIONS OF DMS AND CCTV SYSTEMS ON CONTRACTOR PROVIDED LAPTOP TO BE ISSUED AS PART OF THIS PROJECT.

12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING CCTV CAMERA VIEWS AND SETTING (RESOLUTION & FRAME RATE) WITH THE DEPARTMENT STAFF PRIOR TO FINAL INSTALLATION.

13. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EQUIPMENT GROUNDING AND LIGHTNING PROTECTION (I.E. ITS CABINET EQUIPMENT, CCTV POWER INJECTOR, NETWORK ELECTRONICS, CCTV CABLING, ETC.).

14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NETWORK EQUIPMENT PROGRAMMING AND COORDINATING NETWORK IP AND SUBNET MASK SCHEMES WITH THE DEPARTMENT IT STAFF PRIOR TO FINAL INSTALLATION.

Prepared By: _____ DISTRICT STRUCTURES & PLANS ENGINEER

Examined By: _____ DISTRICT LAND ACQUISITION ENGINEER

Examined By: _____ DISTRICT PROGRAM DEVELOPMENT ENGINEER

Examined By: _____ DISTRICT OPERATIONS ENGINEER

Examined By: _____ DISTRICT PROJECT IMPLEMENTATION ENGINEER

Examined By: _____ DISTRICT CONSTRUCTION ENGINEER

Examined By: _____ DISTRICT MATERIALS ENGINEER

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		DRAWN OTL	REVISED -
	PLOT SCALE = 2.0000 ' / in.	CHECKED KLG	REVISED -
	PLOT DATE = 3/16/2015	DATE 03-16-15	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SYMBOLS, GENERAL & ITS NOTES

SCALE: N.A. | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-57	D9 ITS SIGNING 2013-1	JEFFERSON/ WILLIAMSON	38	2
		CONTRACT NO. 78337		
		ILLINOIS FED. AID PROJECT		

/100% SCALE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				JEFFERSON	WILLIAMSON
				TRAFFIC SIGNS	TRAFFIC SIGNS
				0021	0021
				RURAL	RURAL
25000210	SEEDING, CLASS 2A	ACRE	1.25	0.75	0.5
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	113	68	45
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	113	68	45
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	113	68	45
25100115	MULCH, METHOD 2	ACRE	1.25	0.75	0.5
28000400	PERIMETER EROSION BARRIER	FOOT	364	364	
28000500	INLET AND PIPE PROTECTION	EACH	2	1	1
63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	950	637.5	312.5
63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	5	3	2
63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	5	3	2
67100100	MOBILIZATION	L SUM	1	0.5	0.5
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	2	1	1
70100700	TRAFFIC CONTROL AND PROTECTION, STANDARD 701406	L SUM	1		1
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	60	30	30

19 • SPECIALTY ITEM

EFK•Moen, LLC
Civil Engineering Design

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	PLOT DATE = 3/8/2016	DATE - 3/8/16	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: N.A. | SHEET 1 OF 4 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	D9 ITS SIGNING 2013-1	JEFFERSON/WILLIAMSON	38	3
		CONTRACT NO. 78337		
		ILLINOIS FED. AID PROJECT		

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				JEFFERSON	WILLIAMSON
				TRAFFIC SIGNS	TRAFFIC SIGNS
				0021	0021
				RURAL	RURAL
70200100	NIGHTTIME WORK ZONE LIGHTING	L SUM	1	0.5	0.5
72700100	STRUCTURAL STEEL SIGN SUPPORT - BREAKAWAY	POUND	520	520	
73300300	OVERHEAD SIGN STRUCTURE - SPAN, TYPE III-A (5'-0" X 7'-0")	FOOT	171	74	97
73301810	OVERHEAD SIGN STRUCTURE WALKWAY, TYPE A	FOOT	13	6	7
73400100	CONCRETE FOUNDATIONS	CU YD	1.4	1.4	
73400200	DRILLED SHAFT CONCRETE FOUNDATIONS	CU YD	45.1	23.9	21.2
78200410	GUARDRAIL MARKERS, TYPE A	EACH	20	12	8
78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	5	3	2
80400100	ELECTRIC SERVICE INSTALLATION	EACH	2	1	1
80500020	SERVICE INSTALLATION - POLE MOUNTED	EACH	2	1	1
81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	490	240	250
81028350	UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	2000	1500	500
81028390	UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	150	150	
81028730	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1 1/4" DIA.	FOOT	2805	2170	635

19 • SPECIALTY ITEM

EFK•Moen, LLC
Civil Engineering Design

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	PLOT SCALE = 2.0000 ' / in.	DRAWN - JRD	REVISED -		
	PLOT DATE = 3/16/2015	CHECKED - SLO	REVISED -		SCALE: N.A. SHEET 2 OF 4 SHEETS
		DATE - 3/13/15	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	D9 ITS SIGNING 2013-1	JEFFERSON/ WILLIAMSON	38	4
		CONTRACT NO. 78337		
		ILLINOIS FED. AID PROJECT		

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				JEFFERSON	WILLIAMSON
				TRAFFIC SIGNS	TRAFFIC SIGNS
				0021	0021
				RURAL	RURAL
81300540	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" X 12" X 4"	EACH	2	1	1
81400100	HANDHOLE	EACH	14	8	6
81702130	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6	FOOT	2400	1800	600
81702150	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 2	FOOT	900	450	450
81702160	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 1/0	FOOT	1050		1050
81702180	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 3/0	FOOT	3300	3300	
82700100	TRANSFORMER, GENERAL PURPOSE	EACH	2	2	
83062710	LIGHT POLE, WEATHERING STEEL, 35 FT. M.H., TENON MOUNT	EACH	2	1	1
83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	11	5.5	5.5
83800650	BREAKAWAY DEVICE, COUPLING WITH STAINLESS STEEL SCREEN	EACH	2	1	1
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	40	25	15
X0323388	TRAFFIC COUNTER	EACH	1	1	
X0324597	CLOSED CIRCUIT TELEVISION CABINET	EACH	2	1	1
X0325485	TRUSS MOUNTED LED DYNAMIC MESSAGE SIGN	EACH	2	1	1

1M • SPECIALTY ITEM

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	PLOT DATE = 3/16/2015	DATE - 3/13/15	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: N.A. | SHEET 3 OF 4 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	09 ITS SIGNING 2013-1	JEFFERSON/ WILLIAMSON	38	5
		CONTRACT NO. 78337		
	ILLINOIS FED. AID PROJECT			

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				JEFFERSON	WILLIAMSON
				TRAFFIC SIGNS	TRAFFIC SIGNS
				0021	0021
				RURAL	RURAL
X0325922	CELLULAR MODEM	EACH	2	1	1
X0327216	CLOSED CIRCUIT TELEVISION CAMERA	EACH	2	1	1
X8040305	ELECTRICAL SERVICE CONNECTION	L SUM	1	0.5	0.5
X8570100	DISCONNECT SWITCH	EACH	8	5	3
X1400101	NETWORK CONFIGURATION	L SUM	1	0.5	0.5
X1400102	OUTDOOR RATED NETWORK CABLE	FOOT	470	235	235
Z0005216	HOT-MIX ASPHALT STABILIZATION 6" AT STEEL PLATE BEAM GUARD RAIL	SQ YD	448	291	157
Z0058668	GRADING AND SHAPING FORESLOPES	SQ YD	3217	2343	874
X1400103	ROAD WEATHER INFORMATION SYSTEM, COMPLETE	L SUM	1	1	
X7010410	SPEED DISPLAY TRAILER	CAL MO	1	0.5	0.5

9 • SPECIALTY ITEM

Rev,

EFK • Moen, LLC
Civil Engineering Design

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	PLOT DATE = 3/16/2015	DATE - 3/13/15	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: N.A. | SHEET 4 OF 4 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	D9 ITS SIGNING 2013-1	JEFFERSON/WILLIAMSON	38	6
		CONTRACT NO. 78337		
		ILLINOIS FED. AID PROJECT		

SEEDING							
STATION	STATION	SIDE	SEEDING CLASS 2A (ACRE)	NITROGEN FERTILIZER NUTRIENT (POUND)	PHOSPHORUS FERTILIZER NUTRIENT (POUND)	POTASSIUM FERTILIZER NUTRIENT (POUND)	MULCH METHOD 2 (ACRE)
JEFFERSON CO.							
432+00.00	433+00.00	MEDIAN	0.43	39	39	39	0.43
432+00.00	435+25.00	RT	0.32	29	29	29	0.32
SUBTOTAL (JEFFERSON CO)=			0.75	68	68	68	0.75
WILLIAMSON CO.							
290+00.00	295+00.00	MEDIAN	0.50	45	45	45	0.50
SUBTOTAL (WILLIAMSON CO)=			0.50	45	45	45	0.50
TOTALS=			1.25	113	113	113	1.25

INLET AND PIPE PROTECTION		
STATION	SIDE	INLET & PIPE PROTECTION (EACH)
JEFFERSON CO.		
435+01	MEDIAN	1
SUBTOTAL (JEFFERSON CO)=		1
WILLIAMSON CO.		
294+31	MEDIAN	1
SUBTOTAL (WILLIAMSON CO)=		1
TOTAL=		1

PERIMETER EROSION BARRIER			
STATION	STATION	SIDE	PERIMETER EROSION BARRIER (FOOT)
JEFFERSON CO.			
432+00.00	435+25.00	LT	364
SUBTOTAL (JEFFERSON CO)=			364
TOTAL=			364

GUARDRAIL SCHEDULE								
STATION	STATION	SIDE	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS (FOOT)	GUARDRAIL MARKERS, TYPE A (EACH)	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT (EACH)	TRAFFIC BARRIER TERMINAL TYPE 2 (EACH)	TERMINAL MARKER DIRECT APPLIED (EACH)	HMA STABILIZATION 6" AT STEEL PLATE BEAM GUARDRAIL (SQ YD)
JEFFERSON CO.								
432+44.00	434+93.99	LT	187.5	4	1	1	1	89
432+85.41	435+72.90	LT	225	4	1	1	1	101
429+27.07	432+14.57	RT	225	4	1	1	1	101
SUBTOTAL (JEFFERSON CO)=			637.5	12	3	3	3	291
WILLIAMSON CO.								
292+59.81	294+72.30	LT	150	4	1	1	1	76
290+22.75	292+47.74	RT	162.5	4	1	1	1	81
SUBTOTAL (WILLIAMSON CO)=			312.5	8	2	2	2	157
TOTALS=			950	20	5	5	5	448

LIGHT POLE SCHEDULE				
STATION	OFFSET	LIGHT POLE, WEATHERING STEEL, 35 FT. M.H., TENON MOUNT (EACH)	LIGHT POLE FOUNDATION, 24" DIAMETER (FOOT)	BREAKAWAY DEVICE, COUPLING WITH STAINLESS STEEL SCREEN (EACH)
JEFFERSON CO.				
434+50.00	88.00' LT.	1	5.5	1
SUBTOTAL (JEFFERSON CO)=		1	5.5	1
WILLIAMSON CO.				
294+50.00	96.00' LT.	1	5.5	1
SUBTOTAL (WILLIAMSON CO)=		1	5.5	1
		2	11.0	2

GRADING AND SHAPING FORESLOPES			
STATION	STATION	SIDE	GRADING AND SHAPING FORESLOPES (SQ YD)
JEFFERSON CO.			
432+00.00	435+25.00	LT	1,322
429+00.00	432+50.00	MEDIAN / RT	473
432+50.00	436+00.00	MEDIAN / LT	548
SUBTOTAL (JEFFERSON CO)=			2,343
WILLIAMSON CO.			
290+00.00	295+00.00	MEDIAN / LT	390
290+00.00	295+00.00	MEDIAN / RT	484
SUBTOTAL (WILLIAMSON CO)=			874
TOTALS=			3,217

EFK•Moen, LLC
Civil Engineering Design

FILE NAME = Y:\14010 IDOT D9 ITS\DGN\Design\Prelim\Plotsheets\D978337-007-schedule.dgn	USER NAME = jd	DESIGNED - SJF	REVISED -
		DRAWN - SJF	REVISED -
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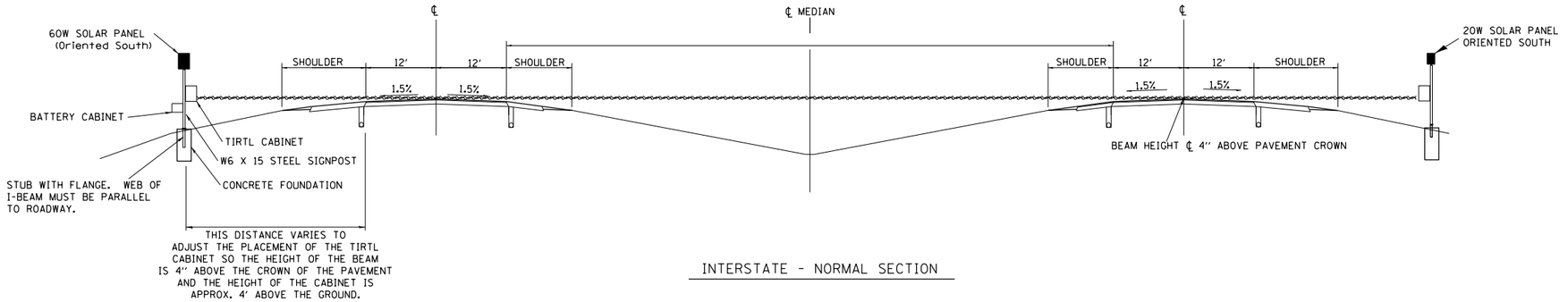
	PLOT DATE = 3/16/2015	DATE - 3/13/15	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

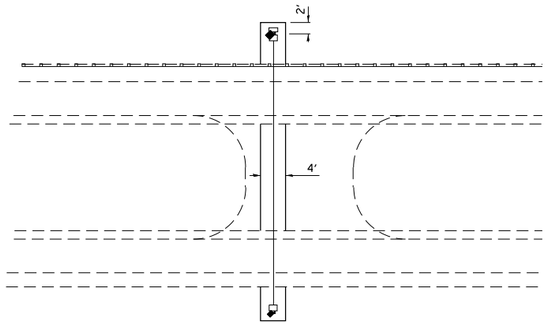
SCHEDULE OF QUANTITIES

SCALE: N.A. | SHEET 1 OF 1 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	D9 ITS SIGNING 2013-1	JEFFERSON/ WILLIAMSON	38	7
		CONTRACT NO. 78337		
ILLINOIS	FED. AID PROJECT			



INTERSTATE - NORMAL SECTION



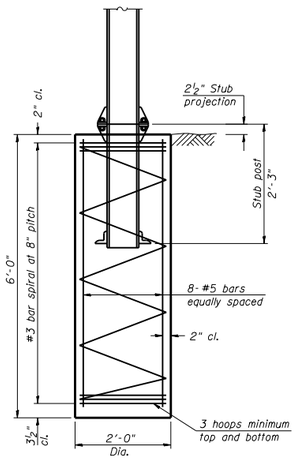
LOCATION: THE FIRST CROSS-OVER SOUTH OF WEATHER STATION

NOTES:

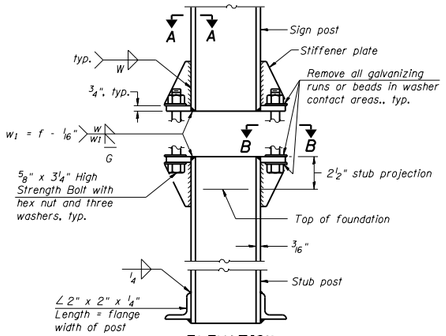
1. SYSTEM CONSISTS OF TWO W6 X 15 I-BEAM SIGNPOSTS WITH CONCRETE FOUNDATION AND A FLANGE WITH BREAKAWAY BOLTS
2. THE I-BEAMS ARE 12' LONG AND DRILLED AS PER THE I-BEAM DETAIL TO ACCOMODATE A PIPE TO ALLOW THE MOUNTING OF THE SOLAR PANEL.
3. THE WEB OF THE I-BEAM IS TO BE PLACED PARALLEL TO THE LANES.
4. THE TWO POSTS MUST BE PLACED DIRECTLY ACROSS FROM EACH OTHER AND PERPENDICULAR TO THE LANES.
5. TWO POSTS ARE REQUIRED LOCATED AS PER THE DRAWING.
6. THE CABINETS ARE ATTACHED TO THE I-BEAM USING 8" GALVANIZED J-BOLTS.
7. THE BOTTOM OF THE CABINET HEIGHT MUST BE NO LOWER THAN 4' ABOVE THE GROUND AND BE ABLE TO VIEW ACROSS ALL LANES AT THE CROWN OF THE PAVEMENT.
8. THE IDOT OFFICE OF PLANNING AND PROGRAMMING DATA MANAGEMENT LAB (RAMON TAYLOR or RICH MARX 217-782-2065) SHALL BE NOTIFIED TWO WEEKS PRIOR TO THE LAYOUT AND SHALL BE PRESENT DURING THE PLACEMENT OF THE POST FOUNDATIONS.

TIRTL TRAFFIC COUNTER
SCHEDULE OF QUANTITIES
(FOR INFORMATION ONLY)

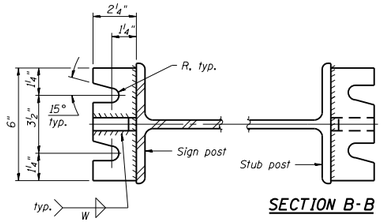
CODE NUMBER	ITEM	UNIT	QUANTITY
72700100	STRUCTURAL STEEL SIGN SUPPORT - BREAKAWAY	POUND	520
73400100	CONCRETE FOUNDATIONS	CU YD	1.4
X0323388	TRAFFIC COUNTER SYSTEM	EACH	1
	TIRTL TRAFFIC DATA COLLECTION SYSTEM INCLUDES:		
	Sierra Wireless LS300 EVDO Rev. A VZW	EACH	1
	PHANTOM DUAL BAND ANTENNA P/N RF-ART183055P/281	EACH	1
	TIRTL CABINET 15" X 27" X 16"	EACH	2
	BATTERY CABINET 16.5" X 16" X 11.5" BBA1M w/ #2 Police Lock	EACH	1
	SOLAR PANEL 60 W 12 VDC	EACH	1
	SOLAR PANEL 20 W 12 VDC	EACH	1
	SOLAR CHARGE REGULATOR 6 AMP 12 VDC	EACH	2
	BATTERY - 33 AH ABSORBED ELECTROLYTE 8" X 5.5" X 7" (DEEP CYCLE	EACH	1
	BATTERY - 80 AH ABSORBED ELECTROLYTE 10" X 6" X 8" (DEEP CYCLE)	EACH	1



FOUNDATION SECTION

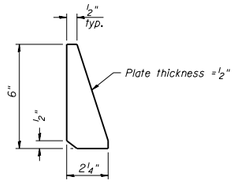


ELEVATION
SIGN POST & STUB POST

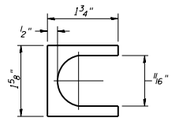


SECTION A-A

SECTION B-B



STIFFENER PLATE DETAIL



SHIM DETAIL

Furnish two 0.01" thick and two 0.03" thick stainless steel or brass (ASTM B36) shims per post.

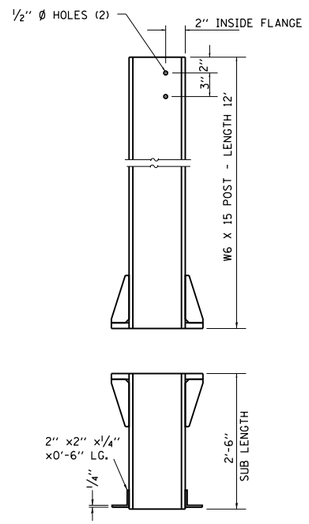
GENERAL NOTES

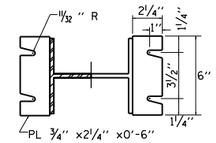
Posts shall be plumbed by using shims with post-to-stub post connection bolts snug tight only. Final tightening of all High Strength Bolts shall be in accordance with Article 727.05 and threads at the junction of the bolt and nut shall be burred or center punched to prevent the nut from loosening.

LOADING: 80 m.p.h. wind with 30% gust factor, normal to sign.

DESIGN STRESSES:
Structural steel - 20,000 p.s.i.
Reinforcing steel - 20,000 p.s.i.
Concrete - 1,400 p.s.i.
Footing soil pressure - 2,000 p.s.f.

After fabrication, the post and upper 6", min. of the stub post shall be hot-dip galvanized in accordance with AASHTO M111. All bolts, nuts and washers shall be hot-dip galvanized in accordance with AASHTO M232.





BREAK-AWAY WIDE FLANGE STEEL POST DETAILS

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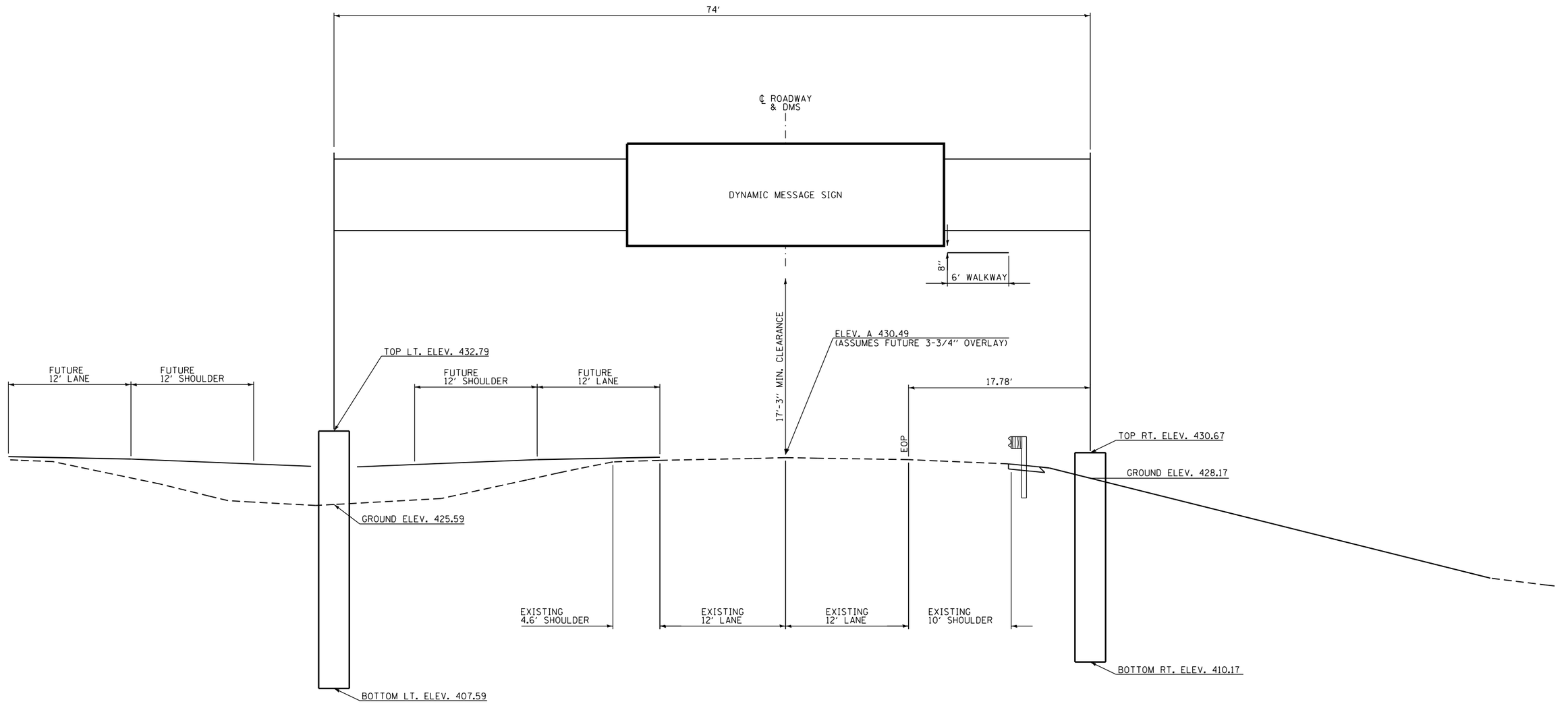
$MODELNAME$	PLOT DATE = 3/16/2015	DATE - 3/13/15	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TIRTL TRAFFIC COUNTER

SCALE: N.A. | SHEET 1 OF 1 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	D9 ITS SIGNING 2013-1	JEFFERSON	38	8
		CONTRACT NO. 78337		
	ILLINOIS FED. AID PROJECT			



DMS MOUNTING DETAIL
432+50 (SB I–57)
STR. NO. 9S041I057L088.6

EFK·Moen, LLC
Civil Engineering Design

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	PLOT DATE = 3/16/2015	DATE - 3/13/15	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DMS MOUNTING DETAILS
I–57 (SOUTHBOUND) – STA. 432+50 – MM 88.63

SCALE: N.T.S. | SHEET 1 OF 4 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	D9 ITS SIGNING 2013-1	JEFFERSON	38	9
		CONTRACT NO. 78337		
	ILLINOIS	FED. AID PROJECT		

OVERHEAD SIGN STRUCTURE

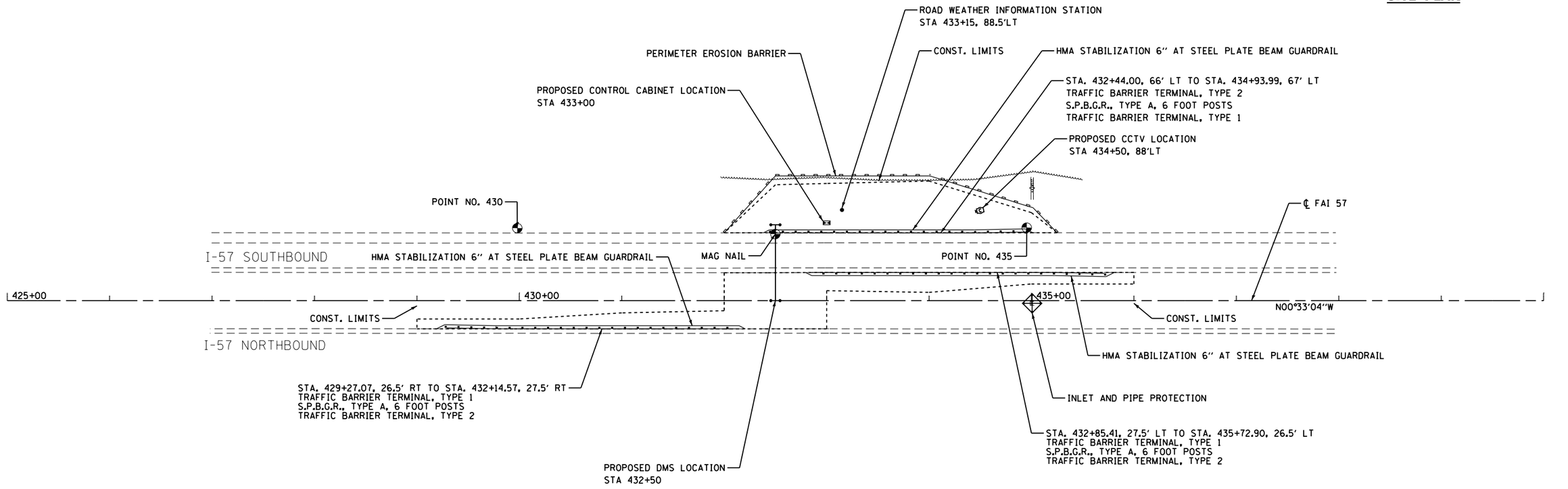
1–57 SB – MM 88.63

STRUCTURE NO.
9S041I057L088.6

N

1"=50'
0 50 100 150

SITE PLAN



COORDINATE TABLE					
JEFFERSON COUNTY					
FIELD BOOK *3057, PGS. 32-33, NAD 83 (97adj), NAVD 88					
POINT NO.	NORTHING	EASTING	ELEV.	STATION	OFFSET
435	573123.961	819676.264	428.375'	434+95.36	71.23' LT
430	572626.611	819681.508	428.244'	429+97.99	70.77' LT.
MAG NAIL	572878.668	819684.856	429.661'	432+50.00	65.00' LT.

EFK•Moen, LLC
Civil Engineering Design

FILE NAME =	USER NAME = jd	DESIGNED - JRD	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN SHEET
I–57 (SOUTHBOUND) – STA. 432+50 – MM 88.63

SCALE: 1"=50' | SHEET 2 OF 4 SHEETS | STA. 425+00 TO STA. 440+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	D9 ITS SIGNING 2013-1	JEFFERSON	38	10
		CONTRACT NO. 78337		
	ILLINOIS FED. AID PROJECT			

SECTION 29, T. 3 S., R. 3 E., OF THE 3RD P.M., JEFFERSON COUNTY, ILLINOIS

PARCEL	OWNER	EASEMENT PURPOSE	EASEMENT
100	DON GULLEY	PERMANENT	4109 SF / 0.094 AC.±

PLAT OF SURVEY FAI-57
SEC 41-1, 41-1-1 & 41-2
RECORDED MAY 22, 1974
BOOK 6, PAGE 2247

COORDINATE TABLE

NO.	NORTHING	EASTING	DESCRIPTION
ESMT1	574631.8315	820532.8471	IR SET/POB
ESMT2	574637.1681	820690.9959	CALC PT
ESMT3	574605.7342	820691.2805	CALC PT
ESMT4	574605.5078	820666.2815	CALC PT
ESMT5	574611.3181	820666.2289	CALC PT
ESMT6	574606.8249	820533.0735	CALC PT
18	574639.071	820747.388	16TH COR

SW 1/4 SEC 20

PERMANENT EASEMENT
4,109 SQ FT

ESMT1
POB

S 00° 31' 07" E
31.44'

FENCE COR POST

18
16TH CORNER
2 1/2" PIPE FND

ESMT2

N 88° 04' 02" E 158.24'

ESMT5

S 88° 04' 02" W 133.23'

ESMT3

2" PIPE FND

POC

IR SET

NORTH LINE SECTION 29

N 88° 04' 02" E 635.00'

℄ EXISTING DIKE

150'

N 00° 31' 07" W
25.01'

ESMT6

N 00° 31' 07" W
5.81'

ESMT4

S 89° 28' 52" W
25.00'

PP

JAMES FORD
CAB 4, DRAWER 1 DOC.# 3307

STATE OF ILLINOIS
WARRANTY DEED
BOOK 289, PAGE 132

IR SET

IR SET

FENCE COR POST

FENCE COR POST

DON GULLEY
DOC.# 200901058

165'

EXISTING ℄ I-57

EXISTING ℄ NORTH BOUND LANE

EXISTING ROW & AC LINE

EXISTING ROW LINE

US ROUTE 37 (100' WIDE)

EXISTING ROW LINE

US ROUTE 37 (60' WIDE)

EXISTING ROW LINE

UNION PACIFIC RAILROAD (100' WIDE)

16TH LINE

NW 1/4 NW 1/4 SEC 29

NE 1/4 NW 1/4 SEC 29

N

SCALE: 1" = 50'

STATE OF ILLINOIS)
) SS
COUNTY OF JEFFERSON)

I, WILLIAM C. BOLLINGER III, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, CERTIFY THAT I HAVE SURVEYED THE SURVEY PLAT SHOWN HEREON AND THAT THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY IN THE STATE OF ILLINOIS.

DATED 12-12-14

WILLIAM C. BOLLINGER III, PLS NO. 3856 - CLARIDA & ZIEGLER ENGINEERING
LICENSE EXPIRATION DATE: 11/30/2016

WILLIAM C. BOLLINGER III
STATE OF ILLINOIS PROFESSIONAL LAND SURVEYOR 3856
MARION, ILLINOIS

EXPIRATION/RENEWAL DATE
11/30/2016

Illinois Professional Design Firm Lic. No. 184-004515
CLARIDA & ZIEGLER ENGINEERING CO.
410 North Court St, P.O. Box 937
Marion, Illinois 62959
Phone - (618)993-6411, Fax - (618)993-6750

P:\13-1021.13-WO13 CZ Engineering\10_CadCadd Drawings\REVISED_Plat_of_Survey_JeffersonCO.dgn

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RIGHT OF WAY
R-99-001-15

SCALE: | SHEET 1 OF 2 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-57	D9ITS SIGNING 2013-1	JEFFERSON		
		CONTRACT NO. 78337		
	ILLINOIS	FED. AID PROJECT		

KEY NOTES

(A) (1) UNDERGROUND CONDUIT, PVC, 2" DIA. (81028350)
(3) ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 3/0 (81702180) (ALUMINUM)

(B) (1) UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA. (81028200)
(3) ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 2 (81702150)
(1) ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6 (81702130)

(C) (1) UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA. (81028200)
(1) MULTIMODE FIBER OPTIC CABLE (PROVIDED BY DMS MANUFACTURER)

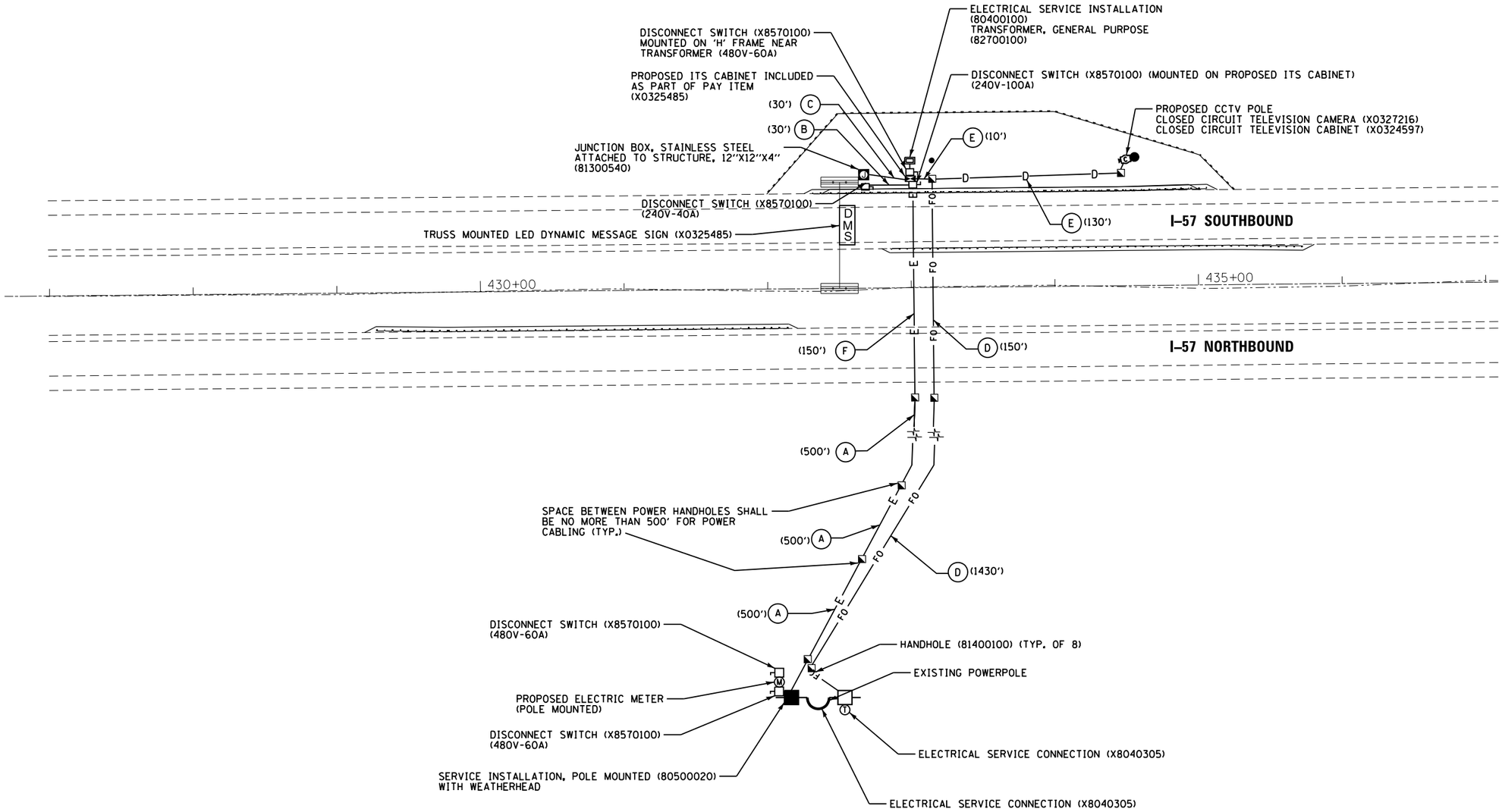
(D) (1) UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1 1/4" DIA. (81028730)

(E) (1) UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1 1/4" DIA. (81028730)
(1) OUTDOOR RATED NETWORK CABLE (XX008392)

(F) (1) UNDERGROUND CONDUIT, PVC, 4" DIA. (81028390) [EXTENDED AT LEAST 2' BEYOND ROADWAY EDGE]
(3) UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1 1/4" DIA. (81028730)
(2) ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 3/0 (81702180) (ALUMINUM)
(1) ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6 (81702130) [GROUND] (ALUMINUM)

N

0 40 80 120
SCALE IN FEET



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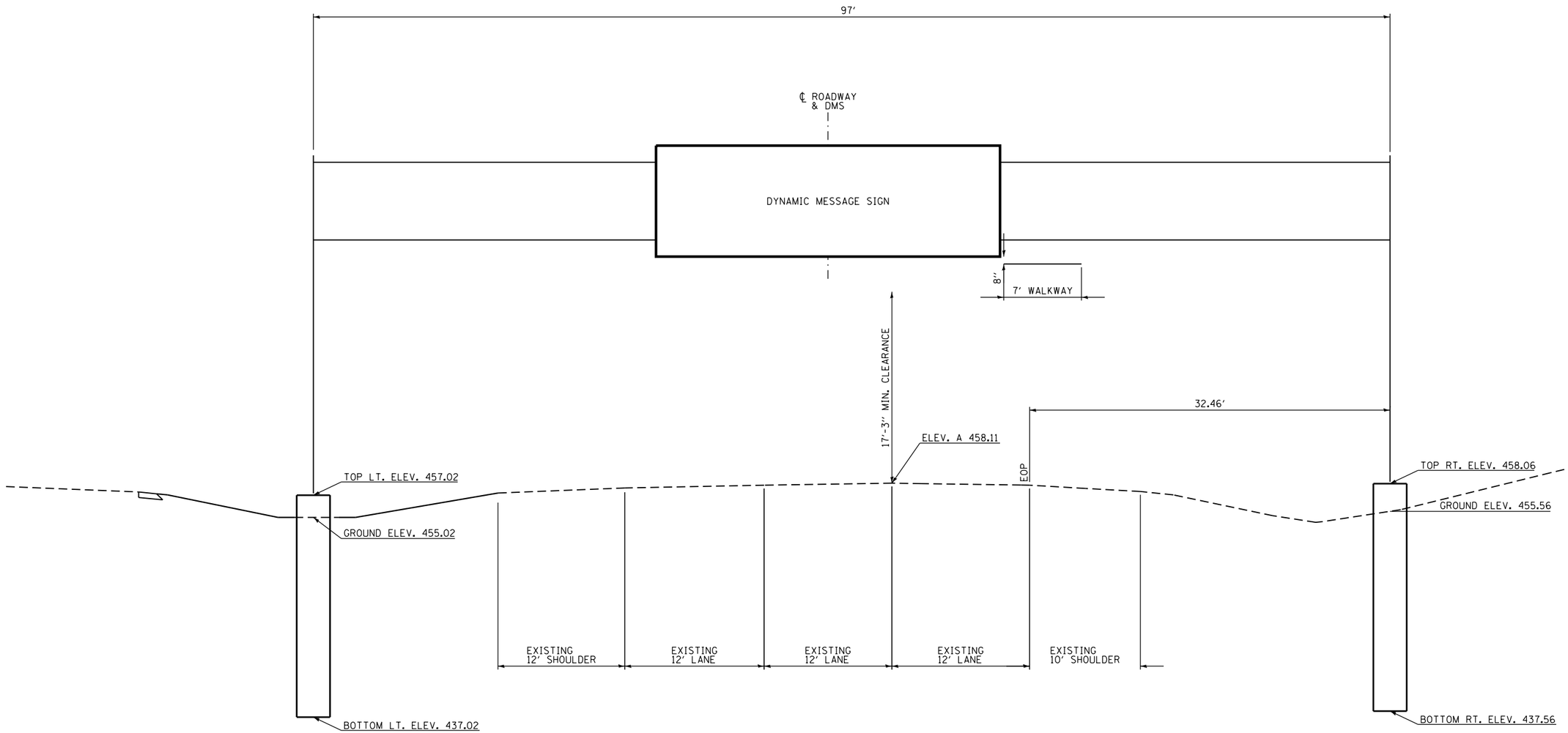
	PLOT DATE = 3/16/2015	DATE 03-16-15	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ITS PLAN – JEFFERSON COUNTY
STA. 432+50 MM 88.63

SCALE: N.A. | SHEET 4 OF 4 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-57	D9 ITS SIGNING 2013-1	JEFFERSON/ WILLIAMSON	38	12
		CONTRACT NO. 78337		
		ILLINOIS FED. AID PROJECT		



DMS MOUNTING DETAIL
292+50 (NB I–57)
STR. NO. 9S100I057R056.6

EFK•Moen, LLC
Civil Engineering Design

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	PLOT DATE = 3/16/2015	DATE - 3/13/15	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DMS MOUNTING DETAILS
1–57 (NORTHBOUND) – STA. 292+50 – MM 56.56

SCALE: N.T.S. | SHEET 1 OF 4 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	D9 ITS SIGNING 2013-1	WILLIAMSON	38	13
		CONTRACT NO. 78337		
		ILLINOIS FED. AID PROJECT		

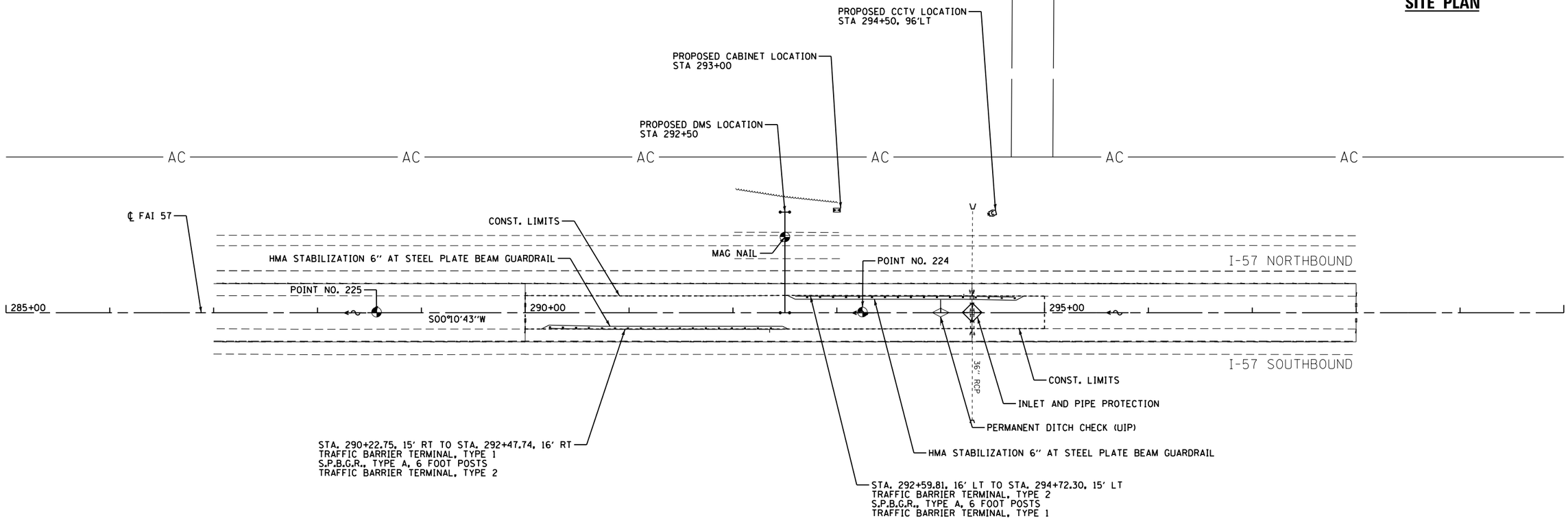
OVERHEAD SIGN STRUCTURE

1–57 NB – MM 56.56

STRUCTURE NO.
9S100I057R056.6

1"=50'
0 50 100 150

SITE PLAN



COORDINATE TABLE					
WILLIAMSON COUNTY					
FIELD BOOK #2694, PGS. 65-68, NAD 83 (86adj), NGVD 29					
POINT NO.	NORTHING	EASTING	ELEV.	STATION	OFFSET
224	406559.980	807246.003	455.375'	293+24.66	0.67' LT.
225	407027.809	807247.361	453.172'	288+56.83	0.57' LT.
MAG NAIL	406634.416	807318.563	457.461'	292+50.00	73.00' LT.

EFK•Moen, LLC
Civil Engineering Design

FILE NAME =	USER NAME = jd	DESIGNED - JRD	REVISED -
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	PLOT DATE = 3/16/2015	DATE - 3/13/15	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN SHEET
1–57 (NORTHBOUND) – STA. 292+50 – MM 56.56
SCALE: 1"=50' | SHEET 2 OF 4 SHEETS | STA. 285+00 TO STA. 300+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	D9 ITS SIGNING 2013-1	WILLIAMSON	38	14
		CONTRACT NO. 78337		
	ILLINOIS FED. AID PROJECT			

SECTION 36, T. 8 S., R. 2 E., OF THE 3RD P.M., WILLIAMSON COUNTY, ILLINOIS

R.C. THOMPSON'S SURVEY OF OUTLOTS
PLAT RECORDED APRIL 18, 1907
PLAT BOOK 3 PAGE 19

SW 1/4 - NW 1/4 SEC 36

RECORDED NOV. 10, 1960
(BOOK OF STATE AID ROAD MAPS)
CONST. SEC. X1-4 & X1-5

EXISTING ℄ I-57

S 00° 10' 43" W

291 292 293 294 295+00 296 297 298

EXISTING ROW & AC LINE

294+65.30
250.01' RT
REBAR FND
W 1/4 COR.
SEC 36

S 88° 55' 17" E
1/4 SECTION LINE

294+71.59
150.00' LT

294+68.00
150.00' LT
MAG NAIL SET

ROOF BOLT FND

294+69.23
0.00' RT

S 89° 28' 28" E
EXISTING ROW LINE

EX ℄ ROAD

QUINCY LANE (40' WIDE)

PP

295+08.00
150.00' LT
IR SET

150'

ROOF BOLT FND

REBAR IN CONC FND

EXISTING ROW LINE
N 0° 49' 34" E

IRON PIPE FND

294+73.63
1079.32' LT
MAG NAIL SET

NE COR. NW 1/4 - SW 1/4
SEC 36
REBAR FND

REBAR FND

EX ℄ ROAD

295+13.63
1078.87' LT
ROOF BOLT FND

EXISTING ROW LINE
S 0° 49' 34" W

PROSPERITY RD (40' WIDE)

ROOF BOLT FND ROOF BOLT FND

RECORDED MAY 16, 2005
BOOK 469, PAGE 839

NW 1/4 - SW 1/4 SEC 36

N

9

50' 0 50' 100'
SCALE: 1" = 50'

STATE OF ILLINOIS)
) SS
COUNTY OF WILLIAMSON)

I, WILLIAM C. BOLLINGER III, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, CERTIFY THAT I HAVE SURVEYED THE SURVEY PLAT SHOWN HEREON AND THAT THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY IN THE STATE OF ILLINOIS.

DATED 12-12-14

WILLIAM C. BOLLINGER III, PLS NO. 3856 - CLARIDA & ZIEGLER ENGINEERING
LICENSE EXPIRATION DATE: 11/30/2016

WILLIAM C. BOLLINGER III
STATE OF ILLINOIS
PROFESSIONAL LAND SURVEYOR
3856
MARION, ILLINOIS

EXPIRATION/RENEWAL DATE
11/30/2016

Illinois Professional Design Firm Lic. No. 184-004515
CLARIDA & ZIEGLER ENGINEERING CO.
410 North Court St, P.O. Box 937
Marion, Illinois 62959
Phone - (618)993-6411, Fax - (618)993-6750

P:\13-1021.13-WO13 CZ Engineering\10_Cadd\Cadd Drawings\REVISED_Plat_of_Survey_WilliamsonCO.dgn

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STATE OF ILLINOIS
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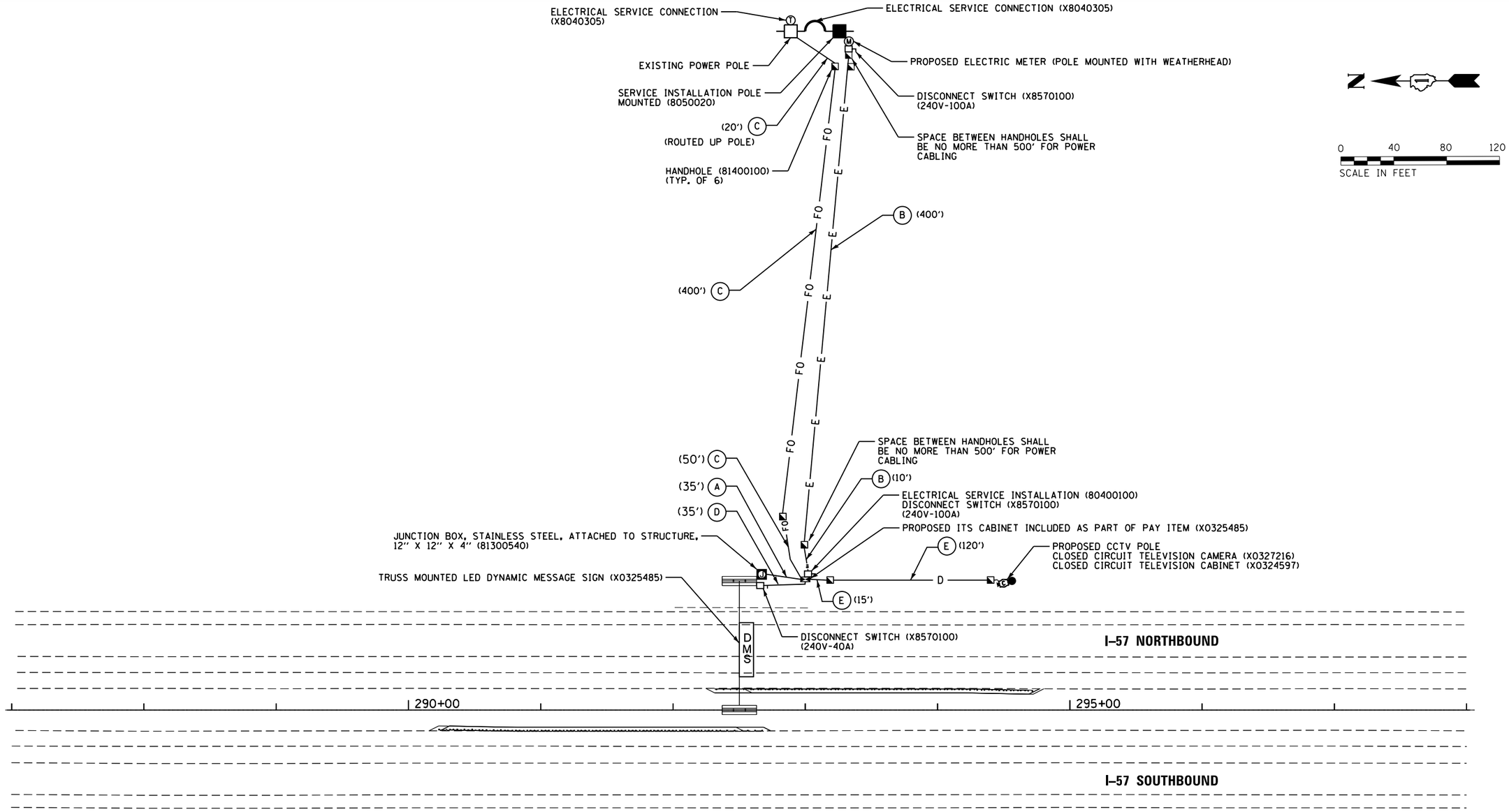
RIGHT OF WAY
R-99-001-15

SCALE: | SHEET 2 OF 2 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-57	D9ITS SIGNING 2013-1	WILLIAMSON		
		CONTRACT NO. 78337		
		ILLINOIS FED. AID PROJECT		



KEY NOTES

(A) (1) UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA. (81028200)
(1) MULTIMODE FIBER OPTIC CABLE (PROVIDED BY DMS MANUFACTURER)

(B) (1) UNDERGROUND CONDUIT, PVC, 2" DIA. (81028350)
(3) ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 1/0 (81702160)
(1) ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO.6 (81702130) [GROUND]

(C) (1) UNDERGROUND CONDUIT, COILABLE NONMETALIC CONDUIT, 1 1/4" DIA. (81028730)

(D) (1) UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA. (81028200)
(3) ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO.2 (81702150)
(1) ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO.6 (81702130)

(E) (1) UNDERGROUND CONDUIT, COILABLE NONMETALIC CONDUIT, 1 1/4" DIA. (81028730)
(1) OUTDOOR RATED NETWORK CABLE (XX008392)

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ITS PLAN – WILLIAMSON COUNTY
STA. 292 + 50 MM 56.56

SCALE: N.A. | SHEET 4 OF 4 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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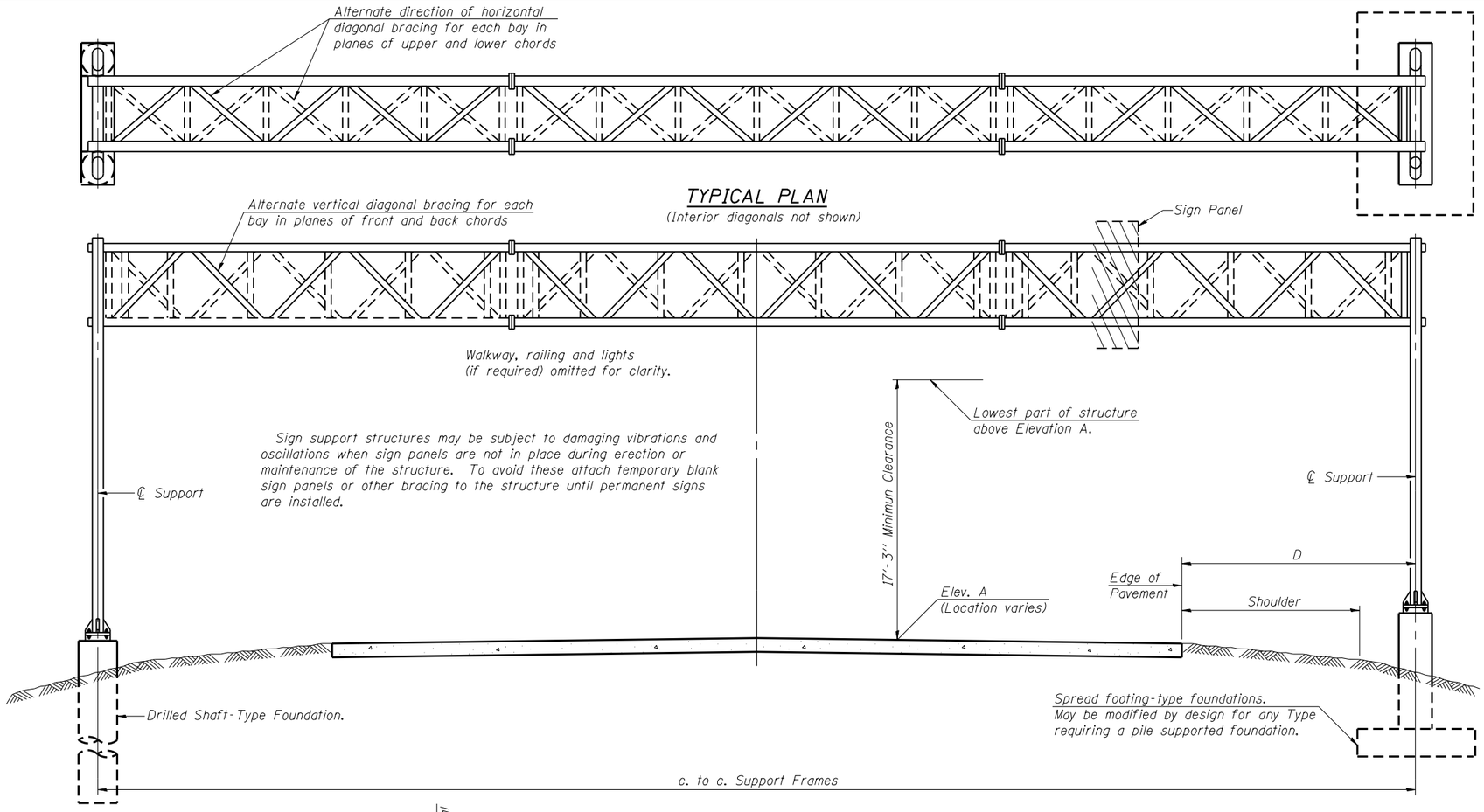
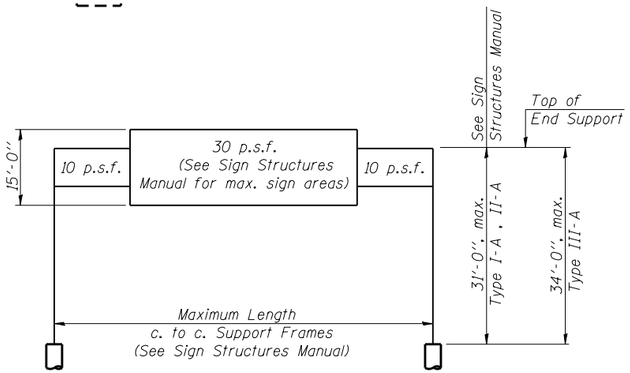
		CONTRACT NO. 78337		
	ILLINOIS FED. AID PROJECT			



TYPICAL PLAN
(Interior diagonals not shown)



DESIGN WIND LOADING DIAGRAM

Parameters shown are basis for I.D.O.T. Standards and Sign Manual Tables. Installations not within dimensional limits shown require special analysis for all components.

TYPICAL ELEVATION
(Looking at Face of Signs**)

Elev. A = Elevation at point of minimum clearance to sign, walkway support or truss.

Structure Number	Station	Design Truss Type	c. to c. Supports	Elev. A (See NOTE below)	Dim. D	Height of Tallest Sign ***	Total Sign Area
9S041I057L088.6	432+50	III-A	74'	430.49	17.78'	OF DMS	OF DMS
9S100I057R056.6	292+50	III-A	97'	458.11	32.46'	OF DMS	OF DMS

* If M270 Gr. 50W (M222) steel is proposed, chemistry for plate to be used shall first be approved by the Engineer as suitable for galvanizing and welding.

** Looking upstation for structures with signs both sides.

*** End support height based on 15'-0" sign height per OS4-A-8a

NOTE: ELEV. A SHOWN FOR STRUCTURE NUMBER 9S041I057L088.6 ACCOUNTS FOR A FUTURE $3\frac{3}{4}$" OVERLAY. THE STRUCTURE DESIGN IS BASED ON THE ELEVATION SHOWN.

GENERAL NOTES

DESIGN: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals. ("AASHTO Specifications")

CONSTRUCTION: Current (at time of letting) Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Supplemental Specifications and Special Provisions. ("Standard Specifications")

LOADING: 90 M.P.H. WIND VELOCITY

WALKWAY LOADING: Dead load plus 500 lbs. concentrated live load.

DESIGN STRESSES:
Field Units
f'c = 3,500 p.s.i.
fy = 60,000 p.s.i. (reinforcement)

WELDING: All welds to be continuous unless otherwise shown. All welding to be done in accordance with current AWS D1.1 and D1.2 Structural Welding Codes (Steel and Aluminum) and the Standard Specificiations.

MATERIALS: Aluminum Alloys as shown throughout plans. All Structural Steel Pipe shall be ASTM A53 Grade B or A500 Grade B or C. If A500 pipe is substituted for A53, then the outside diameter shall be as detailed and wall thickness greater than or equal to A53. All Structural Steel Plates and Shapes shall conform to AASHTO M270 Gr. 36, Gr. 50 or Gr. 50W*. Stainless steel for shims, sleeves and handhole covers shall be ASTM A240, Type 302 or 304, or another alloy suitable for exterior exposure and acceptable to the Engineer.
The steel pipe and stiffening ribs at the base plate for the column shall have a minimum longitudinal Charpy V-Notch (CVN) energy of 15 lb.-ft. at 40° F. (Zone 2) before galvanizing.

FASTENERS FOR ALUMINUM TRUSSES: All bolts noted as "high strength" must satisfy the requirements of AASHTO M164 (ASTM A325), or approved alternate, and must have matching lock nuts. Threaded studs for splices (if Members interfere) must satisfy the requirements of ASTM A449, ASTM A193, Grade B7, or approved alternate, and must have matching lock nuts. Bolts and lock nuts not required to be high strength must satisfy the requirements of ASTM A307. All bolts and lock nuts must be hot dip galvanized per AASHTO M232. The lock nuts must have nylon or steel inserts. A stainless steel flat washer conforming to ASTM A240 Type 302 or 304, is required under both head and nut or under both nuts where threaded studs are used. High strength bolt installation shall conform to Article 505.04 (f) (2)d of the IDOT Standard Specifications for Road and Bridge Construction. Rotational capacity ("ROCAP") testing of bolts will not be required.

U-BOLTS AND EYEBOLTS: U-Bolts and Eyebolts must be produced from ASTM A276 Type 304, 304L, 316 or 316L, Condition A, cold finished stainless steel, or an equivalent material acceptable to the Engineer. All nuts for U-Bolts and Eyebolts must be lock nuts equivalent to ASTM A307 with nylon or steel inserts and hot dip galvanized per AASHTO M232. A stainless steel flat washer conforming to ASTM A240, Type 302 or 304, is required under each U-Bolt and Eyebolt lock nut.

GALVANIZING: All Steel Grating, Plates, Shapes and Pipe shall be Hot Dip Galvanized after fabrication in accordance with AASHTO M111. Painting is not permitted.

ANCHOR RODS: Shall conform to ASTM F1554 Gr. 105.

CONCRETE SURFACES: All concrete surfaces above an elevation 6" below the lowest final ground line at each foundation shall be cleaned and coated with Concrete Sealer in accordance with the Standard Specifications.

REINFORCEMENT BARS: Reinforcement Bars designated (E) shall be epoxy coated in accordance with the Standard Specifications.

FOUNDATIONS: The contract unit price for Concrete Foundations and Drilled Shaft Concrete Foundations shall include reinforcement bars complete in place.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
OVERHEAD SIGN STRUCTURE SPAN TYPE I-A	Foot	-
OVERHEAD SIGN STRUCTURE SPAN TYPE II-A	Foot	-
OVERHEAD SIGN STRUCTURE SPAN TYPE III-A	Foot	171
OVERHEAD SIGN STRUCTURE WALKWAY TYPE A	Foot	13
CONCRETE FOUNDATIONS	Cu. Yds.	-
DRILLED SHAFT CONCRETE FOUNDATIONS	Cu. Yds.	45.1

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OS-A-1 8-21-13

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES – GENERAL PLAN & ELEVATION – ALUMINUM TRUSS & STEEL SUPPORTS

SCALE: N/A | SHEET 1 OF 10 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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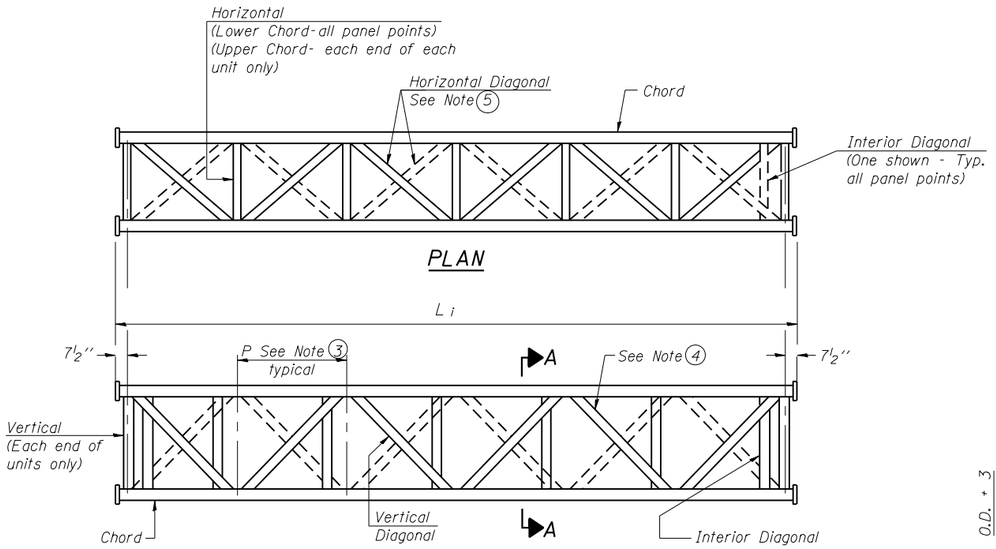
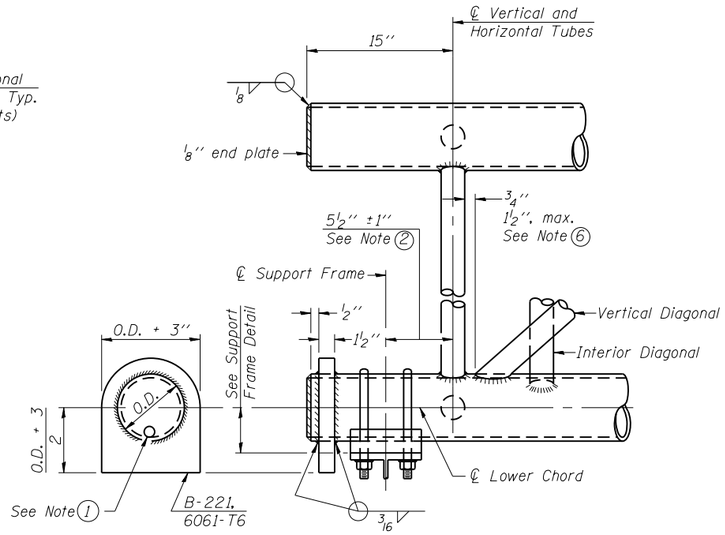
		CONTRACT NO. 78337		
		ILLINOIS FED. AID PROJECT		

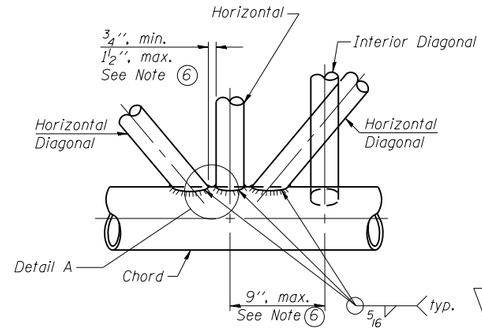


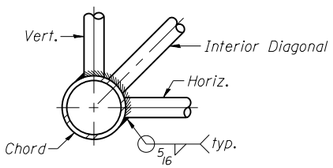
ELEVATION
TYPICAL INTERIOR UNIT

Even number of panels/interior unit required.

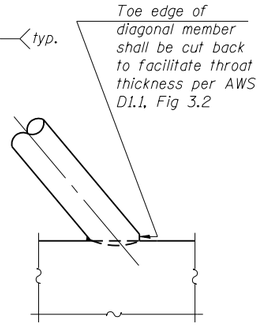


SUPPORT END DETAIL FOR EXTERIOR UNIT

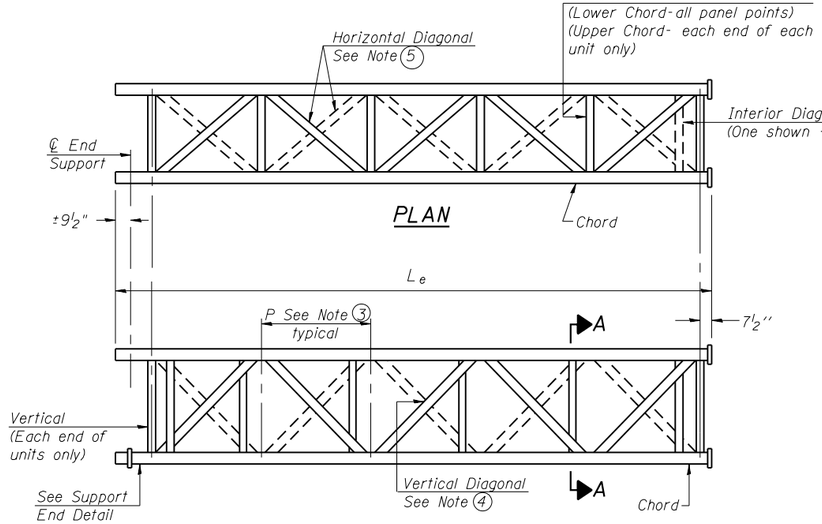




TYPICAL JOINT DETAILS

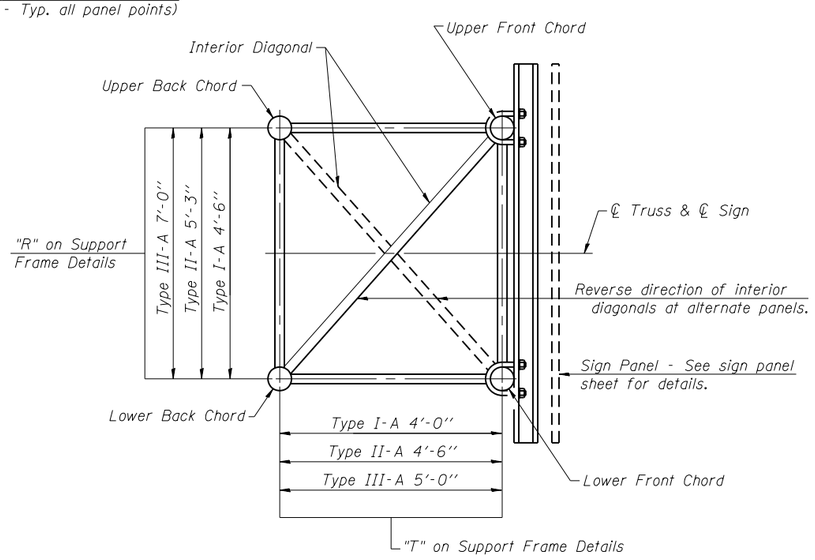


DETAIL A



ELEVATION
TYPICAL EXTERIOR UNIT

Even or odd number of panels/exterior units allowed.



SECTION A-A

1. Contractor may alternatively use standard aluminum drive-fit cap to close end. ½" ϕ drain hole in end plate/drive-fit cap. (Typ. at ends of all chords)
2. 5½" end dimension may vary by ±1" to provide uniform panel spacing (P).
3. Panel spacing (P) shall be uniform for entire truss and between 4'-0" and 5'-0" for Type I-A or 4'-0" and 5'-6" for Types II-A and III-A.
4. Vertical Diagonals in front and back face shall alternate.
5. Hidden lines show wind bracing alternates direction between planes of top and bottom chords.
6. All diagonals shall be detailed for minimum offset from the panel point based on the following: Offset shall be such as to provide a ¾" minimum to 1½" maximum clearance between any diagonal and any horizontal or vertical member, and to provide clearance for U-bolt connections of signs or walkway brackets.

OS-A-2 6-1-12

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Civil Engineering Design

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

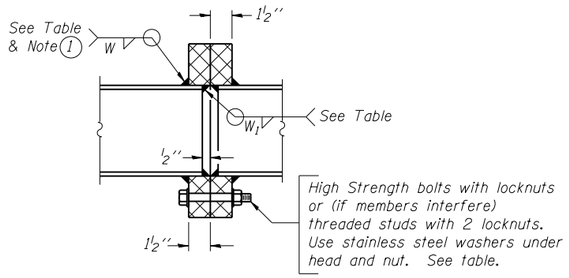
OVERHEAD SIGN STRUCTURES – ALUMINUM TRUSS
DETAILS FOR TRUSS TYPES I–A, II–A AND III–A

SCALE: N/A | SHEET 2 OF 10 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	D9 ITS SIGNING 2013-1	JEFFERSON/ WILLIAMSON	38	18
		CONTRACT NO. 78337		
	ILLINOIS FED. AID PROJECT			

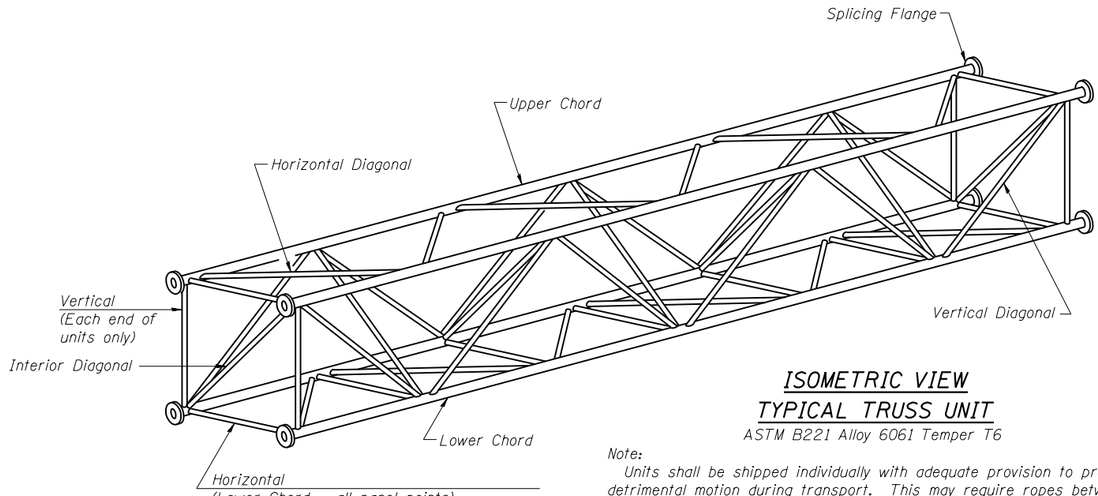
TRUSS UNIT TABLE

Structure Number	Station	Design Truss Type	Exterior Units (2)			Interior Unit				Upper & Lower Chord		Verticals; Horizontals; Vertical, Horizontal, and Interior Diagonals		Camber at Midspan	Splicing Flange					
			No. Panels per Unit	Unit Lgth.(L_e)	Panel Lgth.(P)	No. Req'd.	No. Panels per Unit	Unit Lgth.(L_I)	Panel Lgth.(P)	O.D.	Wall	O.D.	Wall		Bolts		Weld Sizes		A	B
															No./Splice	Dia.	W	W_1		
9S041I057L088.6	432+50	III-A	7	37'-9"	5'-1 1/2"	0	-	-	-	7"	5/16"	3 1/4"	5/16"	1"	6	1"	7/16"	5/16"	11 1/2"	15"
9S100I057R056.6	292+50	III-A	6	33'-1 1/2"	5'-2 1/2"	1	6	32'-6"	5'-2 1/2"	7"	5/16"	3 1/4"	5/16"	2 1/8"	6	1"	7/16"	5/16"	11 1/2"	15"



SECTION B-B

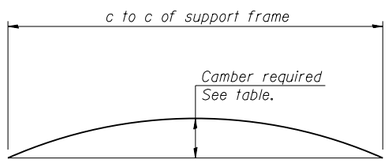
(1) Splicing Flanges shall be attached to each truss unit with the truss shop assembled to camber shown. Truss units shall be in proper alignment and flange surfaces shall be shop bolted into full contact before welding. Sufficient external welds or tacks shall be made to secure flanges until remaining welds are made after disassembly. Adjacent flanges shall be "match marked" to insure proper field assembly.



ISOMETRIC VIEW
TYPICAL TRUSS UNIT

ASTM B221 Alloy 6061 Temper T6

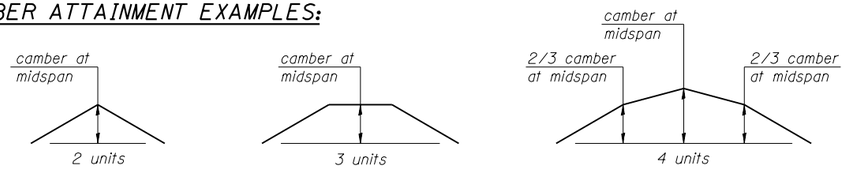
Note:
Units shall be shipped individually with adequate provision to prevent detrimental motion during transport. This may require ropes between horizontals and diagonals or energy dissipating (elastic) ties to the vehicle. The Contractor is responsible for maintaining the configuration and protection of the units.



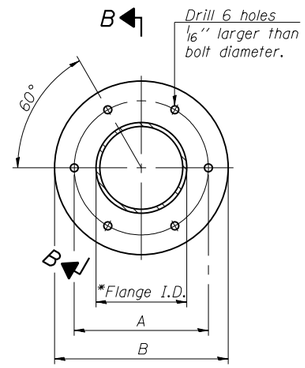
CAMBER DIAGRAM

Camber curve shown is theoretical. Actual camber attained by slope changes at splices between units.

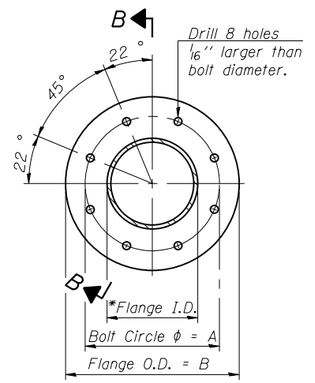
CAMBER ATTAINMENT EXAMPLES:



Camber shown is for fabrication only, measured with truss fully supported. (No-load condition)



TRUSS TYPES I-A, II-A, & III-A



TRUSS TYPES II-A & III-A

SPLICING FLANGES

ASTM B221, Alloy 6061-T6
or ASTM B209, Alloy 6061-T651
*To fit O.D. of Chord with maximum gap of 1/16".

OS4-A-2 6-1-12

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DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES – ALUMINUM TRUSS DETAILS FOR TRUSS TYPES I-A, II-A AND III-A

SCALE: N/A | SHEET 3 OF 10 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 78337		
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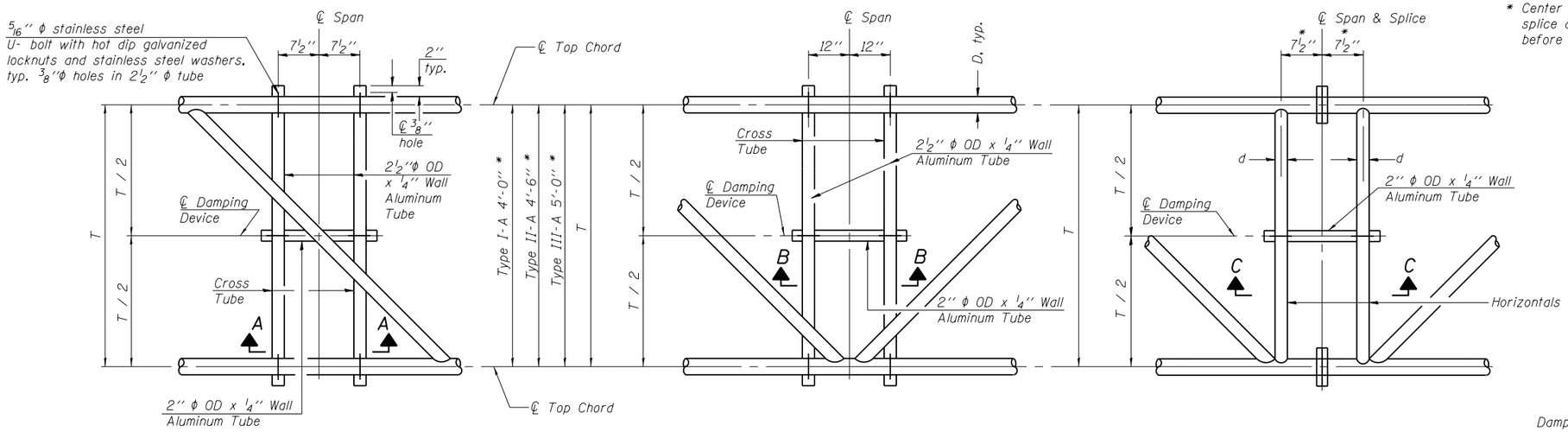


PLAN DETAIL "A"
℄ Span between Panel Points

PLAN DETAIL "B"
℄ Span at Panel Point

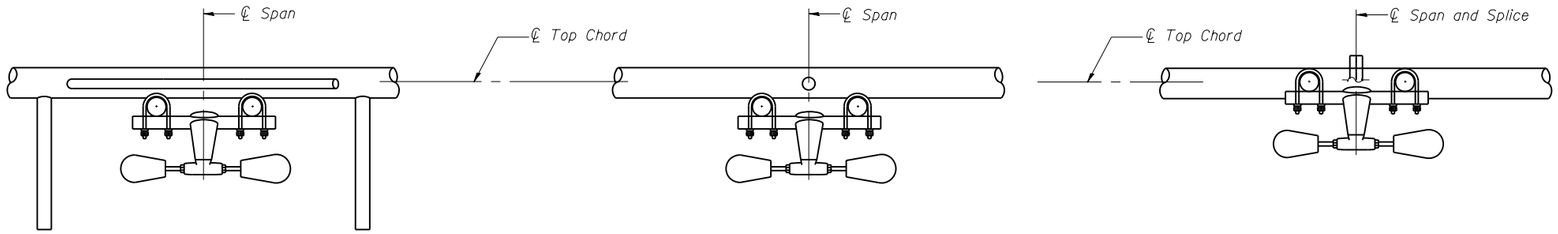
PLAN DETAIL "C"
℄ Span at ℄ Chord Splice

* Center of horizontal to center of splice dimension may vary. Verify before drilling holes in mounting tube.

NOTES

Damper: One damper per truss. (31 lbs. minimum Stockbridge-Type Aluminum - 29'' minimum between ends of weights) Cost included in Overhead Sign Structure...

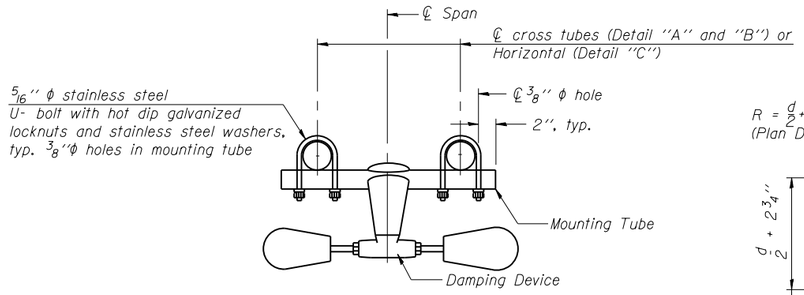
Materials: Materials: Aluminum tubes shall be ASTM B221 alloy 6061 temper T6. Cost included in Overhead Sign Structure...



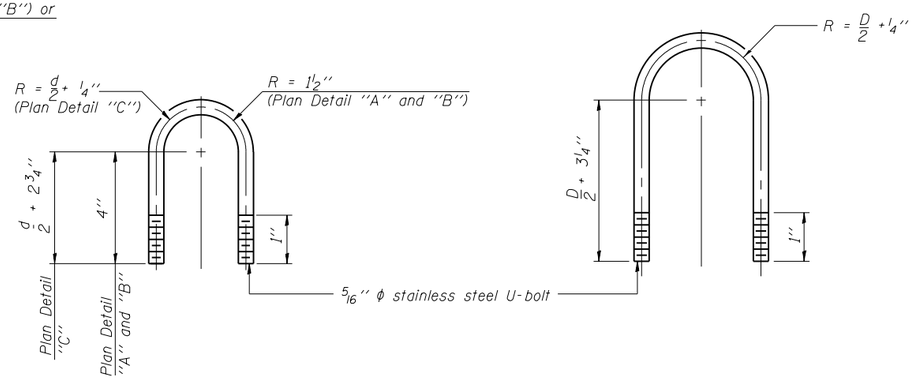
SECTION A-A

SECTION B-B

SECTION C-C

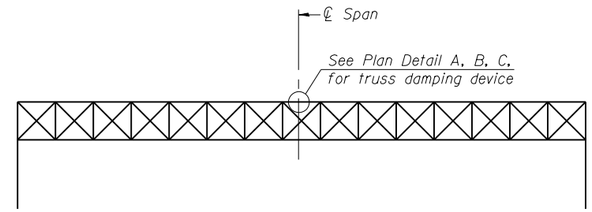


TRUSS DAMPING DEVICE CONNECTION DETAIL
(Typical)



DAMPING DEVICE MOUNTING TUBE U-BOLT DETAIL
(Typical)

TOP CHORD TO CROSS TUBE U-BOLT DETAIL
(Typical - Detail ''A'' and ''B'')



ELEVATION
Aluminum Overhead Sign Truss

OS-A-D 6-1-12

EFK•Moen, LLC
Civil Engineering Design

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURE
DAMPING DEVICE

SCALE: N/A | SHEET 4 OF 10 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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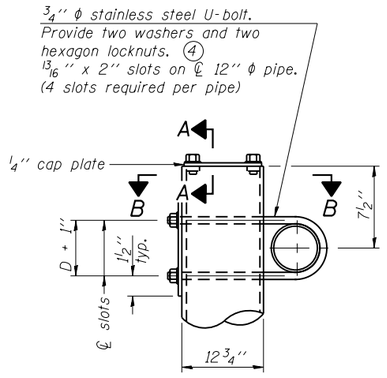
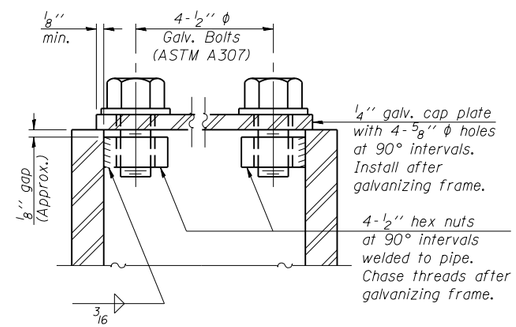
		CONTRACT NO. 78337		
		ILLINOIS FED. AID PROJECT		

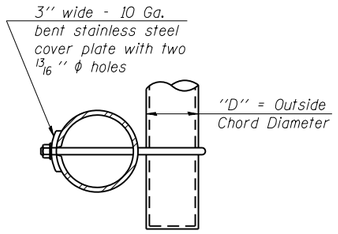


DETAIL A

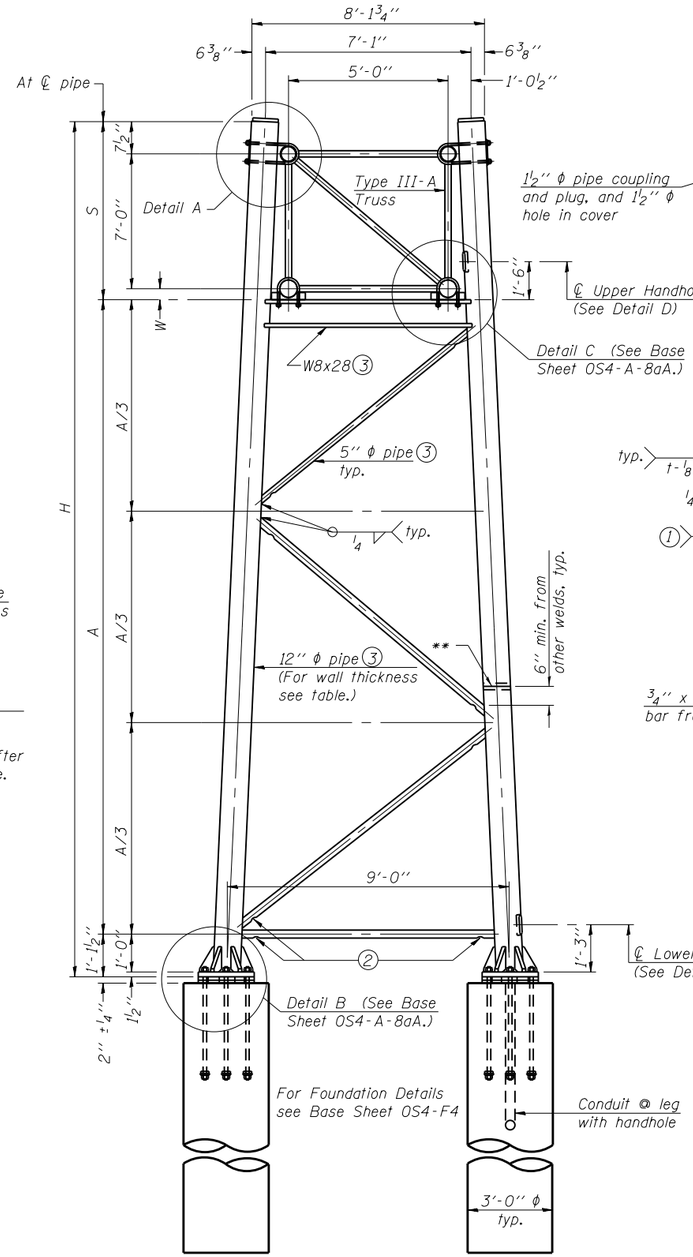


SECTION A-A

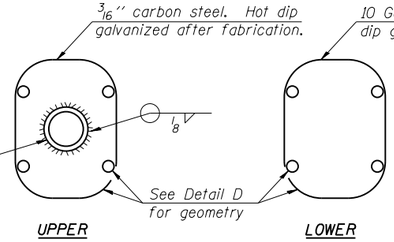
As an alternate to bolts, may use galvanized drive-fit caps installed after galvanizing frame.



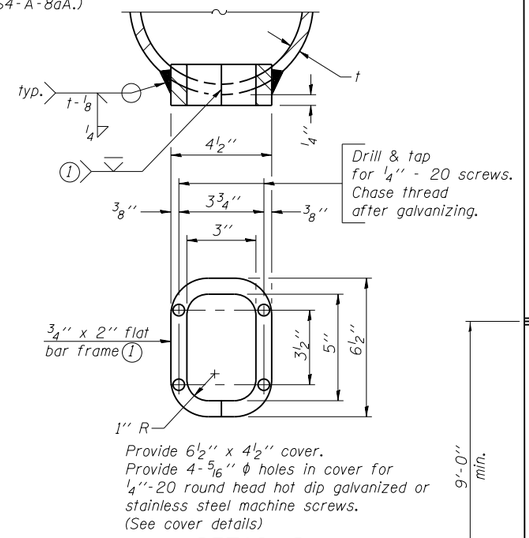
SECTION B-B



SIDE ELEVATION

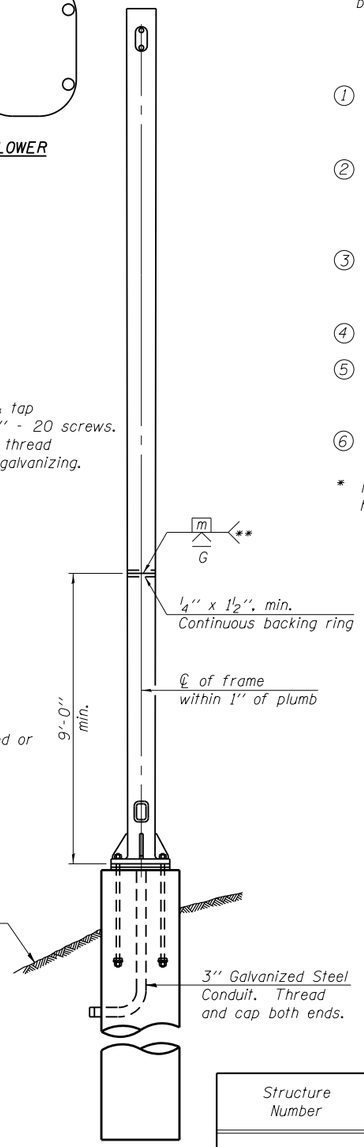


HANDHOLE COVERS



DETAIL D

Dimensions		
Truss Chord Nominal Dia.	W	S
7"	4 3/4"	8'-0 1/4"
8 1/2"	5 1/2"	8'-1"
9"	5 3/4"	8'-1 1/4"



END ELEVATION

Support Design Loads: See Base Sheet OS-A-1 for design and loading criteria.

Load combinations checked include deadload plus:
a) 100% wind normal to sign, 20% parallel to sign
b) 60% wind normal to sign, 30% parallel to sign

(1) In lieu of fabricated handhole frame as shown, may cut from 2" plate (rolling direction vertical). All cut faces to be ground to ANSI Roughness of 500 min or less.

(2) Galvanizing vent holes of adequate size shall be provided on underside at each end of bracing pipes. Alternately, holes may be provided in wall of pipe column. All vent holes shall be drilled and de-burred, typ.

(3) Steel pipe, plate, carbon steel handhole covers and rolled sections shall be hot dip galvanized after fabrication. Painting is not permitted. See Base Sheet OS-A-1.

(4) See General Notes for fasteners.

(5) Dimensions shown are based on selection criteria in the Sign Structures Manual. Nonstandard applications must have dimensions verified or amended as appropriate.

(6) "H" based on 15'-0" or actual sign height, whichever is greater.

* For dynamic message sign installations, provide upper and lower handholes in both legs of each support frame.

TRUSS SUPPORT DETAILS

(12" ϕ Pipe-Type III-A Truss

** One butt welded joint is allowed only on one post per support frame. If used, weld procedure must be pre-approved by Engineer and joint shall receive 100% RT or UT (tension criteria) at Contractor's expense.

Structure Number	Station	Support		Pipe Wall Thickness	H (6)	A
		Left	Right			
9S041I057L088.6	432+50	X		0.33	27'-1"	17'-11 1/4"
			X	0.33	29'-2 3/8"	20'-5/8"
9S100I057R056.6	292+50	X		0.33	30'-5 5/8"	21'-3 7/8"
			X	0.33	29'-5 1/8"	20'-3 3/8"

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Civil Engineering Design

OS4-A-8a 6-1-12

FILE NAME = Y:\14010 IDOT D9 ITS\DGN\Design\Prelim\Plotsheets\D978337-017-026-signtruss.dgn	USER NAME = jd	DESIGNED - JRD	REVISED -
		DRAWN - JRD	REVISED -
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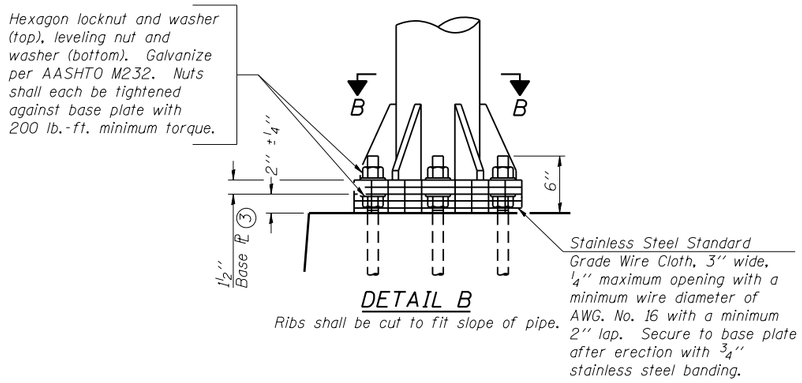
	PLOT DATE = 3/16/2015	DATE - 3/13/15	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES – SUPPORT FRAME FOR TYPE III-A ALUMINUM TRUSS

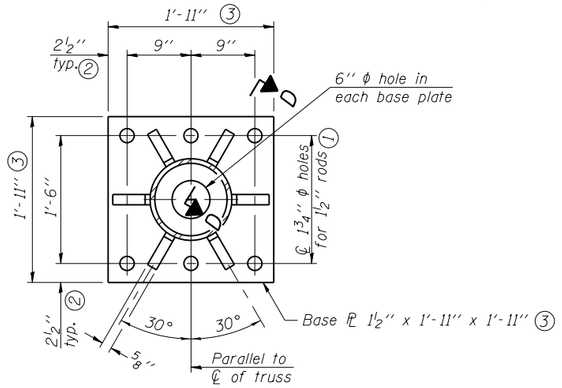
SCALE: N/A | SHEET 5 OF 10 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	D9 ITS SIGNING 2013-1	JEFFERSON/ WILLIAMSON	38	21
		CONTRACT NO. 78337		
	ILLINOIS FED. AID PROJECT			

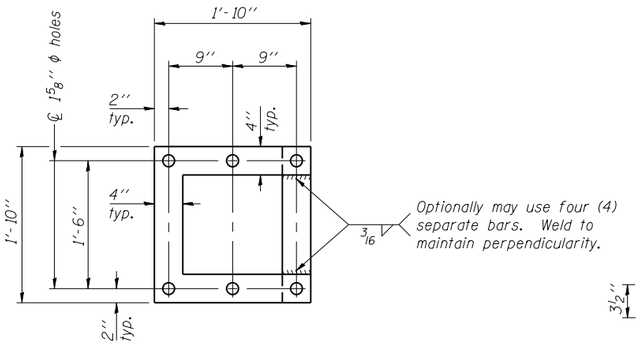


DETAIL B

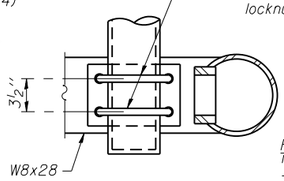
Ribs shall be cut to fit slope of pipe.



SECTION B-B

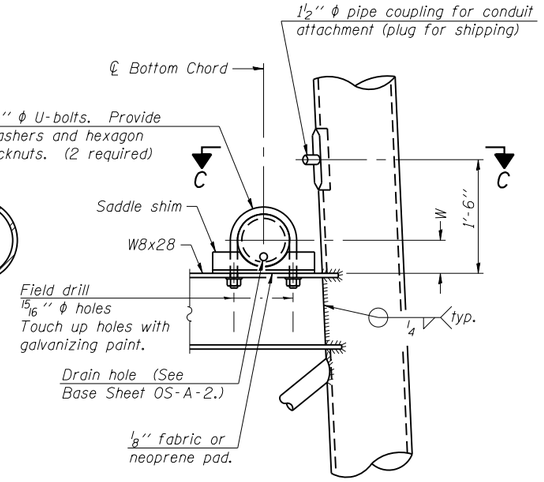


POSITIONING PLATE(S)

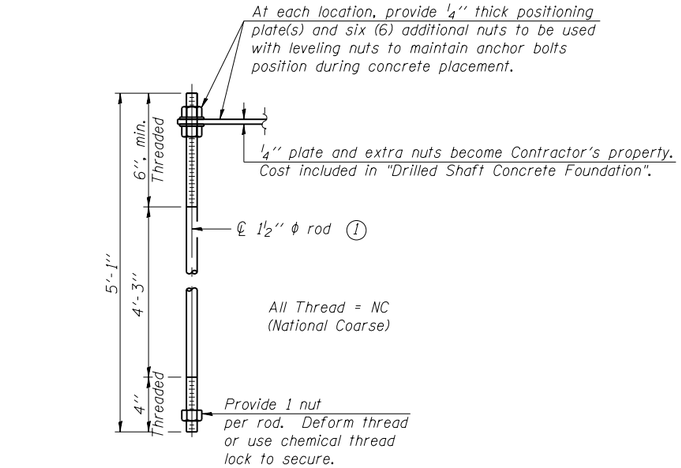


SECTION C-C

(Handhole cover not shown)

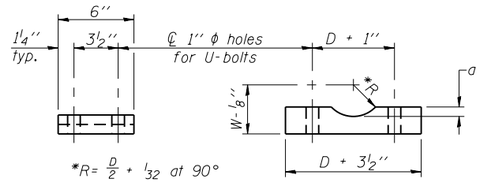


DETAIL C



ANCHOR ROD DETAIL

Anchor rods shall conform to ASTM F1554 Grade 105 Galvanize upper 12'' minimum per AASHTO M232. No welding shall be permitted on rods.



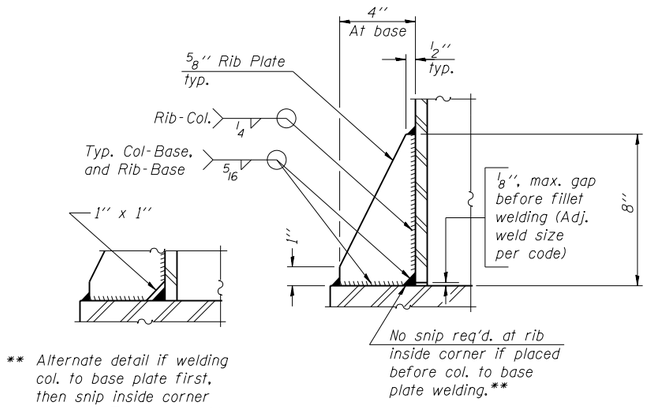
*R = D/2 + 1/32 at 90°

D = Outside Diameter of Chord.
For W, see Base Sheet OS-A-6.

Truss Chord Nominal Dia.	a
7''	1''
8 1/2''	1 1/4''
9''	1 3/8''

SADDLE SHIM DETAIL

ASTM B26 Alloy 356-F
or
ASTM B209 Alloy 6061-T651
(4 required per sign truss)



** Alternate detail if welding col. to base plate first, then snip inside corner of ribs. Terminate weld on rib 1/4'' from snip.

SECTION D-D

TYPE III-A TRUSS
12'' ϕ PIPE SUPPORT FRAME DETAILS

Notes:
For Type III-A Truss spans greater than 150 ft. and up to 160 ft.:

① 1 3/4'' ϕ rod, 2'' ϕ holes

② 2 3/4'' edge distance

③ Base ℄ 1 5/8'' x 1'-11 1/2'' x 1'-11 1/2''

OS4-A-8aA 6-1-12

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Civil Engineering Design

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	PLOT DATE = 3/16/2015	DATE - 3/13/15	REVISED -

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OVERHEAD SIGN STRUCTURES
SUPPORT FRAME FOR TYPE III-A ALUMINUM TRUSS

SCALE: N/A | SHEET 6 OF 10 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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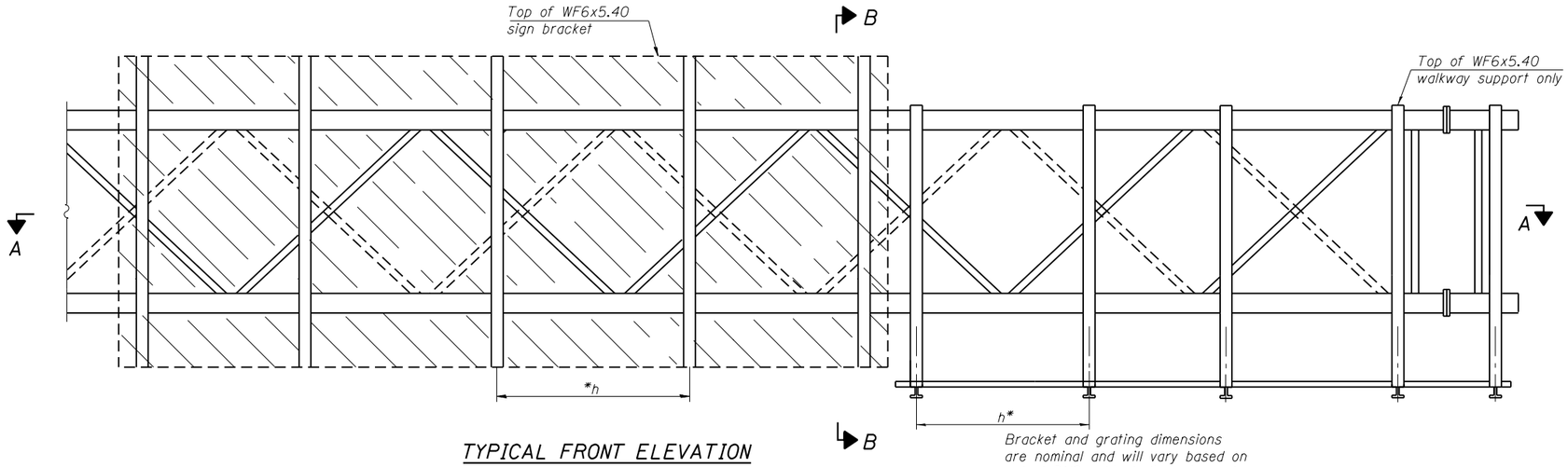
		CONTRACT NO. 78337		
		ILLINOIS FED. AID PROJECT		

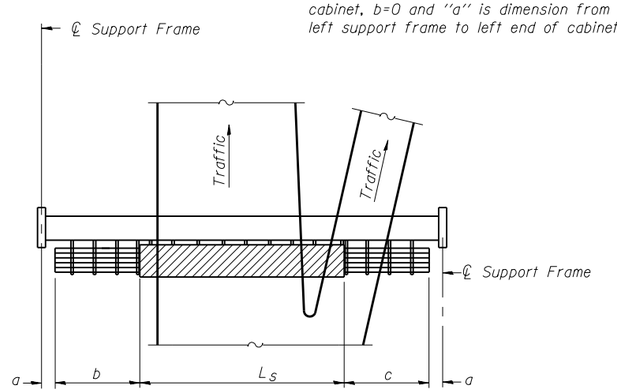


TYPICAL FRONT ELEVATION

With handrail omitted for clarity.

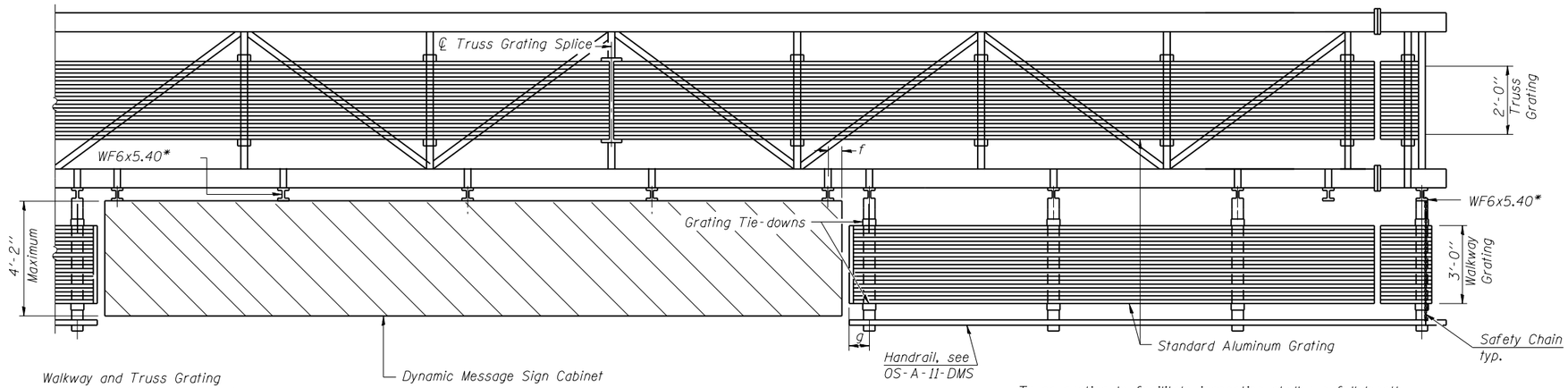
Bracket and grating dimensions are nominal and will vary based on actual DMS cabinet dimensions plus manufacturer's mounting devices.

① If walkway is required left of the DMS cabinet, a=1'-6" and b=walkway lengths. If walkway is not required left of the DMS cabinet, b=0 and "a" is dimension from left support frame to left end of cabinet.



PLAN
WALKWAY AND HANDRAIL SKETCH

(Road plan beneath truss varies)



Walkway and Truss Grating width dimensions are nominal and may vary ±½" based on available standard widths.

Truss grating to facilitate inspection shall run full length (center to center of support frames) ±12" on overhead trusses. Cost of truss grating is included in "Overhead Sign Structure".

SECTION A-A

Handrail and walkway shall span a minimum of three brackets between splices and/or gap joints.
Place all sign and walkway brackets as close to panel points as practical.
Grating and handrail splices placed as needed.

BRACKET TABLE

WF6x5.40 ASTM B308, Alloy 6061-T6		
Sign Width		Number Brackets Required
Greater Than	Less Than or Equal To	
	8'-0"	2
8'-0"	14'-0"	3
14'-0"	20'-0"	4
20'-0"	26'-0"	5
26'-0"	32'-0"	6

Structure Number	Station	a	b	c	L_s	Walkway Grating and Handrail Lengths
9S041I057L088.6	432+50	-	-	6'	OF DMS	6'
9S100I057R056.6	292+50	-	-	7'	OF DMS	7'

Notes:
* Space walkway brackets WF6x5.40 for efficiency and within limits shown:

f = 12" maximum, 4" minimum (End of sign to ℄ of nearest bracket)
g = 12" maximum, 4" minimum (End of walkway grating to ℄ of nearest support bracket)
h = 6'-0" maximum (℄ to ℄ sign and/or walkway support brackets, WF6x5.40

Maximum DMS weight = 5000 lbs. 4'-2" maximum cabinet depth includes depth of cabinet plus connection to WF6x5.40.
For Section B-B and Grating Splice Details, see Base Sheet OS-A-10-DMS.
For Handrail Splice Details, see Base Sheet OS-A-11-DMS.

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Civil Engineering Design

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		DATE - 3/13/15	REVISED -

STATE OF ILLINOIS
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OVERHEAD SIGN STRUCTURES
ALTERNATE ALUMINUM WALKWAY DETAILS FOR DMS

SCALE: N/A | SHEET 7 OF 10 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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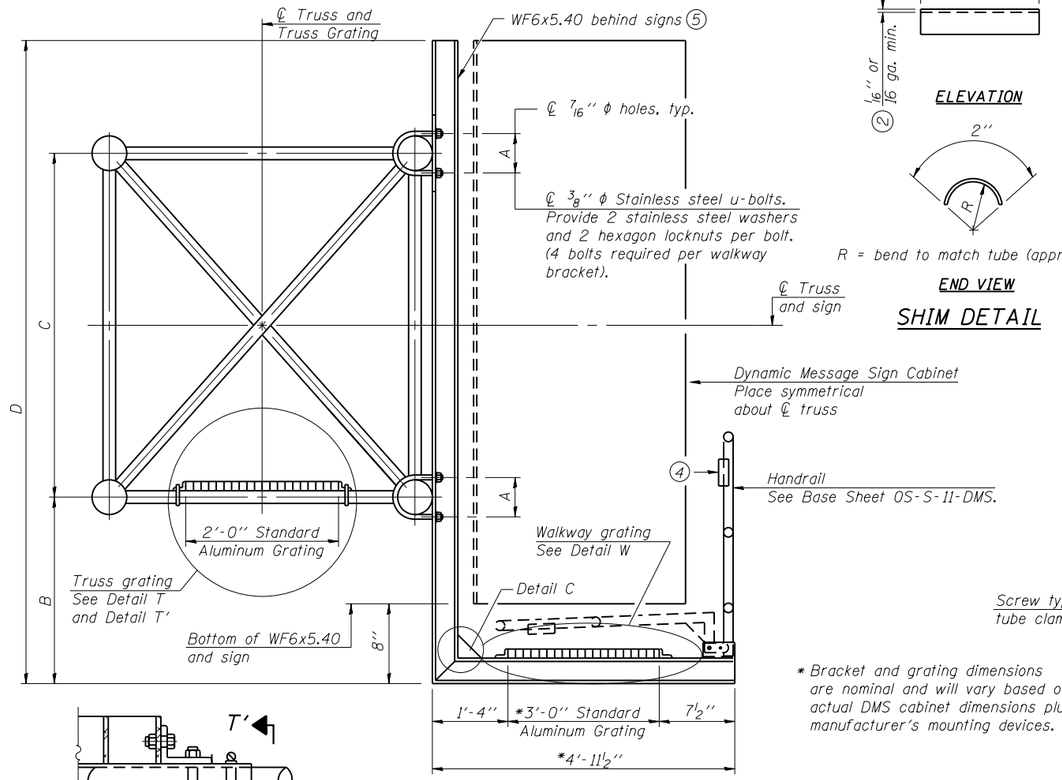
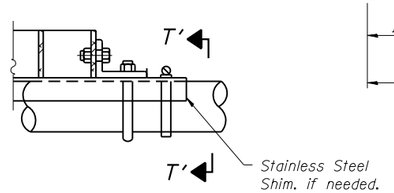
	ILLINOIS FED. AID PROJECT			



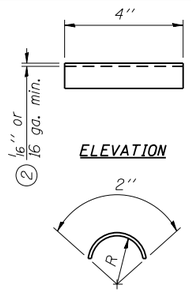


DETAIL T'

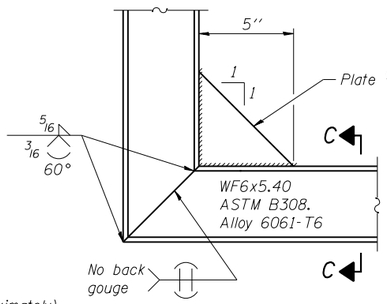
(Truss grating splice)
Details not shown same as Detail T.
Alternate materials may be used subject to the Engineer's review and approval.

SECTION B-B

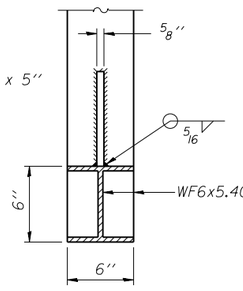
* Bracket and grating dimensions are nominal and will vary based on actual DMS cabinet dimensions plus manufacturer's mounting devices.



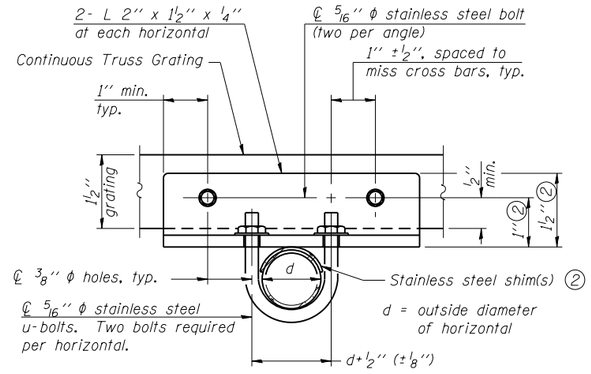
SHIM DETAIL



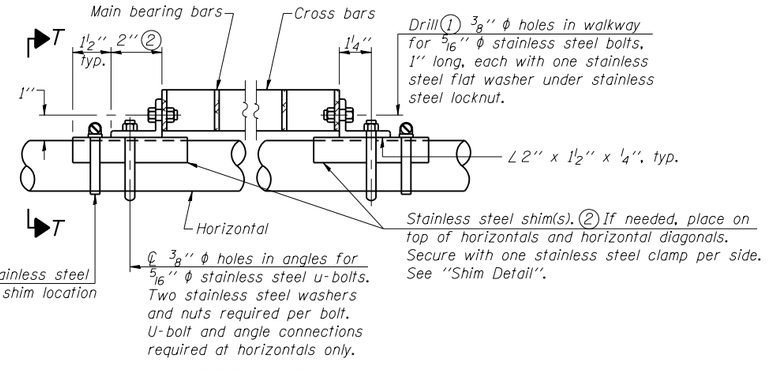
DETAIL C



SECTION C-C

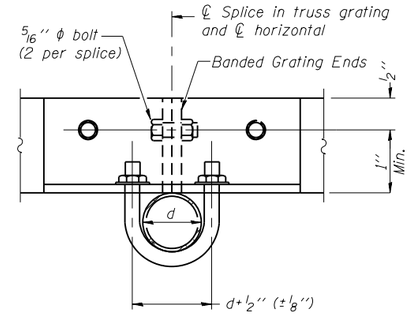


SECTION T-T

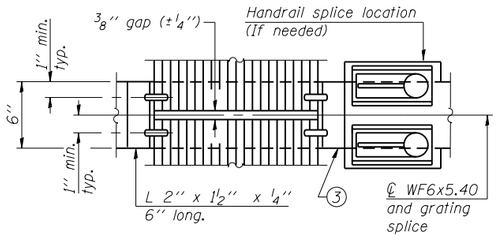


DETAIL T

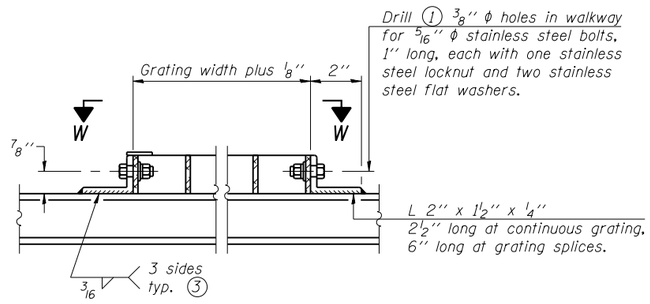
(Continuous Truss grating)



SECTION T'-T'

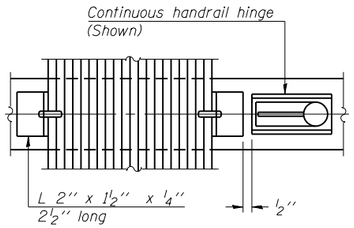


(AT WALKWAY GRATING SPLICE)



DETAIL W

(Walkway grating)



(CONTINUOUS WALKWAY GRATING)

SECTION W-W

SPECIFICATIONS FOR STANDARD ALUMINUM GRATING

Main Bearing Bars shall be 3/16" x 1 1/2" on 1 3/16" centers and conform to ASTM B211 Alloy 6061-T6.
Cross bars shall be 3/16" x 1 1/2" on 4" centers and conform to ASTM B221 Alloy 6063-T5 or 6061-T6.

OR

Aluminum Grating with modified "T" sections for main bearing bars shall meet the following requirements:

Main bars shall conform to ASTM B221 Alloy 6061-T6 and have a minimum section modulus equal to 0.0705 in. per bar, a depth of 1 1/2", spaced on 1 3/16" centers.
Cross bars shall conform to ASTM B221 Alloy 6063-T5 or T-42 and spaced on 4" centers.

Structure Number	Station	A	(6) B	C	(6) D
9S041I057L088.6	432+50	7 1/2"	1'-5"	7'-0"	9'-2"
9S100I057R056.6	292+50	7 1/2"	1'-5"	7'-0"	9'-2"

"B" and "D" dimensions are based on a maximum DMS height of 8'-6". DMS heights greater than 8'-6" will not be allowed.

(1) Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.

(2) Stainless steel shims shall be placed as shown in Detail T if needed to compensate for alignment variations between horizontal and diagonal pipes beyond adjustment provided by angles. Thicker shims may be used subject to shims performing properly.

(3) If Handrail Joint present, weld angle to WF(A-N)4 and 1/4" extension bars. (See Base Sheet OS-A-11.)

(4) ℄ 1/8" x 1/2" x 2" welded to handrail posts to protect locations that contact grating.

(5) Cabinet manufacturer must design and supply hardware for connection of cabinet to WF6's. Bolts must be stainless steel or hot dip galvanized high strength per IDOT specifications.

(6) Based on actual height of tallest sign given on OS-A-1.

OS-A-10-DMS 6-1-12

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		DATE - 3/13/15	REVISED -

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OVERHEAD SIGN STRUCTURES
ALTERNATE ALUMINUM WALKWAY DETAILS FOR DMS

SCALE: N/A | SHEET 8 OF 10 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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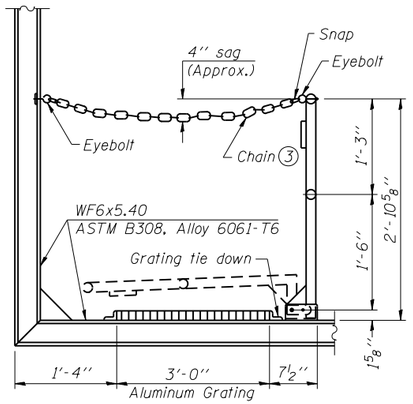
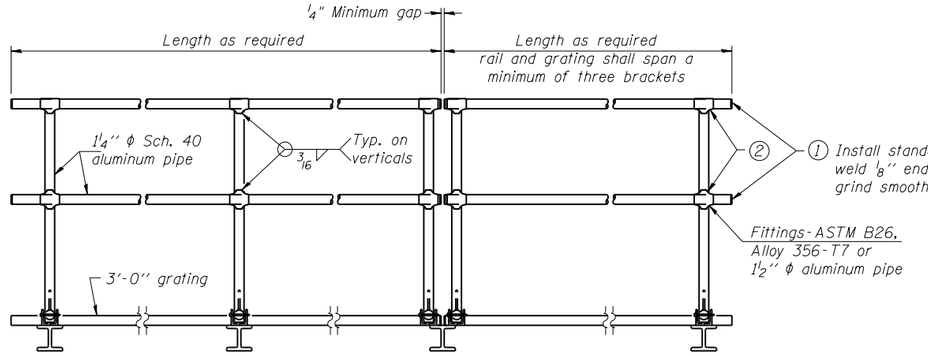
		CONTRACT NO. 78337		
		ILLINOIS FED. AID PROJECT		

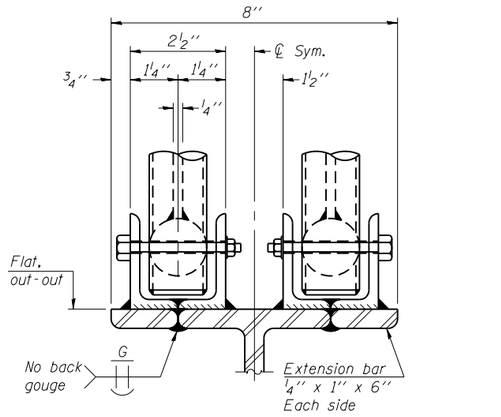


SIDE ELEVATION

(Showing safety chain w/o sign)



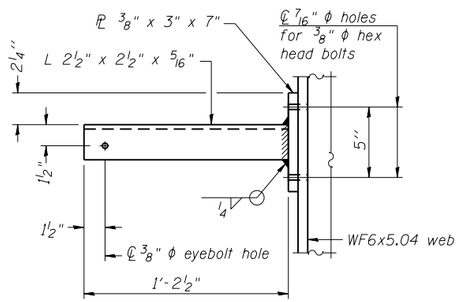
FRONT ELEVATION



ELEVATION AT HANDRAIL JOINT (4)

HANDRAIL DETAILS

Handrail pipe shall be ASTM B241, Alloy 6063-T6 or Alloy 6061-T6.

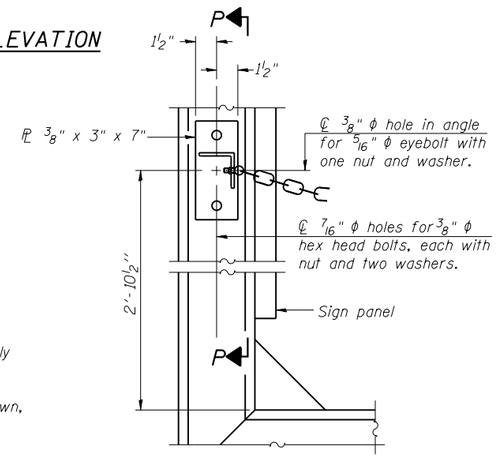


SECTION P-P

(2) Horizontal handrail member shall be continuous thru fitting. Provide 7/16" ϕ hole in fitting for 3/8" ϕ bolt. Field drill 7/16" ϕ hole in horizontal rail member. Provide washer and locknut for bolt. (Use 5/16" eyebolts in 7/16" ϕ holes on top rail at ends only.)

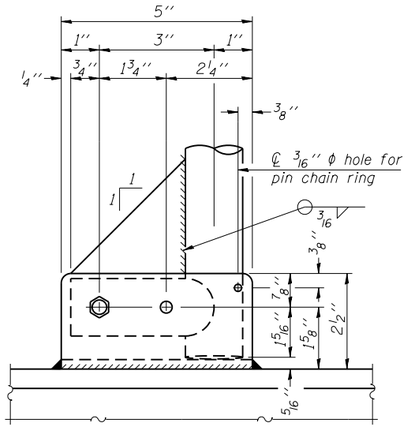
(3) 3/16" type 304L stainless steel chain, approximately 12 links per foot.

(4) Extrusions may be used in lieu of the details shown, with approval of the Engineer.

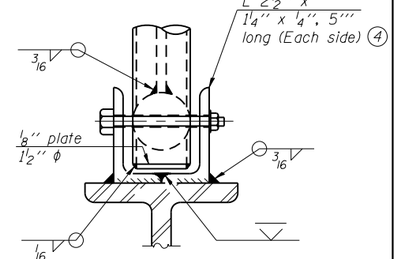


ALTERNATE SAFETY CHAIN ATTACHMENT

(With Sign Present)
Items not shown same as "Side Elevation" of "Handrail Details"

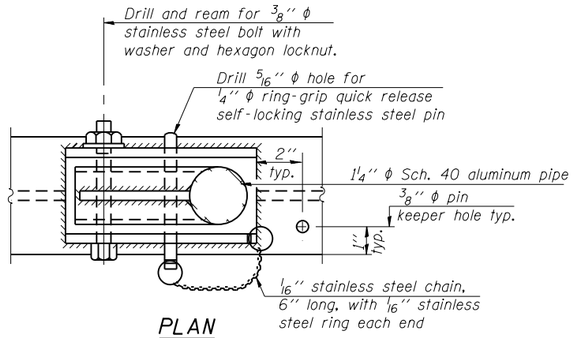


SIDE ELEVATION



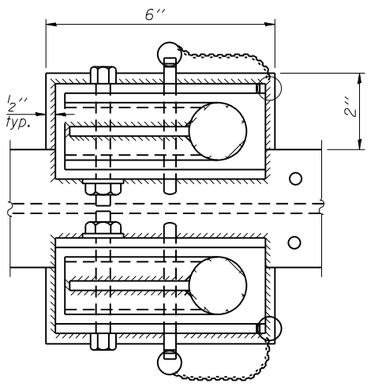
FRONT ELEVATION

See "ELEVATION" at right for dimensions.



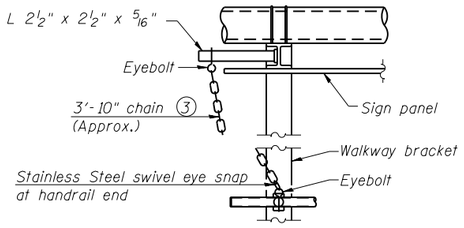
PLAN

DETAIL E HANDRAIL HINGE



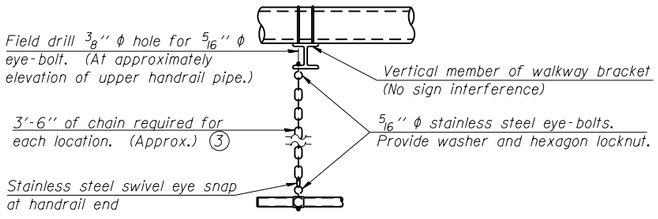
PLAN AT HANDRAIL JOINT

Details not shown same as "PLAN"



ALTERNATE SAFETY CHAIN ATTACHMENT

Details not shown similar to "Safety Chain" Details
(Walkway omitted for clarity)



SAFETY CHAIN

One required for each end of each walkway.

OS-A-11-DMS 6-1-12

EFK·Moen, LLC
Civil Engineering Design

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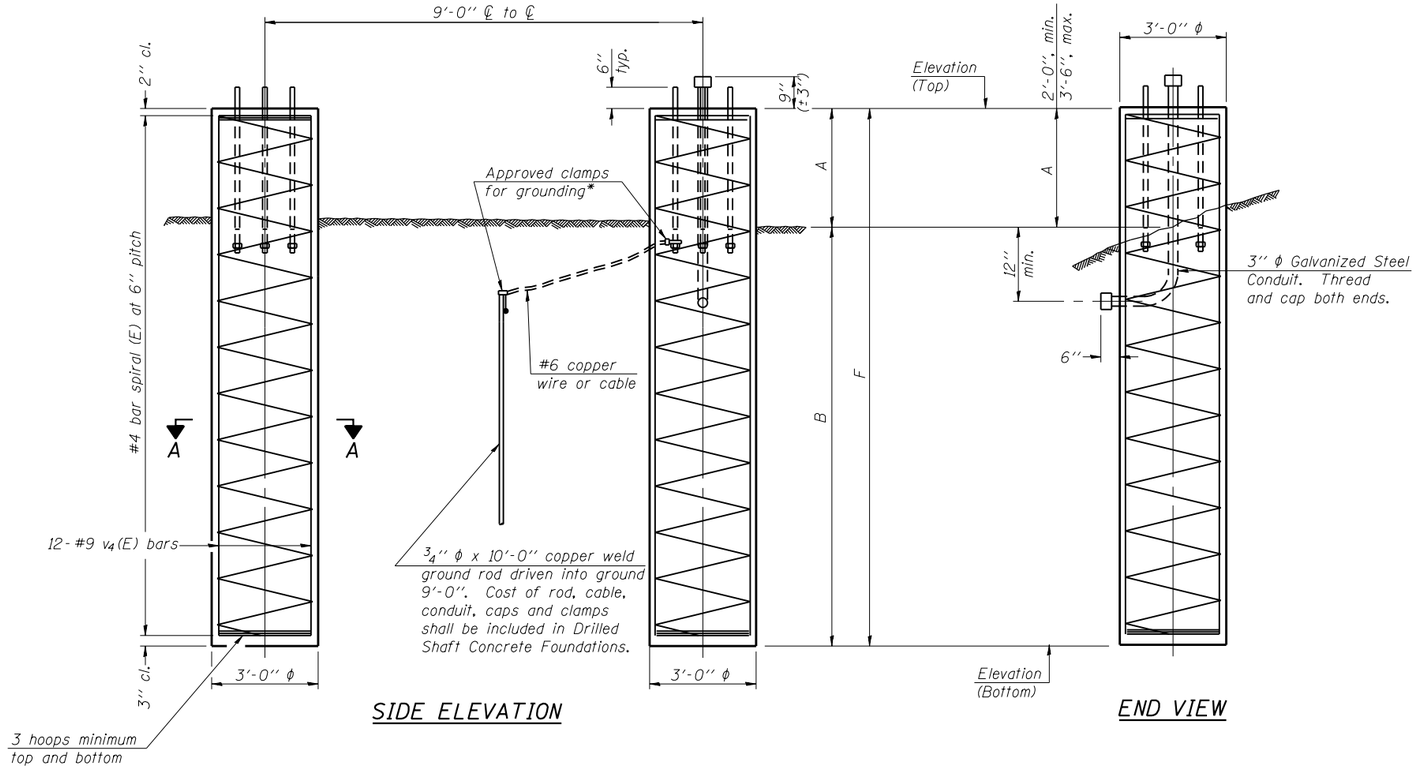
	PLOT DATE = 3/16/2015	DATE - 3/13/15	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
ALTERNATE ALUMINUM HANDRAIL DETAILS FOR DMS

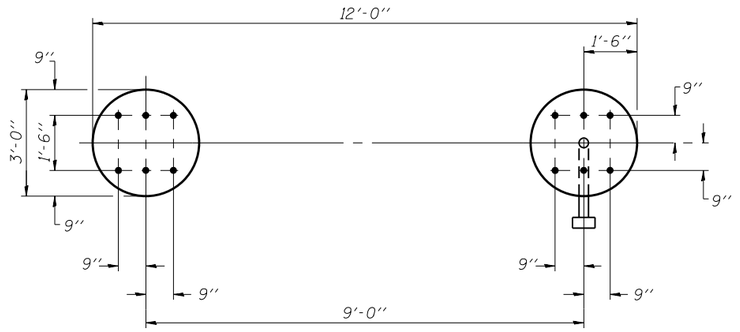
SCALE: N/A | SHEET 9 OF 10 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	D9 ITS SIGNING 2013-1	JEFFERSON/ WILLIAMSON	38	25
		CONTRACT NO. 78337		
		ILLINOIS FED. AID PROJECT		



SIDE ELEVATION

END VIEW



PLAN

For anchor rod size and placement, see Support Frame Detail Sheet.

* Anchor rod shall be ground or filed to bright metal at clamp and cable connection location.

BAR LIST - EACH FOUNDATION

Bar	Number	Size	Length	Shape
v4(E)	24	#9	F less 5"	——
#4 bar spiral (E) - see Side Elevation				

NOTES:

The foundation dimensions shown are based on the presence of mostly cohesive soils with an average Unconfined Compressive Strength (Qu) of at least 1.25 tsf, which must be determined by previous soil investigations at the jobsite. When other conditions are indicated, the boring data will be included in the plans and the foundation dimensions shown will be the result of site specific designs.

If the conditions encountered are different than those indicated, the Contractor shall notify the Engineer to determine if the foundation dimensions need to be modified. If dimensions "B" or "F" are revised by more than 12" by the Contractor, "as-built" plans shall be prepared and submitted to the District Bureau of Operations for future reference.

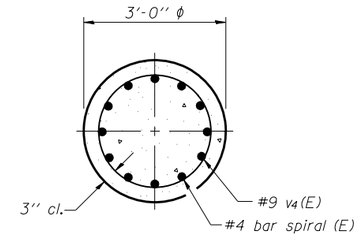
No sonotubes or decomposable forms shall be used below the lower conduit entrance.

Permanent metal forms or other shielding may not be left in place below that elevation without the Engineer's written permission.

Concrete shall be placed monolithically, without construction joints.

Backfill shall be placed per Article 502 of Standard Specification and prior to erection of support column.

A normal surface finish followed by a Concrete Sealer application will be required on concrete surfaces above the lowest elevation 6" below finished ground line. Cost included in Drilled Shaft Concrete Foundation.



SECTION A-A

DETAILS FOR 12" ϕ SUPPORT FRAME TYPE III-A TRUSS

EFK·Moen, LLC
Civil Engineering Design

Structure Number	Station	Left Foundation					Right Foundation					Class DS Concrete (Cu. Yds.)
		Elevation Top	Elevation Bottom	A	B	F	Elevation Top	Elevation Bottom	A	B	F	
9S041I057L088.6	432+50	432.79	407.59	7'-2 3/8"	18'-0"	25'-2 3/8"	430.67	410.17	2'-6"	18'-0"	20'-6"	23.9
9S100I057R056.6	292+50	457.02	437.02	2'-0"	18'-0"	20'-0"	458.06	437.56	2'-6"	18'-0"	20'-6"	21.2

OS4-F4 8-21-13

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	PLOT DATE = 3/16/2015	CHECKED - SLD	REVISED -
		DATE - 3/13/15	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
DRILLED SHAFT DETAILS

SCALE: N/A | SHEET 10 OF 10 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	D9 ITS SIGNING 2013-1	JEFFERSON/ WILLIAMSON	38	26
		CONTRACT NO. 78337		
	ILLINOIS FED. AID PROJECT			

ILLINOIS DEPARTMENT OF TRANSPORTATION
District Nine Materials

Bridge Foundation Boring Log

Proposed Truss Mounted Message Board Over Southbound FAI 57 — Sheet 1 of 1

Route: FAI 57 — Structure Number: 9S041I057L088.6 — Date: 7/21/2014

Section D9 ITS Signing 1013 — Bored By: R Moberly

County: Jefferson — Location: Milemarker 88.6, 1.8 mi S of Bakervi — Checked By: R Graeff

Boring No 1-MB
Station 432+50
Offset 24' Lt CL SBL
Ground Surface 429.3 Ft

Surf Wat Elev:
Ground Water Elevation
when Drilling 402.3
At Completion
At: Hrs:

DEPTH	BLOWS	Qu tsf	W%	Description
				Crushed aggregate
427.3				
	1			Stiff, moist, brown, Silty Clay A-6
	2	1.1B	18	
	3			
424.8				
5.0	2			Very stiff, moist, grey mottled brown, Silty Clay to Clay A7-6
	4	3.1S	20	
	5			
	2			
	5	3.7B	17	
	8			
10.0	2			
	4	3.1S	18	
	6			
417.3				
	1			Very stiff, moist, brown mottled grey, Clay A7-6
	3	2.3B	21	
	4			
414.8				
15.0	3			Stiff, moist, brown and grey, Clay Loam A-6
	9	1.6S	17	
	14			
412.3				
	1			Stiff, moist, grey mottled brown, Silty Clay A-6
	1	1.2S	22	
	3			
409.8				
20.0	1			Stiff, moist, brown, Silty Clay to Clay A7-6
	3	1.8B	25	
	3			
407.3				
	WH			Medium, very moist, brown, Silty Clay to Clay A7-6 (15)
	1	0.8B	26	
	2			
404.8				
25.0	WH			

DEPTH	BLOWS	Qu tsf	W%	Description
	1	0.3B	26	Soft, very moist, brown, Silty Clay to Clay A7-6
	WH			
402.3				
	WH			Very soft, wet, brown, Silty Clay to Silty Clay Loam A-6
	1	0.2B	30	
	WH			
399.8				
30.0	WH			Medium, very moist, brown, Silty Clay Loam A-4
	1	0.6S	30	
	2			
397.3				
	1			Medium to stiff, very moist, grey mottled brown, Silty Clay A-6
	1	1.0B	23	
	1			
35.0	1			
	1	0.7B	25	
	2			
392.3				
	WH			Soft, very moist, grey, Clay A7-6
	WH	0.4B	28	
	WH			
389.8				
40.0	WH			Medium to soft, very moist, grey, Clay A7-6
	WH	0.5B	25	
	1			
				++++++++++++++++++++++++++
				Borehole advanced with hollow stem auger (8" O.D, 3.25" I.D.)
				To convert "N" values to "N60" multiply by 1.25
384.8				++++++++++++++++++++++
45.0	WH			Very loose, wet, grey, Sand
383.3	WH			
				Bottom of hole = 46.0 feet
				Free water observed at 27.0 feet
				Elevation referenced to CL SB I57@ Sta. 432+50; Elevation = 430.4 feet
50.0				

N-Std Pentr Test: 2" OD Sampler,140# Hammer, 30" Fall (Type Fail. B-Bulge S-Shear E-Estimated P-Penetrometer)

ILLINOIS DEPARTMENT OF TRANSPORTATION
District Nine Materials

Bridge Foundation Boring Log

Proposed Truss Mounted Message Board Over Southbound FAI 57 — Sheet 1 of 1

Route: FAI 57 — Structure Number: D9041I057L088.6 — Date: 7/21/2014

Section D9 ITS Signing 1013 — Bored By: R Moberly

County: Jefferson — Location: Milemarker 88.6, 1.8 mi S of Bakervi — Checked By: R Graeff

Boring No 2-MB
Station 432+50
Offset 16' Rt CL SBL
Ground Surface 430.1 Ft

Surf Wat Elev:
Ground Water Elevation
when Drilling 403.1
At Completion
At: Hrs:

DEPTH	BLOWS	Qu tsf	W%	Description
				Asphalt over crushed aggregate
428.1				
	1			Medium, very moist, grey, Silty Clay A-6
	1	0.8B	24	
	1			
425.6				
5.0	1			Very stiff, moist, brown and grey, Silty Clay A-6
	4	3.3B	17	
	4			
	1			
	4	2.7B	22	
	5			
420.6				
10.0	2			Very stiff, moist, grey, Silt Loam A-4
	9	3.7S	17	
	9			
418.1				
	1			Very stiff, moist, brown and grey, Clay A7-6
	4	3.1B	19	
	5			
15.0	2			
	4	2.5B	18	
	6			
413.1				
	1			Very stiff, moist, grey mottled brown, Silty Clay to Silty Clay Loam A-6
	3	2.7S	21	
	3			
410.6				
20.0	WH			Stiff, moist to very moist, grey mottled brown, Silty Clay Loam A-6
	1	1.1B	26	
	1			
408.1				
	WH			Medium, very moist, brown, Silty Clay to Clay A7-6
	1	0.7B	26	
	2			
405.6				
25.0	WH			

DEPTH	BLOWS	Qu tsf	W%	Description
	WH	0.4B	25	Soft, very moist, brown mottled grey, Silty Clay Loam A-6
	WH			
	WH			
	WH	0.4B	26	
	WH			
400.6				
30.0	WH			Very soft, very moist, brown mottled grey, Silty Clay Loam A-6
	WH	0.2B	27	
399.1	WH			
				Bottom of hole = 31.0 feet
				Free water observed at 27.0 feet
				Elevation referenced to CL SB I57@ Sta. 432+50; Elevation = 430.4 feet
35.0				
				Borehole advanced with hollow stem auger (8" O.D, 3.25" I.D.)
				To convert "N" values to "N60" multiply by 1.25
40.0				
45.0				
50.0				

N-Std Pentr Test: 2" OD Sampler,140# Hammer, 30" Fall (Type Fail. B-Bulge S-Shear E-Estimated P-Penetrometer)

EFK•Moen, LLC
Civil Engineering Design

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	PLOT DATE = 3/16/2015	DATE - 3/13/15	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS

SCALE: N.A. | SHEET 1 OF 2 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	D9 ITS SIGNING 2013-1	JEFFERSON/ WILLIAMSON	38	27
		CONTRACT NO. 78337		
	ILLINOIS	FED. AID PROJECT		

ILLINOIS DEPARTMENT OF TRANSPORTATION
District Nine Materials

Bridge Foundation Boring Log

Proposed Truss Mounted Message Board Over FAI 57

Sheet 1 of 1

Route: FAI 57 Structure Number: Date: 7/17/2014

Section Bored By: R Moberly

County: Williamson Location: Milemarker 56.5, 0.7 mi S of Stotlar Checked By: R Graeff

Boring No 1-MB
Station 292+50
Offset 23' Lt CL Median
Ground Surface 457.8 Ft

Surf Wat Elev:
Ground Water Elevation
when Drilling
At Completion
At: Hrs:

	DEPTH	BLOWS	Qu tsf	W%		DEPTH	BLOWS	Qu tsf	W%
9.5" Asphalt over crushed aggregate					Cored 24.7 to 29.7 feet				
453.8					Very dense, dry, brown and grey, Sandstone				
Very stiff, moist, brown, Clay A7-6	5.0	1			100% Recovery; 7% RQD				
		2	2.1B	21	427.8	30.0			
		4							
					Bottom of hole = 29.7 feet				
		2							
		4	2.5B	18	No free water observed				
		6							
448.3					Elevation referenced to plans at Sta 292+50; Elev = 458.3 ft				
Hard, damp, brown mottled grey, Clay A7-6	10.0	3				35.0			
		10	5.0B	14	Borehole advanced with hollow stem auger (8" O.D, 3.25" I.D.)				
		9							
445.8					To convert "N" values to "N60" multiply by 1.25				
Very stiff, moist, brown and grey, Clay to Clay Loam A-6		3							
		6	2.7B	17					
		8							
443.3									
Stiff, moist, brown and grey, Clay to Clay Loam A-6	15.0	1				40.0			
		3	1.5B	16					
		3							
440.8									
Stiff, moist, grey and brown, Clay to Clay Loam A7-6		2							
		4	1.2B	24					
		3							
438.3									
V.dense, dry, br, Sandstone 437.8	20.0	100/2"				45.0			
Cored 19.7 to 24.7 feet									
Very dense, dry, brown and grey, highly weathered Sandstone with Clay layers									
40% Recovery; 0% RQD									
432.8	25.0					50.0			

N-Std Pentr Test: 2" OD Sampler,140# Hammer, 30" Fall (Type Fail. B-Bulge S-Shear E-Estimated P-Penetrometer)

ILLINOIS DEPARTMENT OF TRANSPORTATION
District Nine Materials

Bridge Foundation Boring Log

Proposed Truss Mounted Message Board Over FAI 57

Sheet 1 of 1

Route: FAI 57 Structure Number: Date: 1/21/2015

Section Bored By: R Moberly

County: Williamson Location: Milemarker 56.5, 0.7 mi S of Stotlar Checked By: R Graeff

Boring No 2-MB
Station 292+50
Offset 75' Lt CL Median
Ground Surface 457.6 Ft

Surf Wat Elev:
Ground Water Elevation
when Drilling
At Completion
At: Hrs:

	DEPTH	BLOWS	Qu tsf	W%		DEPTH	BLOWS	Qu tsf	W%
Stiff, moist to very moist, brown mottled grey, Silty Clay to Clay A7-6									
		2							
		4	1.2B	20					
		4							
453.1									
Very stiff, moist, brown mottled grey, Clay A7-6	5.0	2				30.0			
		5	3.3S	22					
		6							
		2							
		5	2.7S	20					
		6							
448.1									
Hard, moist, brown mottled grey, Clay A7-6	10.0	4				35.0			
		10	4.5B	16					
		10							
445.6									
Very stiff, moist, brown mottled grey, Clay A7-6		2							
		4	2.1B	23					
		5							
443.1									
Stiff, moist, brown mottled grey, Clay A7-6 with sand seams	15.0	4				40.0			
		10	1.4S	21					
		18							
440.6									
Very dense, dry, brown, Sandstone 439.6		24							
		100/4"							
Bottom of hole = 17.8 feet									
No free water observed	20.0					45.0			
Elevation referenced to plans at Sta 292+50; Elev = 458.3 ft									
Borehole advanced with hollow stem auger (8" O.D, 3.25" I.D.)									
To convert "N" values to "N60" multiply by 1.25									
	25.0					50.0			

N-Std Pentr Test: 2" OD Sampler,140# Hammer, 30" Fall (Type Fail. B-Bulge S-Shear E-Estimated P-Penetrometer)

EFK·Moen, LLC
Civil Engineering Design

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	PLOT DATE = 3/16/2015	DATE - 3/13/15	REVISED -

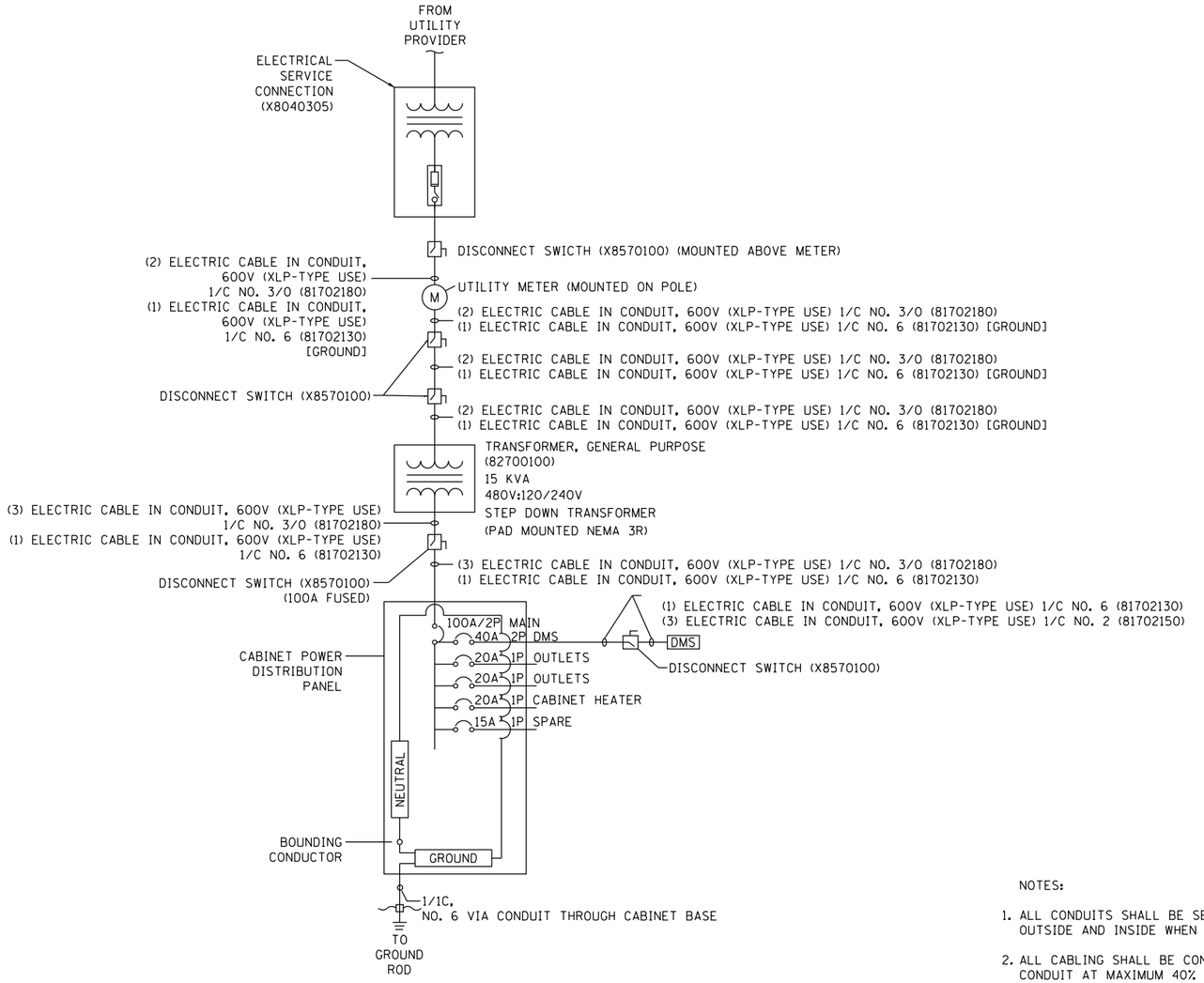
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS

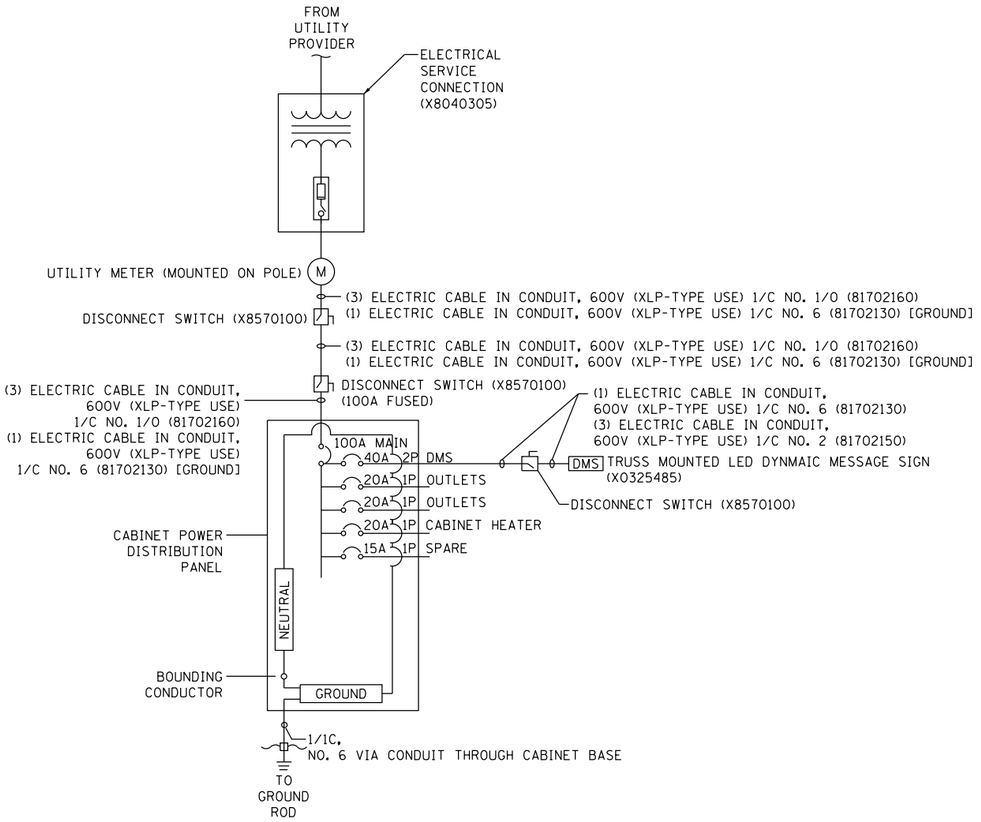
SCALE: N.A. SHEET 2 OF 2 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	D9 ITS SIGNING 2013-1	JEFFERSON/ WILLIAMSON	38	28
		CONTRACT NO. 78337		
		ILLINOIS FED. AID PROJECT		

JEFFERSON COUNTY



WILLIAMSON COUNTY



NOTES:

1. ALL CONDUITS SHALL BE SEALED FROM THE OUTSIDE AND INSIDE WHEN ENTERING OR LEAVING.
2. ALL CABLING SHALL BE CONCEALED WITHIN CONDUIT AT MAXIMUM 40% FILL RATIO.
3. THIS ONE-LINE IS DIAGRAMMATIC AND NOT INTENDED TO SHOW ACTUAL ROUTING OR QUANTITIES OF MATERIALS. THIS ONE-LINE IS SHOWN FOR CLARIFICATION OF CONNECTIONS AND CABLE TYPES.
4. CONTRACTOR SHALL PROVIDE NEMA 4X 100A RATED 2-POLE (EITHER 480V OR 240V) DISCONNECT. ALL LOCATIONS NOTED ON DRAWINGS.

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		DRAWN DTL	REVISED -
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	PLOT DATE = 3/16/2015	DATE 03-16-15	REVISED -

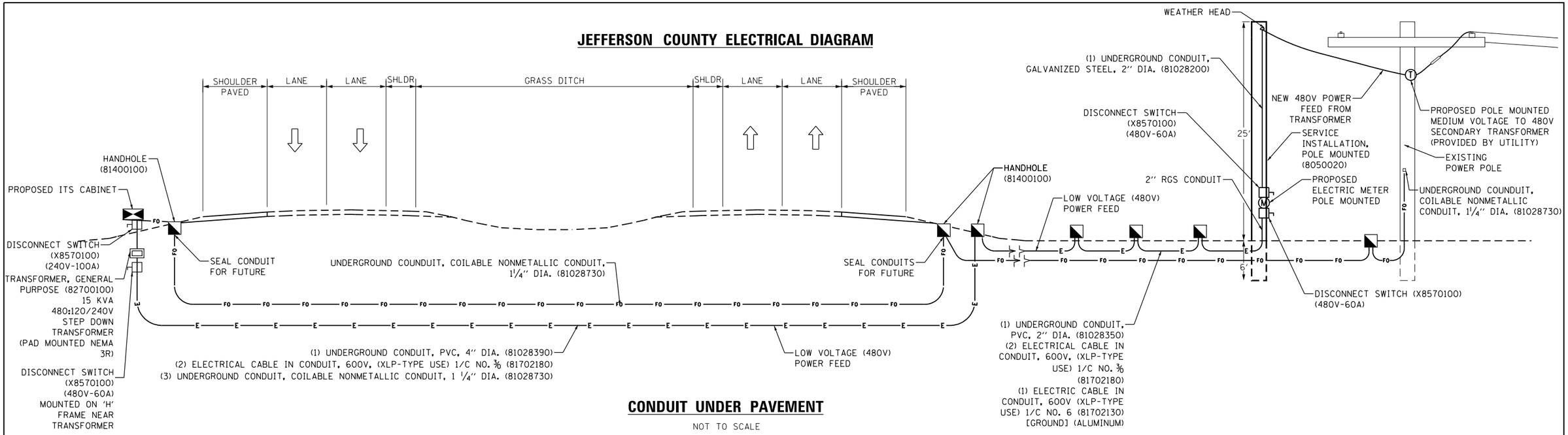
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ITS DETAILS
SINGLE LINE DIAGRAM

SCALE: N.A. | SHEET 1 OF 1 SHEETS | STA. | TO STA.

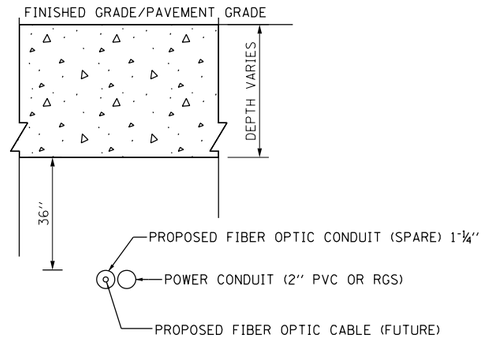
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-57	D9 ITS SIGNING 2013-1	JEFFERSON/ WILLIAMSON	38	29
		CONTRACT NO. 78337		
		ILLINOIS FED. AID PROJECT		

JEFFERSON COUNTY ELECTRICAL DIAGRAM



CONDUIT UNDER PAVEMENT

NOT TO SCALE



BELOW GRADE CONDUIT

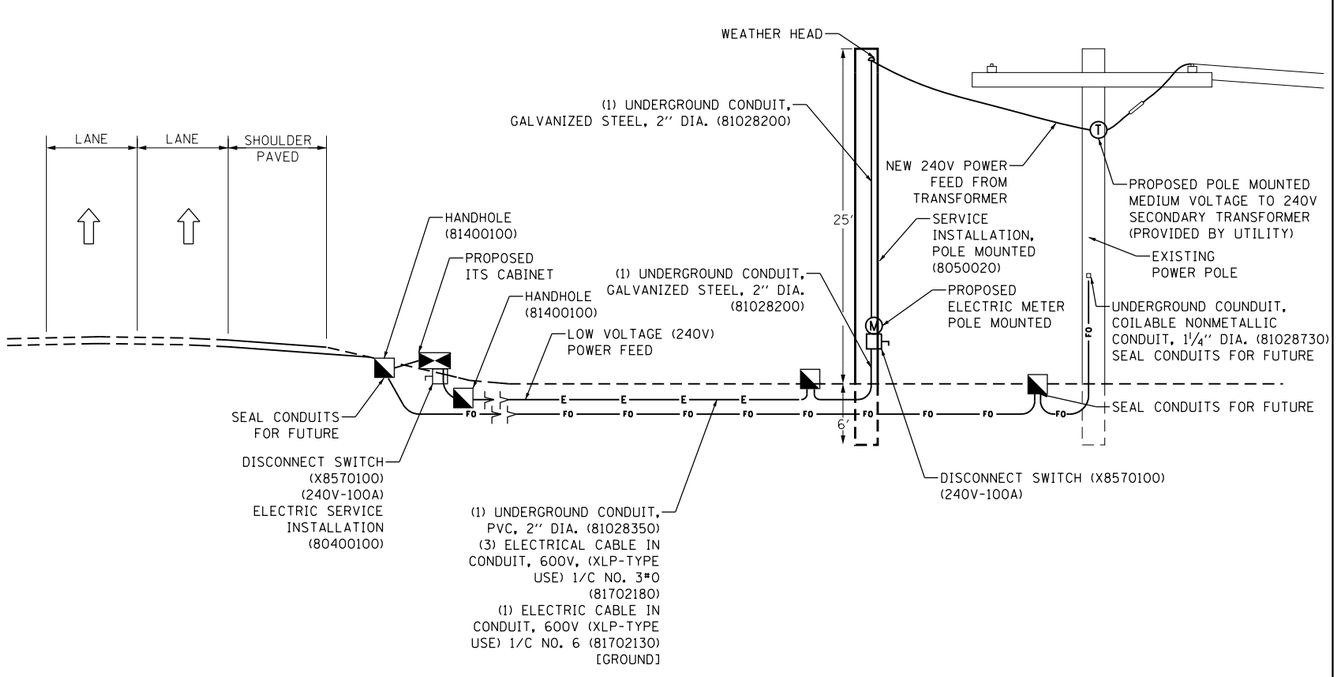
NOT TO SCALE

NOTES:

1. NOMINAL 36" DEPTH WILL BE MAINTAINED EXCEPT WHERE CONDUIT TRANSITIONS INTO HANDHOLES, OR ON TO STRUCTURES.

2. NEW POWER POLE TO BE INSTALLED AT BOTH WILLIAMSON AND JEFFERSON COUNTY REFER TO AMEREM ELECTRICAL SERVICE MANUAL PAGES 600-7 AND 600-8 FOR REQUIREMENTS OF CUSTOMER OWNED SECONDARY METERING UNDERGROUND DISTRIBUTION INSTALLATION FOR POWER POLE INSTALLATION REQUIREMENTS.

WILLIAMSON COUNTY ELECTRICAL DIAGRAM



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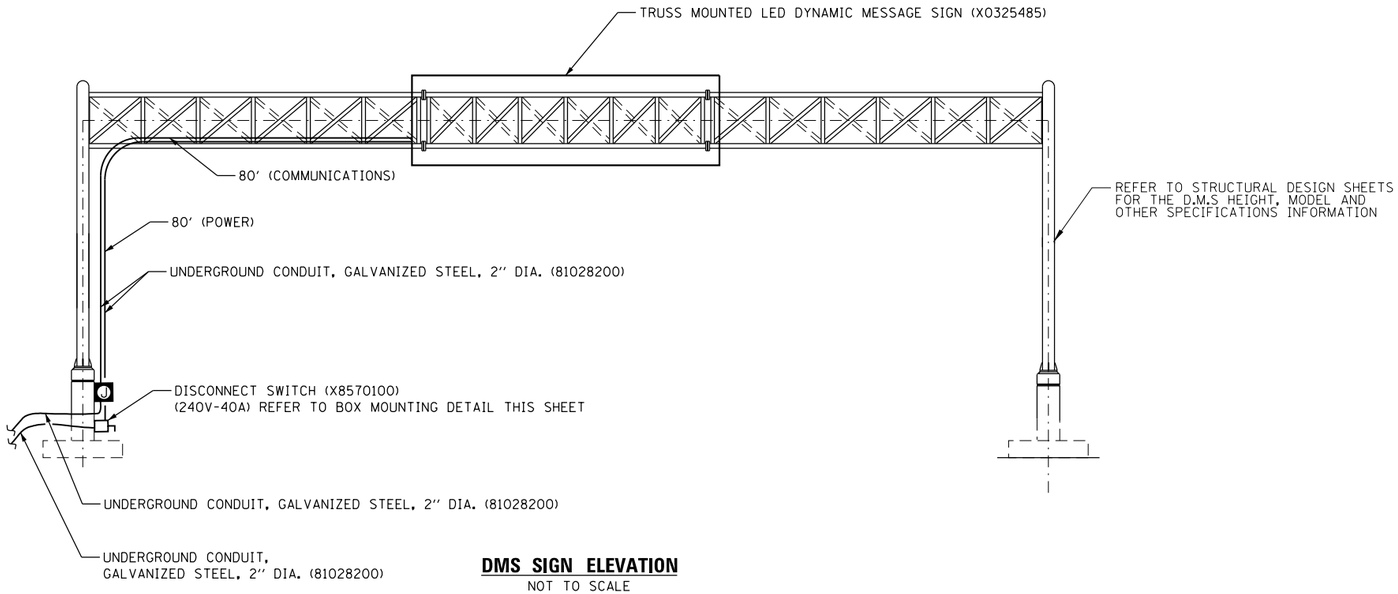
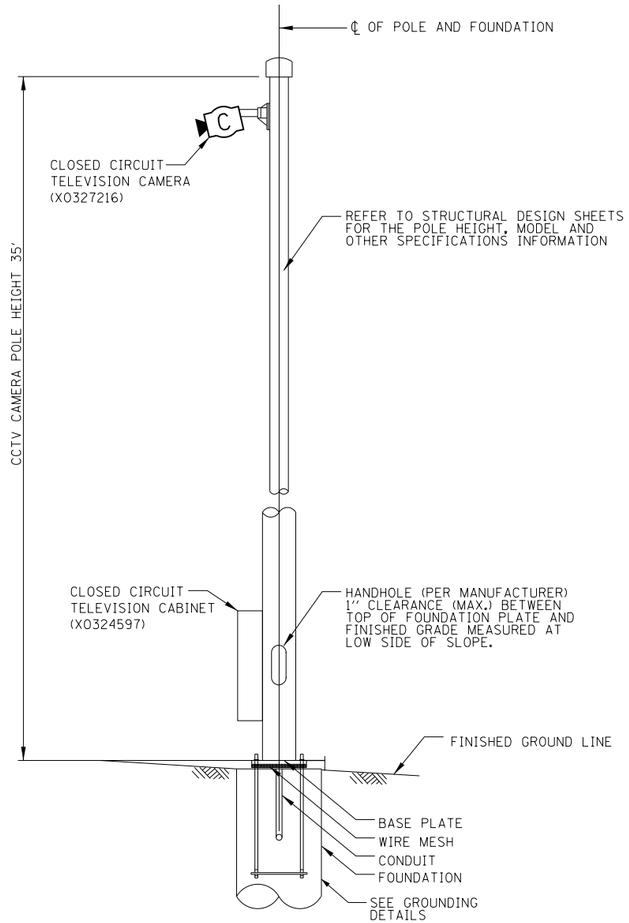
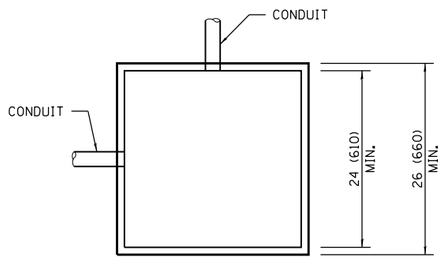


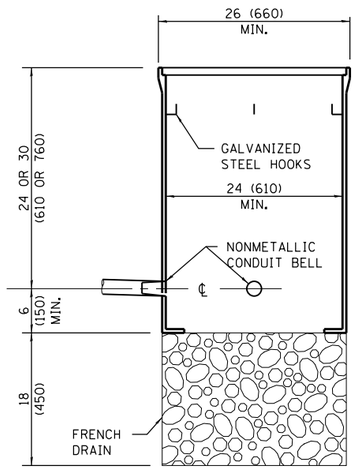
DMS SIGN ELEVATION
NOT TO SCALE



CCTV POLE ELEVATION
ON DRILLED SHAFT FOUNDATION DETAIL
NOT TO SCALE

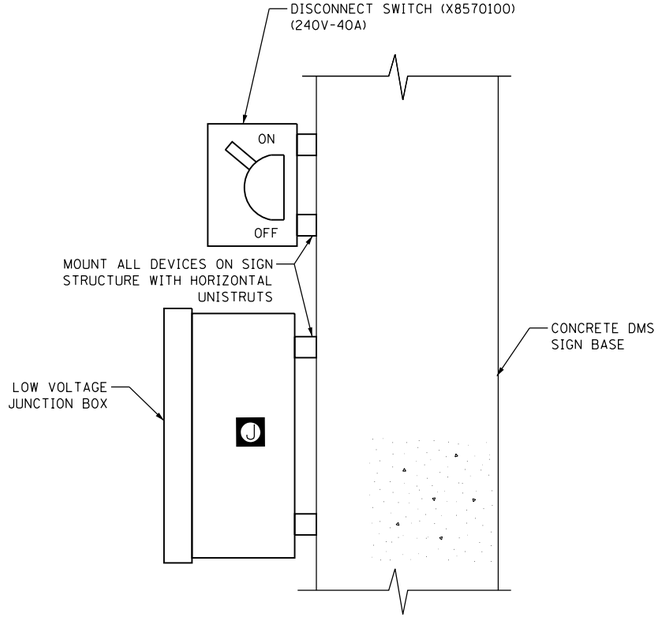


PLAN



ELEVATION

HANDHOLE DETAIL
NOT TO SCALE



ELECTRICAL AND LOW VOLTAGE
BOX MOUNTING DETAIL
NOT TO SCALE

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		DRAWN DTL	REVISED -
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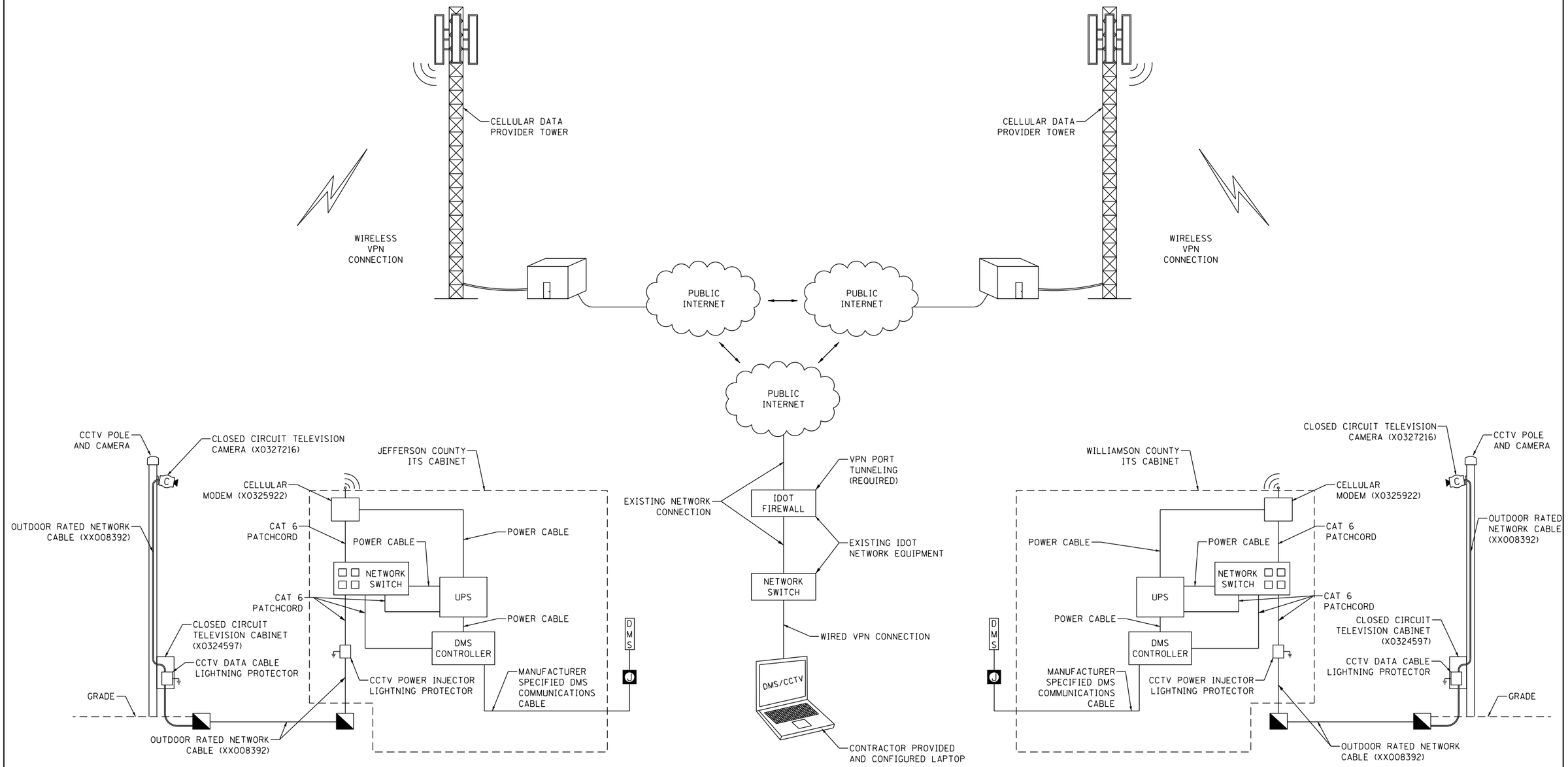
	PLOT DATE = 3/16/2015	DATE 03-16-15	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ITS DETAILS
VARIOUS

SCALE: N.A. | SHEET 1 OF 1 SHEETS | STA. | TO STA.

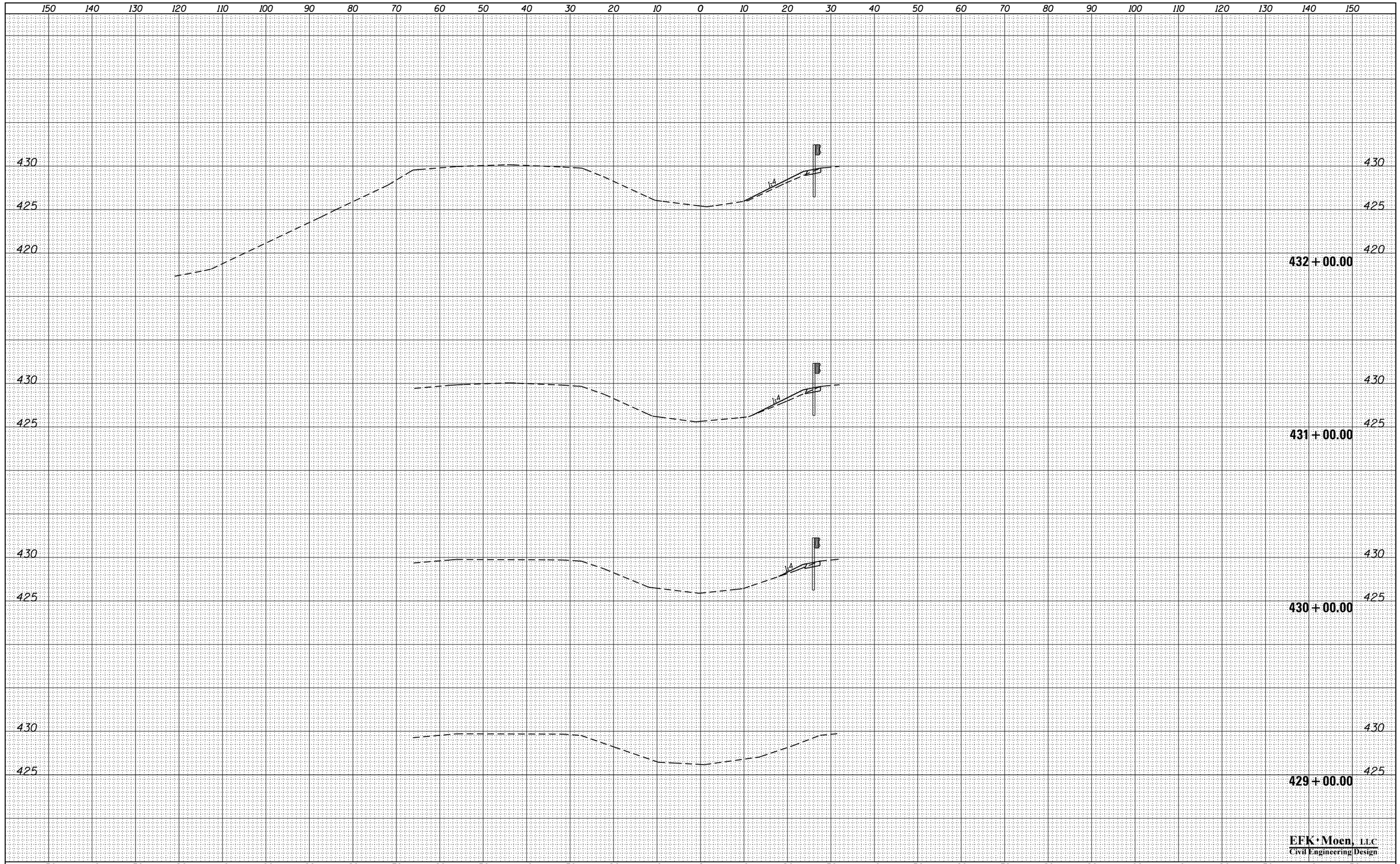
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1-57	D9 ITS SIGNING 2013-1	JEFFERSON/ WILLIAMSON	38	31
		CONTRACT NO. 78337		
		ILLINOIS FED. AID PROJECT		



ITS COMMUNICATIONS NETWORK DIAGRAM

NOT TO SCALE

FILE NAME = ITS comm network diagram.dgn	USER NAME = jdardeen	DESIGNED RAG	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ITS DETAILS COMMUNICATIONS NETWORK DIAGRAM			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN DTL	REVISED -					I-57	D9 ITS SIGNING 2013-1	JEFFERSON/ WILLIAMSON	38	32
	PLOT SCALE = 20.0025 ' / in.	CHECKED KLG	REVISED -								CONTRACT NO. 78337	
	PLOT DATE = 3/16/2015	DATE 03-16-15	REVISED -		SCALE: N.A.	SHEET 1 OF 1 SHEETS	STA. TO STA.			ILLINOIS	FED. AID PROJECT	



FINAL SURVEY

NO.	NOTE BOOK	SURVEYED	BY	DATE
		PLOTTED		
		TEMPLATE		
		AREAS		
		AREAS CHECKED		

ORIGINAL SURVEY

NO.	NOTE BOOK	SURVEYED	BY	DATE
		PLOTTED		
		TEMPLATE		
		AREAS		
		AREAS CHECKED		

EFK·Moen, LLC
Civil Engineering Design

FILE NAME =	USER NAME = jd	DESIGNED - JRD	REVISED -
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	PLOT SCALE = 20.0000 ' / in.	CHECKED - SLD	REVISED -
	PLOT DATE = 3/16/2015	DATE - 3/13/15	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

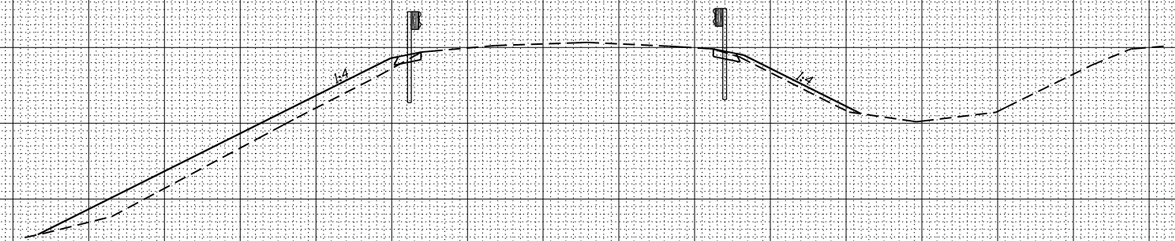
CROSS SECTIONS

SCALE: 10'H : 5V | SHEET 1 OF 3 SHEETS | STA. 428+00.00 TO STA. 432+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	D9 ITS SIGNING 2013-1	JEFFERSON	38	33
		CONTRACT NO. 78337		
	ILLINOIS FED. AID PROJECT			

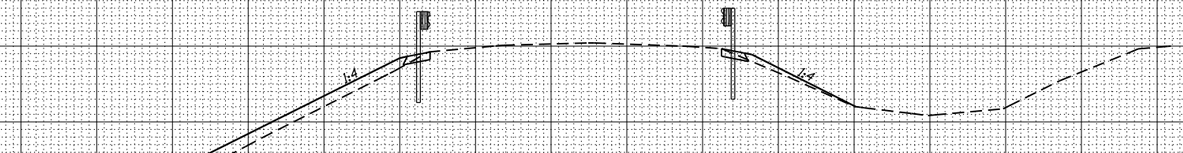
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

430
425
420



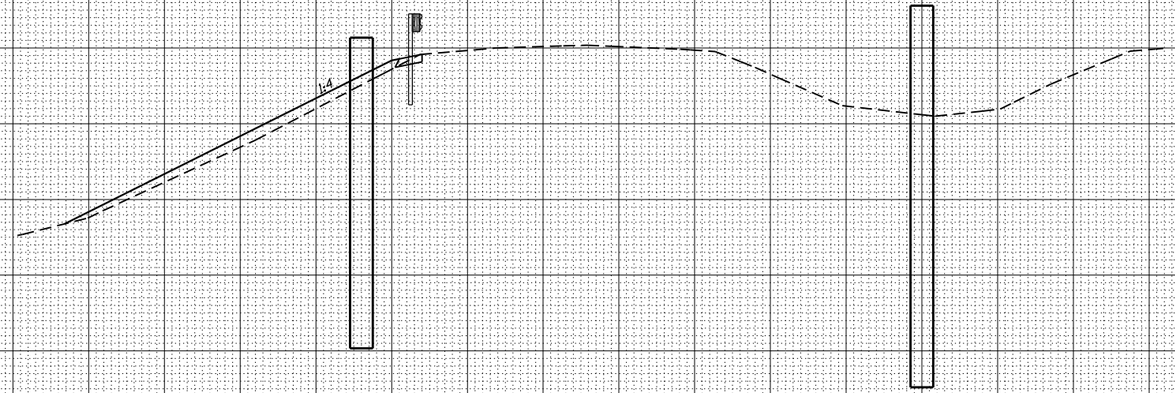
434 + 00.00

430
425
420



433 + 00.00

430
425
420
415
410
405



432 + 50.00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FINAL SURVEY

NO.	BY	DATE
NOTE BOOK		
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

ORIGINAL SURVEY

NO.	BY	DATE
NOTE BOOK		
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

EFK·Moen, LLC
Civil Engineering Design

FILE NAME = Y:\14010 IDOT D9 ITS\DGN\Design\Prelim\Plotsheets\D978337-033-035-xsec-Jeff.dgn	USER NAME = jd	DESIGNED - JRD	REVISED -
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	PLOT DATE = 3/16/2015	DATE - 3/13/15	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: 10'H : 5V | SHEET 2 OF 3 SHEETS | STA. 432+50.00 TO STA. 434+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	D9 ITS SIGNING 2013-1	JEFFERSON	38	34
		CONTRACT NO. 78337		
		ILLINOIS FED. AID PROJECT		

FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

430
425

436 + 00.00

435 + 00.00

1:3.5

1:4

430
425
420
415

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

EFK·Moen, LLC
Civil Engineering Design

FILE NAME = Y:\14010 IDOT D9 ITS\DGN\Design\Prelim\Plotsheets\D978337-033-035-xsec-Jeff.dgn	USER NAME = jd	DESIGNED - JRD	REVISED -
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	PLOT SCALE = 20.0000 ' / in.	CHECKED - SLD	REVISED -
	PLOT DATE = 3/16/2015	DATE - 3/13/15	REVISED -

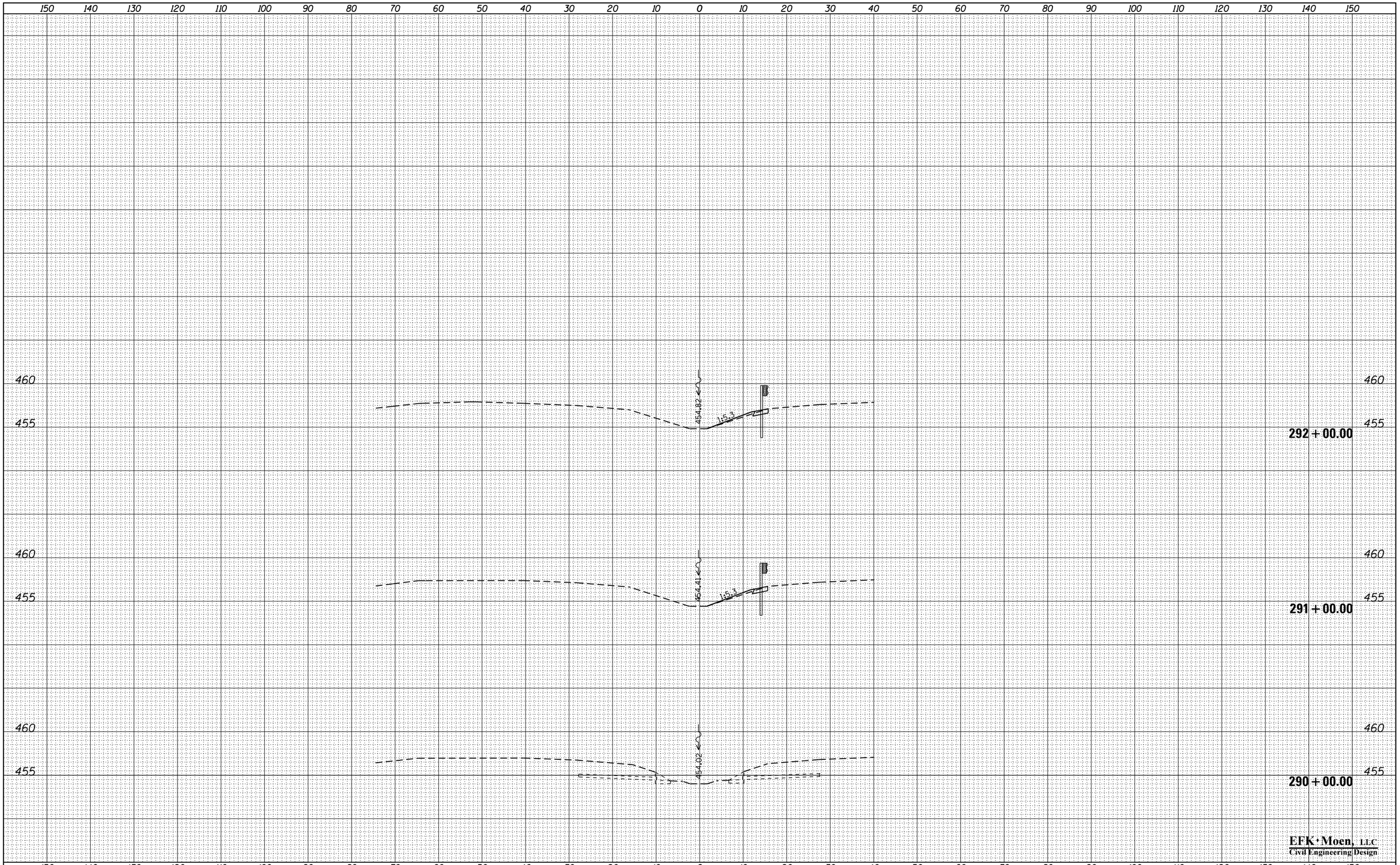
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: 10'H : 5V | SHEET 3 OF 3 SHEETS | STA. 435+00.00 | TO STA.436+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	D9 ITS SIGNING 2013-1	JEFFERSON	38	35
		CONTRACT NO. 78337		
	ILLINOIS FED. AID PROJECT			

FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		



ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

EFK·Moen, LLC
Civil Engineering Design

FILE NAME = Y:\14010 IDOT D9 ITS\DGN\Design\Prelim\Plotsheets\D978337-036-038-xsec-Wall.dgn	USER NAME = jd	DESIGNED - JRD	REVISED -
		DRAWN - JRD	REVISED -
	PLOT SCALE = 20.0000 ' / in.	CHECKED - SLD	REVISED -
	PLOT DATE = 3/16/2015	DATE - 3/13/15	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

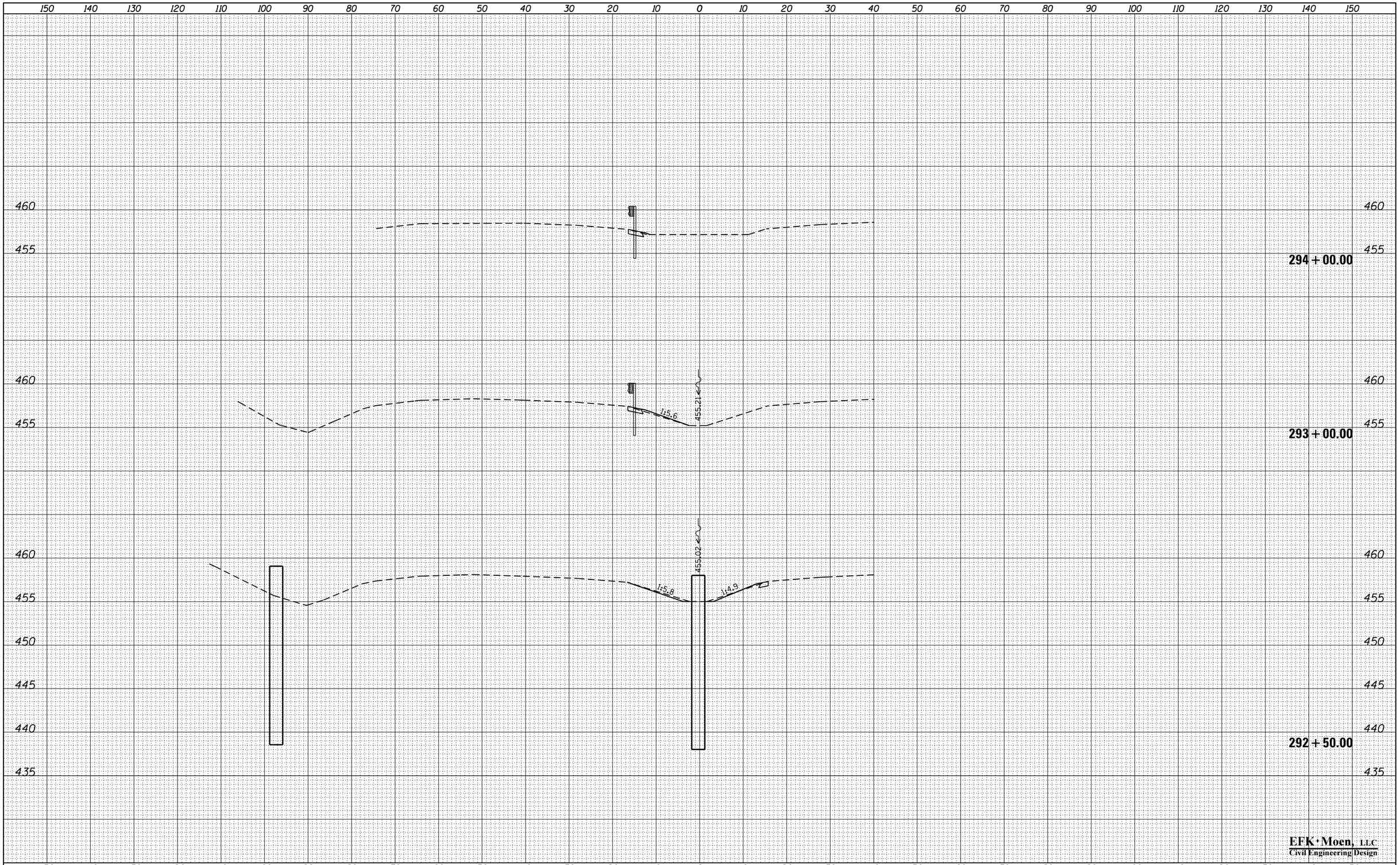
CROSS SECTIONS

SCALE: 10'H : 5'V | SHEET 1 OF 3 SHEETS | STA. 290+00.00 TO STA. 292+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	D9 ITS SIGNING 2013-1	WILLIAMSON	38	36
		CONTRACT NO. 78337		
	ILLINOIS FED. AID PROJECT			

FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		



EFK·Moen, LLC
Civil Engineering Design

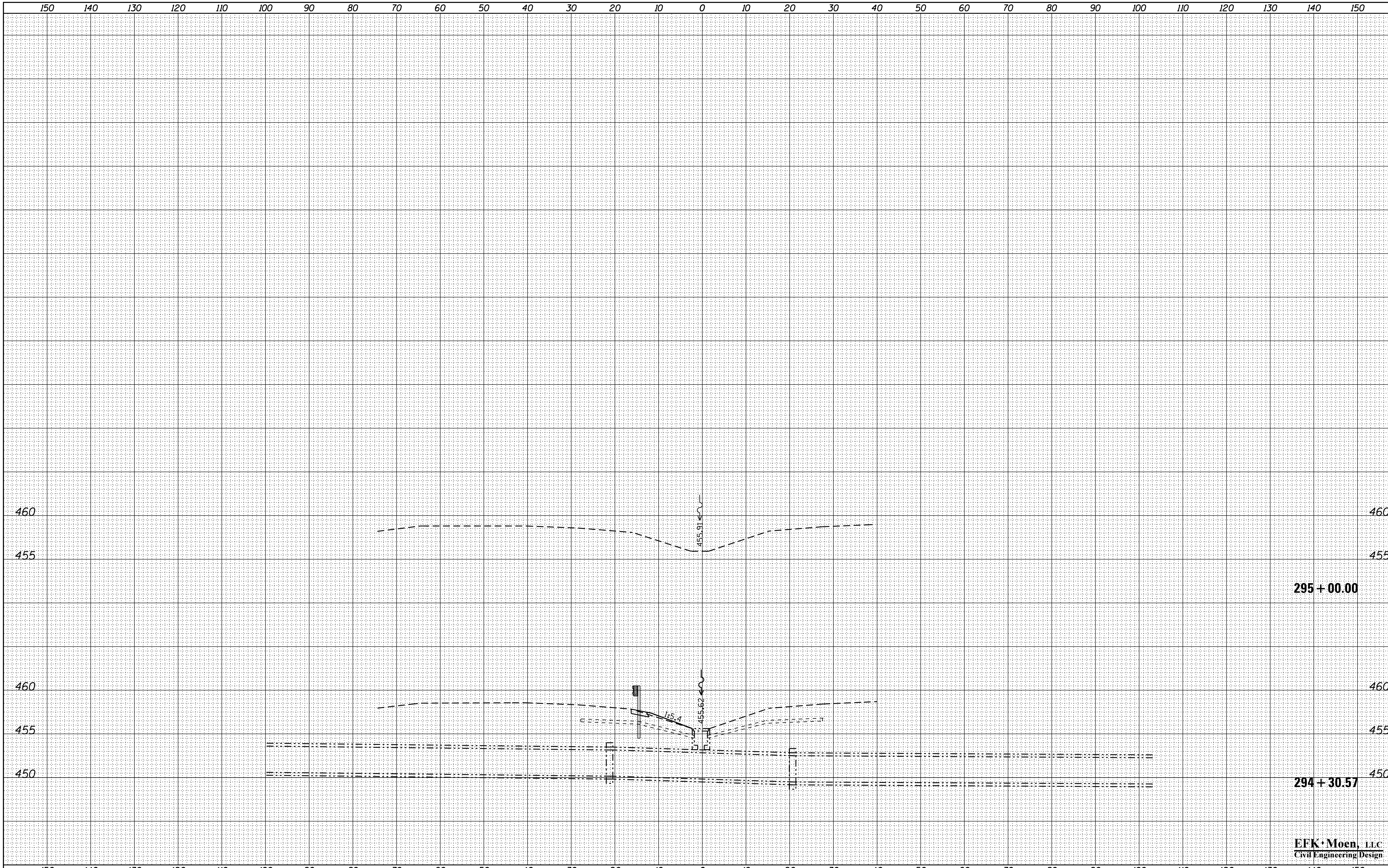
FILE NAME =	USER NAME = jd	DESIGNED - JRD	REVISED -
Y:\14010 IDOT D9 ITS\DGN\Design\Prelim\Plotsheets\D978337-036-038-xsec-Wall.dgn		DRAWN - JRD	REVISED -
	PLOT SCALE = 20.0000 ' / in.	CHECKED - SLD	REVISED -
	PLOT DATE = 3/16/2015	DATE - 3/13/15	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: 10'H : 5'V | SHEET 2 OF 3 SHEETS | STA. 292+50.00 TO STA. 294+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	D9 ITS SIGNING 2013-1	WILLIAMSON	38	37
		CONTRACT NO. 78337		
		ILLINOIS FED. AID PROJECT		



EFK•Moen, LLC
Civil Engineering Design

FILE NAME =	USER NAME = jd	DESIGNED - JRD	REVISED -
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	PLOT SCALE = 20.0000 ' / in.	CHECKED - SLD	REVISED -
	PLOT DATE = 3/16/2015	DATE - 3/13/15	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: 10'H : 5'V | SHEET 3 OF 3 SHEETS | STA. 294+30.57 TO STA.295+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	D9 ITS SIGNING 2013-1	WILLIAMSON	38	38
		CONTRACT NO. 78337		
		ILLINOIS	FED. AID PROJECT	

FINAL SURVEY	BY	DATE
NOTE BOOK NO.		
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

ORIGINAL SURVEY	BY	DATE
NOTE BOOK NO.		
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		