# 06-12-2015 LETTING ITEM 062 INDEX OF SHEETS

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2. GENERAL NOTES

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11.-12. BLUETOOTH POLE DETAILS

13.-15. DMS SITE LOCATIONS
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# HIGHWAY STANDARDS

90-100000 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS 001006 DECIMAL OF AN INCH AND OF A FOOT STEEL PLATE BEAM GUARDRAIL TRAFFIC BARRIER TERMINAL, TYPE 2 631011-09 635006-03 REFLECTOR AND TERMINAL MARKER PLACEMENT REFLECTOR MARKER AND MOUNTING DETAILS 635011-02 701001-02 OFF-ROAD OPERATIONS 2L. 2W, MORE THAN 15' (4.5 m) AWAY OFF-ROAD OPERATIONS 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM 701006-05 OFF-ROAD OPERATIONS MULTILANE, 15' (4.5 m) TO 24" (600 mm) FROM 701101-04 PAVEMENT FORF 701106-02 OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' (4.5 m) AWAY LANE CLOSURE, 2L, 2W. DAY ONLY, FOR SPEEDS 2 45 MPH FOR SPEEDS 2" 45 MPH LANE CLOSURE, FREEWAY/EXPRESSWAY 701401-09 701428 TRAFFIC CONTROL SETUP AND REMOVAL FREEWAY/EXPRESSWAY 701901-04 TRAFFIC CONTROL DEVICES 805001-01 ELECTRICAL SERVICE INSTALLATION DETAILS 814001-03 836001-02 LIGHT POLE FOUNDATION BREAKAWAY DEVICES 838001

# STATE OF ILLINOIS

# **DEPARTMENT OF TRANSPORTATION**

**DIVISION OF HIGHWAYS** 

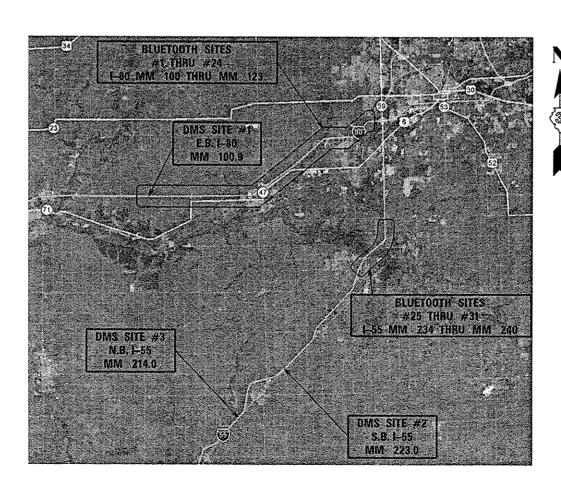
# PROPOSED HIGHWAY PLANS

FAI ROUTE 80 & 55

SECTION D3 OVD MESSAGE SG-2015

DMS & BLUETOOTH INSTALLATION
(LASALLE, GRUNDY, LIVINGSTON & WILL COUNTIES) VARIOUS

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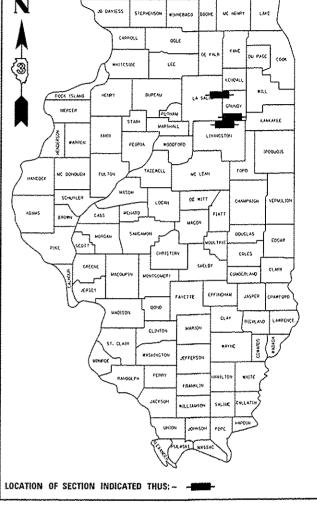


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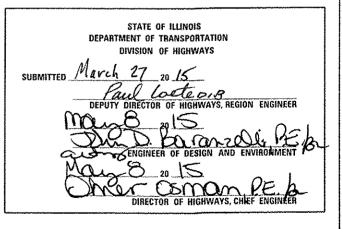
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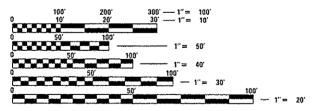
ILLINOIS CONTRACT NO. 66D79



# FUNCTIONAL CLASSIFICATION RURAL - INTERSTATE



PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED,

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

PROJECT ENGINEER: TOM HUFNAGEL, P.E. UNIT CHIEF: HASAN AHMED TOWNSHIPS: VARIOUS

CONTRACT NO. 66D79

# GENERAL NOTES

PLAN DIMENSIONS AND DETAILS RELATIVE TO THE EXISTING PLANS ARE SUBJECT TO ROUTINE VARIATIONS. THE CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF THE WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY FURNISHED BASED UPON THE UNIT BID PRICE FOR THE WORK.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY FROM CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS. THE "JULIE" NUMBER IS 1-800-892-0123. A MINIMUM OF FORTY-EIGHT (48) HOURS ADVANCE NOTICE IS REQUIRED.

THE LOCATION OF ALL UTILITIES AND PRIVATELY OWNED FACILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE INSTALLATION OF ANY COMPONENTS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING EXISTING IDOT ELECTRICAL FACILITIES AT HIS/HER OWN EXPENSE IF REQUIRED. THE CONTRACTOR SHALL ALSO BE LIABLE FOR ANY DAMAGE TO IDOT FACILITIES RESULTING FROM INACCURATE LOCATING.

THE CONTRACTOR WILL CONTACT THE DISTRICT 1 ELECTRICAL MAINTENANCE CONTRACTOR FOR LOCATING UTILITIES IN WILL COUNTY.

THE CONTRACTOR WILL CONTACT AND COORDINATE WITH THE EXISTNIG DISTRICT I GATEWAY PROVIDER BEFORE BEGINNING THE GATEWAY INTEGRATION WORK, AND THE EXISTING DISTRICT 1 ATMS PROVIDER BEFORE BEGINNING THE ATMS INTEGRATION WORK.

ELECTRICAL WORK SHALL CONFORM WITH NATIONAL, STATE, AND LOCAL CODES.

THE CONTRACTOR SHALL PROVIDE ELECTRICAL CABLE SLACK IN ACCORDANCE WITH ARTICLE 873.03 UNLESS SPECIFIED OTHERWISE. ELECTRICAL CABLE WILL BE MEASURED FOR PAYMENT IN ACCORDANCE WITH ARTICLE 873.05.

ALL SURPLUS MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH ARTICLE 202.03 OF THE STANDARD SPECIFICATION.

THE COMMUNICATION VAULT SHALL BE CONSTRUCTED SO THAT THE TOP OF THE FRAME WILL BE FLUSH WITH THE SURFACE OF THE MEDIAN, SIDEWALK, OR GROUND LINE,

POTHOLING TO LOCATE EXISTING UNDERGROUND UTILITIES SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR THE UNDERGROUND CONDUIT PAY ITEMS.

NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR PLACING CONDUIT AT GREATER THAN 2 FT, MINIMUM DEPTH TO AVOID OBSTACLES SUCH AS UNDERGROUND UTILITIES AND STRUCTURES.

THE CONTRACTOR IS RESPONSIBLE FOR THE COST OF UNCOVERING OR HAND DIGGING AROUND UTILITIES AS NECESSARY. THIS COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT PRICES FOR THE CONDUITS.

REINFORCEMENT BARS SHALL BE EPOXY COATED

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER SHOWN IN THE LIST OF STANDARDS OR THE COPY INCLUDED IN THESE PLANS.

# COMMITMENTS

ALL EXCAVATED MATERIAL, WHICH INCLUDES DIGGING OR GRADING OF ANY SOIL OR FILL MATERIAL, WITH THE EXCEPTION OF AGGREGATE FILLS, MUST BE INCORPORATED WITHIN THE IDOT RIGHT OF WAY DUE TO ENVIRONMENTAL DOCUMENTATION REQUIREMENTS. EXCAVATED MATERIALS SHALL BE DISPOSED OF AT LOCATIONS DESIGNATED BY THE ENGINEER. ANY SUCH DISPOSAL SHALL BE COMPLETED IN SUCH A MANNER THAT PUBLIC OR PRIVATE PROPERTY WILL NOT BE DAMAGED OR ENDANGERED AND SHALL NOT CREATE AN UNSIGHTLY OR OBJENTIONABLE APPEARANCE OR DETRACT FROM THE NATURAL TOPOGRAPHIC FEATURES WITHOUT WRITTEN PERMISSION FROM THE ENGINEER.

UNION PACIFIC RAILROAD COMPANY'S WIRELINE CROSSING AGREEMENT HAS BEEN INCLUDED IN THE SPECIAL PROVISIONS. THE CONTRACTOR SHALL ADHERE TO THE TERMS OF THIS AGREEMENT.

PREPARED BY:

DISTRICT OPERATIONS ENGINEER

EXAMINED BY:

DISTRICT STUDIES & PLANS ENGINEER

DISTRICT GONSTRUCTION ENGINEER

DISTRICT MATERIALS ENGINEER

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į	CODE NO.	ITEM	UNIT	TOTAL	0040 RURAL	0040 RURAL	0040 RURAL	0040 RURAL
X	63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	487.5	87.5	200	200	
*	63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	2		1	1	
*	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	2		1	1	
***************************************	67100100	MOBILIZATION	L SUM	1.0	0. 25	0. 25	0. 25	0. 25
***************************************	70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM				1	
***************************************	73301805	OVERHEAD SIGN STRUCTURE - BUTTERFLY, TYPE III-F-A	FOOT	116.0	38. 66	38. 66	38. 66	
***************************************	73301900	OVERHEAD SIGN STRUCTURE WALKWAY - BUTTERFLY, TYPE A	FOOT	19.0	6. 33	6. 33	6. 33	
***************************************	73400200	DRILLED SHAFT CONCRETE FOUNDATIONS	CU YD	27. 9	9. 3	9. 3	9. 3	
*	78200410	GUARDRAIL MARKERS, TYPE A	EACH	25	5	10	10	
*	78201000	. TERMINAL MARKER - DIRECT APPLIED	EACH	2		1	1	
	80400100	ELECTRIC SERVICE INSTALLATION	EACH	3	1	1	ì	
	81028190	UNDERGROUND CONDUIT, GALVANIZED STEEL, 1 1/2" DIA.	FOOT	85	15	40	30	
	81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	935	200	680	55	
***************************************	81702400	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2	FOOT	490	225		265	
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\*Specialty Hems

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DEPARTMENT OF TRANSPORTATION

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				T	MINOR STRUCTURES	MINOR STRUCTURES	MINOR STRUCTURES	MINOR STRUCTURES
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	81702440	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 1/0	FOOT	705		705		
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				***				
	83600352	LIGHT POLE FOUNDATION, METAL, 11 1/2" BOLT CIRCLE, 8 5/8" X 6'	EACH	31	3	20		8
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	83800105	BREAKAWAY DEVICE, TRANSFORMER BASE, 11.5 INCH BOLT CIRCLE	EACH	31	3	20		8
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	X0323920	POLE MOUNTED EQUIPMENT CABINET, TYPE B	EACH	3	1	1	<b>1</b>	
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	X0325379	DIRECTIONAL BORING	FOOT	190		***************************************	190	
				130		ei-ara	130	
	X0325485	TRUSS MOUNTED LED DYNAMIC MESSAGE SIGN	EACH	3	1	1	***	
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	X0325922	CELLULAR MODEM	EACH	3	1	1	1	
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	X0326880	MESSAGE BOARD VEHICLE DRIVER	HOUR	72.0	24	24	24	
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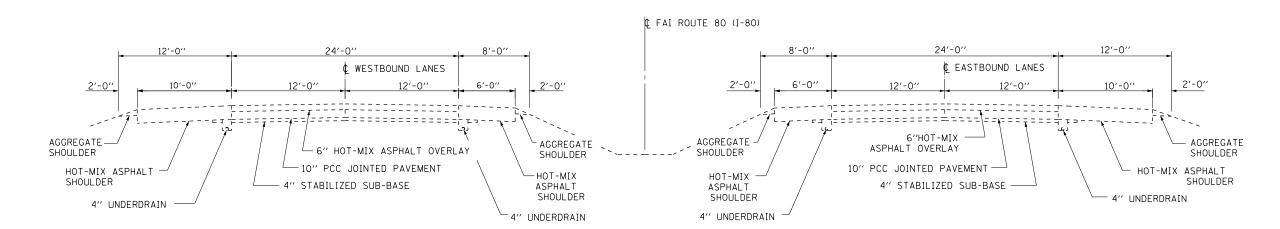


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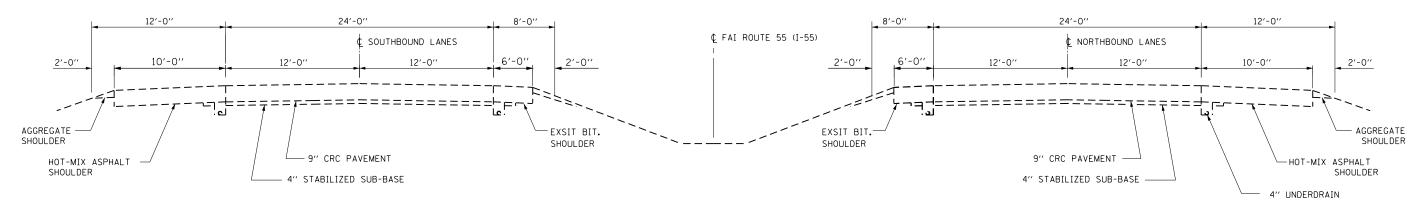
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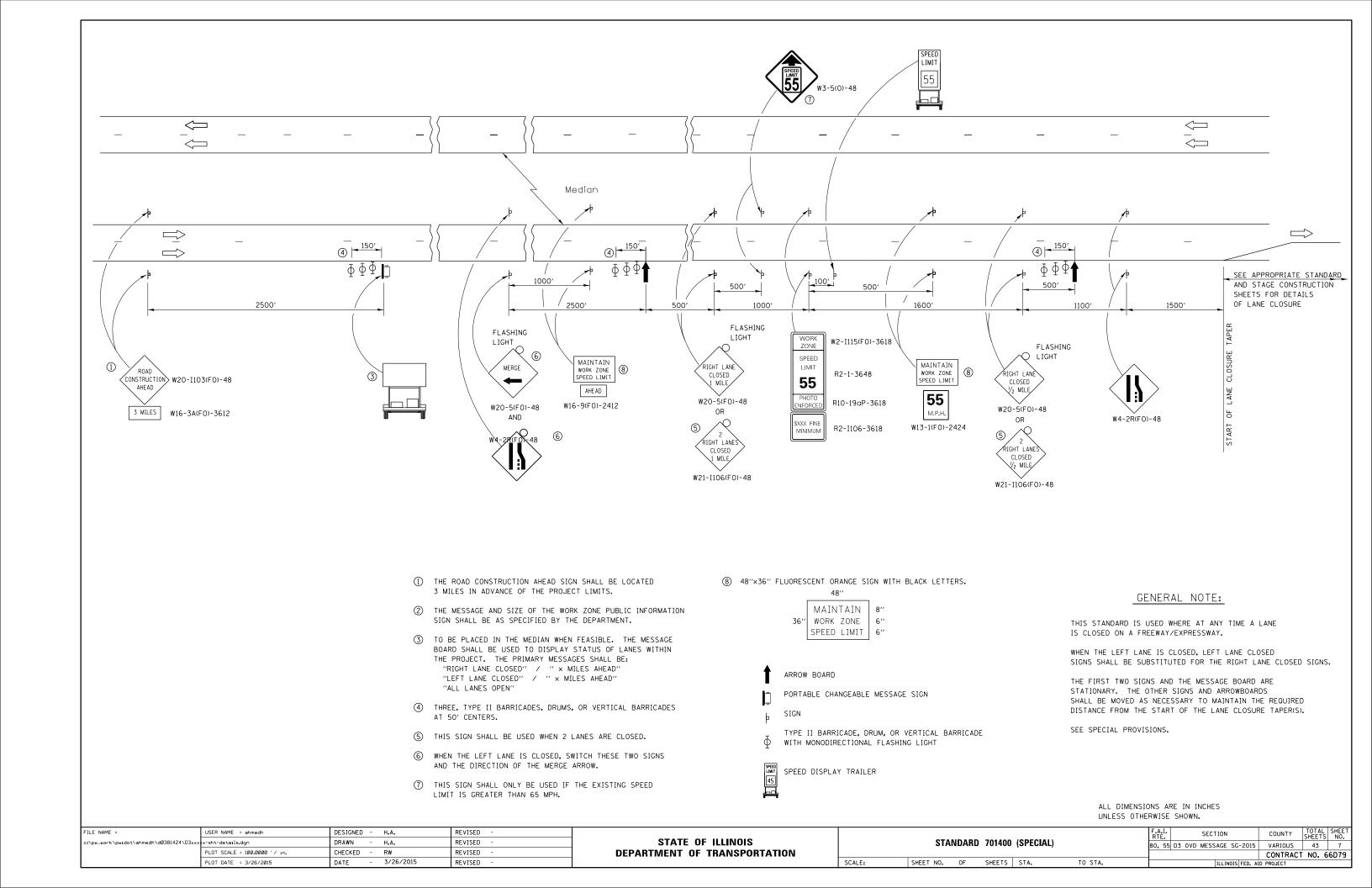
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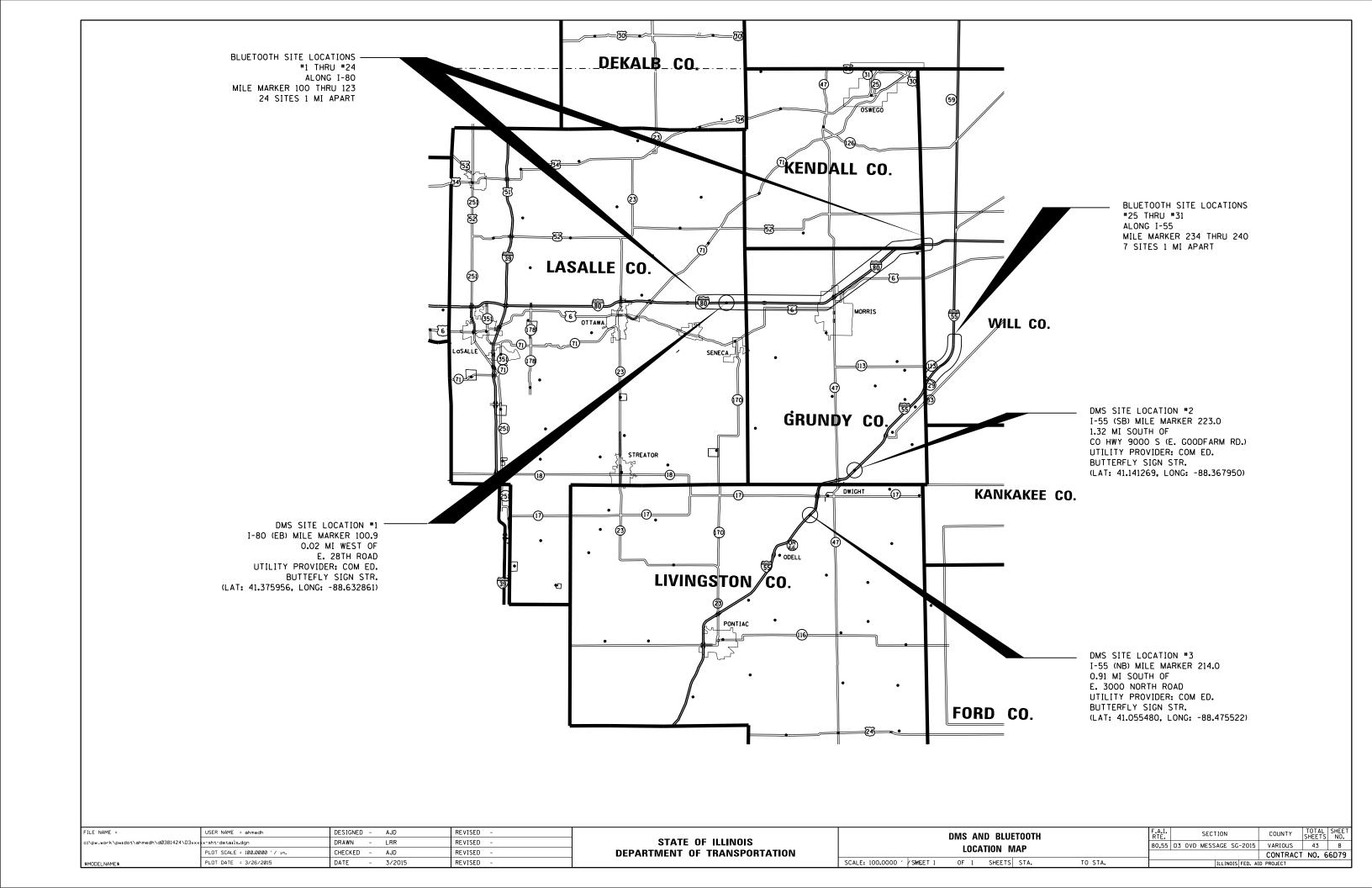
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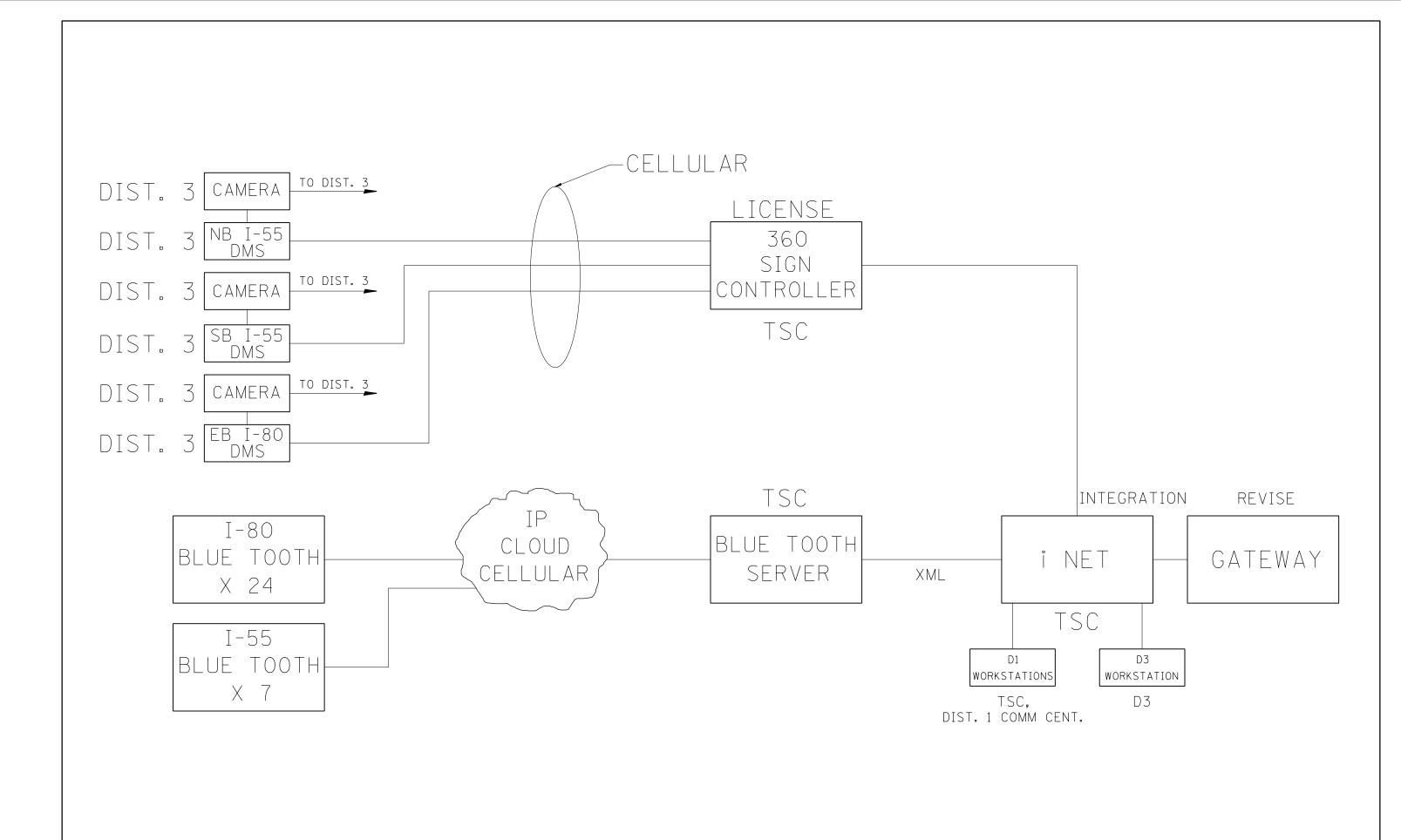


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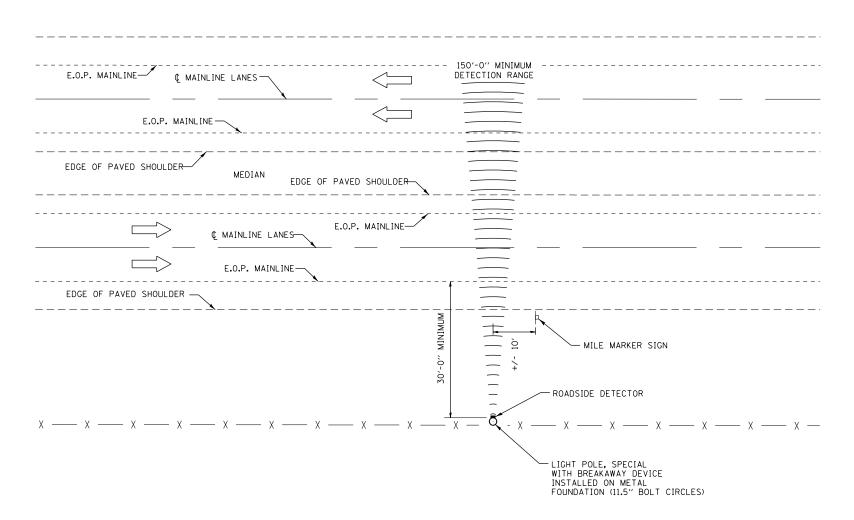
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# **BLUETOOTH DETECTOR LOCATION (TYP.)**

NOT TO SCALE

	S	CHEDULE OF (	DUANTITIES - 1-8	O BLUETOOTH DETE	CTORS	
ROUTE	ММ	DIRECTION		BREAKAWAY DEVICE. TRANSFORMER BASE. 11.5 INCH BOLT CIRCLE	ROADSIDE DETECTOR	LIGHT POLE, SPECIAL
I-80	100	EB	1	1	1	1
I-80	101	EB	1	1	1	1
I-80	102	WB	1	1	1	1
I-80	103	EB	1	1	1	1
I-80	104	WB	1	1	1	1
I-80	105	WB	1	1	1	1
I-80	106	EB	1	1	1	1
I-80	107	WB	1	1	1	1
I-80	108	EB	1	1	1	1
I-80	109	WB	1	1	1	1
I-80	110	EB	1	1	1	1
I-80	111	WB	1	1	1	1
I-80	112	EB	1	1	1	1
I-80	113	WB	1	1	1	1
I-80	114	EB	1	1	1	1
I-80	115	WB	1	1	1	1
I-80	116	EB	1	1	1	1
I-80	117	EB	1	1	1	1
I-80	118	WB	1	1	1	1
I-80	119	EB	1	1	1	1
I-80	120	EB	1	1	1	1
I-80	121	WB	1	1	1	1
I-80	122	EB	1	1	1	1
I-80	123	WB	1	1	1	1
	TOTALS	5	24	24	24	24

	S	CHEDULE OF (	DUANTITIES - I-5	5 BLUETOOTH DETE	CTORS	
ROUTE	ММ	DIRECTION	LIGHT POLE FOUNDATION, METAL, 11 1/2" BOLT CIRCLE	BREAR AND AND THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF	ROADSIDE DETECTOR	LIGHT POLE, SPECIAL
I-55	234	NB	1	1	1	1
I-55	235	SB	1	1	1	1
I-55	236	NB	1	1	1	1
I-55	237	SB	1	1	1	1
I-55	238	NB	1	1	1	1
I-55	239	SB	1	1	1	1
I-55	240	NB	1	1	1	1
	TOTALS	5	7	7	7	7

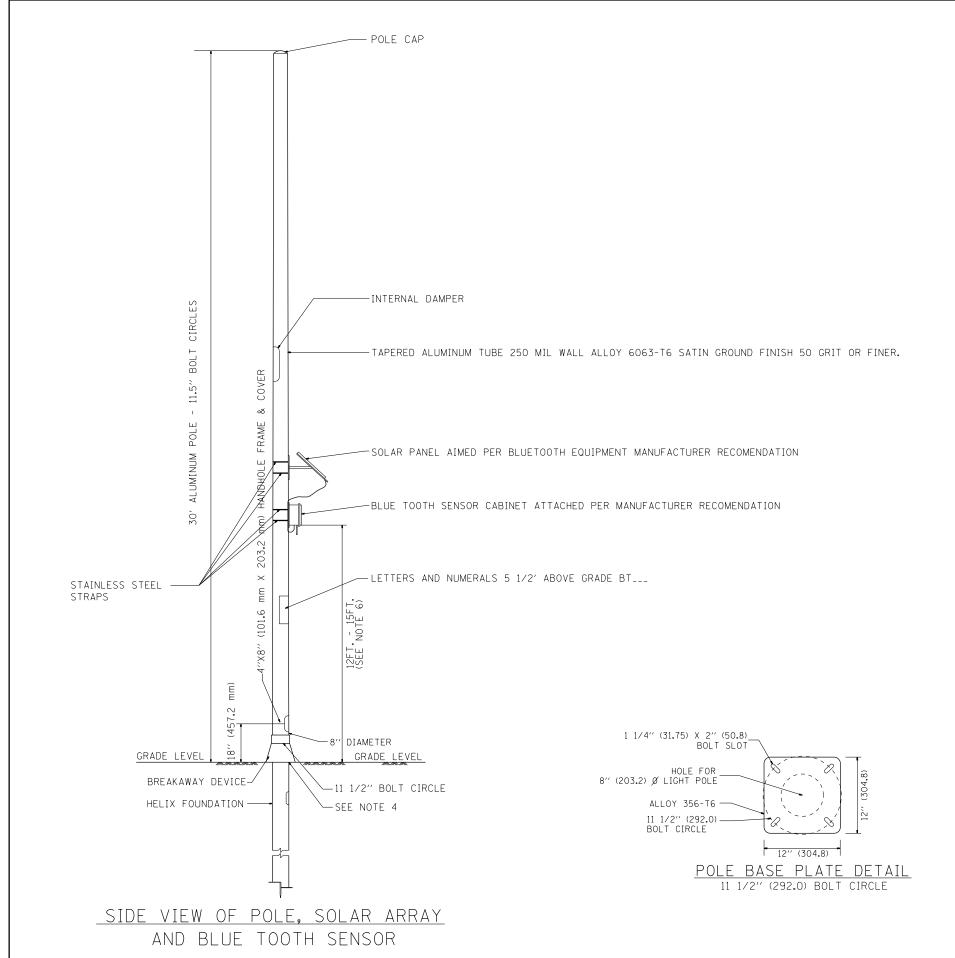
# NOTES:

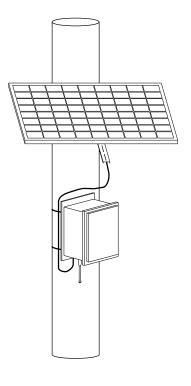
- 1. THE DETECTORS SHALL BE PLACED AT THE ACCESS CONTROL FENCE WHENEVER PRACTICAL OR AS DIRECTED BY THE ENGINEER.
- 2. THE BLUETOOTH DETECTOR VENDOR SHALL BE INVOLVED IN SITE VERIFICTION FOR EACH LOCATION.
- 3. THE FINAL LOCATION OF EACH BLUETOOTH DETECTOR SHALL BE DETERMINED BY THE ENGINEER.

SCALE:

\$MODELNAME\$	PLOT SCALE = 100.0000 ' / in.  PLOT DATE = 3/26/2015	DATE -	R.W. 3/26/2015	REVISED - REVISED -	DEPARTMENT OF TRANSPORTATION
c:\pw_work\pwidot\ahmedh\d0381424\D3xxx	-	DRAWN - CHECKED -		REVISED -	STATE OF ILLINOIS
	USER NAME = ahmedh	DESIGNED -	H.A.	REVISED -	CTATE OF HUMOIC

BLUETOOTH DETECTOR	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
LOCATION DETAIL & SCHEDULES	80, 55	D3 OVD MESSAGE SG-2015	VARIOUS	43	10	
LOCATION DETAIL & SUILDULLS			CONTRACT	NO. 6	6D79	
SHEET 1 OF 1 SHEETS STA	TO STA		THE INDIS EED AT	D DDO ICCT		





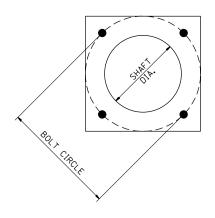
FRONT VIEW OF POLE, SOLAR ARRAY

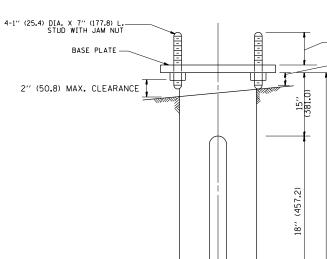
AND BLUE TOOTH SENSOR DETAIL

# NOTES:

- 1.- THE POLE WILL MEET AASHTO DESIGN CRITERIA.
- 2.- POLES WILL BE SET PLUMB ON THE FOUNDATION WITHOUT THE USE OF LEVELING NUTS, WASHERS OR SHIMS.
- 3.- THERE SHALL BE NO PENETRATIONS IN POLE, EXCEPT FOR HANDHOLE.
- 4.- THE HELIX FOUNDATION BASE PLATE SHALL BE COORDINATED WITH THE TRANSFORMER BASE SO THE BOTTOM OF THE TRANSFORMER BASE DOES NOT OVERHANG THE FOUNDATION BASE PLATE.
- 5.- ALL PENETATION INTO BOX SHALL BE FROM BOTTOM. DRIP LOOPS SHALL BE INCLUDED.
- 6.- BLUE TOOTH DETECTORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER RECOMMENDATION OF 12-15 FT. ABOVE TRAVELLED LANE.
- 7.- BLUE TOOTH POLES SHALL BE LOCATED OUTSIDE CLEAR ZONE, UNLESS APPROVED BY ENGINEER. THEY SHALL BE INSTALLED BEHIND GUADRAIL WHEN IT IS LESS THEN 500 FT. FROM PLAN LOCATIONS.

FILE NAME =	USER NAME = ahmedh	DESIGNED - H.A.	REVISED -							SECTION	COUNTY	TOTAL SHEET SHEETS NO.
c:\pw_work\pwidot\ahmedh\d0381424\D3xxx	xx-sht-details.dgn	DRAWN - H.A.	REVISED -	STATE OF ILLINOIS	SOLAR POWERED BLUE TOOTH POLE DETAIL		80, 55 D3	OVD MESSAGE SG-2015	VARIOUS	43 11		
	PLOT SCALE = 100.0000 '/ in.	CHECKED - R.W.	REVISED -	DEPARTMENT OF TRANSPORTATION							CONTRAC	T NO. 66D79
\$MODELNAME\$	PLOT DATE = 3/26/2015	DATE - 3/26/2015	REVISED -		SCALE:	SHEET 1 OF 1 SHE	EETS STA.	TO STA.		ILLINOIS FED. AI	D PROJECT	



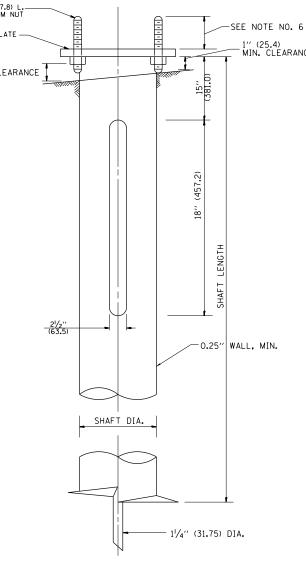


# HELIX FOUNDATION SIZE

POLE MOUNTING HEIGHT	BOLT CIRCLE	SHAFT DIAMETER	SHAFT LENGTH	BASEPLATE
30 FT.	111/2''	85/8′′	6 FT.	12''×12''×1''
31 FT35 FT.	111/2''	85/8′′	6 FT.	12''×12''×1''
36 FT40FT.	15"	85/8′′	6 FT.	15''×15''×1 <sup>1</sup> / <sub>4</sub> ''
41 FT45 FT.	15''	85/8′′	6 FT.	15''×15''×1 <sup>1</sup> / <sub>4</sub> ''
46 FT50 FT.	15"	10''	8 FT.	15''×15''×1 <sup>1</sup> / <sub>4</sub> ''

# METAL HELIX FOUNDATION MATERIALS

ITEM	MATERIAL REQUIREMENT
BASEPLATE	AASHTO M 270M, GRADE 36 (M270M, GRADE 250)
SHAFT	ASTM A 252, GRADE 2 (PHOSPHOROUS 0.04% MAXIMUM, SULFUR 0.05% MAXIMUM)
HELIX SCREW	AASHTO M 183 (ASTM A 635)
PILOT POINT	AASHTO M 270 (ASTM A 575)
ANCHOR RODS/STUDS	AASHTO M 314 (ASTM F 1554)
HEXAGON NUTS	AASHTO M 291M (ASTM A 563) GRADE DH, OR AASHTO M 292 (ASTM A 194) GRADE 2H
WASHERS	AASHTO M 293 (ASTM F 436)



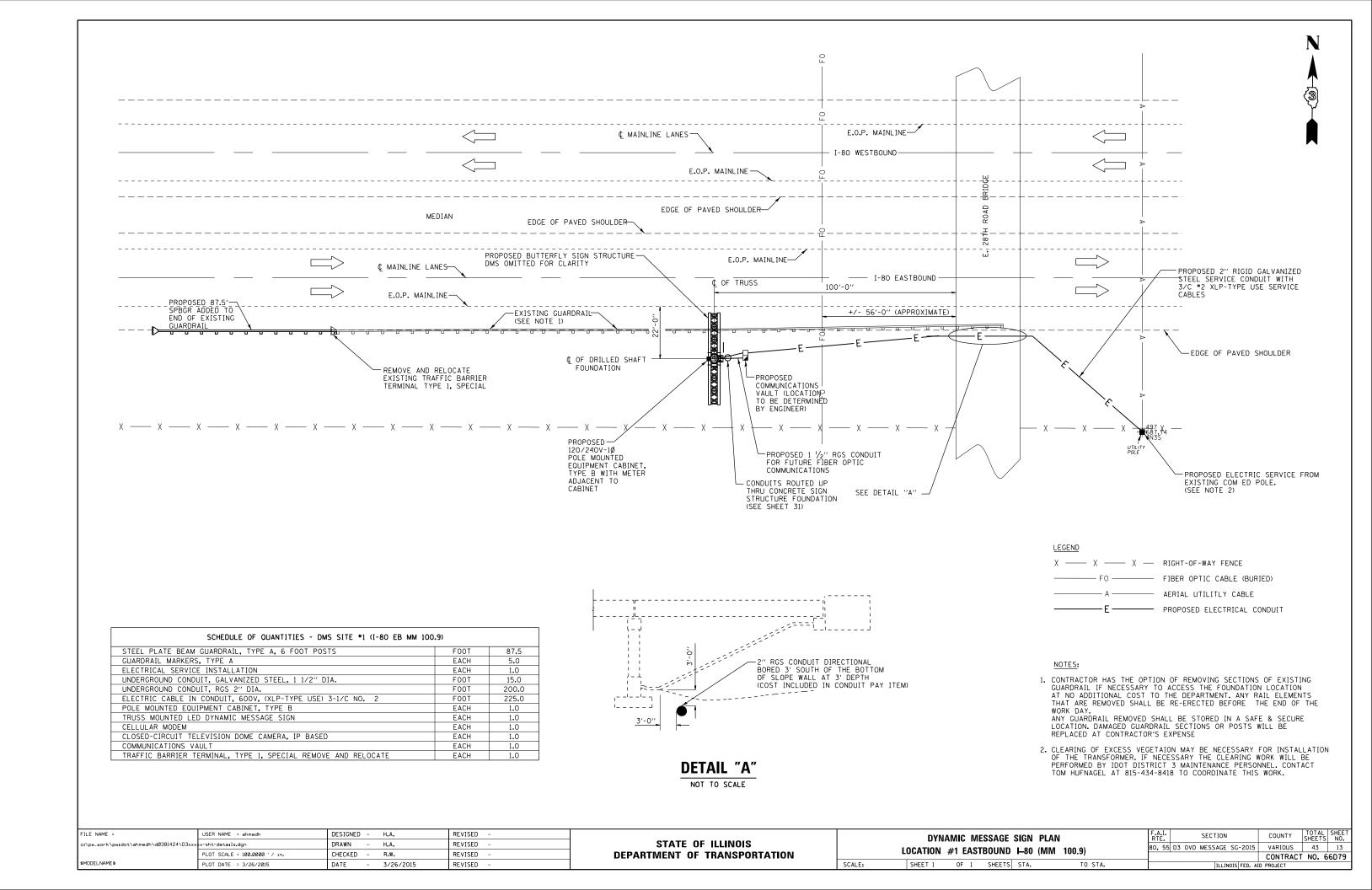
# NOTES:

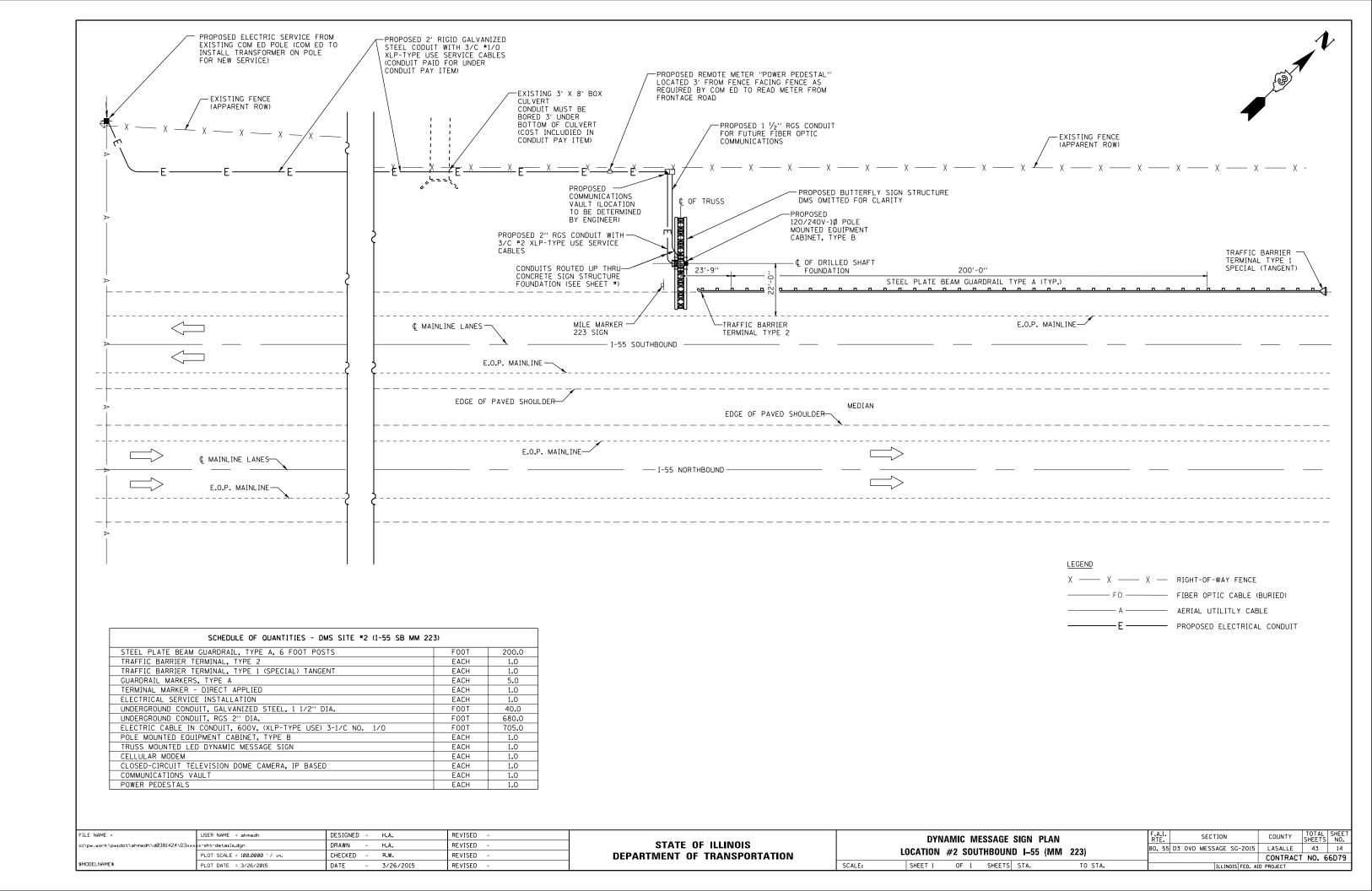
- 1. ALL DIMENSION IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- 2. ALL MATERIAL SHALL BE GALVINIZED ACCORDING TO AASHTO M111, UNLESS OTHERWISE SPECIFIED.
- 3. ALL WELDS SHALL BE CONTINUOUS AND NOT LESS THAN  $\frac{1}{4}$ " (6.35 mm) FILLET WELDS. THE WELDED FOUNDATION SHALL BE CAPABLE OF WITHSTANDING 10,000 FT/LBS (13558.18 n.m) OF INSTALLATION TORQUE APPLIED ABOUT THE AXIS OF THE FOUNDATION.
- 4. THE HELIX FOUNDATION SHAFT SHALL BE INSTALLED VERTICAL AND THE BASE PLATE SHALL BE IN LEVEL. THE BREAKAWAY COUPLINGS AND HARDWARE SHALL NOT BE USED TO ALIGN THE POLE INSTALLATION.
- 5. THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE INSTALLATION OF THE LIGHT POLE.
- 6. THE CONTRACTOR SHALL COORDINATE EXTENSION OF ANCHOR BOLTS ABOVE TOP OF THE BASE PLATE WITH THE BREAKAWAY DEVICE MANUFACTURER'S REQUIREMENTS.
- 7. ANY VOIDS WITHIN THE METAL FOUNDATION SHALL BE FILLED WITH FINE AGGREGATE.
- 8. METAL FOUNDATIONS SHALL BE INSTALLED IN UNDISTURBED SOIL. PREDRILLING A PILOT HOLE AND/OR BACKFILLING AROUND THE FOUNDTION IS NOT ALLOWED.
- 9. THE METAL FOUNDATION SHALL NOT BE INSTALLED TO A TORQUE WHICH EXCEEDS THE MANUFACTURER'S MAXIMUM TORQUE RATING NOR SHALL IT BE INSTALLED TO AN INSTALLATION TORQUE VALUE OF LESS THAN 3,500 FT LB (4,750 KNM). METAL FOUNDATIONS THAT ARE NOT INSTALLED TO FULL INSTALLATION DEPTH OR DO NOT ACHIEVE THE MINIMUM INSTALLATION TORQUE SHALL BE REMOVED AND REPLACED WITH A CONCRETE FOUNDATION AT NO ADDITIONAL COST.
- 10. THE BASEPLATE SHALL BE PERPENDICULAR TO THE SHAFT AXIS (± 1°) AND THE HOLE CENTERLINE SHALL BE CONCENTRIC (± 0.188) TO THE SHAFT AXIS.

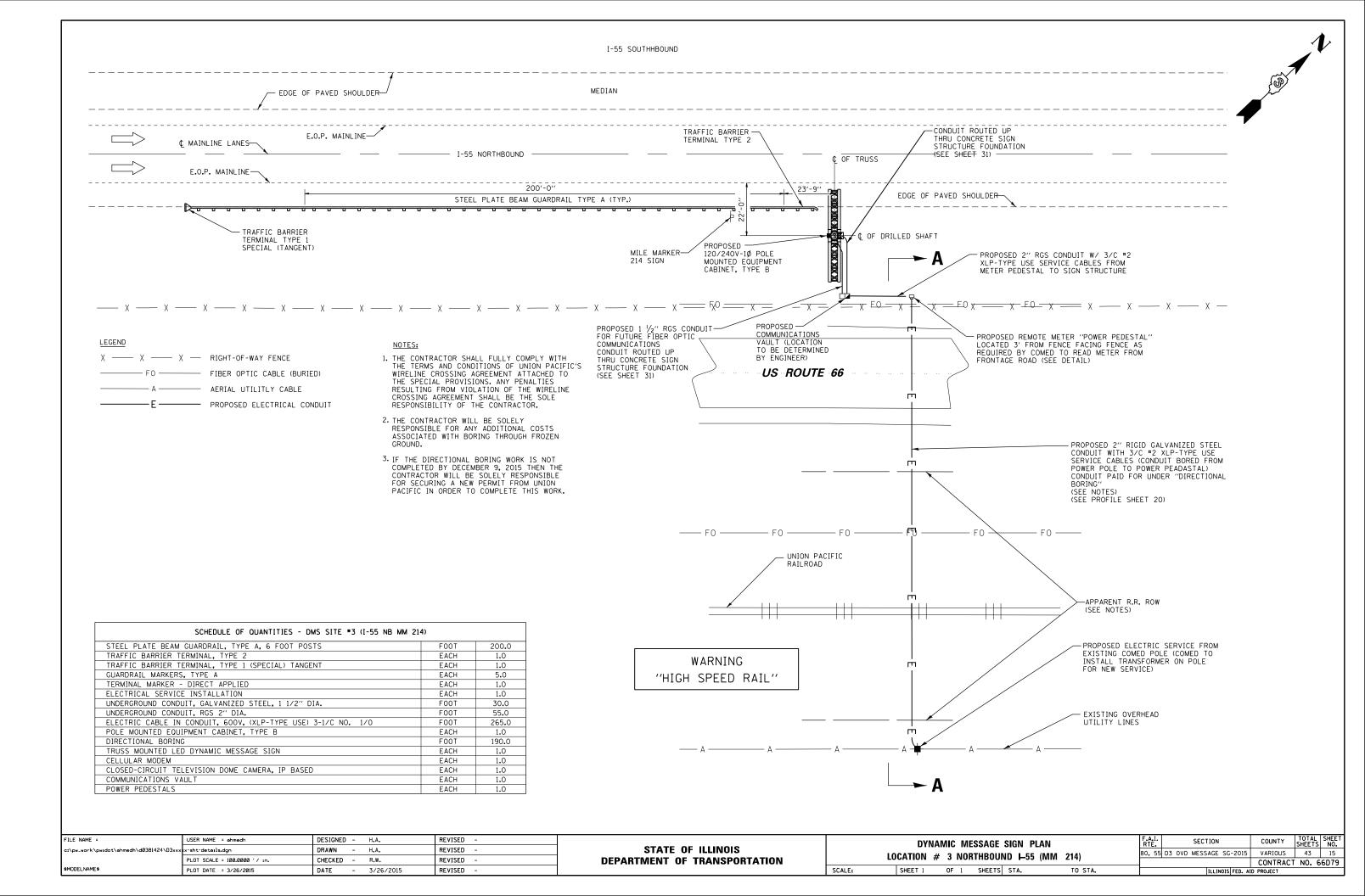
SECTION

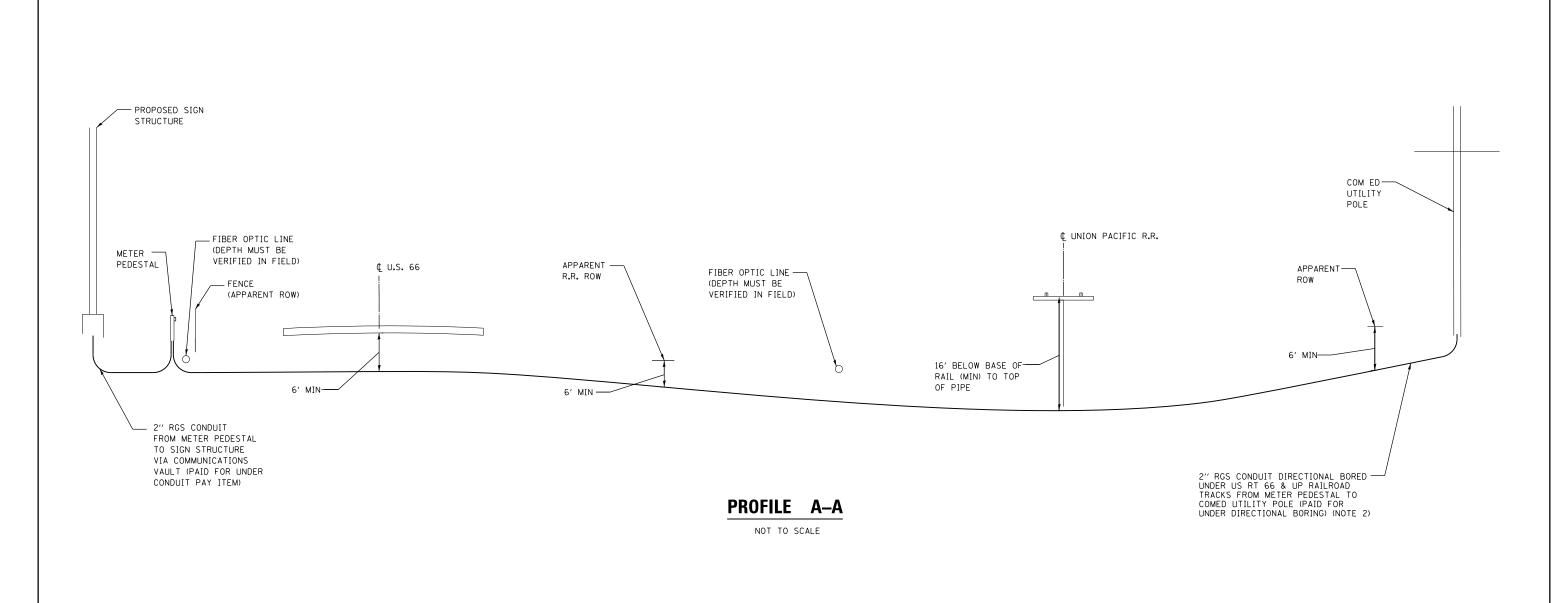
- 11. THE PILOT POINT AND SHAFT AXIS SHALL BE CONCENTRIC (± 0.125) AND IN LINE (± 2°).
- 12. THE BASEPLATE SHALL BE STAMPED WITH THE MANUFACTURERS NAME AND DATE OF MANUFACTURE.

l	FILE NAME =	USER NAME = ahmedh	DESIGNED - H.A.		REVISED -			LIGHT	POLE F	OUNDA	TION, METAL		RTF.	SECTION	COUNTY	SHEETS	NO.
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		PLOT SCALE = 100.0000 '/ in.	CHECKED - R.W.		REVISED -	DEPARTMENT OF TRANSPORTATION			L	DETAIL					CONTRACT	T NO. 660	5D79
	\$MODELNAME\$	PLOT DATE = 3/26/2015	DATE - 3/26	5/2015	REVISED -		SCALE:	SHEET 1	OF 1	SHEETS	STA.	TO STA.		ILLINOIS FED. A	D PROJECT		







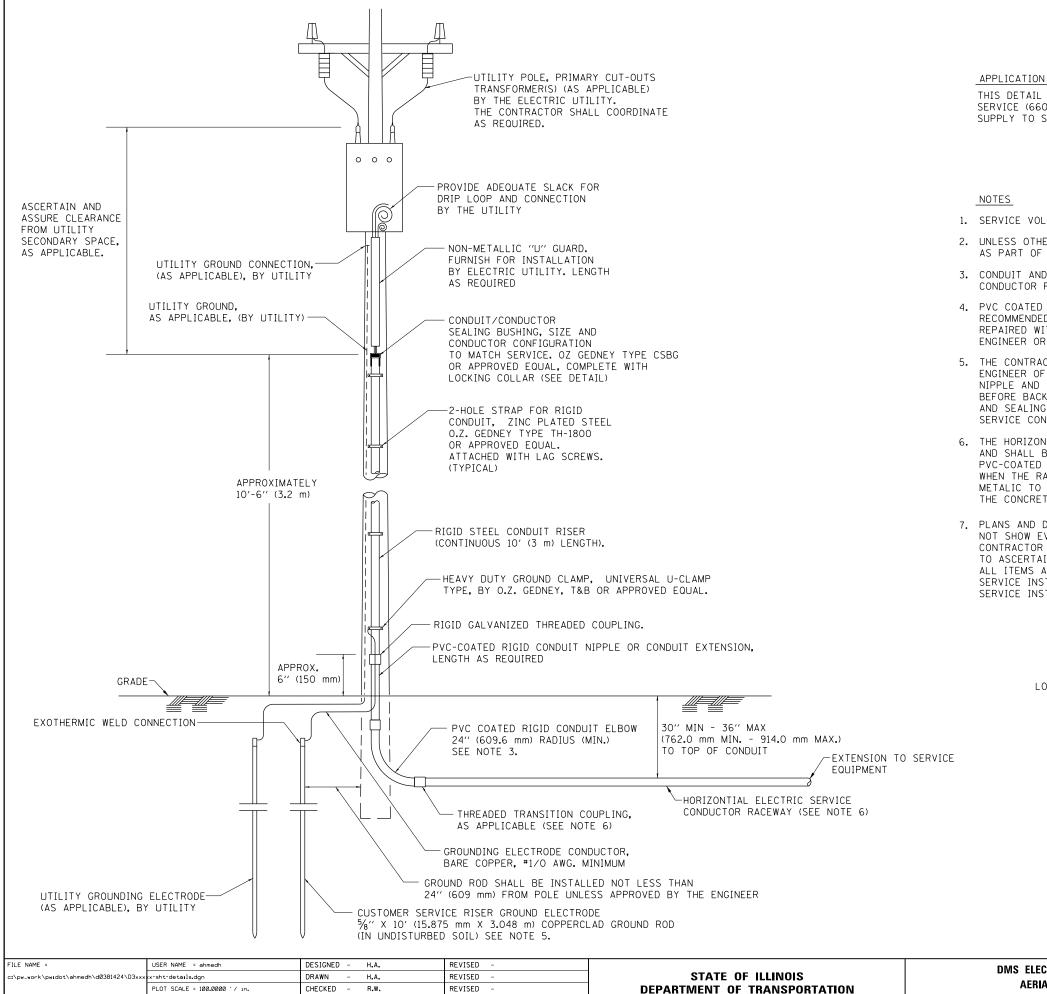


# NOTES:

- 1. PROPOSED MINIMUM ANGLE OF DEFLECTION FOR DIRECTIONAL BORED CONDUIT IS 230 FT RADIUS. TYPICAL DIRECTIONAL BORING MACHINE MINIMUM ANGLE OF DEFLECTION 100-150 FT RADIUS.
- 2. CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH UNION PACIFIC'S WIRELINE CROSSING AGREEMENT. SEE SPECIAL PROVISION FOR "DIRECTIONAL BORING"
- 3. CONTRACTOR MUST VERIFY PRESENCE AND LOCATION OF ANY AND ALL UNDERGROUND UTILITIES PRIOR TO BEGINNING WORK

FILE NAME = c:\pw_work\pwidot\ahmedh\d0381424\D3xxx	USER NAME = ahmedh (x-sht-details.dgn	DESIGNED - DRAWN -	H.A.	REVISED -	STATE OF ILLINOIS	
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	R.W.	REVISED -	DEPARTMENT OF TRANSPORTATION	
\$MODELNAME\$	PLOT DATE = 3/26/2015	DATE -	3/26/2015	REVISED -		SCALE:

DMS SITE # 3 (NORTHBOUND I-55 AT MM	214)	F.A.I. RTE.		SECTION		COUNTY	TOTAL	SHEET NO.
DIRECTIONAL BORING PROFILE	,	80, 55	D3 OV	D MESSAGE	SG-2015	VARIOUS	43	16
DIRECTIONAL DOMING THOTILE						CONTRACT	NO.	66D79
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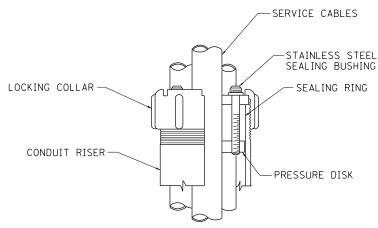
3/26/2015

PLOT DATE = 3/26/2015

REVISED

THIS DETAIL APPLIES FOR LOW VOLTAGE ELECTRIC SERVICE (660 V OR LESS) FROM AN OVERHEAD UTILITY SUPPLY TO SEPERATLY-MOUNTED SERVICE EQUIPMENT.

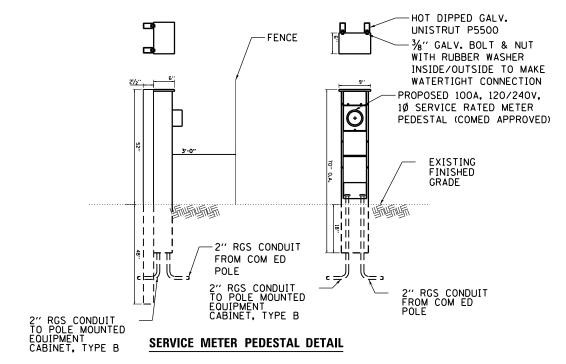
- 1. SERVICE VOLTAGE SHALL BE AS INDICATED ELSEWHERE IN THE DRAWINGS.
- 2. UNLESS OTHERWISE INDICATED, ITEMS AND WORK SHALL BE INCLUDED AND PAID AS PART OF THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.
- 3. CONDUIT AND CONNECTOR DIAMETER SHALL MATCH THE DIAMETER OF THE SERVICE CONDUCTOR RACEWAY AS INDICATED ON THE PLANS.
- 4. PVC COATED RACEWAYS AND ACCESSORIES SHALL BE CAREFULLY INSTALLED WITH MFR RECOMMENDED TOOLS AND PROCEDURES TO AVOID DAMAGE. ANY DAMAGE SHALL BE REPAIRED WITH COMPATIBLE PVC TOUCH-UP MATERIAL TO THE SATISFACTION OF THE ENGINEER OR THE DAMAGED MATERIAL SHALL BE REPLACED AT NO ADDITIONAL COST.
- 5. THE CONTRACTOR SHALL OBTAIN INSPECTION AND APPROVAL BY THE ENGINEER OF SERVICE RISER GROUND ELECTRODE, RISER ELBOW, NIPPLE AND CONNECTION TO SERVICE CONDUCTOR RACEWAY EXTENSION BEFORE BACKFILL AND SHALL ALSO OBTAIN INSPECTION OF SERVICE RISER AND SEALING BUSHING BEFORE UTILITY "U" GUARD INSTALLATION AND SERVICE CONNECTION.
- 6. THE HORIZONTAL ELECTRIC SERVICE CONDUCTOR RACEWAY SHALL BE AS INDICATED AND SHALL BE MEASURED SEPARATELY FOR PAYMENT. WHEN THE RACEWAY IS PVC-COATED RIGID GALVANIZED STEEL, THE COUPLING SHALL BE THE SAME. WHEN THE RACEWAY IS PVC CONDUIT (IN CONCRETE), THE COUPLING SHALL BE A METALIC TO NON METALIC ADAPTER. WHEN THE RACEWAY IS ENCASED IN CONCRETE, THE CONCRETE SHALL EXTEND TO COVER THE COUPLING.
- 7. PLANS AND DETAILS INDICATE THE GENERAL NATURE AND REQUIREMENTS. THEY DO NOT SHOW EVERY ACCESSORY AND ATTACHMENT, AND THEY DO NOT RELIEVE THE CONTRACTOR OF THE REQUIREMENTS OF THE SPECIFICATIONS AND SPECIAL PROVISIONS TO ASCERTAIN UTILITY REQUIREMENTS AND TO COORDINATE ACCORDINGLY, FURNISHING ALL ITEMS AND WORK NOT PROVIDED BY THE UTILITY, BUT NECESSARY FOR A COMPLETE SERVICE INSTALLATION IS REQUIRED AND SHALL BE INCLUDED IN THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.

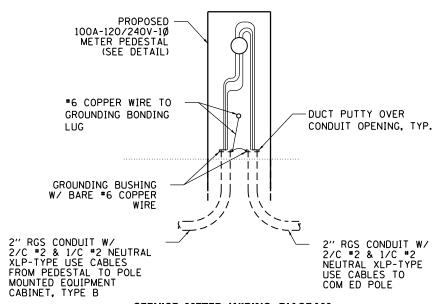


SEALING BUSHING DETAIL

DMS ELECTRIC SERVICE INSTALLATION **AERIAL, REMOTE DISCONNECT** OF 1 SHEETS STA. SHEET 1 TO STA.

SECTION COUNTY 80, 55 D3 OVD MESSAGE SG-2015 VARIOUS 43 17 CONTRACT NO. 66D79





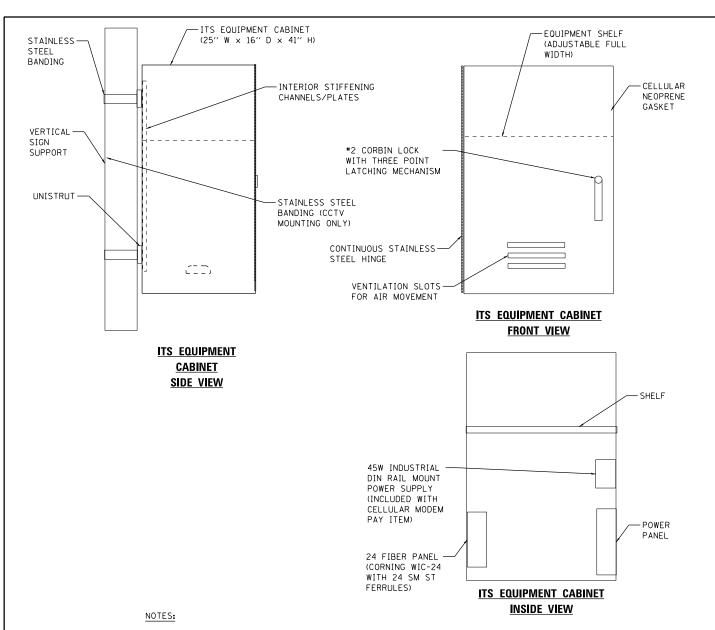
SERVICE METER WIRING DIAGRAM

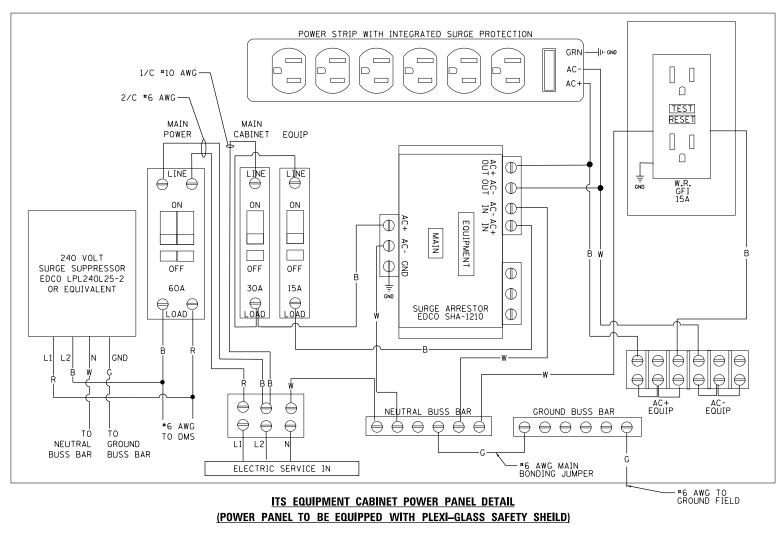
# NOTES:

- 1. ALL WORK SHALL CONFORM TO THE COM ED BOOK OF "INFORMATION & REQUIREMENTS FOR THE SUPPLY OF ELECTRIC SERVICE."
- 2. ALL MATERIAL ABOVE SHALL BE INCLUDED IN THE PRICE BID FOR "POWER PEDESTALS". THE HORIZONTAL SERVICE CONDUIT & WIRING FROM UTILITY POLE TO PEDESTAL, AND FROM PEDESTAL TO SIGN STRUCTURE SHALL BE PAID FOR SEPARATELY.

# POWER PEDESTAL (S.B. I-55 & N.B. I-55 ONLY)

FILE NAME =	USER NAME = ahmedh	DESIGNED - AJD	REVISED -					F.A.I.	SECTION	COUNTY	TOTAL SHEET
c:\pw_work\pwidot\ahmedh\dØ381424\D3xxx	xxx-sht-details.dgn	DRAWN - LRR	REVISED -	STATE OF ILLINOIS		POWER PEDESTAL DETAIL		80, 55 r	D3 OVD MESSAGE SG-2015	VARIOUS	43 18
	PLOT SCALE = 100.00000 '/ in.	CHECKED - AJD	REVISED -	DEPARTMENT OF TRANSPORTATION						CONTRACT	T NO. 66D79
\$MODELNAME\$	PLOT DATE = 3/26/2015	DATE - 3/26/2015	REVISED -		SCALE:	SHEET 1 OF 1 SHEETS STA.	TO STA.		ILLINOIS FED. AI	ID PROJECT	

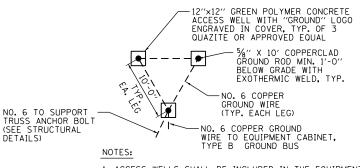




- 1. THE ITS EQUIPMENT CABINET SHALL BE A NEMA TYPE 3R CABINET WITH MINIMUM OUTSIDE DIMENSIONS OF 41" (H) X 25" (W) X 16" (D). THE CABINET SHALL BE CONSTRUCTED FROM .125" THICK ALUMINUM AND HAVE A NATURAL FINISH.
- 2. THE CABINET SHALL BE FURNISHED WITH ONE ADJUSTABLE HEIGHT SHELF, THREE POSITION DOOR STOP (90,120,180 DEGREES), NEOPRENE DOOR GASKET, AIR VENT LOUVERS, CONTINUOUS STAINLESS STEEL DOOR HINGE, INTERIOR STIFFENERS FOR MOUNTING, THREE POINT LATCHING MECHANISM WITH #2 CORBIN LOCK, 24 FIBER INTERCONNECT CENTER, POWER PANEL, AND ALL STAINLESS STEEL HARDWARE.
- 3. THE CABINET SHALL BE EQUIPPED WITH A THERMOSTATICALLY CONTROLLED VENTILATION FAN, 250 WATT HEATER STRIP (WITH GUARD), AND DELUXE PLEATED AIR FILTER.
- 4. THE CONTRACTOR SHALL INSTALL ALL DIN RAIL MOUNTED EQUIPMENT IN THE CABINET.
- 5. ALL ITEMS SHOWN ON THIS DRAWING (EXCEPT CELLULAR MODEM) SHALL BE INCLUDED IN THE EQUIPMENT CABINET PAY ITEM (INCLUDING ALL UNISTRUT, MTG. BRACKETS, CONDUIT/WIRE ATTACHED TO STRUCTURE & METER FITTING).
- 6. ALL CONTROL CABINET ITEMS SHALL HAVE SUITABLE IDENTIFICATION. OPEN CIRCUIT BREAKERS, CONTACTORS AND OTHER OPEN DEVICES SHALL HAVE PERMANENT SELF STICKING TAGS. DEVICES IN ENCLOSURES SHALL HAVE ENGRAVED 2-COLOR LAMINATED PLASTIC NAMEPLATES ATTACHED TO ENCLOSURES WITH SCREWS. NAMEPLATES SHALL BE ENGRAVED TO CORRESPOND TO DESIGNATIONS ON THE DRAWINGS. INTERNAL CABINET WIRING SHALL BE IDENTIFIED AS INDICATED OR AS DIRECTED BY THE ENGINEER BY MEANS OF SELF-STICKING TAGS APPLIED AT EACH CONNECTED END. IDENTIFICATION SHALL BE MADE BY THE CABINET MANUFACTURER.

- 7. ALL WIRING WITHIN THE CABINET SHALL BE COLOR CODED AS INDICATED: R = REDBL = BLUEW = WHITEB = BLACKY = YELLOWG = GREEN
- 8. PROVIDE SEALING GROMMETS FOR ALL OPEN WIRING EXTENDED FROM DEVICES IN BOXES OR CABINETS WITHIN THE CONTROL CABINET.
- 9. ALL 120 VOLT SYSTEM AND ALL CONTROL WIRING SHALL BE #12AWG STRANDED UNLESS OTHERWISE INDICATED.
- 10. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.
- 11. THE CONTROLLER SHALL BE CONSTRUCTED TO U.L. STD 508 AND BEAR THE U.L. LABEL "ENCLOSED INDUSTRIAL CONTROL PANEL".

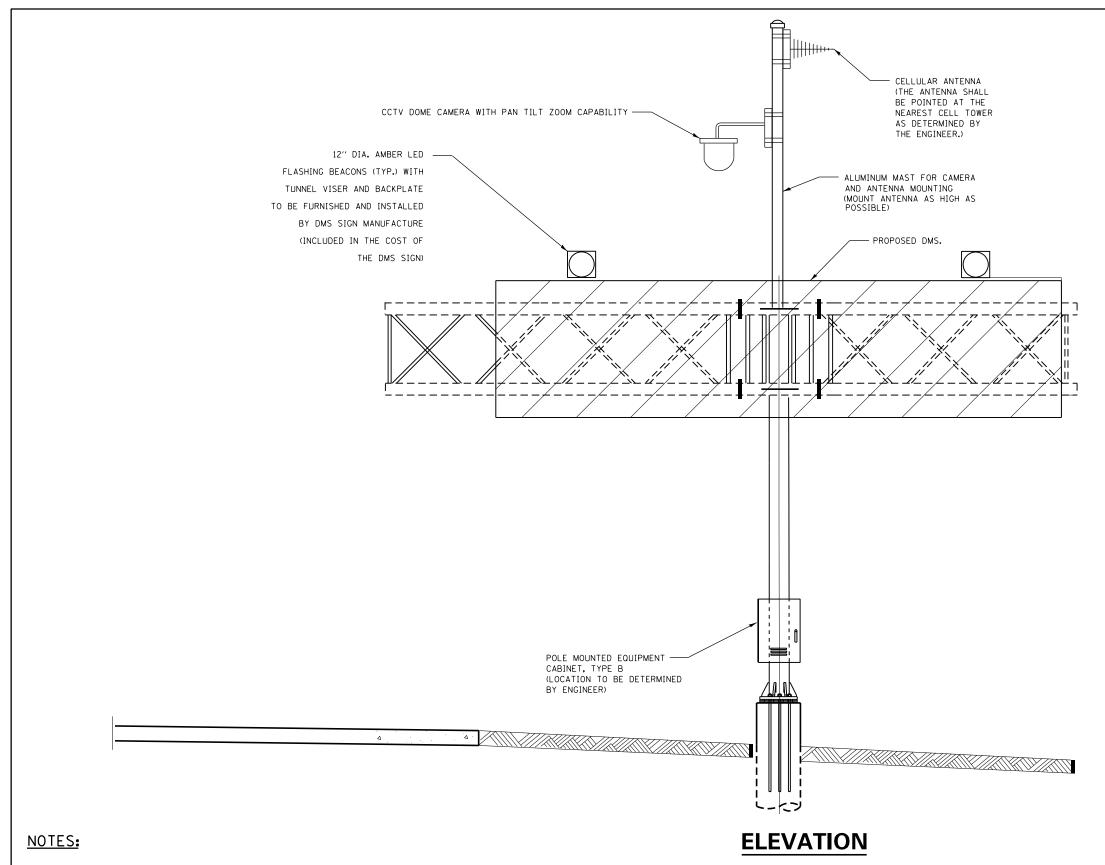




1. ACCESS WELLS SHALL BE INCLUDED IN THE EQUIPMENT CABINET PAY ITEM.

# **GROUND FIELD DETAIL (TYP.)**

FILE NAME =	USER NAME = ahmedh	DESIGNED - AJD	REVISED -	F.A.I. SECTION			
c:\pw_work\pwidot\ahmedh\d0381424\D3xx	xx-sht-details.dgn	DRAWN - LRR	REVISED -	STATE OF ILLINOIS	POLE MOUNTED EQUIPMENT CABINET, TYPE B	80,55 D3 OVD MESSAGE SG-2015	VARIOUS 43 19
	PLOT SCALE = 100.0000 '/ in.	CHECKED - AJD	REVISED -	DEPARTMENT OF TRANSPORTATION			CONTRACT NO. 66D79
\$MODELNAME\$	PLOT DATE = 3/26/2015	DATE - 3/2015	REVISED -		SCALE: 100.0000 / SHIEET 1 OF 1 SHEETS STA. TO STA.	ILLINOIS FED. A	ID PROJECT



\* THE CONTRACTOR SHALL SUBMIT COMPLETE ELECTRICAL DESIGN DETAILS AND CALCULATIONS

SEALED BY AN ILLINOIS LICENSED ELECTRICAL AND STRUCTURAL ENGINEER

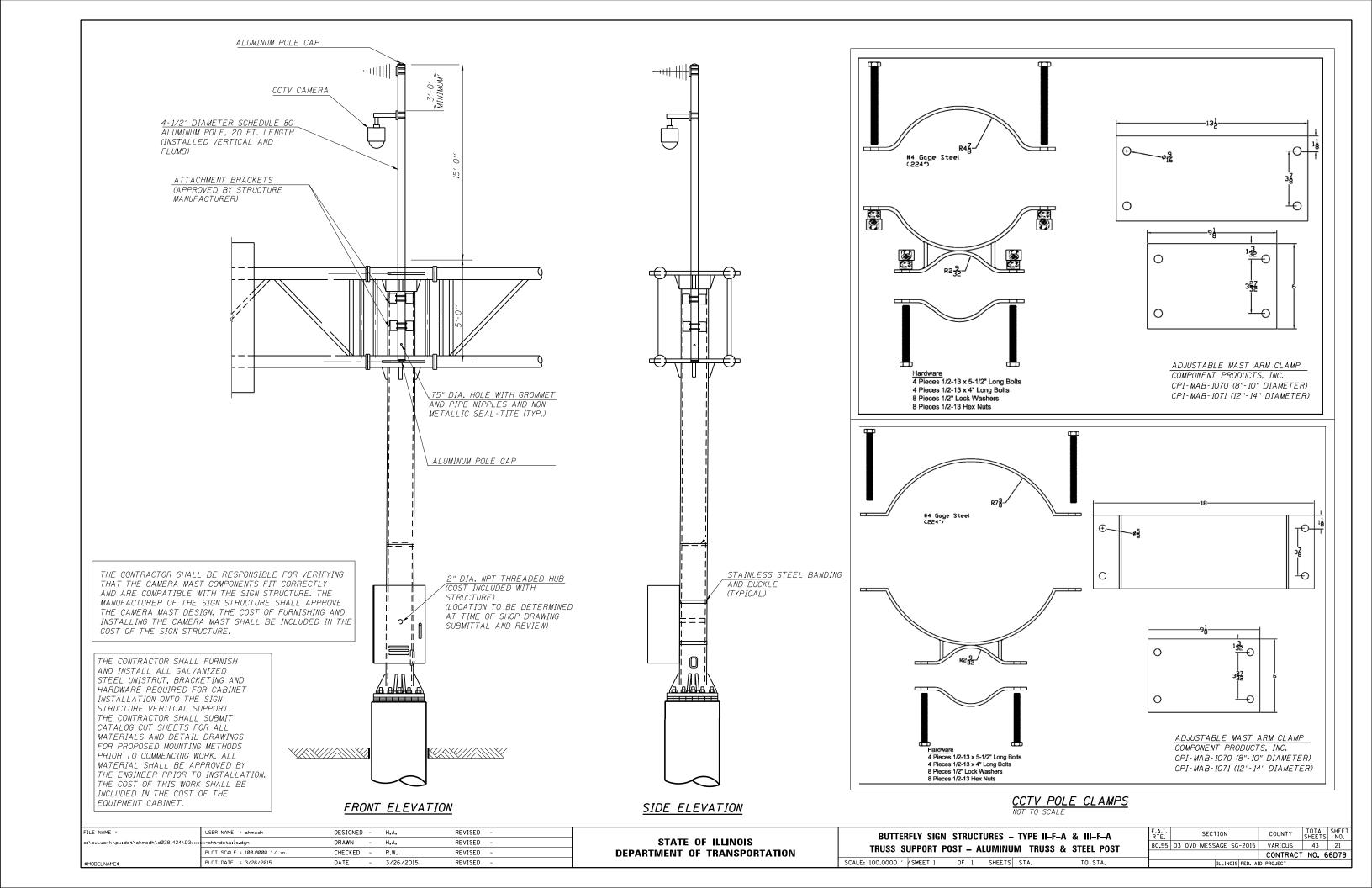
TO THE RESIDENT ENGINEER FOR REVIEW AND APPROVAL PRIOR

TO THE ORDERING OF ANY MATERIALS.

**CCTV CAMERA PLACEMENT (TYP.)** 

**BUTTERFLY SIGN STRUCTURES (TYP.)** 

F	FILE NAME =	USER NAME = ahmedh	DESIGNED - H.A.	REVISED -		PROPOSED DMS AND CCTV CAMERA DETAIL FOR	F.A.I. SECTION	COUNTY   TOTAL   SHEET
•	c:\pw_work\pwidot\ahmedh\d0381424\D3xxx	x-sht-details.dgn	DRAWN - H.A.	REVISED -	STATE OF ILLINOIS	BUTTERFLY TRUSS SIGN STRUCTURE	80,55 D3 OVD MESSAGE SG-2015	VARIOUS 43 20
		PLOT SCALE = 100.00000 ' / in.	CHECKED - R.W.	REVISED -	DEPARTMENT OF TRANSPORTATION	DUTTENFLY INUSS SIGN STRUCTURE	<u>'</u>	CONTRACT NO. 66D79
Ŀ	\$MODELNAME\$	PLOT DATE = 3/26/2015	DATE - 3/26/2015	REVISED -		SCALE: 100.0000 / SHEET 1 OF 1 SHEETS STA. TO STA.	ILLINOIS FED. A	ID PROJECT



Escalante, Anthony J:(ComEd) <anthony.escalante@ComEd.com> Monday, September 29, 2014 9:22 AM Anthony Dericco

Ahmed, Hasan (Hasan, Ahmed@Illinois.gov); Brulc, Beatriz; (ComEd); Escalante, Anthony Cc:

RE: IDOT Digital Message Signs (I-55 and I-80)

Great & I have all info on each site & await the final ok to go ahead & install at those 3 locations when ready. The first location off 1-80 "0180EB-SIGN, MP100-9" in is Miller Twp & cc/gsr rep for that area

Anthony J. Escalante GSR/Joliet N/B S/W Region

"The Difficult We Do Immediately; The Impossible Takes A Little Longo



From: Anthony Dericco [mailto:aderi Sent: Wednesday, September 24, 2014 2:31 PM To: Escalante, Anthony J:(ComEd) Subject: RE: IDOT Digital Message Signs (I-55 and I-80)

I am sending this email as a follow up to our meeting at all three sites this week. Below is a summary

- There will be three new Digital Message Signs with each requiring a new single phase 100A-120/240V-3W
- The signs will be installed in the summer of 2015.
- The first sign is on eastbound I-80 mile marker 100.9. ComEd has logged in as address "0180EB-SIGN, MP100-9" and Acct #2053017040
- The second sign is on southbound I-55 mile marker 223, ComEd has logged in as address "OSI55, MP223" and Acct #3273134029.
- The third sign is on northbound I-55 mile marker 214, ComEd has logged in as address "0SN55, MP214" and Acct #2313168135.
- . ComEd confirmed they will be able to provide service at all three proposed locations, this will include installing a new transformer on the existing utility pole
- ComEd requires the meter (meter pedestal) at the two locations along I-55 to be installed near the fence line so they can safely read it from the frontage roads.

  ComEd will be required to obtain a permit to work along I-80 to install the new transformer, & IDOT
- maintenance will clear the area near the existing utility pole.
- The new account numbers are only temporary to establish location confirmation and will expire in about 45 days, they will need to be reestablished during construction.

PLOT DATE = 3/26/2015

DATE

3/26/2015

Attached are the service application load letters and plan exhibits for all three sites for your use

Thanks, Tony

FILE NAME

\$MODELNAME\$

Anthony J. DeRicco, PE. LEED AP. LC

Head, Electrical Section Christopher B. Burke Engineering, Ltd. 9575 W. Higgins Road, Suite 600 Rosemont, IL 60018 Phone: (947) 823-9500 Fax: (947) 939-5214 E-Mail: adericco@cbbel.com

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# Com Ed

Com Ed.

Sq. Ft. Sq. Ft.

Date to Final Grade (est.): July 2015 Hours of Operation Per Day:  $\square$  8  $\square$  12  $\square$  16  $\boxtimes$  24

# Service and Meter Application

Service and Meter Application

Please complete a separate sheet for each switch - existing or new

Switch Size (amps): 100 (If switchgear is 1,200 Amps or larger, customer must submit drawings for ComEd approval)

Project Name: IDOT Digital Message Sign on Eastbound I-80 at MM 100.9 Site Address: 0I80EB-Sign, MP100-9 Switch Name and Location: Main - Located in Control Cabinet

Other Items (check all that apply):

New Construction Sq. Ft. Underground Service
Building Addition Sq. Ft. Overhead Service
Relocating Existing Service Entrance Commercial – No. of units
HI-Rise/ Vault Service Units Residential – No. of units

ervice Voltage (check one):
] 120/240V 1-phase, 3-wire
] 120/240V 3-phase, 4-wire
] 120/208V 3-phase, 4-wire
] Other:

☐ 4kV ☐ 12kV ☐ 34kV 3-phase, 3-wire ☐ 4kV ☐ 12kV ☐ 3-phase, 4-wire

Date of Ground Breaking (est.): May 2015 Date to Energize: July 2015

Switch Rating (percentage): 80

Project Name: IDOT Digital Message Sign on Eastbound I-80 at MM 100.9 Site Address: 0I80EB-Sign, MP100-9 City: Marseilles

Total Number of Service Entrance Locations (meters/switches) Requested: 1

Legal Name of Entity (Electric Consumer): Illinois Dept of Transportation Dist 3 □ Corporation □ Partnership □ Sole Proprietor ☒ Other: State of Illinois Existing Account Number: 2053017040

Principle(s) to Sign Contracts For Service, Easements, Etc.:

Building Owner: Phone: Building Manager: Daniel Devine Phone: (815) 434-8505

Mailing Address For Contracts

Company: IL Dept of Transp. Dist. 3 Address: 700 East Norris Drive City: Ottawa Zip: 61350 Mailing Address For Electric Bills: Company: IL Dept of Transp. Dist. 3 City: Ottawa Address: 700 East Norris Drive Zin: 61350 Consulting Engineer: Anthony DeRicco E-mail: adericm@cbbel.com Fax: (847) 939-5214 Firm Name: Christopher Burke Engineering, LTD Phone: (847) 823-0500 Address: 9575 W. Higgins Rd. Suite 600 City: Rosemont Zip: 60018 Consulting Engineer Address: City: Zip: Consulting Engineer: E-mail: Firm Name

# The Following Documents May Be Required

- Plat of Survey with legal description of property (for easement, if required)
   Site Plan showing building relative to property lines mark service entrance location(s)
   Civil drawings (showing water, sewer, gas, phone, electric, pavement, grading, etc.)
   Complete electrical drawings and/or load detail sheets

REVISED

Address:

Print Name: Anthony DeRico E.B. I—80 (MM. 100.9)

SERVICE APPLICATION





# Service and Meter Application

Please complete a separate sheet for each switch - existing or new:

Project Name: IDOT Digital Message Sign on Southbound I-55 at MM 223 Site Address: 05155, MP223 Switch Name and Location: Main - Located in Control Cabinet

Service Voltage (check one):

☑ 120/240V 1-phase, 3-wire
☐ 120/240V 3-phase, 4-wire
☐ 120/208V 3-phase, 4-wire
☐ Other:

☐ 4kV ☐ 12kV ☐ 34kV 3-phase, 3-wire ☐ 4kV ☐ 12kV ☐ 3-phase, 4-wire

Other Items (check all that apply):

New Construction Sq. Ft. ☐ Underground Service
□ Building Addition Sq. Ft. ☐ Overhead Service
□ Relocating Existing Service Entrance ☐ Commercial – No. of units
□ Hi-Rise/ Vault Service ☐ Residential – No. of units Date of Ground Breaking (est.): May 2015 Date to Final Grade (est.): July 2015 Hours of Operation Per Day: ☐ 8 ☐ 12 ☐ 16 ☑ 24

Switch Size (amps): 100 (If switchgear is 1,200 Amps or larger, customer must submit drawings for ComEd approval) Switch Rating (percentage): 80 

Total Connected Load Information:

(KW or HP)	Description:	Connect	ed Load:
		1-phase	3-phase
Lighting:	LED Display	12 kw	
VAC:			
Receptacle:			
Process Heat:			
Water Heat:			
Space Heat:			
Motors*:			
Welders**:			
TOTAL LOAD:		12 kw	
	•		

Description	Quantity	Size (HP)	Efficiency Rating	Phase / Voltage	Nema Code	Starts Per Hr. or Day	Starting Amps	Use

**Welder Detail i	included abov	/e:					
Description	Quantity	Size (kVA)	Туре	Max. Inst. Demand	Welds Per Minute	Cycles Per Weld	i
							Г
							Г



# **ComE**d

## Service and Meter Application Project Information Sl

ect Name: IDOT Digital Message Sign on Southbound I-55 at MM 223 Site Address: 0SI55, MP223 City: Gardner

Total Number of Service Entrance Locations (meters/switches) Requested: 1

Legal Name of Entity (Electric Consumer): Illinois Dept of Transportation Dist 3 ☐ Corporation ☐ Partnership ☐ Sole Proprietor ☒ Other: State of Illinois Tax LD.: 371354673 Existing Account Number: 3273134029

Principle(s) to Sign Contracts For Service, Easements, Etc.: Property Owner: Phone:

Building Owner: Building Manager: Daniel Devine Phone: (815) 434-8505 Mailing Address For Contracts

Company: IL Dept of Transp. Dist. 3 Address: 700 East Norris Drive

Address: 9575 W. Higgins Rd. Suite 600

Zip: 61350 City: Ottawa Mailing Address For Electric Bills Company: IL Dept of Transp. Dist. 3 Address: 700 East Norris Drive City: Ottawa Zip: 61350 Consulting Engineer: Anthony DeRicco E-mail: adericco@cbbel.com Firm Name: Christopher Burke Engineering, LTD Phone: (847) 823-0500 Eav. (847) 939-5214

City: Rosemont

Zip: 60018

SHEET 1 OF 1 SHEETS STA.

Zip:

Consulting Engineer: Firm Name Address: City:

E-mail: Consulting Engineer: Firm Name: Phone: Fax: Address: The Following Documents May Be Required

Plat of Survey with legal description of property (for easement, if required)

Site Plan showing building relative to property lines – mark service entrance location(s)

Civil drawings (showing water, sewer, gas, phone, electric, pavement, grading, etc.)
 Complete electrical drawings and/or load detail sheets

Print Name: Anthony DeRicco.
Signature: S.B. I—55 (MM. 223)

SERVICE APPLICATION

SCALE:





# Service and Meter Application

Please complete a separate sheet for each switch - existing or new:

Project Name: IDOT Digital Message Sign on Northbound I-55 at MM 214 Site Address: 0NI55, MP214

Switch Name and Location: Main - Located in Control Cabinet

Service Voltage (check one):

120/240V 1-phase, 3-wire 120/240V 3-phase, 4-wire 120/208V 3-phase, 4-wire Other 277/480V 3-phase, 4-wire
480V 3-phase 3-wire (B-phase Grounded)
480V 3-phase 3-wire (Ungrounded – requires ground detection equip.)

☐ 4kV ☐ 12kV ☐ 34kV 3-phase, 3-wire ☐ 4kV ☐ 12kV ☐ 3-phase, 4-wire

Other Items (check all that apply):

New Construction Sq. Ft. Underground Service
Underground Service
Underground Service
Underground Service
Underground Service
Underground Service
Underground Service
Underground Service
Underground Service
Underground Service
Residential – No. of units

Date to Final Grade (est.): July 2015 Hours of Operation Per Day: ☐ 8 ☐ 12 ☐ 16 ☒ 24 Date of Ground Breaking (est.): May 2015

Switch Size (amps): 100 (If switchgear is 1,200 Amps or larger, customer must submit drawings for ComEd approval) Switch Rating (percentage): 80 Secondary Conductors: 1 Sets of 3 /C 2 (No. of conductors) (Size) (Type

Total Connected Load Information

(KW OF HP)	Description:	Connect	Connected Load:			
		1-phase	3-phase			
Lighting:	LED Display	12 kw				
VAC:						
Receptacle:						
Process Heat:						
Water Heat:						
Space Heat:						
Motors*:						
Welders**:						
TOTAL LOAD:		12 kw				

Motor Load Det	notor Load Detail included above:											
Description	Quantity	Size (HP)	Efficiency Rating	Phase / Voltage	Nema Code	Starts Per Hr. or Day	Starting Amps	Use				





# Service and Meter Application

Project Information Shee ject Name: IDOT Digital Message Sign on Northbound I-55 at MM 214 Site Address: 0NI55, MP214 City: Dwight

Total Number of Service Entrance Locations (meters/switches) Requested: 1

Legal Name of Entity (Electric Consumer): Illinois Dept of Transportation Dist 3 ☐ Corporation ☐ Partnership ☐ Sole Proprietor ☒ Other: State of Illinois Tax I.D.: 371354673 Existing Account Number: 2313168135

Principle(s) to Sign Contracts For Service, Easements, Etc.: Property Owner Phone:

Building Manager: Daniel Devine Phone: (815) 434-8505

Mailing Address For Contracts Company: IL Dept of Transp. Dist. 3

Zip: 61350 Address: 700 East Norris Drive City: Ottawa Mailing Address For Electric Bills: Company: IL Dept of Transp. Dist. 3 Address: 700 East Norris Drive City: Ottawa Zip: 61350

Consulting Engineer: Anthony DeRicco E-mail: adericco@cbbel.com Firm Name: Christopher Burke Engineering, LTD Phone: (847) 823-0500 Fax: (847) 939-5214 Address: 9575 W. Higgins Rd. Suite 600 City: Rosemon Zip: 60018

Firm Name: Phone:

Firm Name: Phone:

The Following Documents May Be Requ

Plat of Survey with legal description of property (for easement, if required)
 Site Plan showing building relative to property lines – mark service entrance location(s)

Civil drawings (showing water, sewer, gas, phone, electric, pavement, grading, etc.) Complete electrical drawings and/or load detail sheets

TO STA.

Address:

Print Name: Anthony DeRicco N.B. I—55 (MM. 214)

SERVICE APPLICATION

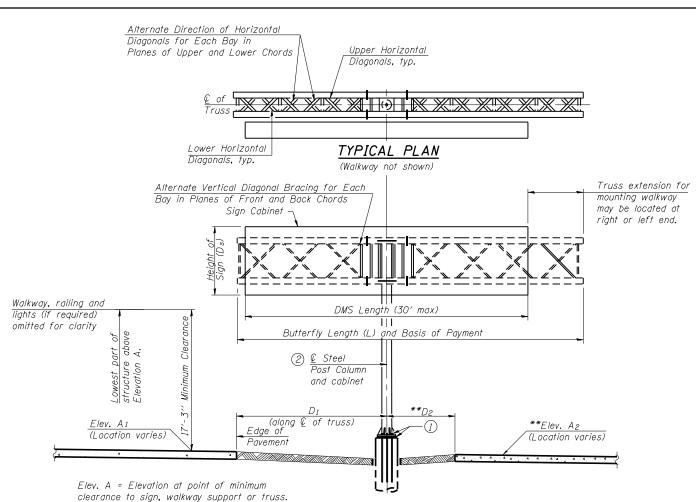
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**COMED CORRESPONDENCE** DESIGNED - H.A. REVISED COUNTY DMS ELECTRIC SERVICE COORDINATION STATE OF ILLINOIS c:\pw\_work\pwidot\ahmedh\d0381424\D3xxx x-sht-details.don DRAWN H.A. REVISED 80, 55 D3 OVD MESSAGE SG-2015 VARIOUS 43 22 "FOR INFORMATION ONLY" PLOT SCALE = 100.0000 '/ in. CHECKED R.W. REVISED **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 66D79









\*\* Elevation Az and dimension Dz not used when butterfly structure is mounted on right side of the shoulder.

# TYPICAL ELEVATION

Looking in Direction of Traffic

Sign support structures may be subject to damaging vibrations and oscillations when signs are not in place during erection or maintenance of the structure. To avoid these vibrations and oscillations, consideration should be given to attaching temporary blank sign panels to the structure.

Structure Number	Station	Total Butterfly Length (L)	Elev. A <sub>1</sub>	Elev. A <sub>2</sub>	Dim. D <sub>1</sub>	Dim. D <sub>2</sub>	Ds	Total Sign Area	Access door and walkway location (Right or Left end)
3F050I080R100.9	1042+84	38′-8"	694.24	**	22'-0"	**	10'-0"	300 Sq. Ft.	LEFT.
3F032I055L223.0	556+56	38′-8"	611.24	**	22'-0"	**	10'-0"	300 Sq. Ft.	LEFT.
3F032I055R2I4.0	587+29	38′-8"	663.74	**	22′-0"	**	10'-0"	300 Sq. Ft.	LEFT.

# TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
OVERHEAD SIGN STRUCTURE BUTTERFLY TYPE III-F-A	Foot	116′-0"
OVERHEAD SIGN STRUCTURE WALKWAY, TYPE A	Foot	19′-0"
DRILLED SHAFT CONCRETE FOUNDATIONS	Cu. Yds.	28.7

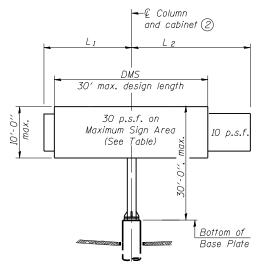
TRUSS TYPE

MAXIMUM TOTAL

DMS SIGN CABINET AREA

300 Sq. Ft.

Mamimum DMS weight = 5000 LB.



# DESIGN WIND LOADING DIAGRAM

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

Note:

Trusses 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 trusses.

- (1) After adjustments to level truss and insure adequate vertical clearance, all top and bottom leveling nuts shall be tightened against the base plate with a minimum torque of 200 lb.-ft. Stainless steel mesh shall then be placed around the perimeter of the base plate. Secure to base plate with stainless steel banding.
- 2 Centerline cabinet must be located at centerline of column.
- \* 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.

# 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

WIND LOADING: 30 p.s.f. normal to DMS Cabinet Area and truss elements not behind sign Loading Diagram.

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 Specifications.

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

all Structural Steel Plates and Shapes shall conform to AASHIU M2/0 Gr. 36, Gr. 50 or Gr. 50W\* (M183, M223 Gr. 50, or M222). 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 1DOT 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.

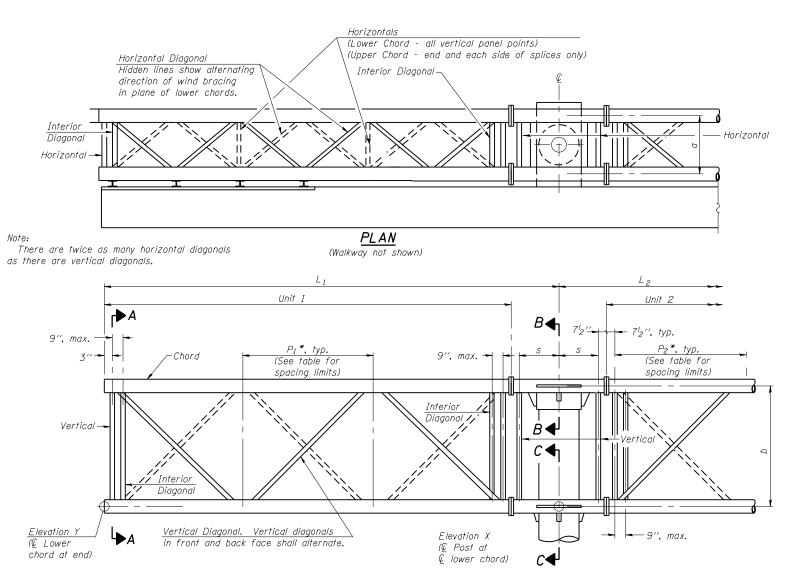
OSF - A - 1 - DMS

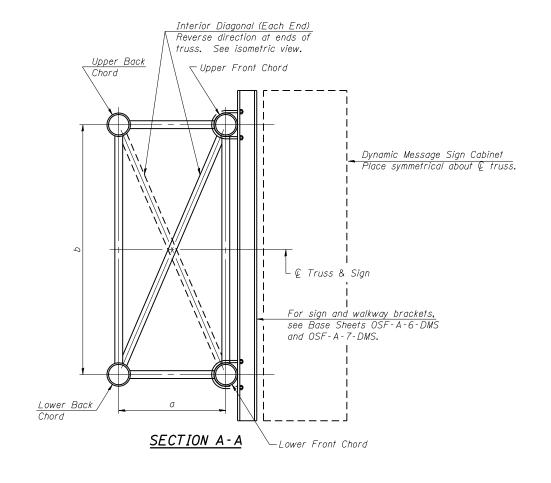
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

					E PLAN & ELEVATION STEEL POST
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# ELEVATION

(Sign and walkway omitted for clarity)

# TYPICAL TRUSS UNIT

For Section B-B and Section C-C, see Base Sheet OSF-A-3-DMS

# TRUSS UNIT TABLE

Truss Type	Dimension	Dimension	Dimension	Limits for Panel Spacina (P)*	II '	Low. ord	Verticals; Horiz Horizontals; and I	
7 9 5 6	Ů	υ	3	Spacing (17	0.D.	Wall	riorizoniais, and i	Therior Diagonals
III-F-A	36′′	84′′	21′′	48'' min. to 66'' max.	7''	38′′	3'2''	3 <sub>8</sub> ′′

\*P =  $\frac{L - s - 1' - 6''}{\# Panels}$ 

Structure Number	Station	Truss Type	L <sub>I</sub>	L <sub>2</sub>	Number of Panels Unit 1	Panel Length (P <sub>1</sub> )*	Number of Panels Unit 2	Panel Length (P <sub>2</sub> )*
3F050I080R100.9	1042+84	III-F-A	21'-4"	17′-4"	4	54"	3	56"
		T.T. (5. 4	0.44	.=				50"
3F032I055L223.0	556+56	III-F-A	21'-4"	17'-4"	4	54"	3	56"
3F032I055R2I4.0	587+29	III-F-A	21'-4"	17'-4"	4	54"	3	56"

OSF-A-2-DMS

6 - 1 - 12

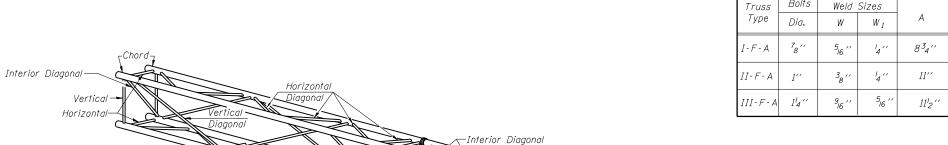
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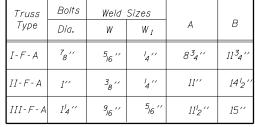
STATE	OF	ILLINOIS
DEPARTMENT	0F	TRANSPORTATION

BUTTERFLY SI	GN STRUC	TURES	– ALTERN	ATE TI	RUSS DETAILS FOR DMS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
						80, 55	D3 OVD MESSAGE SG-2015	VARIOUS	43	24
	ALUIV	IIIVOIVI	THUSS &	SILLL	FUST			CONTRAC	T NO. 6	6D79
SCALE:	SHEET	OF	SHEETS	STA.	TO STA.		ILLINOIS FED. A	ID PROJECT		

# SHOP CAMBER TABLE

Unit Length L <sub>1</sub> or L <sub>2</sub>	Shop Camber at End
<i>15′</i>	1'2''
16′-17′	134''
18′-20′	2''
21'-22'	24"
23′-25′	212"
26′-27′	234''
28′-30′	3''
31′-32′	34''
<i>33′-35′</i>	312"





Horizontal –

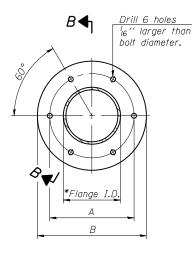
Chord -

**√**tур.

*3₄′′*, min.

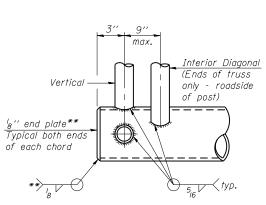
1½'', max.





# SPLICING FLANGE ASTM b221, Alloy 6061-T6 or ASTM B209, Alloy 6061-T651

\* To fit O.D. of Chord with maximum gap of  $^{1}6''$ .

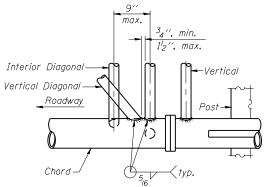


CAMBER DIAGRAM

(For Fabrication Only)

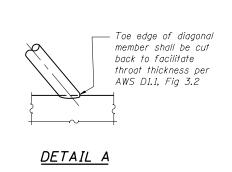
# BUTTERFLY END JOINT DETAIL

\*\* Contractor may alternatively use standard aluminum drive-fit cap to close ends.  $^{l}_{2}$ "  $\phi$  Drain hole in end plate / drive-fit



Horizontai

POST END JOINT DETAIL

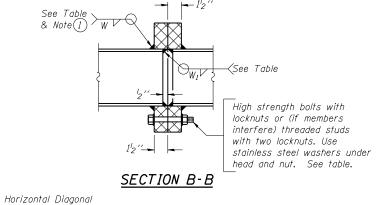


TRUSS INTERIOR JOINT DETAIL

Detail A

Horizontal Diagonal

Horizontal Diagonal

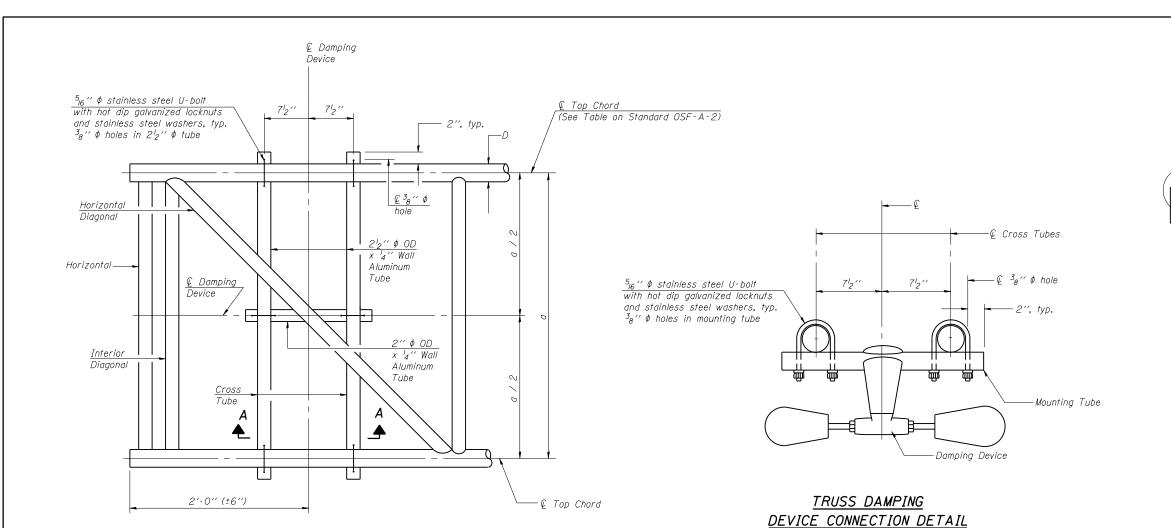


1) Splicing Flanges shall be attached to each truss unit with the truss shop assembled to camber shown. Truss units shall be in proper alignment and flange surfaces shall be shop bolted into full contact before welding. Sufficient external welds or tacks shall be made to secure flanges until remaining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

OSF - A - 2A

6-1-12

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# <u>GENERAL NOTES</u>

€ Damping

Device

See Plan Detail

ELEVATION

Aluminum Butterfly Sign Structure

Damper: One damper per truss. (31 lbs. Stockbridge-Type Aluminum-

29" minimum between ends of weights)

Materials: Aluminum tubes shall be ASTM B221 alloy 6061

temper T6

# $\underbrace{\mathbb{E} \ Damping}_{Device}$ $R = \underbrace{0}_{2} + t_{4}$ $\underbrace{SECTION \ A-A}$

# DAMPING DEVICE MOUNTING TUBE U-BOLT DETAIL (Typical)

TOP CHORD TO CROSS TUBE

U-BOLT DETAIL

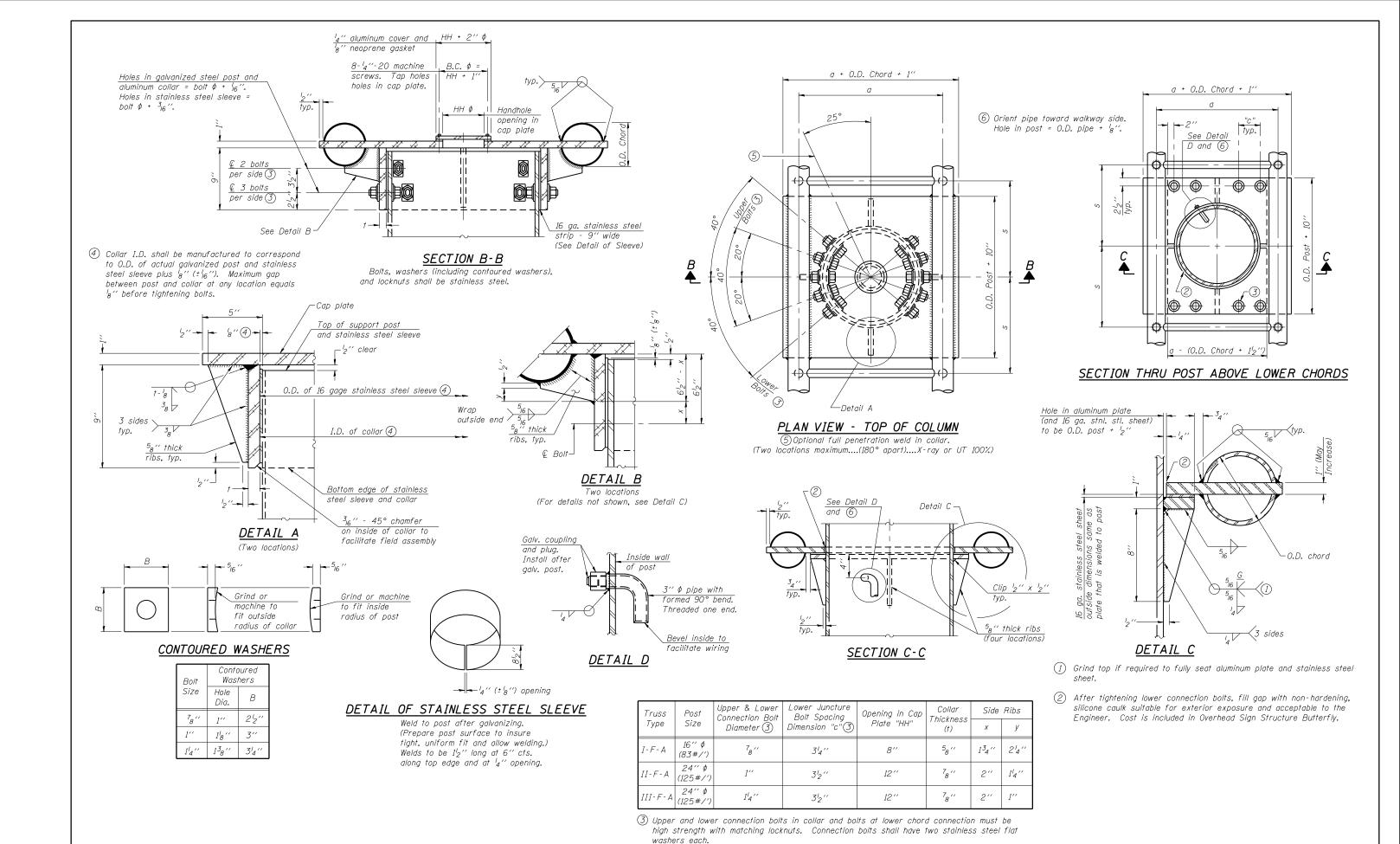
(Typical)

OSF-A-D

6 - 1 - 12

PLAN DETAIL

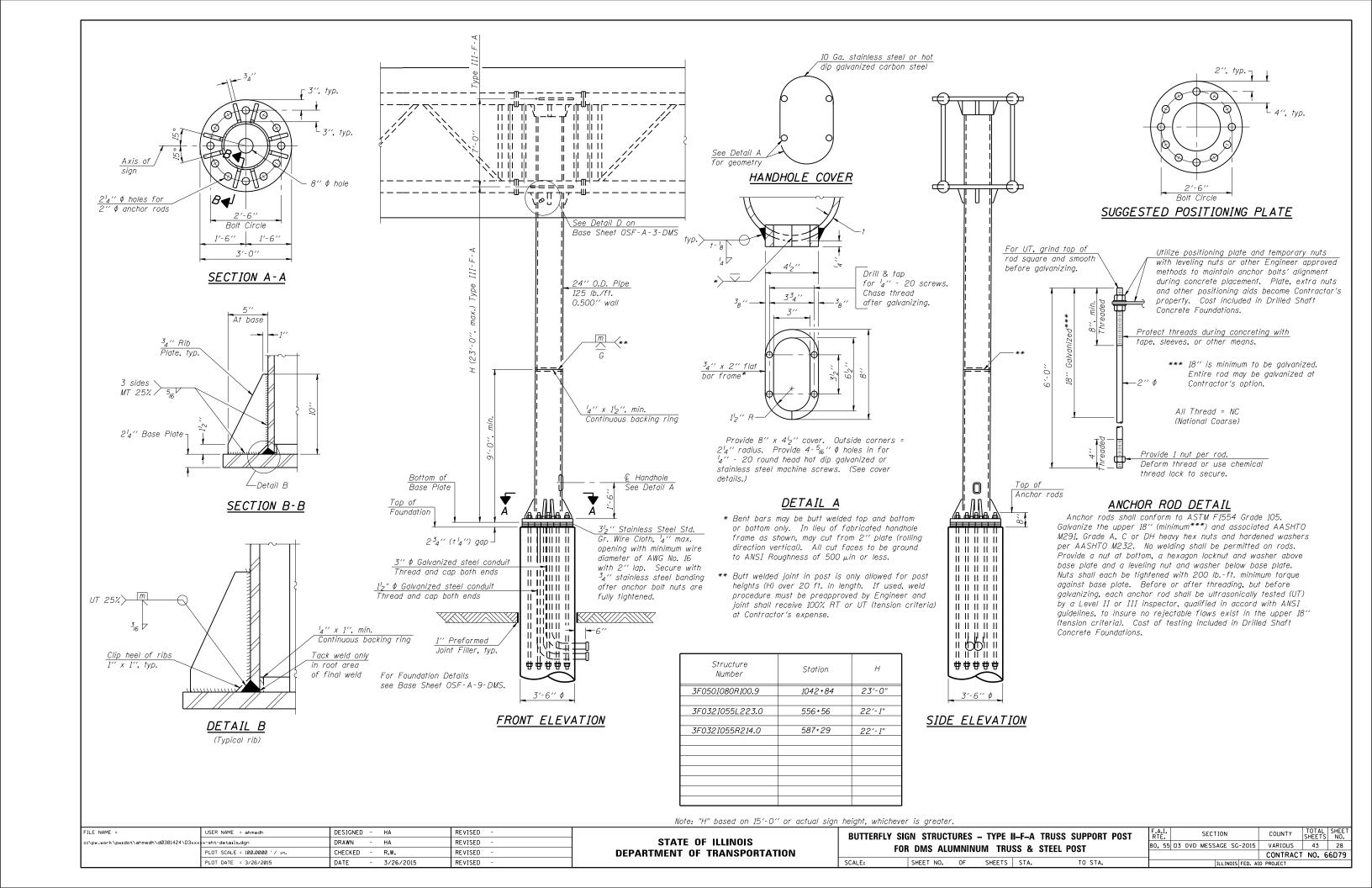
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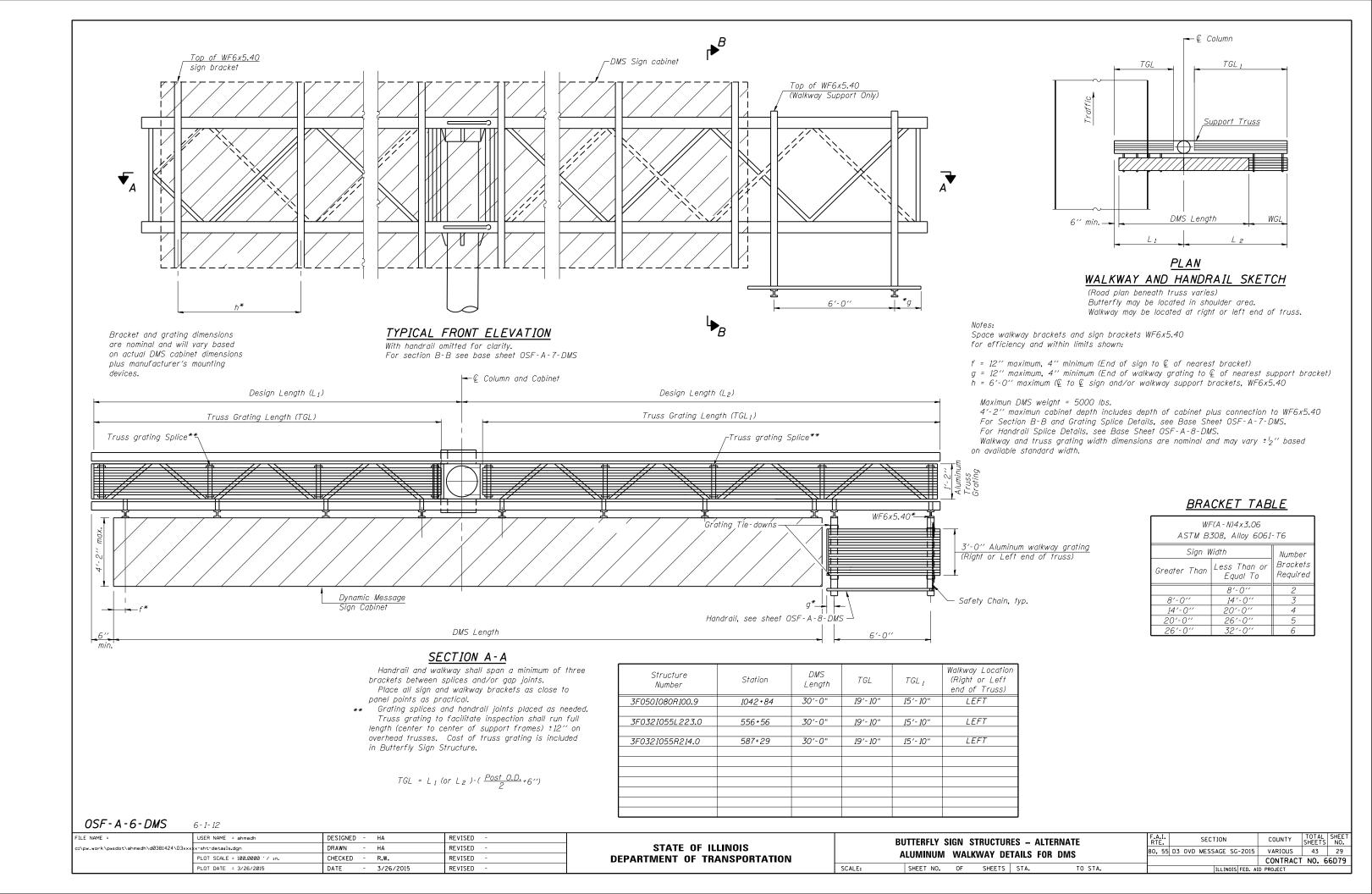


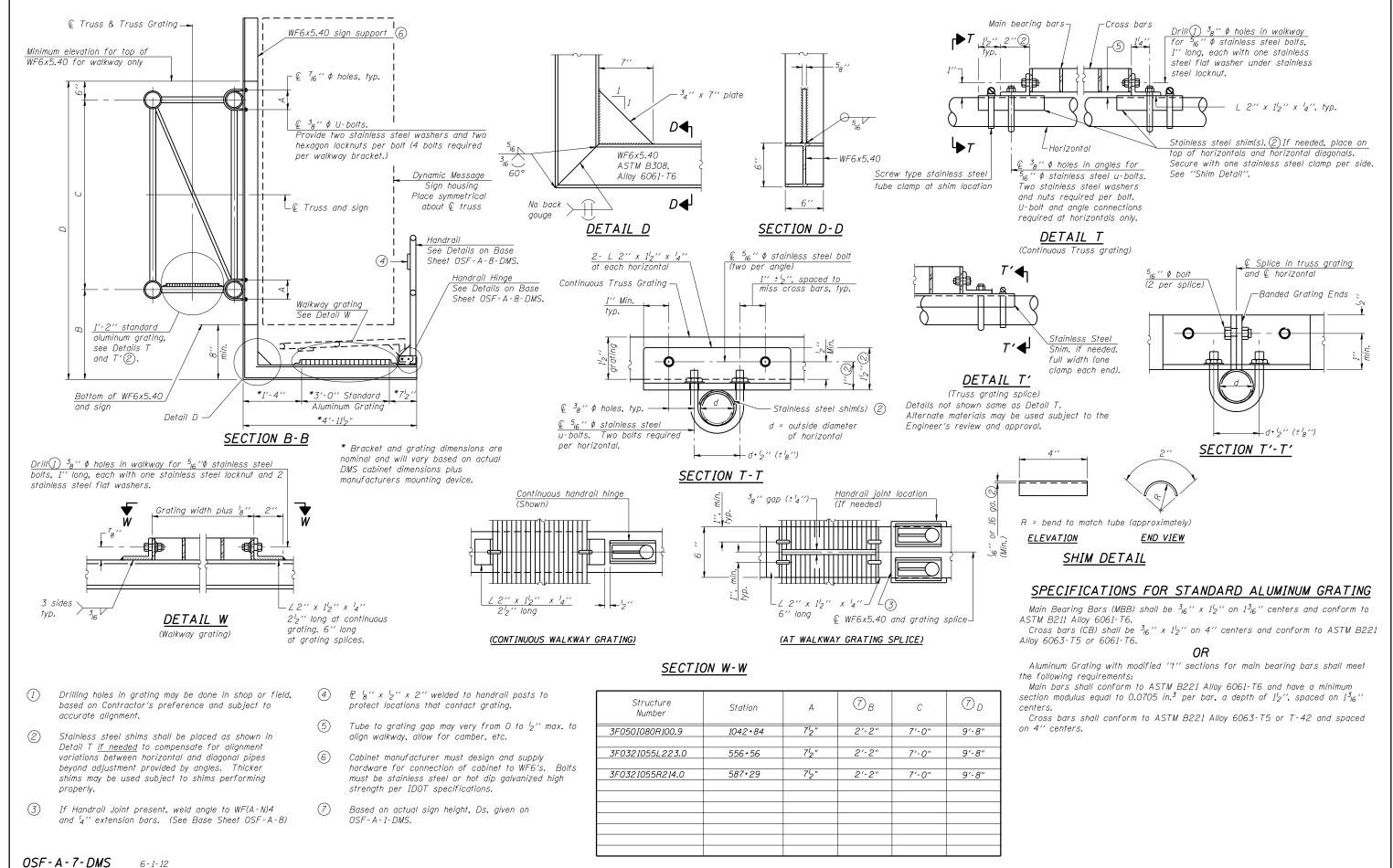
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	PLOT SCALE = 100.00000 ' / in.	CHECKED - R.W.	REVISED -	DEPARTMENT OF TRANSPORTATION		ALUMINUM TRUSS & STEEL POST		CONTRACT	T NO. 66D79	Л
	PLOT DATE = 3/26/2015	DATE - 3/26/2015	REVISED -		SCALE:	SHEET NO. OF SHEETS STA. TO STA.	ILLINOIS FED. A	AID PROJECT		1

SECTION

COUNTY







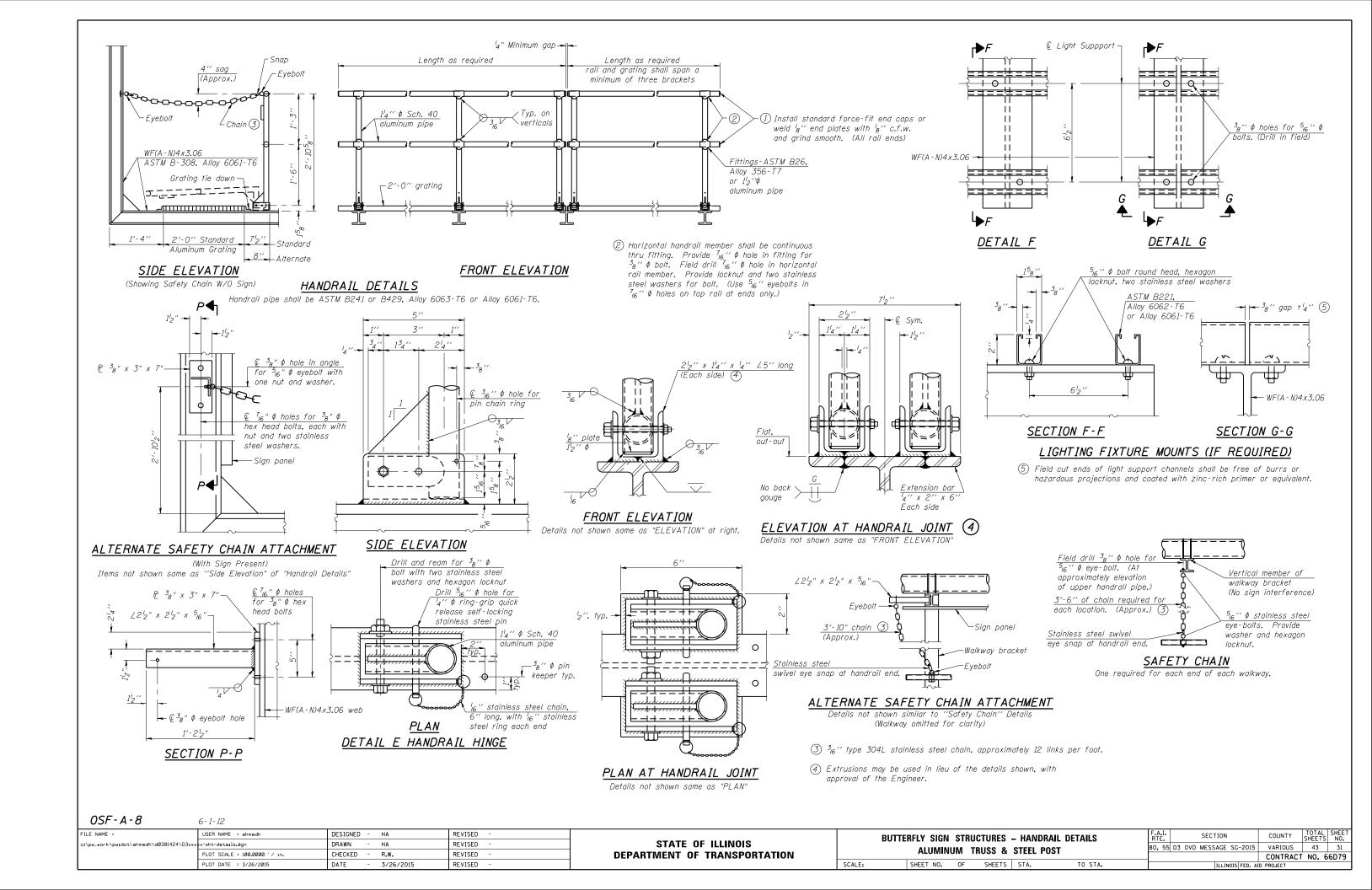
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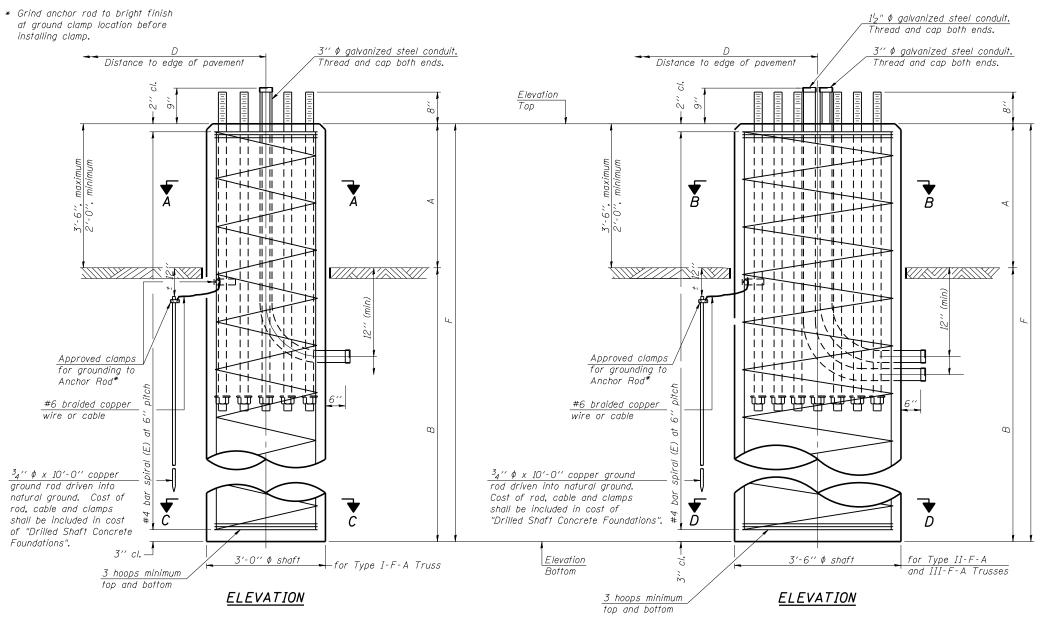
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# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCALE:

	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DETAILS FOR DMS - ALUMINUM TRUSS & STEEL POST	80, 55	D3 OVD MESSAGE SG-2015	VARIOUS	43	30
DETAILS TON DIVIS - ALCOHOLOW THOSE & STELL TOST			CONTRACT	NO. 6	6D79
SHEET NO. OF SHEETS STA. TO STA.		ILLINOIS FED. AI	D PROJECT		





FOUNDATION DESIGN TABLE Maximum Anchor Rods Maximum Shaft "R" Anchor Rod Post Base Truss CantileverLength Total Sign Area )iamete. Depth Circle Diameter Diameter Sheet Туре No. (ft) (sq ft) (ft) (in) (in) (in) 0SF - A - 4 200 3.0 II-F-A OSF-A-5 22'-0" 30 400 3.5 30 III-F-A OSF-A-5 35 400 *3*.5 24'-0'' 12

# For details of anchor rods and positioning templates see Truss Support Post Base SECTION A-A Sheets OSF-A-4 and OSF-A-5. #4 bar spiral (E) 12-#8 v(E) bars equally spaced Anchor Rod Circle Diameter CONDUITS MAY EXIT FOUNDATION IN DIFFERENT DIRECTIONS For details of anchor rods and positioning templates see Truss Support Post Base Sheets OSF-A-4 and SECTION B-B OSF - A - 5. 10-#9 v(E) bars equally spaced — #4 bar spiral (E) -#4 bar spiral (E) SECTION C-C 3'-0" & shaft 12 - #8 v(E) b<u>ars</u> equally spaced 3" cl. SECTION D-D 3′-6′′ ¢ shaft

10-#9 v(E) bars

equally spaced

-#4 bar spiral (E)

Anchor Rod

Circle Diameter

# NOTES:

The foundation dimensions shown in the Foundation Design Table are based on the presence of mostly cohesive soils with an average Unconfined Compressive Strength (Ou) 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 in the Foundation Data Table 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".

FOUNDATION DATA TABLE													
Structure Number	Station	Truss Type	Shaft Diameter	Elevation Top	Elevation Bottom	А	В	F	Class DS Concrete Cubic Yards				
3F050I080R100.9	1042+84	III-F-A	3′-6"	692.98	665.81	3'-2"	24'-0"	27′-2"	9.7				
3F032I055L223.0	556+56	III-F-A	3′-6"	610.89	584.89	2'-0"	24'-0"	26′-0"	9.3				
3F032I055R2I4.0	587+29	III-F-A	3'-6"	663.34	636.25	3'-1"	24'-0"	27'-1"	9.7				

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	PLOT SCALE = 100.0000 ' / in.	CHECKED - R.W.	REVISED -	DEPARTMENT OF TRANSPORTATION		ALUMINUM TRUSS & STEEL POST
	PLOT DATE = 3/26/2015	DATE - 3/26/2015	REVISED -		SCALE:	SHEET NO. OF SHEETS STA.

BUTTE	RFLY SIGN	ı s	TRUCTURES	– DRILLE	D SHAFT	F.A.I. RTE.		SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
	ALUMINUM TRUSS & STEEL POST						D3 OVD	MESSAGE S	G-2015	VARIOUS	43	32
	ALOMINO	,141	111000 Q	JILLE I O					CONTRACT	NO. 6	6D79	
9	SHEET NO.	OF	SHEETS	STA.	TO STA.			ILL INO	IS FED. AI	D PROJECT		

		ST	RUC	TURE	BORING LOG		Started		5/14
ROUTE FAI 80 DESCR	RIPTIC	ON _D	ynamic	Mess	age Sign, I-80 EB @ MM100.9 Dar	te Cor	mpleted	9/2	5/14
SECT. D3 OVD MESSAGE SG-2015	STR	UCT. N	O		DRILLED BY	TSC/	L-81.92	9C	
COUNTY 099 (LaSalle) LOCA	TION	Nor	th Side	of EB	I-80 S. 34 E1/2	TWP.	34 N	, RNG.	_5
Boring No. 5 Station 1042+84 Offset 7.00ft RT Surface Elev. 692.50 ft	D E P T H	B L O W S	Qu tsf	W %	Surface Water Elev. Groundwater Elev.: when drilling Dry at Completion Dry after Hrs.	D E P T H	B L O W S	Qu tsf	W %
FILL - Black clayey TOPSOIL, very moist (OL) CLAY A-8 691.00		3	P 4.00	43.5 16.1	Very tough gray silty CLAY, little sand, trace to little gravel, moist (CL)	_	5 7 6	B 2.35	18 (
FILL - Brown, black and gray silty CLAY, little sand, trace gravel, moist (CL)		3	1.00	10.1	CLAY LOAM A-8	Ξ		15%	10.0
CLAY LOAM A-8	-5	4 5	3.00	23.3	662.50	-30	3 5 6	3.75	16.2
Very tough black silty CLAY, little sand, trace organic, moist (CL/CH) CLAY A-7-8 684.50		5 5 8	9 3.25	31.7	End of Boring at 30.0'	=			
Tough gray silty CLAY, little sand, trace organic, moist (CL/CH) CLAY A-7-8 682.00	-10	2 3 5	P 1.50	27.8					
Very tough to hard brown and gray silty CLAY, little sand, trace to little gravel, moist (CL)		2 2 4	B 2.35 15%	22.9					
ČLÁY LOAM A-8	-15	4 4 7	B 3.74 15%	19.4		-40			
	$\exists$	8 10 11	P 4.5+	14.3		=			
Very tough gray silty CLAY, glittle sand, trace to little gravel, moist (CL) CLAY LOAM A-6	-20	16 7 8	B 2.94 15%	21.2		-45			
TO TOO TOO TOO TOO TOO TOO TOO TOO TOO		5 6 8	B 2.48 15%	19.9		=			
GCGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	-25	5 6 7	P 3.50	21.7					

# **Testing Service Corporation** Page 1 of 1 STRUCTURE BORING LOG Date Started \_\_\_\_9/25/14\_\_\_ ROUTE FAI 80 DESCRIPTION Dynamic Message Sign, I-80 EB @ MM100.9 Date Completed 9/25/14 SECT. D3 OVD MESSAGE SG-2015 DRILLED BY TSC/L-81.929C STRUCT. NO. \_ COUNTY 099 (LaSalle) LOCATION South Side of EB I-80 S. 34 E1/2 , TWP. 34 N , RNG. 5 E Surface Water Elev. 1042+84 68.00ft RT O W S U W S Groundwater Elev.: when drilling Qu tsf Qu tsf W % at Completion Drv Surface Elev. 689.00 ft Black clayey TOPSOIL, very moist (OL) CLAY A-8 B 52.3 little sand and gravel, moist (CL) CLAY LOAM A-6 2.25 19.9 Tough brown and gray silty CLAY, little sand, trace gravel, moist to very moist (CL) CLAY A-6 B 1.79 19.4 15% 2 2 1.50 21.5 End of Boring at 30.0' Very tough to hard brown and gray silty CLAY, little sand and gravel, moist (CL) CLAY LOAM A-8 B 3.60 16.3 15% 5 10 B 4.73 15.9 15% Very tough to hard gray silty CLAY, little sand, trace gravel, moist (CL) CLAY A-6 3.00 19.3 B 2.68 21.9 15% 4.5+ 17.4 7 B 9 5.12 20.9 12 15% Hard to tough gray silty CLAY, little sand and gravel, moist (CL) CLAY LOAM A-8 4.5+ 16.1 B 1.56 16.8 15% SPT. (N) = Sum of last two blow values in sample. (Qu) S=Shear, B=Bulge at 15% Strain, P=Penetration Test. Stations, Depths, Offset, and Elevations are in Feet

# EB I-80 MM 100.9

FILE NAME =	USER NAME = ahmedh	DESIGNED - H.A.	REVISED -			SOIL BORING LOGS	F.A.I. SECTION	COUNTY TOTAL SHEET
c:\pw_work\pwidot\ahmedh\d0381424\D3xxx	xx-sht-details.dgn	DRAWN - H.A.	REVISED -	STATE OF ILLINOIS		LOCATION # 1 (I—80 EB MM 100.9)	80, 55 D3 OVD MESSAGE SG-2015	VARIOUS 43 33
	PLOT SCALE = 100.00000 '/ in.	CHECKED - R.W.	REVISED -	DEPARTMENT OF TRANSPORTATION		. ,		CONTRACT NO. 66D79
\$MODELNAME\$	PLOT DATE = 3/26/2015	DATE - 3/26/2015	REVISED -		SCALE:	SHEET 1 OF 1 SHEETS STA. TO STA.	ILLINOIS FED. A	AID PROJECT

		ST	RUC	TURE	BORING LOG Page 1  Date Started 9/3/14
ROUTE FAI 55 DESCR	IPTIC	ON _D	ynamic	Mess	age Sign, I-55 SB @ MM223 Date Completed 9/3/14
SG-2015		UCT. N			DRILLED BY
Boring No. 3 Station 556+56 Offset 97.00ft LT Surface Elev. 607.00 ft	DEPTH	B L O W S	Qu tsf	W %	Surface Water Elev.         D         B           Groundwater Elev.:         E         L           when drilling         Dry         P         O           at Completion         Dry         T         W         Qu         V           after         Hrs.         H         S         tsf         9
FILL - Black clayey TOPSOIL_606.50 very moist (OL)  FILL - Brown and dark brown silty CLAY, little sand, trace gravel, trace organic, moist (CL) CLAY A-6	61111111	569 466	Р	18.3	Very tough gray silty CLAY, little sand and gravel, moist (CL) CLAY LOAM A-8   6 B 7 3.21 14  577.00 -30
Very tough to tough brown and gray silty CLAY, little sand, trace gravel, moist (CL) CLAY A-8		4 4 6 5 7	15% B	21.2	End of Boring at 30.0'
Very tough to hard brown and gray silty CLAY, little sand and gravel, moist (CL) CLAY LOAM A-8	-10	6 7 6	P 3.50	18.6	
	-15	9 9 11		18.3	
Very tough gray silty CLAY.  Ittle sand and gravel, moist  (CL)  CLAY LOAM A-6	-20	568	B 2.94 15%	15.3	
S S S S S S S S S S S S S S S S S S S	-25	-00	2.50	15.3	

# **Testing Service Corporation** Page 1 of 1 STRUCTURE BORING LOG Date Started \_\_\_\_9/3/14\_\_\_ Date Completed \_\_\_\_9/3/14 ROUTE FAI 55 DESCRIPTION Dynamic Message Sign, I-55 SB @ MM223 SECT. D3 OVD MESSAGE SG-2015 DRILLED BY TSC/L-81.929B STRUCT. NO. COUNTY 063 (Grundy) LOCATION Southeast Side of SB I-55 S. 24 S1/2 , TWP. 31 N , RNG. 7 E Surface Water Elev. 556+56 1.00ft LT O W S U W S Groundwater Elev.: when drilling at Completion Qu tsf Qu tsf W % Drv Surface Elev. 606.50 ft FILL - Dark brown and black clayey TOPSOIL (OL) SILTY CLAY A-7-8 Very tough gray sitty CLAY, little sand and gravel, moist (CL) CLAY LOAM A-6 Very tough to hard brown and gray silty CLAY, little sand, trace gravel, moist (CL) CLAY A-8 B 3.21 23.8 15% 4 6 2.25 19.8 End of Boring at 30.0' B 3.60 22.9 15% 2.75 20.7 8 10 Very tough gray silty CLAY, little sand and gravel, moist (CL) CLAY LOAM A-6 2.00 20.6 B 3.74 16.5 15% 1.75 16.1 B 2.68 14.8 15% SPT. (N) = Sum of last two blow values in sample. (Qu) S=Shear, B=Bulge at 15% Strain, P=Penetration Test. Stations, Depths, Offset, and Elevations are in Feet

# SB I-55 MM 223

FILE NAME =	USER NAME = ahmedh	DESIGNED - H.A.	REVISED -			SOIL BORING LOGS	F.A.I. SECTION	COUNTY TOTAL SHEET
c:\pw_work\pwidot\ahmedh\dØ381424\D3xxx	x-sht-details.dgn	DRAWN - H.A.	REVISED -	STATE OF ILLINOIS		LOCATION # 2 (I–55 SB MM 223)	80, 55 D3 OVD MESSAGE SG-2015	5 VARIOUS 43 34
	PLOT SCALE = 100.0000 '/ in.	CHECKED - R.W.	REVISED -	DEPARTMENT OF TRANSPORTATION		, , , , , , , , , , , , , , , , , , , ,		CONTRACT NO. 66D79
\$MODELNAME\$	PLOT DATE = 3/26/2015	DATE - 3/26/2015	REVISED -		SCALE:	SHEET 1 OF 1 SHEETS STA. TO STA.	ILLINOIS FED.	AID PROJECT

		ST	RUC	TURE	BORING LOG Page 1 o
ROUTE FAI 55 DESCR	IPTIC	N D	ynamic	Mess	age Sign, I-55 NB @ MM214 Date Completed 9/3/14
SG-2015					DRILLED BY TSC/L-81.929A
COUNTY 105 (Livingston) LOCA	TION	We	st Side	of NB	I-55 S. 24 SE , TWP. 30N , RNG. 68
Boring No1 Station586+80 Offset1.00ft RT  Surface Elev658.50ft	D E P T H	B L O W S	Qu tsf	w %	Surface Water Elev.
FILL - Dark brown and black clayey TOPSOIL, moist (OL) SILTY CLAY A-7-6	3	4 5 7	P 4.5+	22.4	Tough gray silty CLAY, little sand and gravel, moist (CL) CLAY LOAM A-6
FILL - Black to dark brn silty CLAY, trace sand and gravel, trace organic,		3 3	P 2.50	31.1	4 B 4 1.62 19.
moist (CL) SILTY CLAY A-7-8 653.00	-5	4			628.50 -30 6 15%
Hard to very tough brown and gray silty CLAY, little sand, trace gravel, moist (CL) CLAY A-6		4 4 6	5.06 15%	22.2	End of Boring at 30.0'
-	-10	5 5 6	B 4.92 15%	22.4	
		4 5 7	P 4.50	23.4	
-	-15	3 4 6	B 2.68 15%	25.4	
		4 8 8	P 2.25	24.6	
84666 -	-20	6 6 9	B 4.13 15%	16.8	
Tough gray silty CLAY, little sand and gravel, moist (CL) CLAY LOAM A-6		3 4 4	P 1.50	19.3	

# **Testing Service Corporation** Page 1 of 1 STRUCTURE BORING LOG Date Started \_\_\_\_9/3/14\_\_\_ Date Completed \_\_\_\_9/3/14 ROUTE FAI 55 DESCRIPTION Dynamic Message Sign, I-55 NB @ MM214 SECT. D3 OVD MESSAGE SG-2015 DRILLED BY TSC/L-81,929A STRUCT, NO. \_ COUNTY 105 (Livingston) LOCATION East Side of NB I-55 S. 24 SE , TWP. 30N , RNG. 6E Surface Water Elev. 586+80 O W S L Groundwater Elev.: 94.00ft RT when drilling Qu tsf Qu tsf W S W % at Completion Drv Surface Elev. 660.50 ft FILL - Black clayey TOPSOIL.660.00 very moist (OL) CLAY A-8 FILL - Bm and drk bm silty P 4.25 19.3 CLAY LOAM A-8 CLAY, little sand, trace gravel, trace organic, moist (CL) CLAY A-6 Very tough to hard brown silty CLAY, little sand, trace gravel, B 1.69 18.1 15% 2.50 21.6 4 5 moist (CL) CLAY A-6 End of Boring at 30.0' Very tough brown and gray silty CLAY, little sand, moist (CL/CH) CLAY A-7-8 B 3.34 26.0 15% B 3.74 28.1 15% Hard to very tough brown and gray silty CLAY, little sand, trace gravel, moist (CL) CLAY A-8 4.5+ 24.2 5.06 20.3 15% 1.75 22.5 B 2.68 21.8 15% Tough gray silty CLAY, little sand and gravel, moist (CL) CLAY LOAM A-8 1.50 19.5 SPT. (N) = Sum of last two blow values in sample. (Qu) S=Shear, B=Bulge at 15% Strain, P=Penetration Test. Stations, Depths, Offset, and Elevations are in Feet

# NB I-55 MM 214

FILE NAME =	USER NAME = ahmedh	DESIGNED - H.A.	REVISED -			SOIL BORIN	F.A.I.	SECTION	COUNTY	TOTAL SHEET		
c:\pw_work\pwidot\ahmedh\d0381424\D3xxx	x-sht-details.dgn	DRAWN - H.A.	REVISED -	STATE OF ILLINOIS			80, 55 D3 OV	D MESSAGE SG-2015	VARIOUS	43 35		
	PLOT SCALE = 100.0000 '/ in.	CHECKED - R.W.	REVISED -	DEPARTMENT OF TRANSPORTATION	,						CONTRACT	NO. 66D79
\$MODELNAME\$	PLOT DATE = 3/26/2015	DATE - 3/26/2015	REVISED -		SCALE:	SHEET 1 OF 1 SHEE	TS STA.	TO STA.		ILLINOIS FED. AI	D PROJECT	

