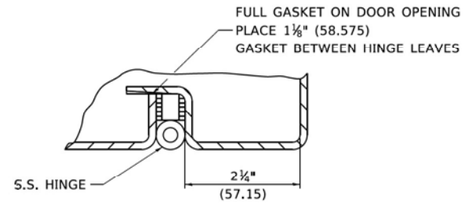
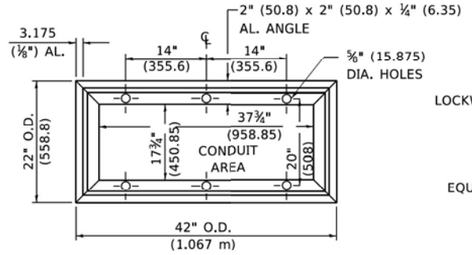
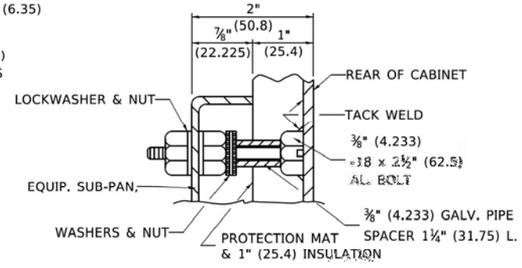


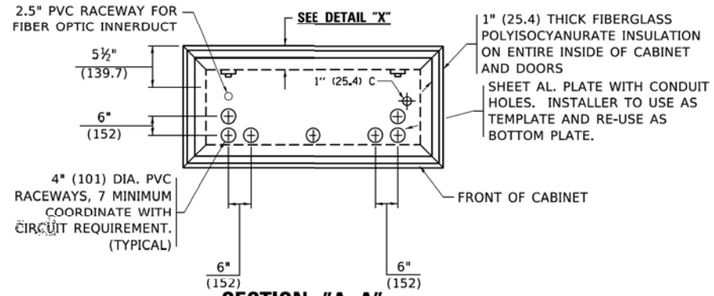
DETAIL "Y"



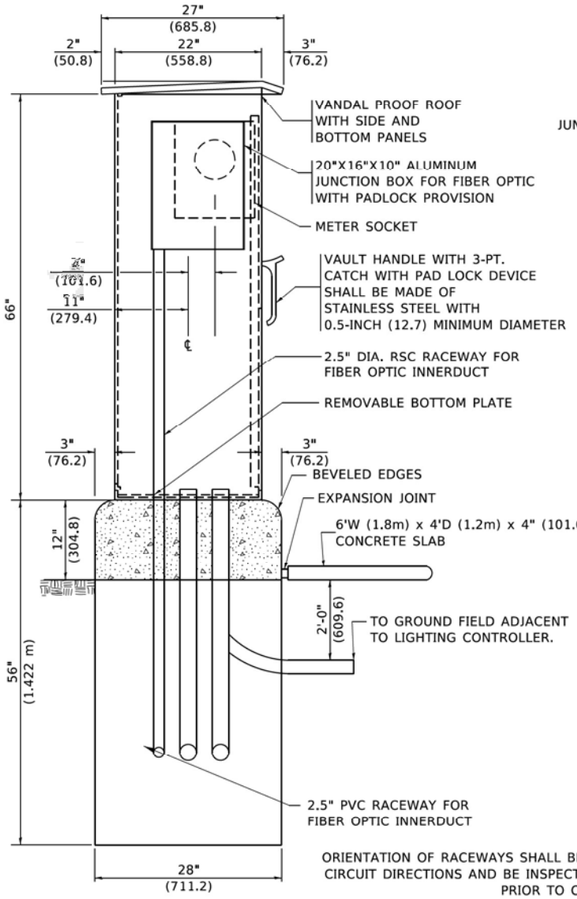
BASE MTG. DETAIL



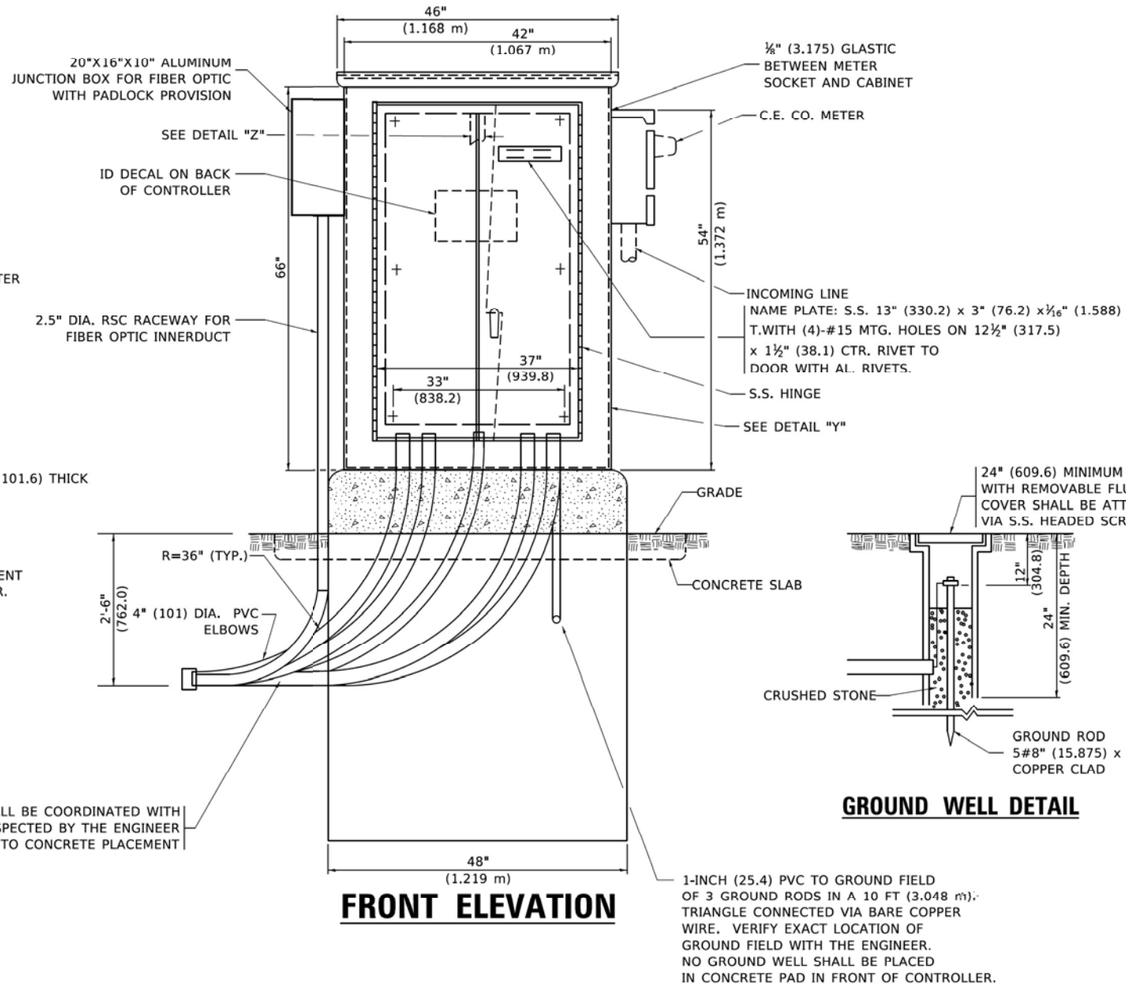
DETAIL "X"



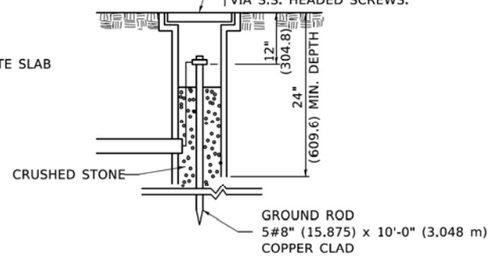
SECTION "A–A"



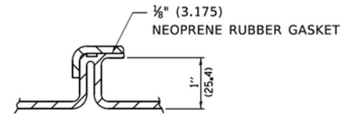
LEFT SIDE ELEVATION



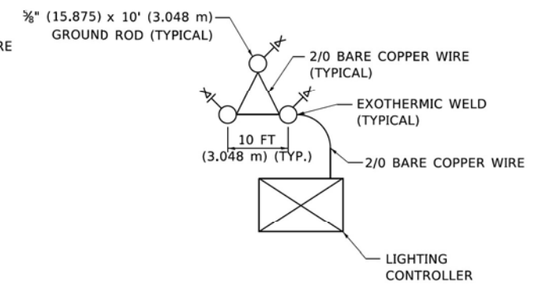
FRONT ELEVATION



GROUND WELL DETAIL



DETAIL "Z"



GROUND FIELD DETAIL
(N.T.S.)

THE CONTRACTOR SHALL
VERIFY EXACT LOCATION
WITH THE ENGINEER

MODEL: 2D SHEET H
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS+PW+01\DMS08073.02R29-SHT-LIGHT-DETAILS-DGN_05-C.DGN

HNTB

USER NAME = JBRYNDA		DESIGNED - AJS		REVISED -	
		DRAWN - AJS		REVISED -	
PLOT SCALE = 0.166666 ' / IN.		CHECKED - MCD		REVISED -	
PLOT DATE = 6/29/2023		DATE - 6/29/2023		REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING CONTROLLER, BASE MOUNTED
480VOLT, 200AMP (DUAL) RADIO SCADA – FIBER OPTIC PROVISION

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

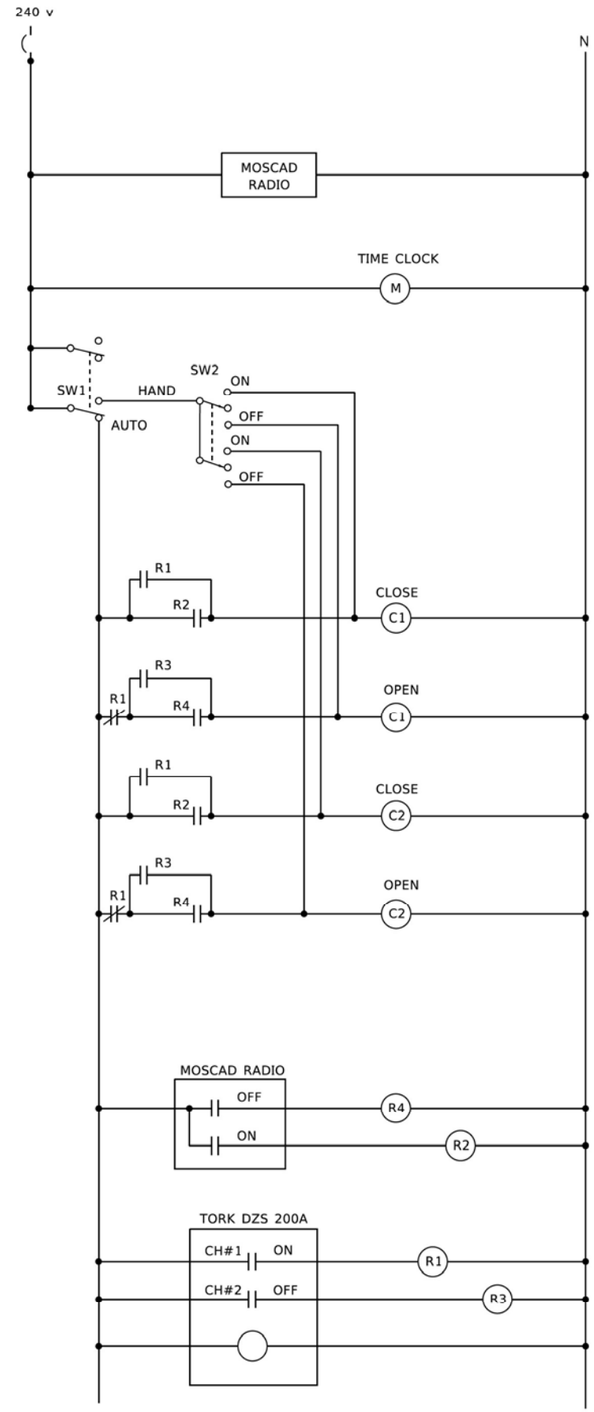
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	501
	BE-206C	CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			

NOTES

1. CABINET SHALL BE FABRICATED FROM 0.125-INCH (3.175) SHEET ALUMINUM #3003H14, FORMED AND ARC WELDED.
2. ALL SCREWS AND HARDWARE SHALL BE PLATED, GALVANIZED, OR MADE OF BRASS, ALUMINUM OR STAINLESS STEEL, UNLESS OTHERWISE NOTED.
3. NAME PLATE SHALL HAVE ENGRAVED 0.75-INCH (19.05) HIGH LETTERS FILLED IN BLACK: "STATE OF ILLINOIS LIGHTING CONTROLS" UNLESS OTHERWISE SPECIFIED.
4. ONE INCH THICK POLYISOCYANURATE INSULATION SHALL BE INSTALL AND PERMANENTLY CEMENTED ON ALL SIDES OF THE CABINET AND DOORS.
5. CABINET SHALL BE PRIMED AND PAINTED AS SPECIFIED.
6. ELECTRIC UTILITY METER BOX SHALL BE MOUNTED ON THE SIDE OF CONTROL CABINET AS SHOWN ON THE PANEL LAYOUT DIAGRAM.
7. THE COMPLETED CONTROLLER SHALL BE U.L. LISTED AS AN INDUSTRIAL CONTROL PANEL UNDER UL508.
8. METAL MOUNTING PANEL SHALL BE FABRICATED FROM THE SAME MATERIAL AS THE CABINET AND SHALL BE FLANGED BACK 0.75-INCHES I.D. ON 4 SIDES.
9. CIRCUIT BREAKERS AND CONTACTORS AND OTHER COMPONENTS SHALL BE MOUNTED ON 0.125-INCH (3.175) THICK GLASTIC INSULATION BACK PANEL.
10. ALL DEVICES SHALL BE FRONT REMOVABLE.
11. TIME CLOCK CHANNEL 1 N.O. CONTACT IS CLOSED NIGHT AND OPEN DAY (LIGHTS ON).
12. SET LATITUDE TO 42 DEGREES. SET CH.1 TO 23 MINUTES AFTER ASTRONOMICAL SUNSET, 50 MINUTES BEFORE ASTRONOMICAL SUNRISE. SET CH.2 TO 60 MINUTES AFTER ASTRONOMICAL SUNSET (WITH A SIGNAL LENGTH OF 1 SECOND), +28 MINUTES AFTER ASTRONOMICAL SUNRISE (WITH A SIGNAL LENGTH OF 7 SECONDS.)
13. BUS BAR SHALL HAVE 22 LUG TERMINALS SIZED TO ACCOMMODATE REQUIRED WIRE SIZES. 240V NEUTRAL BUS SHALL BE PAINTED WHITE, GROUND BUS SHALL BE PAINTED GREEN, AND THE 120V NEUTRAL BUS SHALL BE PAINTED GREY.
14. ALL LUGS SHALL BE OF COPPER SCREWS AND CONNECTORS, SPRING HELD.
15. ALL WIRING TERMINATIONS SHALL BE RATED NOT LESS THAN 75 DEGREE CENTIGRADE.
16. ALL CONTROL WIRING SHALL BE 600V #12 TYPE MTW, SCADA WIRING SHALL BE #18.
17. ALL POWER WIRING SHALL BE 600V TYPE RHH/RHW.
18. ALL WIRING WITHIN THE CABINET SHALL BE COLOR CODED AS INDICATED:

R = RED	Y = YELLOW
B = BLACK	W = WHITE
BL = BLUE	G = GREEN
	G = GREY

19. MOSCAD I/O WIRING SHALL BE:
    DIGITAL INPUT (DI) WIRING SHALL BE #18 MTW PURPLE.
    ANALOG INPUT (AI) WIRING SHALL BE #18, 2/C SHIELDED.
    AI AND DI WIRING MAY BE BUNDLED TOGETHER, BUT SHALL NOT BE BUNDLED WITH OTHER WIRING.
20. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED.
21. SCHEMATIC SHOWN WITH BREAKER OPEN, CONTACTOR OPEN, CABINET DOOR CLOSED, CLOCK NOT ACTIVE (DE-ENERGIZED STATE).
22. A LAMINATED COPY OF THE CIRCUIT SCHEMATIC AND SCADA I/O DIAGRAM (NO SMALLER THAN 11"x17" EACH) SHALL BE ATTACHED TO THE INSIDE OF THE CONTROLLER WITH STAINLESS STEEL SCREWS.



CONTROL CIRCUIT LADDER LOGIC DIAGRAM

MOSCAD I/O ASSIGNMENTS		
TERM	MOSCAD DESTINATION	DESCRIPTION OF INPUT
1	DIGITAL INPUT 1	ALARM KNOWLEDGE
2	DIGITAL INPUT 2	DOOR OPEN
3	DIGITAL INPUT 3	MAIN(S) BREAKER OPEN
4	DIGITAL INPUT 4	CONTACTOR 1 OPEN
5	DIGITAL INPUT 5	CONTACTOR 2 OPEN
6	DIGITAL INPUT 6	CABINET IN NON-AUTO
7	DIGITAL INPUT 7	BACK-UP CLOCK OFF CALL
8	DIGITAL INPUT 8	BACK-UP CLOCK ON CALL
17	24 V+	24+VDC
18	DI COMMON	COMMON
21	K1 C	K1 COMMON
22	K1 NO	LIGHTS ON CALL
24	K2 C	K2 COMMON
25	K2 NO	LIGHTS OFF CALL
32	ANALOG INPUT 1 (+)	CABINET NEUTRAL CURRENT
33	ANALOG INPUT 1 (-)	CABINET NEUTRAL CURRENT
34	ANALOG INPUT 2 (+)	CABINET SERVICE VOLTAGE
35	ANALOG INPUT 2 (-)	CABINET SERVICE VOLTAGE
40	P. GROUND	GROUND

ALL ANALOG INPUTS WIL. BE 4-20 MA ONLY. DIGITAL OUTPUT RELAYS WILL BE ELECTRICALLY ENERGIZED AND MOMENTARILY HELD

MIXED I/O MODULE MODEL NUMBER V436

MODEL: 2D SHEET H
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS#PW401\DMS08073\62R29-SHT-LIGHT-DETAILS-DGN_05-D.DGN

HNTB

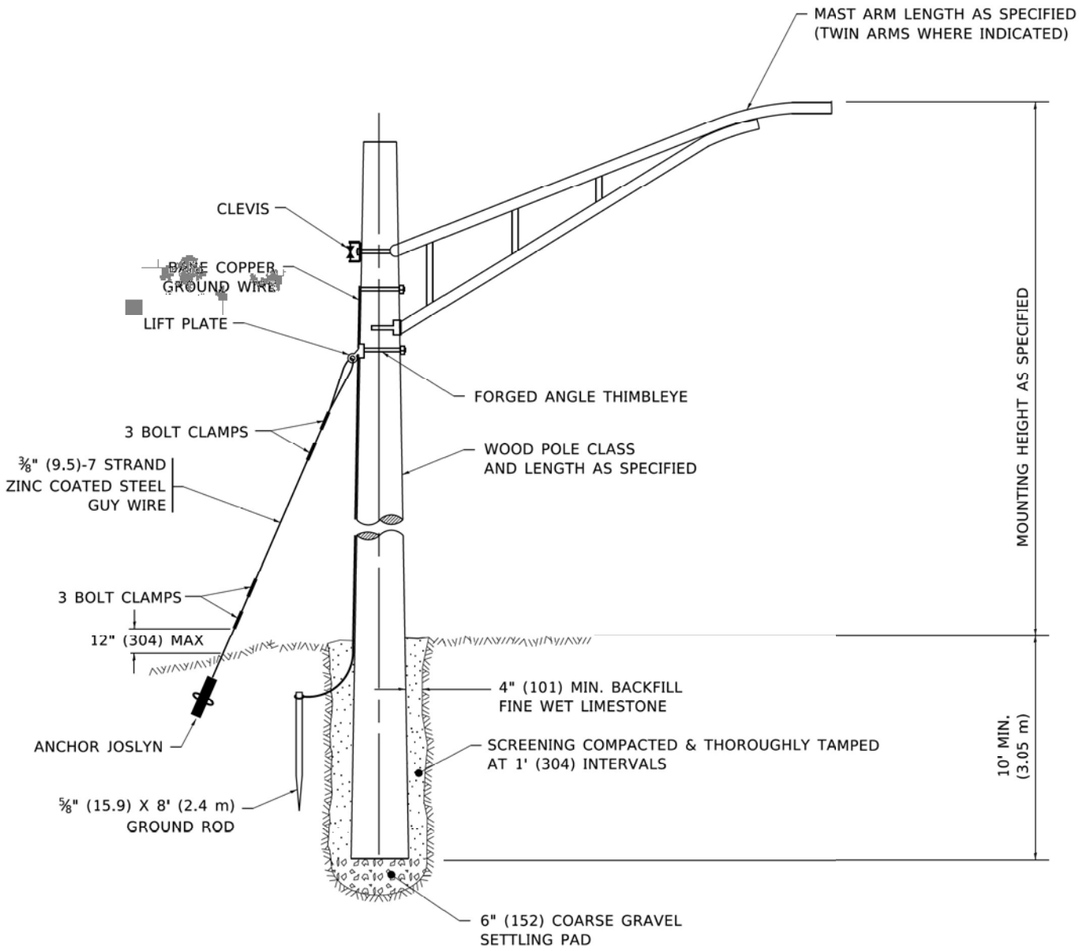
USER NAME = JBRYNDA	DESIGNED - AJS	REVISED -	
	DRAWN - AJS	REVISED -	
PLOT SCALE = 0.166666 ' / IN.	CHECKED - MCD	REVISED -	
PLOT DATE = 6/29/2023	DATE - 6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

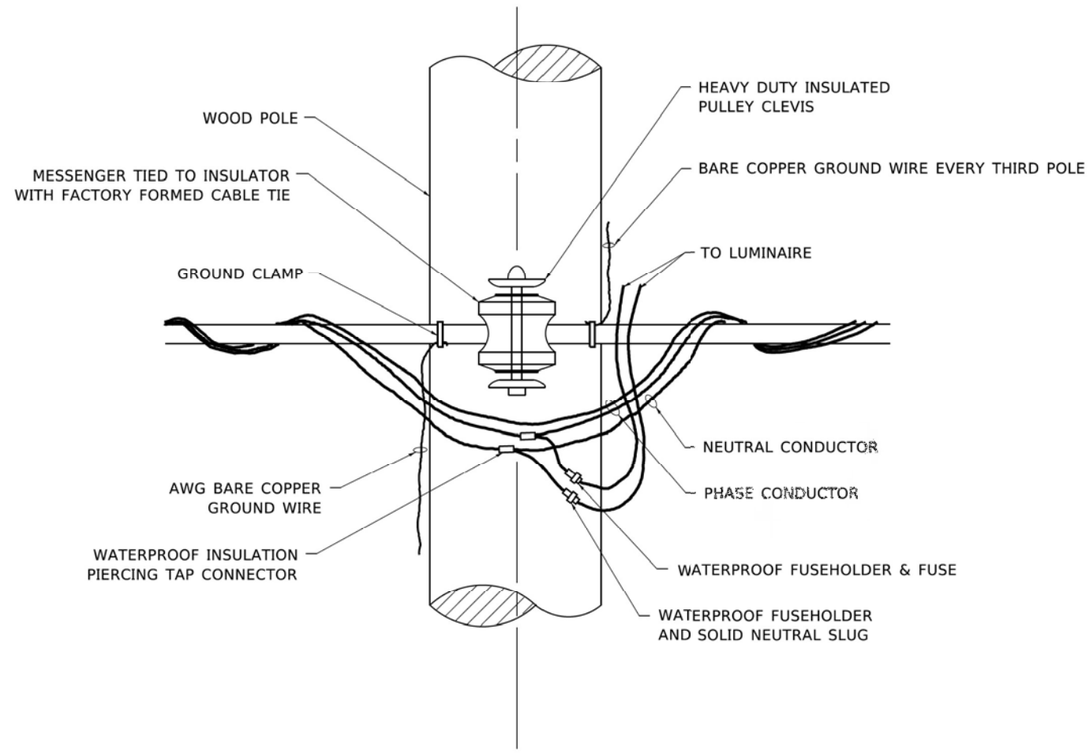
LIGHTING CONTROLLER, BASE MOUNTED
480VOLT, 200AMP (DUAL) RADIO SCADA – FIBER OPTIC PROVISION

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	502
	BE-206C	CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			



TEMPORARY LIGHT POLE DETAIL



TEMPORARY LIGHT POLE ATTACHMENT DETAIL

NOTE:

1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED.
2. MAST ARM SHALL BE RATED FOR THE SPECIFIED MOUNTING HEIGHT.

MODEL: 2D SHEET H
FILE NAME: C:\TRANSYSTEMS\DPW_LOCAL\TRANSYSTEMS4PW4011DMS80731\62R35-SHT-LIGHT-DETAILS_06-01-DGN.DGN

HNTB

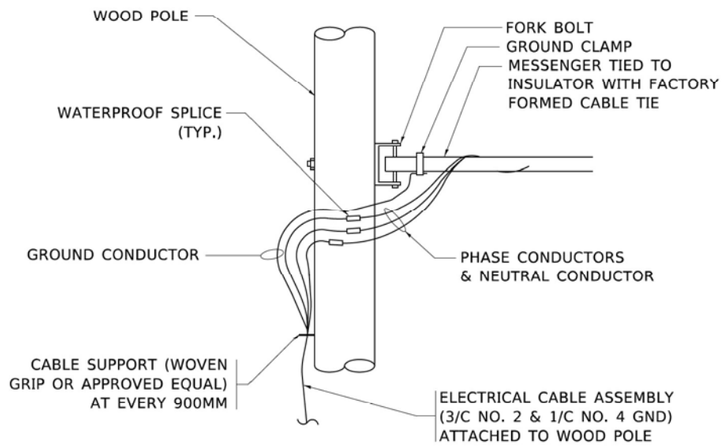
USER NAME = JBRYNDA	DESIGNED - AJS	REVISED -	
	DRAWN - AJS	REVISED -	
PLOT SCALE = 0.166666 ' / IN.	CHECKED - MCD	REVISED -	
PLOT DATE = 6/29/2023	DATE - 6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY LIGHT POLE DETAILS
I–80 – RAMP

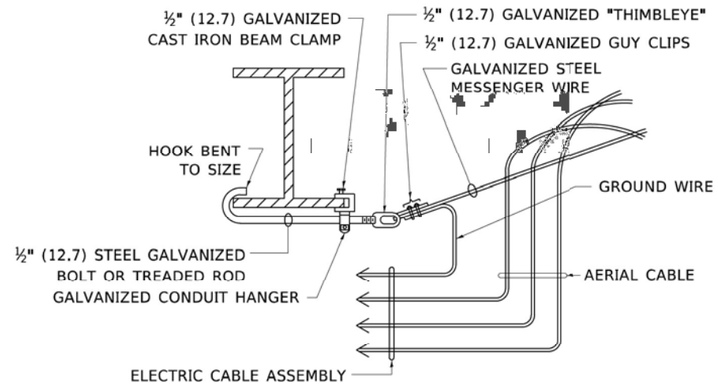
SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	503
	BE-800	CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			



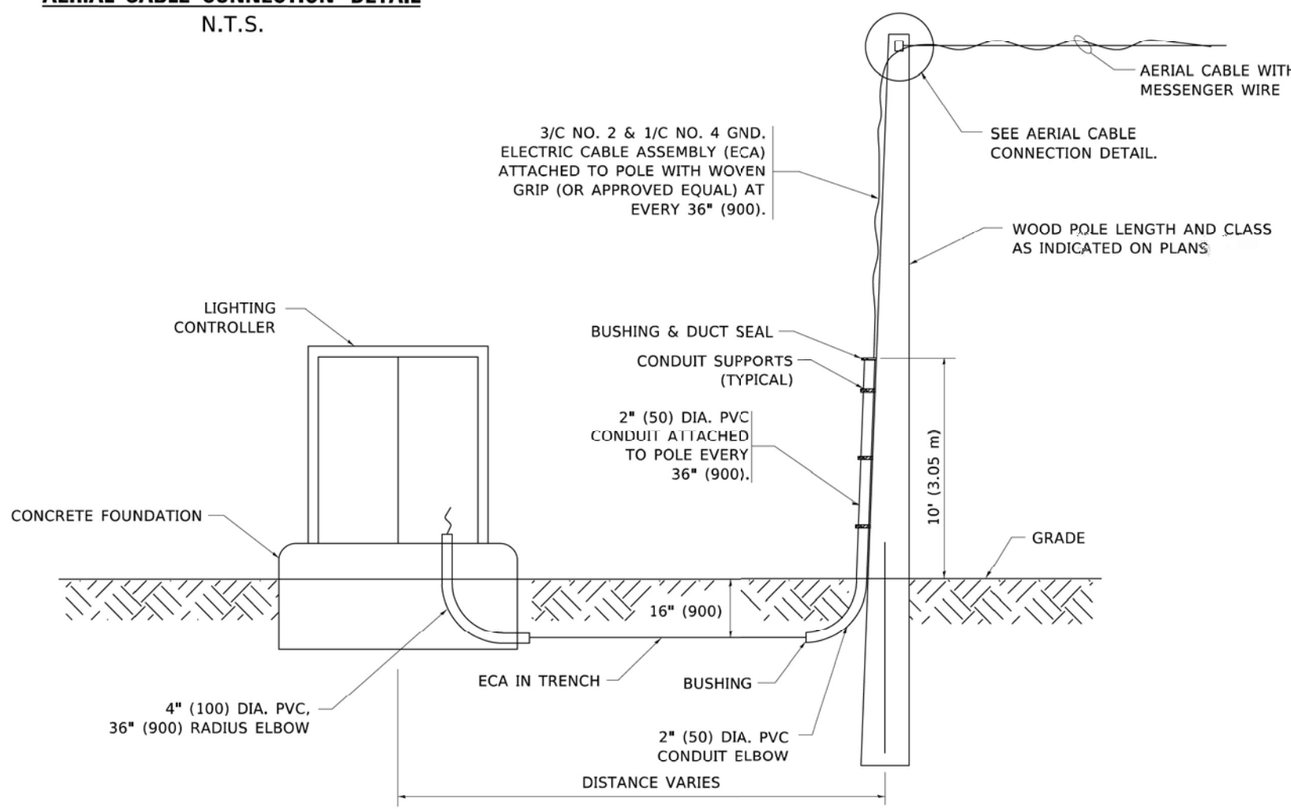
AERIAL CABLE CONNECTION DETAIL

N.T.S.



AERIAL CABLE ATTACHED TO STRUCTURE

NOT TO SCALE



WOOD POLE TO LIGHTING CONTROLLER WIRING CONNECTION DETAIL

N.T.S.

NOTES:

1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED.
2. SEE PROPOSED LIGHTING PLAN FOR CONDUIT, CABLE AND ROUTING.
3. THE CONTRACTOR SHALL PROVIDE INTERMEDIATE SUPPORTS TO MAINTAIN MINIMUM CLEARANCES. REFER TO AERIAL AERIAL CABLE ATTACHED TO STRUCTURE DETAIL.
4. COST OF SPLICES AND MOUNTING HARDWARE SHALL BE INCLUDED IN THE UNIT PRICE FOR AERIAL CABLE.

MODEL: 2D SHEET H
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW401DMS08073\62R53-SHT-LIGHT-DETAILS_06_02-DGN.DGN

HNTB

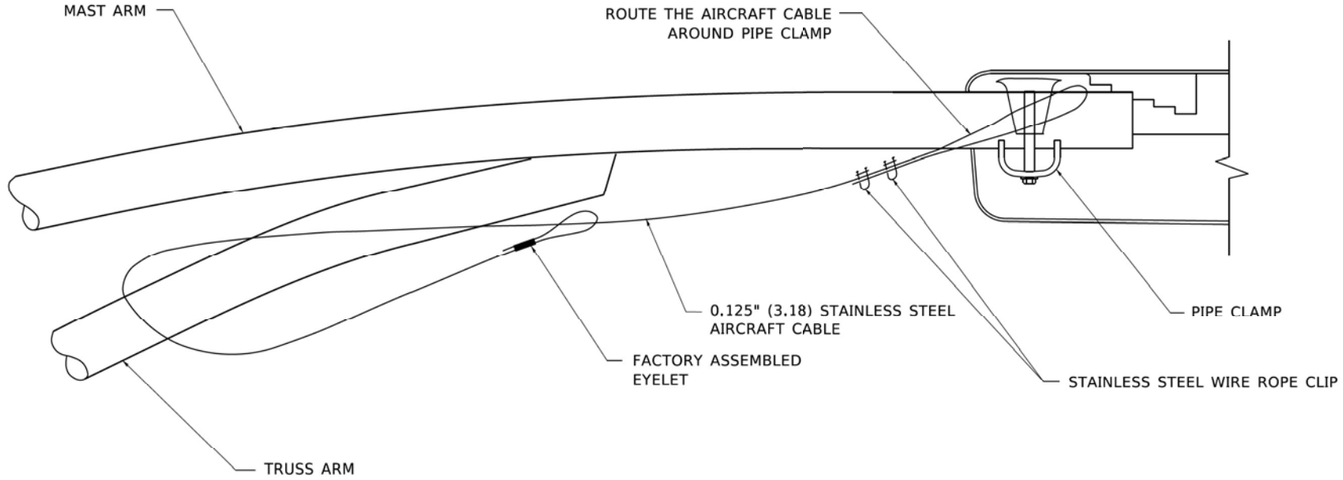
USER NAME = JBRYNDA		DESIGNED - AJS	REVISED -	
		DRAWN - AJS	REVISED -	
PLOT SCALE = 0.166666 ' / IN.		CHECKED - MCD	REVISED -	
PLOT DATE = 6/29/2023		DATE - 6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

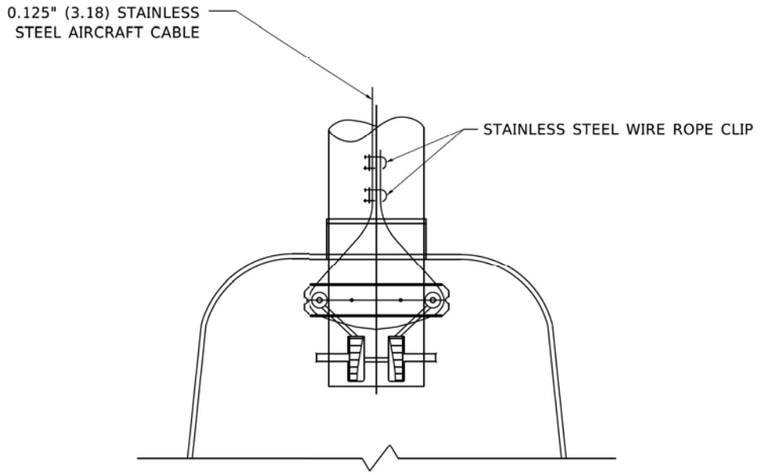
TEMPORARY AERIAL CABLE INSTALLATION
I–80 – RAMP

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

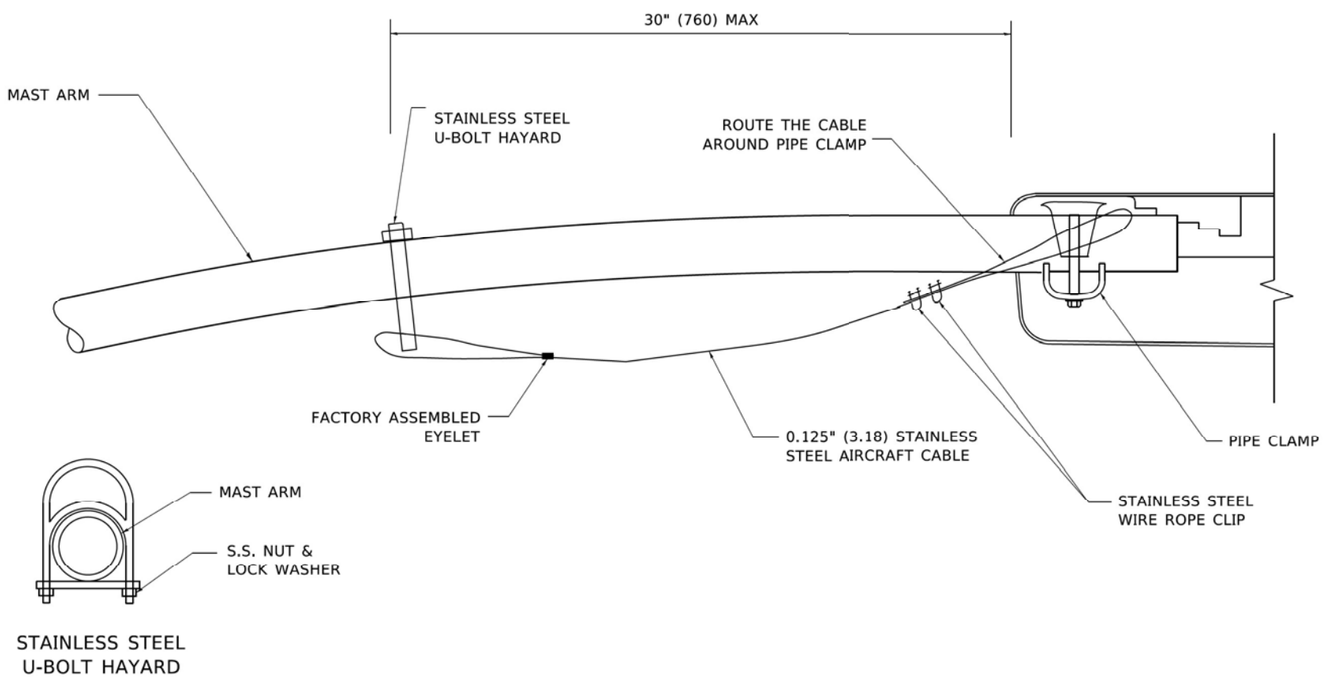
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	504
	BE-801	CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			



SIDE VIEW (TRUSS ARM)
N.T.S.



BOTTOM VIEW
N.T.S.



SIDE VIEW (SINGLE MEMBER OR DAVIT ARM)
N.T.S.

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.
2. CONTRACTOR SHALL ADJUST THE WIRE CLIP TO ELIMINATE ANY SLACK FROM THE WIRE ROPE.
3. THE 0.125" (3.18) STAINLESS STEEL AIRCRAFT CABLE SHALL REMAIN VISIBLE FROM THE GROUND LEVEL.
4. THE BREAKING STRENGTH OF THE CABLE SHALL BE 1700 LBS. MIN.

MODEL: 2D SHEET H
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW401DMS08073\62R53-SHT-LIGHT-DETAILS_07_01-DGN.DGN

HNTB

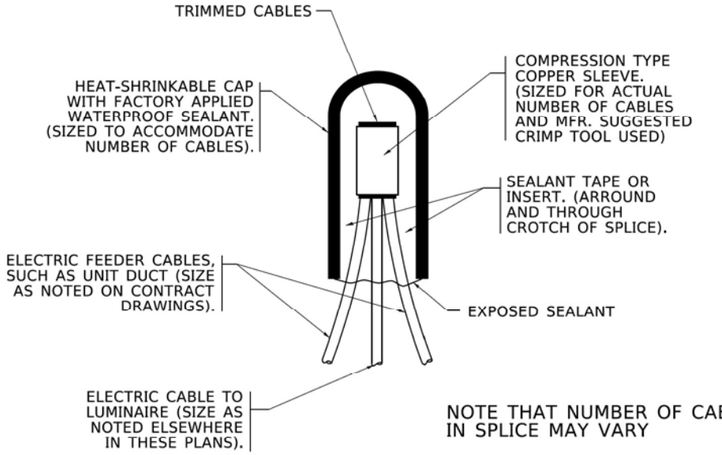
USER NAME = JBRYNDA	DESIGNED - JB	REVISED -	
	DRAWN - JB	REVISED -	
PLOT SCALE = 0.166666 ' / IN.	CHECKED - MCD	REVISED -	
PLOT DATE = 6/29/2023	DATE - 6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

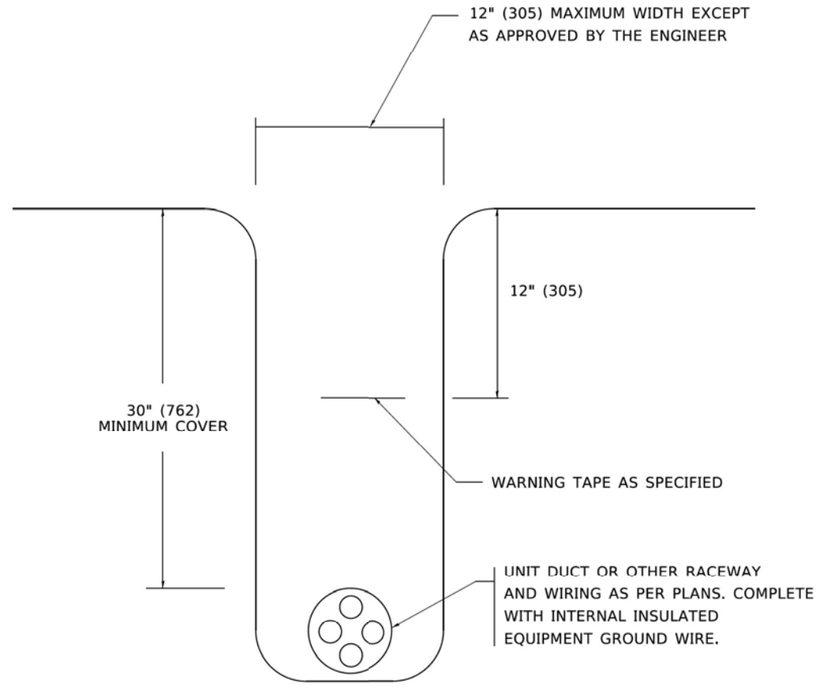
LUMINAIRE SAFETY CABLE ASSEMBLY

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

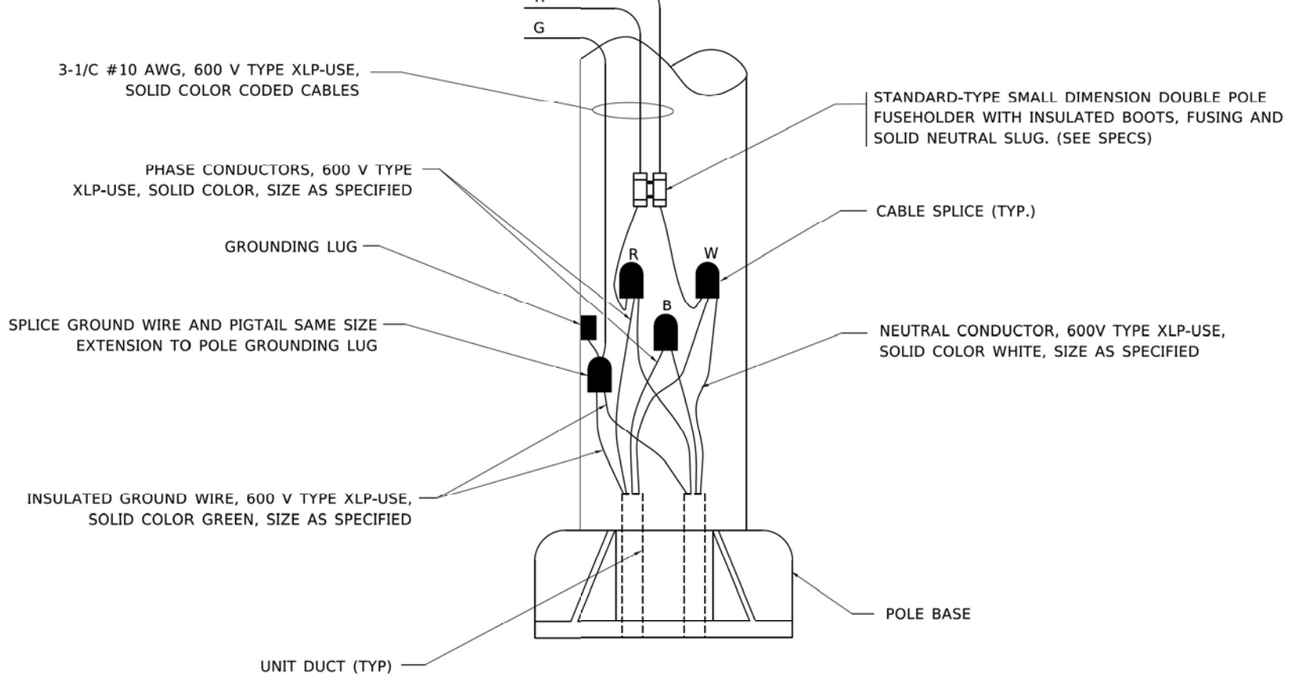
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	505
	BE-701	CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			



TYPICAL SPLICE DETAIL
N.T.S.



TYPICAL WIRING IN TRENCH DETAIL
N.T.S.



POLE WIRING DETAIL
N.T.S.

HNTB

USER NAME = JBRYNDA	DESIGNED - JB	REVISED -	
	DRAWN - JB	REVISED -	
PLOT SCALE = 0.166666 ' / IN.	CHECKED - MCD	REVISED -	
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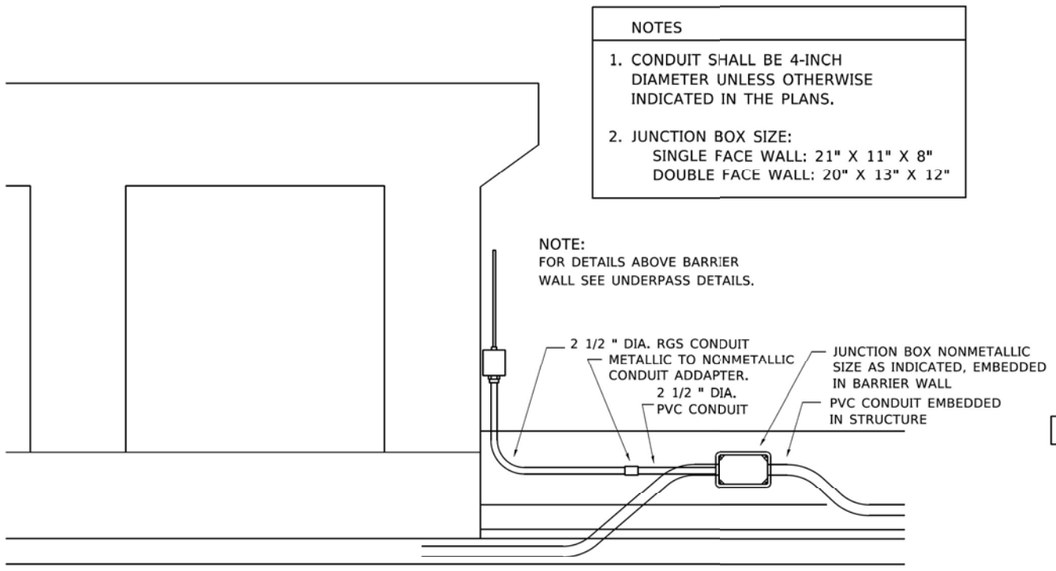
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MISC. ELECTRICAL DETAILS

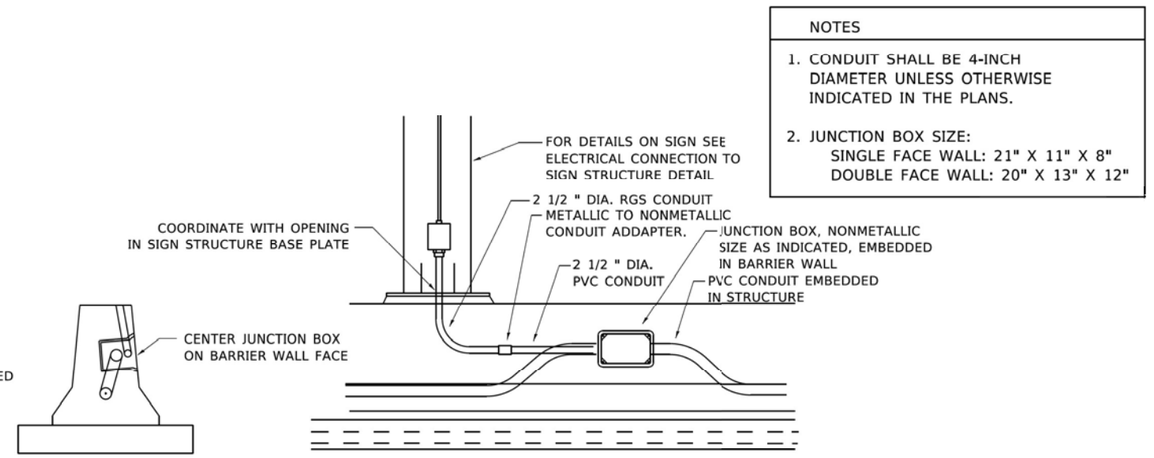
SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	506
	BE-702	CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			



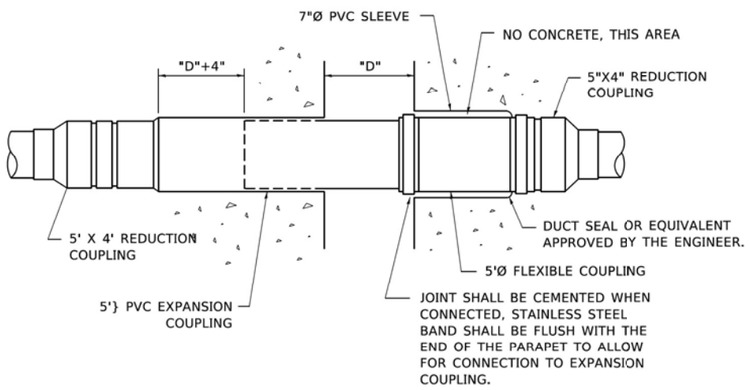
ED - BWD

ELECTRIC CONNECTION TO UNDERPASS LIGHTING



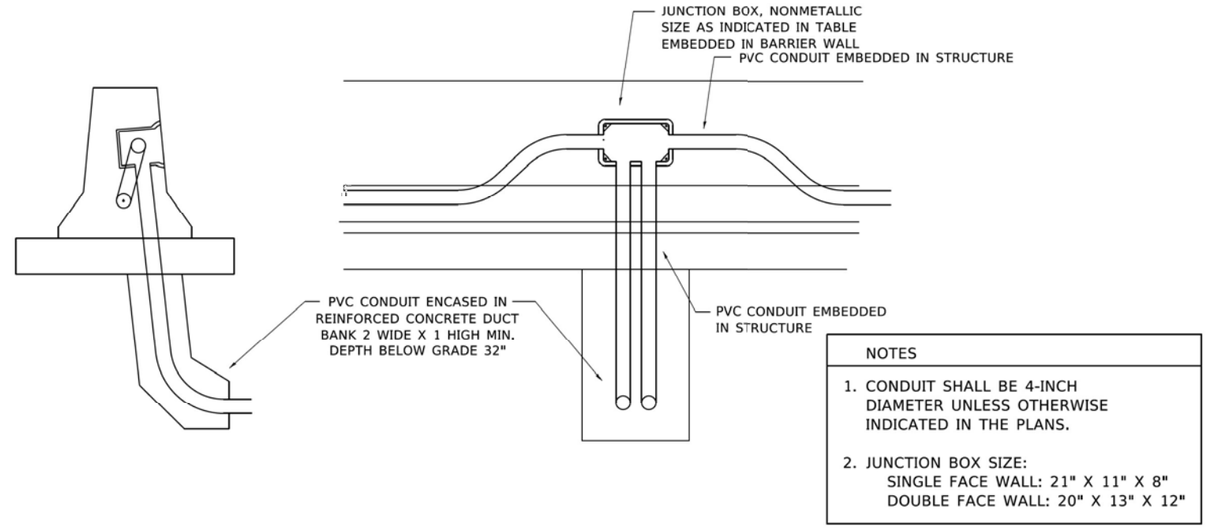
ED - SGN

JUNCTION BOX EMBEDDED IN BARRIER WALL FOR SIGN LIGHTING



INSTALLATION OF CONDUIT IN BRIDGE PARAPET EXPANSION JOINT

(N.T.S.)



ED - BW

JUNCTION BOX EMBEDDED IN BARRIER WALL

MODEL: 2D SHEET H
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PWG01\DMS08073\62R35-SHT-HGHT-DETAILS_07_03-DGN.DGN

HNTB

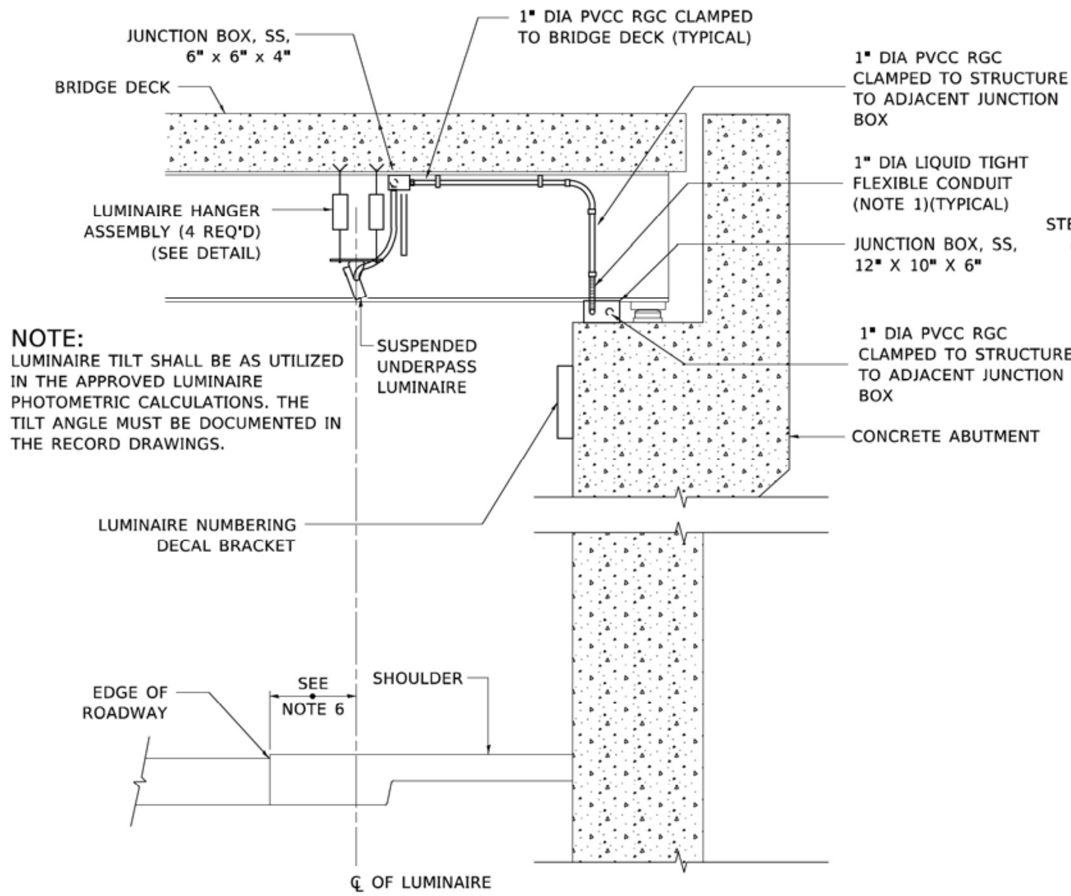
USER NAME = JBRYNDA	DESIGNED - JB	REVISED -
	DRAWN - JB	REVISED -
PLOT SCALE = 0.166666 ' / IN.	CHECKED - MCD	REVISED -
PLOT DATE = 6/29/2023	DATE - 6/29/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

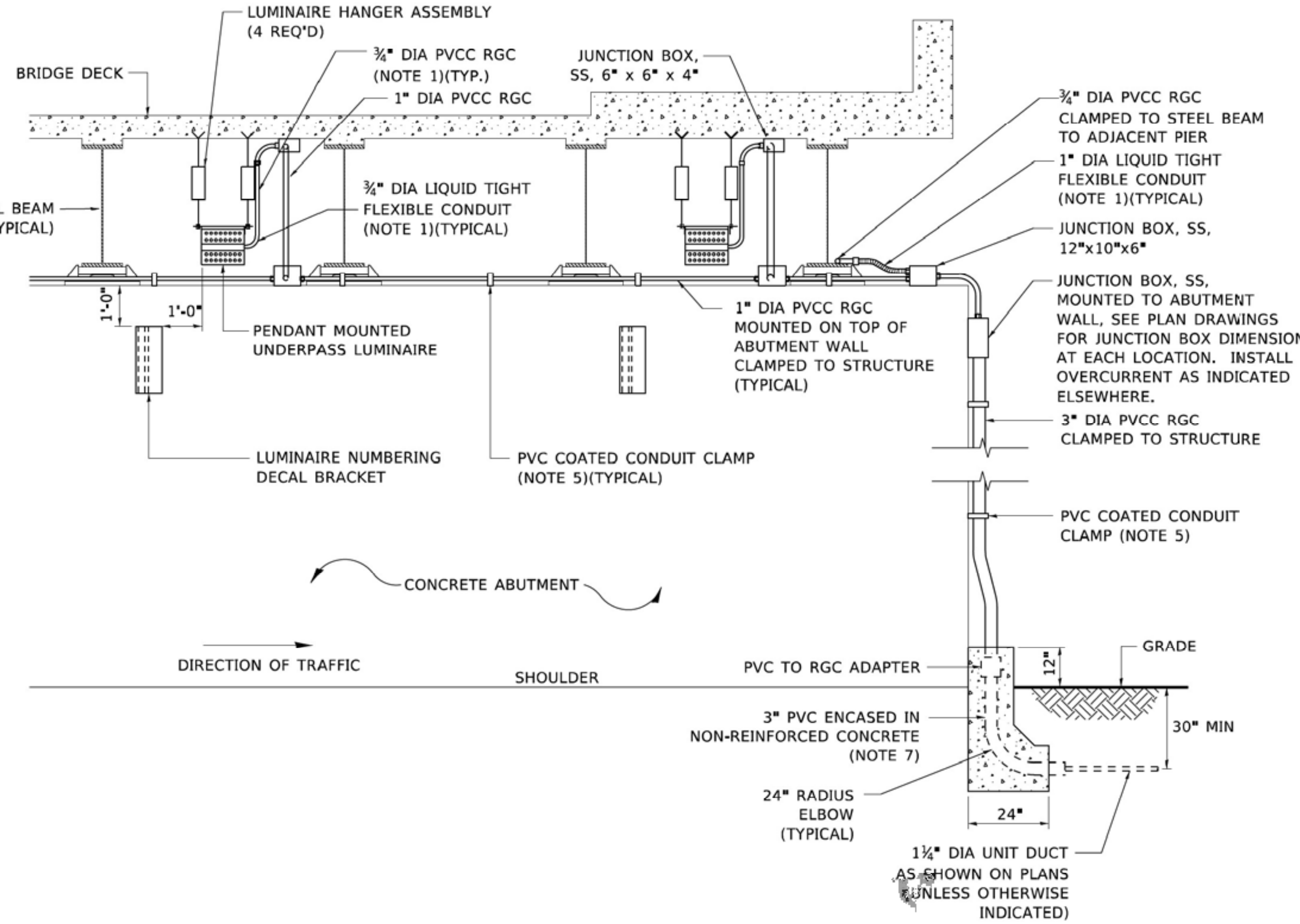
MISC. ELECTRICAL DETAILS CONT.

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	507
	BE-703	CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			

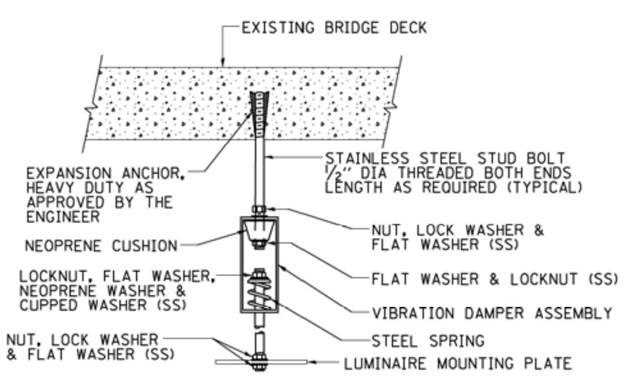


NOTE:
LUMINAIRE TILT SHALL BE AS UTILIZED IN THE APPROVED LUMINAIRE PHOTOMETRIC CALCULATIONS. THE TILT ANGLE MUST BE DOCUMENTED IN THE RECORD DRAWINGS.

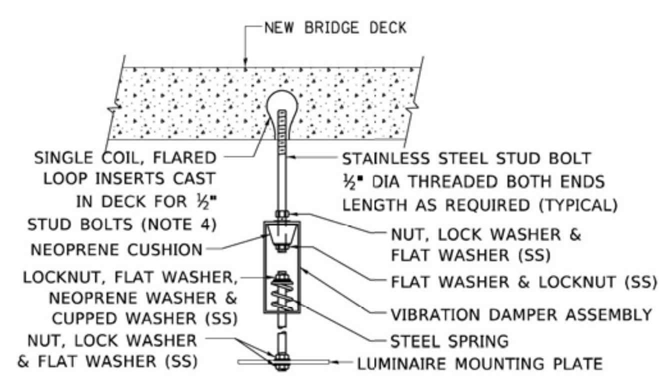


NOTES:

1. LIQUID TIGHT FLEXIBLE METAL CONDUIT, MAXIMUM LENGTH 6'-0", TYPICAL FOR EACH INSTANCE AS SHOWN. PROVIDE PVC COATED RIGID GALVANIZED STEEL CONDUIT AS REQUIRED NOT TO EXCEED 6'-0" OF FLEXIBLE LIQUID TIGHT METAL CONDUIT. LIQUID TIGHT FLEXIBLE METAL CONDUIT WILL BE INCLUDED IN THE COST OF THE CONDUIT ATTACHED TO STRUCTURE, OF THE CORRESPONDING DIA., GALVANIZED STEEL, PVC COATED PAY ITEM EXCEPT THAT " DIA. CONDUIT AND " DIA. FLEXIBLE CONDUIT SHALL BE INCLUDED IN THE COST OF UNDERPASS LUMINAIRE INSTALLATION.
2. SEE UNDERPASS LIGHTING PLANS FOR INSTALLATION LOCATION OF UNDERPASS LIGHTING LUMINAIRES.
3. THE CONTRACTOR SHALL USE APPROVED SINGLE COIL FLARED LOOP INSERTS WHEN SUSPENDED MOUNTING AN UNDERPASS LUMINAIRE TO A NEW BRIDGE DECK. THE FLARED LOOP INSERTS MUST BE CAST INTO THE CONCRETE DECK. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND COORDINATING THE INSERT LOCATIONS FOR MOUNTING THE UNDERPASS LIGHTING SYSTEM AS SHOWN ON THE PLANS WITH THE BRIDGE DECK CONTRACTOR. SEE DETAIL.
4. THE UNDERPASS LUMINAIRE HANGER ASSEMBLY COMPLETE WITH HEAVY DUTY ANCHORS/INSERTS AND ALL APPLICABLE HARDWARE SHALL BE INCLUDED IN THE COST OF THE UNDERPASS LUMINAIRE PAY ITEM.
5. SECURE THE CONDUIT WITH PVC COATED CONDUIT CLAMPS OR CONDUIT BEAM CLAMPS AS SHOWN AT 5'-0" INTERVALS FOR LATERALS AND WITHIN 2'-0" MAXIMUM FROM ANY JUNCTION BOX, FLEXIBLE CONDUIT, OR CHANGE IN DIRECTION. ALL PVC COATED CONDUIT CLAMPS OR BEAM CLAMPS SHALL BE INCLUDED WITH THE COST OF THE "CONDUIT ATTACHED TO STRUCTURE, OF THE CORRESPONDING DIA., GALVANIZED STEEL, PVC COATED" PAY ITEM.
6. ALL UNDERPASS LUMINAIRES MUST BE CENTERED IN THE BEAM SPACE AS INDICATED ON THE PLANS UNLESS OTHERWISE DIRECTED BY THE ENGR. LUMINAIRE SETBACK SHALL BE AS INDICATED IN PLANS FOR EACH SPECIFIC UNDERPASS
7. THE CONCRETE ENCASED CONDUIT TRANSITION SHALL BE INCLUDED IN THE COST OF THE GALVANIZED RIGID STEEL CONDUIT PAY ITEMS.
8. ALL CONDUIT ATTACHED TO STRUCTURE SHALL BE PVC COATED RIGID STEEL CONDUIT (PVCC RGC) TYPICAL.
9. IN NO INSTANCE SHALL ANY UNDERPASS LUMINAIRE OR ANY OTHER ELECTRICAL EQUIPMENT BE INSTALLED BELOW THE ELEVATION OF THE BOTTOM OF THE BRIDGE BEAM WHEN OVER ANY PAVEMENT (ROADWAY OR SHOULDER).

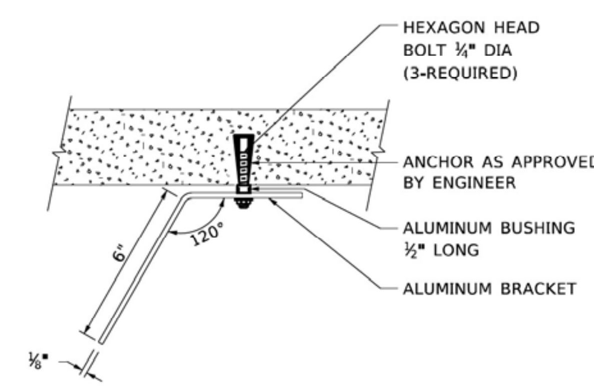


EXISTING BRIDGE DECK INSTALLATION

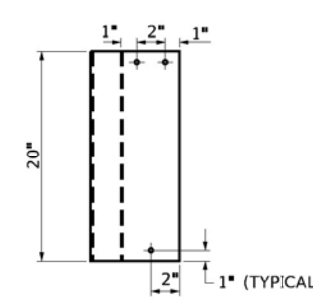


NEW BRIDGE DECK INSTALLATION

TYPICAL LUMINAIRE HANGER ASSEMBLY DETAILS



TOP VIEW



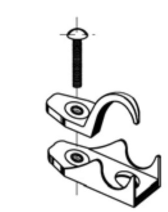
ELEVATION

LUMINAIRE NUMBERING DECAL BRACKET

NOT TO SCALE

PVC COATED CONDUIT BEAM CLAMP

NOT TO SCALE



PVC COATED CONDUIT CLAMP

NOT TO SCALE

MODEL: 2D SHEET H
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-01\DMS08073\62R29-SHT-LIGHT-DETAILS-DGN_08.DGN

HNTB

USER NAME = JBRYNDA	DESIGNED - AJS	REVISED -	
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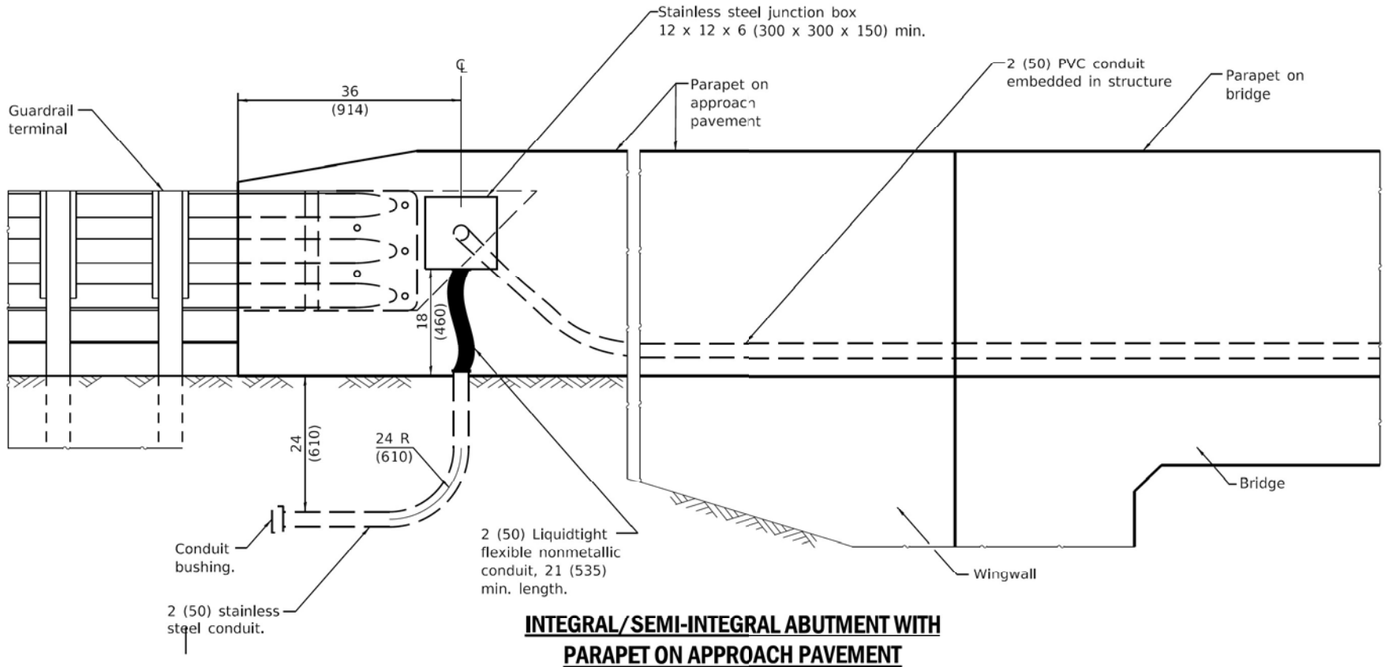
PLOT DATE = 6/29/2023	DATE - 6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

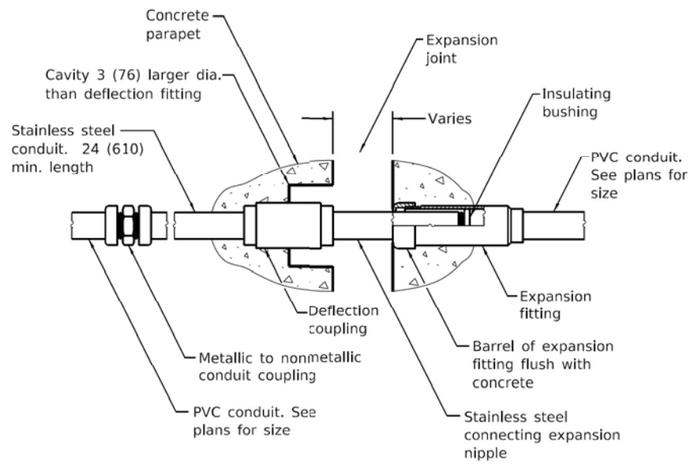
SUSPENDED MOUNT LED UNDERPASS LUMINAIRE INSTALLATION DETAILS

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

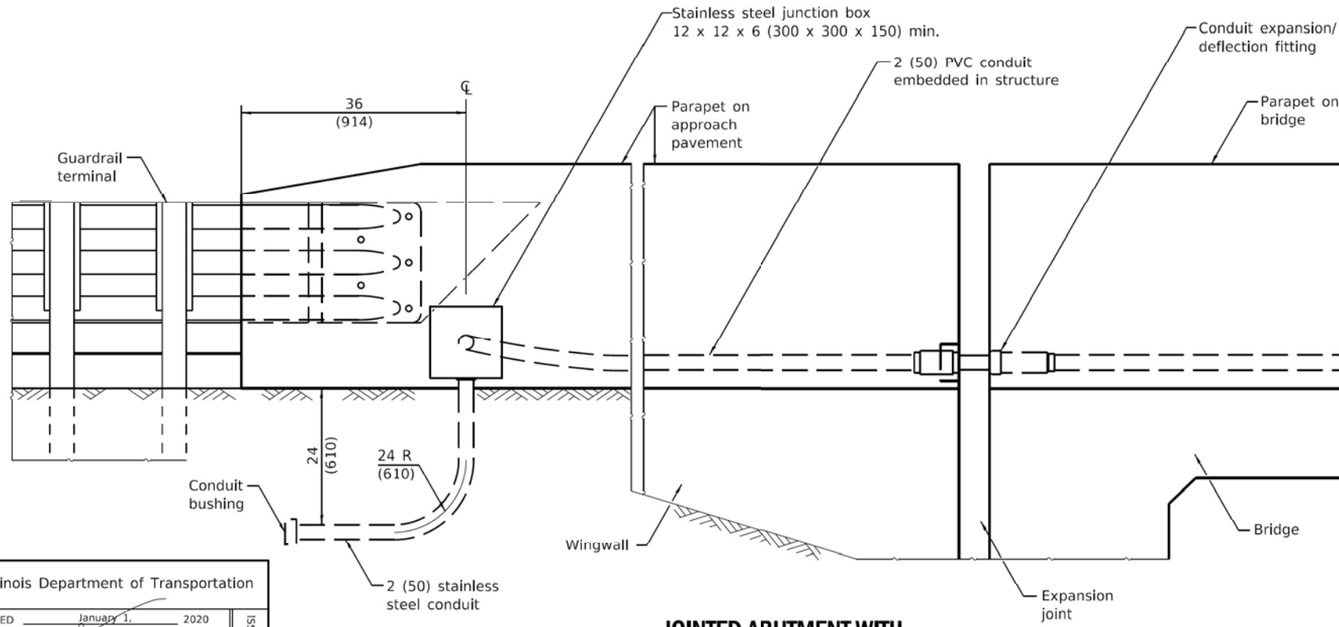
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	508
	BE-901	CONTRACT NO. 62R29		
		ILLINOIS FED. AID PROJECT		



INTEGRAL/SEMI-INTEGRAL ABUTMENT WITH PARAPET ON APPROACH PAVEMENT



COMBINATION EXPANSION/ DEFLECTION FITTING



JOINTED ABUTMENT WITH PARAPET ON APPROACH PAVEMENT

GENERAL NOTES

The barrel in the expansion fitting shall be fully embedded in the concrete on one side of the expansion joint. One half the length of the deflection fitting shall be embedded in the concrete on the other side of the expansion joint.

The Contractor shall install combination expansion deflection fittings at all bridge expansion joints.

With the approval of the Engineer, the Contractor may substitute two 12 x 12 x 6 (300 x 300 x 150) min. stainless steel junction boxes attached to back of wall and connected with liquidtight flexible nonmetallic conduit for all expansion joints.

See Stancard 631031 for details of steel connector plate for constant slope parapet.

All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation

APPROVED January 1, 2020
ELECTRICAL AND MECHANICAL UNIT CHIEF

APPROVED January 1, 2020
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-15

DATE	REVISIONS
1-1-20	Revised from F-Shape to constant
	slope parapet, added general note
	for steel connector plate, revised
	standard name, and fixed typo.
1-1-15	New standard.

RACEWAYS EMBEDDED IN STRUCTURE

(Sheet 1 of 3)

STANDARD 812001-01

MODEL: 2D SHEET H
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-01\DMS08073.62R29-SHT-LIGHT-DETAILS_09-01.DGN

HNTB

USER NAME = JBRYNDA	DESIGNED - JB	REVISED -	
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PLOT DATE = 6/29/2023	DATE - 6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RACEWAYS EMBEDDED IN STRUCTURE
SHEET 1 OF 3

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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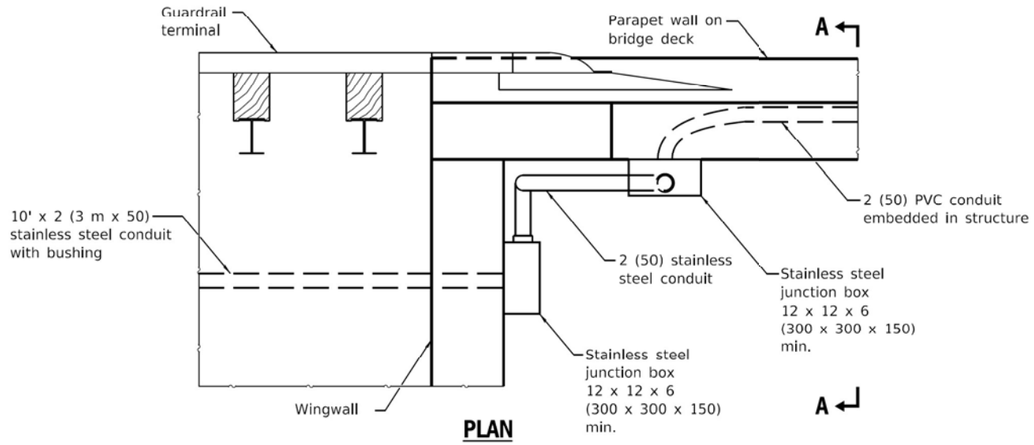
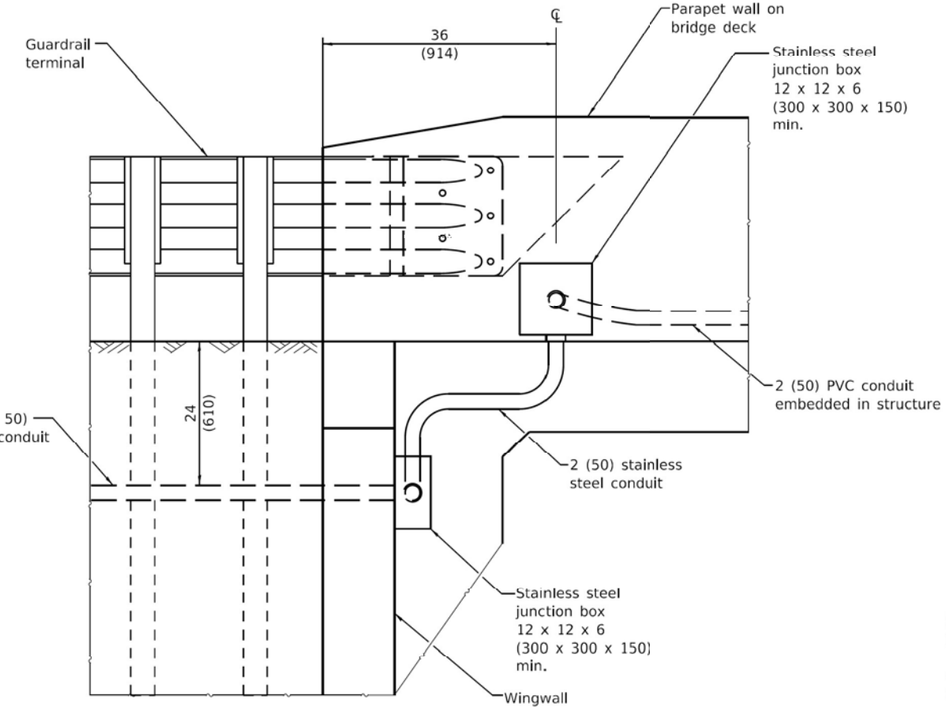
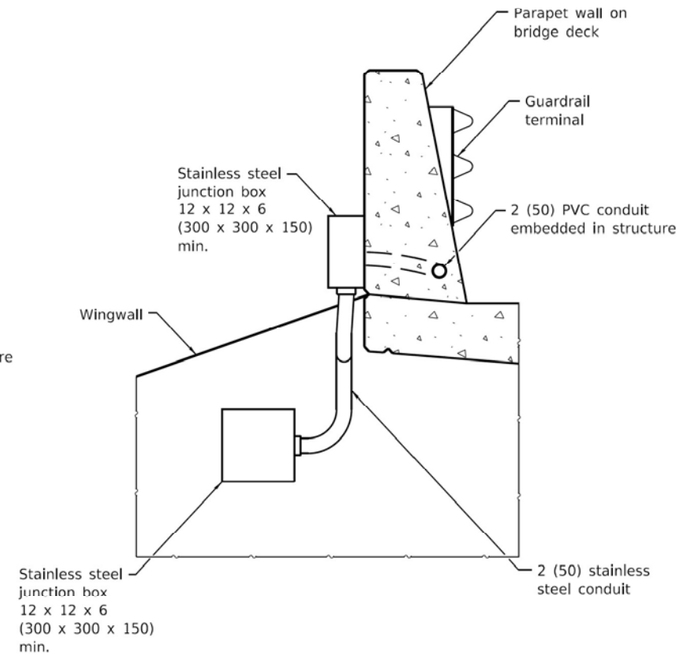
	812001-1	CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			



PLAN



ELEVATION



VIEW A-A

Illinois Department of Transportation

APPROVED January 1, 2020
ELECTRICAL AND MECHANICAL UNIT CHIEF

APPROVED January 1, 2020
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-15

INTEGRAL/SEMI-INTEGRAL ABUTMENT WITH PARAPET ENDING ON BRIDGE DECK

RACEWAYS EMBEDDED IN STRUCTURE

(Sheet 2 of 3)

STANDARD 812001-01

MODEL: 2D SHEET H
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PWA01\DMS508073\62R29-SHT-LIGHT-DETAILS_09-02.DGN

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PLOT DATE = 6/29/2023	DATE - 6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RACEWAYS EMBEDDED IN STRUCTURE
SHEET 2 OF 3

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

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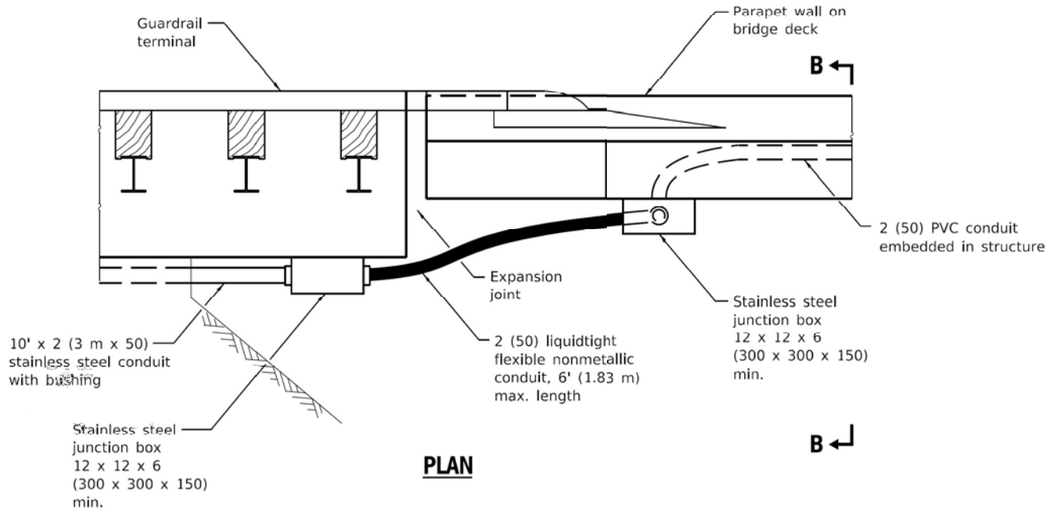
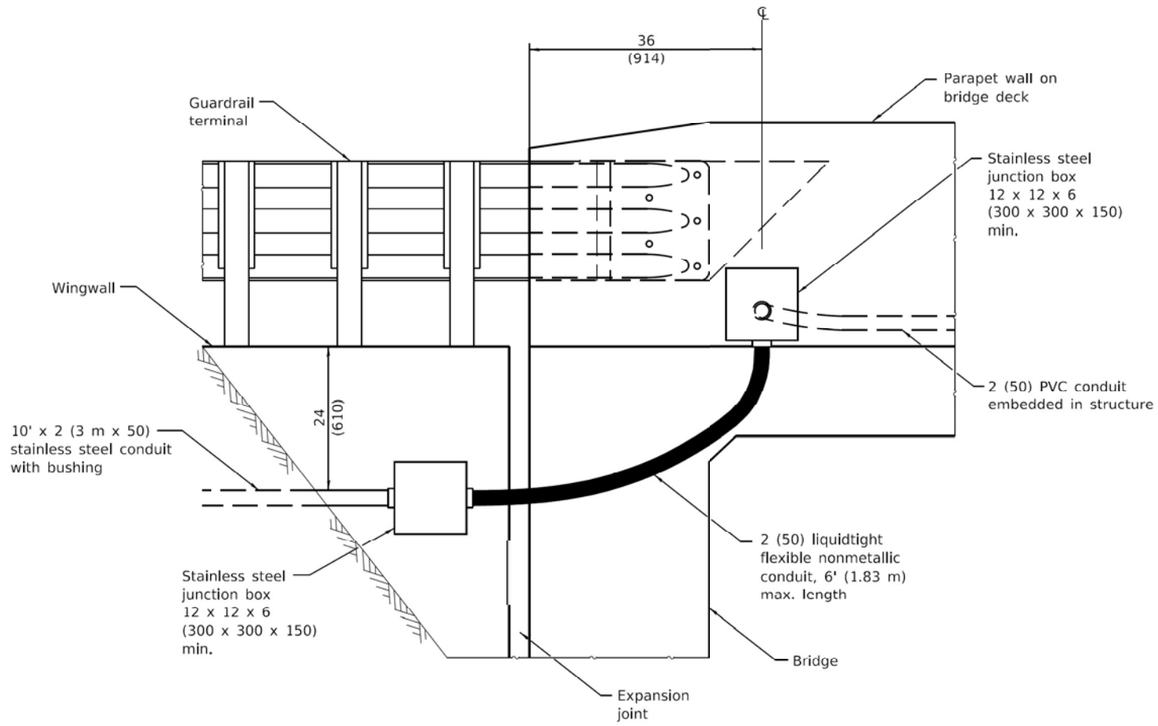
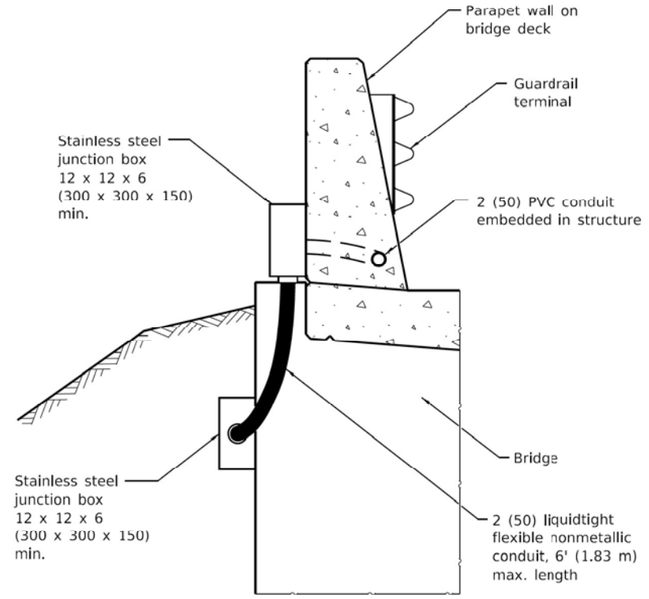
	ILLINOIS FED. AID PROJECT			



PLAN



ELEVATION



VIEW B-B

JOINTED ABUTMENT WITH PARAPET ENDING ON BRIDGE DECK

Illinois Department of Transportation

APPROVED January 1, 2020
ELECTRICAL AND MECHANICAL UNIT CHIEF

APPROVED January 1, 2020
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-15

RACEWAYS EMBEDDED IN STRUCTURE

(Sheet 3 of 3)

STANDARD 812001-01

MODEL: 2D SHEET H
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS4PW401\DMS08073\62R29-SHT-LIGHT-DETAILS_09-03.DGN

HNTB

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PLOT DATE = 6/29/2023	DATE - 6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RACEWAYS EMBEDDED IN STRUCTURE
SHEET 3 OF 3

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	511
	812001-1	CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			

SYMBOLS FOR EXISTING CONDITIONS

- AUTOMATIC TRAFFIC RECORDER (ATR) STATION
- BLUETOOTH DETECTION ASSEMBLY
- CLOSED CIRCUIT TELEVISION CAMERA
- DMS DYNAMIC MESSAGE SIGN
- HEAVY DUTY HANDHOLE (ELECTRICAL)
- COMMUNICATIONS VAULT
- JUNCTION BOX ATTACHED TO STRUCTURE
- ITS POLE AND FOUNDATION
- GROUND MOUNTED CABINET
- POLE MOUNTED CABINET
- ELECTRIC UTILITY POLE
- POLE MOUNTED ELECTRIC UTILITY TRANSFORMER(S)
- PAD MOUNTED ELECTRIC UTILITY TRANSFORMER
- SERVICE METER PEDESTAL

SYMBOLS FOR PROPOSED WORK

- HEAVY DUTY HANDHOLE (ELECTRICAL)
- COMMUNICATIONS VAULT (IDOT)
- COMMUNICATIONS VAULT (THIRD PARTY)
- JUNCTION BOX ATTACHED TO STRUCTURE*
- CONCRETE FOUNDATION FOR FUTURE ITS POLE
- TYPE "A" FOUNDATION FOR FUTURE DISCONNECT
- FND FOUNDATION FOR FUTURE GROUND MOUNTED CABINET*
- FOUNDATION MOUNTED CABINET*
- ELECTRIC UTILITY POLE
- POLE MOUNTED ELECTRIC UTILITY TRANSFORMER(S)
- PAD MOUNTED ELECTRIC UTILITY TRANSFORMER
- SERVICE METER PEDESTAL

*TYPE AND/OR SIZE AS INDICATED ON PLANS

ABBREVIATIONS*

(A)	ABANDON IN PLACE
ATR	AUTOMATIC TRAFFIC RECORDER
ATS	ATTACHED TO STRUCTURE
CCTV	CLOSED CIRCUIT TELEVISION
CNC	COILABLE NONMETALLIC CONDUIT
COMM	COMMUNICATION
DCF	DISTRIBUTION CABLE FIBER
DMS	DYNAMIC MESSAGE SIGN
F	FIBER
FRE	FIBER REINFORCED EPOXY (CONDUIT)
FT	FEET
GS	GALVANIZED STEEL
HDHH	HEAVY DUTY HANDHOLE
JB	JUNCTION BOX
NTS	NOT TO SCALE
OFF	OFFSET
SM	SINGLE MODE
TCF	TRUNK CABLE FIBER
TRNS	TRANSFORMER

*NOT LISTED IN IDOT STANDARD 000001-08

LINESTYLES FOR EXISTING CONDITIONS

- E E ELECTRICAL CABLE IN CONDUIT*
- FO FO FIBER OPTIC CABLE IN CONDUIT*
- E E ELECTRICAL CABLE TO REMAIN
- FO FO FIBER OPTIC CABLE TO REMAIN

*CABLE TO BE REMOVED;
CONDUIT TO BE ABANDONED

LINESTYLES FOR PROPOSED WORK

- E E CONDUIT FOR FUTURE ELECTRICAL CABLE*
- FO FO MICRODUCT OR INNERDUCT FOR FUTURE FIBER OPTIC CABLE*
- CONDUIT SLEEVE*

*TYPE AND SIZE AS INDICATED ON PLANS

NON-ITS ELEMENTS LEGEND

- T *EXISTING UNDERGROUND TELEPHONE*
- G *EXISTING UNDERGROUND GAS*
- CTV *EXISTING UNDERGROUND CABLE TV*
- W *EXISTING UNDERGROUND WATER*
- O *EXISTING UNDERGROUND OIL*
- AC *EXISTING ACCESS CONTROL AND ROW FENCE*
- A *EXISTING AERIAL LINE*
- *EXISTING GUARDRAIL*
- *Existing STORM SEWER*
- *EXISTING LIGHTING*
- *EXISTING SIGNAGE*
- AC *PROPOSED ACCESS CONTROL AND ROW FENCE*
- *Proposed GUARDRAIL*
- *PROPOSED STORM SEWER*
- *PROPOSED Underdrain*
- *PROPOSED DRAINAGE*
- *PROPOSED DRAINAGE FLOW*
- *PROPOSED LIGHTING*
- *PROPOSED SIGNAGE*

MODEL: 2D SHEET H
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-01\JOSEPH.MALCOLM\D0MS1220\D1622R29-SHT-ITS-LGND-01.DGN

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

USER NAME = JMALCOLM	DESIGNED - DJM	REVISED -	
	DRAWN - JNR	REVISED -	
PLOT SCALE = 0.16666633 ' / IN.	CHECKED - REL	REVISED -	
PLOT DATE = 6/27/2023	DATE - 6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ITS LEGEND & ABBREVIATIONS

SCALE: NONE | SHEET OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	512
		CONTRACT NO. 62R29		
		ILLINOIS	FED. AID PROJECT	

GENERAL NOTES

1. A MINIMUM OF SEVENTY-TWO (72) HOURS BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL J.U.L.I.E. AT (800-892-0123) OR 811 TO HAVE THE LOCATION OF EXISTING UNDERGROUND UTILITIES MARKED IN THE FIELD.

2. IDOT FACILITIES ARE NOT LOCATED BY JULIE OR DIGGER. IDOT ELECTRICAL FACILITIES INCLUDING ROADWAY LIGHTING, FIBER OPTIC, ITS EQUIPMENT, TRAFFIC SIGNAL AND PUMP STATION FACILITIES ARE LOCATED BY THE DEPARTMENT'S ELECTRICAL MAINTENANCE CONTRACTOR. AS OF THE LETTING DATE, CONTACT THE MEADE ELECTRIC COMPANY AT 773-287-7672.

3. AFTER THE INITIAL LOCATE OF IDOT FACILITIES, THE CONTRACTOR WILL BE RESPONSIBLE FOR LOCATING EXISTING IDOT ELECTRICAL FACILITIES AT HIS/HER OWN EXPENSE. THE CONTRACTOR SHALL ALSO BE LIABLE FOR ANY DAMAGE TO IDOT FACILITIES RESULTING FROM INACCURATE LOCATING.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN IN THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER. THIS WORK WILL BE AT THE CONTRACTOR'S EXPENSE.

5. THE LOCATIONS OF PUBLIC OR PRIVATE UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND THEIR ACCURACY IS NOT GUARANTEED. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND ELEVATION OF ALL UTILITIES. THE CONTRACTOR SHALL REPORT ANY ENCOUNTERED DISCREPANCIES TO THE ENGINEER AT ONCE. THE CONTRACTOR SHALL TAKE DUE CARE.

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

7. 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.

8. THE CONTRACTOR SHALL VERIFY ADEQUATE CLEARANCE OVER/UNDER EXISTING AND PROPOSED FACILITIES BEFORE INSTALLING DUCTS, CONDUIT AND CABLES. WHERE THE CONTRACTOR'S EXCAVATION MEETS AN OBSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER FOR DIRECTION IN WRITING PRIOR TO EXCAVATION.

9. CONDUIT CROSSING OVER/UNDER OTHER UTILITIES SHALL MAINTAIN A SEPERATION OF AT LEAST 12 INCHES OR AS SPECIFIED BY OWNING UTILITY.

10. CONDUITS AND UNIT DUCTS SHALL BE INSTALLED AT A MINIMUM 30" DEPTH BELOW GRADE AND POSITIONED IN THE FIELD TO AVOID CONFLICT WITH ROADWAY UNDERDRAINS AND OTHER EXISTING AND PROPOSED UTILITIES.

11. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR PLACING CONDUIT AT GREATER THAN 30 INCHES MINIMUM DEPTH TO AVOID OBSTACLES SUCH AS UNDERGROUND UTILITIES AND STRUCTURES OR TO ENTER COMMUNICATIONS VAULTS OR HANDHOLES.

12. THE CONTRACTOR SHALL AVOID TRENCHING THROUGH WETLAND AREA, ROADSIDE DITCHES AND RETENTION PONDS.

13. IDOT MICRODUCT SHALL ONLY ENTER IDOT COMMUNICATIONS VAULTS OR JUNCTION BOXES.

14. THIRD PARTY MICRODUCT SHALL ONLY ENTER THIRD PARTY COMMUNICATIONS VAULTS OR JUNCTION BOXES.

15. 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.

16. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION.

17. ITS REMOVAL PLAN SHEETS DEPICT EXISTING CONDITIONS AND WORK TO BE PERFORMED TO MAINTAIN, REMOVE, SALVAGE, OR ABANDON EXISTING ITS INFRASTRUCTURE. PROPOSED ITS PLAN SHEETS DEPICT NEW ITS INFRASTRUCTURE TO BE INSTALLED.

18. 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 OBJECTIONABLE APPEARANCE OR DETRACT FORM THE NATURAL TOPOGRAPHIC FEATURES WITHOUT WRITTEN PERMISSION FROM THE ENGINEER.

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

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

21. 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.

22. ELECTRICAL HANDHOLE COVER LEGEND SHALL BE "IDOT ITS".

23. ITS SYMBOLS ARE OVERSIZED ON THE PLANS FOR CLARITY. CONTRACTOR SHALL USE STATIONS AND OFFSETS TO ACCURATELY LOCATE EQUIPMENT.

BILL OF MATERIALS

ITEM	DESCRIPTION	UNIT	QTY	IDOT QTY*	THIRD PARTY QTY*	WILL COUNTY QTY*
20200200	ROCK EXCAVATION	CU YD	200	-	-	-
31101100	SUBBASE GRANULAR MATERIAL, TYPE B	CU YD	200	-	-	-
80400100	ELECTRIC SERVICE INSTALLATION	EACH	5	-	-	-
80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	0.7**	-	-	-
81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	143	-	-	-
81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	3,049	2,444	605	-
81028730	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1 1/4" DIA.	FOOT	138	-	-	-
81028750	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 2" DIA.	FOOT	8,004	-	-	-
81028770	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 3" DIA.	FOOT	166	-	-	-
81400200	HEAVY-DUTY HANDHOLE	EACH	18	-	-	-
81702150	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 2	FOOT	924	-	-	-
84200804	REMOVAL OF POLE FOUNDATION	EACH	9	-	-	-
84500120	REMOVAL OF ELECTRIC SERVICE INSTALLATION	EACH	1	-	-	-
86300300	CONTROLLER CABINET TYPE III	EACH	1	-	-	-
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	15	-	-	-
87800200	CONCRETE FOUNDATION, TYPE D	FOOT	4	-	-	-
87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	108	-	-	-
87900205	DRILL EXISTING HEAVY DUTY HANDHOLE	EACH	1	-	-	-
88600100	DETECTOR LOOP, TYPE I	FOOT	76	-	-	-
88600300	DETECTOR LOOP, TYPE III	FOOT	558	-	-	-
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	3,211	-	-	-
89502380	REMOVE EXISTING HANDHOLE	EACH	13	-	-	-
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	4	-	-	-
X0301242	PIEZO AXLE SENSOR, CLASS II	FOOT	69	-	-	-
X0323388	TRAFFIC COUNTER	EACH	2	-	-	-
X0327116	SOLAR POWER ASSEMBLY	EACH	1	-	-	-
X8710318	FIBER OPTIC UTILITY MARKER	EACH	92	59	33	-
X8710402	FIBER OPTIC INNERDUCT 1 1/4" DIA.	FOOT	2,404	2,301	-	103
X8730810	ELECTRIC CABLE IN CONDUIT, CONOGA-30003	FOOT	1,226	-	-	-
X8780200	CONCRETE FOUNDATION, SURVEILLANCE CABINET MODEL 334	EACH	2	-	-	-
X8950425	REMOVE EXISTING TRAFFIC SURVEILLANCE EQUIPMENT	L SUM	1	-	-	-
X8950510	REMOVE FIBER OPTIC CABLE FROM CONDUIT	FOOT	13,898	-	-	-
Z0033052	COMMUNICATIONS VAULT	EACH	34	21	12	1
	UNDERGROUND CONDUIT, MULTI-DUCT, 7-18MM MICRODUCTS	FOOT	52,849	33,783	19,066	-

*THESE COLUMNS ARE NOT ADDITIONAL QUANTITY. THEY PROVIDE THE QUANTITY SPLIT BETWEEN IDOT, THIRD PARTY AND WILL COUNTY FOR THE ITEMS LISTED.

**THE TOTAL PROJECT QUANTITY IS 1.0 LUMP SUM FOR ALL ELECTRIC UTILITY SERVICE CONNECTIONS. THE QUANTITY OF 0.7 REPRESENTS THE PROPORTION OF THIS ITEM ASSOCIATED WITH ITS ELECTRIC SERVICES.

SITE REMOVALS SCHEDULE

SITE TYPE	STATION	OFFSET	ASSOCIATED PAY ITEM	SHEET
BLUETOOTH	768+84	84' LT	84200804, X8950425	515
BLUETOOTH	791+67	95' RT	84200804, X8950425	517
BLUETOOTH	818+67	88' LT	84200804, X8950425	518
BLUETOOTH	845+17	94' RT	84200804, X8950425	520
CCTV CAMERA	855+53	87' RT	84200804, X8950425	521
DMS*	858+94	95' RT	89502385, X8950425	521
ELECTRIC SERVICE	866+85	102' LT	84500120	522
DMS*	868+21	93' LT	89502385, X8950425	523
CCTV CAMERA	870+93	90' LT	84200804, X8950425	523
BLUETOOTH	871+70	105' LT	84200804, X8950425	523
ATR	875+31	100' LT	89502385, X8950425	523
BLUETOOTH	897+70	92' RT	84200804, X8950425	524
INTERCONNECT CABINET	907+42	99' LT	89502385, X8950425	524
BLUETOOTH	924+51	107' LT	84200804, X8950425	525

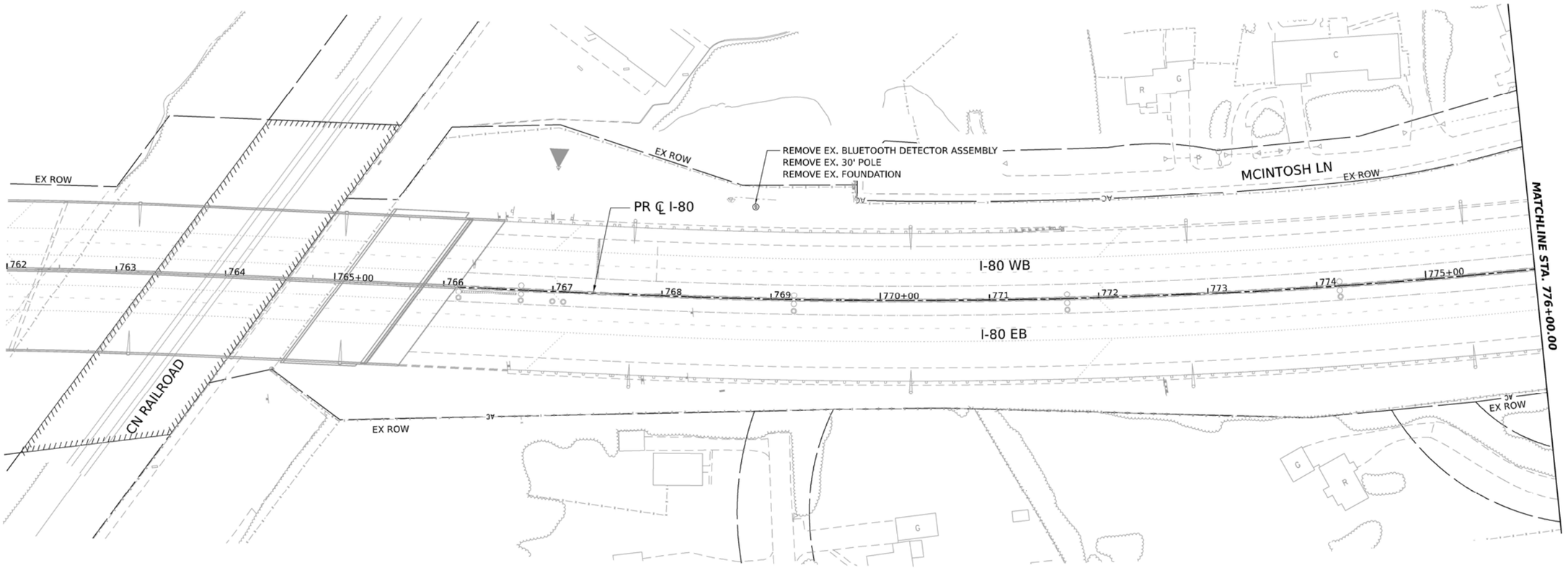
*STATION/OFFSET OF THE CONTROLLER CABINET IS LISTED

PROPOSED SITE SCHEDULE

ITEM	STATION	OFFSET	ASSOCIATED PAY ITEM	SHEET
30" DIA CONCRETE FOUNDATION	783+25	84' RT	87800400	527
ELECTRIC SERVICE	783+61	146' RT	80400100, 80400200	527
ELECTRIC SERVICE	800+17	134' RT	80400100, 80400200	528
30" DIA CONCRETE FOUNDATION	806+60	115' RT	87800400	528
30" DIA CONCRETE FOUNDATION	RAMP C, 311+75	70' LT	87800400	528
30" DIA CONCRETE FOUNDATION	831+00	78' LT	87800400	530
30" DIA CONCRETE FOUNDATION	852+50	72' RT	87800400	532
334 CABINET FOUNDATION	853+50	73.5' RT	X8780200	532
ELECTRIC SERVICE	866+93	130' RT	80400100, 80400200	533
334 CABINET FOUNDATION	870+75	73.5' LT	X8780200	533
30" DIA CONCRETE FOUNDATION	871+50	72' LT	87800400	533
ELECTRIC SERVICE	894+97	123' LT	80400100, 80400200	534
30" DIA CONCRETE FOUNDATION	915+75	72' RT	87800400	535
30" DIA CONCRETE FOUNDATION	917+00	70' RT	87800400	536
ELECTRIC SERVICE	919+01	112' RT	80400100, 80400200	536

N

0 50 100 150
SCALE IN FEET



MODEL: PR_I80 - PR I80_ML-1
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-01\DMS15230\D162829-SHT-ITS-REMOVAL-01.DGN

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

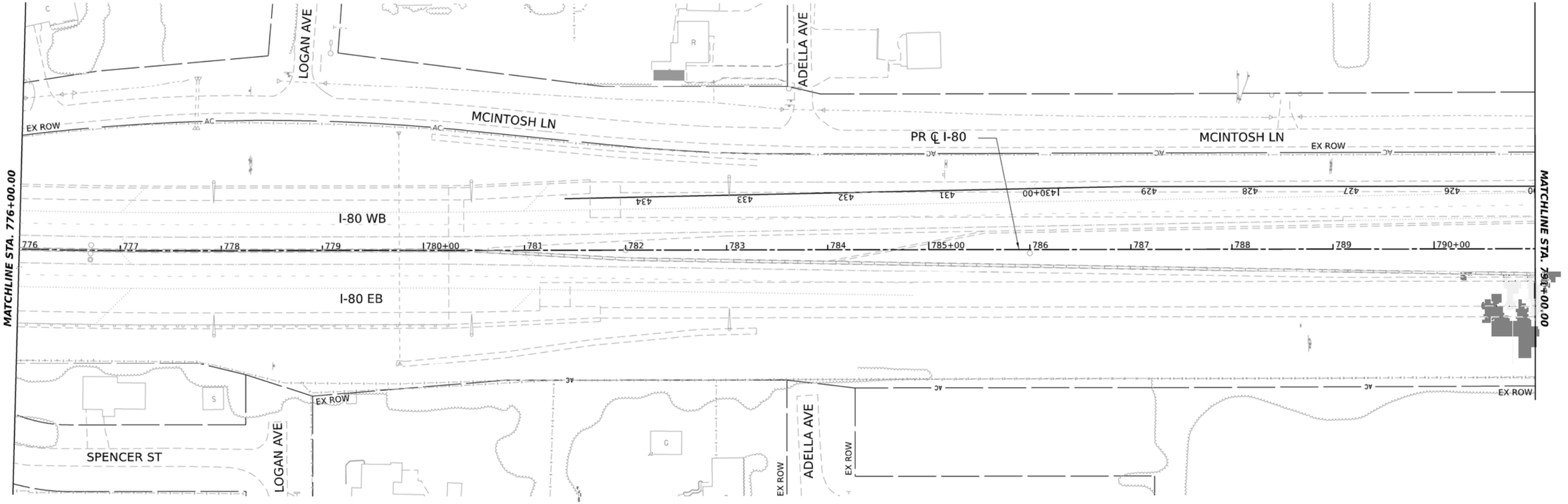
USER NAME = DMEIER	DESIGNED - DJM	REVISED -	
	DRAWN - JNR	REVISED -	
PLOT SCALE = 0.16666633 ' / IN.	CHECKED - REL	REVISED -	
PLOT DATE = 7/17/2023	DATE - 6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–80
ITS REMOVAL PLANS

SCALE: 1" = 50' | SHEET OF SHEETS | STA. 762+00 | TO STA. 776+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	899	515
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			



NOTES
1. NO WORK ON THIS SHEET.

MODEL: PR_I80 - PR I89_MU-2
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-01\DMS515290\D162R29-SHT-ITS-REMOVAL-02.DGN

TranSmart 100 S. Wacker Drive Suite 400 Chicago, Illinois 60606	USER NAME = DMEIER	DESIGNED - DJM	REVISED -	
		DRAWN - JNR	REVISED -	
	PLOT SCALE = 0.16666633 ' / IN.	CHECKED - REL	REVISED -	
	PLOT DATE = 7/17/2023	DATE - 6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–80
ITS REMOVAL PLANS

SCALE: 1" = 50' | SHEET OF SHEETS | STA. 776+00 | TO STA. 791+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	899	516
		CONTRACT NO. 62R29		
		ILLINOIS	FED. AID PROJECT	

N

0 50 100 150

SCALE IN FEET

MATCHLINE STA. 791+00.00

MCINTOSH LN

EX ROW

OAKVIEW AVE

EX RAMP D

I-80 WB

791 792 793 794 795+00 796 797 798 799 800+00 801 802 803 804 805+00

I-80 EB

PR ℄ I-80

EX RAMP A

REMOVE EX. BLUETOOTH DETECTOR ASSEMBLY
REMOVE EX. 30' POLE
REMOVE EX. FOUNDATION

EX ROW

EX ROW

EX ROW

EX ROW

EX ROW

EX ROW

MATCHLINE STA. 806+00.00

MODEL: PR_I80 - PR I89_ML-3
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-011\DMS15290\D162R29-SHT-ITS-REMOVAL-03.DGN

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

USER NAME = DMEIER		DESIGNED - DJN	REVISED -	
		DRAWN - JNR	REVISED -	
PLOT SCALE = 0.16666633 ' / IN.		CHECKED - REL	REVISED -	
PLOT DATE = 7/17/2023		DATE - 6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–80
ITS REMOVAL PLANS

SCALE: 1" = 50' | SHEET OF SHEETS | STA. 791+00 | TO STA. 806+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	899	517
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			

N

0 50 100 150
SCALE IN FEET

MCINTOSH LN
EX ROW
EX RAMP D
EX RAMP C
EX RAMP A
EX RAMP B
EX ROW
BRIGGS ST
EX ℄ BRIGGS ST
PR ℄ I-80
I-80 WB
I-80 EB
REMOVE EX. BLUETOOTH DETECTOR ASSEMBLY
REMOVE EX. 30' POLE
REMOVE EX. FOUNDATION

MATCHLINE STA. 806+00.00

806 807 808 809 810+00 811 812 813 20+00 814 815+00 816 817 818 819 820+00

MATCHLINE STA. 821+00.00

24 23 22 21 19 18 17 16

MODEL: PR_I80 - PR 189_ML-4
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-01\DMS15290\D162R29-SHT-ITS-REMOVAL-04.DGN

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

USER NAME = DMEIER		DESIGNED - DJN		REVISED -	
		DRAWN - JNR		REVISED -	
PLOT SCALE = 0.16666633 ' / IN.		CHECKED - REL		REVISED -	
PLOT DATE = 7/17/2023		DATE - 6/29/2023		REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-80
ITS REMOVAL PLANS

SCALE: 1" = 50' | SHEET OF SHEETS | STA. 806+00 | TO STA. 821+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	899	518
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			

N

0 50 100 150

SCALE IN FEET

EX ROW

EX RAMP C

PR ℄ I-80

I-80 WB

EX ROW

MATCHLINE STA. 821+00.00

821 822 823 824 825+00 826 827 828 829 830+00 831 832 833 834 835+00

MATCHLINE STA. 836+00.00

I-80 EB

EX RAMP B

EX ROW

EX ROW

FLAG POLE

NOTES
1. NO WORK ON THIS SHEET.

MODEL: PR_I80 - PR 189_MI-5
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS#W-011\DMS15290\D162R29-SHT-ITS-REMOVAL-05.DGN

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

USER NAME = DMEIER	DESIGNED - DJM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I-80 ITS REMOVAL PLANS
	DRAWN - JNR	REVISED -		
PLOT SCALE = 0.16666633 ' / IN.	CHECKED - REL	REVISED -		
PLOT DATE = 7/17/2023	DATE - 6/29/2023	REVISED -		

SCALE: 1" = 50' | SHEET OF SHEETS | STA. 821+00 | TO STA. 836+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	899	519
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			

N

0 50 100 150

SCALE IN FEET

MATCHLINE STA. 836+00.00

MATCHLINE STA. 851+00.00

EX ROW

AC

PR ℄ I-80

I-80 WB

836 837 838 839 840+00 841 842 843 844 845+00 846 847 848 849 850+00

I-80 EB

224 225+00 226 227 228 229 230+00 231 232 233

REMOVE EX. BLUETOOTH DETECTOR ASSEMBLY
REMOVE EX. 30' POLE
REMOVE EX. FOUNDATION

MODEL: PR_I80 - PR 189_MI-6
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-011DMS15290\D162R29-SHT-ITS-REMOVAL-06.DGN

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

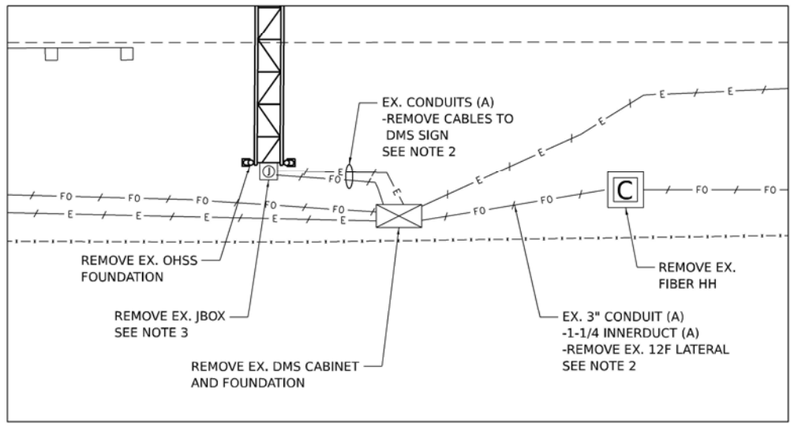
USER NAME = DMEIER	DESIGNED - DJM	REVISED -
	DRAWN - JNR	REVISED -
PLOT SCALE = 0.16666633 ' / IN.	CHECKED - REL	REVISED -
PLOT DATE = 7/17/2023	DATE - 6/29/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

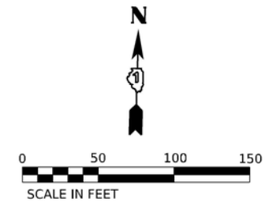
I–80
ITS REMOVAL PLANS

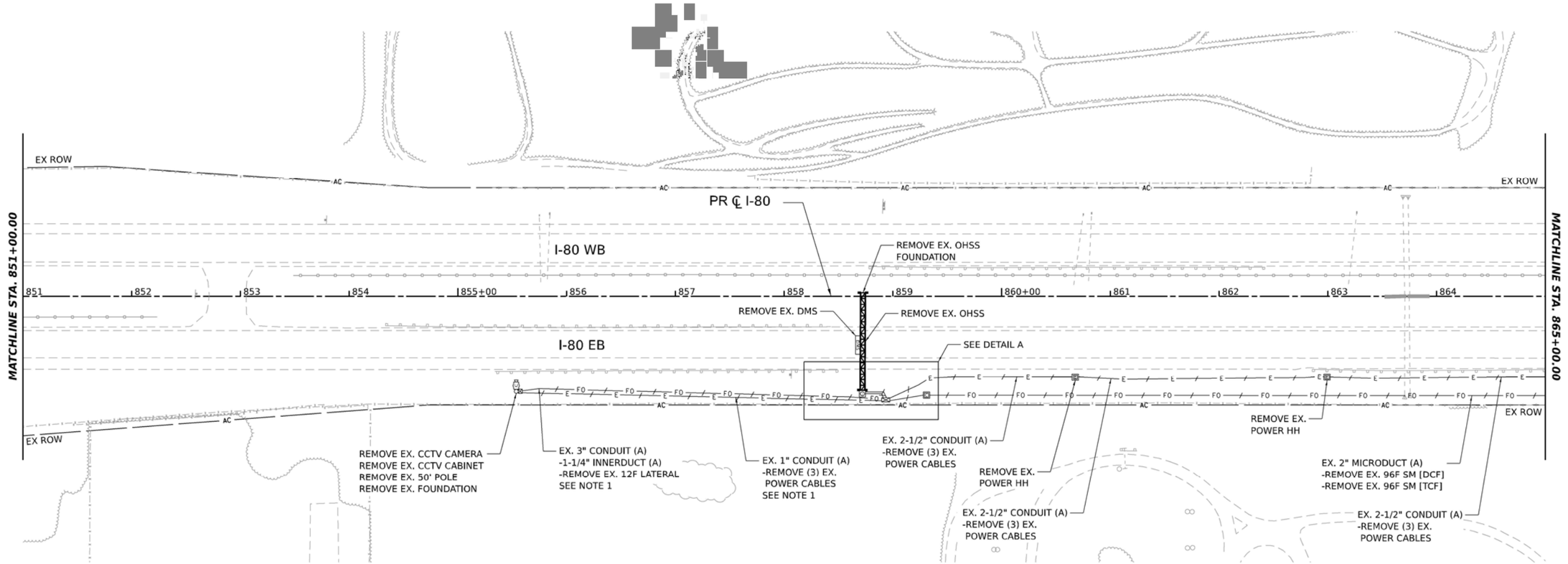
SCALE: 1" = 50' | SHEET OF SHEETS | STA. 836+00 | TO STA. 851+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	899	520
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			



DETAIL A





NOTES
1. REMOVAL OF THE CABLES IS INCLUDED AS PART OF THE CCTV SITE REMOVAL (PAY ITEM X8950425).
2. REMOVAL OF THE CABLES IS INCLUDED AS PART OF THE DMS SITE REMOVAL (PAY ITEM X8950425).
3. REMOVAL OF THE JUNCTION BOXES TO BE INCLUDED IN THE COST OF THE OVERHEAD SIGN STRUCTURE REMOVAL.

MODEL: PR_I80 - PR 189_ML=7
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-031\D0515290\D1628292\SHT-ITS-REMOVAL-07.DGN

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

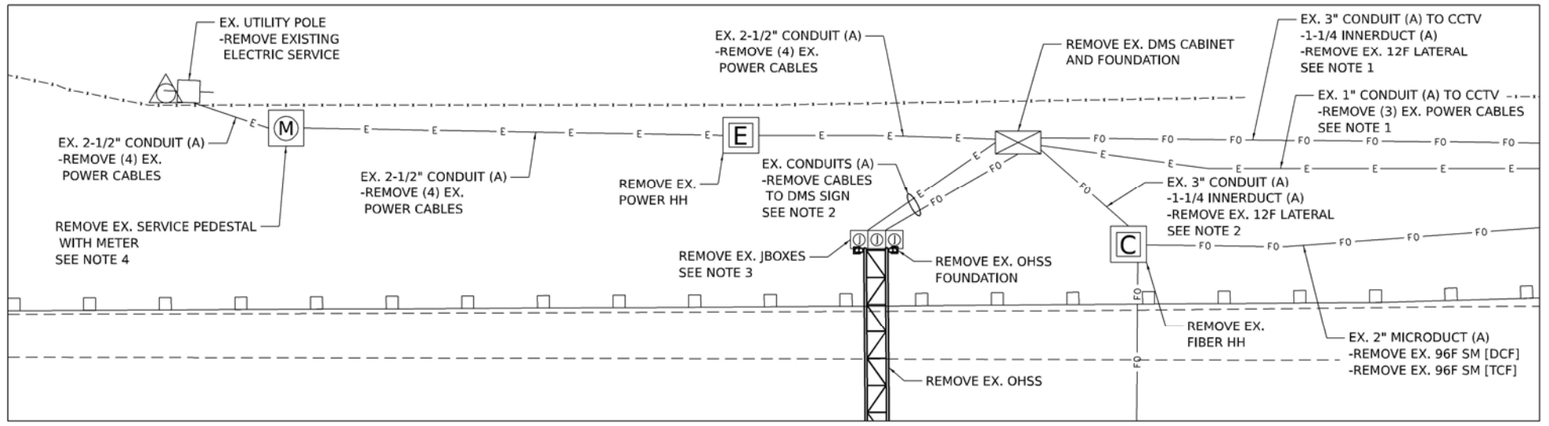
USER NAME = DMEIER	DESIGNED - DJM	REVISED -	
	DRAWN - JNR	REVISED -	
PLOT SCALE = 0.16666633 ' / IN.	CHECKED - REL	REVISED -	
PLOT DATE = 7/17/2023	DATE - 6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

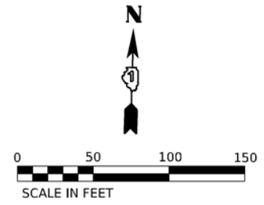
I–80
ITS REMOVAL PLANS

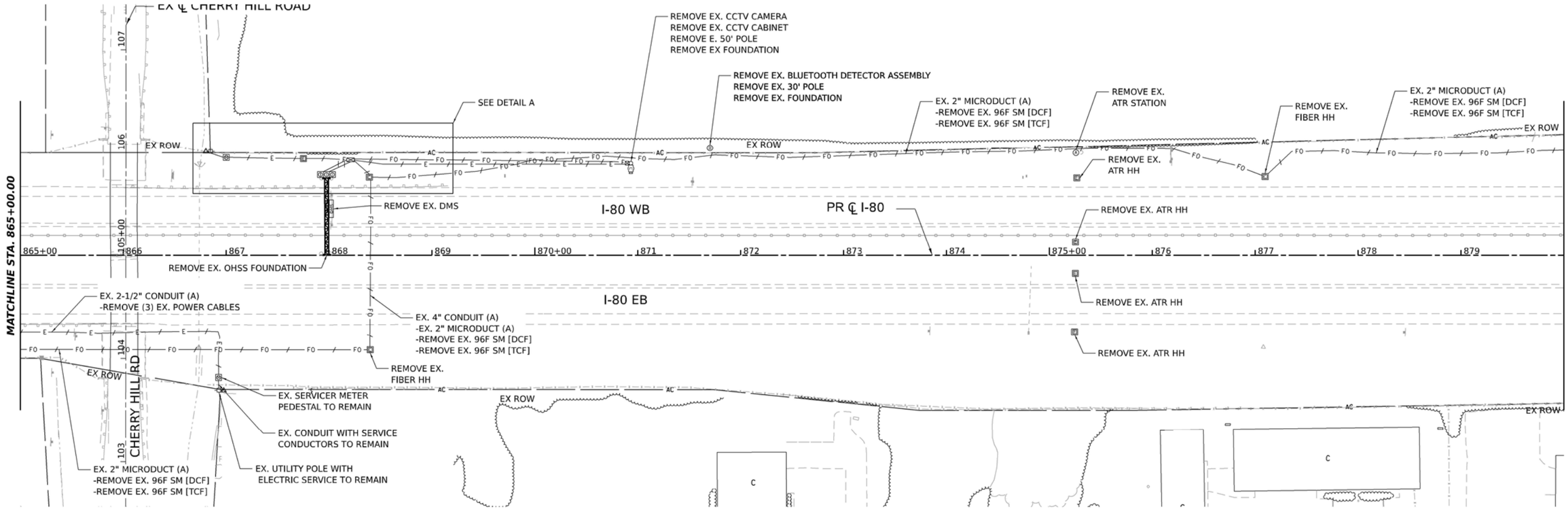
SCALE: 1" = 50' | SHEET OF SHEETS | STA. 851+00 | TO STA. 865+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	899	521
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			



DETAIL A





NOTES
1. REMOVAL OF THE CABLES IS INCLUDED AS PART OF THE CCTV SITE REMOVAL (PAY ITEM X8950425).
2. REMOVAL OF THE CABLES IS INCLUDED AS PART OF THE DMS SITE REMOVAL (PAY ITEM X8950425).
3. REMOVAL OF THE JUNCTION BOXES TO BE INCLUDED IN THE COST OF THE OVERHEAD SIGN STRUCTURE REMOVAL.
4. REMOVAL OF THE SERVICE METER PEDESTAL TO BE INCLUDED AS PART OF REMOVE ELECTRIC SERVICE INSTALLATION (PAY ITEM 84500120).

MODEL: PR_I80 - PR I80_ML-8
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-01\DMS15290\D1628229-SHT-ITS-REMOVAL-08.DGN

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

USER NAME = DMEIER	DESIGNED - DJM	REVISED -	
	DRAWN - JNR	REVISED -	
PLOT SCALE = 0.16666633 ' / IN.	CHECKED - REL	REVISED -	
PLOT DATE = 7/17/2023	DATE - 6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–80
ITS REMOVAL PLANS

SCALE: 1" = 50' | SHEET OF SHEETS | STA. 865+00 | TO STA. 880+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	899	522
		CONTRACT NO. 62R29		
	ILLINOIS	FED. AID PROJECT		

N

0 50 100 150

SCALE IN FEET

EX. 2" MICRODUCT (A)
-REMOVE EX. 96F SM [DCF]
-REMOVE EX. 96F SM [TCF]

REMOVE EX. FIBER HANDHOLE

EX. 2" MICRODUCT (A)
-REMOVE EX. 96F SM [DCF]
-REMOVE EX. 96F SM [TCF]

EX ROW

EX ROW

PR ℄ I-80

I-80 WB

880+00 881 882 883 884 885+00 886 887 888 889 890+00 891 892 893 894

MATCHLINE STA. 880+00.00

MATCHLINE STA. 895+00.00

I-80 EB

AC EX ROW

AC EX ROW

MODEL: PR_I80 - PR 189_ML-9
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-01\DMS15290\D162R29-SHT-ITS-REMOVAL-09.DGN

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

USER NAME = DMEIER		DESIGNED - DJM		REVISED -	
		DRAWN - JNR		REVISED -	
PLOT SCALE = 0.16666633 ' / IN.		CHECKED - REL		REVISED -	
PLOT DATE = 7/17/2023		DATE - 6/29/2023		REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–80
ITS REMOVAL PLANS

SCALE: 1" = 50' | SHEET OF SHEETS | STA. 880+00 | TO STA. 895+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	899	523
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			

N

0 50 100 150

SCALE IN FEET

EX. 2" MICRODUCT (A)
-REMOVE EX. 96F SM [DCF]
-REMOVE EX. 96F SM [TCF]

REMOVE EX.
FIBER HANDHOLE

EX. 2" MICRODUCT (A)
-REMOVE EX. 96F SM [DCF]
-REMOVE EX. 96F SM [TCF]

EX. (2) 1-1/4" INNERDUCT (A)
-REMOVE EX. 96F SM [DCF]
-REMOVE EX. 96F SM [TCF]

REMOVE EX. FIBER INTERCONNECT CABINET
AND FOUNDATION

EX ROW

EX ROW

PR ℄ I-80

I-80 WB

I-80 EB

MATCHLINE STA. 895+00.00

MATCHLINE STA. 910+00.00

895+00 896 897 898 899 900+00 901 902 903 904 905+00 906 907 908 909

EX ROW

EX ROW

REMOVE EX. BLUETOOTH DETECTOR ASSEMBLY
REMOVE EX. 30' POLE
REMOVE EX. FOUNDATION

MODEL: PR_I80 - PR 189_ML-10
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-01\DMS15290\D162R29-SHT-ITS-REMOVAL-10.DGN

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

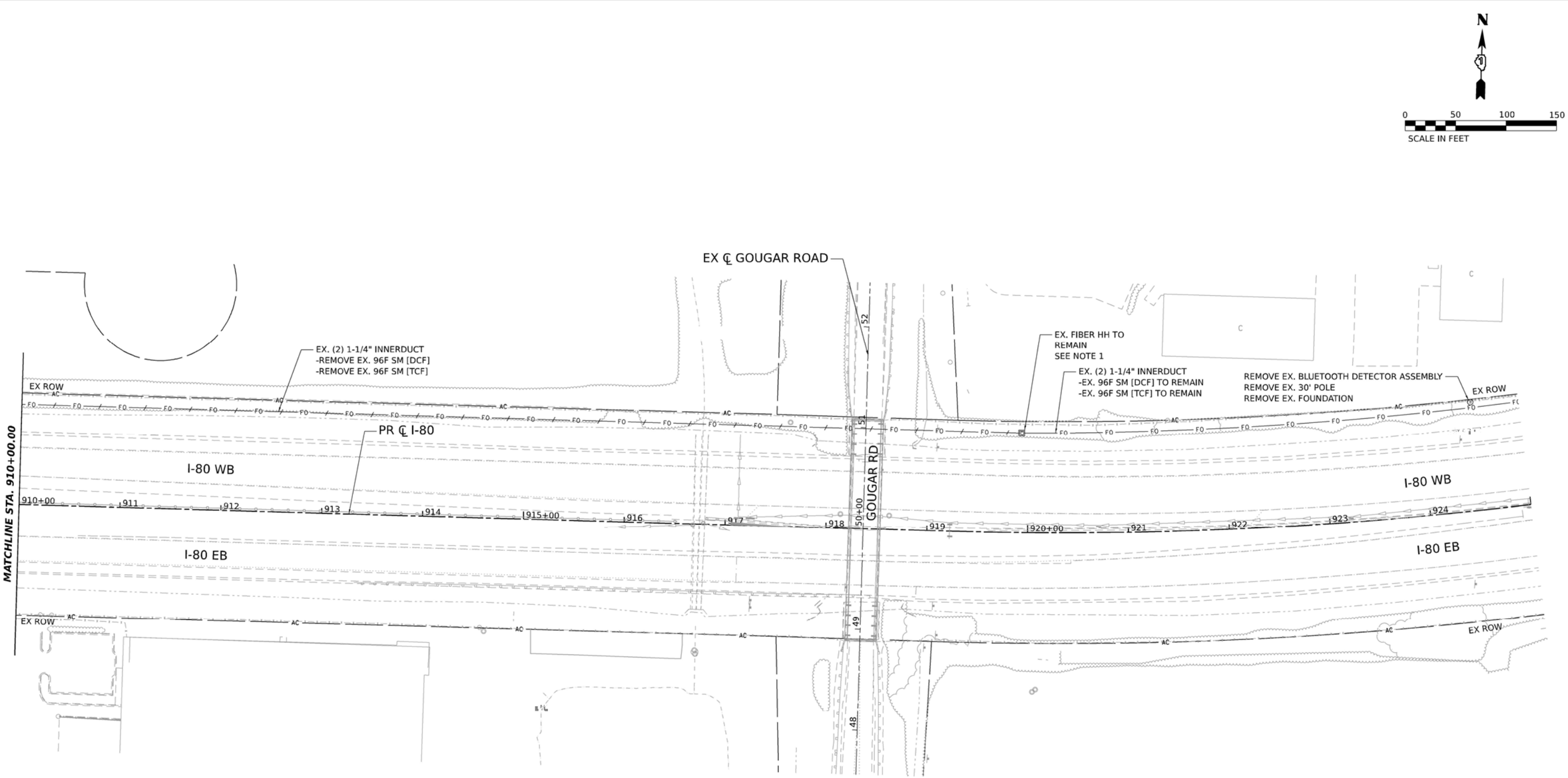
USER NAME = DMEIER	DESIGNED - DJM	REVISED -
	DRAWN - JNR	REVISED -
PLOT SCALE = 0.16666633 ' / IN.	CHECKED - REL	REVISED -
PLOT DATE = 7/17/2023	DATE - 6/29/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-80
ITS REMOVAL PLANS

SCALE: 1" = 50' | SHEET OF SHEETS | STA. 895+00 | TO STA. 910+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	899	524
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			



NOTES

1. CONTRACTOR SHALL CUT THE EXISTING IDOT FIBER CABLES WITHIN THE EXISTING COMMUNICATIONS HANDHOLE AND SHALL LEAVE A MINIMUM OF 50' SLACK FOR EACH CABLE WITHIN THE EXISTING HANDHOLE, NEATLY COILED AND DRESSED FOR FUTURE USE.

MODEL: PR_I80 - PR I89_MI-11
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-011\DMS15290\D162R29-SHT-ITS-REMOVAL-11.DGN

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

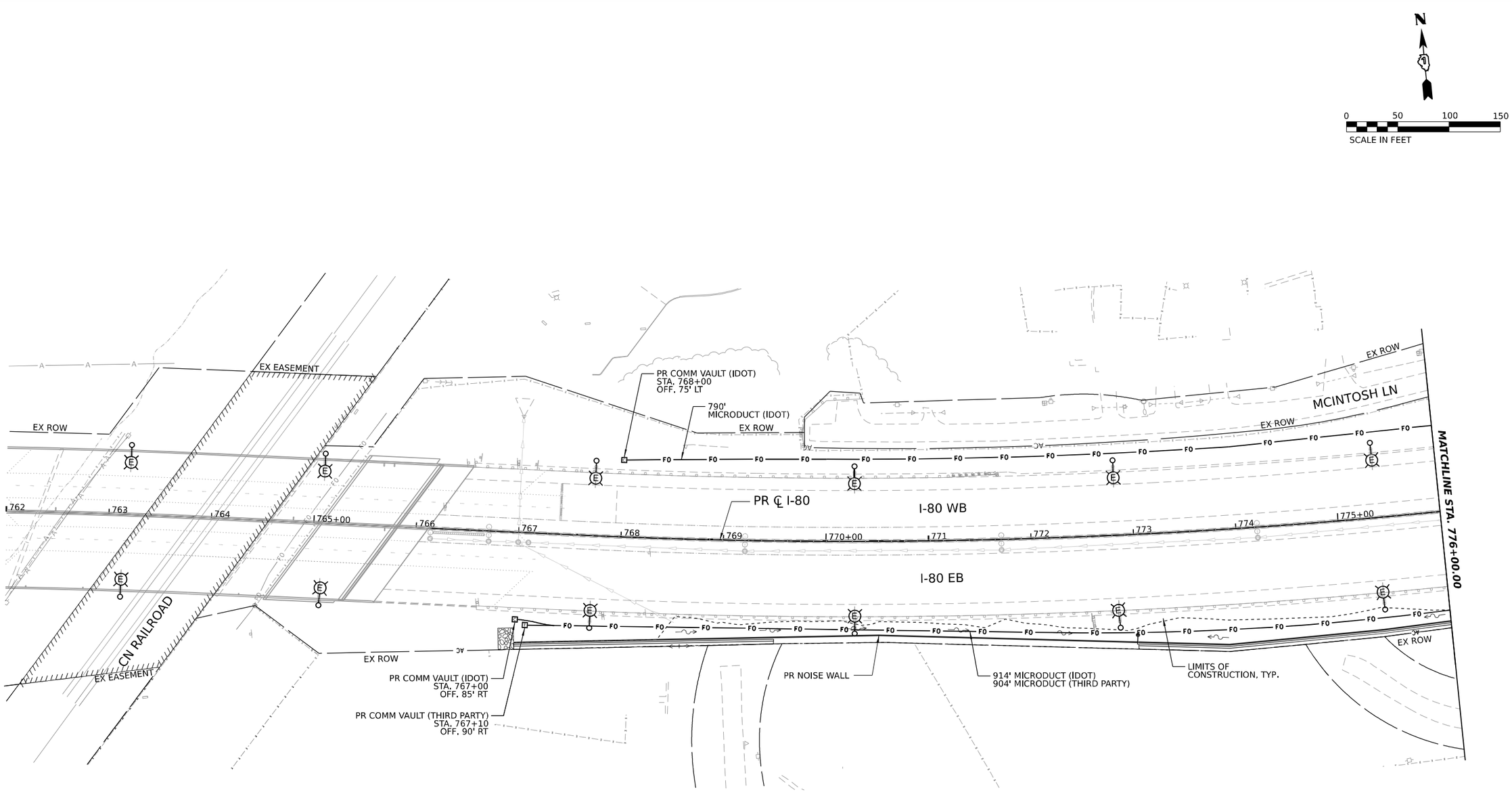
USER NAME = DMEIER	DESIGNED - DJM	REVISED -	
	DRAWN - JNR	REVISED -	
PLOT SCALE = 0.16666633 ' / IN.	CHECKED - REL	REVISED -	
PLOT DATE = 7/17/2023	DATE - 6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–80
ITS REMOVAL PLANS

SCALE: 1" = 50' | SHEET OF SHEETS | STA. 910+00 | TO STA. 925+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	899	525
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			



NOTES:

1. IDOT MICRODUCT SHALL ONLY ENTER IDOT COMMUNICATION VAULTS.
2. THIRD PARTY MICRODUCTS SHALL ONLY ENTER THIRD PARTY COMMUNICATION VAULTS.

MODEL: PR_I80 - PR I80_ML-1
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PWG01\JOSEPH.JMALCOLM\D0MS515290\D162R29-SHT-ITS-01.DGN

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

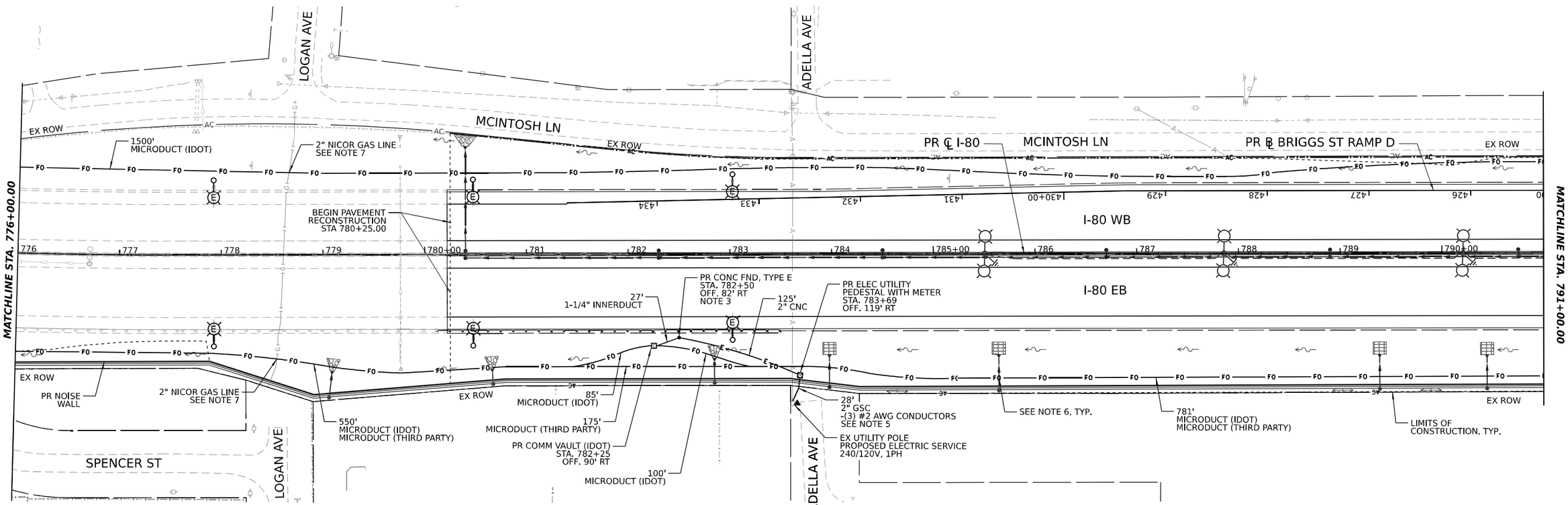
USER NAME = JMALCOLM	DESIGNED - DJM	REVISED -	
	DRAWN - JNR	REVISED -	
PLOT SCALE = 0.16666633 ' / IN.	CHECKED - REL	REVISED -	
PLOT DATE = 6/27/2023	DATE - 6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-80
ITS INFRASTRUCTURE PLANS

SCALE: 1" = 50' | SHEET OF SHEETS | STA. 763+00 | TO STA. 771+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	526
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			



NOTES:

1. IDOT MICRODUCT SHALL ONLY ENTER IDOT COMMUNICATION VAULTS.
2. THIRD PARTY MICRODUCTSHALL ONLY ENTER THIRD PARTY COMMUNICATION VAULTS.
3. 2" CNC CONDUIT SHALL BE COUPLED TO THE 2" CONCRETE FOUNDATION CONDUIT STUB OUT. 1-1/4" INNERDUCT SHALL BE INSTALLED IN THE OTHER 2" CONCRETE FOUNDATION CONDUIT STUB OUT UP THROUGH THE TOP OF THE FOUNDATION.
4. THE 2" CNC CONDUITS SHALL BE COUPLED TO THE 2" CONCRETE FOUNDATION CONDUIT STUB OUTS.
5. COORDINATE WITH INSTALLATION OF NOISE WALL. CONDUIT SHALL BE INSTALLED A MINIMUM OF 5' FROM NOISE WALL DRILLED SHAFT.
6. COORDINATE INSTALLATION WITH DRAINAGE. MAINTAIN MINIMUM 18" CLEARANCE BETWEEN ITS MICRODUCT/CONDUIT AND DRAINAGE PIPES/STRUCTURES/UNDERDRAIN, TYP.
7. INSTALL ITS MICRODUCT/CONDUIT WITH A MINIMUM 3' CLEARANCE TO GAS LINE OR AS SPECIFIED BY THE UTILITY.

MODEL: PR_I80 - PR I80_ML-2
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PWG1\JOSEPH.JMALCOLM\DMS15290\D162R29-SHT-ITS-02.DGN

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

USER NAME = JMALCOLM	DESIGNED - DJM	REVISED -	
	DRAWN - JNR	REVISED -	
PLOT SCALE = 0.16666633 ' / IN.	CHECKED - REL	REVISED -	
PLOT DATE = 6/27/2023	DATE - 6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-80
ITS INFRASTRUCTURE PLANS

SCALE: 1" = 50' | SHEET OF SHEETS | STA. 776+00 | TO STA. 791+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	527
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			

N

0 50 100 150

SCALE IN FEET

MATCHLINE STA. 791+00.00

EX ROW

MCINTOSH LN

LIMITS OF CONSTRUCTION (TYP.)

PR ℄ I-80

1512'
MICRODUCT (IDOT)

OAKVIEW AVE

6" NICOR GAS MAIN
SEE NOTE 3

PR ℄ BRIGGS ST RAMP D

MCINTOSH LN

EX ROW

PR RAMP D

I-80 WB

I-80 EB

PR RAMP A

1510'
MICRODUCT (IDOT)
MICRODUCT (THIRD PARTY)

PR NOISE WALL

NOTE 2, TYP.

15'
2" GSC
-(3) #2 AWG
CONDUCTORS
SEE NOTE 1

EX UTILITY POLE
-PROPOSED ELECTRIC SERVICE
480/240V, 1PH

OAKVIEW AVE

6" NICOR GAS MAIN
SEE NOTE 3

PR ELEC UTILITY
PEDESTAL WITH METER
STA. 800+18
OFF. 119' RT

592'
2" CNC

PR ℄ BRIGGS ST RAMP A

EX ROW

MATCHLINE STA. 806+00.00

NOTES:

1. COORDINATE WITH INSTALLATION OF NOISE WALL, CONDUIT SHALL BE INSTALLED A MINIMUM OF 5' FROM NOISE WALL DRILLED SHAFT.
2. COORDINATE INSTALLATION WITH DRAINAGE. MAINTAIN MINIMUM 18" CLEARANCE BETWEEN ITS MICRODUCT/CONDUIT AND DRAINAGE PIPES/STRUCTURES/UNDERDRAIN, TYP.
3. INSTALL ITS MICRODUCT/CONDUIT WITH A MINIMUM 3' CLEARANCE TO GAS LINE OR AS SPECIFIED BY THE UTILITY.

MODEL: PR_I80 - PR RPO_ML-3
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-01\DMS15290\D16282\SHT-ITS-03.DGN

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

USER NAME = DMEIER	DESIGNED - DJM	REVISED -	
	DRAWN - JNR	REVISED -	
PLOT SCALE = 0.16666633 ' / IN.	CHECKED - REL	REVISED -	
PLOT DATE = 7/18/2023	DATE - 6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-80
ITS INFRASTRUCTURE PLANS

SCALE: 1" = 50' | SHEET OF SHEETS | STA. 791+00 | TO STA. 806+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	899	528
		CONTRACT NO. 62R29		
	ILLINOIS	FED. AID PROJECT		

N

0 50 100 150
SCALE IN FEET

MATCHLINE RAMP D
STA 405+00

MCINTOSH LN

PR ℄ BRIGGS ST RAMP D

PR COMM VAULT (IDOT)
STA. 410+00
35' RT

386'
1-1/4" INNERDUCT (IDOT)
1-1/4" INNERDUCT (TRAFFIC SIGNALS)
SEE NOTE 6

1-1/4" INNERDUCT

PR RAMP D

665'
MICRODUCT (IDOT)

75'
4" GSC
-MICRODUCT (IDOT)

PR COMM VAULT (IDOT)
STA. 806+36
97' LT

PR ℄ I-80

I-80 WB

I-80 EB

600'
MICRODUCT (IDOT)
MICRODUCT (THIRD PARTY)

MATCHLINE STA. 806+00.00

MATCHLINE STA. 821+00.00

MATCHLINE BRIGGS STA. 64+50

BRIGGS ST.

150'
4" GSC
-MICRODUCT (IDOT)

PR ℄ BRIGGS ST.

MATCHLINE BRIGGS STA. 58+00

MATCHLINE RAMP C
STA 312+50

PR ℄ BRIGGS
ST RAMP C

PR CONC FND, TYPE E
STA. 311+75
OFF. 70' LT
NOTE 3

193'
1-1/4" INNERDUCT

55'
2" CNC

PR CONC FND, TYPE A
STA. 311+20
OFF. 68' LT
NOTE 4

30'
2" CNC

PR ELEC HH
STA. 311+00
OFF. 45' LT

88'
4" GSC
-2" CNC

150'
(2) 2" CNC

PR ELEC HH
STA. 311+00
OFF. 43' RT

PR COMM VAULT (IDOT)
STA. 310+00
OFF. 50' RT

210'
MICRODUCT (IDOT)

285'
2" CNC

PR RAMP C

100'
4" GSC
-MICRODUCT (IDOT)

PR COMM VAULT (IDOT)
STA. 310+00
OFF. 50' LT

465'
MICRODUCT (IDOT)

PR ℄ BRIGGS
ST RAMP A

SEE DETAIL A

PR RAMP A

93'
2" CNC

80' - MICRODUCT (IDOT)
87' - MICRODUCT
(THIRD PARTY)

MATCHLINE RAMP A
STA 209+00

NOTE 7, TYP.

DETAIL A

PR COMM VAULT (IDOT)
STA. 108+00
OFF. 53' LT

PR COMM VAULT
(THIRD PARTY)
STA. 108+08
OFF. 53' LT

PR CONC FND, TYPE E
STA. 806+60
OFF. 110' RT
NOTE 3

54'
1-1/4" INNERDUCT

71'
2" CNC

MICRODUCT (IDOT)
MICRODUCT
(THIRD PARTY)

83' - 4" GSC
-MICRODUCT (IDOT)
85' - 4" GSC
-MICRODUCT (THIRD PARTY)

PR ELEC HH
STA. 108+16
OFF. 63' LT

98' - 4" GSC
-2" CNC

PR COMM VAULT (IDOT)
STA. 108+00
OFF. 30' RT

2" CNC

PR ELEC HH
STA. 108+16
OFF. 35' RT

MICRODUCT (IDOT)
MICRODUCT
(THIRD PARTY)

PR COMM VAULT (THIRD PARTY)
STA. 108+08
OFF. 32' RT

540'
MICRODUCT (IDOT)
MICRODUCT (THIRD PARTY)

PR COMM
VAULT (THIRD PARTY)
STA. 207+00
OFF. 45' LT

110'
MICRODUCT (IDOT)
MICRODUCT (THIRD PARTY)

PR ℄ BRIGGS
ST RAMP B

PR COMM
VAULT (IDOT)
STA. 207+10
OFF. 45' LT

70' - 4" GSC
-MICRODUCT (IDOT)
75' - 4" GSC
-MICRODUCT (THIRD PARTY)

PR RAMP B

EX ROW

MATCHLINE RAMP B
STA 206+00

PR COMM
VAULT (IDOT)
STA. 207+10
OFF. 25' RT
NOTE 5

PR COMM VAULT
(THIRD PARTY)
STA. 207+00
OFF. 30' RT
NOTE 5

NOTES:

1. IDOT MICRODUCT SHALL ONLY ENTER IDOT COMMUNICATION VAULTS.
2. THIRD PARTY MICRODUCTSHALL ONLY ENTER THIRD PARTY COMMUNICATION VAULTS.
3. 2" CNC CONDUIT SHALL BE COUPLED TO THE 2" CONCRETE FOUNDATION CONDUIT STUB OUT. 1-1/4" INNERDUCT SHALL BE INSTALLED IN THE OTHER 2" CONCRETE FOUNDATION CONDUIT STUB OUT UP THROUGH THE TOP OF THE FOUNDATION.
4. THE 2" CNC CONDUITS SHALL BE COUPLED TO THE 2" CONCRETE FOUNDATION CONDUIT STUB OUTS.
5. CONDUIT MEASUREMENTS FOR MICRODUCT ALONG RAMP B SHOWN ON OTHER SHEETS.
6. THE QUANTITIY FOR FIBER OPTIC INNERDUCT 1-1/4" DIA. (X8710402) FROM THE COMMUNICATIONS VAULT AT RAMP D STA 410+00, 35; RT TO THE TRAFFIC SIGNAL HANDHOLE AT RAPM D STQA 400+52, 45' RT IS REPRESENTED ON THE TRAFFIC SIGNAL PLANS. THIS FIBER OPTIC INNERDUCT 1-1/4" DIA. (X8710402) WILL HAVE A FIBER OPTIC CABLE INSTALLED, WHICH IS ALSO QUANTIFIED ON THE TRAFFIC SIGNAL PLANS.
7. COORDINATE INSTALLATION WITH DRAINAGE. MAINTAIN MINIMUM 18" CLEARANCE BETWEEN ITS MICRODUCT/CONDUIT AND DRAINAGE PIPES/STRUCTURES/UNDERDRAIN, TYP.

MODEL: PR_I80 - PR I89_M
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-031DMS15290\D162829-SHT-ITS-04.DGN

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

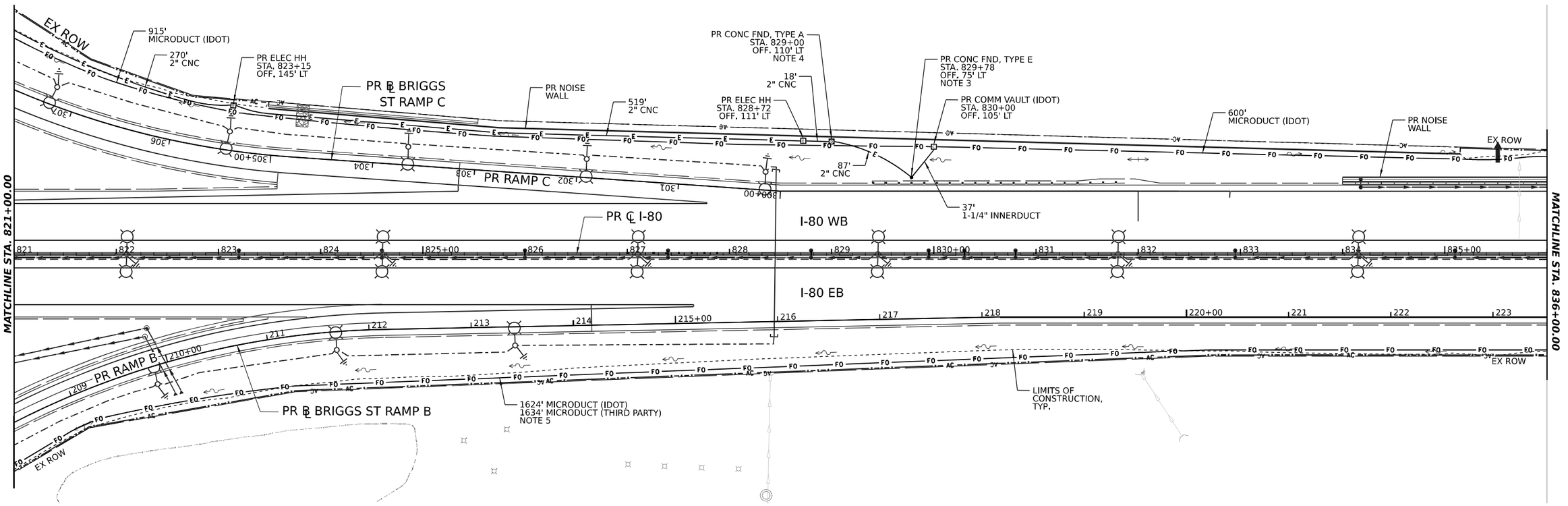
USER NAME = DMEIER		DESIGNED - DJM		REVISED -	
		DRAWN - JNR		REVISED -	
PLOT SCALE = 0.16666633 ' / IN.		CHECKED - REL		REVISED -	
PLOT DATE = 7/18/2023		DATE - 6/29/2023		REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–80
ITS INFRASTRUCTURE PLANS

SCALE: 1" = 50' | SHEET OF SHEETS | STA. 806+00 | TO STA. 821+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	899	529
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			



NOTES:

1. IDOT MICRODUCT SHALL ONLY ENTER IDOT COMMUNICATION VAULTS.
2. THIRD PARTY MICRODUCTSHALL ONLY ENTER THIRD PARTY COMMUNICATION VAULTS.
3. 2" CNC CONDUIT SHALL BE COUPLED TO THE 2" CONCRETE FOUNDATION CONDUIT STUB OUT. 1-1/4" INNERDUCT SHALL BE INSTALLED IN THE OTHER 2" CONCRETE FOUNDATION CONDUIT STUB OUT UP THROUGH THE TOP OF THE FOUNDATION.
4. THE 2" CNC CONDUITS SHALL BE COUPLED TO THE 2" CONCRETE FOUNDATION CONDUIT STUB OUTS.
5. LENGTHS ARE MEASURED FROM VAULTS ON SHEET 540.

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Chicago, Illinois 60606

USER NAME = DMEIER	DESIGNED - DJM	REVISED -		
	DRAWN - JNR	REVISED -		
PLOT SCALE = 0.16666633 ' / IN.	CHECKED - REL	REVISED -		
PLOT DATE = 7/18/2023	DATE - 6/29/2023	REVISED -		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-80
ITS INFRASTRUCTURE PLANS

SCALE: 1" = 50' | SHEET OF SHEETS | STA. 821+00 | TO STA. 836+00

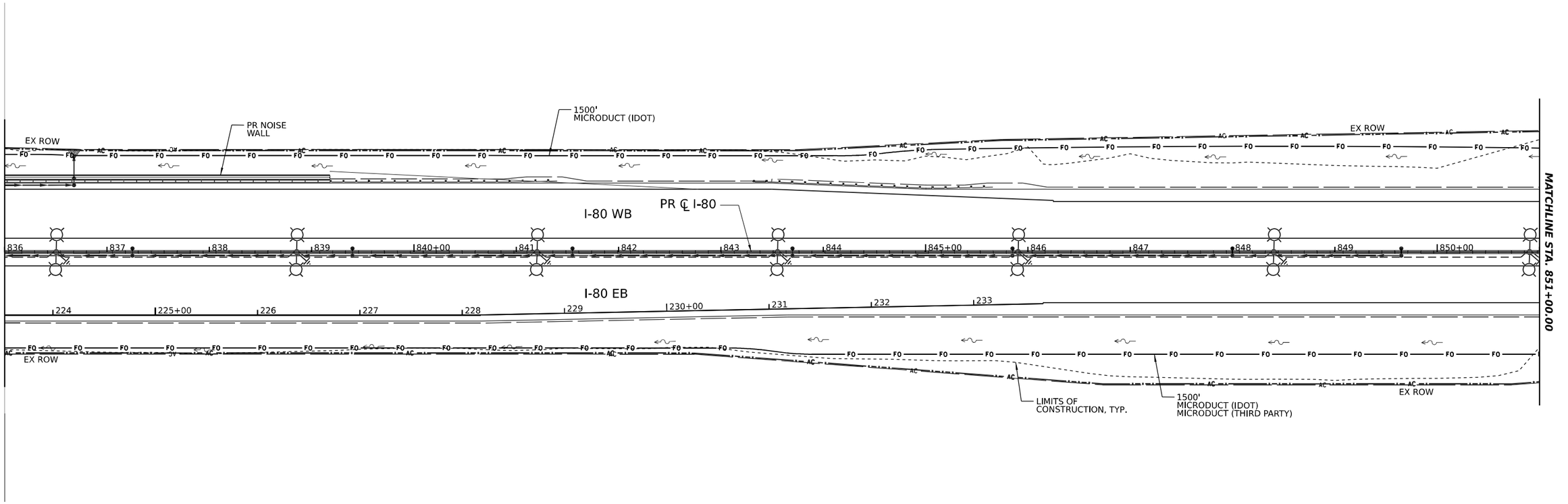
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	899	530
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			

MODEL: PR_I80 - PR I80_MI-5
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-#PW-01\DMS15290\D1628295HT-ITS-05.DGN

N

0 50 100 150

SCALE IN FEET



MODEL: PR_I80 - PR I80_MI-6
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-01\JOSEPH.JMALCOLM\D0MS1229\D162R29-SHT-ITS-06.DGN

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

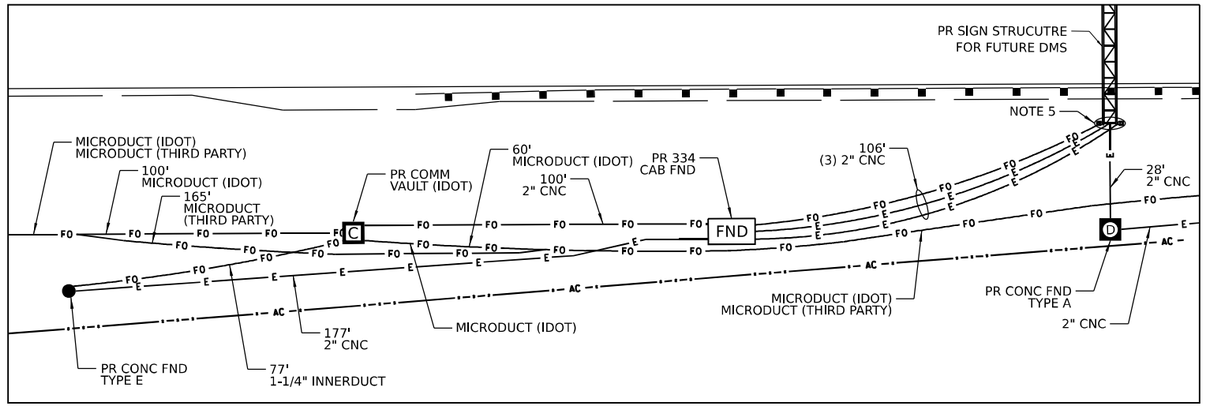
USER NAME = JMALCOLM	DESIGNED - DJM	REVISED -
	DRAWN - JNR	REVISED -
PLOT SCALE = 0.16666633 ' / IN.	CHECKED - REL	REVISED -
PLOT DATE = 6/27/2023	DATE - 6/29/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

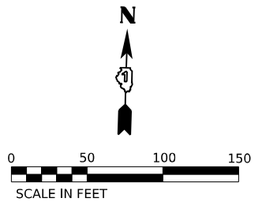
I-80
ITS INFRASTRUCTURE PLANS

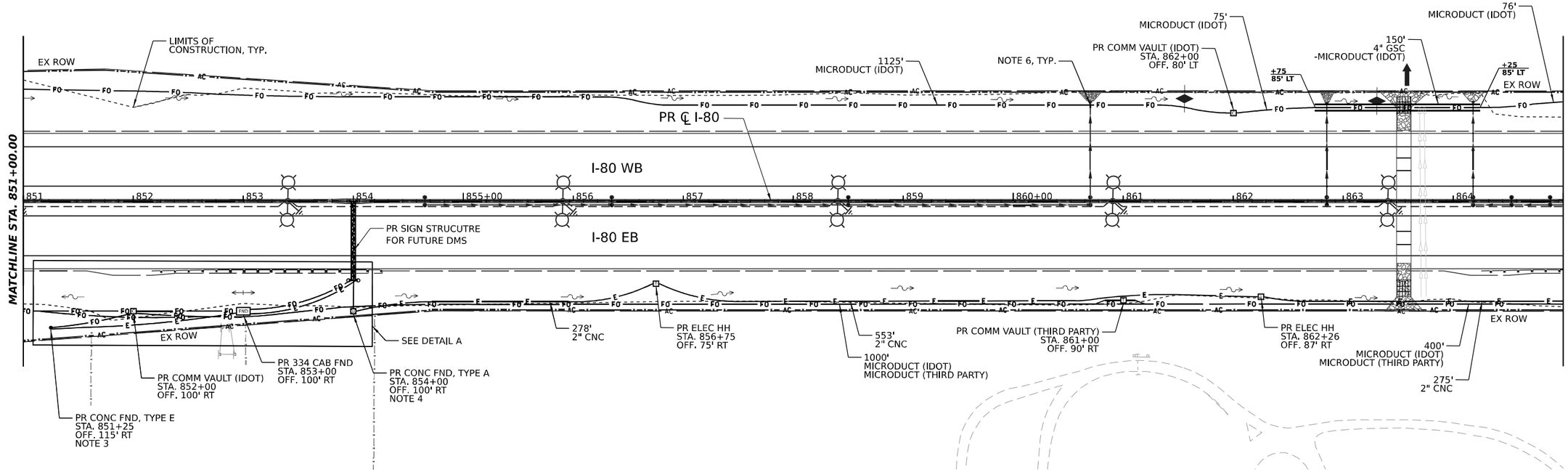
SCALE: 1" = 50' | SHEET OF SHEETS | STA. 836+00 | TO STA. 851+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	531
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			



DETAIL A





NOTES:

1. IDOT MICRODUCT SHALL ONLY ENTER IDOT COMMUNICATION VAULTS.
2. THIRD PARTY MICRODUCTSHALL ONLY ENTER THIRD PARTY COMMUNICATION VAULTS.
3. 2" CNC CONDUIT SHALL BE COUPLED TO THE 2" CONCRETE FOUNDATION CONDUIT STUB OUT. 1-1/4" INNERDUCT SHALL BE INSTALLED IN THE OTHER 2" CONCRETE FOUNDATION CONDUIT STUB OUT UP THROUGH THE TOP OF THE FOUNDATION.
4. THE 2" CNC CONDUITS SHALL BE COUPLED TO THE 2" CONCRETE FOUNDATION CONDUIT STUB OUTS.
5. STUB UP AND CAP THE 2" CNC FROM TYPE A FOUNDATION AND ONE (1) 2" CNC FROM 334 CABINET FOUNDATION ABOVE GRADE AT THE OHSS FOUNDATION TO BE CONNECTED TO BY FUTURE CONTRACT. THE OTHER TWO (2) 2" CNC FROM THE 334 CABINET FOUNDATION SHALL BE COUPLED TO THE 2" OHSS STUBOUTS.
6. COORDINATE INSTALLATION WITH DRAINAGE. MAINTAIN MINIMUM 18" CLEARANCE BETWEEN ITS MICRODUCT/CONDUIT AND DRAINAGE PIPES/STRUCTURES/UNDERDRAIN, TYPE.

MODEL: PR_I80 - PR IBO_ML-7
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-01\JOSEPH.MALCOLM\D0515230\D162R29-SHT-ITS-07.DGN

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

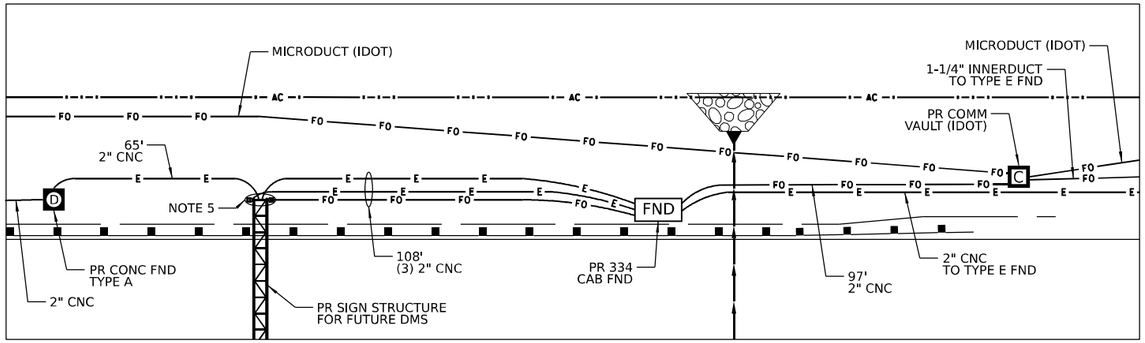
USER NAME = JMALCOLM	DESIGNED - DJM	REVISED -	
	DRAWN - JNR	REVISED -	
PLOT SCALE = 0.16666633 ' / IN.	CHECKED - REL	REVISED -	
PLOT DATE = 6/27/2023	DATE - 6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

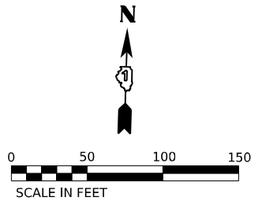
I-80
ITS INFRASTRUCTURE PLANS

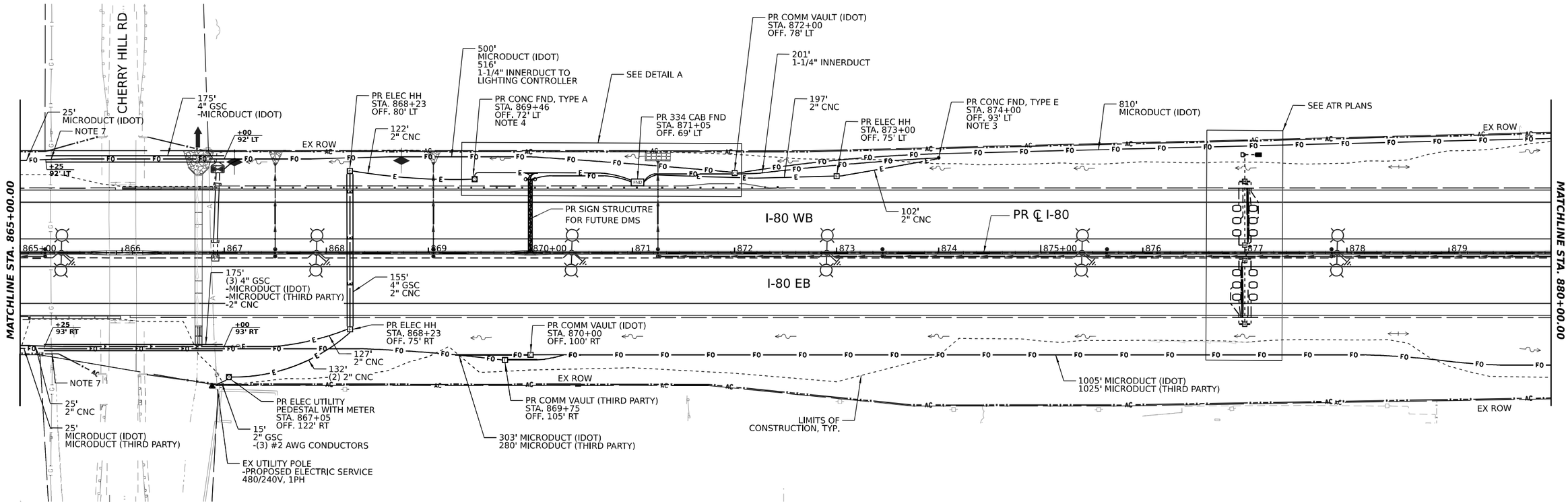
SCALE: 1" = 50' | SHEET OF SHEETS | STA. 851+00 | TO STA. 865+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	532
		CONTRACT NO. 62R29		
	ILLINOIS	FED. AID PROJECT		



DETAIL A





NOTES:

1. IDOT MICRODUCT SHALL ONLY ENTER IDOT COMMUNICATION VAULTS.
2. THIRD PARTY MICRODUCTSHALL ONLY ENTER THIRD PARTY COMMUNICATION VAULTS.
3. 2" CNC CONDUIT SHALL BE COUPLED TO THE 2" CONCRETE FOUNDATION CONDUIT STUB OUT. 1-1/4" INNERDUCT SHALL BE INSTALLED IN THE OTHER 2" CONCRETE FOUNDATION CONDUIT STUB OUT UP THROUGH THE TOP OF THE FOUNDATION.
4. THE 2" CNC CONDUITS SHALL BE COUPLED TO THE 2" CONCRETE FOUNDATION CONDUIT STUB OUTS.
5. STUB UP AND CAP THE 2" CNC FROM TYPE A FOUNDATION AND ONE (1) 2" CNC FROM 334 CABINET FOUNDATION ABOVE GRADE AT THE OHSS FOUNDATION TO BE CONNECTED TO BY FUTURE CONTRACT. THE OTHER TWO (2) 2" CNC FROM THE 334 CABINET FOUNDATION SHALL BE COUPLED TO THE 2" OHSS STUBOUTS.
6. COORDINATE INSTALLATION WITH DRAINAGE. MAINTAIN MINIMUM 18" CLEARANCE BETWEEN ITS MICRODUCT/CONDUIT AND DRAINAGE PIPES/STRUCTURES/UNDERDRAIN, TYP.
7. 4" NICOR GAS MAIN. INSTALL ITS MICRODUCT/CONDUIT WITH A MINIMUM 3' CLEARANCE TO GAS LINE OR AS SPECIFIED BY THE UTILITY.

MODEL: PR_I80 - PR I80_ML-8
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS+PW-01\DMS1529\D1628\29-SHT-ITS-08.DGN

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

USER NAME = DMEIER	DESIGNED - DJM	REVISED -	
	DRAWN - JNR	REVISED -	
PLOT SCALE = 0.16666633 ' / IN.	CHECKED - REL	REVISED -	
PLOT DATE = 7/18/2023	DATE - 6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-80
ITS INFRASTRUCTURE PLANS

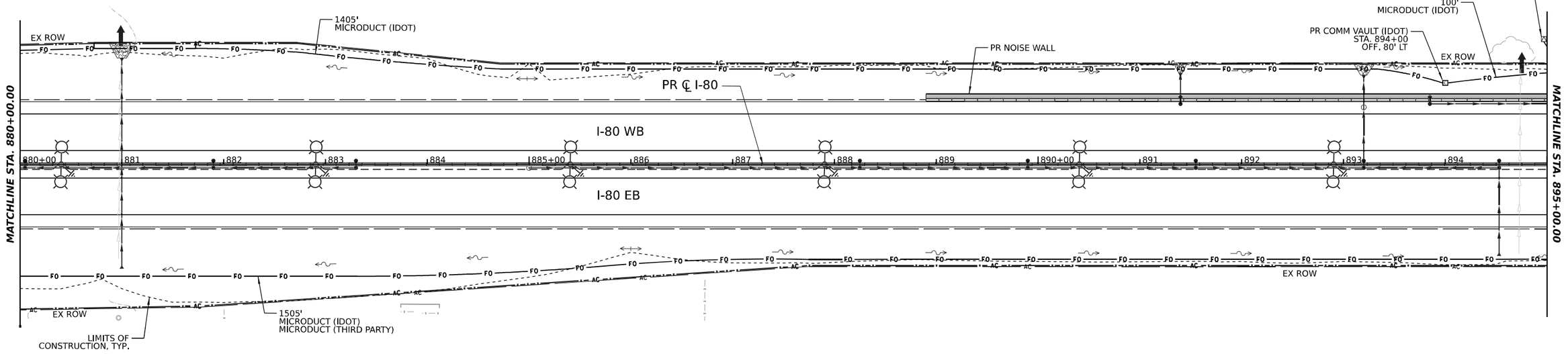
SCALE: 1" = 50' | SHEET OF SHEETS | STA. 865+00 | TO STA. 880+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	899	533
		CONTRACT NO. 62R29		
	ILLINOIS	FED. AID PROJECT		

N

0 50 100 150

SCALE IN FEET



NOTES:

1. COORDINATE INSTALLATION WITH DRAINAGE. MAINTAIN MINIMUM 18" CLEARANCE BETWEEN ITS MICRODUCT/CONDUIT AND DRAINAGE PIPES/STRUCTURES/UNDERDRAIN, TYP.

MODEL: PR_I80 - PR I80_ML-9
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS4PW401\JOSEPH.MALCOLM\D1515290\D162R29-SHT-ITS-09.DGN

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

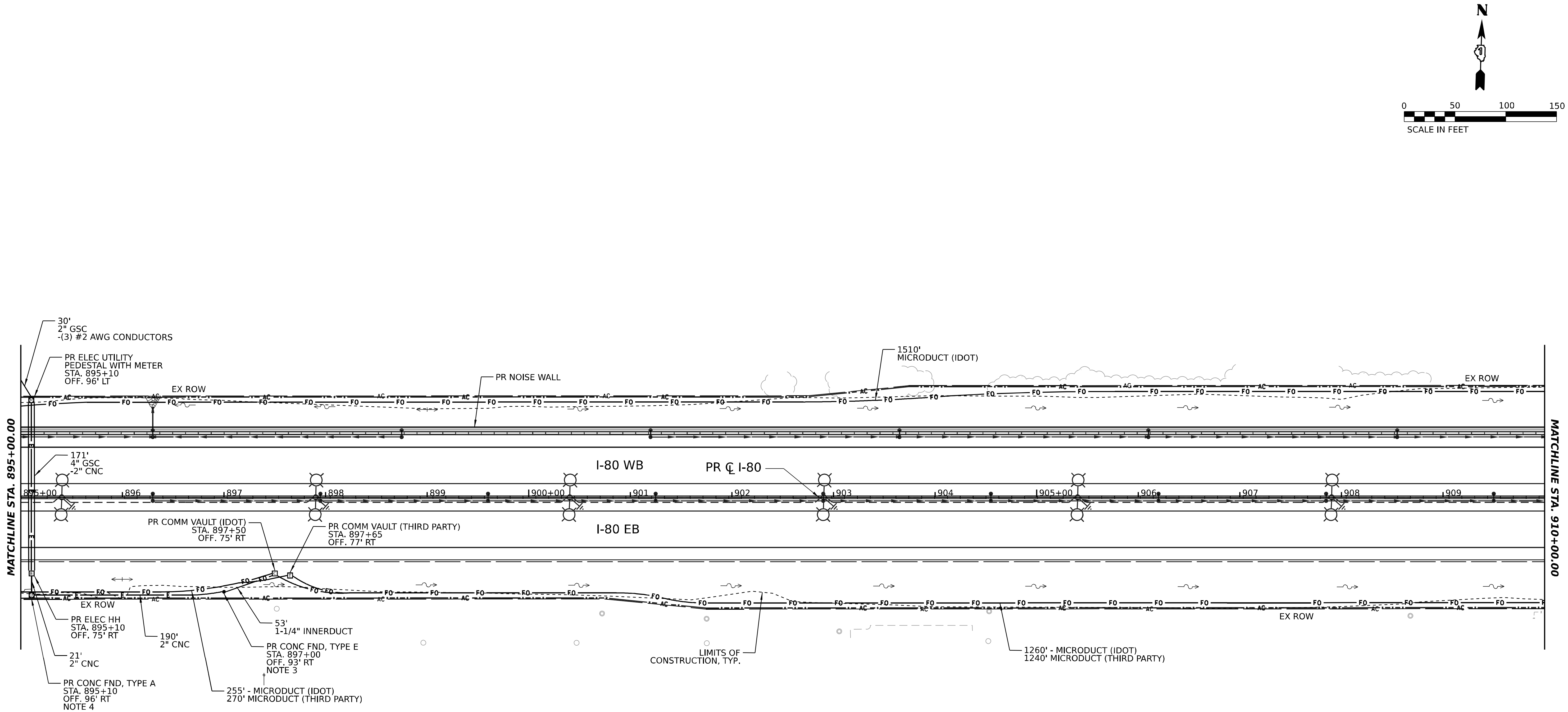
USER NAME = JMALCOLM	DESIGNED - DJM	REVISED -	
	DRAWN - JNR	REVISED -	
PLOT SCALE = 0.16666633 ' / IN.	CHECKED - REL	REVISED -	
PLOT DATE = 6/27/2023	DATE - 6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-80
ITS INFRASTRUCTURE PLANS

SCALE: 1" = 50' | SHEET OF SHEETS | STA. 880+00 | TO STA. 895+00

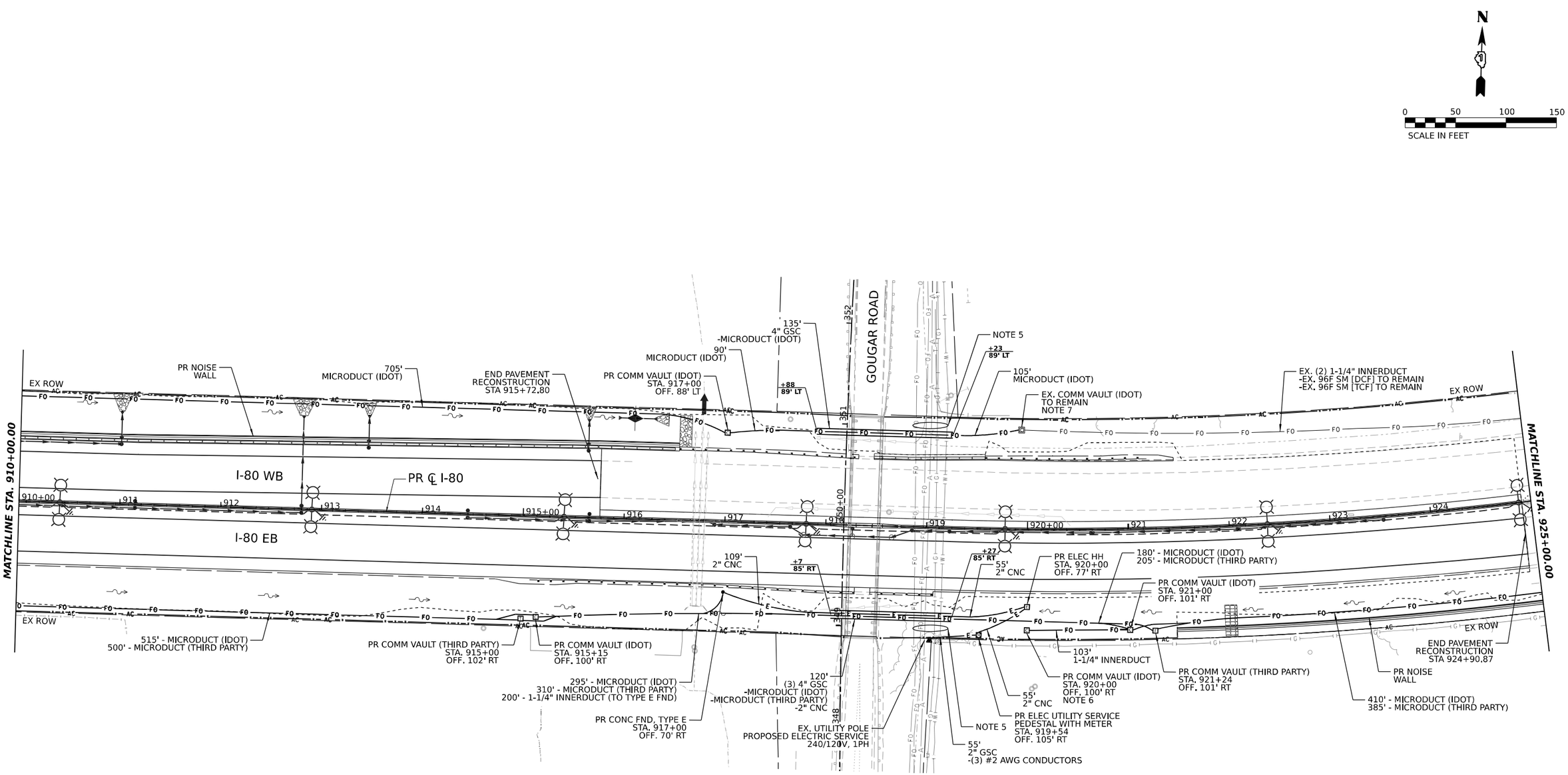
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	534
		CONTRACT NO. 62R29		
	ILLINOIS	FED. AID PROJECT		



N
0 50 100 150
SCALE IN FEET
30'
2" GSC
-(3) #2 AWG CONDUCTORS
PR ELEC UTILITY
PEDESTAL WITH METER
STA. 895+10
OFF. 96' LT
EX ROW
PR NOISE WALL
1510'
MICRODUCT (IDOT)
EX ROW
MATCHLINE STA. 895+00.00
MATCHLINE STA. 910+00.00
171'
4" GSC
-2" CNC
I-80 WB
PR ℄ I-80
I-80 EB
PR COMM VAULT (IDOT)
STA. 897+50
OFF. 75' RT
PR COMM VAULT (THIRD PARTY)
STA. 897+65
OFF. 77' RT
EX ROW
PR ELEC HH
STA. 895+10
OFF. 75' RT
190'
2" CNC
53'
1-1/4" INNERDUCT
PR CONC FND, TYPE E
STA. 897+00
OFF. 93' RT
NOTE 3
21'
2" CNC
PR CONC FND, TYPE A
STA. 895+10
OFF. 96' RT
NOTE 4
255' - MICRODUCT (IDOT)
270' MICRODUCT (THIRD PARTY)
LIMITS OF
CONSTRUCTION, TYP.
1260' - MICRODUCT (IDOT)
1240' MICRODUCT (THIRD PARTY)
EX ROW

NOTES:

1. IDOT MICRODUCT SHALL ONLY ENTER IDOT COMMUNICATION VAULTS.
2. THIRD PARTY MICRODUCTSHALL ONLY ENTER THIRD PARTY COMMUNICATION VAULTS.
3. 2" CNC CONDUIT SHALL BE COUPLED TO THE 2" CONCRETE FOUNDATION CONDUIT STUB OUT. 1-1/4" INNERDUCT SHALL BE INSTALLED IN THE OTHER 2" CONCRETE FOUNDATION CONDUIT STUB OUT UP THROUGH THE TOP OF THE FOUNDATION.
4. THE 2" CNC CONDUITS SHALL BE COUPLED TO THE 2" CONCRETE FOUNDATION CONDUIT STUB OUTS.



NOTES:

1. IDOT MICRODUCT SHALL ONLY ENTER IDOT COMMUNICATION VAULTS.
2. THIRD PARTY MICRODUCTSHALL ONLY ENTER THIRD PARTY COMMUNICATION VAULTS.
3. 2" CNC CONDUIT SHALL BE COUPLED TO THE 2" CONCRETE FOUNDATION CONDUIT STUB OUT. 1-1/4" INNERDUCT SHALL BE INSTALLED IN THE OTHER 2" CONCRETE FOUNDATION CONDUIT STUB OUT UP THROUGH THE TOP OF THE FOUNDATION.
4. THE 2" CNC CONDUITS SHALL BE COUPLED TO THE 2" CONCRETE FOUNDATION CONDUIT STUB OUTS.
5. MAINTAIN A MINIMUM 3' CLEARANCE FROM WATER LINE, GAS LINE, AND FIBER OR AS SPECIFIED BY THE UTILITY.
6. VAULT FOR FUTURE WILL COUNTY CONNECTION.
7. MICRODUCT SHALL ENTER THE EXISTING IDOT COMM VAULT FROM THE UNDERSIDE OF THE VAULT AND NO DRILLING SHALL BE ALLOWED.

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

USER NAME = DMEIER	DESIGNED - DJM	REVISED -	
	DRAWN - JNR	REVISED -	
PLOT SCALE = 0.16666633 ' / IN.	CHECKED - REL	REVISED -	
PLOT DATE = 7/18/2023	DATE - 6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-80
ITS INFRASTRUCTURE PLANS

SCALE: 1" = 50' | SHEET OF SHEETS | STA. 910+00 | TO STA. 925+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	899	536
		CONTRACT NO. 62R29		
	ILLINOIS	FED. AID PROJECT		

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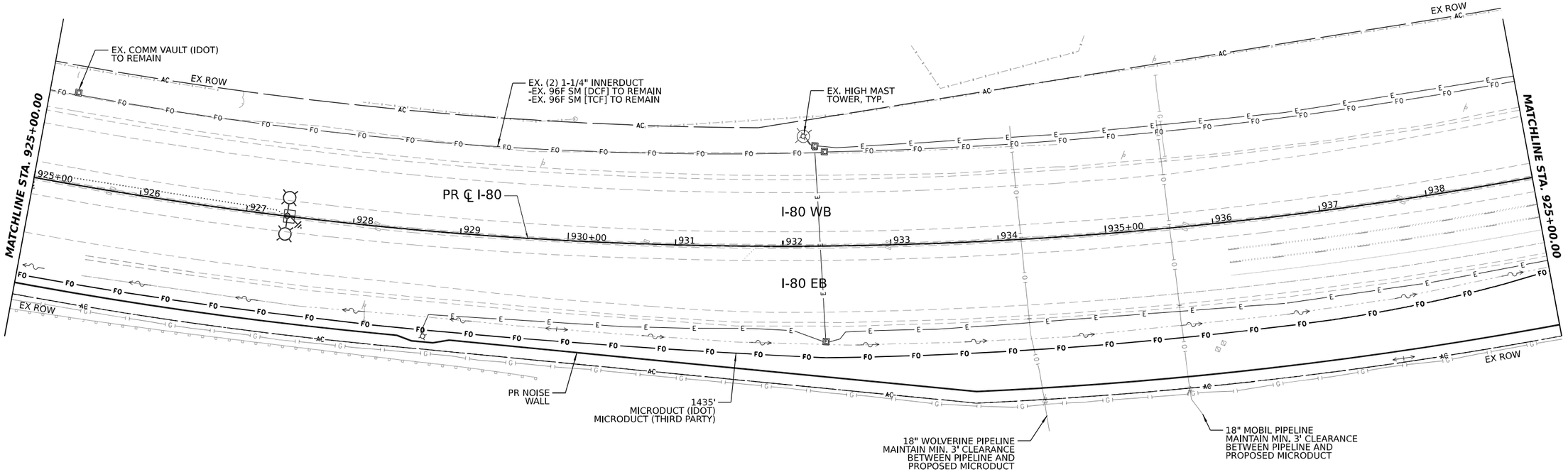

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TranSmart
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Chicago, Illinois 60606

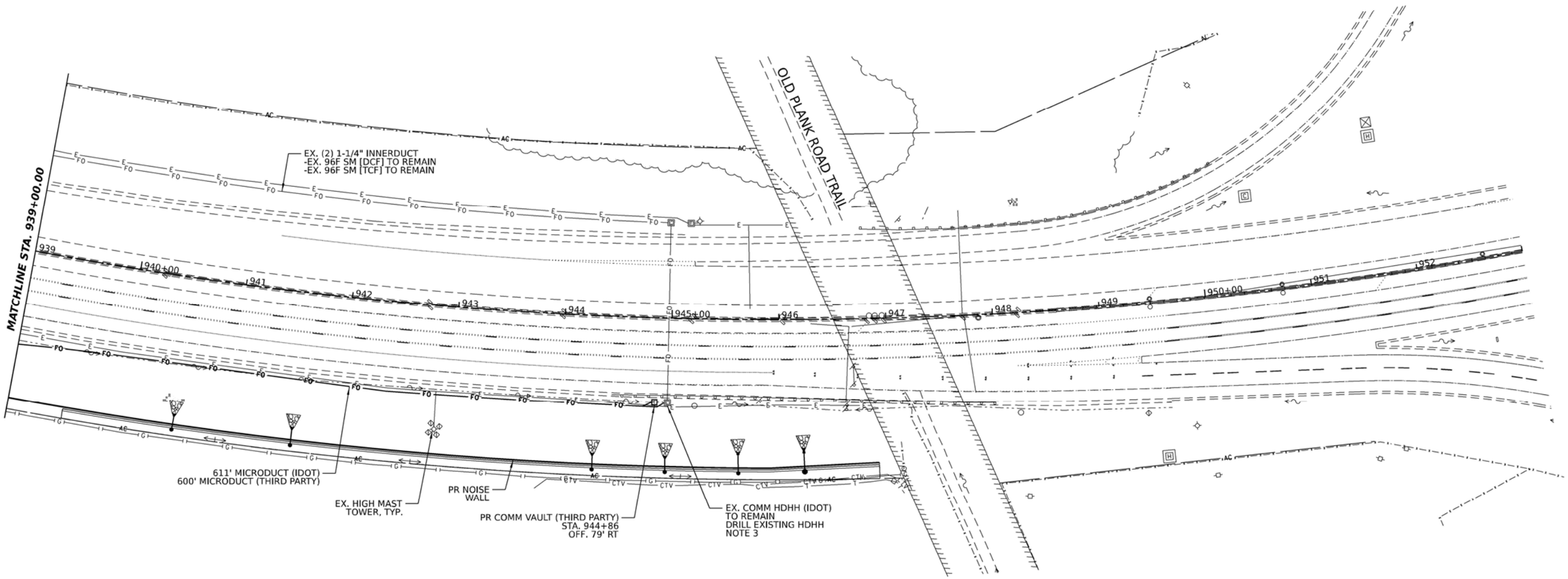
USER NAME = JMALCOLM	DESIGNED - DJM	REVISED -	
	DRAWN - JNR	REVISED -	
PLOT SCALE = 0.16666633 ' / IN.	CHECKED - REL	REVISED -	
PLOT DATE = 6/27/2023	DATE - 6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-80
ITS INFRASTRUCTURE PLANS

SCALE: 1" = 50' | SHEET OF SHEETS | STA. 925+00 TO STA. 939+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	537
		CONTRACT NO. 62R29		
	ILLINOIS	FED. AID PROJECT		



NOTES:

1. IDOT MICRODUCT SHALL ONLY ENTER IDOT COMMUNICATION VAULTS.
2. THIRD PARTY MICRODUCTSHALL ONLY ENTER THIRD PARTY COMMUNICATION VAULTS.

MODEL: PR_I80 - PR I89_ML-13
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL:TRANSYSTEMS-PW-01\JOSEPH.MALCOLM\D0MS1229\D1628R29-SHT-ITS-13.DGN

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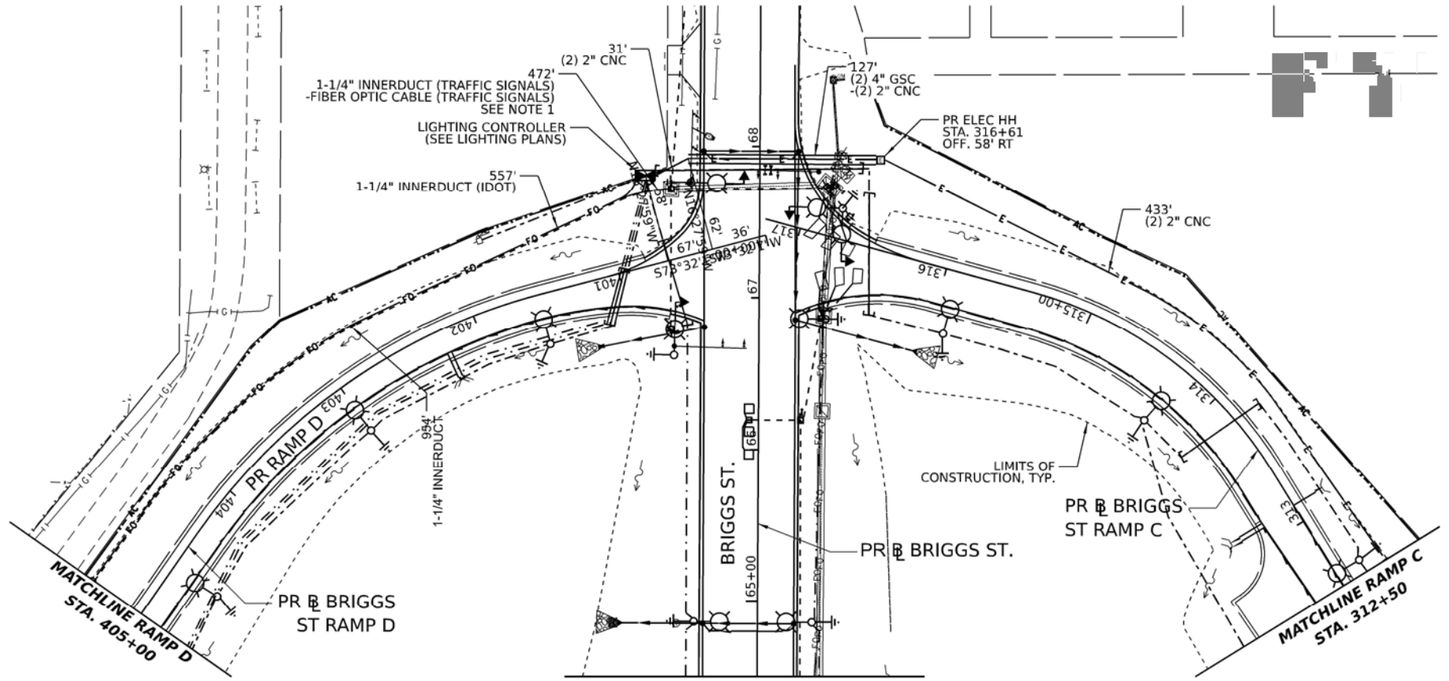
	DRAWN - JNR	REVISED -		
PLOT SCALE = 0.16666633 ' / IN.	CHECKED - REL	REVISED -		
PLOT DATE = 6/27/2023	DATE - 6/29/2023	REVISED -		SCALE: 1" = 50' SHEET OF SHEETS STA. 939+00 TO STA. 953+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	538
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			



NOTES:

1. THE QUANTITY FOR FIBER OPTIC INNERDUCT 1-1/4" DIA. (X8710402) FROM THE COMMUNICATIONS VAULT AT RAMP D STA 410+00, 35' RT TO THE TRAFFIC SIGNAL HANDHOLE AT RAMP D STA 400+52, 45' RT IS REPRESENTED ON THE TRAFFIC SIGNAL PLANS. THIS FIBER OPTIC INNERDUCT 1-1/4" DIA. (X8710402) WILL HAVE A FIBER OPTIC CABLE INSTALLED, WHICH IS ALSO QUANTIFIED ON THE TRAFFIC SIGNAL PLANS.

MODEL: PR_I80 - PR I89_ML-14
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS4PW-01\JOSEPH.JMALCOLM\DMS515290\D162829-SHT-ITS-14.DGN

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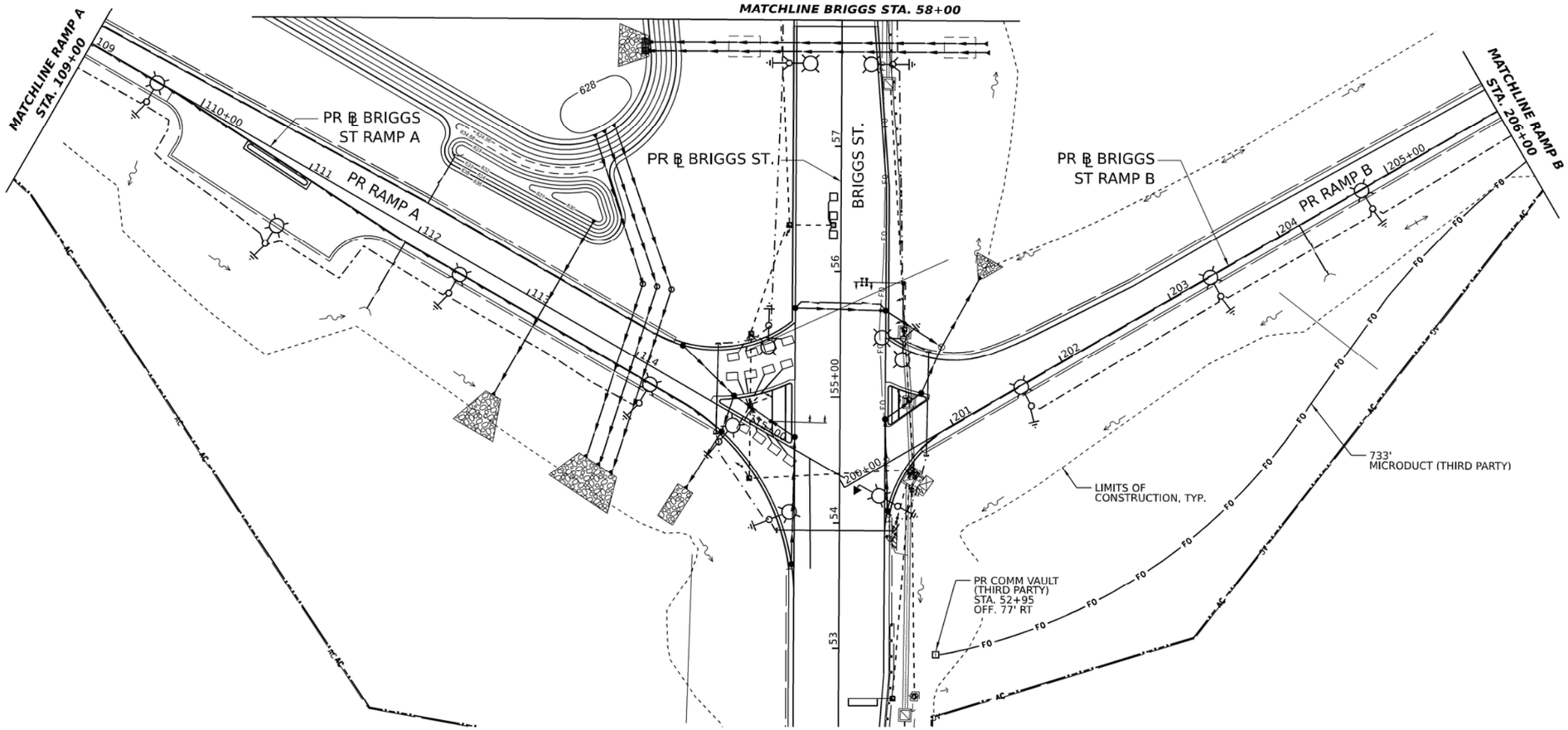
	DRAWN - JNR	REVISED -	
PLOT SCALE = 0.16666633 ' / IN.	CHECKED - REL	REVISED -	
PLOT DATE = 6/27/2023	DATE - 6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–80
ITS INFRASTRUCTURE PLANS

SCALE: 1" = 50' | SHEET OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	539
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			



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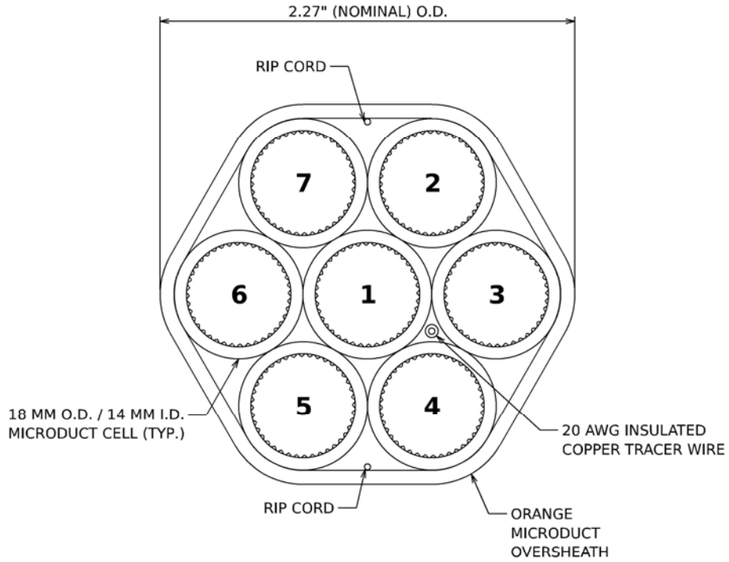
TranSmart 100 S. Wacker Drive Suite 400 Chicago, Illinois 60606	USER NAME = JMALCOLM	DESIGNED - DJM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I–80 ITS INFRASTRUCTURE PLANS
		DRAWN - JNR	REVISED -		
	PLOT SCALE = 0.16666633 ' / IN.	CHECKED - REL	REVISED -		SCALE: 1" = 50' SHEET OF SHEETS STA. TO STA.
	PLOT DATE = 6/27/2023	DATE - 6/29/2023	REVISED -		

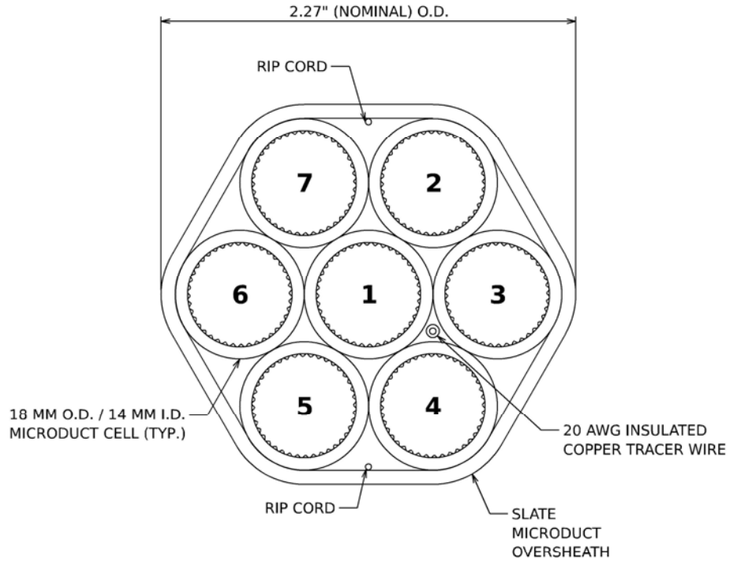
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	540
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			



IDOT MICRODUCT DETAIL

CELL NO.	CELL COLOR	CELL ALLOCATION
1	BLUE	FUTURE 144 IDOT (TCF)
2	ORANGE	FUTURE 144 IDOT (DCF)
3	GREEN	SPARE
4	BROWN	SPARE
5	GREY	SPARE
6	WHITE	SPARE
7	RED	SPARE

IDOT MICRODUCT CELL INFORMATION



THIRD PARTY MICRODUCT DETAIL

CELL NO.	CELL COLOR	CELL ALLOCATION
1	BLUE	FUTURE 144 THIRD PARTY
2	ORANGE	SPARE
3	GREEN	SPARE
4	BROWN	SPARE
5	GREY	SPARE
6	WHITE	SPARE
7	RED	SPARE

THIRD PARTY MICRODUCT CELL INFORMATION

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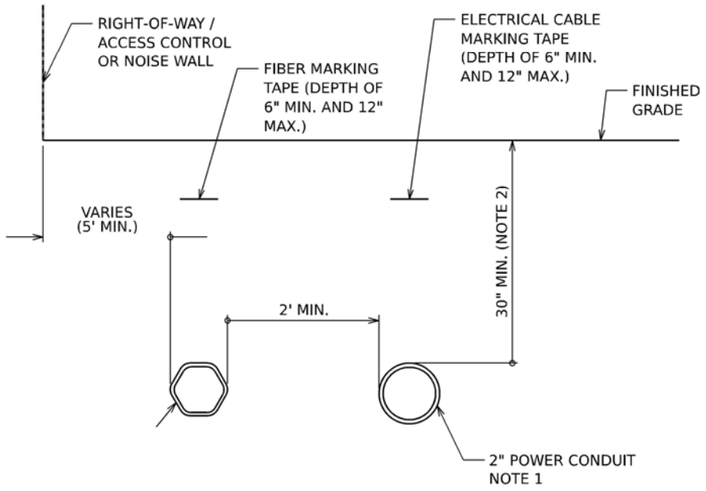
	DRAWN - JNR	REVISED -	
PLOT SCALE = 0.16666667 ' / IN.	CHECKED - REL	REVISED -	
PLOT DATE = 6/27/2023	DATE - 6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ITS INFRASTRUCTURE DETAILS
MICRODUCT

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

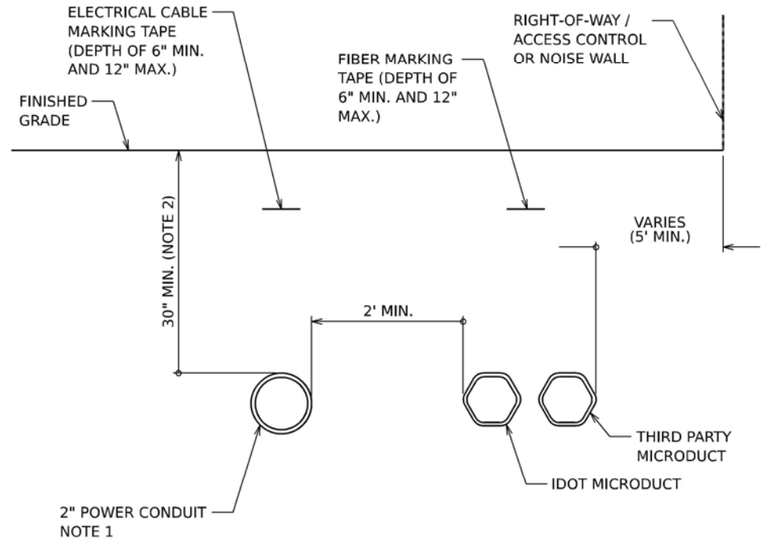
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	541
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			



I-80 WESTBOUND TYPICAL CONDUIT SECTION

NOTES

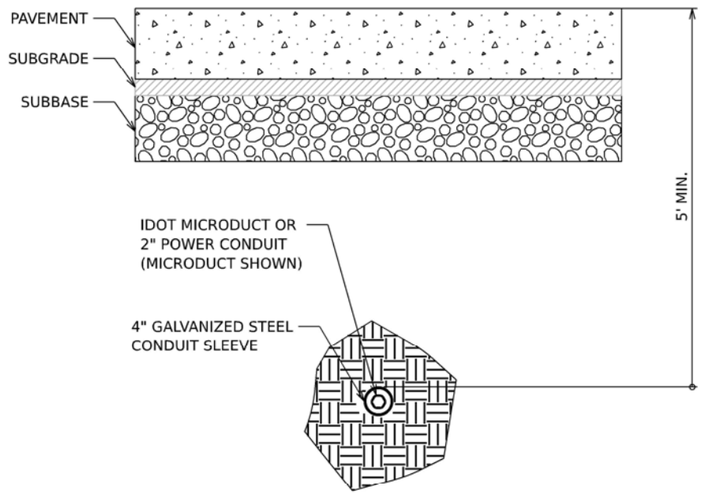
1. INSTALLATION CONFIGURATION/QUANTITY OF POWER CONDUITS VARIES BY LOCATION.
2. GREATER DEPTH MAY BE REQUIRED IN CERTAIN SITUATIONS, INCLUDING, BUT NOT LIMITED TO: ENTERING HANDHOLES/VAULTS, UTILITY AVOIDANCE, CROSSING BENEATH BOX CULVERTS.



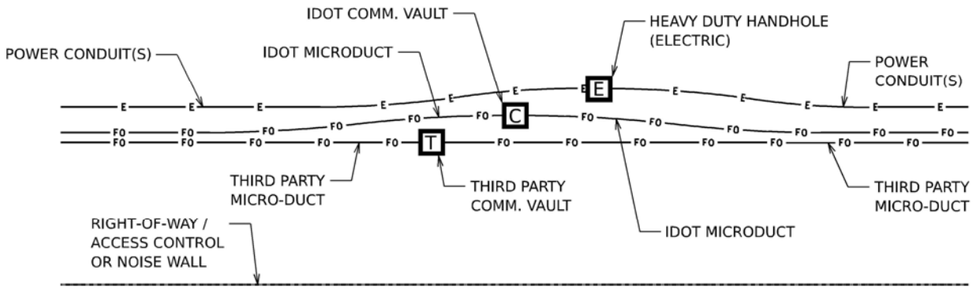
I-80 EASTBOUND TYPICAL CONDUIT SECTION

NOTES

1. INSTALLATION CONFIGURATION/QUANTITY OF POWER CONDUITS VARIES BY LOCATION.
2. GREATER DEPTH MAY BE REQUIRED IN CERTAIN SITUATIONS, INCLUDING, BUT NOT LIMITED TO: ENTERING HANDHOLES/VAULTS, UTILITY AVOIDANCE, CROSSING BENEATH BOX CULVERTS.



BORED CONDUIT UNDER ROADWAY



TYPICAL CONDUIT ROUTING AT HANDHOLES

NOTES

1. INSTALLATION CONFIGURATION/QUANTITY OF POWER CONDUITS VARIES BY LOCATION AND ROADWAY DIRECTION. EASTBOUND DIRECTION SHOWN ABOVE WITH POWER CONDUIT, IDOT MICRODUCT, AND THIRD PARTY MICRODUCT.
2. IDOT MICRODUCT SHALL ENTER IDOT COMMUNICATIONS VAULTS ONLY.
3. THIRD PARTY MICRODUCT SHALL ENTER THIRD PARTY COMMUNICATIONS VAULTS ONLY.

MODEL: 2D SHEET H
FILE NAME: C:\TRANSYSTEMS\PW LOCAL\TRANSYSTEMS-PW-01\JOSEPH.MALCOLM\D0MS11290\D162R29-SHT-ITS-DET-02.DGN

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PLOT DATE = 6/27/2023	DATE - 6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ITS INFRASTRUCTURE DETAILS
CONDUIT ROUTING

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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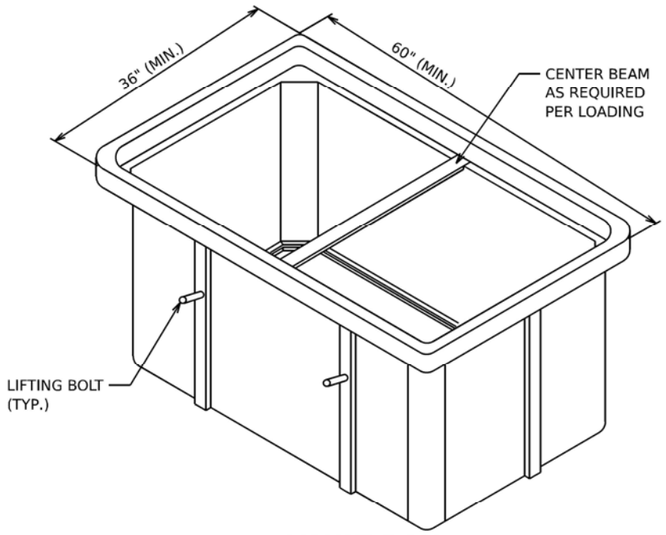
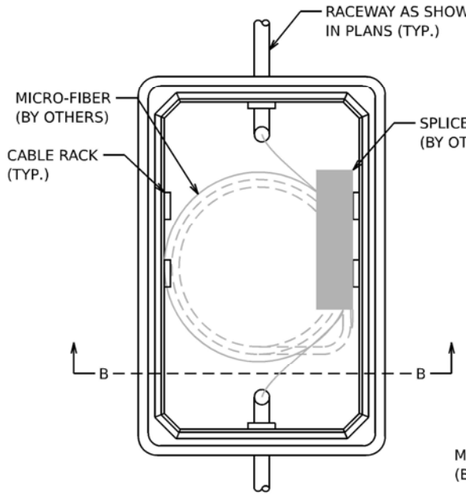
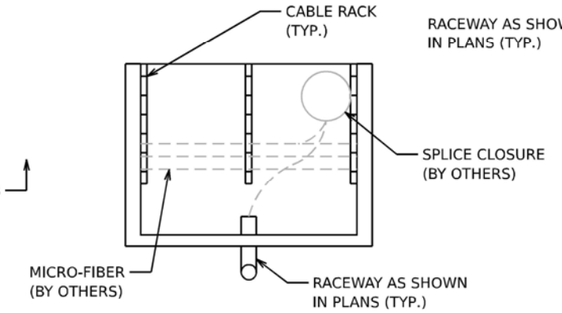
		CONTRACT NO. 62R29		
	ILLINOIS	FED. AID PROJECT		



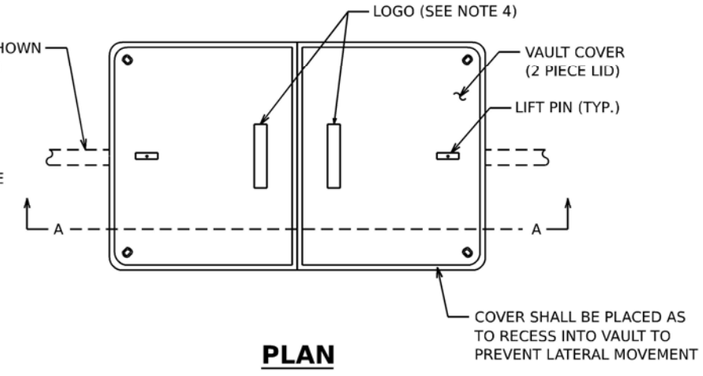
VAULT BOX ISOMETRIC VIEW



TOP VIEW



SECTION B-B



PLAN

NOTES:

1. GROUND ROD, 1-1/2" CONDUIT, #6 AWG GROUND WIRE, LOCATE POST AND ASSOCIATED WORK ARE INCLUDED AS PART OF COMMUNICATIONS VAULT AND WILL NOT BE PAID FOR SEPARATELY. ALL MATERIALS FOR MECHANICAL CONNECTION SHALL BE UL LISTED AND INSTALLED PER NEC ARTICLE 250.

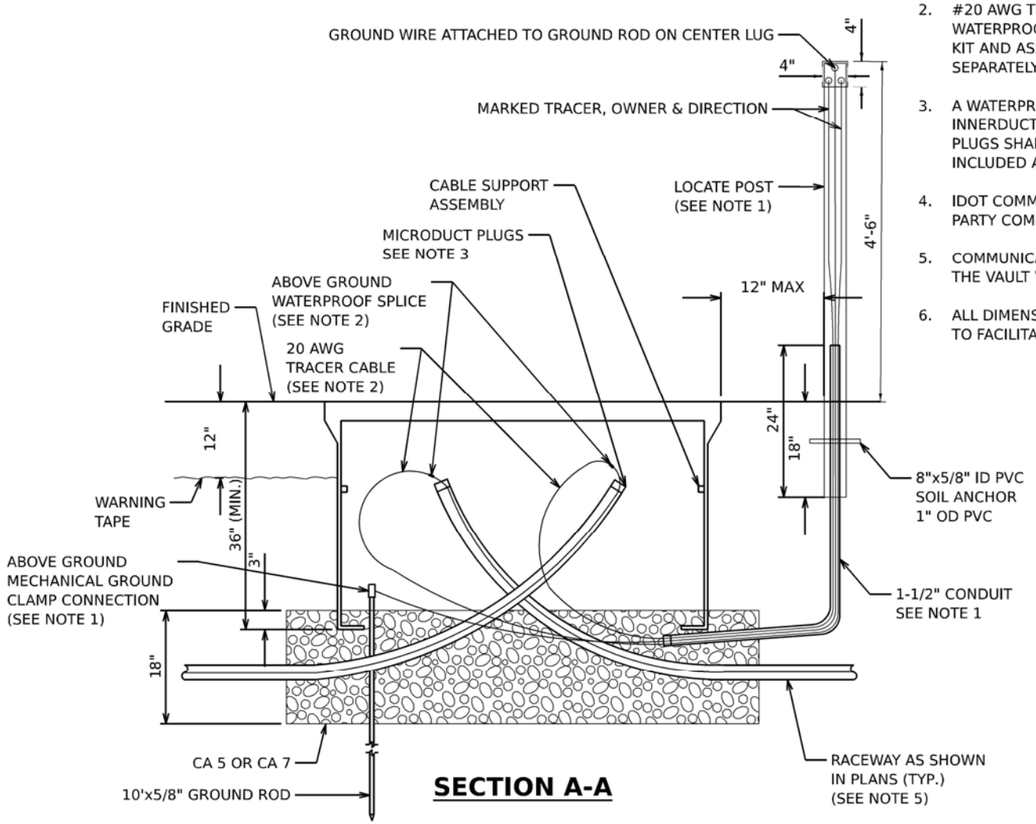
2. #20 AWG TRACER CABLE SHALL BE SPLICED TO THE #20 AWG TRACER CABLE IN THE MICRODUCT USING A WATERPROOF SPLICE KIT AS RECOMENDED BY THE MICRODUCT MANUFACTURER. THE #20 AWG WIRE, SPLICE KIT AND ASSOCIATED WORK ARE INCLUDED AS PART OF COMMUNICATIONS VAULT AND WILL NOT BE PAID FOR SEPARATELY.

3. A WATERPROOF MICRODUCT PLUG(S) OR INNERDUCT PLUG SHALL BE INSTALLED AROUND EACH MICRODUCT OR INNERDUCT TO SEAL AROUND THE DUCT FOR ALL MICRODUCTS OR INNERDUCTS COMING INTO THE VAULT. THE PLUGS SHALL BE APPROPRIATELY SIZED AND INSTALLED AS RECOMMENDED BY THE MANUFACTURER AND IS INCLUDED AS PART OF THE MICRODUCT OR INNERDUCT PAY ITEM AND WILL NOT BE PAID SEPARATELY.

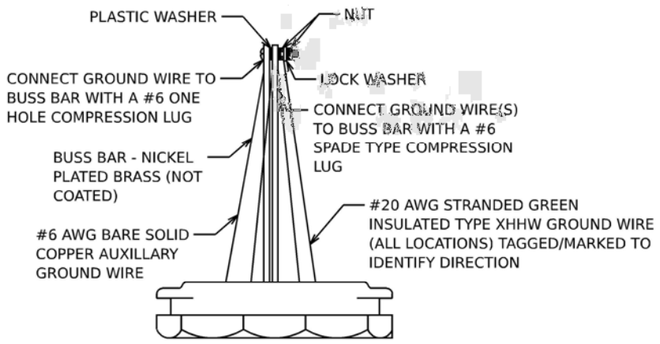
4. IDOT COMMUNICATIONS VAULTS SHALL HAVE A PERMANENTLY RECESSED LOGO THAT READS "IDOT" AND THIRD PARTY COMMUNICATIONS VAULTS SHALL HAVE A PERMANENTLY RECESSED LOGO THAT READS "IDOT - BB".

5. COMMUNICATIONS VAULT SHALL HAVE AN OPEN BASE. ALL CONDUITS AS SHOWN ON THE PLANS SHALL ENTER THE VAULT VIA THE OPEN BASE.

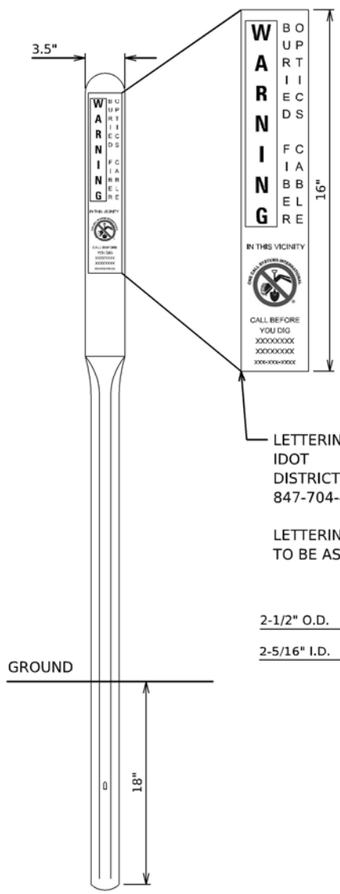
6. ALL DIMENSIONS ARE MINIMUM AND A LARGER SIZE VAULT MAY BE USED, WITH THE APPROVAL OF THE ENGINEER, TO FACILITATE USING A MANUFACTURER'S STANDARD PRODUCT.



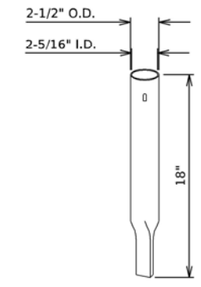
SECTION A-A



LOCATE POST TOP HAT BOND PLATE
N.T.S.



POST



SOIL ANCHOR

MODEL: 2D SHEET H
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-01\JOSEPH.MALCOLM\DMS11290\D1628Z9-SHT-ITS-DET-03.DGN

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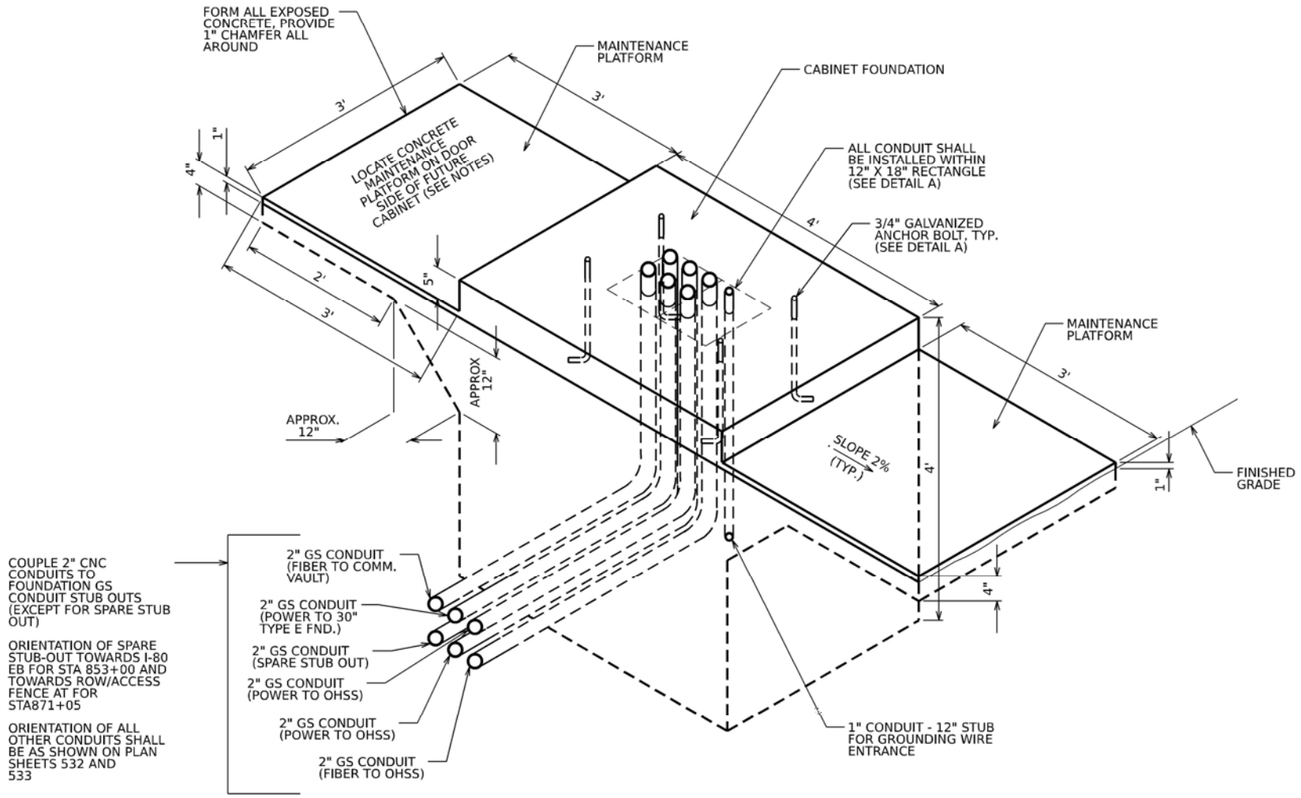
		DRAWN	- JNR	REVISED	-
PLOT SCALE	= 0.16666667 ' / IN.	CHECKED	- REL	REVISED	-
PLOT DATE	= 6/27/2023	DATE	- 6/29/2023	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

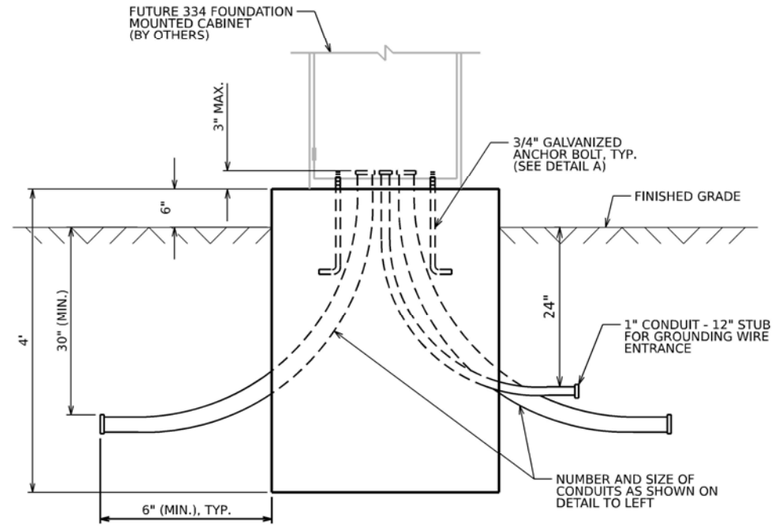
ITS INFRASTRUCTURE DETAILS
COMMUNICATION VAULT

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	543
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			



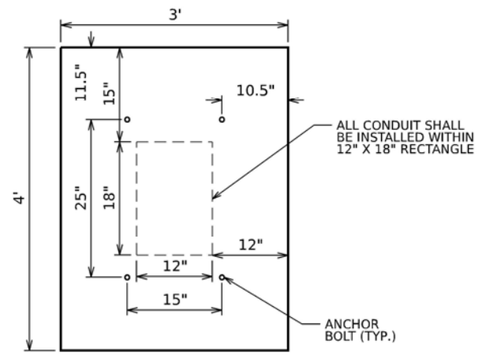
CONCRETE FOUNDATION FOR SURVEILLANCE CABINET MODEL 334 ELEVATION VIEW



CONCRETE FOUNDATION FOR SURVEILLANCE CABINET MODEL 334 ELEVATION VIEW

NOTES

1. INSTALL FOUR 3/4 INCH DIAMERTER X 12 INCH MINIMUM LENGTH APPROVED J-BOLTS TO ANCHOR THE FUTURE CABINET BASES. THE ANCHOR BOLTS SHALL BE HOT-DIPPED GALVANIZED STEEL AND LOCATED AS SHOWN IN DETAIL A.
2. CONTROL CABINET BASE TOP SURFACES SHALL BE TROWEL FINISHED AND LEVEL. LEVELING OF TOP SURFACES AFTER CONCRETE BASE HAS CURED SHALL ONLY BE ACCOMPLISHED BY GRINDING.
3. MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.
4. CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.
5. CONCRETE MAINTENANCE PLATFORM AND CABINET FOUNDATION FOR CABINET SHALL BE MONOLITHIC POUR.
6. WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.
7. CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 3 INCHES.
8. MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER
9. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.
10. CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.
11. PLUG ALL BELOW GRADE NONMETALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.
12. ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.
13. ALL METALLIC CONDUIT ENDS AT TOP OF CONCRETE BASES SHALL BUSHINGS AND ALL NONMETALLIC CONDUIT ENDS AT TOP OF CONCRETE BASES SHALL HAVE END BELLS.
14. REFER TO SPECIAL PROVISIONS FOR ADDITIONAL REQUIREMENTS.
15. THE CONTRACTOR SHALL INSTALL INSULATED BUSHINGS AND DUCT SEALANT AT ALL CONDUIT BEND TERMINATIONS IN FOUNDATIONS.
16. CONCRETE BASE TO BE FORMED AT LEAST 6" ABOVE THE GROUND SURFACE.



DETAIL A CABINET FOUNDATION ANCHOR BOLT AND CONDUIT LAYOUT

MODEL: 2D SHEET H
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-01\JOSEPH.MALCOLM\DMS\1290\D1162R29-SHT-ITS-DET-04.DGN

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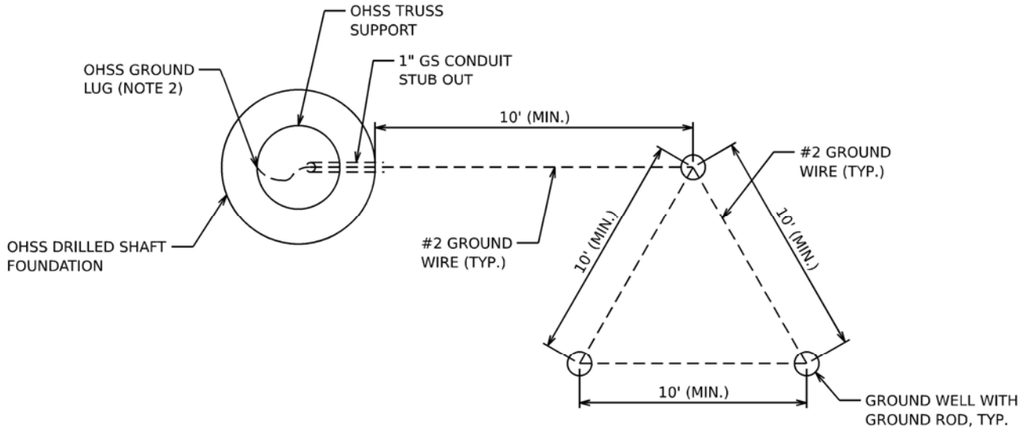
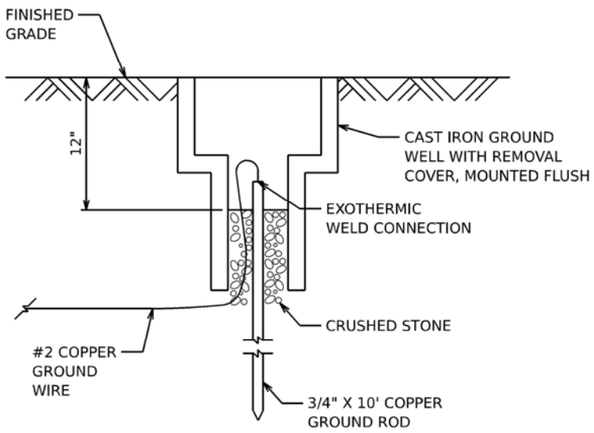
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

USER NAME = JMALCOLM	DESIGNED - DJM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ITS INFRASTRUCTURE DETAILS
	DRAWN - JNR	REVISED -		CONCRETE FOUNDATION, SURVEILLANCE CABINET MODEL 334
PLOT SCALE = 0.16666667 ' / IN.	CHECKED - REL	REVISED -		SCALE: NTS SHEET OF SHEETS STA. TO STA.
PLOT DATE = 6/27/2023	DATE - 6/29/2023	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	544
		CONTRACT NO. 62R29		
	ILLINOIS	FED. AID PROJECT		



DMS SIGN STRUCTURE GROUNDING DETAIL



GROUND WELL DETAIL

NOTES

1. THE COST FOR GROUNDING OF THE DMS SIGN STRUCTURE SHALL BE INCLUDED AND PAID AS PART OF THE OVERHEAD SIGN STRUCTURE PAY ITEM.

2. CONTRACTOR SHALL TERMINATE THE GROUND COPPER WIRE TO OHSS GROUND LUG USING APPROVED CLAMPS FOR GROUNDING.

3. ONLY STUB OUT CONDUITS FOR GROUNDING SHOWN. OTHER CONDUITS FOR POWER OR COMMUNICATIONS ARE NOT SHOWN FOR CLARITY.

MODEL: 2D SHEET H
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-01\JOSEPH.MALCOLM\DMS11290\D16ZR29-SHT-ITS-DET-05.DGN

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100 S. Wacker Drive Suite 400
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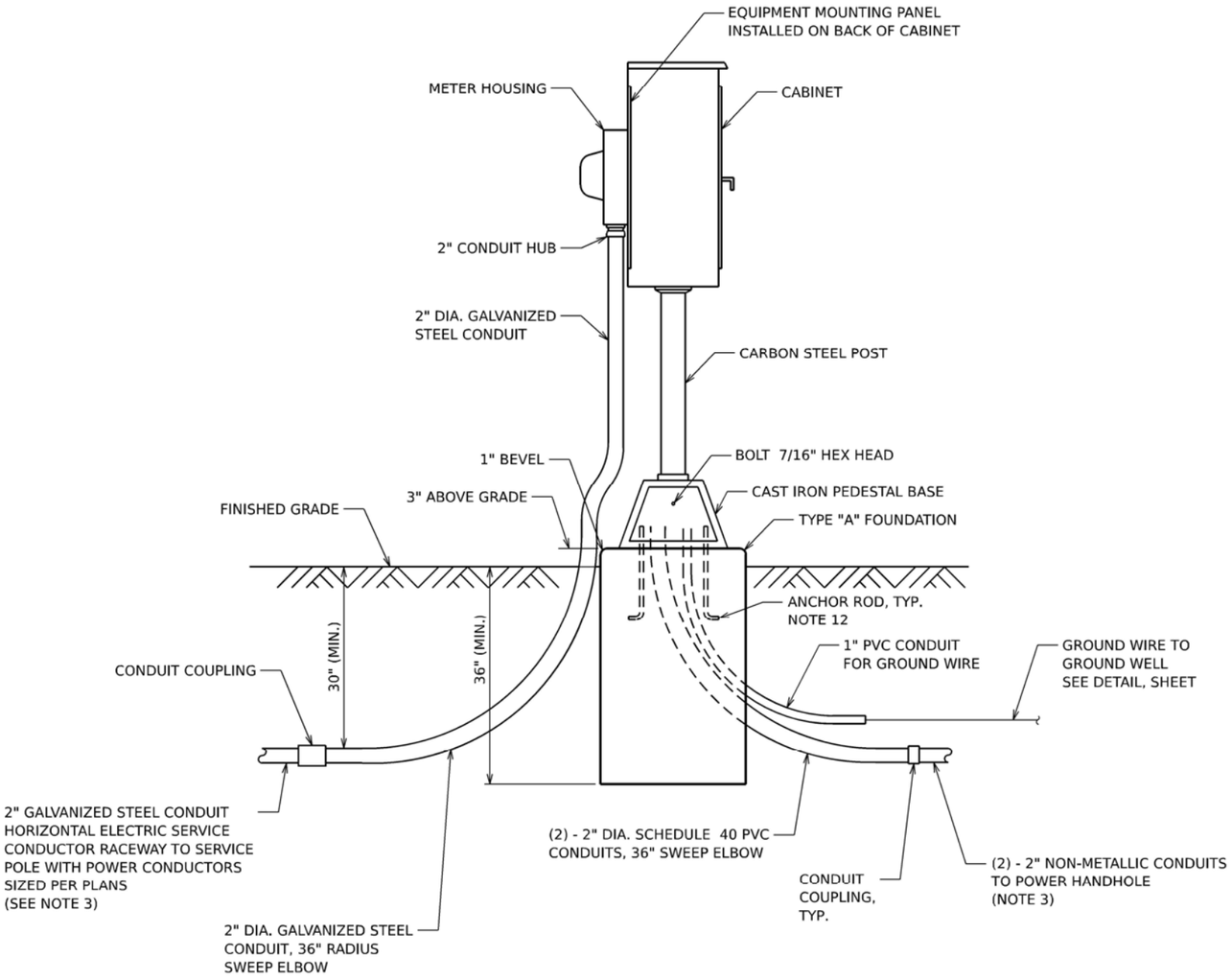
	DRAWN - JNR	REVISED -	
PLOT SCALE = 0.16666667 ' / IN.	CHECKED - REL	REVISED -	
PLOT DATE = 6/27/2023	DATE - 6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ITS INFRASTRUCTURE DETAILS
GROUNDING

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	545
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			



SERVICE PEDESTAL WITH METER

NOTES

1. SERVICE VOLTAGE SHALL BE AS INDICATED ELSEWHERE IN THE DRAWINGS.
2. UNLESS OTHERWISE INDICATED, ALL ITEMS AND WORK SHOWN SHALL BE INCLUDED AND PAID AS PART OF THE ELECTRIC UTILTIY SERVICE INSTALLATION PAY ITEM.
3. THE HORIZONTAL ELECTRIC SERVICE CONDUCTOR RACEWAY/CONDUCTORS AND NON-METALLIC CONDUITS TO POWER HANDHOLE SHALL BE MEASURED SEPARATELY FOR PAYMENT.
4. CABINETS, CABINET POSTS AND CABINET PEDESTALS SHALL BE PRIMED AND PAINTED. THE EXTERIOR SHALL HAVE TWO EPOXY FINISH COATS OF ANSI-61 GRAY. THE INTERIOR SHALL BE PAINTED WHITE.
5. METER HOUSING SHALL BE MOUNTED TO BACK WALL OF CABINET. PROVIDE A GATE IN ROW FENCE TO ALLOW UTILITY ACCESS TO READ THE METER.
6. CABLES FROM METER HOUSING SHALL PASS THROUGH BACK WALL OF CABINET.
7. METER HOUSING SHALL BE AS REQUIRED BY THE UTILITY.
8. THE CABINET SHALL BE 36"H X 20"W X 15"D, FABRICATED FROM ALUMINUM WITH A MINIMUM THICKNESS OF .125", RATED NEMA TYPE 3R AND HAVE A MOUNTING BACK PLATE.
9. THE CABINET DOOR SHALL HAVE A CONTINUOUS HINGE THAT IS BOLTED TO THE CABINET AND DOOR WITH 1/4-20 STAINLESS STEEL CARRIAGE BOLTS AND NY-LOCK NUTS. THE HINGE SHALL BE INSTALLED ON THE RIGHT SIDE WHEN FACING THE CABINET AND BE MADE OF STAINLESS STEEL WITH A 0.25 INCH DIAMETER STAINLESS STEEL HINGE PIN. THE HINGE PIN SHALL BE CAPPED TOP AND BOTTOM BY WELD TO RENDER IT TAMPER-PROOF. THE CABINET SHALL HAVE A GASKET THAT FORMS A WEATHER-TIGHT SEAL BETWEEN THE CABINET AND DOOR. THE DOOR LATCHING MECHANISM SHALL BE THE 3-POINT DRAW ROLLER TYPE. WHEN THE DOOR IS CLOSED AND LATCHED, IT WILL BE LOCKED. THE LATCHING HANDLE SHALL BE FABRICATED FROM A 0.75" STAINLESS STEEL ROUND BAR AND SHALL HAVE A PROVISION FOR PADLOCKING IN THE CLOSED POSITION.
10. THE ENCLOSURE SHALL BE EQUIPPED WITH TWO ADJUSTABLE "C" MOUNTING CHANNELS WELDED ON BOTH SIDE WALLS AND BACK WALL OF THE ENCLOSURE, ALLOWING VERSATILE POSITIONING OF SHELVES OR PANELS. MOUNTING CHANNELS SHALL BE FACTORY PAINTED SAME COLOR AS INTERIOR OF CABINET.
11. CABINET DOOR SHALL NOT HAVE COMPARTMENT DOORS OR LOUVERS. INTERIOR OF CABINET DOOR SHALL HAVE A PLASTIC POCKET FOR WIRING SCHEMATIC.
12. CONTRACTOR MUST COORDINATE WITH PEDESTAL BASE SUPPLIER AND FURNISH THE NECESSARY ANCHOR RODS.
13. THE ELECTRIC SERVICE EQUIPMENT ASSEMBLY SHALL BE ASSEMBLED BY A UL 508A INDUSTRIAL CONTROL PANEL FABRICATOR. THE PANEL ASSEMBLY SHALL BE UL LABELED AND SUITABLE FOR USE AS SERVICE EQUIPMENT.
14. ALL EQUIPMENT SHALL BE GROUNDED AND BONDED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND THE NATIONAL ELECTRICAL SAFETY CODE.
15. PLANS AND DETAILS INDICATE THE GENERAL NATURE AND REQUIREMENTS. THEY DO NOT SHOW EVERY ACCESSORY AND ATTACHMENT, AND THEY DO NOT RELIEVE THE CONTRCTOR 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.

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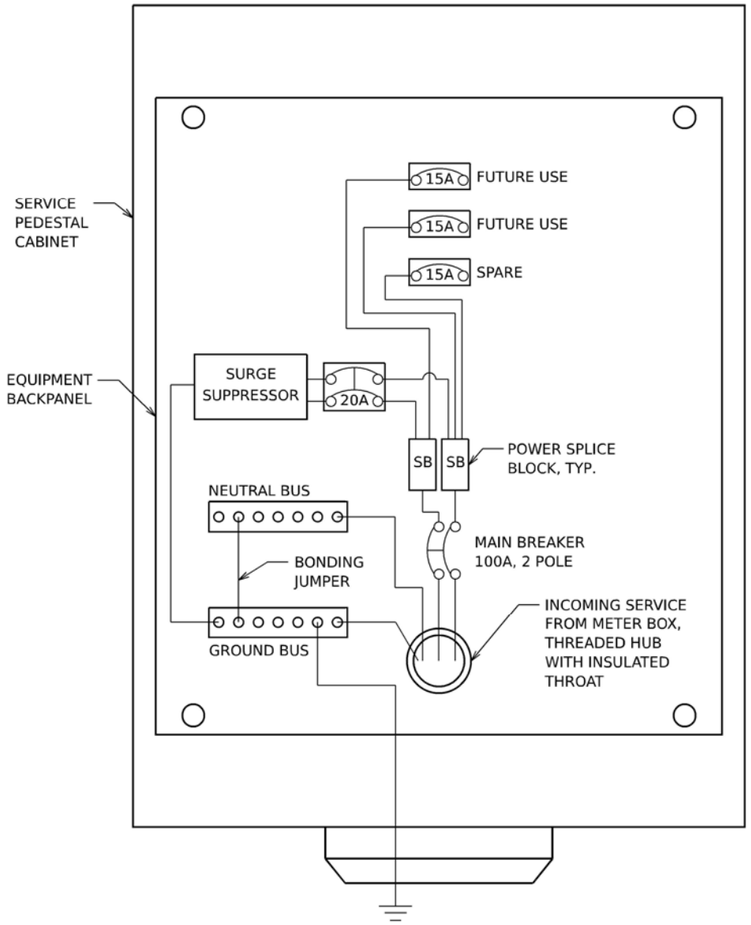
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

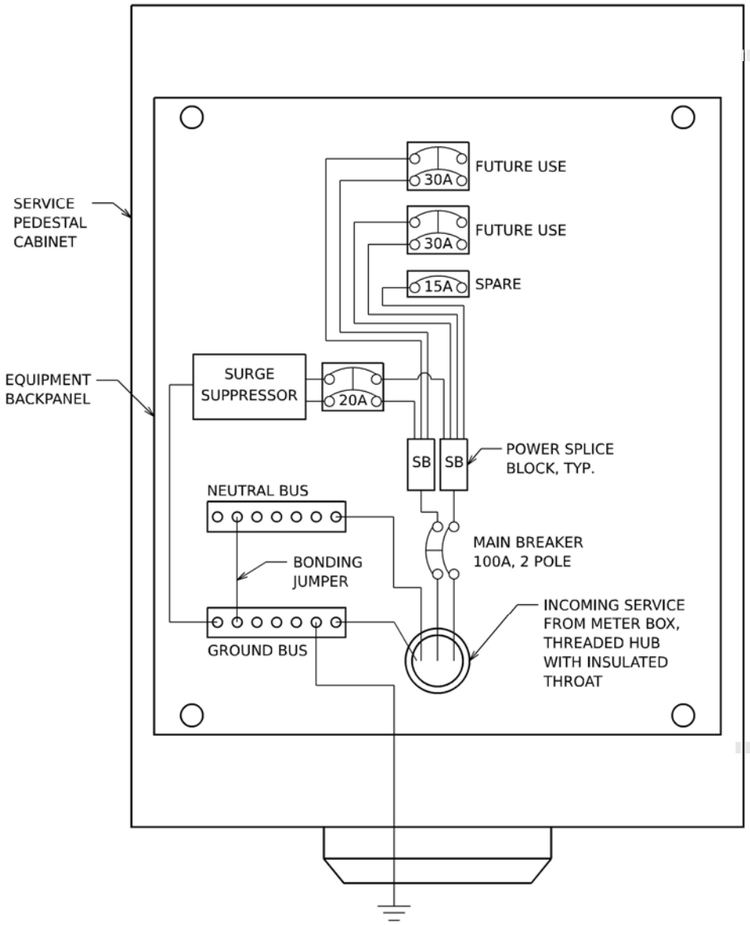
ITS INFRASTRUCTURE DETAILS
SERVICE METER PEDESTAL

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	546
		CONTRACT NO. 62R29		
	ILLINOIS	FED. AID PROJECT		



SERVICE PEDESTAL CABINET WIRING AND EQUIPMENT LAYOUT FOR STATION: 783+69, 800+18, 895+10, 919+54



SERVICE PEDESTAL CABINET WIRING AND EQUIPMENT LAYOUT FOR STATION: 867+05

NOTES

1. THE ELECTRIC SERVICE EQUIPMENT ASSEMBLY SHALL BE UL LABELED, SUITABLE FOR USE AS SERVICE EQUIPMENT.
2. CIRCUIT BREAKERS SHALL BE THERMAL MAGNETIC BOLT-ON TYPE WITH A MINIMUM INTERRUPTING CAPACITY OF 65,000 SYMETRICAL AMPERES AT 240V LINE TO LINE SERVICE OR 14,0000 AT 480V RATED AT LINE TO LINE SERVICE. THEY SHALL BE LOCKABLE IN THE "OFF" POSITION FOR COMPLIANCE WITH OSHA LOCK-OUT/TAG-OUT REQUIREMENTS. HANDLES SHALL BE TRIP FREE.
3. THE SURGE PROTECTOR SHALL BE SUITABLE FOR THE INCOMING SINGLE PHASE 60HZ AC ELECTRICAL SERVICE, WITH A SURGE CURRENT RATING OF 50,00 AMPS OR BETTER, RATED -40 TO 65 DEGREES C., WITH LED OPERATING IDICATORS, AND SHALL BE UL LISTED PER UL 1449. SURGE PROTECTOR SHALL BE WIRED FOR THE INCOMING SERVICE VOLTAGE. FOLLOW MANUFACTURER RECOMMENDED WIRING SPECIFICATIONS.
4. BUS BARS, CONNECTORS AND LUGS SHALL BE COPPER, INSULATED AND ISOLATED AND CONFIGURED TO PREVENT SHORTED CONDITIONS FROM TIGHTENING TERMINATIONS, ETC. THE OVERALL BUS SECTION SHALL BE CONFIGURED BEHIND AN INSULATING BARRIER SHIELD WHICH IS REMOVABLE FOR ACCESS TO CONNECTIONS.
5. THE COMBINATION GROUND AND NEUTRAL BAR SHALL BE CONFIGURED WITH SEPARATE GROUND AND NEUTRAL SECTIONS AND SPARE TERMINALS AS INDICATED. THE HEADS OF GROUND SCREWS SHALL BE PAINTED GREEN. THE HEADS OF NEUTRAL SCREWS SHALL BE PAINTED WHITE.
6. A PLASTIC LAMINATED CABINET LAYOUT DIAGRAM, CIRCUIT SCHEMATIC, AND BILL OF MATERIALS WITH CATALOG NUMBERS USED SHALL BE AFFIXED TO THE INTERIOR SIDE OF THE ENCLOSURE DOOR.
7. EQUIPMENT IN DIAGRAMS ABOVE ARE NOT TO SCALE AND WIRING SCHEMATIC IS DIAGRAMMATIC. CONTRACTOR TO SUBMIT WIRING DIAGRAM AND EQUIPMENT LAYOUT FOR APPROVAL BY THE ENGINEER.

SERVICE LOCATIONS

120/240V SERVICE LOCATIONS:
STA 783+69, 119' RT
STA 895+10, 96' LT
STA 919+54, 105' RT

240/480V SERVICE LOCATION:
STA 800+18. 119' RT
STA 867+05, 122' RT

MODEL: 2D SHEET H
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-031DMS115290\D162829.SHT-ITS-DIET-07.DGN

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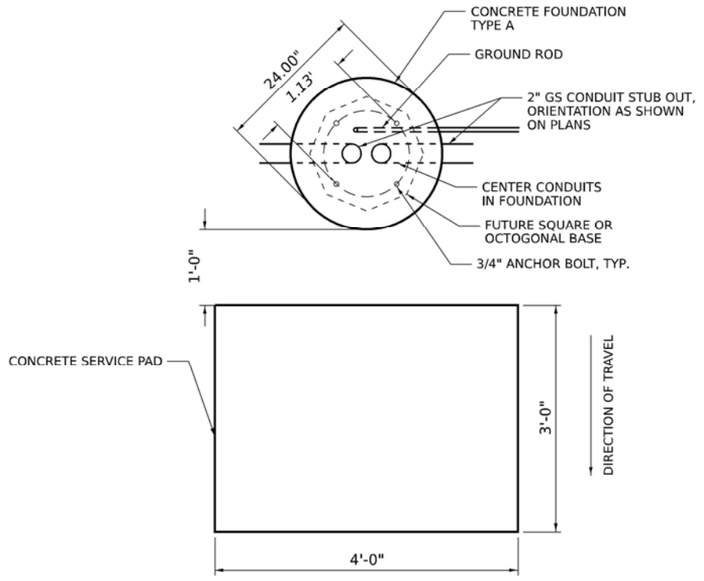
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

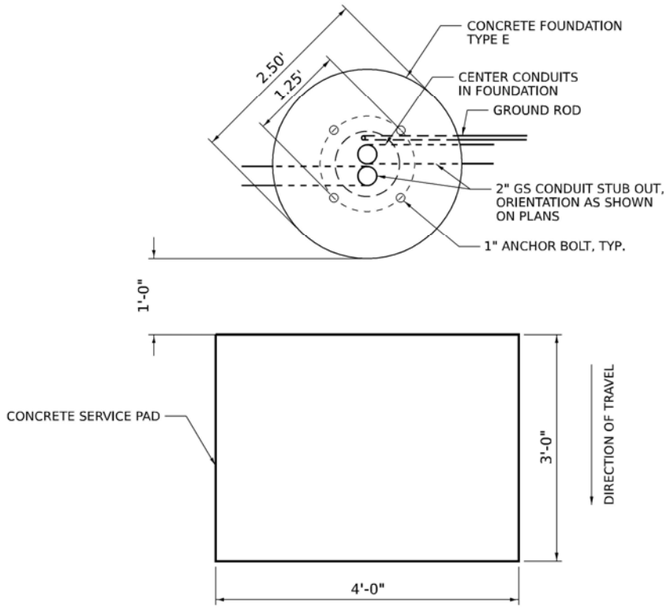
ITS INFRASTRUCTURE DETAILS
METER PEDESTAL WIRING

SCALE: NTS | SHEET OF 8 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	899	547
		CONTRACT NO. 62R29		
	ILLINOIS	FED. AID PROJECT		



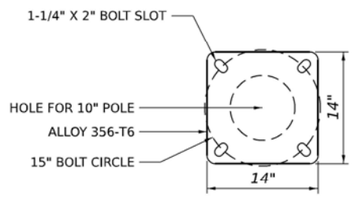
TOP VIEW
TYPE A FOUNDATION FOR FUTURE SERVICE DISCONNECT



TOP VIEW
TYPE E FOUNDATION FOR FUTURE CCTV POLE

NOTES

1. TOP VIEW FOR CONCRETE FOUNDATIONS, TYPE A AND E SHOWN ON THIS SHEET ARE FOR INFORMATION ONLY ON CONDUITS ENERTING FOUNDATION AND ANOCHOR BOLT CIRCLE DIMENSIONS REQUIRED FOR FUTURE EQUIPMENT INSTALLATION. FOR FURTHER FOUNDATION DETAILS, SEE HIGHWAY STANDARD 878001-11 (CONCRETE FOUNDATION DETAILS).



FUTURE CCTV POLE BASE PLATE DETAIL
15" BOLT CIRCLE
(SHOWN FOR REFERENCE ONLY)

MODEL: 2D SHEET M
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-01\JOSEPH.MALCOLM\DMS11298\D162R29-SHT-ITS-DET-08.DGN

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USER NAME = JMALCOLM	DESIGNED - DJM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ITS INFRASTRUCTURE DETAILS CONCRETE FOUNDATIONS
	DRAWN - JNR	REVISED -		
PLOT SCALE = 0.16666667 ' / IN.	CHECKED - REL	REVISED -		SCALE: NTS SHEET OF SHEETS STA. TO STA.
PLOT DATE = 6/27/2023	DATE - 6/29/2023	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	548
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			

MODEL: 2D SHEET H
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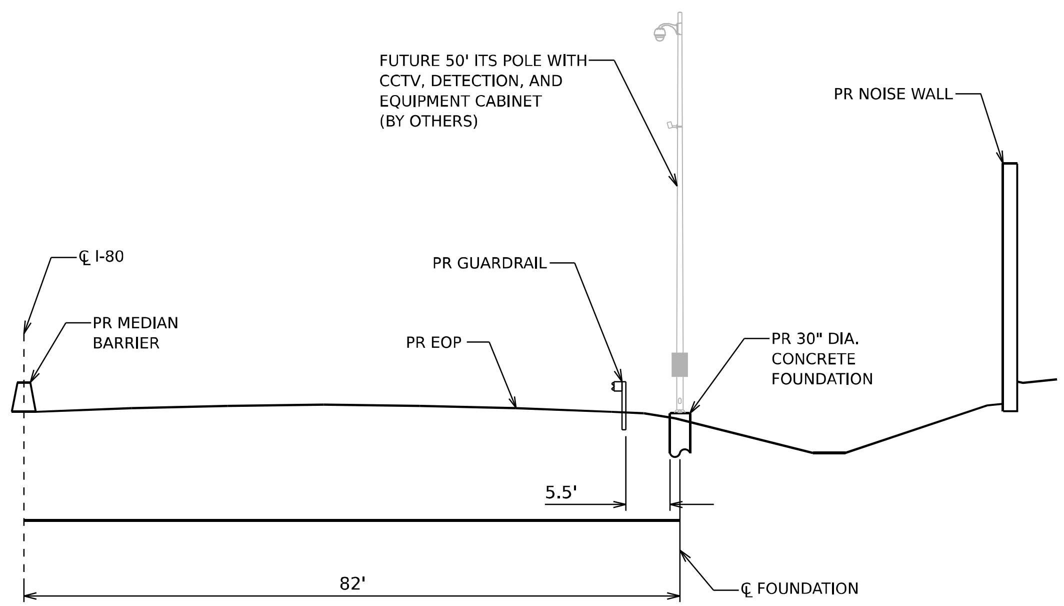
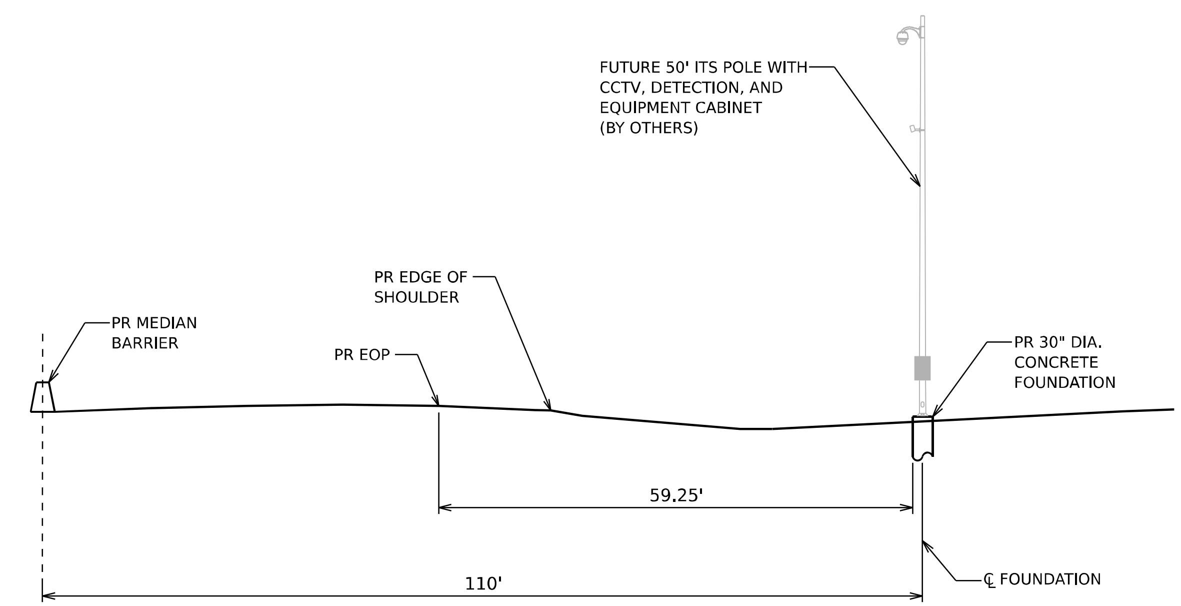


STA 782+50
(LOOKING EAST)
30" DIA. CONCRETE FOUNDATION



STA 806+60
(LOOKING EAST)
30" DIA. CONCRETE FOUNDATION

exp.

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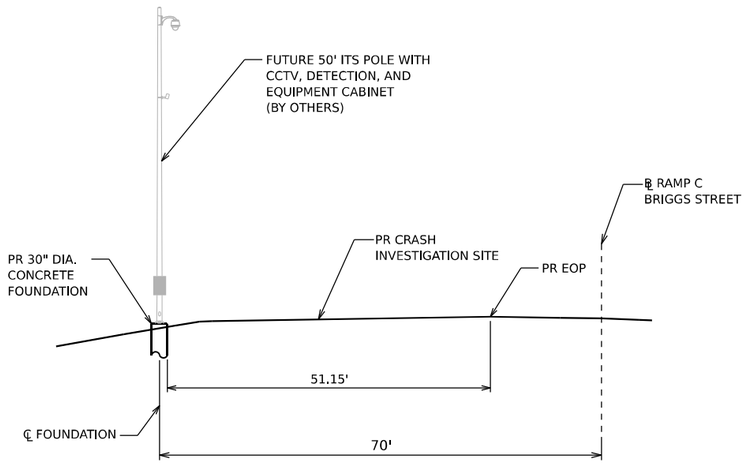
PLOT DATE = 6/27/2023	DATE - 6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

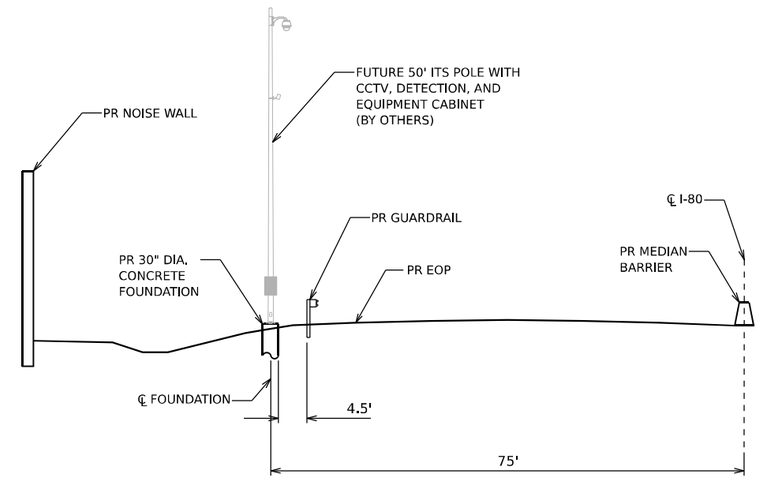
ITS CROSS SECTIONS

SCALE: | SHEET OF 5 SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	549
		CONTRACT NO. 62R29		
		ILLINOIS	FED. AID PROJECT	



RAMP C, STA 311+75
(LOOKING WEST)
30" DIA. CONCRETE FOUNDATION



STA 829+78
(LOOKING EAST)
30" DIA. CONCRETE FOUNDATION

MODEL: 2D SHEET H
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PWA01\DMS513290\D162R29-SHT-ITS-XS-02.DGN

exp.

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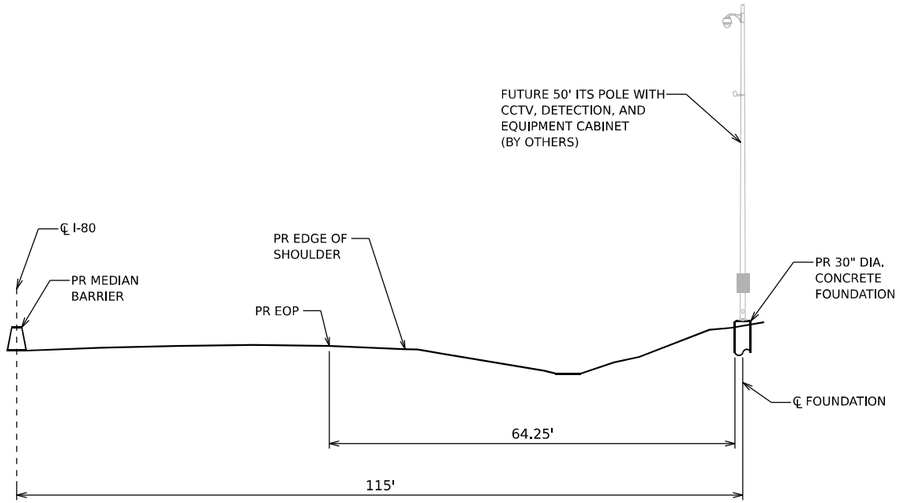
PLOT DATE = 6/27/2023	DATE - 6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

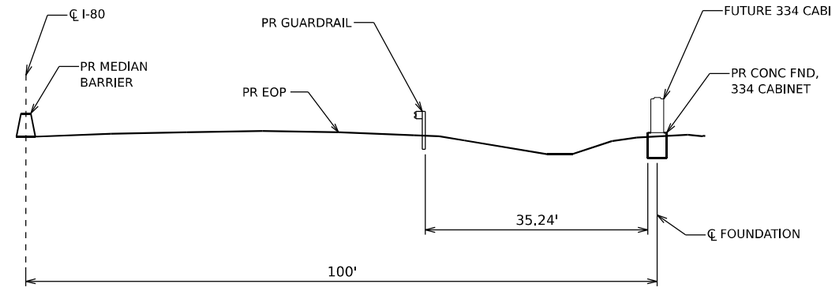
ITS CROSS SECTIONS

SCALE: NTS | SHEET OF 5 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	550
		CONTRACT NO. 62R29		
	ILLINOIS	FED. AID PROJECT		



STA 851+25
(LOOKING EAST)
30" DIA. CONCRETE FOUNDATION



STA 853+00
(LOOKING EAST)
334 CABINET FOUNDATION

MODEL: 2D SHEET H
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exp.

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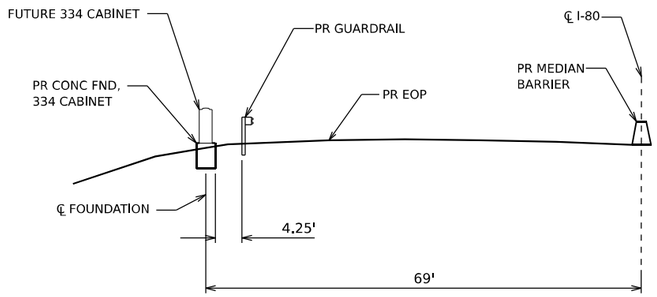
PLOT DATE = 6/27/2023	DATE - 6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

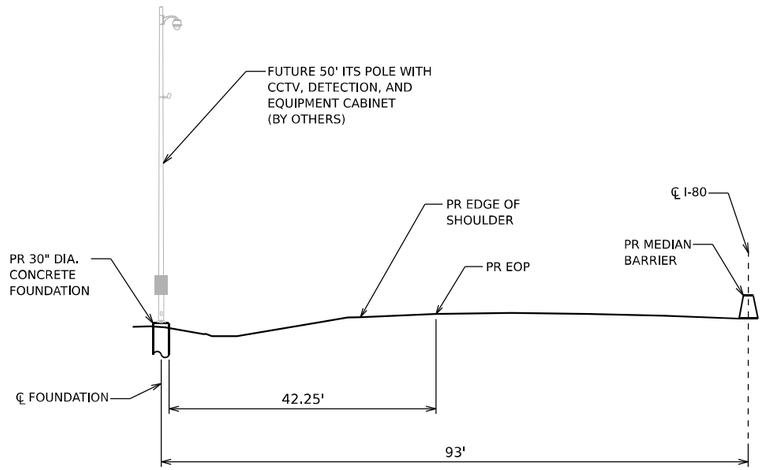
ITS CROSS SECTIONS

SCALE: NTS | SHEET OF 5 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	551
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			



STA 871+05
(LOOKING EAST)
334 CABINET FOUNDATION



STA 874+00
(LOOKING EAST)
30" DIA. CONCRETE FOUNDATION

MODEL: 2D SHEET H
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-v01\DMS15290\D162R29-SHT-ITS-XS-04.DGN

exp.

USER NAME = SUIC		DESIGNED - DJM	REVISED -	
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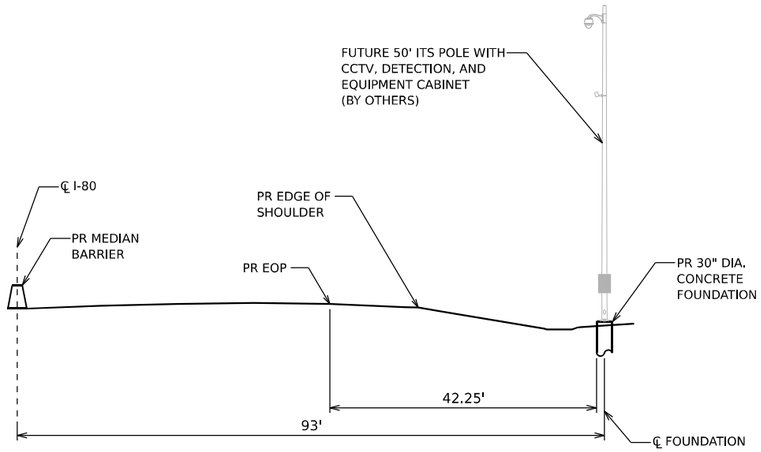
PLOT DATE = 6/27/2023		DATE - 6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

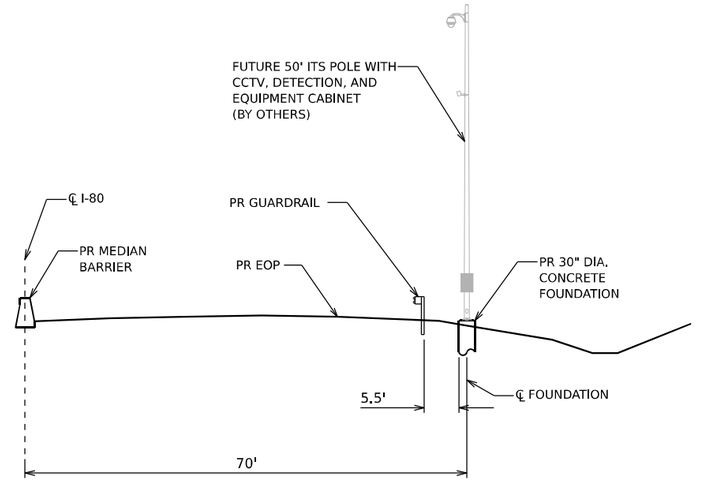
ITS CROSS SECTIONS

SCALE: NTS | SHEET OF 5 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	552
		CONTRACT NO. 62R29		
		ILLINOIS	FED. AID PROJECT	



STA 897+00
(LOOKING EAST)
30" DIA. CONCRETE FOUNDATION



STA 917+00
(LOOKING EAST)
30" DIA. CONCRETE FOUNDATION

MODEL: 2D SHEET H
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exp.	USER NAME = SUIC	DESIGNED - DJM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ITS CROSS SECTIONS
		DRAWN - JNR	REVISED -		
	PLOT SCALE = 0.16666633 ' / IN.	CHECKED - REL	REVISED -		SCALE: NTS | SHEET OF 5 SHEETS | STA. TO STA.
	PLOT DATE = 6/27/2023	DATE - 6/29/2023	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	553
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			

NOTES

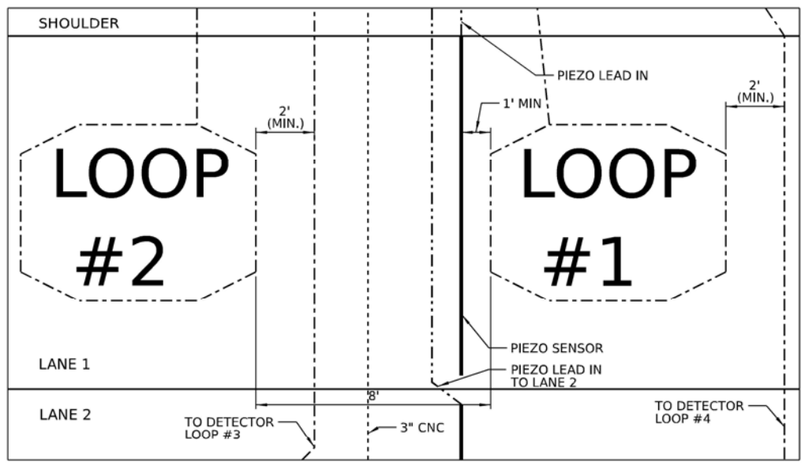
1. ALL HANDHOLE LIDS SHALL READ: "IDOT OPP"
2. COORDINATE EMBEDDED LOOP INSTALLATION WITH ROADWAY PAVEMENT INSTALLATION.
3. CONTRACTOR SHALL DOCUMENT LOCATION OF EMBEDDED LOOPS DURING INSTALLATION IN ORDER TO ACHIEVE PROPER OFFSET OF PIEZO SENSORS DURING THEIR SUBSEQUENT INSTALLATION.
4. DETAIL A SHOWS TYPICAL DIMENSIONS APPLICABLE TO WHOLE SITE.
5. CONTRACTOR SHALL COORDINATE WITH IDOT FOR THE REMOVAL OF THE EXISTING TRAFFIC COUNTER AND BATTERY WITHIN THE EXISTING ATR STATION CABINET. IDOT SHALL INSTALL THE NEW TRAFFIC COUNTER WITHIN THE NEW ATR STATION CABINET.
6. IDOT REPRESENTATIVE SHALL BE PRESENT DURING INSTALLATION OF THE ATR SITE.

BILL OF MATERIALS

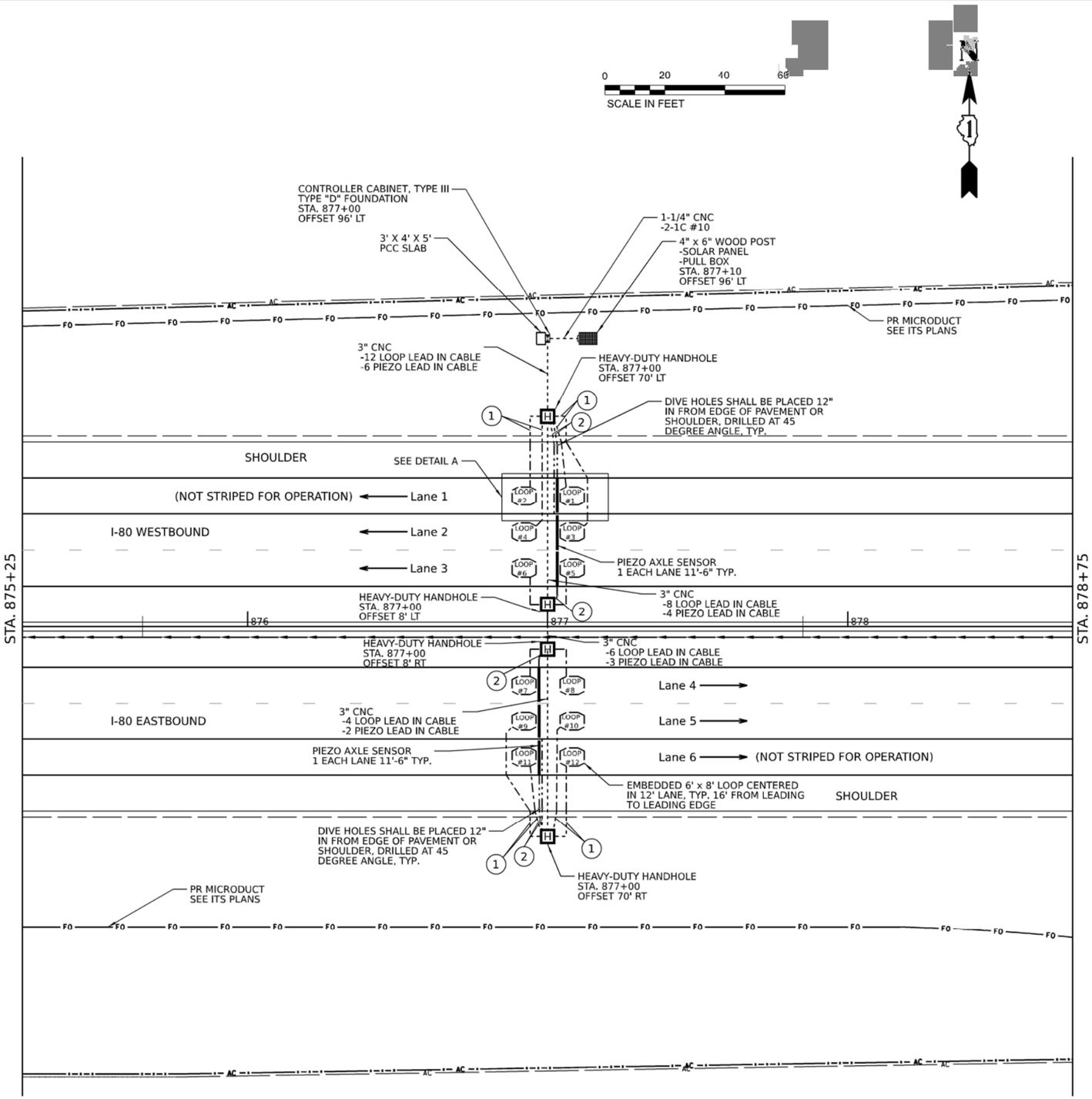
ITEM	DESCRIPTION	UNIT	QTY
81028730	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1 1/4" DIA.	FOOT	138
81028770	UNDERGROUND CONDUIT. COILABLE NONMETALLIC CONDUIT. 3" DIA.	FOOT	166
81400200	HEAVY-DUTY HANDHOLE	EACH	4
86300300	CONTROLLER CABINET TYPE III	EACH	1
87800200	CONCRETE FOUNDATION, TYPE D	FOOT	4
88600100	DETECTOR LOOP, TYPE I	FOOT	76
88600300	DETECTOR LOOP, TYPE III	FOOT	558
X0301242	PIEZO AXLE SENSOR, CLASS II	FOOT	69
X0323388	TRAFFIC COUNTER	EACH	2
X0327116	SOLAR POWER ASSEMBLY	EACH	1
X8730810	ELECTRIC CABLE IN CONDUIT, CONOGA-30003	FOOT	1,226

LEGEND

- CONDUIT (TYPE AND SIZE AS NOTED)
- PIEZO SENSOR
- DETECTOR LOOP, TYPE I
- DETECTOR LOOP, TYPE III
- (1) 1-1/4 CNC W/LOOP LEAD IN
- (2) 1-1/4" CNC W/PIEZO LEAD IN (MANUFACTURER SUPPLIED)



DETAIL A
N.T.S.



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PLOT DATE = 6/27/2023		DATE - 6/29/2023		REVISED -	

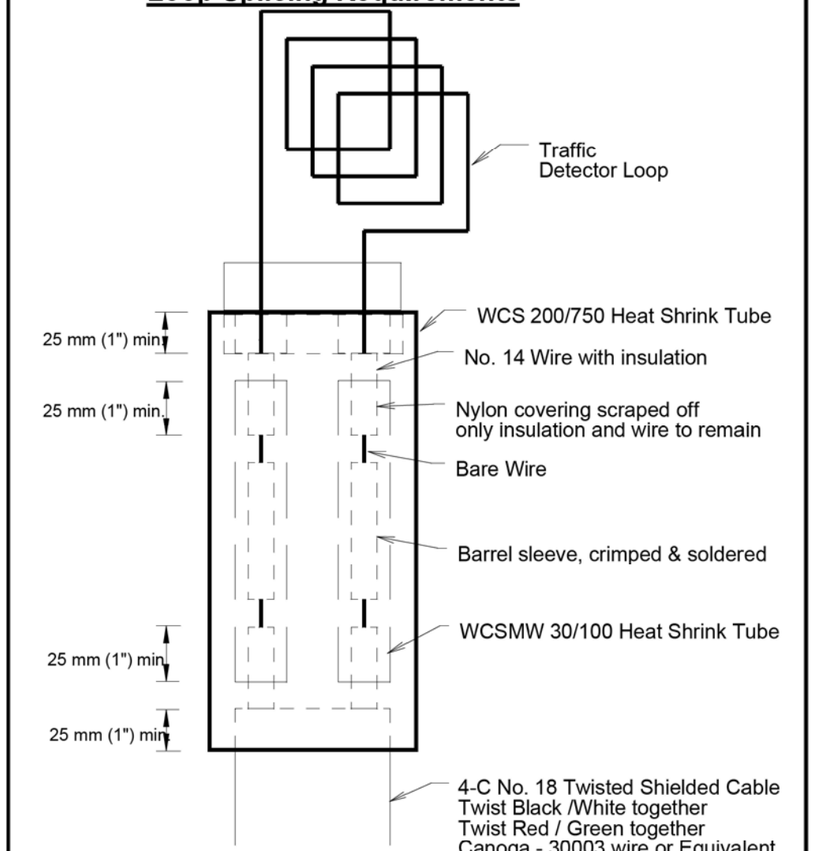
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ATR PLANS

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	554
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			

Loop Splicing Requirements



Minimum 25 mm (1") Heat Shrink Tube overlap on wire.
PVC & Shielded cable to form water tight seal.

Note: Not to Scale

REVISIONS	
Name	Date

Illinois Department of Transportation
Office of Planning and Programming

Drawn By:	Checked By:	Date:	Scale:
R. Taylor	R. Taylor	01/20/00	NONE

MODEL: 2D SHEET H
FILE NAME: C:\TRANSYSTEMS\IW_LOCAL\TRANSYSTEMS-IPW-01\JOSEPH.MALCOLM\D0MS15290\D1628\29-SHT-ATR-02.DGN

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Chicago, Illinois 60606

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		DRAWN -	JNR	REVISED -	
PLOT SCALE = 0.16666633 ' / IN.		CHECKED -	REL	REVISED -	
PLOT DATE = 6/27/2023		DATE -	6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ATR PLANS

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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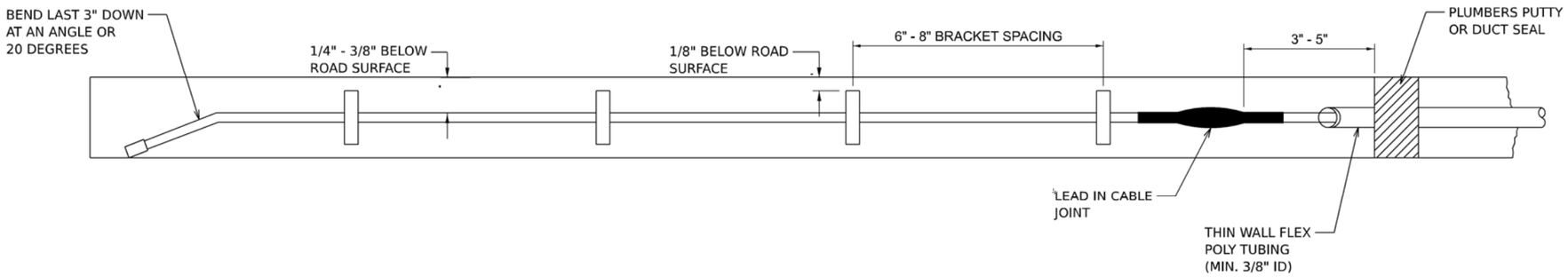
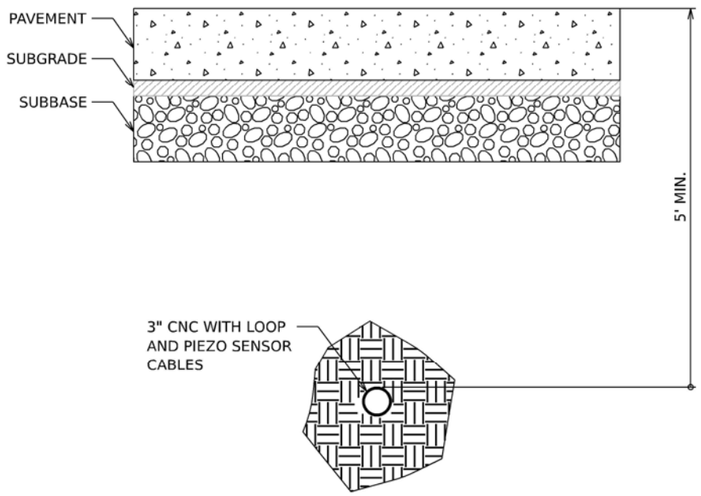
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			



PIEZO DETAIL



BORED CONDUIT UNDER ROADWAY

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TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

USER NAME = JMALCOLM	DESIGNED - DJM	REVISED -	
	DRAWN - JNR	REVISED -	
PLOT SCALE = 0.16666633 ' / IN.	CHECKED - REL	REVISED -	
PLOT DATE = 6/27/2023	DATE - 6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ATR PLANS

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 62R29		
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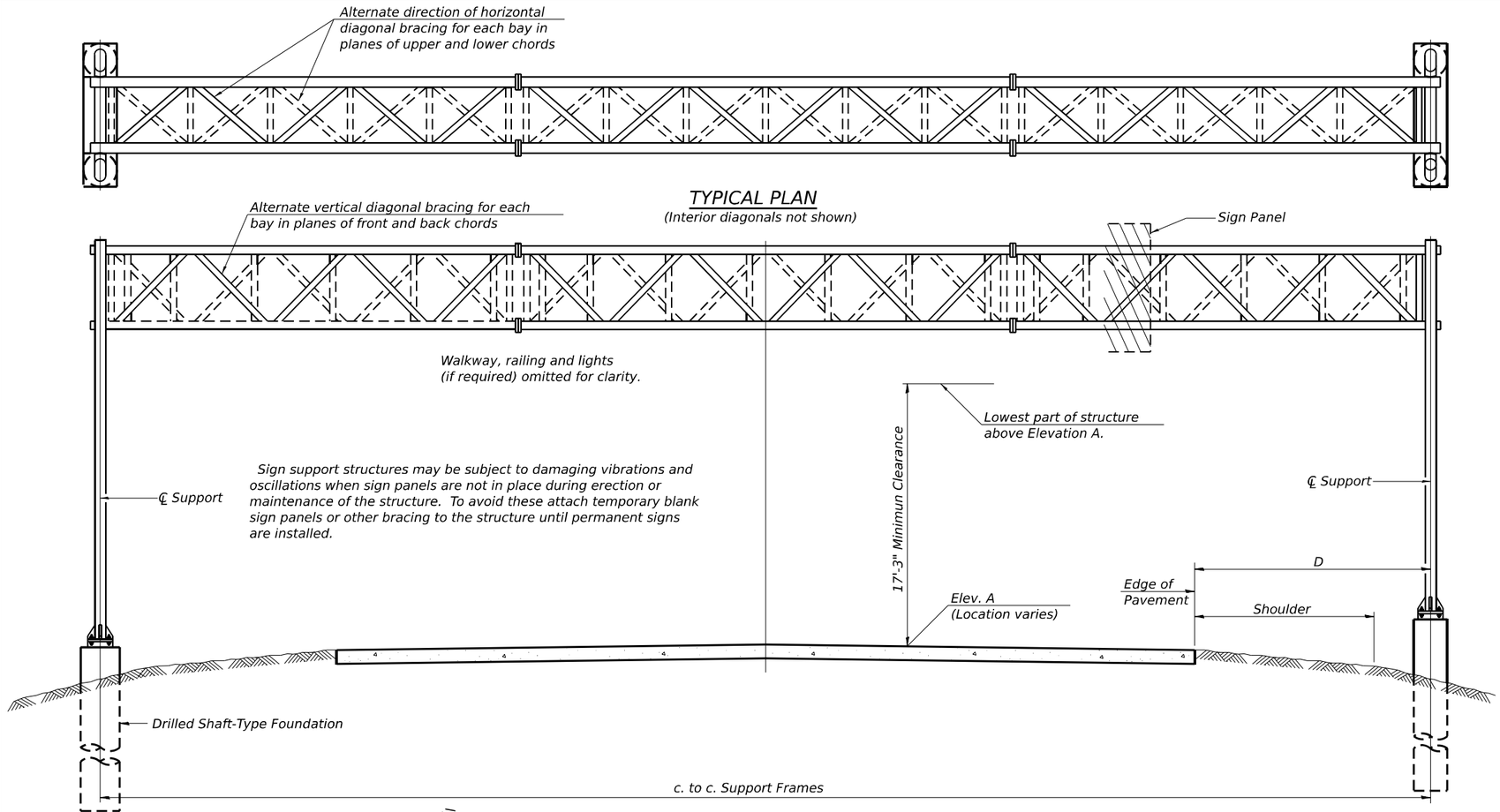
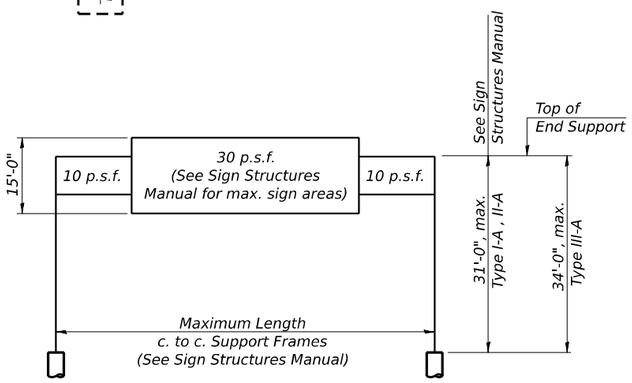


TYPICAL PLAN

(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	Dim. D	Height of Tallest Sign	Total Sign Area
1S099I080R135.7	854+00	III-A	72'-0''	651.61	22'-6"	8'-0"	240 sqft
1S099I080L136.0	870+00	III-A	72'-0"	648.72	22'-6"	8'-0"	240 sqft

**Looking upstation for structures with signs both sides.

* 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

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 Artie 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 eaned 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.

FOUNDATION REMOVAL: Existing foundation removal shall be at least 3 feet below existing ground.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
OVERHEAD SIGN STRUCTURE - SPAN, TYPE III-A (5'-0" X 7'-0")	Foot	144
OVERHEAD SIGN STRUCTURE WALKWAY, TYPE A	Foot	78
DRILLED SHAFT CONCRETE FOUNDATIONS	Cu Yd	56.6
REMOVE OVERHEAD SIGN STRUCTURE - SPAN	Each	2
REMOVE CONCRETE FOUNDATION - OVERHEAD	Each	8

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6/27/2023

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		CHECKED - BAR	REVISED -	
PLOT SCALE =		DRAWN - CS	REVISED -	
PLOT DATE =		CHECKED - BAR	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

SHEET 1 OF 13 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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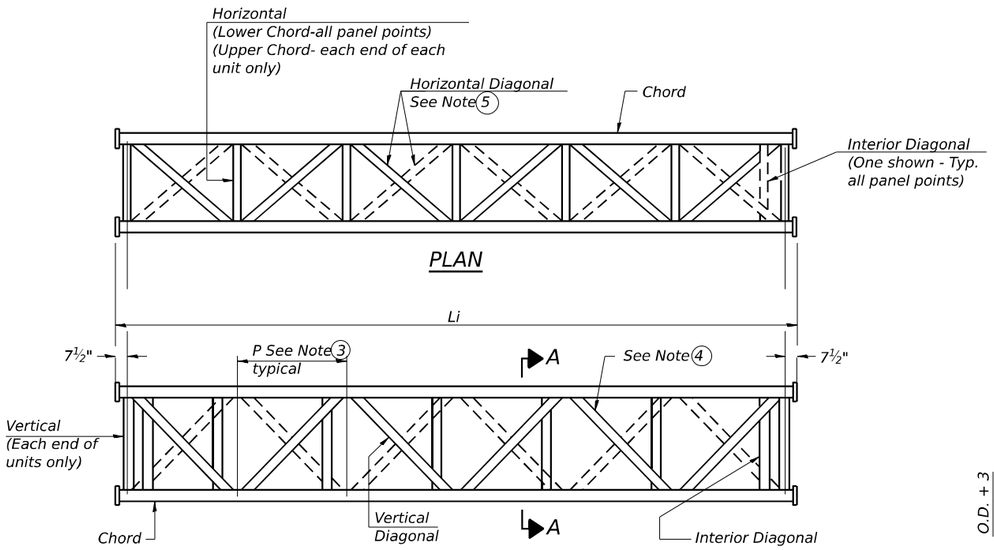
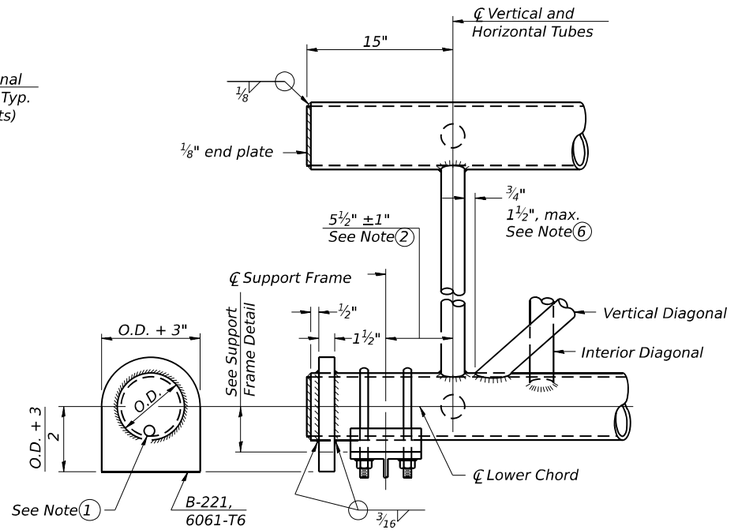
		CONTRACT NO. 62R29		
	ILLINOIS	FED. AID PROJECT		

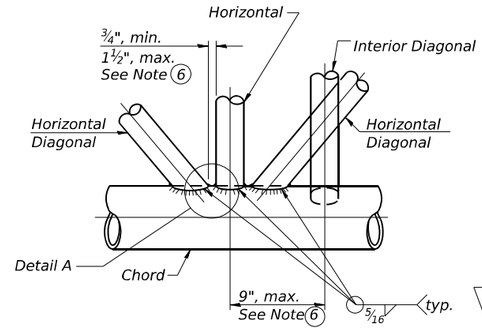


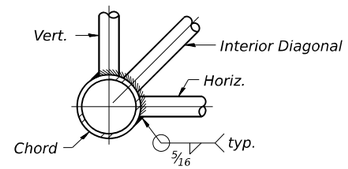
ELEVATION
TYPICAL INTERIOR UNIT

Even number of panels/interior unit required.

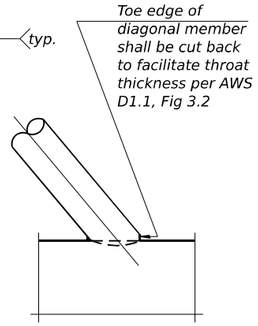


SUPPORT END DETAIL FOR EXTERIOR UNIT

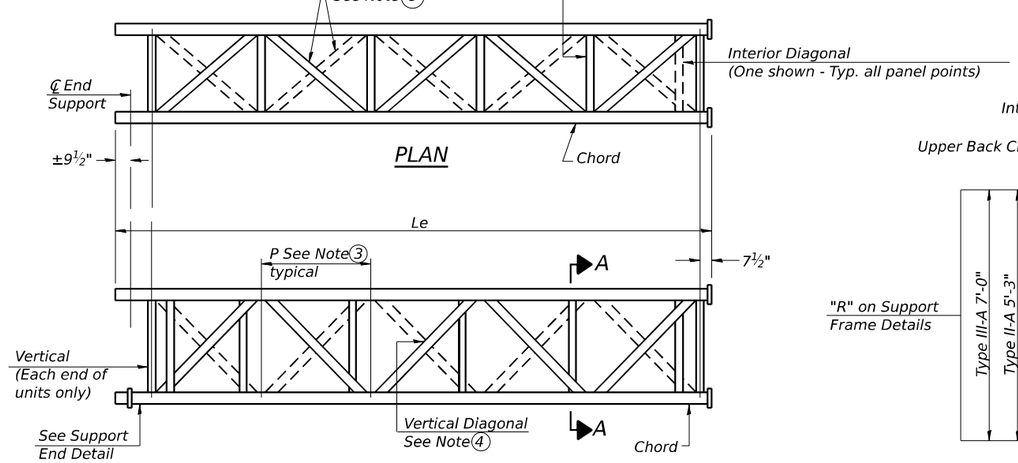




TYPICAL JOINT DETAILS

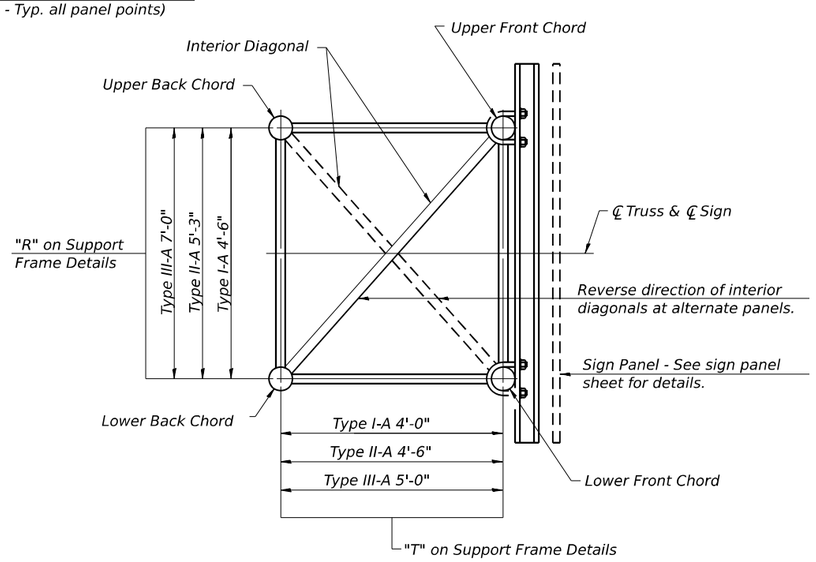


DETAIL A



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" Ø 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

2-17-2017

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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

SHEET 2 OF 13 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	558
		CONTRACT NO. 62R29		
	ILLINOIS	FED. AID PROJECT		

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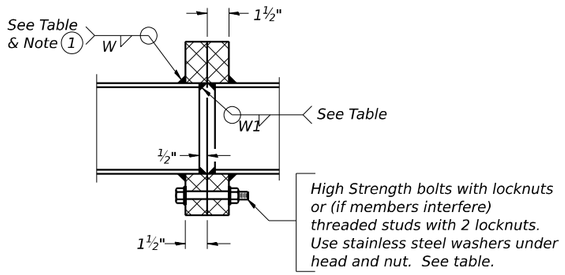
6/27/2023

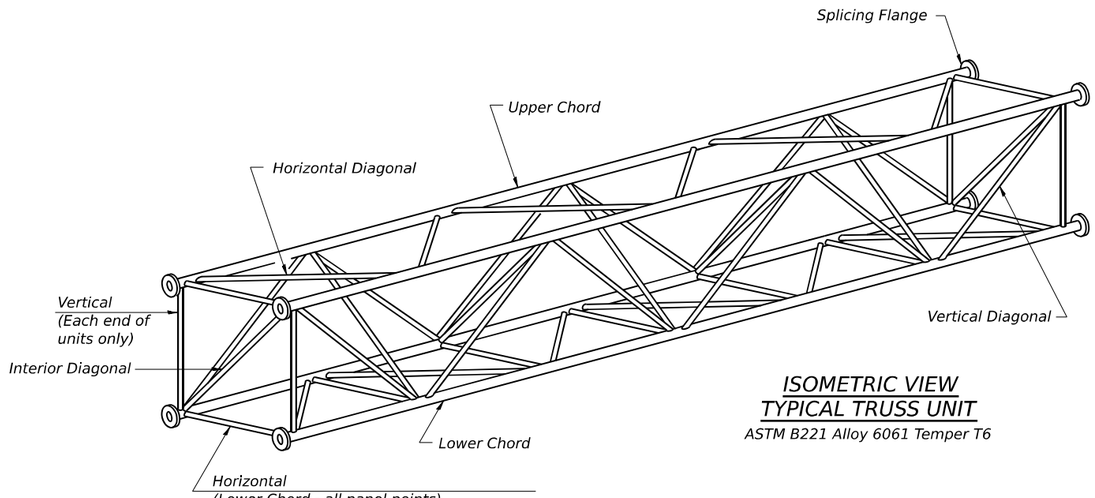
TRUSS UNIT TABLE

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.(Le)	Panel Lgth.(P)	No. Req'd.	No. Panels per Unit	Unit Lgth.(Li)	Panel Lgth.(P)	O.D.	Wall	O.D.	Wall		Bolts		Weld Sizes		A	B
															No./Splice	Dia.	W	W1		
1S099I080R135.7	854+00	III-A	7	36'-10½"	5'-0"	0	——	——	——	7"	5/16"	3¼"	5/16"	7/8"	6	1"	7/16"	5/16"	11½"	15"
1S099I080L136.0	870+00	III-A	7	36'-10½"	5'-0"	0	——	——	——	7"	5/16"	3¼"	5/16"	7/8"	6	1"	7/16"	5/16"	11½"	15"



SECTION B-B

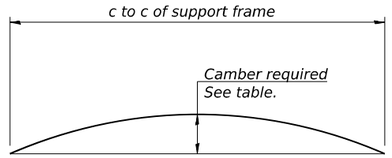
1 Splicing Flanges shall be attached to each truss unit with the truss shop assembled to camber shown. Truss units shall be in proper alignment and flange surfaces shall be shop bolted into full contact before welding. Sufficient external welds or tacks shall be made to secure flanges until remaining 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

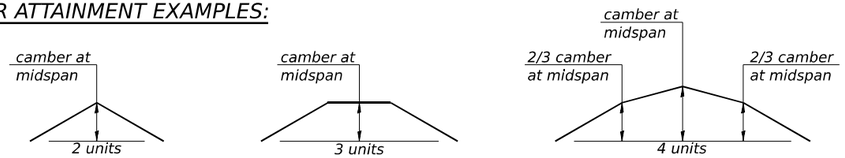
Note:
Units shall be shipped individually with adequate provision to prevent detrimental motion during transport. This may require ropes between horizontals and diagonals or energy dissipating (elastic) ties to the vehicle. The Contractor is responsible for maintaining the configuration and protection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



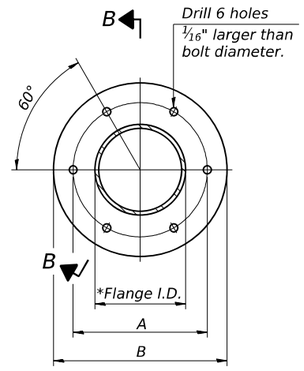
CAMBER DIAGRAM

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

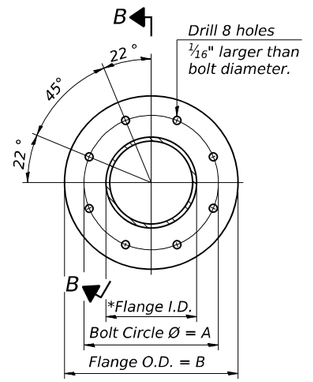
CAMBER ATTAINMENT EXAMPLES:



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



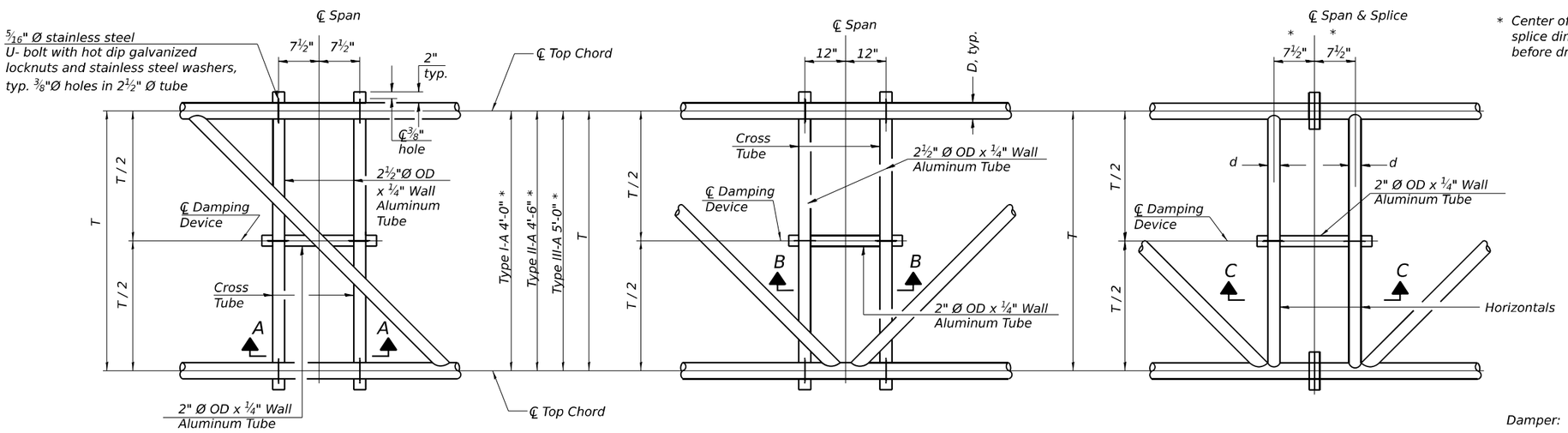
TRUSS TYPES I-A, II-A, & III-A



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".



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

PLAN DETAIL "A"

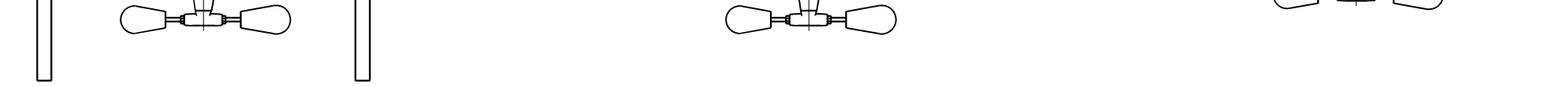
℄ Span between Panel Points

PLAN DETAIL "B"

℄ Span at Panel Point

PLAN DETAIL "C"

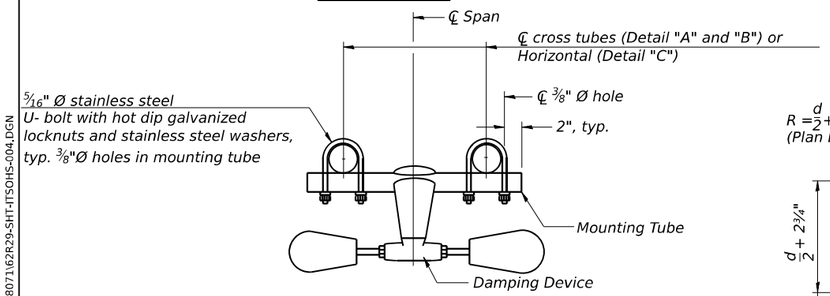
℄ Span at ℄ Chord Splice



SECTION A-A

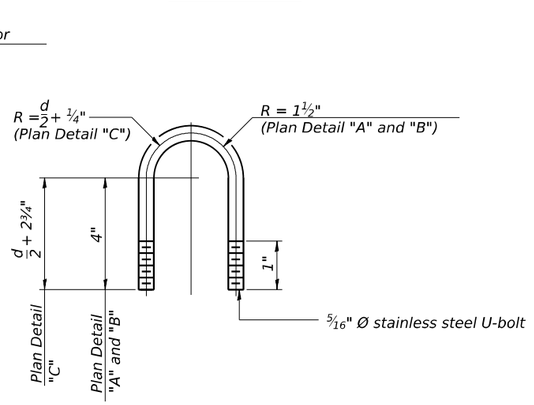
SECTION B-B

SECTION C-C



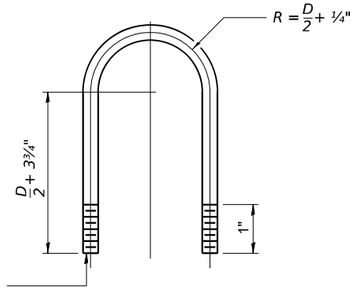
TRUSS DAMPING DEVICE CONNECTION DETAIL

(Typical)



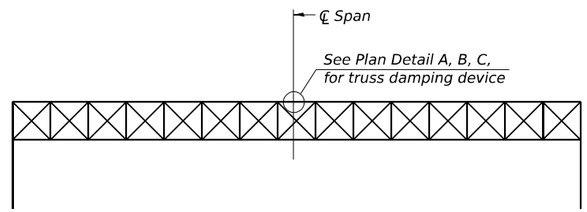
DAMPING DEVICE MOUNTING TUBE U-BOLT DETAIL

(Typical)



TOP CHORD TO CROSS TUBE U-BOLT DETAIL

(Typical - Detail "A" and "B")



ELEVATION

Aluminum Overhead Sign Truss

NOTES

Damper: One damper per truss. (31 lbs. minimum Stockbridge-Type Aluminum - 29"minimum between ends of weights) Cost included in Overhead Sign Structure - Span Type III-A (5'-0'' X 7'-0'')

Materials: Materials: Aluminum tubes shall be ASTM B221 alloy 6061 temper T6. Cost included in Overhead Sign Structure - Span Type III-A (5'-0'' X 7'-0'')

OS-A-D 2-17-2017

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	CHECKED - BAR	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURE
DAMPING DEVICE

SHEET 4 OF 13 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	560
		CONTRACT NO. 62R29		
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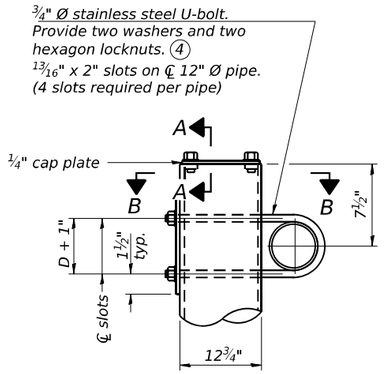
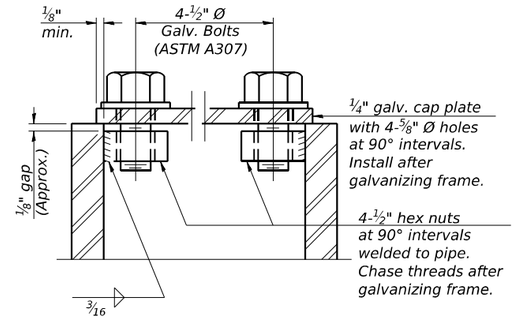
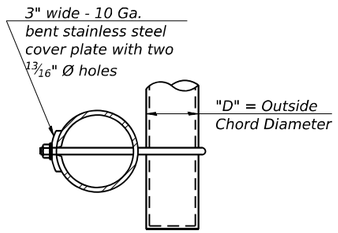


DETAIL A

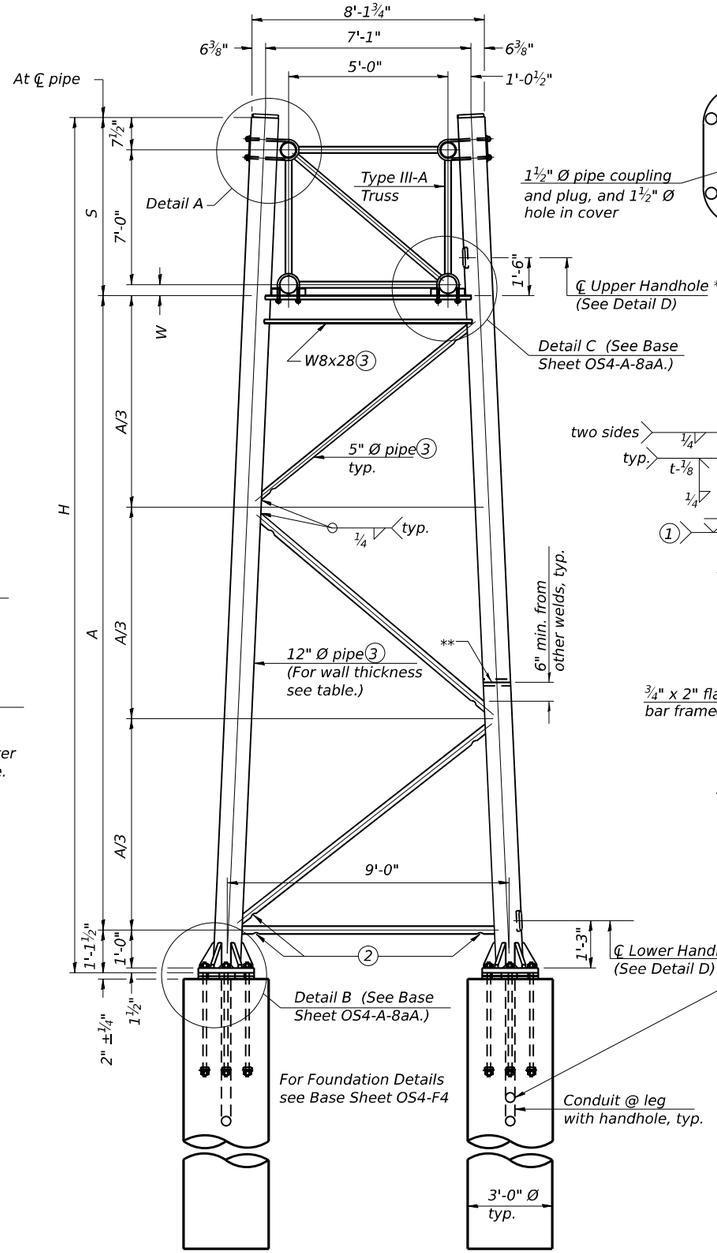


SECTION A-A

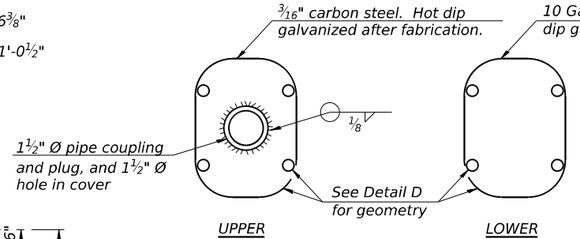
As an alternate to bolts, may use galvanized drive-fit caps installed after galvanizing frame.



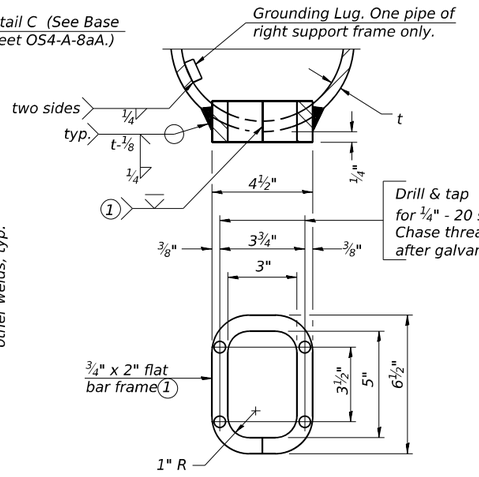
SECTION B-B



SIDE ELEVATION



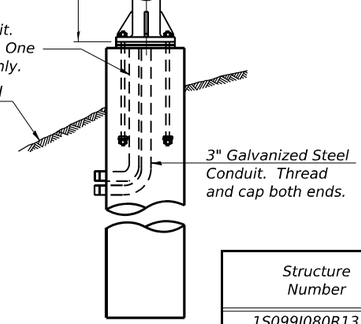
HANDHOLE COVERS



Provide 6½" x 4½" cover.
Provide 4-5/16" Ø holes in cover for ¼"-20 round head hot dip galvanized or stainless steel machine screws.
(See cover details)

DETAIL D

Dimensions		
Truss Chord Nominal Dia.	W	S
7"	4¾"	8'-0¼"
8½"	5½"	8'-1"
9"	5¾"	8'-1¼"



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 µin 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.

Structure Number	Station	Support		Pipe Wall Thickness	H (6)	A
		Left	Right			
1S099I080R135.7	854+00	-	X	0.33"	28'-11¾"	19'-10"
1S099I080R135.7	854+00	X	-	0.33"	26'-9¾"	17'-8"
1S099I080L136.0	870+00	-	X	0.33"	28'-11¾"	19'-10"
1S099I080L136.0	870+00	X	-	0.33"	26'-9¾"	17'-8"

TRUSS SUPPORT DETAILS

(12" Ø 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.

MODEL: DEFAULT
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-01\DMS08071\62R29-SHT-ITSOIHS-005.DGN

6/27/2023

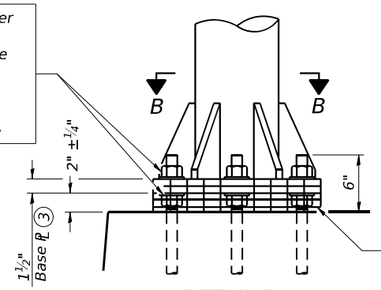
USER NAME =	DESIGNED - CS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	CHECKED - BAR	REVISED -	
PLOT SCALE =	DRAWN - CS	REVISED -	
PLOT DATE =	CHECKED - BAR	REVISED -	

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

SHEET 5 OF 13 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	561
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			

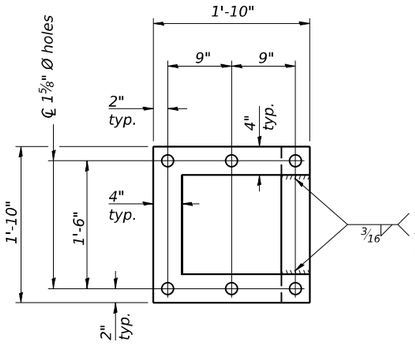
Hexagon locknut and washer (top), leveling nut and washer (bottom). Galvanize per AASHTO M232. Nuts shall each be tightened against base plate with 200 lb.-ft. minimum torque.



DETAIL B

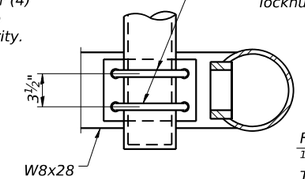
Ribs shall be cut to fit slope of pipe.

Stainless Steel Standard Grade Wire Cloth, 3" wide, ¼" maximum opening with a minimum wire diameter of AWG. No. 16 with a minimum 2" lap. Secure to base plate after erection with ¾" stainless steel banding.



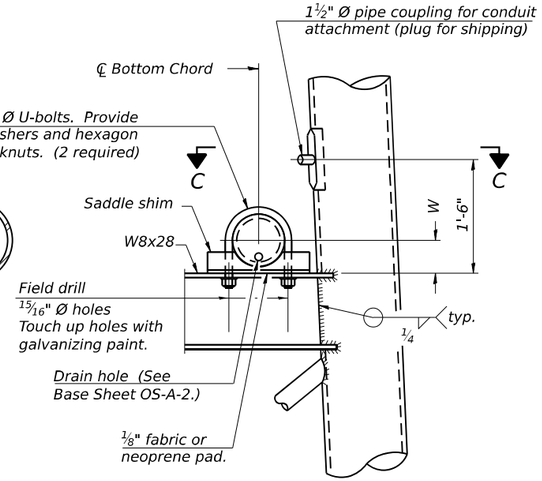
Optionally may use four (4) separate bars. Weld to maintain perpendicularity.

POSITIONING PLATE(S)

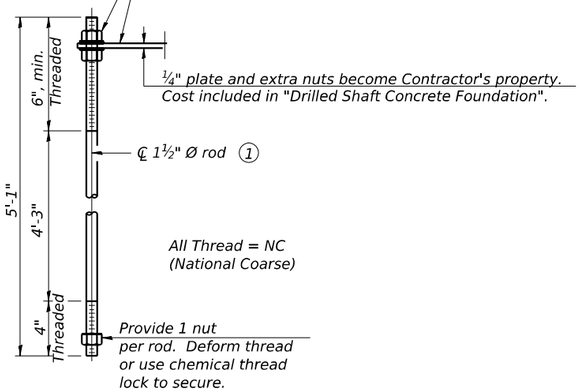


SECTION C-C

(Handhole cover not shown)

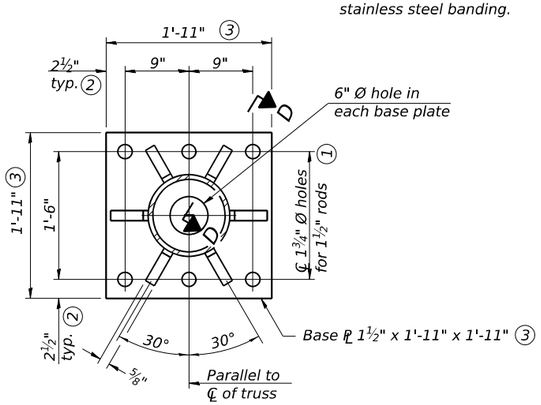


DETAIL C

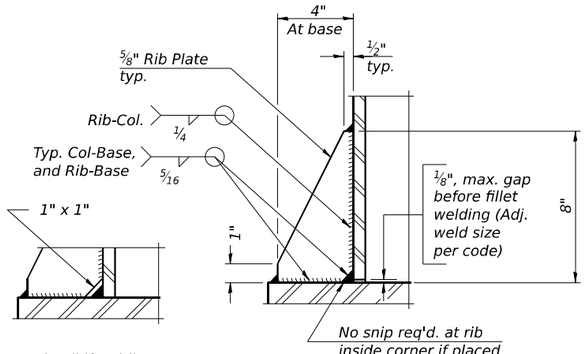


ANCHOR ROD DETAIL

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

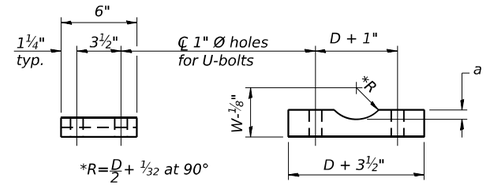


SECTION B-B



** Alternate detail if welding col. to base plate first, then snip inside corner of ribs. Terminate weld on rib ¼" from snip.

SECTION D-D



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

Truss Chord Nominal Dia.	a
7"	1"
8½"	1¼"
9"	1⅜"

SADDLE SHIM DETAIL

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

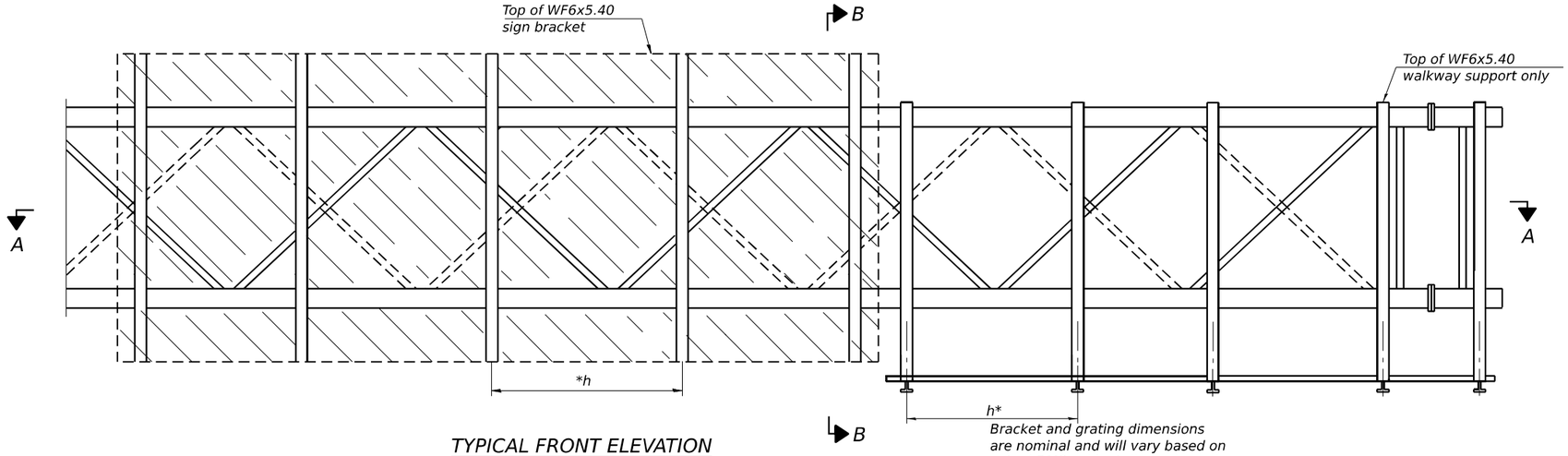
TYPE III-A TRUSS 12" Ø PIPE SUPPORT FRAME DETAILS

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

① 1¾" Ø rod, 2" Ø holes

② 2¾" edge distance

③ Base ℄ 1⅝" x 1'-11½" x 1'-11½"

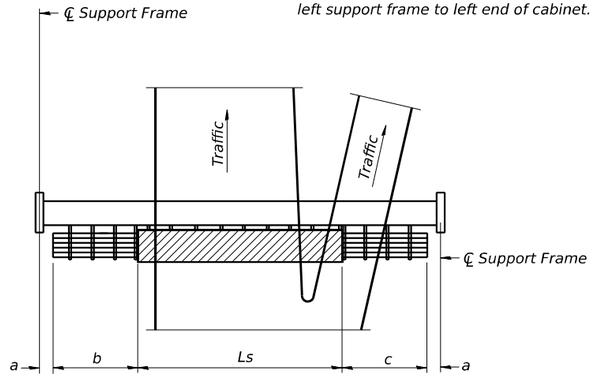


TYPICAL FRONT ELEVATION

With handrail omitted for clarity.

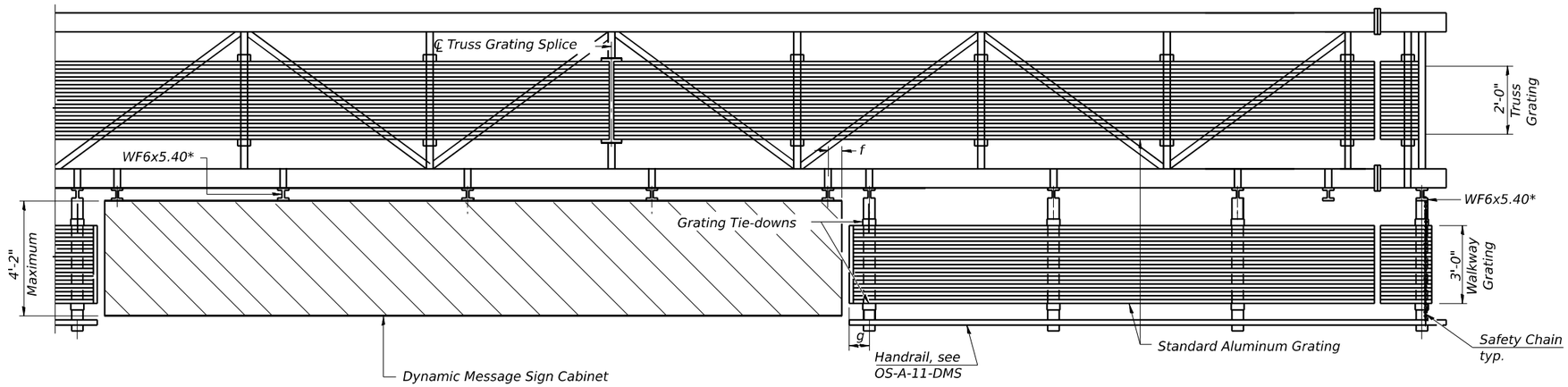
Bracket and grating dimensions are nominal and will vary based on actual DMS cabinet dimensions plus manufacturer's mounting devices.

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.

SECTION A-A

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".

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

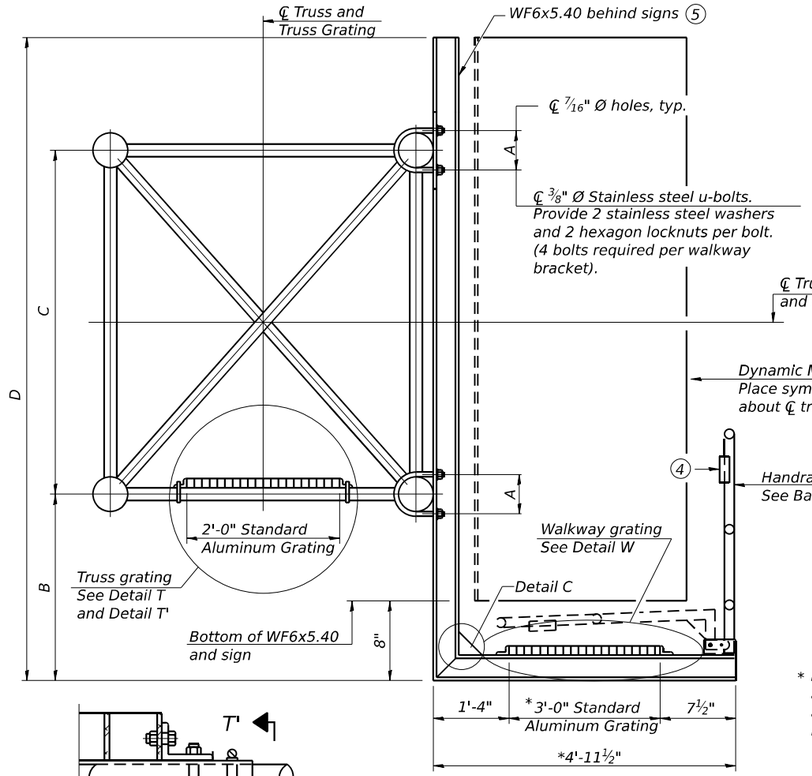
Sign Width		Number Brackets Required
Greater Than	Less Than or Equal To	
	8'-0"	2
8'-0"	14'-0"	3
14'-0"	20'-0"	4
20'-0"	26'-0"	5
26'-0"	32'-0"	6

Structure Number	Station	a	b	c	Ls	Walkway Grating and Handrail Lengths
1S099I080R135.7	854+00	1'-6"	15'-0"	24'-0"	30'-0"	39'-0"
1S099I080L136.0	870+00	1'-6"	15'-0"	24'-0"	30'-0"	39'-0"

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

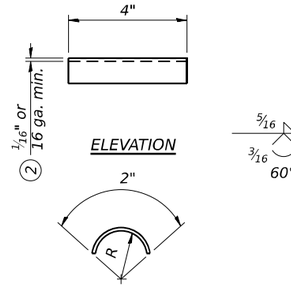
f = 12" maximum, 4" minimum (End of sign to ℄ of nearest bracket)
g = 12" maximum, 4" minimum (End of walkway grating to ℄ of nearest support bracket)
h = 6'-0" maximum (℄ to ℄ sign and/or walkway support brackets, WF6x5.40)

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.

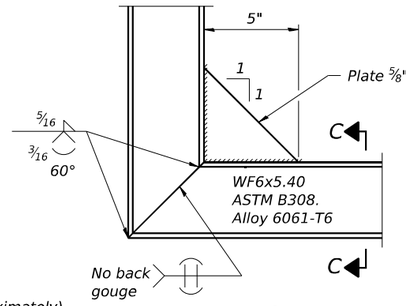


SECTION B-B

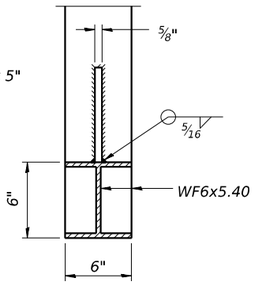
* Bracket and grading dimensions are nominal and will vary based on actual DMS cabinet dimensions plus manufacturer's mounting devices.



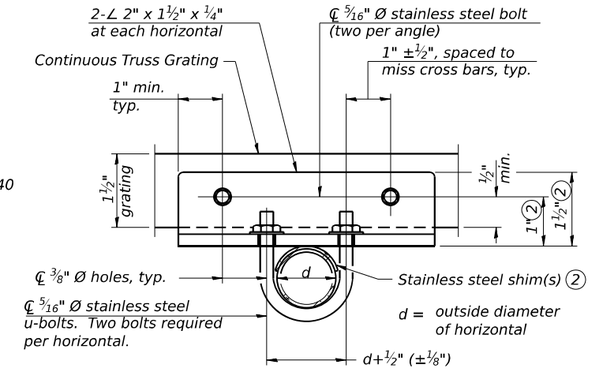
SHIM DETAIL



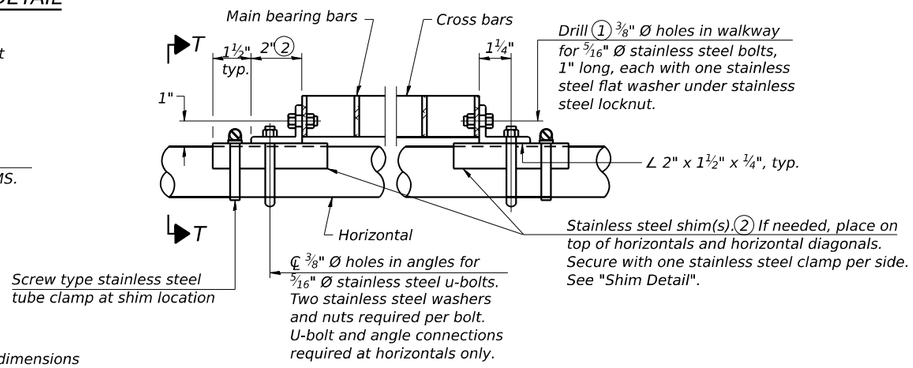
DETAIL C



SECTION C-C

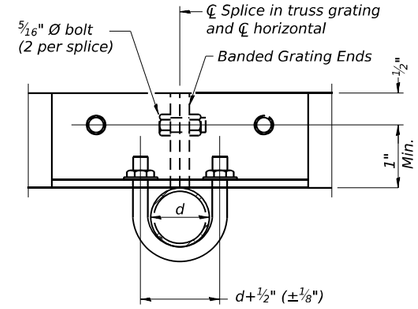


SECTION T-T



DETAIL T

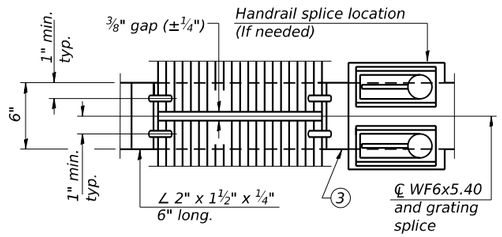
(Continuous Truss grating)



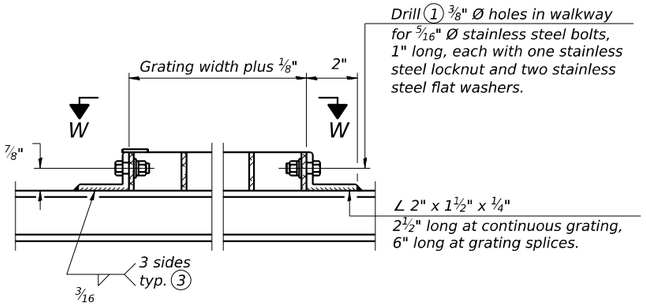
SECTION T'-T'

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.

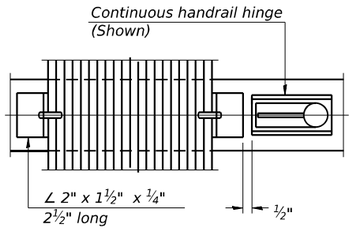


(AT WALKWAY GRATING SPLICE)



DETAIL W

(Walkway grating)



(CONTINUOUS WALKWAY GRATING)

SECTION W-W

SPECIFICATIONS FOR STANDARD ALUMINUM GRATING

Main Bearing Bars shall be 3/16" x 1½" on 1 3/16" centers and conform to ASTM B211 Alloy 6061-T6.

Cross bars shall be 3/16" x 1½" 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.³ per bar, a depth of 1½", 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
1S099I080R135.7	854+00	7½"	1'-2"	7'-0"	8'-8"
1S099I080L136.0	870+00	7½"	1'-2"	7'-0"	8'-8"

(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 ¼" extension bars. (See Base Sheet OS-A-11-DMS.)

(4) ℄ ⅛" x ½" 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.

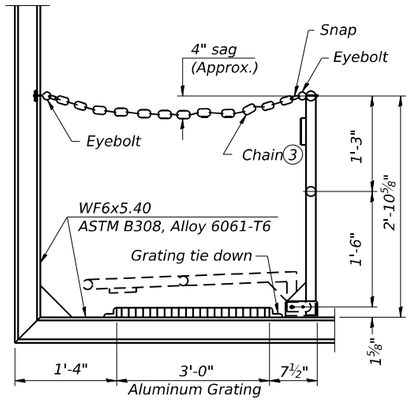
OS-A-10-DMS 2-17-2017

MODEL: DEFAULT
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-01\DMS080071\62R29-SHT-ITSOHS-008.DGN

6/27/2023

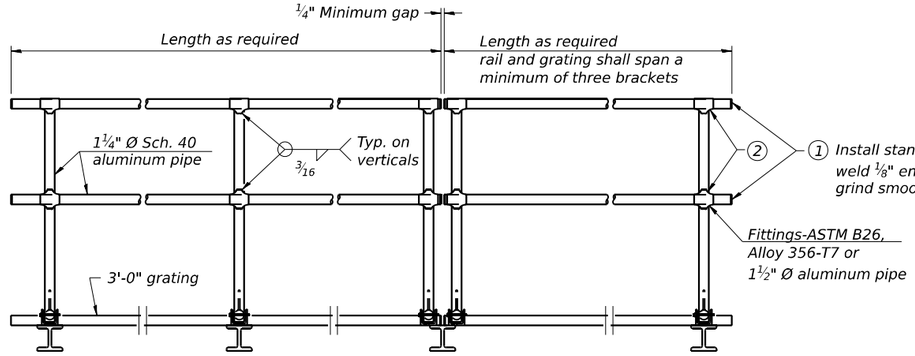
USER NAME =	DESIGNED - CS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	CHECKED - BAR	REVISED -	OVERHEAD SIGN STRUCTURES ALTERNATE ALUMINUM WALKWAY DETAILS FOR DMS
PLOT SCALE =	DRAWN - CS	REVISED -	SHEET 8 OF 13 SHEETS
PLOT DATE =	CHECKED - BAR	REVISED -	

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	564
		CONTRACT NO. 62R29		
	ILLINOIS	FED. AID PROJECT		

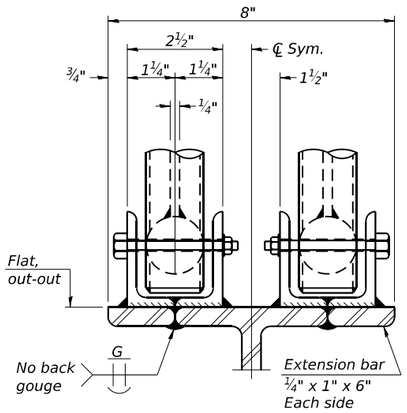


SIDE ELEVATION

(Showing safety chain w/o sign)



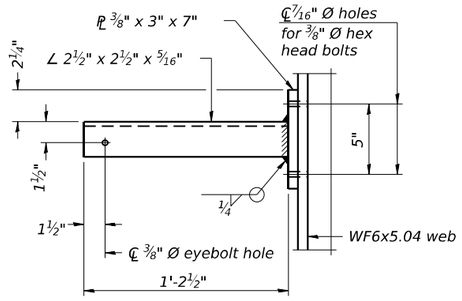
FRONT ELEVATION



ELEVATION AT HANDRAIL JOINT ④

HANDRAIL DETAILS

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

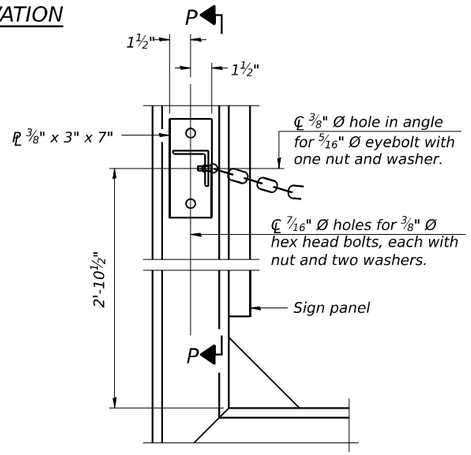


SECTION P-P

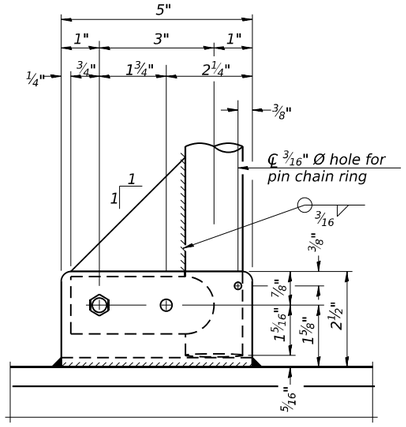
② Horizontal handrail member shall be continuous thru fitting. Provide 7/16" Ø hole in fitting for ⅜" Ø bolt. Field drill 7/16" Ø hole in horizontal rail member. Provide washer and locknut for bolt. (Use 5/16" eyebolts in 7/16" Ø holes on top rail at ends only.)

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

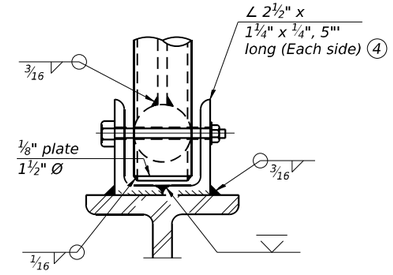
④ Extrusions may be used in lieu of the details shown, with approval of the Engineer.



ALTERNATE SAFETY CHAIN ATTACHMENT

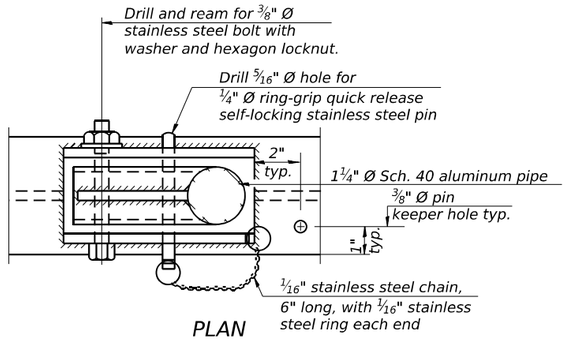


SIDE ELEVATION



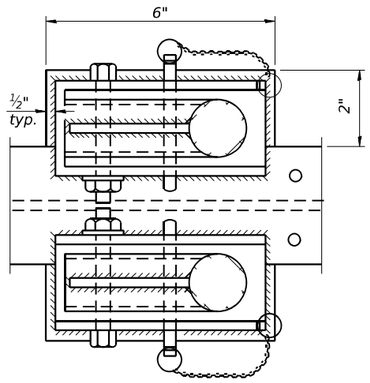
FRONT ELEVATION

See "ELEVATION" at right for dimensions.



PLAN

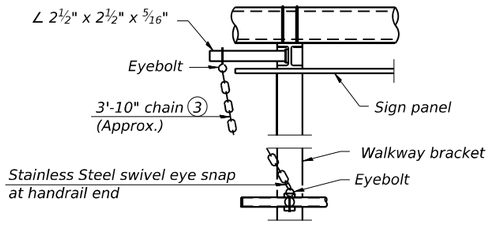
DETAIL E HANDRAIL HINGE



PLAN AT HANDRAIL JOINT

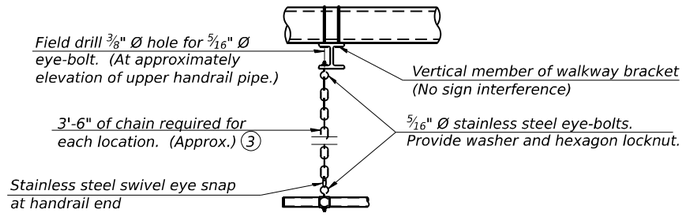
Details not shown same as "PLAN"

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



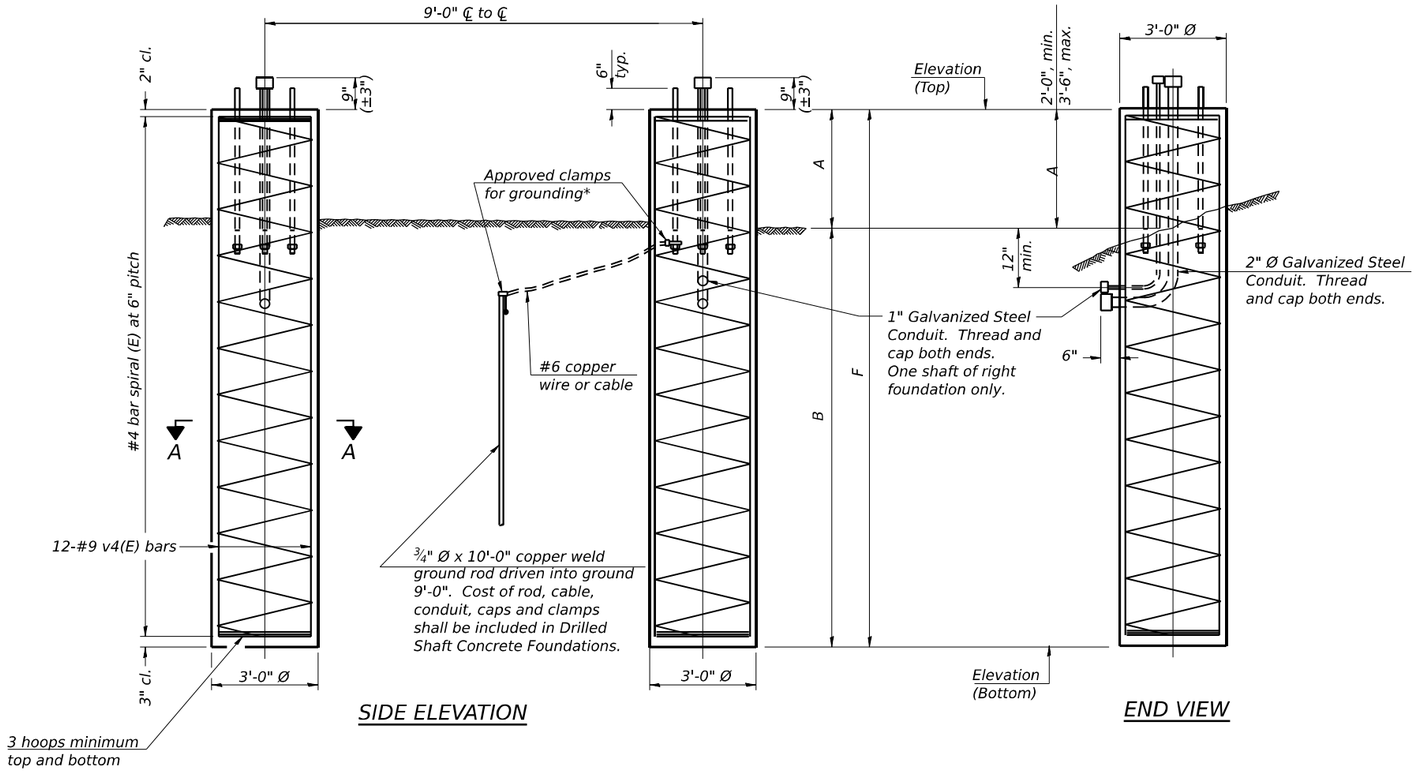
ALTERNATE SAFETY CHAIN ATTACHMENT

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



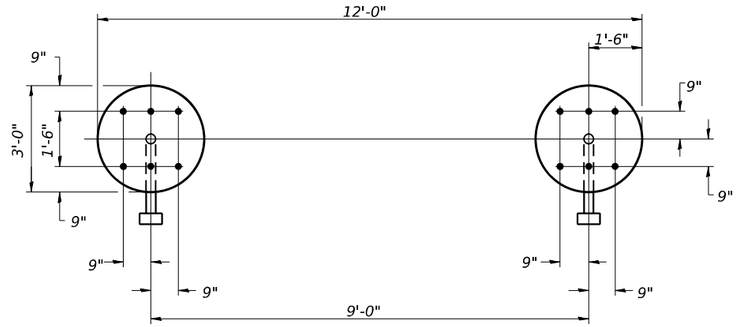
SAFETY CHAIN

One required for each end of each walkway.



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.

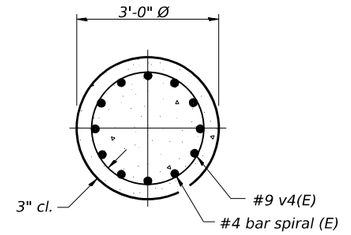
No sonotubes or decomposable forms shall be used below the lower conduit entrance.

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.

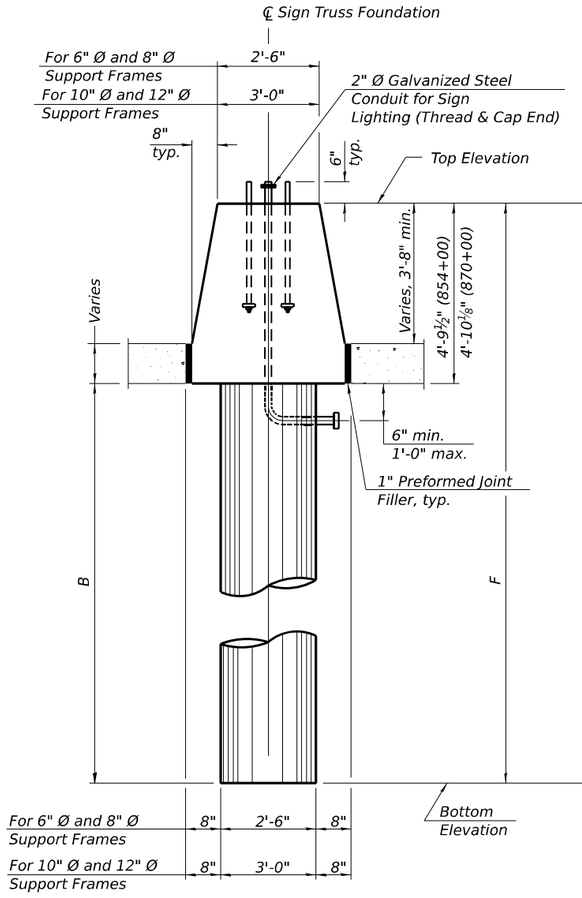


SECTION A-A

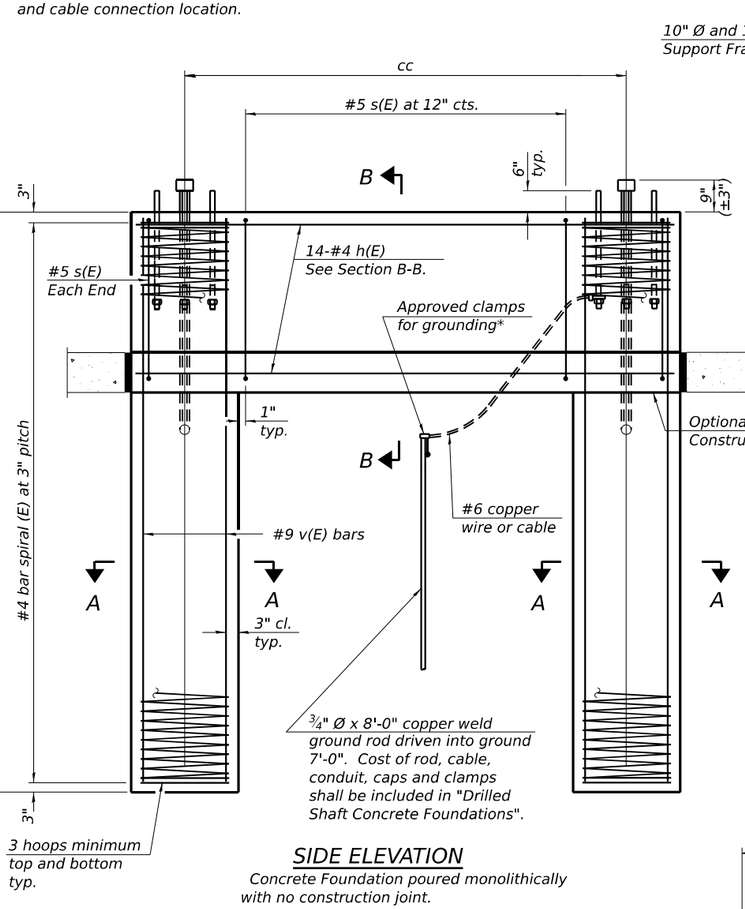
DETAILS FOR 12" Ø SUPPORT FRAME TYPE III-A TRUSS

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	
1S099I080R135.7	854+00	-	-	-	-	-	652.25	631.75	2'-6"	18'-0"	20'-6"	10.7
1S099I080L136.0	870+00	-	-	-	-	-	649.39	628.89	2'-6"	18'-0"	20'-6"	10.7

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

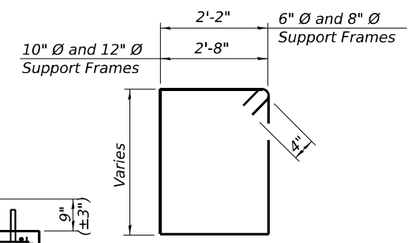


END VIEW



SIDE ELEVATION

Concrete Foundation poured monolithically with no construction joint.



BAR s(E)

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.

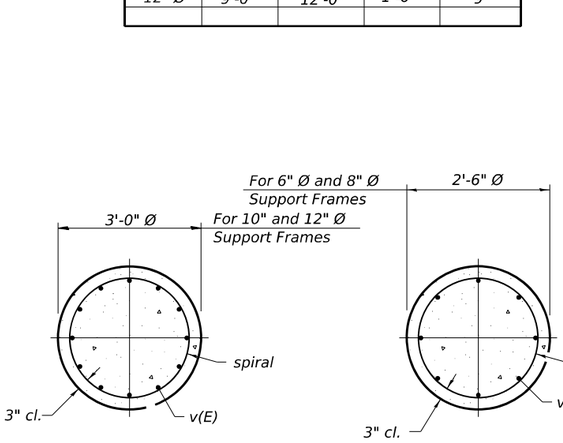
BAR LIST - EACH FOUNDATION

Bar	Number	Size	Length	Shape
h(E)	14	#4	M less 4"	
s(E)	Varies	#5	Varies	
v(E)	16	#9	F less 0'-5"	
v(E)	24	#9	F less 0'-5"	
#4(E) bar spiral. See Side Elevation				

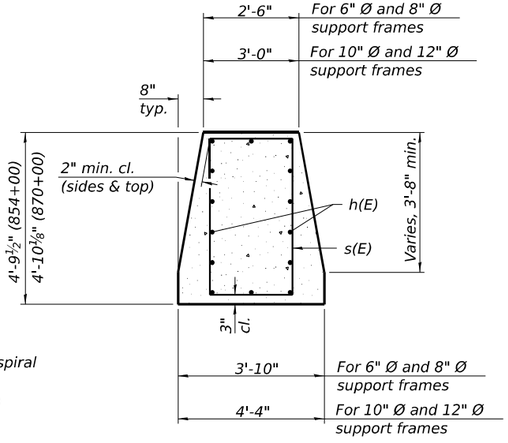
6" Ø and 8" Ø Support Frame

10" Ø and 12" Ø Support Frame

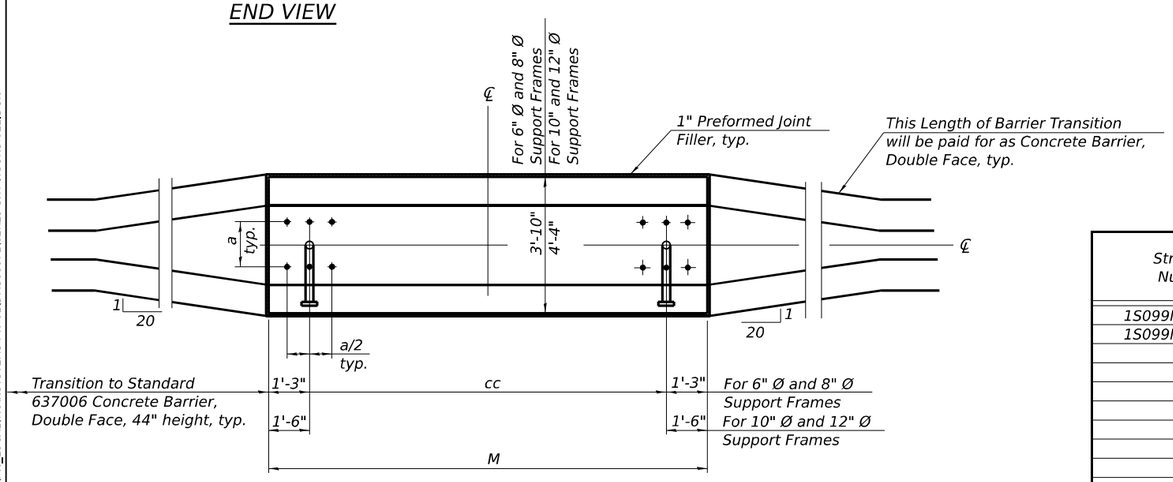
Pipe Support Frames	cc	M	a	a/2
6" Ø	7'-0"	9'-6"	0'-11"	5½"
8" Ø	7'-6"	10'-0"	1'-1½"	6¾"
10" Ø	8'-3"	11'-3"	1'-3"	7½"
12" Ø	9'-0"	12'-0"	1'-6"	9"



SECTION A-A



SECTION B-B



PLAN

Structure Number	Station	Left Foundation				Right Foundation				Class DS Concrete (Cu. Yds.)
		Elevation Top	Elevation Bottom	B	F	Elevation Top	Elevation Bottom	B	F	
1S099I080R135.7	854+00	654.42	631.63	18'-0"	22'-9½"	-	-	-	-	17.6
1S099I080L136.0	870+00	651.56	628.72	18'-0"	22'-10⅛"	-	-	-	-	17.6

MODEL: DEFAULT
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-01\DMS080\7162R29-SHT-ITSOHS-011.DGN

6/27/2023

exp.

USER NAME =	DESIGNED - CS	REVISED -
	CHECKED - BAR	REVISED -
PLOT SCALE =	DRAWN - CS	REVISED -
PLOT DATE =	CHECKED - BAR	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
MEDIAN SUPPORT FOUNDATION DETAILS
SHEET 11 OF 13 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	567
		CONTRACT NO. 62R29		
	ILLINOIS	FED. AID PROJECT		

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2818

SOIL BORING LOG

GEO Job No. 20012
Page 1 of 1
Date 2/25/23

FAI Route 80 from Chicago Street to US
ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY TZ
SECTION - LOCATION , SEC. , TWP. , RNG.
COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO.
Station
BORING NO. OSB-008
Station 853+95
Offset 31.00ft Right
Ground Surface Elev. 649.76 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry to -5.0' ft
Upon Completion n/a ft
After - Hrs. - ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
12.0" ASPHALT			
648.76			1
12.0" STONE	10		
647.76	8		16
CLAY with Gravel-brown & gray-hard	4		
646.26			
CLAY LOAM-brown & gray-medium stiff to very stiff	5		
	8	2.20	24
-5	11	B	
	4		
	6	1.20	26
	8	B	
	4		
	7	2.10	21
-10	9	B	
becoming gray @ -11.0'	7		
	11	2.80	19
	14	B	
	6		
	8	1.80	19
-15	10	B	
	5		
	7	1.30	21
	8	B	
	5		
	6	0.90	21
-20	8	B	

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY LOAM-brown & gray-medium stiff to very stiff *(continued)*			
	4		
	6	1.10	21
	8	B	
	5		
	7	0.40	12
-25	9	B	
	5		
	7	0.70	13
	8	B	
	6		
	7	0.40	13
-30	10	B	
616.26			
CRUSHED LIMESTONE-gray-very dense	9		
	50/5"		11
-35			
	50/2"		
End Of Boring @ -40.0'. Boring backfilled with cuttings.			10
609.76 -40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206), GP-Geoprobe Hand Auger
BBS, from 137 (Rev. 8-99)

Geo Services, Inc.
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SOIL BORING LOG

GEO Job No. 20012
Page 1 of 1
Date 1/11/23

FAI Route 80 from Chicago Street to US
ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY RT/VH
SECTION - LOCATION SE 1/4, SEC. 13, TWP. T35N, RNG. R10E, 3rd PM
COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO.
Station
BORING NO. OSB-009
Station 854+03
Offset 65.00ft Right
Ground Surface Elev. 651.02 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After - Hrs. - ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
15.0" ASPHALT			
649.77			1
SILTY CLAY with Gravel-brown-hard	7		
	5	4.50	19
	7	P	
	4		
becoming brown & gray @ -5.0'	4	0.50	21
646.02 -5	4	P	
CLAY LOAM-brown & gray-hard	2		
	2	1.75	24
	4	P	
	4		
	6	2.25	22
-10	11	P	
becoming gray @ -13.5'	5		
	8	3.25	24
	11	P	
	7		
	8	3.50	22
-15	13	P	
	5		
	7	2.00	20
	9	P	
	5		
	8	1.75	15
-20	8	P	

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY LOAM-brown & gray-hard *(continued)*			
	4		
	6	1.00	13
	8	P	
	5		
	6	1.25	14
-25	7	P	
	6		
	7	0.75	13
	10	P	
	7		
	8	0.75	14
-30 621.02	12	P	
CLAYEY SAND & GRAVEL-gray-very dense			
	50/5"		
-35			12
612.52			
SILT wit Gravel-gray-very dense	50/1"		
End Of Boring @ -40.0'. Boring backfilled with cuttings.			9
611.02 -40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206), GP-Geoprobe Hand Auger
BBS, from 137 (Rev. 8-99)

Z:\PROJECTS\2020\20012 EXP. I-80 FROM CHICAGO ST. TO RT 30, PTB 194-9\20012 BORING LOGS\20012_LOG.GPJ 3/6/23

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6/27/2023

exp.	USER NAME =	DESIGNED - CS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	OVERHEAD SIGN STRUCTURES BORING LOGS 1
		CHECKED - BAR	REVISED -		
	PLOT SCALE =	DRAWN - CS	REVISED -		SHEET 12 OF 13 SHEETS
	PLOT DATE =	CHECKED - BAR	REVISED -		

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	568
		CONTRACT NO. 62R29		
		ILLINOIS FED. AID PROJECT		

Geo Services, Inc.
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SOIL BORING LOG

GEO Job No. 20012
Page 1 of 1
Date 2/24/23

FAI Route 80 from Chicago Street to US
ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY TZ

SECTION - LOCATION , SEC. , TWP. , RNG.

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO.
Station
BORING NO. OSB-010
Station 869+94
Offset 29.00ft Right
Ground Surface Elev. 646.98 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry to -5.0' ft
Upon Completion n/a ft
After - Hrs. - ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
12.0" ASPHALT				
645.98				2
12.0" CRUSHED STONE		24		
644.98		4		17
CLAY LOAM with Gravel-brown & gray-hard		5		
643.48				
CLAY LOAM-brown & gray-very stiff to hard		7		
		12	4.90	17
	-5	15	B	
		7		
		10	3.10	23
		12	B	
becoming gray @ -8.5'		6		
		10	4.00	20
	-10	12	B	
635.98		7		
SILTY CLAY LOAM-brown-very stiff		9	2.60	21
		11	B	
633.48		8		
CLAY LOAM-gray-soft to very stiff		8	1.80	20
	-15	10	B	
		5		
		7	0.50	22
		9	P	
		5		
		7	0.25	25
	-20	8	P	

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY LOAM-gray-soft to very stiff *(continued)*				
		4		
		5	0.90	22
		7	B	
		5		
		5	0.50	22
	-25	6	B	
		5		
		4	0.25	14
		2	P	
618.48				
SAND & GRAVEL-gray-medium dense		8		
		12		13
	-30	15		
613.98				
CRUSHED GRAVEL-gray-very dense		50/2"		
				16
	-35			
		50/0"		
End Of Boring @ -40.0'. Boring backfilled with cuttings.				NR
606.98	-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206), GP-Geoprobe Hand Auger BBS, from 137 (Rev. 8-99)

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2818

SOIL BORING LOG

GEO Job No. 20012
Page 1 of 1
Date 1/11/23

FAI Route 80 from Chicago Street to US
ROUTE Route 30 DESCRIPTION I-80 Phase II LOGGED BY RT/QZ

SECTION - LOCATION SE 1/4, SEC. 13, TWP. T35N, RNG. R10E, 3rd PM

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO.
Station
BORING NO. OSB-011
Station 870+00
Offset 64.00ft Left
Ground Surface Elev. 648.09 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After - Hrs. - ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
15.0" ASPHALT				
646.84				2
6.0" STONE		8		
646.34		6	4.50	13
SILTY CLAY with Gravel-brown-hard		7	P	
645.09				
CLAY LOAM-brown & gray-stiff to hard		6		
		9	4.50	21
	-5	16	P	
		8		
		15	4.50	19
		22	P	
		9		
		12	4.50	23
	-10	17	P	
		6		
		10	3.50	22
		16	P	
		7		
		13	4.00	21
	-15	17	P	
		6		
		10	4.00	23
		12	P	
becoming gray @ -18.5'		5		
		5	1.50	21
	-20	6	P	

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY LOAM-brown & gray-stiff to hard *(continued)*				
		4		
		6	1.50	22
		8	P	
		5		
		6	1.50	22
	-25	8	P	
622.09				
CLAY with Gravel-gray-stiff		6		
		6	1.50	13
		8	P	
619.59				
CLAY LOAM-gray-stiff		8		
		6	1.25	13
	-30	9	P	
614.59				
SAND & GRAVEL-gray-very dense		8		
		50/2"		6
	-35			
		6		
		7		17
End Of Boring @ -40.0'. Boring backfilled with cuttings.		50/2"		
608.09	-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206), GP-Geoprobe Hand Auger BBS, from 137 (Rev. 8-99)

Z:\PROJECTS\2020\20012 EXP. I-80 FROM CHICAGO ST. TO RT 30, PTB 194-9\20012 BORING LOGS\20012_LOG.GPJ 3/6/23

MODEL: DEFAULT
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-01\D0508071\62R29-SHT-ITSOHS-013.DGN

6/27/2023

USER NAME =	DESIGNED - CS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	OVERHEAD SIGN STRUCTURES BORING LOGS 2	
	CHECKED - BAR	REVISED -			
PLOT SCALE =	DRAWN - CS	REVISED -			
PLOT DATE =	CHECKED - BAR	REVISED -		SHEET 13 OF 13 SHEETS	

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	569
		CONTRACT NO. 62R29		
		ILLINOIS FED. AID PROJECT		

TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

ITEM	EXISTING	PROPOSED
CONTROLLER CABINET		
COMMUNICATION CABINET	CC	CC
MASTER CONTROLLER	MC	MC
MASTER MASTER CONTROLLER	MMC	MMC
UNINTERRUPTABLE POWER SUPPLY		
SERVICE INSTALLATION -(P) POLE MOUNTED	P	P
SERVICE INSTALLATION -(G) GROUND MOUNTED -(GM) GROUND MOUNTED METERED	G GM	G GM
TELEPHONE CONNECTION	ET	T
STEEL MAST ARM ASSEMBLY AND POLE		
ALUMINUM MAST ARM ASSEMBLY AND POLE		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE		
SIGNAL POST -(BM) BARREL MOUNTED - TEMPORARY		BM
WOOD POLE		
GUY WIRE		
SIGNAL HEAD		
SIGNAL HEAD WITH BACKPLATE		
SIGNAL HEAD OPTICALLY PROGRAMMED	P P	P P
FLASHER INSTALLATION -(FS) SOLAR POWERED	F FS F FS	F FS F FS
PEDESTRIAN SIGNAL HEAD		
PEDESTRIAN PUSH BUTTON -(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON	APS	APS
RADAR DETECTION SENSOR	R	R
VIDEO DETECTION CAMERA	V	V
RADAR/VIDEO DETECTION ZONE		
PAN, TILT, ZOOM (PTZ) CAMERA	PTZ	PTZ
EMERGENCY VEHICLE LIGHT DETECTOR		
CONFIMATION BEACON		
WIRELESS INTERCONNECT		
WIRELESS INTERCONNECT RADIO REPEATER	RR	RR

ITEM	EXISTING	PROPOSED
HANDHOLE -SQUARE -ROUND		
HEAVY DUTY HANDHOLE -SQUARE -ROUND	H	H
DOUBLE HANDHOLE		
JUNCTION BOX		
RAILROAD CANTILEVER MAST ARM		
RAILROAD FLASHING SIGNAL		
RAILROAD CROSSING GATE		
RAILROAD CROSSBUCK		
RAILROAD CONTROLLER CABINET		
UNDERGROUND CONDUIT (UC), GALVANIZED STEEL		
TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE		
SYSTEM ITEM	S	SP
INTERSECTION ITEM	I	IP
REMOVE ITEM		R
RELOCATE ITEM		RL
ABANDON ITEM		A
CONTROLLER CABINET AND FOUNDATION TO BE REMOVED		RCF
MAST ARM POLE AND FOUNDATION TO BE REMOVED		RMF
SIGNAL POST AND FOUNDATION TO BE REMOVED		RPF
DETECTOR LOOP, TYPE I		
PREFORMED DETECTOR LOOP	P P	P P
SAMPLING (SYSTEM) DETECTOR	S S	S S
INTERSECTION AND SAMPLING (SYSTEM) DETECTOR	IS IS	IS IS
QUEUE AND SAMPLING (SYSTEM) DETECTOR	QS QS	QS QS
WIRELESS DETECTOR SENSOR	W	W
WIRELESS ACCESS POINT		

ITEM	EXISTING	PROPOSED
SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD	R Y G ◄Y ◄G (P)	R Y G ◄Y ◄G (P)
SIGNAL HEAD WITH BACKPLATE -(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE	R Y G ◄Y ◄G (P) (RB)	R Y G ◄Y ◄G (P) (RB)
PEDESTRIAN SIGNAL HEAD AT RAILROAD INTERSECTIONS		
PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER	C D	C D
ILLUMINATED SIGN "NO LEFT TURN"/"NO RIGHT TURN"		
NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE. ALL DETECTOR LOOP CABLE TO BE SHIELDED	5	5
GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)	1#6	1#6
ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1/C	1	1
COAXIAL CABLE	C	C
VENDOR CABLE	V	V
COPPER INTERCONNECT CABLE, NO. 18, 3 PAIR TWISTED, SHIELDED	6#18	6#18
FIBER OPTIC CABLE -NO. 62.5/125, MM12F -NO. 62.5/125, MM12F SM12F -NO. 62.5/125, MM12F SM24F	12F 24F 36F	12F 24F 36F
GROUND ROD -(C) CONTROLLER -(M) MAST ARM -(P) POST -(S) SERVICE	C M P S	C M P S

TS SHT NO.1

MODEL: PR_BRIGGS_RAMP_A - PLAN 1
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-01\DMS\07B16\R29-SHT-TS-01.DGN

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

USER NAME = NSALEHIAN		DESIGNED -	NS	REVISED -	
		DRAWN -	NS	REVISED -	
PLOT SCALE = 0.16666667 ' / IN.		CHECKED -	TS	REVISED -	
PLOT DATE = 6/27/2023		DATE -	6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	570
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			

LOOP DETECTOR NOTES

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.

2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.

3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.

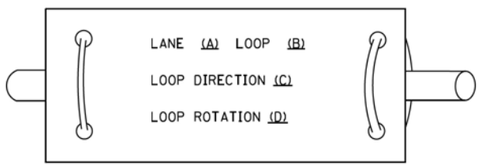
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.

5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.

6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.

7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

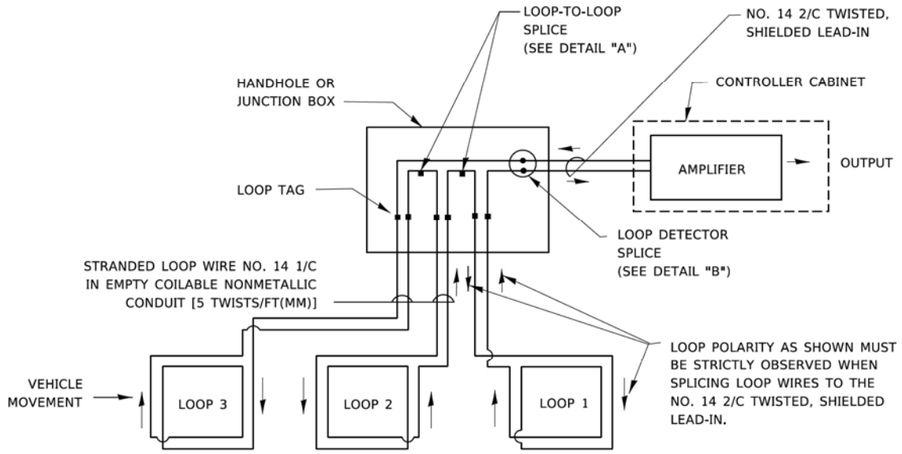


A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY

B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.

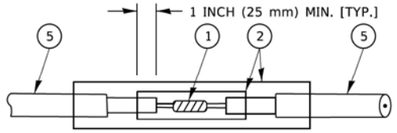
C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".

D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

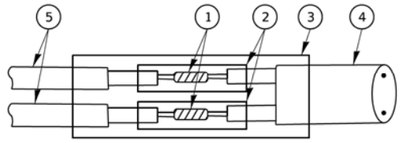


DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES. SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE,
- THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.

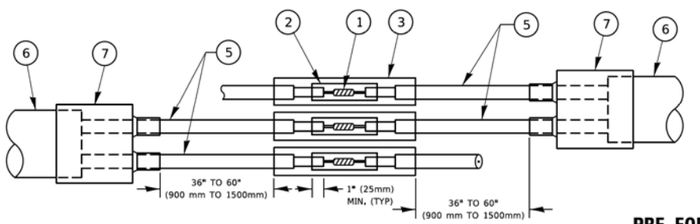


DETAIL "A"
LOOP-TO-LOOP SPLICE



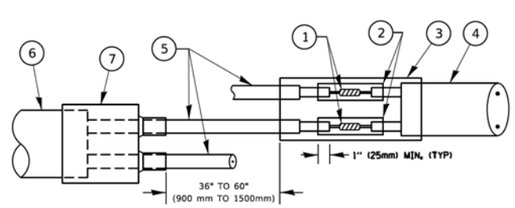
DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE

PRE-FORMED LOOP



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

LOOP DETECTOR SPLICE

1. WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.
2. WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
3. WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.
4. NO. 14 2/C TWISTED, SHIELDED CABLE.
5. LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE. PRE-FORMED LOOP
6. XL POLYOLEFIN 2 CONDUCTOR
7. BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

TS SHT NO.2

MODEL: PR_BRIGGS_RAMP_A - PLAN 1
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-01\DMS07816\62R29-SHT-TS-02.DGN

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

USER NAME = NSALEHIAN	DESIGNED - NS	REVISED -	
	DRAWN - NS	REVISED -	
PLOT SCALE = 0.16666667 ' / IN.	CHECKED - TS	REVISED -	
PLOT DATE = 6/27/2023	DATE - 6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

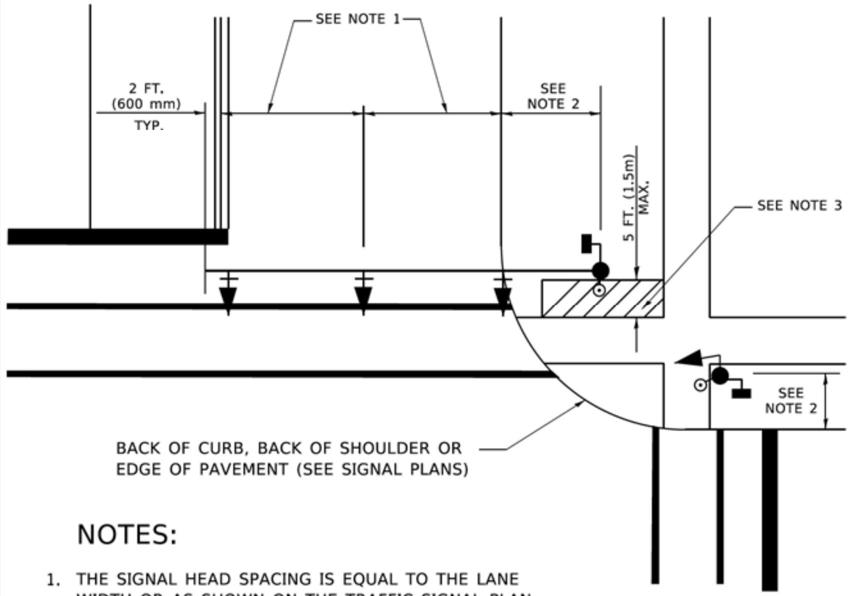
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	571
		CONTRACT NO. 62R29		
	ILLINOIS | FED. AID PROJECT			

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

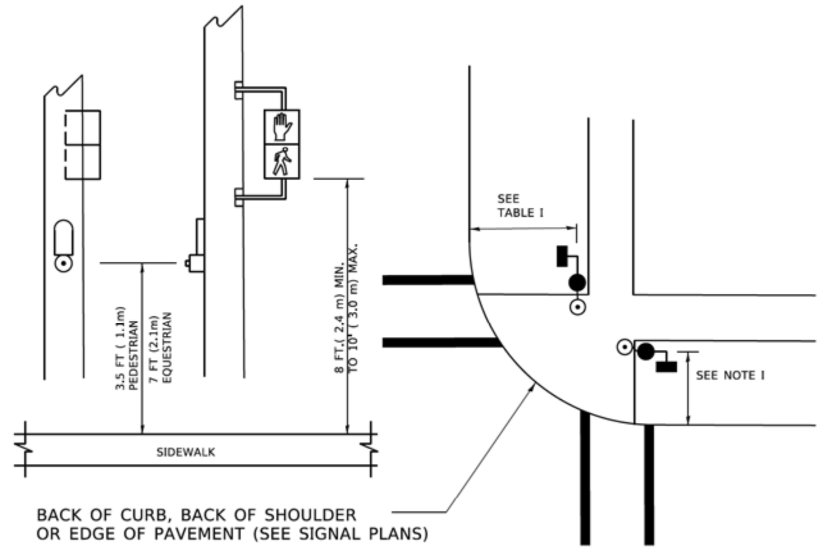
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



NOTES:

1. THE SIGNAL HEAD SPACING IS EQUAL TO THE LANE WIDTH OR AS SHOWN ON THE TRAFFIC SIGNAL PLAN.
2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

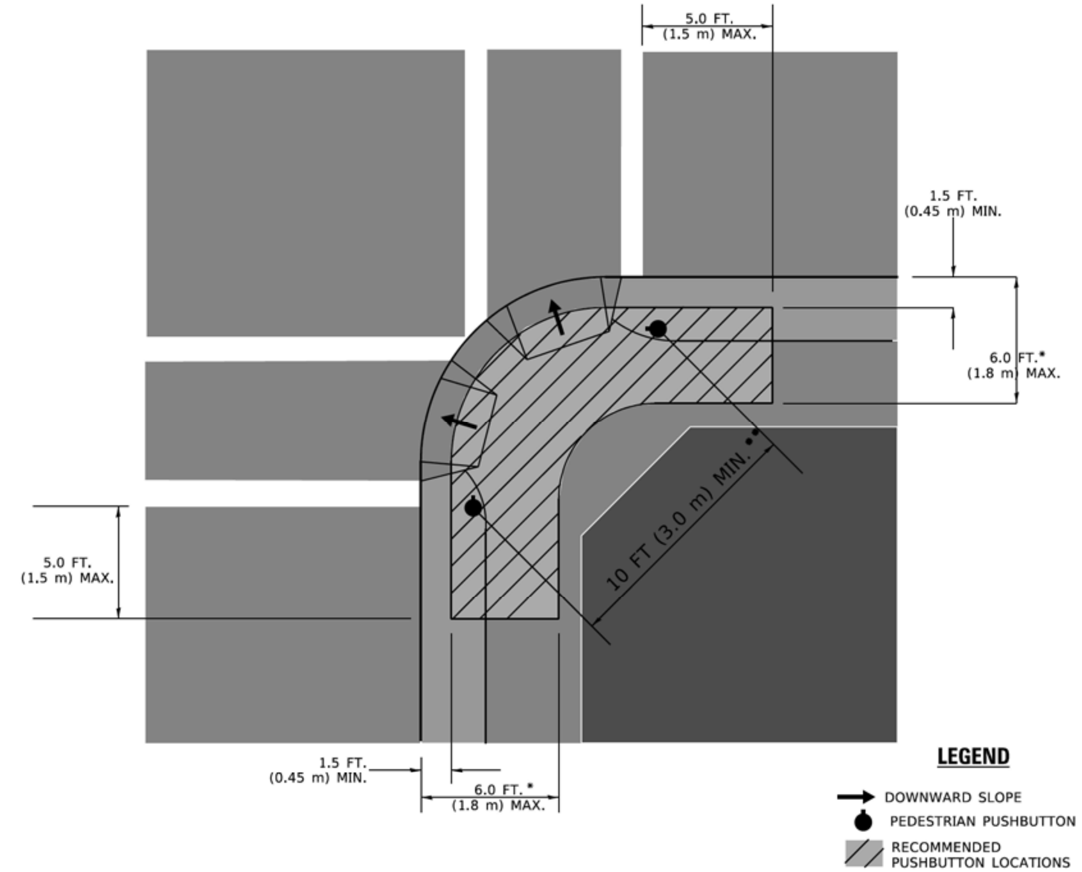
PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



NOTES:

1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

RECOMMENDED PUSHBUTTON LOCATIONS



* WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT (1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.

** WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

NOTES:

1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

TRAFFIC SIGNAL EQUIPMENT OFFSET

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.

NOTES:

1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TOTHE ROADWAY SIDE OF THE FOUNDATION.
4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

TS SHT NO.3

TranSmart 100 S. Wacker Drive Suite 400 Chicago, Illinois 60606	USER NAME = NSALEHIAN	DESIGNED - NS	REVISED -
		DRAWN - NS	REVISED -
	PLOT SCALE = 0.16666667 ' / IN.	CHECKED - TS	REVISED -
	PLOT DATE = 6/27/2023	DATE - 6/29/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

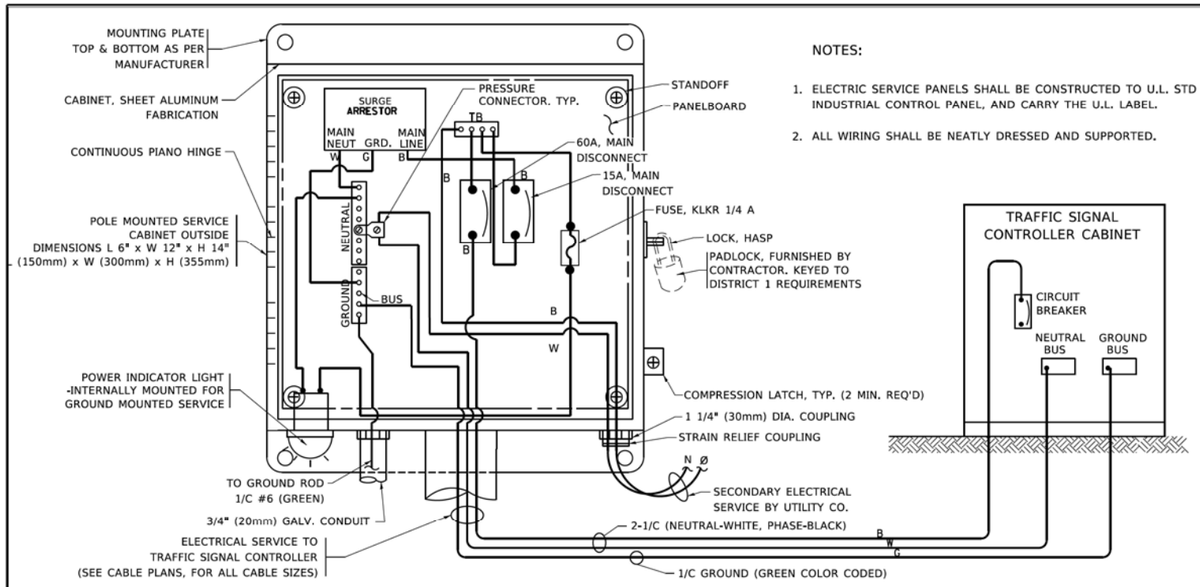
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET OF SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	572

CONTRACT NO. 62R29

ILLINOIS | FED. AID PROJECT



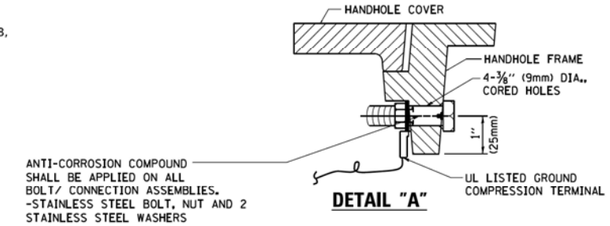
NOTES:

1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508, INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL.
2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.

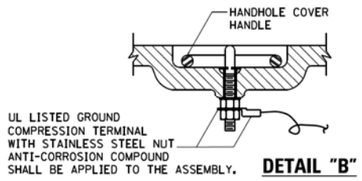
ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)

SERVICE INSTALLATION POLE MOUNT (SHOWN)

(NOT TO SCALE)



DETAIL "A"

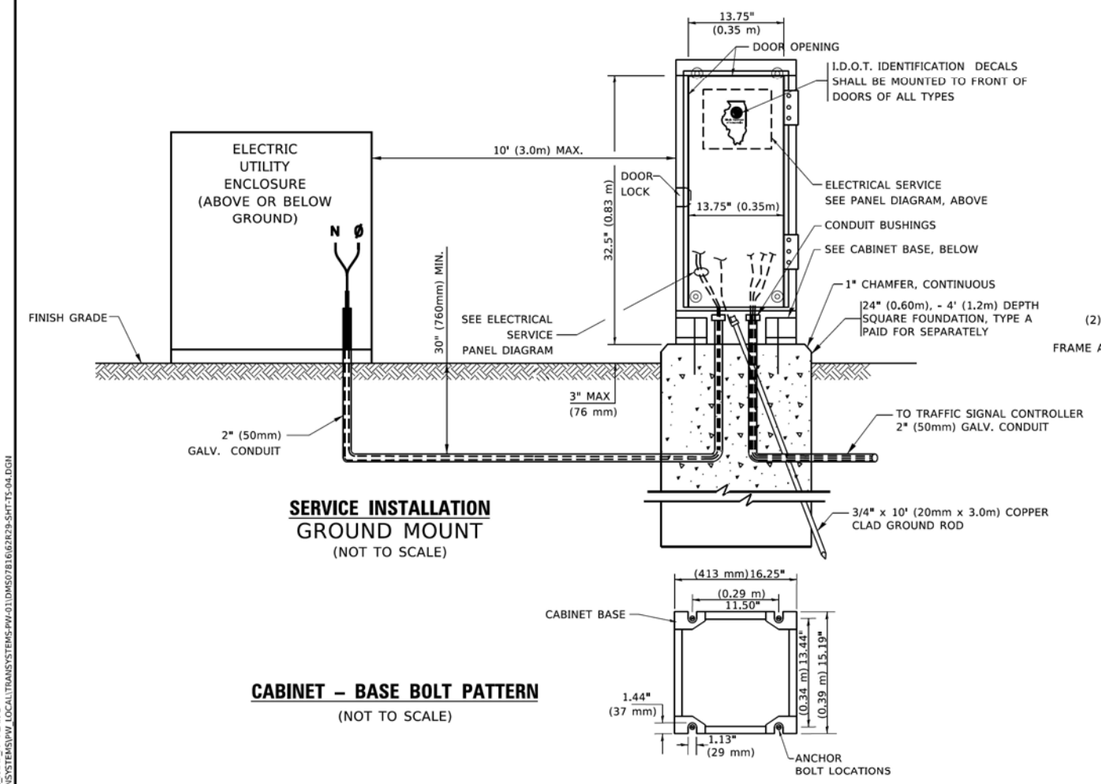


DETAIL "B"

NOTES:

GROUNDING SYSTEM

1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC,). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



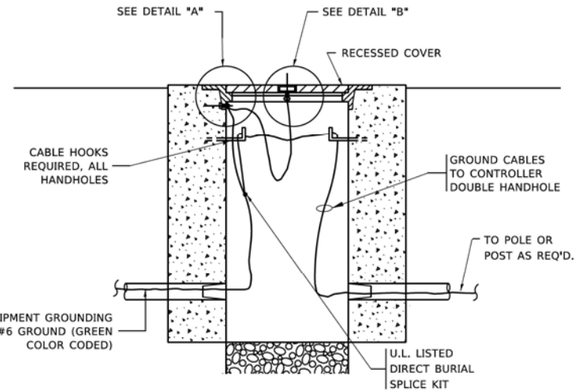
SERVICE INSTALLATION

GROUND MOUNT

(NOT TO SCALE)

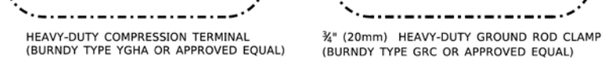
CABINET – BASE BOLT PATTERN

(NOT TO SCALE)



HANDHOLE COVER & FRAME – GROUNDING DETAIL

(NOT TO SCALE)

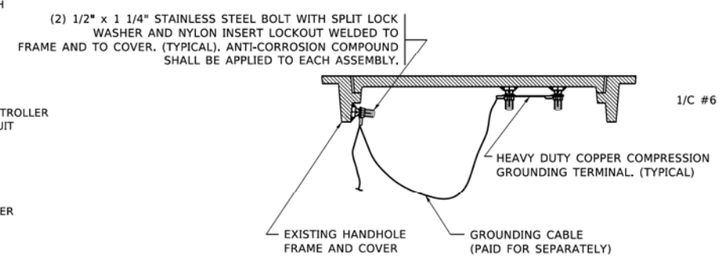


HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)

¾" (20mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED EQUAL)

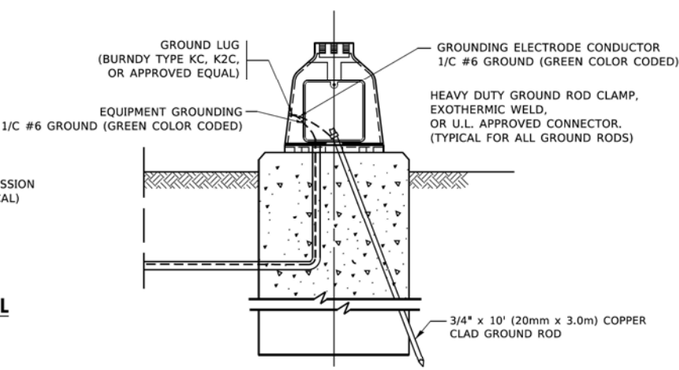
NOTES:

- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
- GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



EXISTING HANDHOLE COVER & FRAME – GROUNDING DETAIL

(NOT TO SCALE)



MAST ARM POLE /POST–GROUNDING DETAIL

(NOT TO SCALE)

TS SHT NO.4

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FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-01\D0450781\62R29-SHT-TS-04.DGN

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

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	DRAWN - NS	REVISED -	
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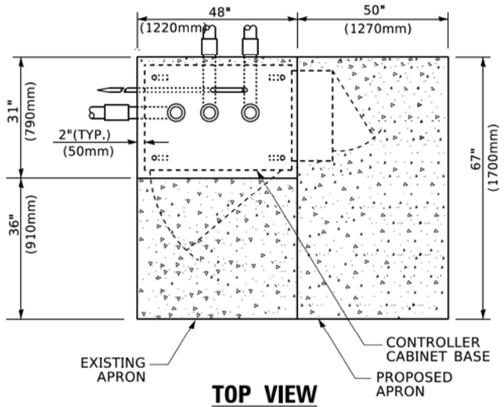
PLOT DATE = 6/27/2023	DATE - 6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

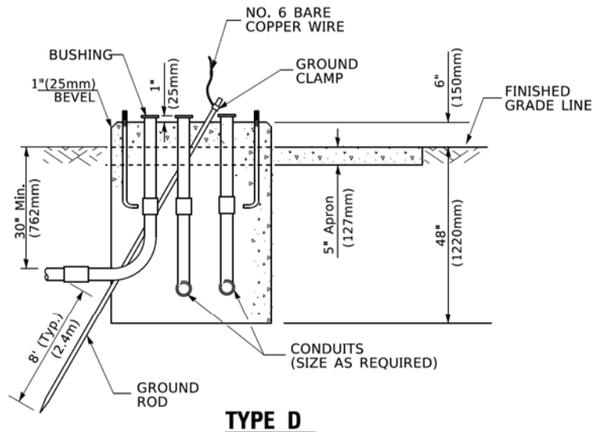
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET | OF | SHEETS | STA. | TO STA.

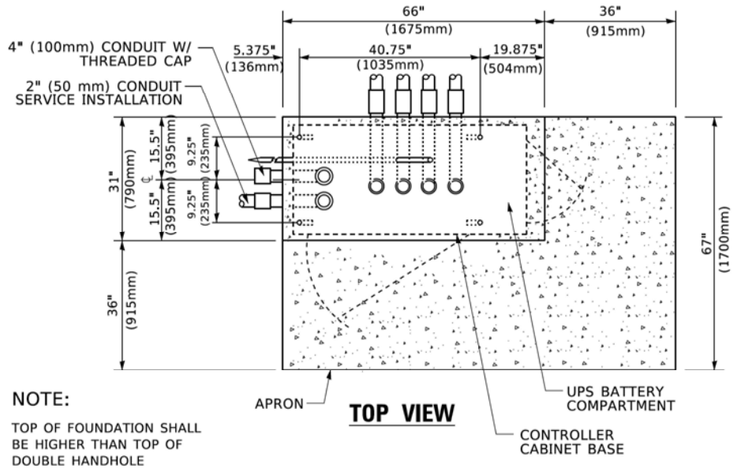
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	573
		CONTRACT NO. 62R29		
	ILLINOIS	FED. AID PROJECT		



TOP VIEW



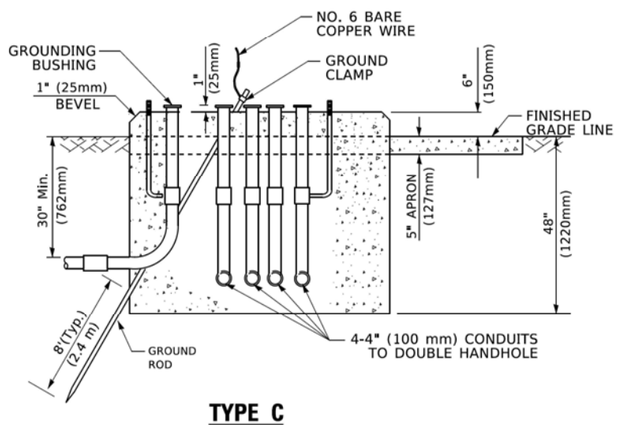
TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET



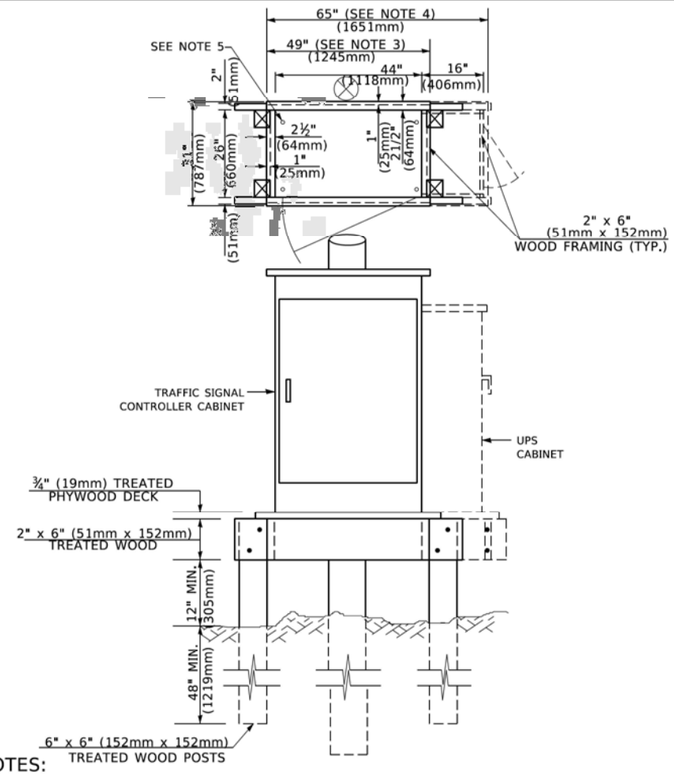
TOP VIEW

NOTE:

TOP OF FOUNDATION SHALL BE HIGHER THAN TOP OF DOUBLE HANDHOLE



TYPE C
FOR GROUND MOUNTED
SUPER P (TYPE IV) AND SUPER R (TYPE V)
CONTROLLER CABINETS



NOTES:

1. BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED
2. BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION..

TEMPORARY SIGNAL CONTROLLER
WOOD SUPPORT PLATFORM

CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

CABLE SLACK

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE (MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

VERTICAL CABLE LENGTH

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0" (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)
TYPE D - CONTROLLER	4'-0" (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0" (1.2m)

DEPTH OF FOUNDATION

Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

NOTES:

1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (Qu) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & structures should be contacted for a revised design if other conditions are encountered.
2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations
4. For mast arm assemblies with dual arms refer to state standard 878001..

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

TS SHT NO.5

MODEL: PR_BRIGGS_RAMP A - PLAN 1
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-011DMS078160\62R29-SHT-TS-05.DGN

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

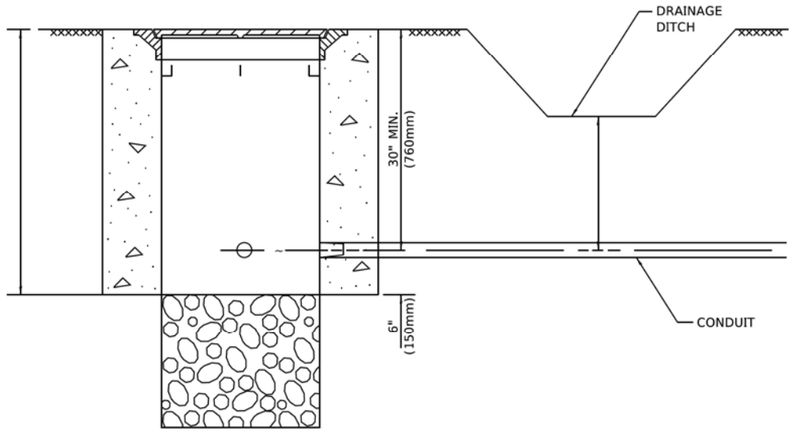
USER NAME	= NSALEHIAN	DESIGNED -	NS	REVISED	-
		DRAWN -	NS	REVISED	-
PLOT SCALE	= 0.16666667 ' / IN.	CHECKED -	TS	REVISED	-
PLOT DATE	= 6/27/2023	DATE -	6/29/2023	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET | OF | SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	574
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			

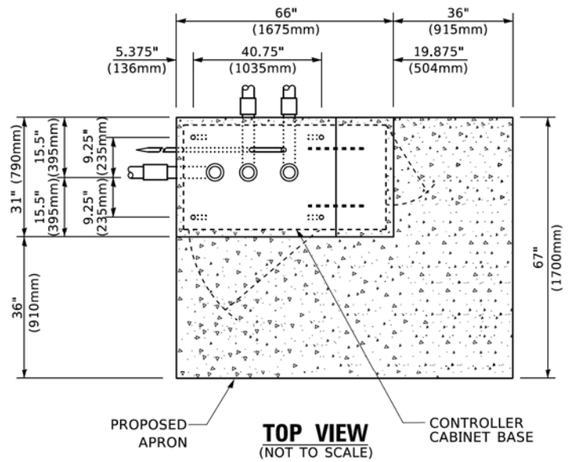


NOTES:

1. CONDUIT DEPTH SHALL BE A MINIMUM OF 30" (760mm) BELOW THE BOTTOM OF THE DRAINAGE DITCH OR ANY SLOPING GROUND
2. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL CONDUIT PLACED UNDER ROADWAY PAVEMENT, MULTI-USE PATHS, SIDEWALKS AND SOIL SURFACES.
3. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL HANDHOLES, HEAVY DUTY HANDHOLES AND DOUBLE HANDHOLES.

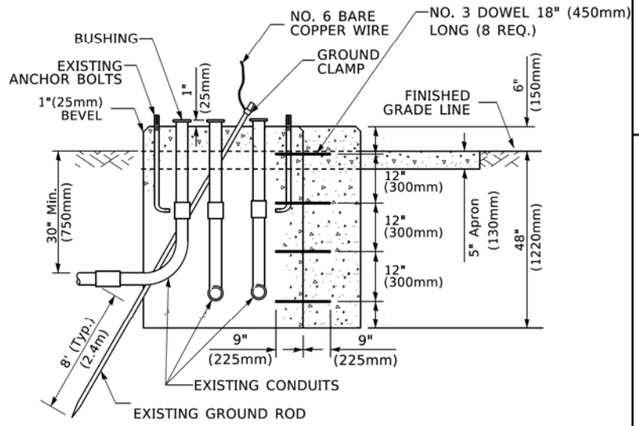
HANDHOLE WITH MINIMUM CONDUIT DEPTH

(NOT TO SCALE)



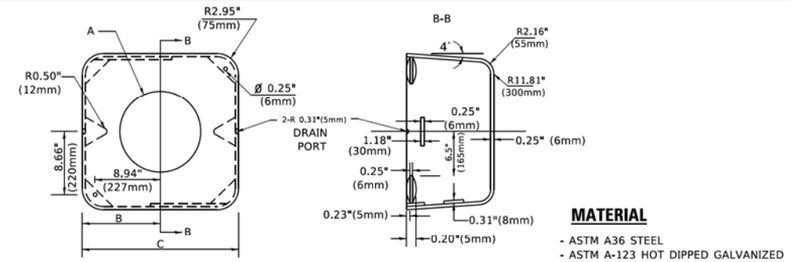
TOP VIEW

(NOT TO SCALE)



MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION

(NOT TO SCALE)



MATERIAL

- ASTM A36 STEEL
- ASTM A-123 HOT DIPPED GALVANIZED

A	B	C	HEIGHT	WEIGHT
VARIES	9.5"(241mm)	19"(483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIES	10.75"(273mm)	21.5"(546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIES	13.0"(330mm)	26"(660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIES	18.5"(470mm)	37"(940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)

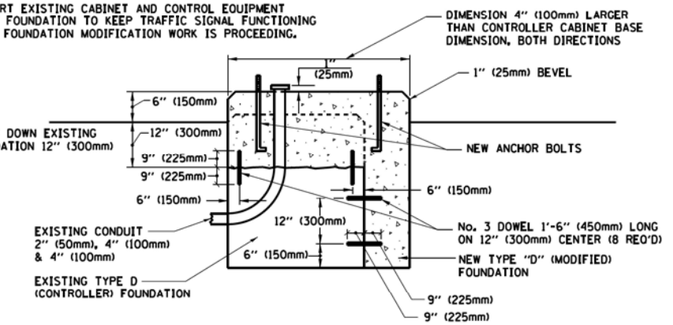
SHROUD

NOTES:

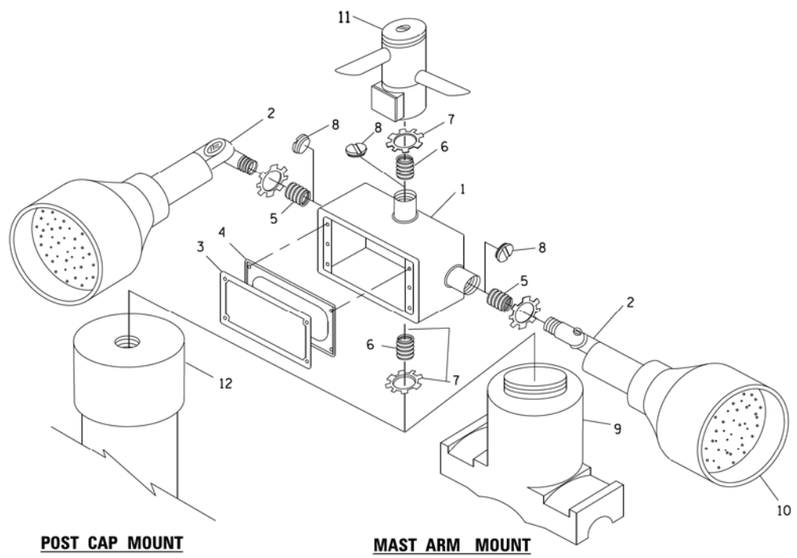
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

NOTE:

SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.



MODIFY EXISTING TYPE "D" FOUNDATION



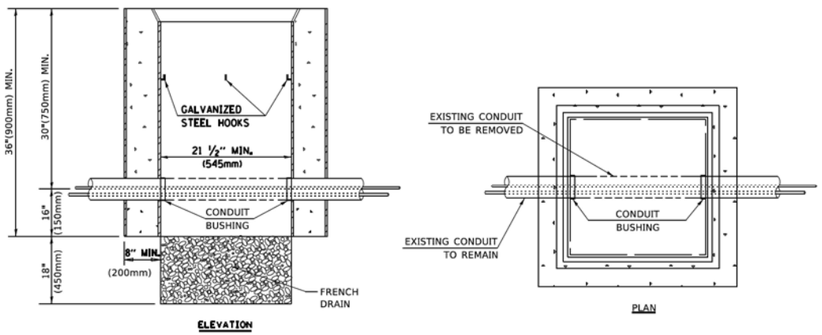
POST CAP MOUNT **MAST ARM MOUNT**

EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	¾"(19 mm) CLOSE NIPPLE
7	¾"(19 mm) LOCKNUT
8	¾"(19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

NOTES:

1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
   ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
   ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4 "(19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



NOTES:

1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

HANDHOLE TO INTERCEPT EXISTING CONDUIT

TS SHT NO.6

MODEL: PR_BRIDGS_RAMP_A - PLAN 1
FILE NAME: C:\TRANSYSTEMS\PW LOCAL\TRANSYSTEMS-PW-011DMS0781616ZR29-SHT-TS-06.DGN

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

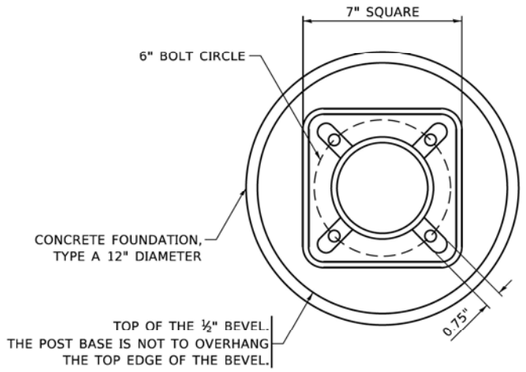
USER NAME = NSALEHIAN		DESIGNED -	NS	REVISED -	
		DRAWN -	NS	REVISED -	
PLOT SCALE = 0.16666667 ' / IN.		CHECKED -	TS	REVISED -	
PLOT DATE = 6/27/2023		DATE -	6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET OF SHEETS | STA. TO STA.

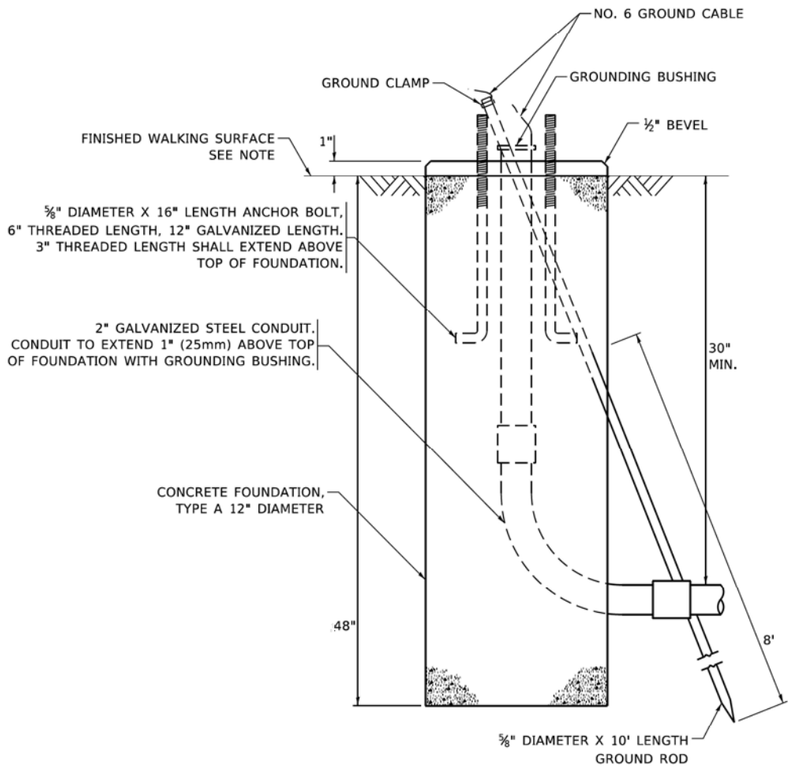
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	575
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			



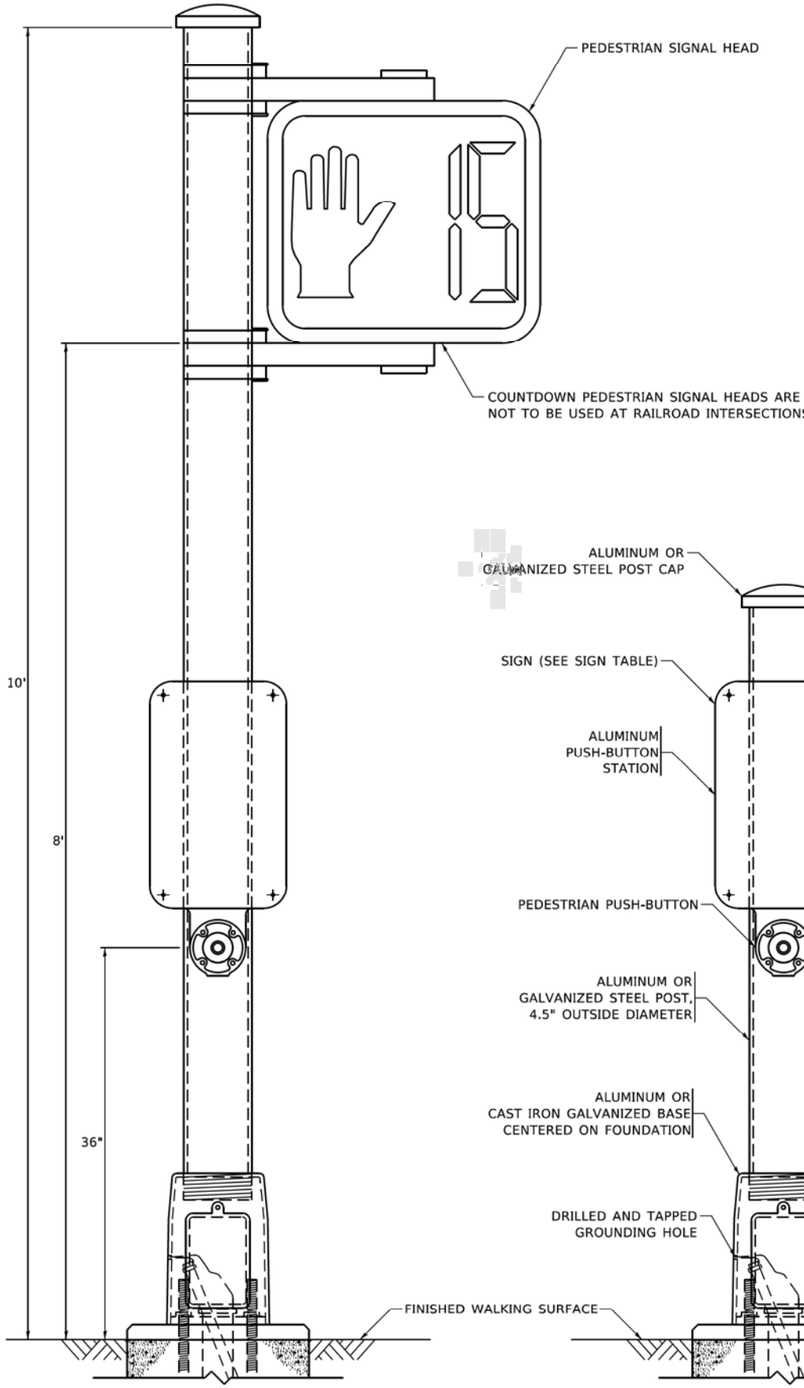
BOLT PATTERN

NOTE:

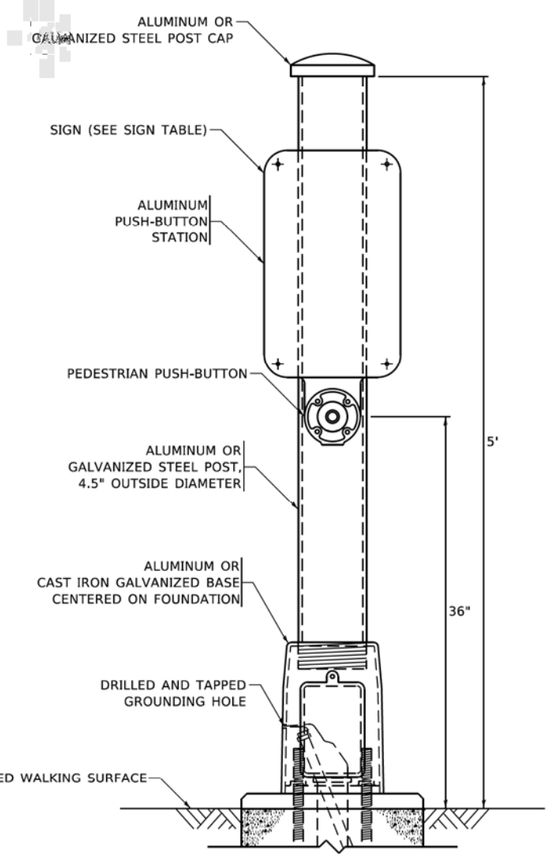
1. IF THE PEDESTRIAN SIGNAL POST FOUNDATION IS INSTALLED WITHIN OR BEHIND A BARRIER CURB, THE TOP OF THE FOUNDATION SHALL BE INSTALLED FLUSH WITH THE TOP OF THE BARRIER CURB.



CONCRETE FOUNDATION, TYPE A 12–INCH DIAMETER



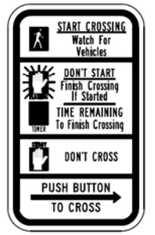
PEDESTRIAN SIGNAL POST, 10 FT.



PEDESTRIAN SIGNAL POST, 5 FT.

R10–3b

R10–3d



R10–3e

SIGN TABLE

SIGN	DIMENSIONS
R10-3b (RAILROAD ONLY)	9" X 12"
R10-3d (RAILROAD ONLY)	9" X 12"
R10-3e	9" X 12"

NOTES:

1. THE SIGN PANELS SHALL BE TYPE AP SHEETING.
2. THE ARROW ON SIGNS FOR PUSH-BUTTONS SERVING TWO DIRECTIONS ON THE SAME PHASE SHALL BE BI-DIRECTIONAL.
3. THE SIGN FOR DUAL-CALL PUSH-BUTTONS SHALL HAVE NO ARROW.

TS SHT NO.7

MODEL: PR_BRIGGS_RAMP_A - PLAN 1
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-011DM507B16628\29-SHT-TS-07.DGN

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

USER NAME = NSALEHIAN		DESIGNED -	NS	REVISED -	
		DRAWN -	NS	REVISED -	
PLOT SCALE = 0.16666667 ' / IN.		CHECKED -	TS	REVISED -	
PLOT DATE = 6/27/2023		DATE -	6/29/2023	REVISED -	

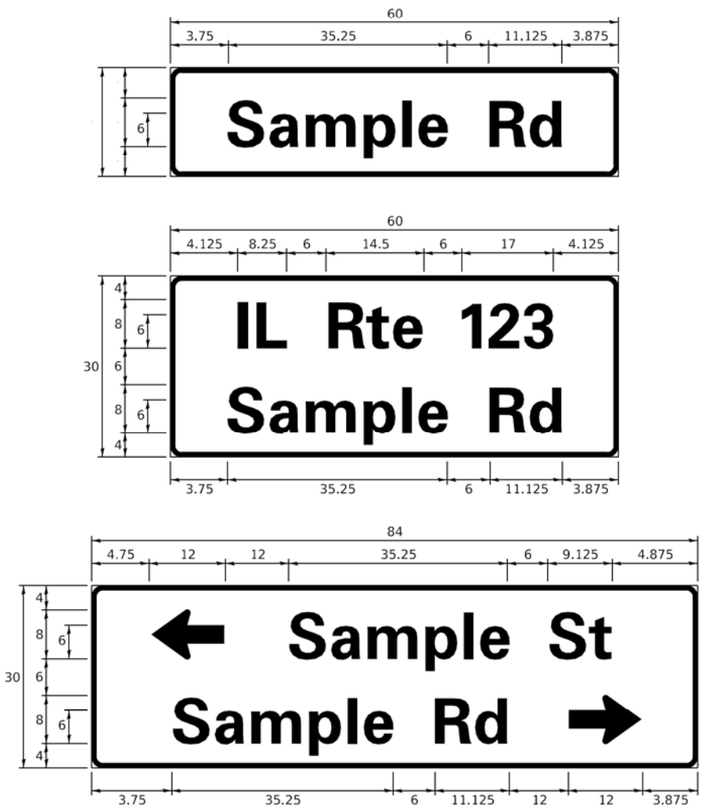
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	576
		CONTRACT NO. 62R29		
	ILLINOIS	FED. AID PROJECT		

SIGN PANEL – TYPE 1 OR TYPE 2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D OR C	-	1 OR 2	ZZ	-

COMMON STREET NAME ABBREVIATIONS AND WIDTHS

NAME	ABBREVATION	WIDTH (INCH)	
		SERIES "C"	SERIES "D"
AVENUE	Ave	15.000	18.250
BOULEVARD	Blvd	17.125	20.000
CIRCLE	Cir	11.125	13.000
COURT	Ct	8.250	9.625
DRIVE	Dr	8.625	10.125
HIGHWAY	Hwy	18.375	22.000
ILLINOIS	IL	7.000	8.250
LANE	Ln	9.125	10.750
PARKWAY	Pkwy	23.375	27.375
PLACE	Pl	7.125	7.750
ROAD	Rd	9.625	11.125
ROUTE	Rte	12.625	14.500
STREET	St	8.000	9.125
TERRACE	Ter	12.625	14.625
TRAIL	Tr	7.750	9.125
UNITED STATES	US	10.375	12.250

GENERAL NOTES

1. WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 8'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
2. ALL SIGNS SHALL CONSIST OF A WHITE LEGEND AND BORDER (TYPE ZZ SHEETING) ON A GREEN BACKGROUND (TYPE ZZ SHEETING)
3. THE SIGN LENGTH SHALL BE IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHALL NOT EXCEED 8'-0". ALL BORDERS IF POSSIBLE, BUT MAY BE REDUCED TO 5" WHEN SPACING IS CRITICAL. A MINIMUM OF 2-1/2" SHALL BE INCLUDED BETWEEN THE WORD AND THE RIGHT AND LEFT EDGES OF THE SIGN.
4. A PREFERRED METHOD FOR THE SIGN DESIGN IS TO USE SERIES "D" LETTER ON A ONE-LINE SIGN 18" IN HEIGHT AND A MAXIMUM OF 8'-0" IN WIDTH. IF SERIES "D" DOES NOT FIT ON A 8"-0" SIGN, THEN SERIES "C" SHOULD BE TRIED. IF SERIES "C" DOES NOT FIT ON A 8'-0" SIGN, A 30" HIGH TWO-LINE SIGN CAN BE USED. THE CROSSROAD DESIGNATION AS TO STREET, AVENUE, ETC. SHOULD BE SPELLED OUT ON THE SECOND LINE, IF THE ABBREVIATION CANNOT FIT ON THE FIRST LINE.
5. LED ILLUMINATED STREET NAME SIGNS CAN BE USED IN PLACE OF REGULAR SIGN PANELS BUT ANY SPECIAL WORDING AND SYMBOLOGY MUST BE APPROVED BY THE DEPARTMENT. GENERAL DESIGN REQUIREMENT AS LISTED ABOVE (COLOR, FONT, SIZE, ETC.) MUST BE FOLLOWED.
6. SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS.

LOCAL SUPPLIERS:

- J.O. HERBERT COMPANY, INC MIDLOTHIAN, VA
- WESTERN REMAC, INC. WOODRIDGE, IL

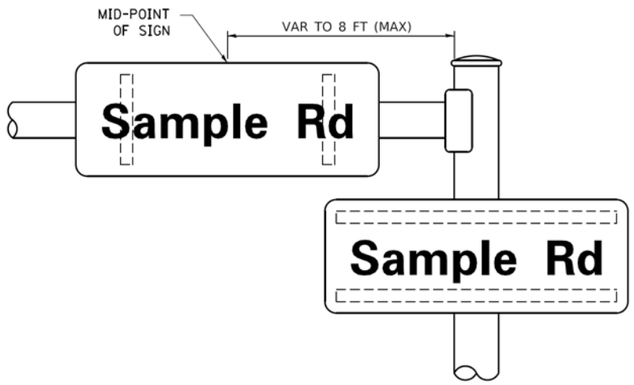
PARTS LISTING:

SIGN CHANNEL	PART #HPN053 (MED. CHANNEL)
SIGN SCREWS	1/4" x 14 x 1" H.W.H. #3 SELF TAPPING WITH NEOPRENE WASHER
BRACKETS	PART #HPN034 (UNIVERSAL) CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

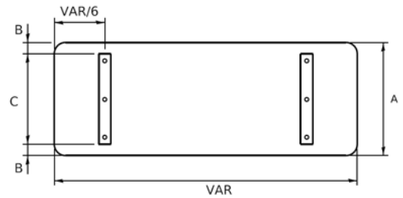
OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BRACKET OF THE ABOVE PRODUCT.

MOUNTING LOCATION

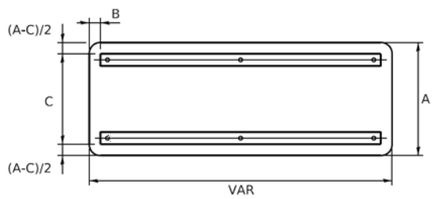
ARM OR POLE MOUNTED



SUPPORTING CHANNELS



A	B	C
18"	2"	14"
30"	2"	24"



A	B	C
18"	2"	12"
30"	2"	22"

STANDARD ALPHABETS SPACING CHART

(8") UPPER CASE AND (6") LOWER CASE

FHWA SERIES "C"				FHWA SERIES "D"			
CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)	CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)
A	0.240	5.122	0.240	A	0.240	6.804	0.240
B	0.880	4.482	0.480	B	0.960	5.446	0.400
C	0.720	4.482	0.720	C	0.800	5.446	0.800
D	0.880	4.482	0.720	D	0.960	5.446	0.800
E	0.880	4.082	0.480	E	0.960	4.962	0.400
F	0.880	4.082	0.240	F	0.960	4.962	0.240
G	0.720	4.482	0.720	G	0.800	5.446	0.800
H	0.880	4.482	0.880	H	0.960	5.446	0.960
I	0.880	1.120	0.880	I	0.960	1.280	0.960
J	0.240	4.082	0.880	J	0.240	5.122	0.960
K	0.880	4.482	0.480	K	0.960	5.604	0.400
L	0.880	4.082	0.240	L	0.960	4.962	0.240
M	0.880	5.284	0.880	M	0.960	6.244	0.960
N	0.880	4.482	0.880	N	0.960	5.446	0.960
O	0.720	4.722	0.720	O	0.800	5.684	0.800
P	0.880	4.482	0.720	P	0.960	5.446	0.240
Q	0.720	4.722	0.720	Q	0.800	5.684	0.800
R	0.880	4.482	0.480	R	0.960	5.446	0.400
S	0.480	4.482	0.480	S	0.400	5.446	0.400
T	0.240	4.082	0.240	T	0.240	4.962	0.240
U	0.880	4.482	0.880	U	0.960	5.446	0.960
V	0.240	4.962	0.240	V	0.240	6.084	0.240
W	0.240	6.084	0.240	W	0.240	7.124	0.240
X	0.240	4.722	0.240	X	0.400	5.446	0.400
Y	0.240	5.122	0.240	Y	0.240	6.884	0.240
Z	0.480	4.482	0.480	Z	0.400	5.446	0.400
a	0.320	3.842	0.640	a	0.400	4.562	0.720
b	0.720	4.082	0.480	b	0.800	4.802	0.480
c	0.480	4.002	0.240	c	0.480	4.722	0.240
d	0.480	4.082	0.720	d	0.480	4.802	0.800
e	0.480	4.082	0.320	e	0.480	4.722	0.320
f	0.320	2.480	0.160	f	0.320	2.882	0.160
g	0.480	4.082	0.720	g	0.480	4.802	0.800
h	0.720	4.082	0.640	h	0.800	4.722	0.720
i	0.720	1.120	0.720	i	0.800	1.280	0.800
j	0.000	2.320	0.720	j	0.000	2.642	0.800
k	0.720	4.322	0.160	k	0.800	5.122	0.160
l	0.720	1.120	0.720	l	0.800	1.280	0.800
m	0.720	6.724	0.640	m	0.800	7.926	0.720
n	0.720	4.082	0.640	n	0.800	4.722	0.720
o	0.480	4.082	0.480	o	0.480	4.882	0.480
p	0.720	4.082	0.480	p	0.800	4.802	0.480
q	0.480	4.082	0.720	q	0.480	4.802	0.800
r	0.720	2.642	0.160	r	0.800	3.042	0.160
s	0.320	3.362	0.240	s	0.320	3.762	0.240
t	0.080	2.882	0.080	t	0.080	3.202	0.080
u	0.640	4.082	0.720	u	0.720	4.722	0.800
v	0.160	4.722	0.160	v	0.160	5.684	0.160
w	0.160	7.524	0.160	w	0.160	9.046	0.160
x	0.000	5.202	0.000	x	0.000	6.244	0.000
y	0.160	4.962	0.160	y	0.160	6.004	0.160
z	0.240	3.362	0.240	z	0.240	4.002	0.240
1	0.720	1.680	0.880	1	0.800	2.000	0.960
2	0.480	4.482	0.480	2	0.800	5.446	0.800
3	0.480	4.482	0.480	3	1.440	5.446	0.800
4	0.240	4.962	0.720	4	0.160	6.004	0.960
5	0.480	4.482	0.480	5	0.800	5.446	0.800
6	0.720	4.482	0.720	6	0.800	5.446	0.800
7	0.240	4.482	0.720	7	0.560	5.446	0.560
8	0.480	4.482	0.480	8	0.800	5.446	0.800
9	0.480	4.482	0.480	9	0.800	5.446	0.800
0	0.720	4.722	0.720	0	0.800	5.684	0.800
-	0.240	2.802	0.240	-	0.240	2.802	0.240

TS SHT NO.8

MODEL: PR_BRIGGS_RAMP_A - PLAN 1
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-031DMS07816\62R29-SHT-TS-08.DGN

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

USER NAME = NSALEHIAN	DESIGNED - NS	REVISED -	
	DRAWN - NS	REVISED -	
PLOT SCALE = 0.16666667 ' / IN.	CHECKED - TS	REVISED -	
PLOT DATE = 6/27/2023	DATE - 6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET | OF | SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	577
		CONTRACT NO. 62R29		
	ILLINOIS	FED. AID PROJECT		

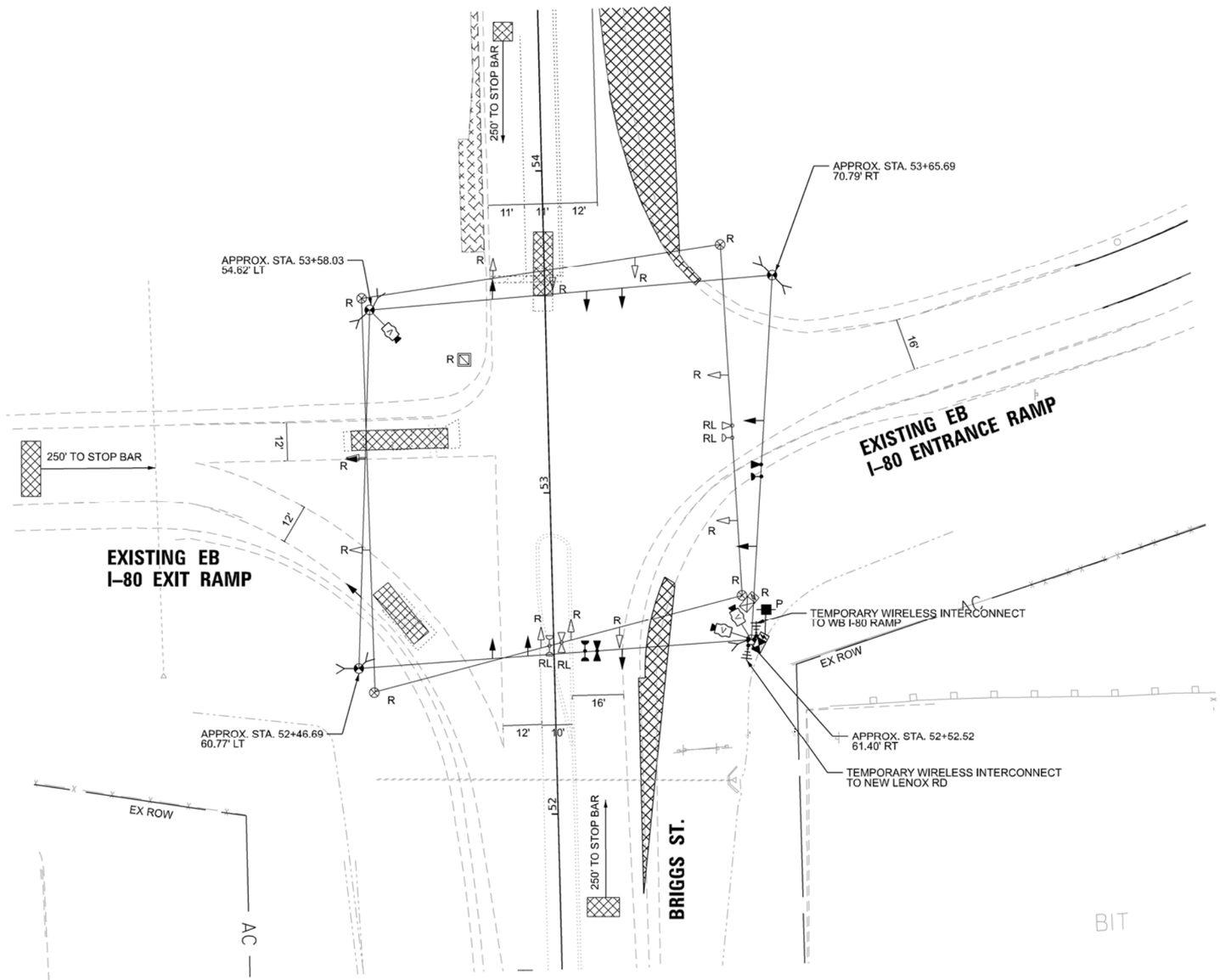
REMOVAL AND RELOCATION NOTES:

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

1	EACH	TEMPORARY CONTROLLER AND CABINET
4	EACH	TEMPORARY WOOD POLE
6	EACH	TEMPORARY 3-SECTION SIGNAL HEAD
2	EACH	TEMPORARY 4-SECTION SIGNAL HEAD
2	EACH	TEMPORARY 5-SECTION SIGNAL HEAD
1	EACH	SERVICE INSTALLATION
1	EACH	UPS

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR, SAFELY STORED AND RELOCATED TO THE PROPOSED MAST ARMS AND TRAFFIC SIGNAL CONTROLLER:

2	EACH	CONFIRMATION BEACON
2	EACH	LIGHT DETECTOR
1	EACH	LIGHT DETECTOR AMPLIFIER



TS SHT NO.9

MODEL: PR_BRIGGS_RAMP_A - PLAN 1
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-01\DMS07B16\62R29-SHT-TS-09A.DGN

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

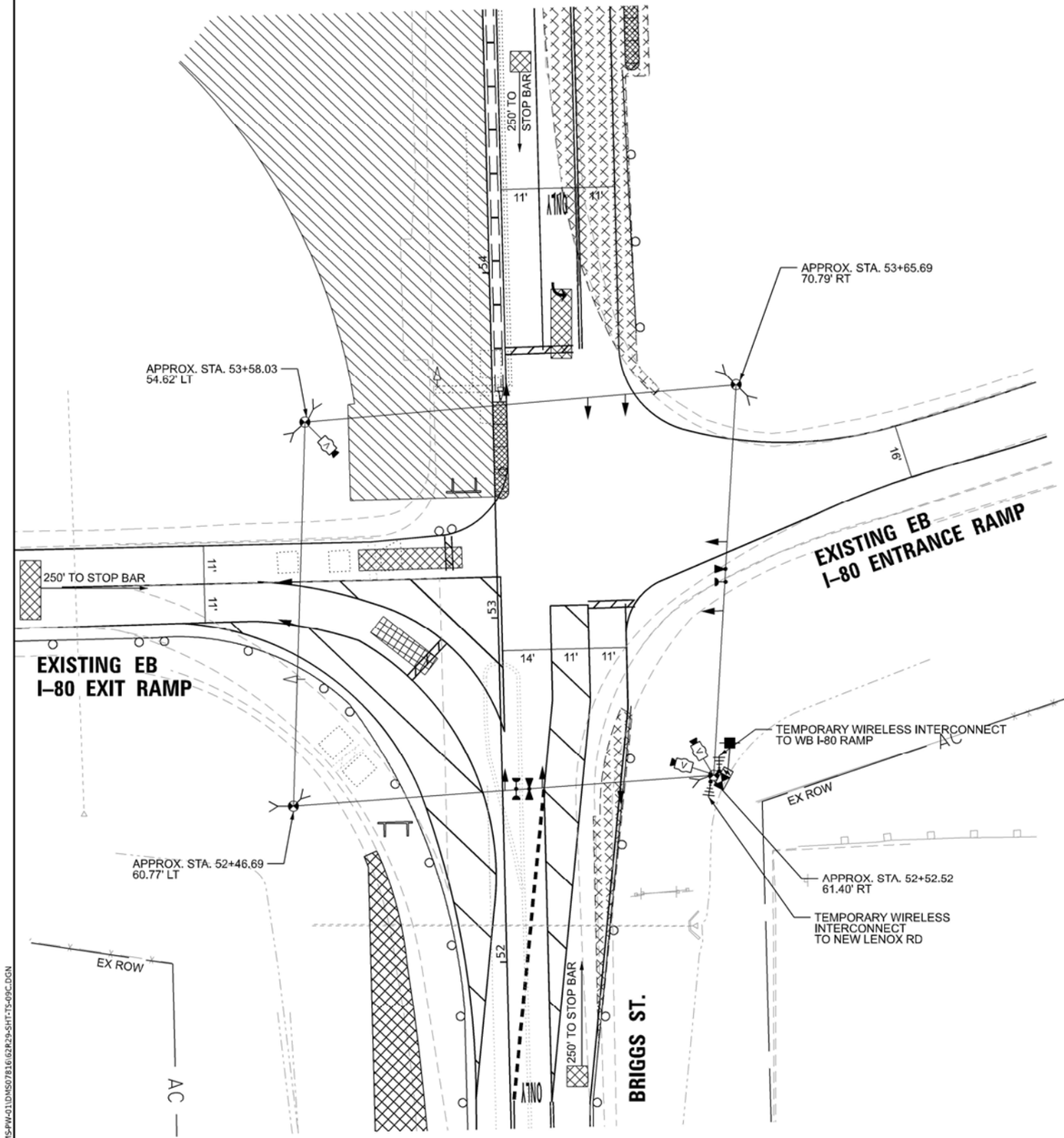
USER NAME = NSALEHIAN		DESIGNED - NS		REVISED -	
		DRAWN - NS		REVISED -	
PLOT SCALE = 0.16666667 ' / IN.		CHECKED - TS		REVISED -	
PLOT DATE = 6/27/2023		DATE - 6/29/2023		REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

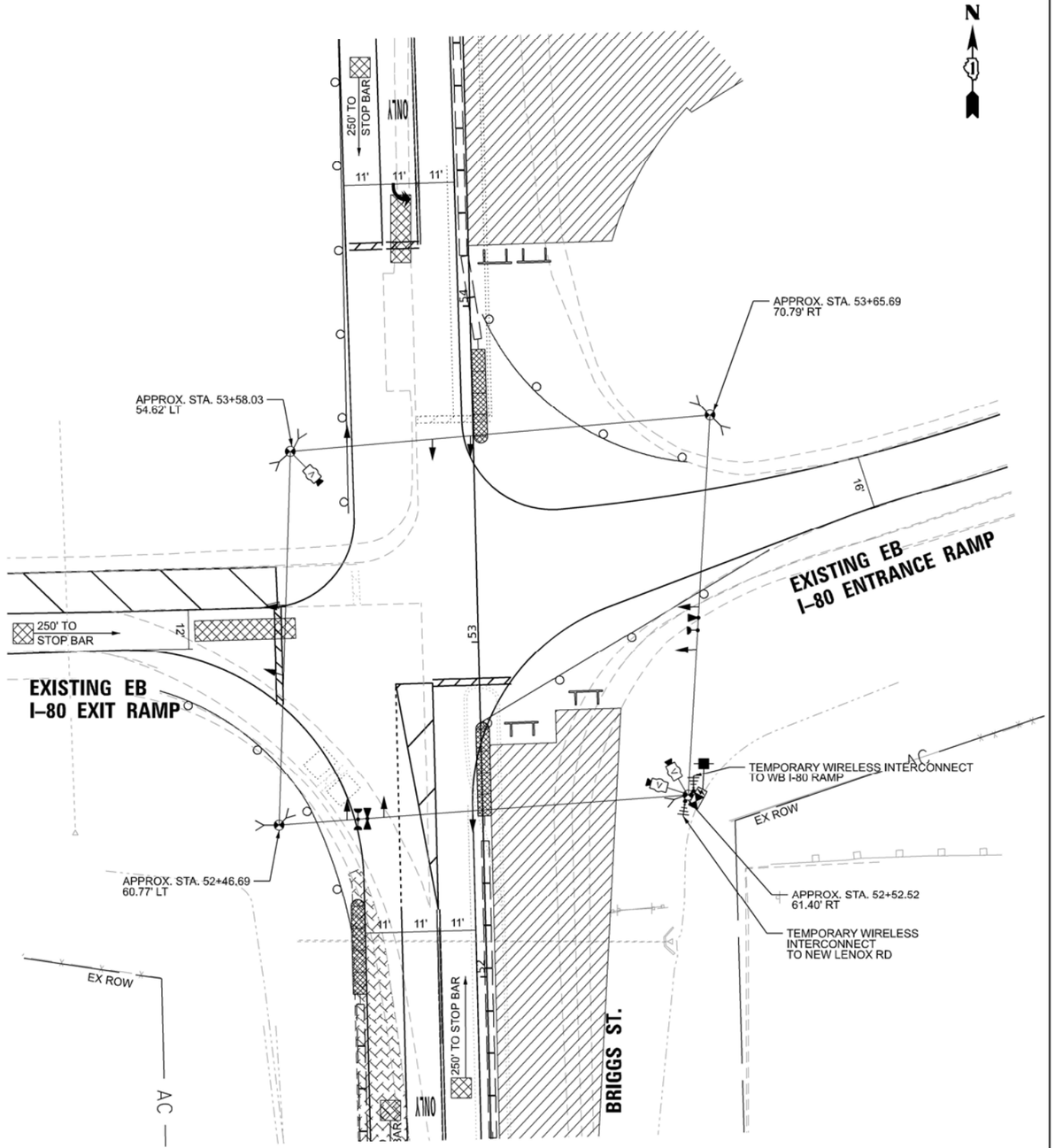
TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN(PRE-STAGE&STAGE 1A) AND REMOVE EX. TRAFFIC SIGNAL EQUIPMENT- BRIGGS ST/I-80 EB RAMP

SCALE: 1"=20' | SHEET OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	578
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			



TEMPORARY TRAFFIC SIGNAL PLAN
STAGE 1



TEMPORARY TRAFFIC SIGNAL PLAN
STAGE 2

TS SHT NO.10

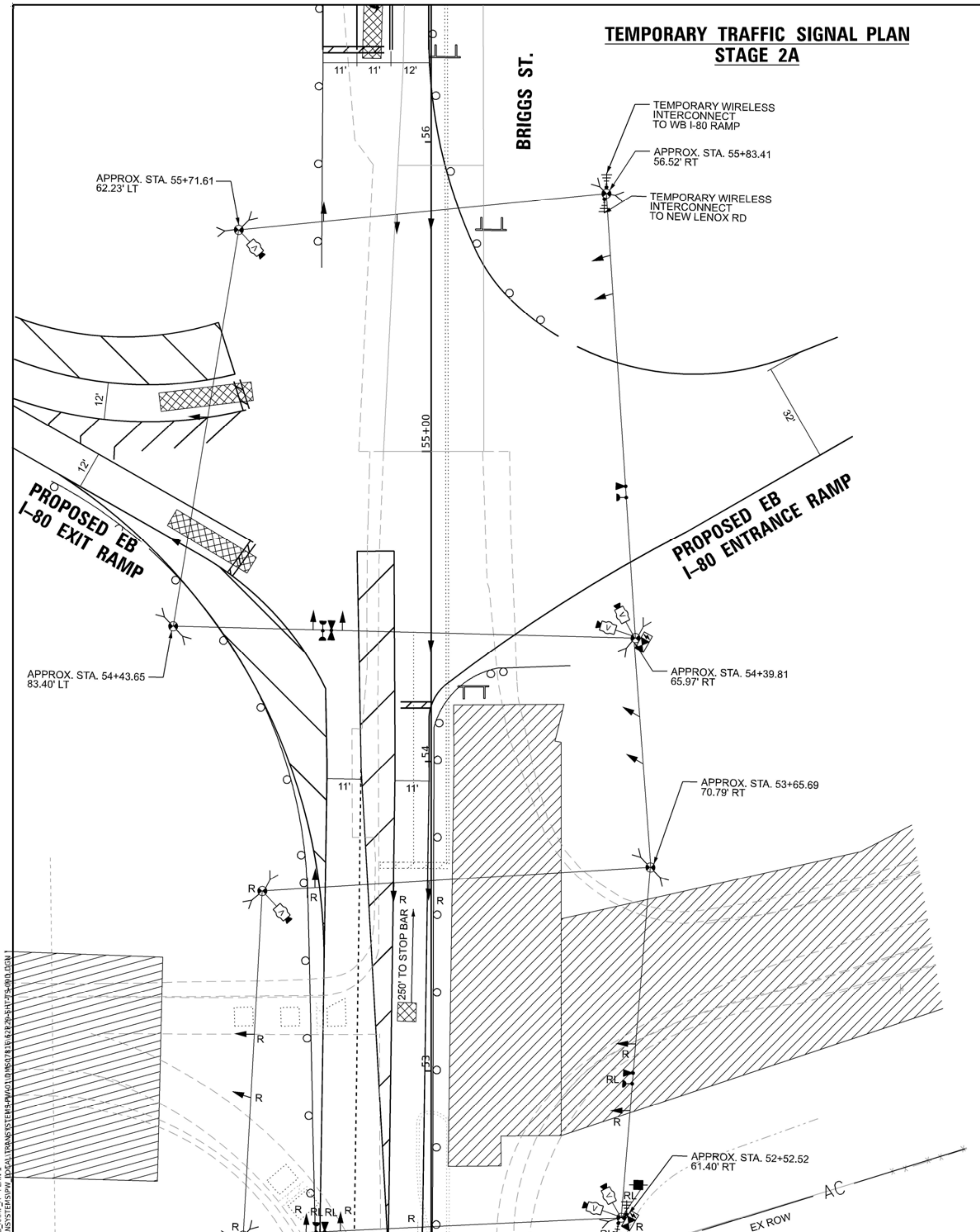
MODEL: PR_BRIGGS_RAMP_A - PLAN 1
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-011DM507816\62R29-SHT-TS-09C.DGN

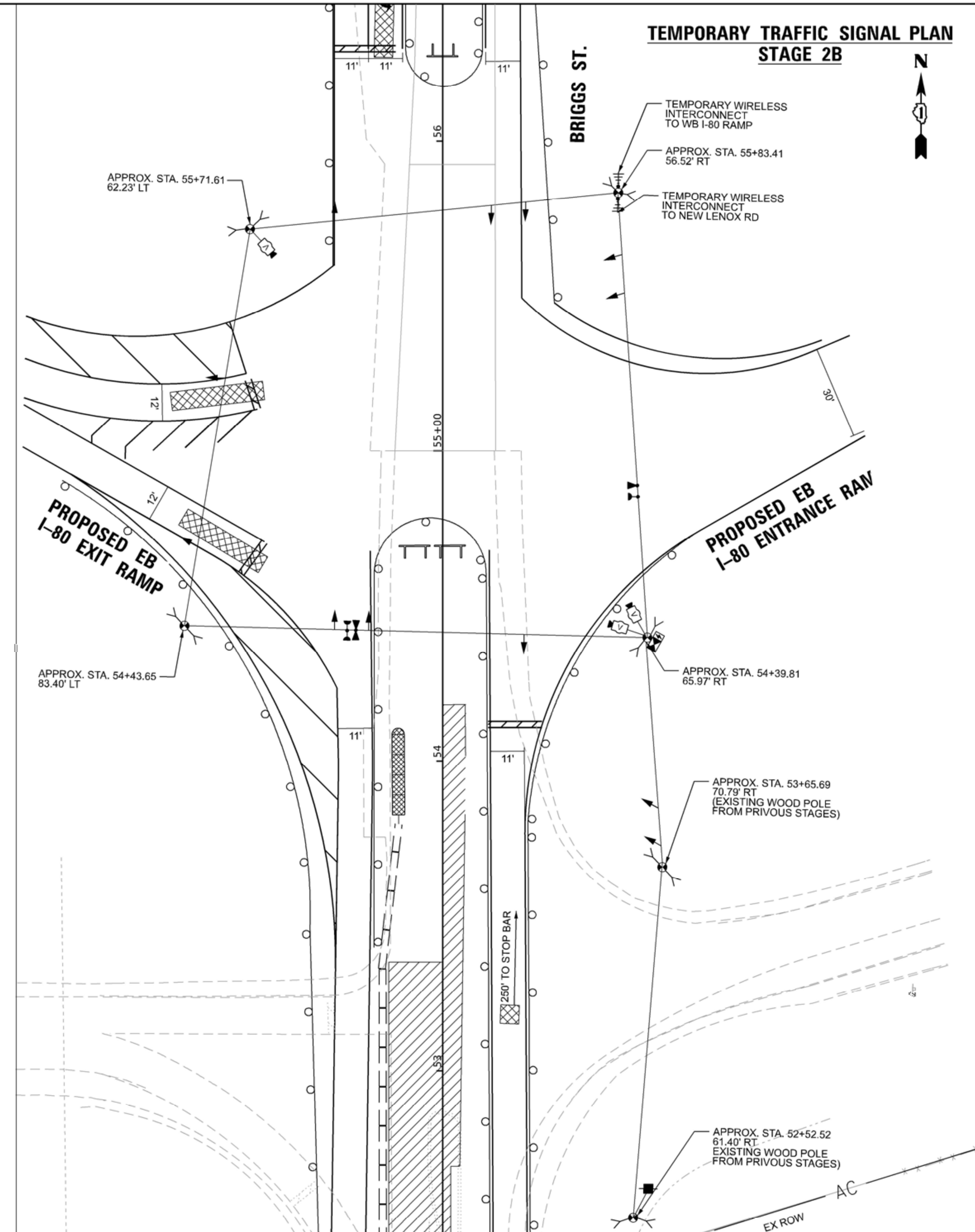
TranSmart 100 S. Wacker Drive Suite 400 Chicago, Illinois 60606	USER NAME = NSALEHIAN	DESIGNED - NS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		DRAWN - NS	REVISED -	
	PLOT SCALE = 0.16666633 ' / IN.	CHECKED - TS	REVISED -	
	PLOT DATE = 6/27/2023	DATE - 6/29/2023	REVISED -	

TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN (STAGE 1 & 2)
BRIGGS ST/I–80 EB RAMP

SCALE: 1"=20' | SHEET OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	579
		CONTRACT NO. 62R29		
	ILLINOIS	FED. AID PROJECT		





TS SHT NO.11

MODEL: PR_BRIGGS_RAMP_A - PLAN 1
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW01\D0507816\62R29-SHT-TS-010.DGN

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

USER NAME = NSALEHIAN	DESIGNED - NS	REVISED -	
	DRAWN - NS	REVISED -	
PLOT SCALE = 0.16666633 ' / IN.	CHECKED - TS	REVISED -	
PLOT DATE = 6/27/2023	DATE - 6/29/2023	REVISED -	

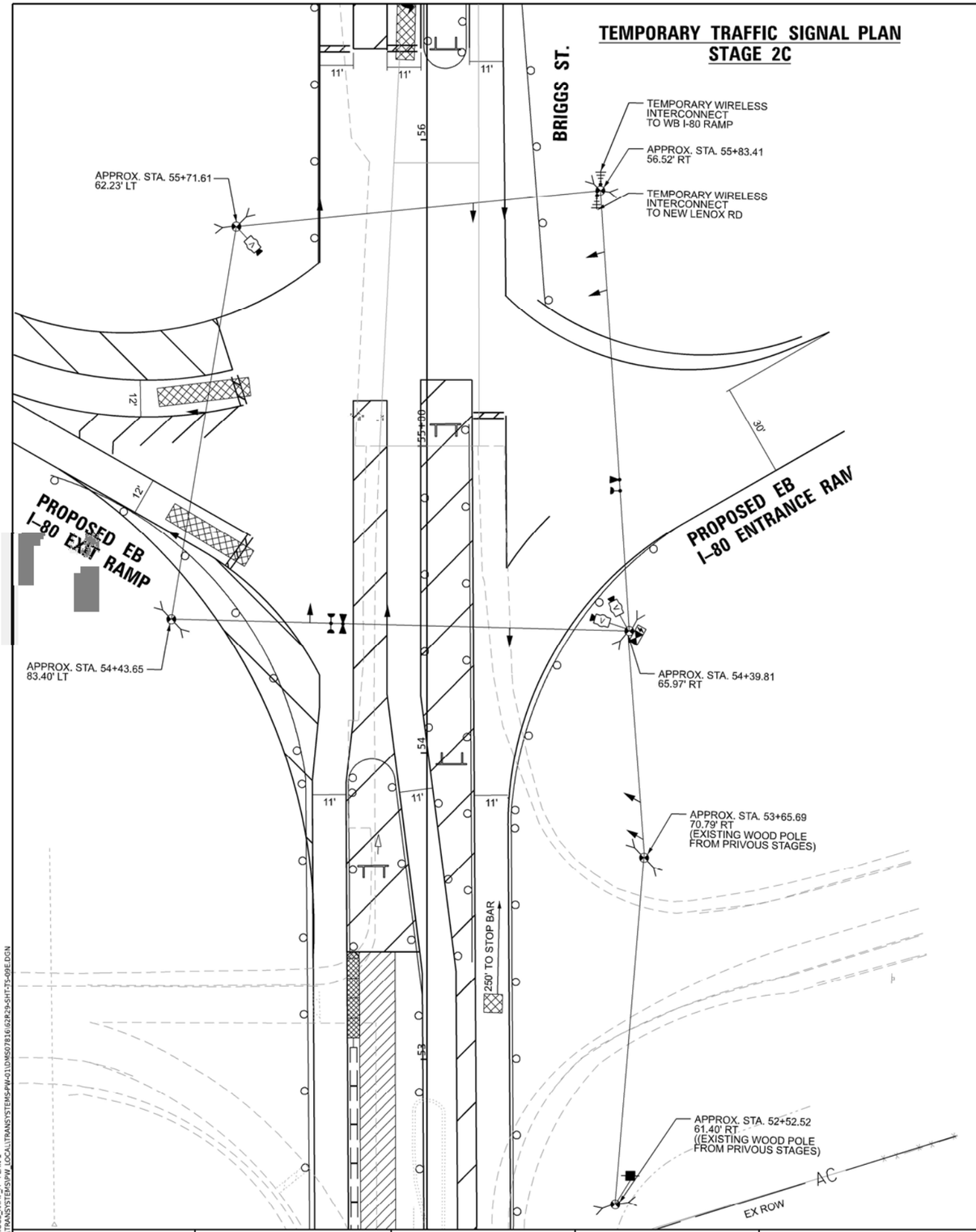
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN (STAGE 2A & 2B)
BRIGGS ST/I-80 EB RAMP

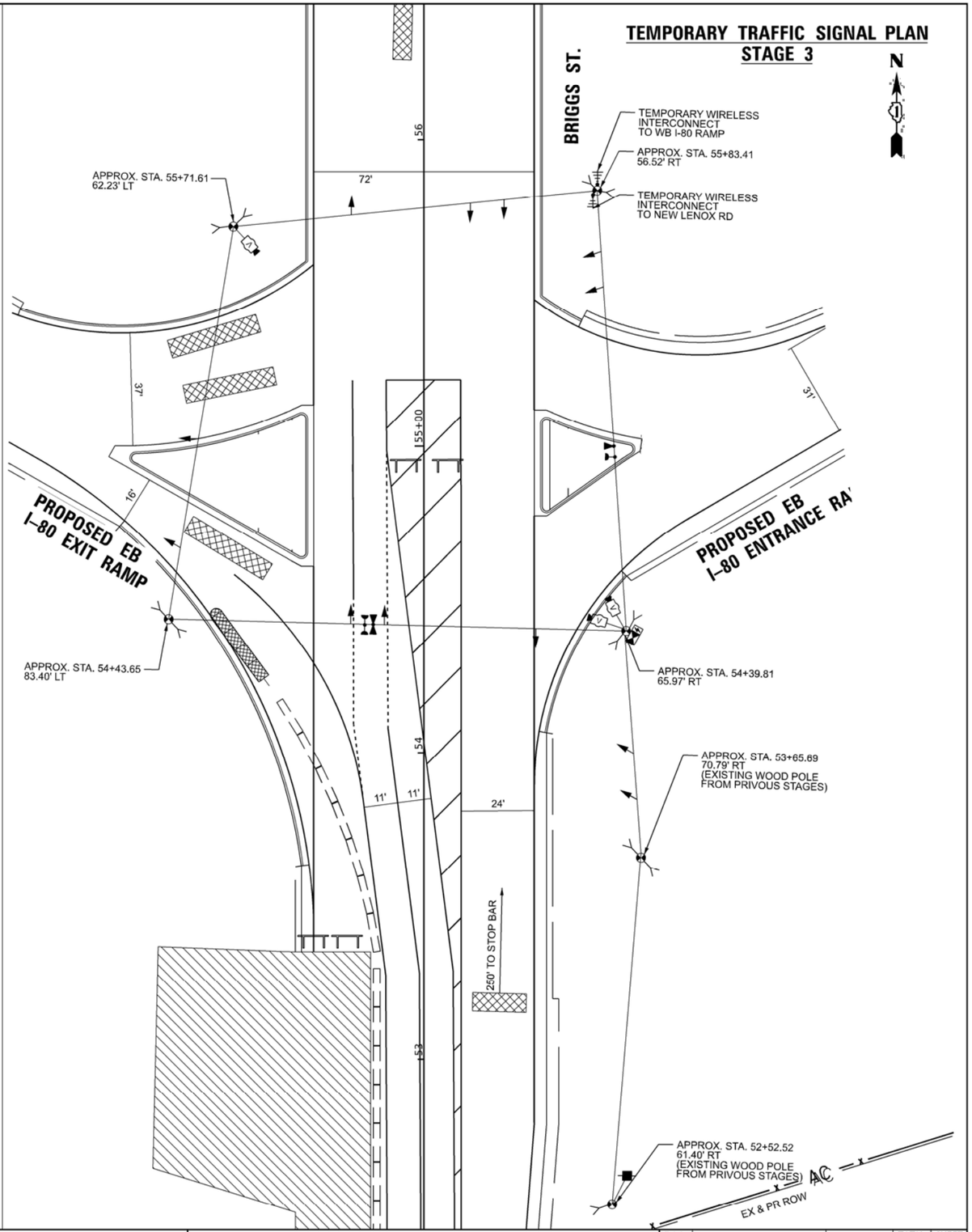
SCALE: 1"=20' | SHEET OF SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	580
		CONTRACT NO. 62R29		
		ILLINOIS FED. AID PROJECT		

TEMPORARY TRAFFIC SIGNAL PLAN
STAGE 2C



TEMPORARY TRAFFIC SIGNAL PLAN
STAGE 3



TS SHT NO.12

MODEL: PR_BRIGGS_RAMP_A - PLAN 1
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-01\DMS07816\62R29-SHT-TS-09E.DGN

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

USER NAME	= NSALEHIAN	DESIGNED	- NS	REVISED	-
		DRAWN	- NS	REVISED	-
PLOT SCALE	= 0.16666633 ' / IN.	CHECKED	- TS	REVISED	-
PLOT DATE	= 6/27/2023	DATE	- 6/29/2023	REVISED	-

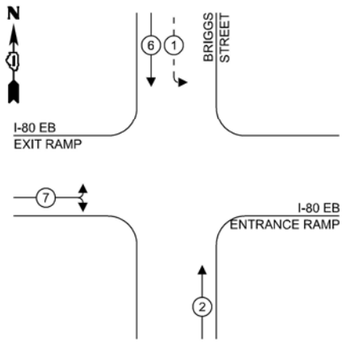
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN (STAGE 2C & 3)
BRIGGS ST/I-80 EB RAMP

SCALE: 1"=20' | SHEET OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	581
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			

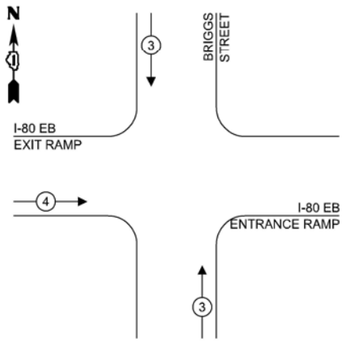
TEMPORARY CONTROLLER SEQUENCE



LEGEND:

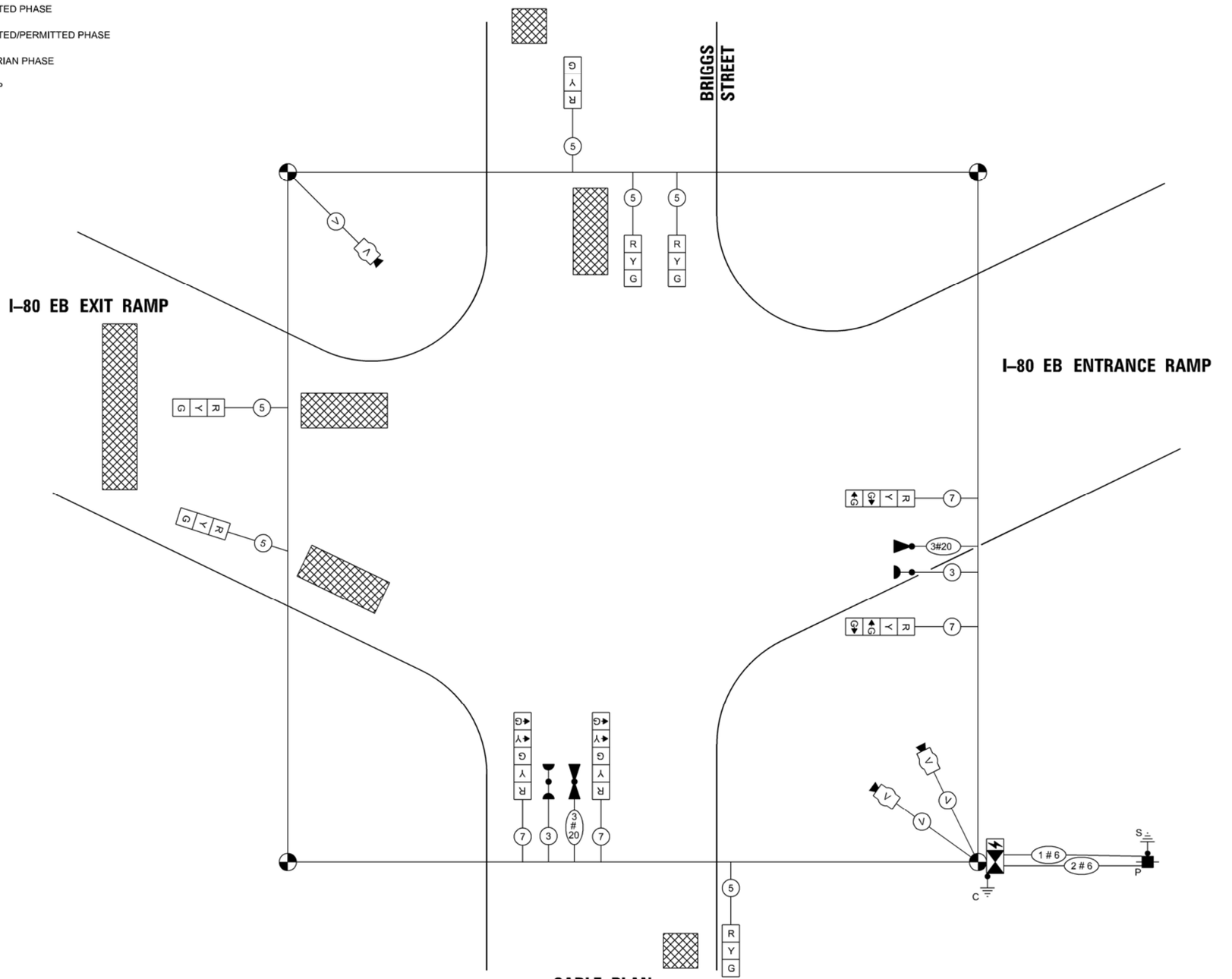
- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OL — OVERLAP

TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE



TRAFFIC SIGNAL ELECTRIC SERVICE REQUIREMENTS			
TYPE	QUANTITY	UNIT	Total
SIGNAL HEAD 3 - SECTION	6	11	66
4 - SECTION	2	14	28
5 - SECTION	2	13	26
PROGRAMMABLE SIGNAL HEAD			
3 - SECTION		22	
4 - SECTION		32	
5 - SECTION		28	
PED. SIGNAL		15	
CONTROLLER	1	150	150
MASTER CONTROLLER		100	
UPS	1	25	25
DETECTION RADAR		20	
VIDEO	1	20	20
BLANK-OUT SIGN		25	
NETWORK SWITCH II OR III		35	
CELLULAR MODEM		15	
TOTAL UPS SIZING			315
UPS CHARGING		225	
BATTERY HEATER MAT		180	
CABINET HEATER		200	
FLASHER		15	
LED STREET NAME SIGN		120	
LUMINAIRE		240	
TOTAL SERVICE WIRE SIZING			315

ENERGY COST TO:
ILLINOIS DEPARTMENT OF TRANSPORTATION
201 W CENTER CT
SCHAUMBURG, IL 60196
ENERGY SUPPLY:
CONTACT: COMED
PHONE: (630)424-5704
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER:



CABLE PLAN (PRE–STAGE , STAGE 1, 1A, AND 2)

(NOT TO SCALE)

TS 7393
FORMER ECON 134
IDOT CENTRACS

TS SHT NO.13

MODEL: PR_BRIGGS_RAMP_A - PLAN 1
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-011DM507816 (62R29-SHT-TS-9B.DGN

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

USER NAME = NSALEHIAN	DESIGNED - NS	REVISED -	
	DRAWN - NS	REVISED -	
PLOT SCALE = 0.16666633 ' / IN.	CHECKED - TS	REVISED -	
PLOT DATE = 6/27/2023	DATE - 6/29/2023	REVISED -	

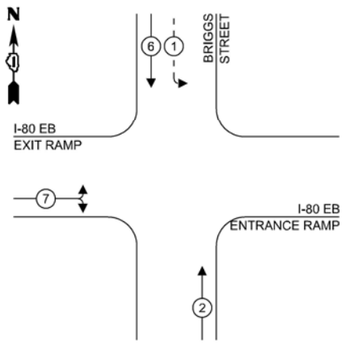
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLANS, PHASE DESIGNATION DIAGRAM AND VEHICLE PREEMP SEQUENCE–BRIGGS ST AND I–80 EB EXIT/ENT. RAMP

SCALE: NONE | SHEET OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	582
		CONTRACT NO. 62R29		
		ILLINOIS FED. AID PROJECT		

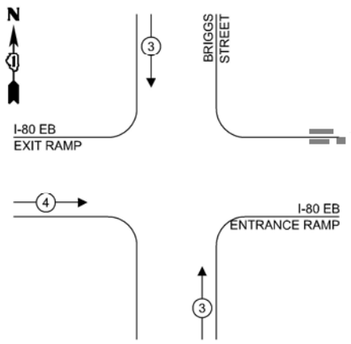
TEMPORARY CONTROLLER SEQUENCE



LEGEND:

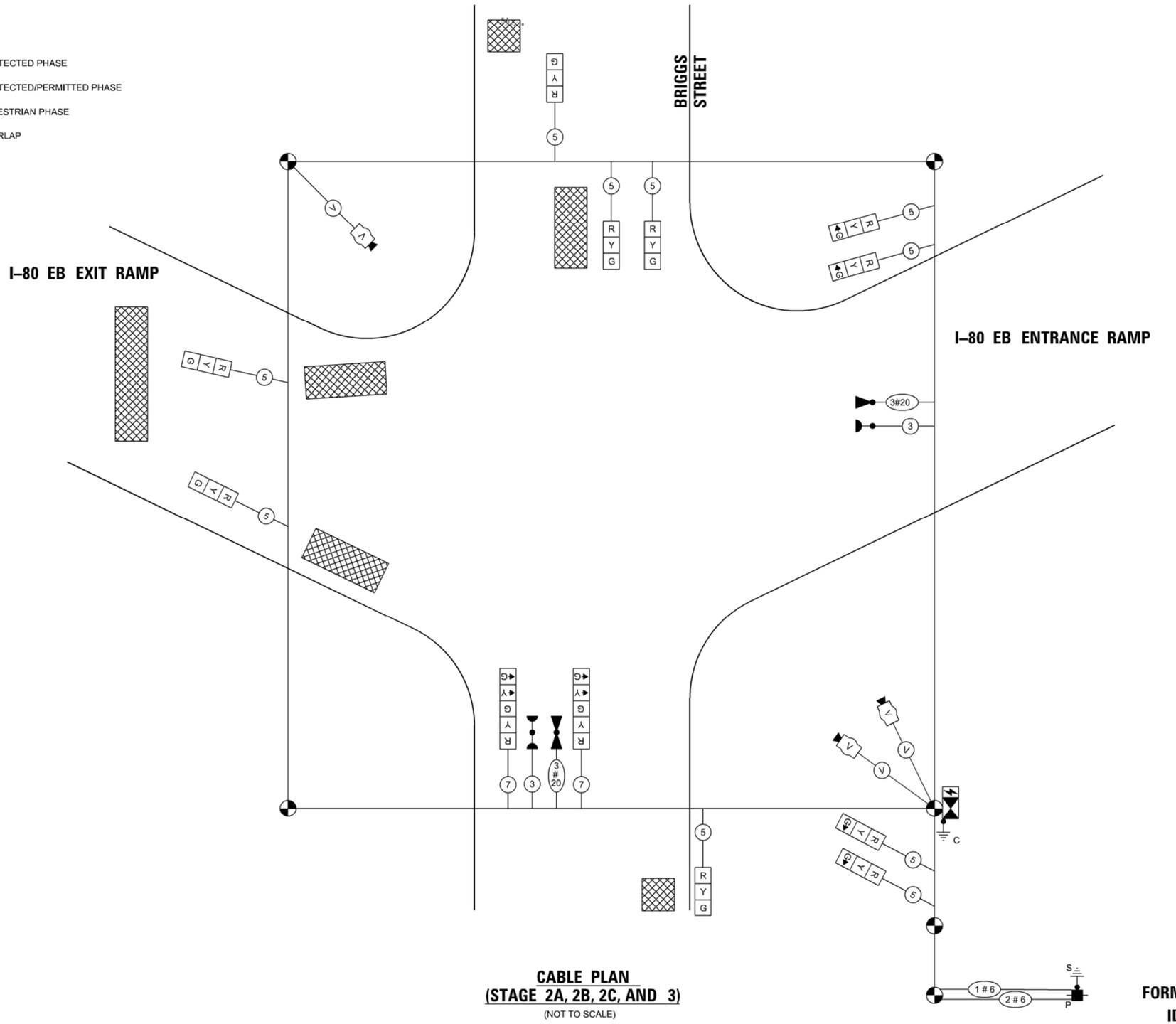
- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OL — OVERLAP

TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE



TRAFFIC SIGNAL ELECTRIC SERVICE REQUIREMENTS			
TYPE	QUANTITY	UNIT	TOTAL
SIGNAL HEAD 3 - SECTION	10	11	110
4 - SECTION		14	
5 - SECTION	2	13	26
PROGRAMMABLE SIGNAL HEAD			
3 - SECTION		22	
4 - SECTION		32	
5 - SECTION		28	
PED. SIGNAL		15	
CONTROLLER	1	150	150
MASTER CONTROLLER		100	
UPS	1	25	25
DETECTION RADAR		20	
VIDEO	1	20	20
BLANK-OUT SIGN		25	
NETWORK SWITCH II OR III		35	
CELLULAR MODEM		15	
TOTAL UPS SIZING			331
UPS CHARGING		225	
BATTERY HEATER MAT		180	
CABINET HEATER		200	
FLASHER		15	
LED STREET NAME SIGN		120	
LUMINAIRE		240	
TOTAL SERVICE WIRE SIZING			331

ENERGY COST TO:
ILLINOIS DEPARTMENT OF TRANSPORTATION
201 W CENTER CT
SCHAUMBURG, IL 60196
ENERGY SUPPLY:
CONTACT: COMED
PHONE: (630)424-5704
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER:



CABLE PLAN (STAGE 2A, 2B, 2C, AND 3)

(NOT TO SCALE)

TS SHT NO.14

MODEL: PR_BRIGGS_RAMP_A - PLAN 1
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS+PW-01\DMS07816\62R29-SHT-TS-9F.DGN

TS 7393
FORMER ECON 134
IDOT CENTRACS

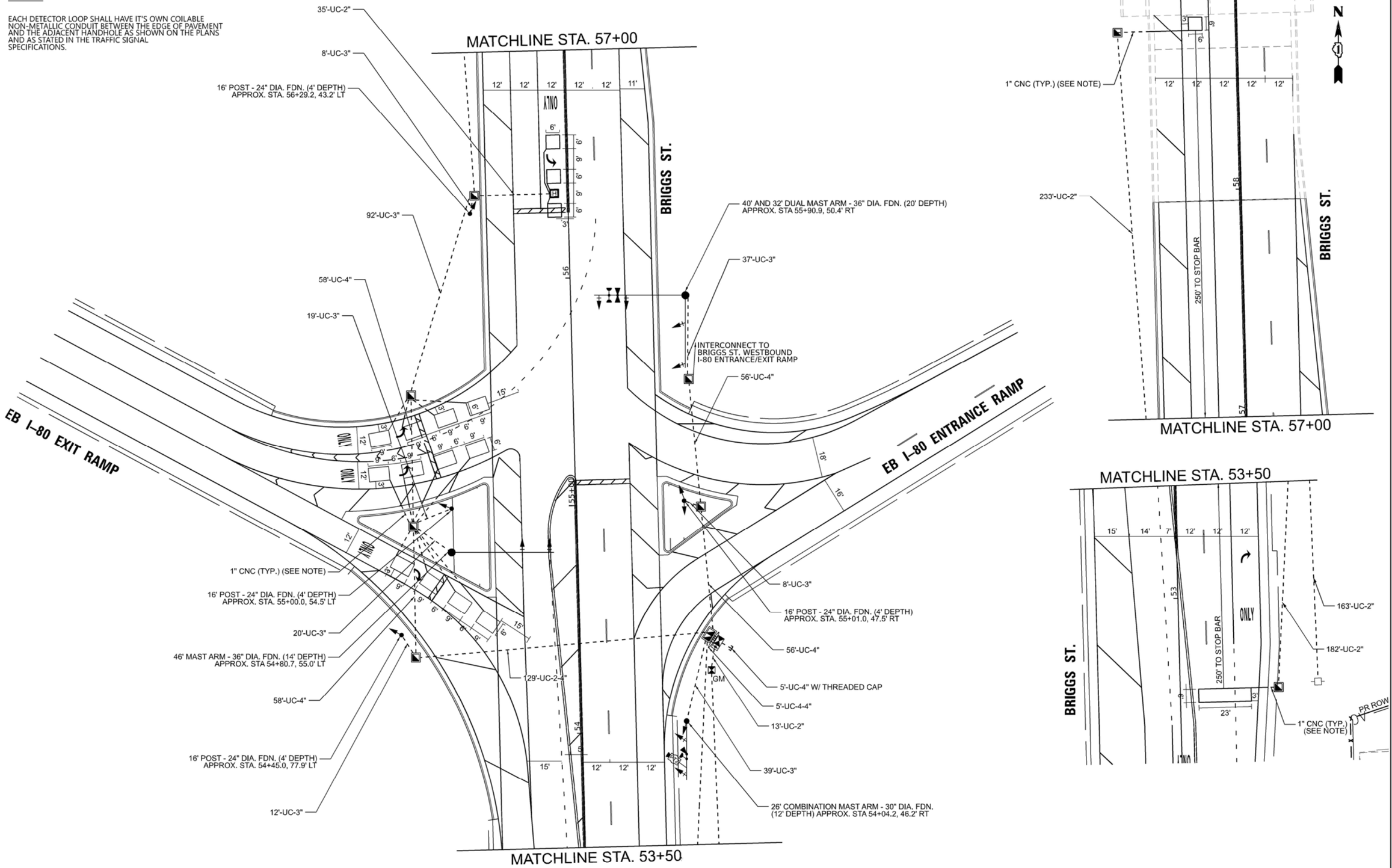
TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

USER NAME = NSALEHIAN	DESIGNED - NS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY CABLE PLANS, PHASE DESIGNATION DIAGRAM AND VEHICLE PREEMP SEQUENCE–BRIGGS ST AND I–80 EB EXIT/ENT. RAMP	
	DRAWN - NS	REVISED -			
PLOT SCALE = 0.16666633 ' / IN.	CHECKED - TS	REVISED -			
PLOT DATE = 6/27/2023	DATE - 6/29/2023	REVISED -		SCALE: NONE SHEET OF SHEETS STA. TO STA.	

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	583
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			

NOTE:

EACH DETECTOR LOOP SHALL HAVE IT'S OWN COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.



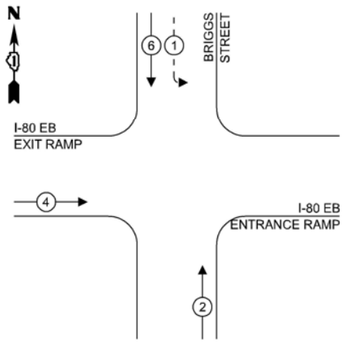
TS SHT NO.15

MODEL: PR_BRIGGS_RAMP_A - PLAN 1
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-01\DMS07816\62R29-SHT-TS-09.DGN

TranSmart 100 S. Wacker Drive Suite 400 Chicago, Illinois 60606	USER NAME = NSALEHIAN	DESIGNED - NS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL INSTALLATION PLAN EASTBOUND I-80 EXIT/ENTRANCE RAMP AND BRIGGS ST
		DRAWN - NS	REVISED -		
	PLOT SCALE = 0.16666667 ' / IN.	CHECKED - TS	REVISED -		SCALE: 1"=20' SHEET OF SHEETS STA. TO STA.
	PLOT DATE = 6/27/2023	DATE - 6/29/2023	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	584
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			

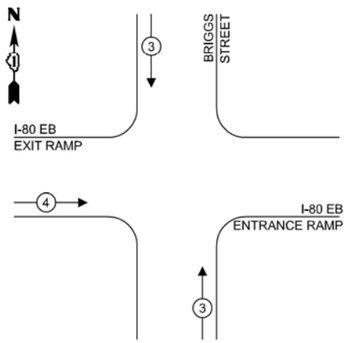
PROPOSED CONTROLLER SEQUENCE



LEGEND:

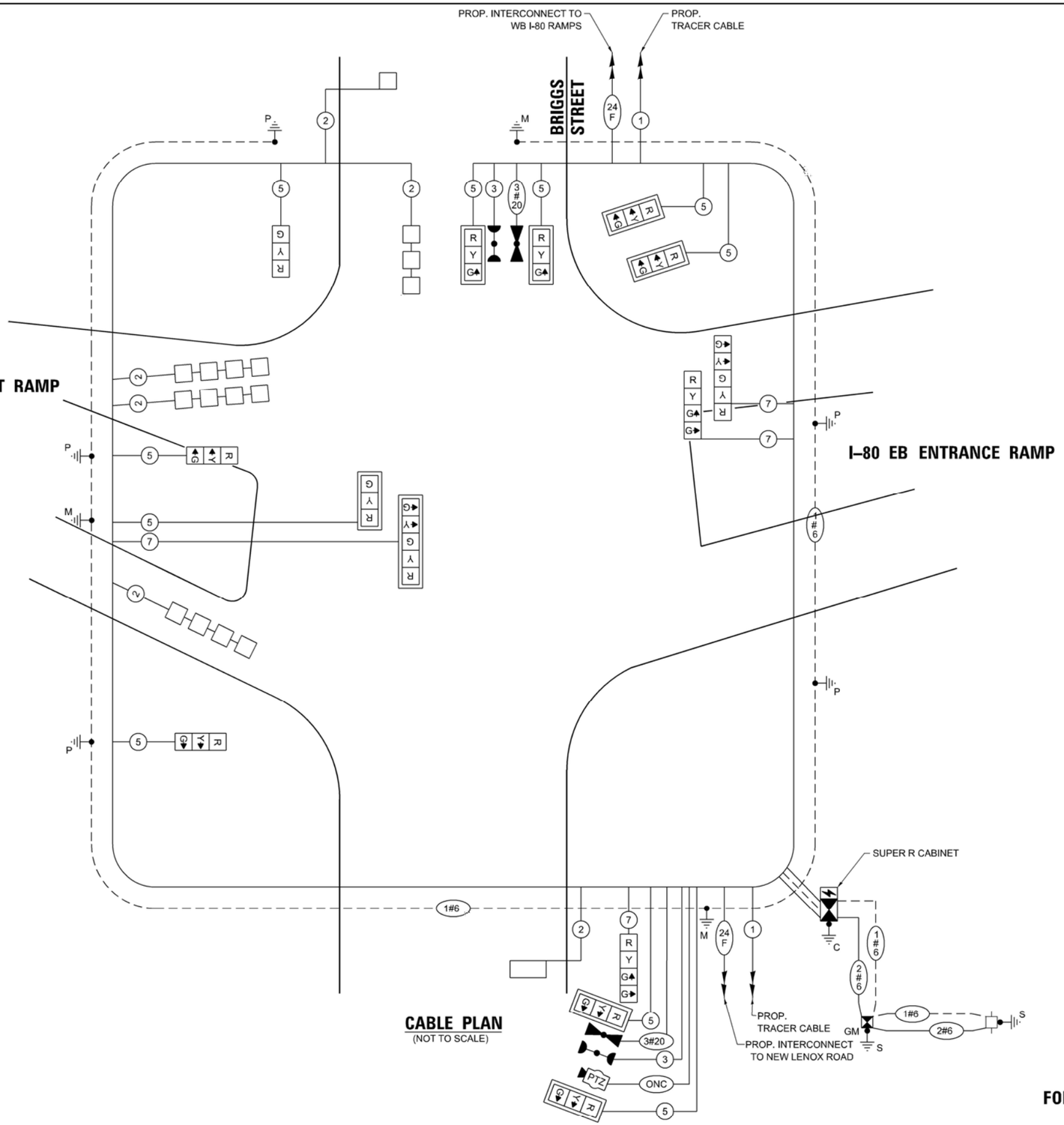
- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OL OVERLAP

PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



TRAFFIC SIGNAL ELECTRIC SERVICE REQUIREMENTS			
TYPE	QUANTITY	UNIT	Total
SIGNAL HEAD 3 - SECTION	10	11	110
4 - SECTION	2	14	28
5 - SECTION	2	13	26
PROGRAMMABLE SIGNAL HEAD			
3 - SECTION		22	
4 - SECTION		32	
5 - SECTION		28	
PED. SIGNAL		15	
CONTROLLER	1	150	150
MASTER CONTROLLER		100	
UPS	1	25	25
DETECTION RADAR		20	
VIDEO		20	
BLANK-OUT SIGN		25	
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM		15	
TOTAL UPS SIZING			374
UPS CHARGING		225	
BATTERY HEATER MAT		180	
CABINET HEATER		200	
FLASHER		15	
LED STREET NAME SIGN		120	
LUMINAIRE		240	
TOTAL SERVICE WIRE SIZING			374

ENERGY COST TO:
ILLINOIS DEPARTMENT OF TRANSPORTATION
201 W CENTER CT
SCHAUMBURG, IL 60196
ENERGY SUPPLY:
CONTACT:
PHONE: (630)424-5704
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER:



CABLE PLAN
(NOT TO SCALE)

TS 7393
FORMER ECON 134
IDOT CENTRACS

TS SHT NO.16

MODEL: PR_BRIGGS_RAMP_A - PLAN 1
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-011DMS07B16\62R29-SHT-TS-10.DGN

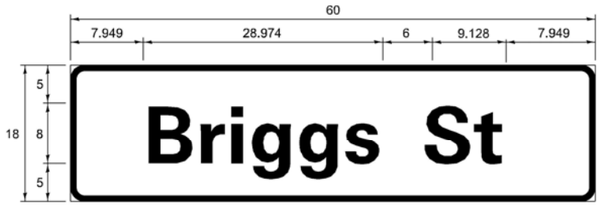
TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

USER NAME = NSALEHIAN		DESIGNED - NS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CABLE PLANS, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMP SEQUENCE–BRIGGS ST AND I–80 EB EXIT/ENT. RAMP
		DRAWN - NS	REVISED -		
PLOT SCALE = 0.16666667 ' / IN.		CHECKED - TS	REVISED -		
PLOT DATE = 6/27/2023		DATE - 6/29/2023	REVISED -		SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	585
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			

SIGN PANEL – TYPE 1 OR TYPE 2

ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY REQUIRED
D	7.5	1	ZZ	2

NOTE: FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGNS DETAIL.

SCHEDULE OF QUANTITIES

	ITEM DESCRIPTION	UNITS	QUANTITY
	SIGN PANEL - TYPE 1	SQ FT	14
	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	626
	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	235
	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	511
	HANDHOLE	EACH	8
	HEAVY-DUTY HANDHOLE	EACH	1
	DOUBLE HANDHOLE	EACH	1
	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	346
	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2299
	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	607
	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	5249
	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	226
	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1321
	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4
	STEEL MAST ARM ASSEMBLY AND POLE 46 FT.	EACH	1
	STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 32 FT. AND 40 FT.	EACH	1
	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 26 FT.	EACH	1
	CONCRETE FOUNDATION, TYPE A	FOOT	20
	CONCRETE FOUNDATION, TYPE C	FOOT	4
	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	12
	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	34
	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	7
	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3
	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	2
	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	1
	TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	8
	INDUCTIVE LOOP DETECTOR	EACH	6
	PREFORMED DETECTOR LOOP	FOOT	688
	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	2
*	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2
*	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
	REMOVE EXISTING HANDHOLE	EACH	1
*	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	409
	FULL-ACTUATED CONTROLLER AND TYPE SUPER R CABINET	EACH	1
	SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	1
	UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	2
	OUTDOOR RATED NETWORK CABLE	FOOT	105
	REMOTE CONTROLLED VIDEO SYSTEM	EACH	1

* 100% COST TO THE JOLIET FIRE PROTECTION DISTRICT

TS SHT NO.17

TS 7393
FORMER ECON 134
IDOT CENTRACS

MODEL: PR_BRIGGS_RAMP_A - PLAN 1
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-011DMS07816\62R29-SHT-TS-10A.DGN

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

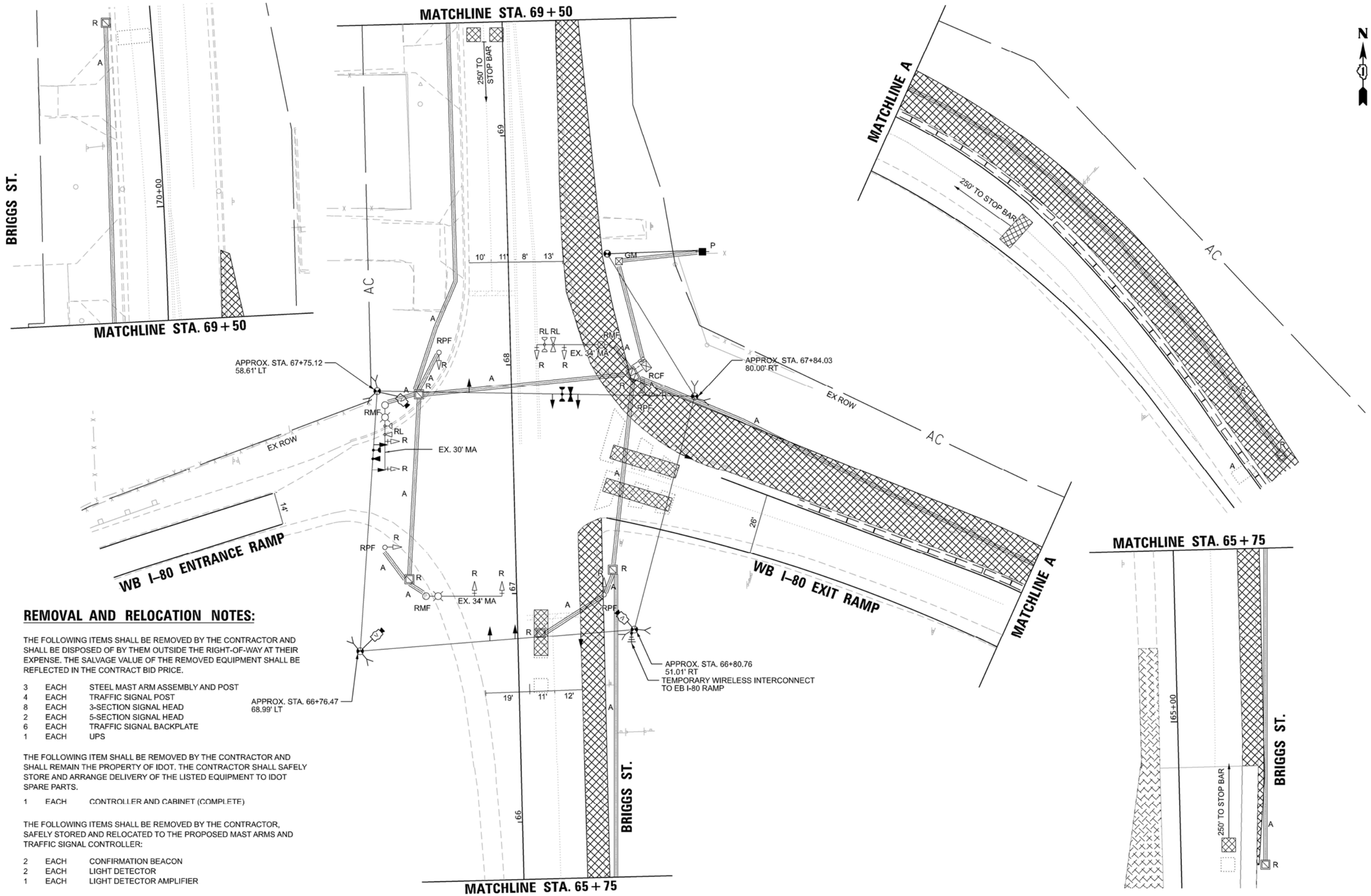
USER NAME = NSALEHIAN	DESIGNED - NS	REVISED -
	DRAWN - NS	REVISED -
PLOT SCALE = 0.16666667 ' / IN.	CHECKED - TS	REVISED -
PLOT DATE = 7/20/2023	DATE - 6/29/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAST ARM MOUNTED SIGNS
AND SCHEDULE OF QUANTITIES – BRIGGS ST./I–80 EB RAMP

SCALE: NONE | SHEET OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	899	586
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			



REMOVAL AND RELOCATION NOTES:

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

3	EACH	STEEL MAST ARM ASSEMBLY AND POST
4	EACH	TRAFFIC SIGNAL POST
8	EACH	3-SECTION SIGNAL HEAD
2	EACH	5-SECTION SIGNAL HEAD
6	EACH	TRAFFIC SIGNAL BACKPLATE
1	EACH	UPS

THE FOLLOWING ITEM SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF IDOT. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE DELIVERY OF THE LISTED EQUIPMENT TO IDOT SPARE PARTS.

1	EACH	CONTROLLER AND CABINET (COMPLETE)

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR, SAFELY STORED AND RELOCATED TO THE PROPOSED MAST ARMS AND TRAFFIC SIGNAL CONTROLLER:

2	EACH	CONFIRMATION BEACON
2	EACH	LIGHT DETECTOR
1	EACH	LIGHT DETECTOR AMPLIFIER

TS SHT NO.18

MODEL: PR_BRIGGS_RAMP_A - PLAN 1
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-01\DMS07B16\62R29-SHT-TS-11A.DGN

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100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

USER NAME = NSALEHIAN		DESIGNED - NS		REVISED -		
		DRAWN - NS		REVISED -		
PLOT SCALE = 0.16666667 ' / IN.		CHECKED - TS		REVISED -		
PLOT DATE = 6/27/2023		DATE - 6/29/2023		REVISED -		

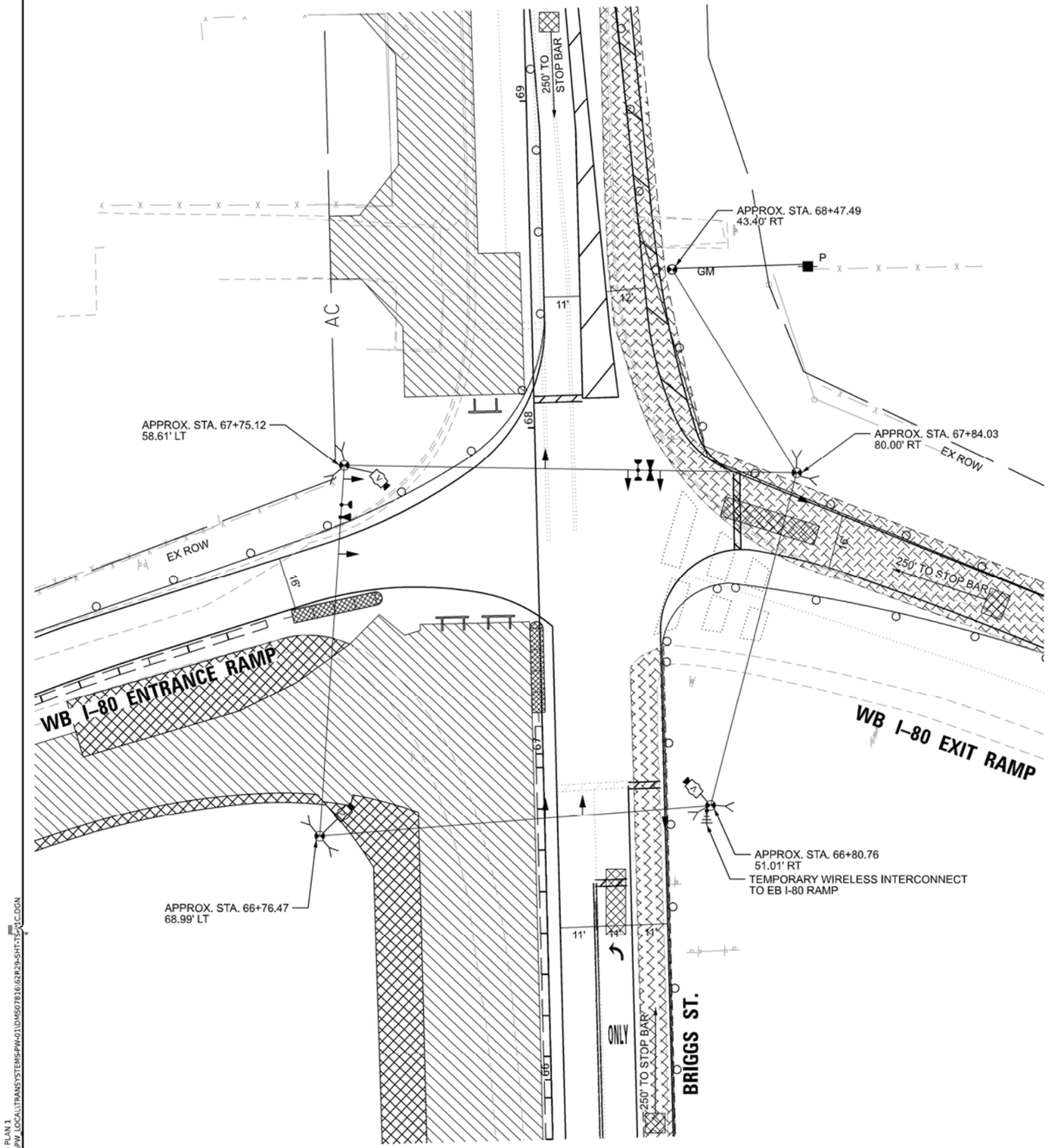
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN (PRE–STAGE) AND REMOVE EX. TRAFFIC SIGNAL EQUIPMENT– BRIGGS ST/I–80 WB RAMP

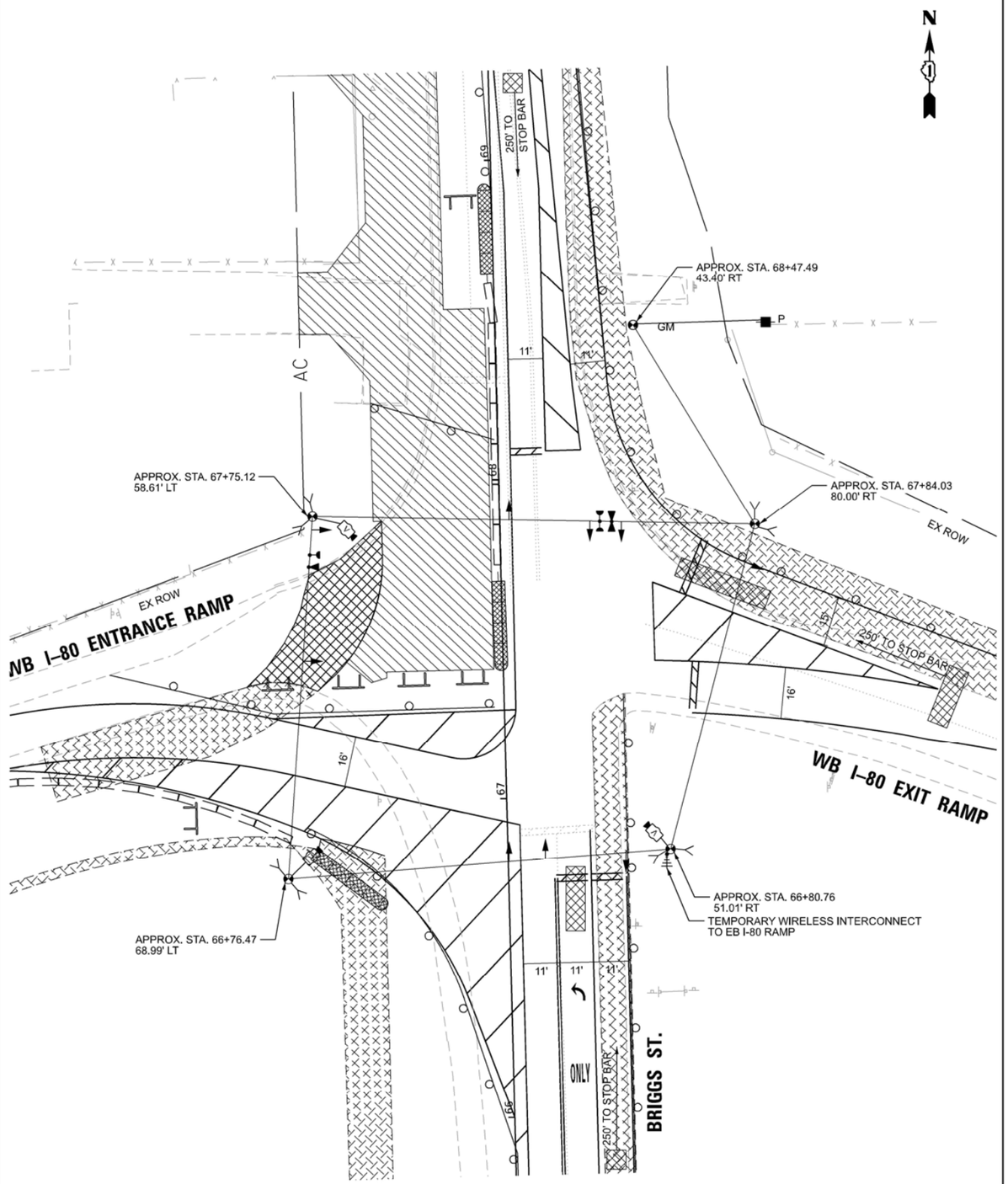
SCALE: 1"=20' | SHEET OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	587
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			

TS SHT NO.19



TEMPORARY TRAFFIC SIGNAL
STAGE 1



TEMPORARY TRAFFIC SIGNAL
STAGE 1A

MODEL: PR_BRIGGS_RAMP_A - PLAN 1
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-01\D4507816\62R29-SHT-TSA1C.DGN

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Chicago, Illinois 60606

USER NAME = NSALEHIAN		DESIGNED - NS		REVISED -	
		DRAWN - NS		REVISED -	
PLOT SCALE = 0.16666633 ' / IN.		CHECKED - TS		REVISED -	
PLOT DATE = 6/27/2023		DATE - 6/29/2023		REVISED -	

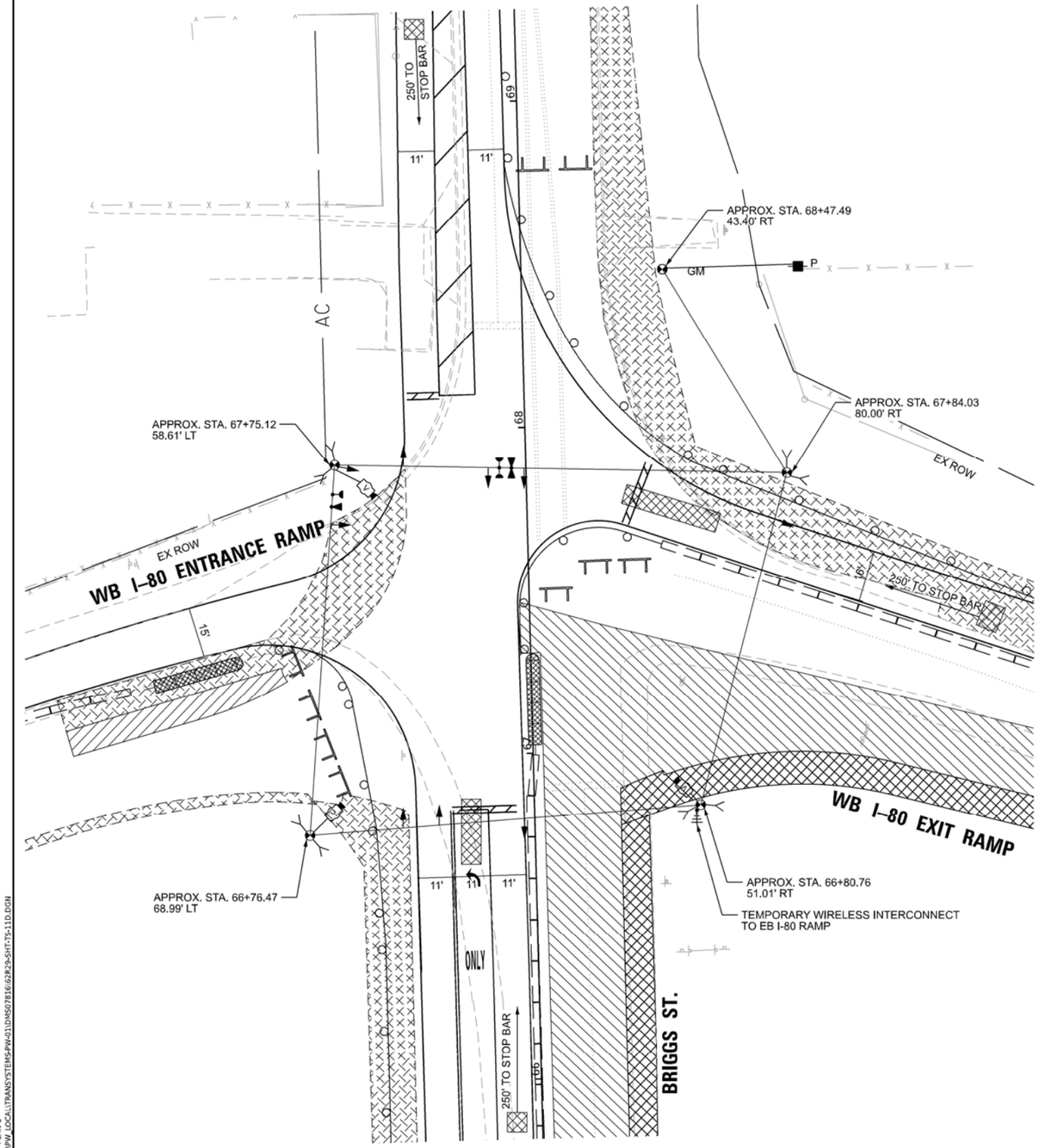
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN (STAGE 1 & 1A)
BRIGGS ST–I-80 WB RAMP

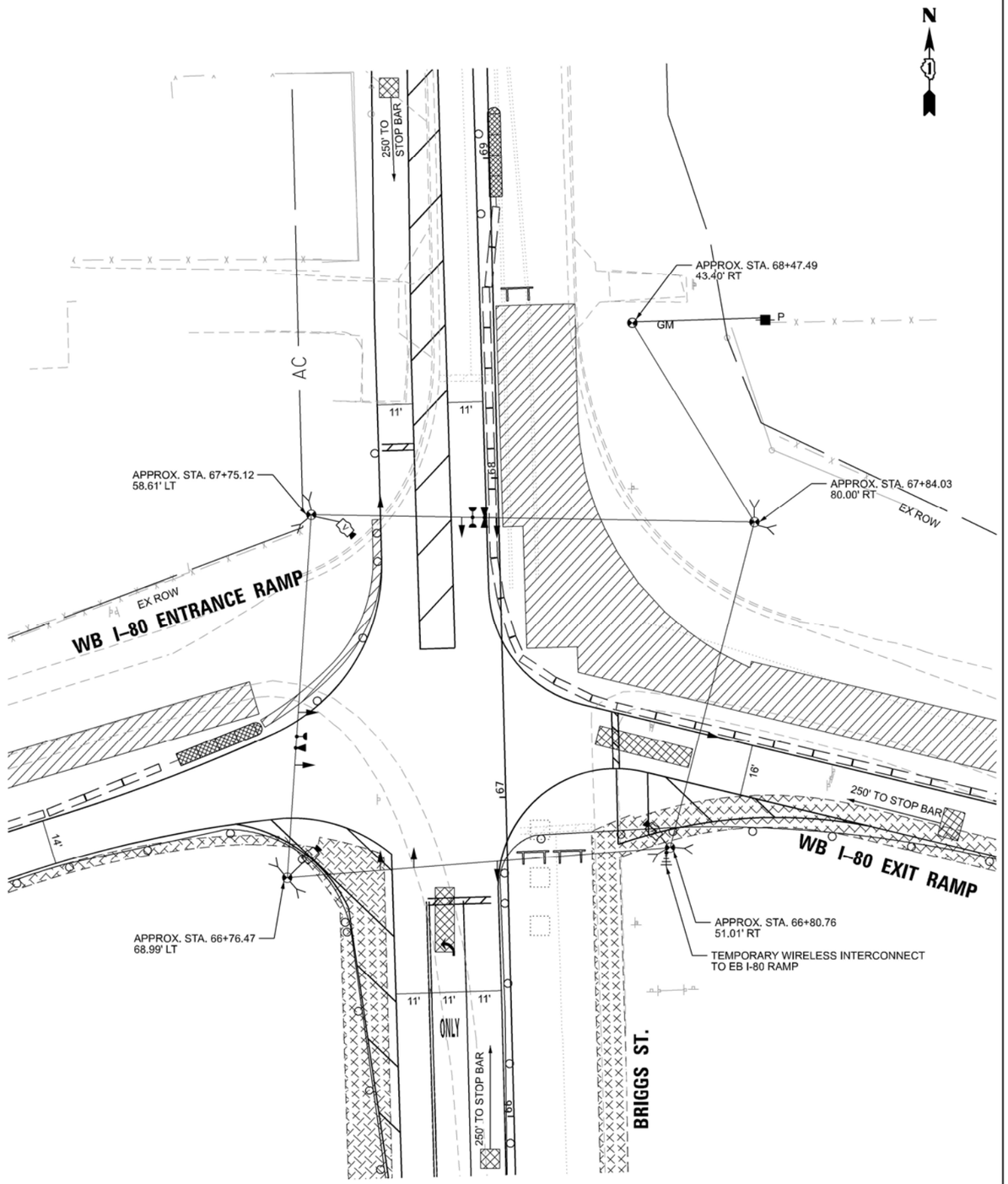
SCALE: 1"=20' | SHEET OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	588
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			

TS SHT NO.20



TEMPORARY TRAFFIC SIGNAL
STAGE 2



TEMPORARY TRAFFIC SIGNAL
STAGE 2A

MODEL: PR_BRIGGS_RAMP_A - PLAN 1
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-011\DMS07816\62R29-SHT-TS-11D.DGN

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100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

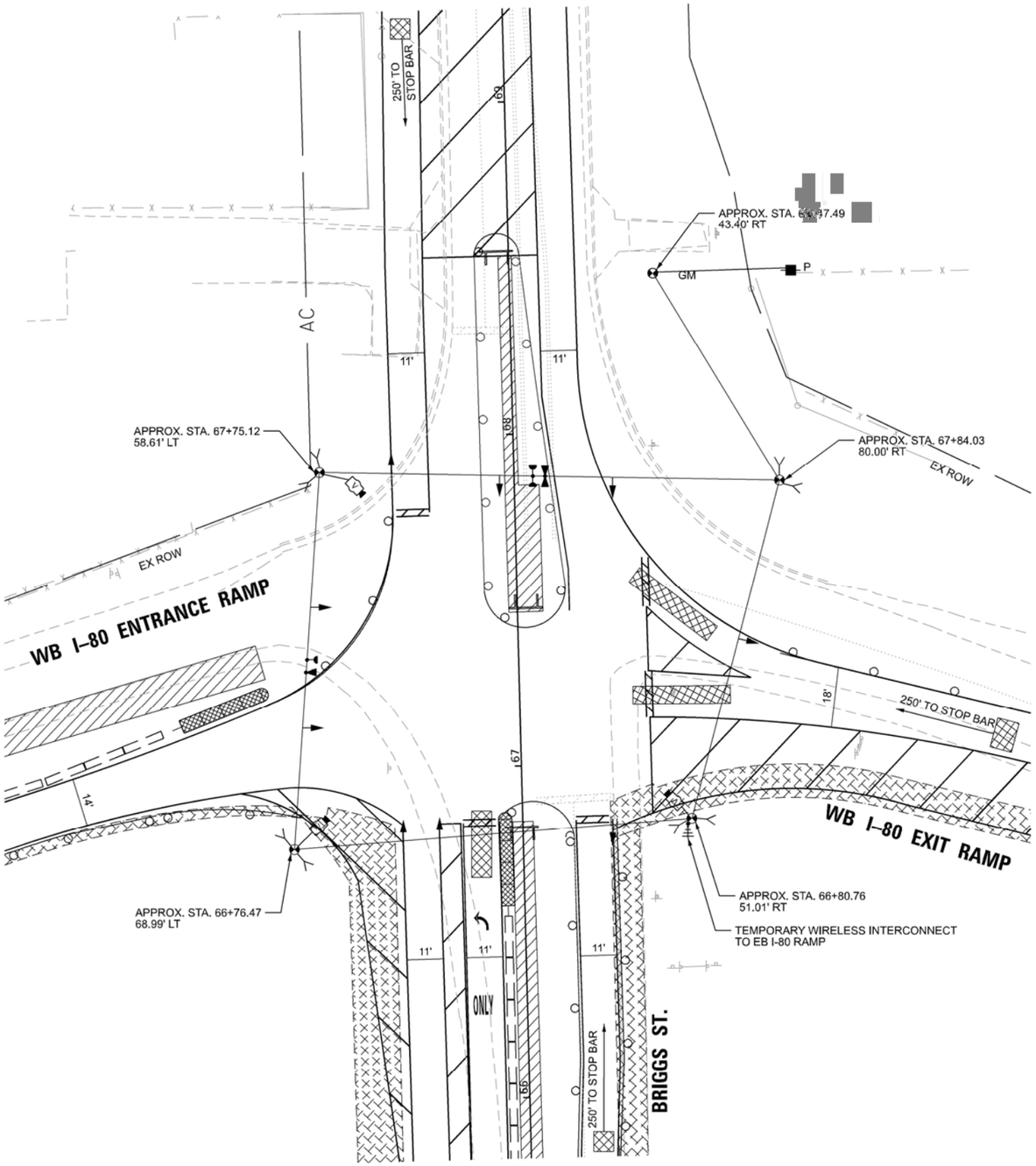
USER NAME = NSALEHIAN		DESIGNED - NS		REVISED -	
		DRAWN - NS		REVISED -	
PLOT SCALE = 0.16666633 ' / IN.		CHECKED - TS		REVISED -	
PLOT DATE = 6/27/2023		DATE - 6/29/2023		REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

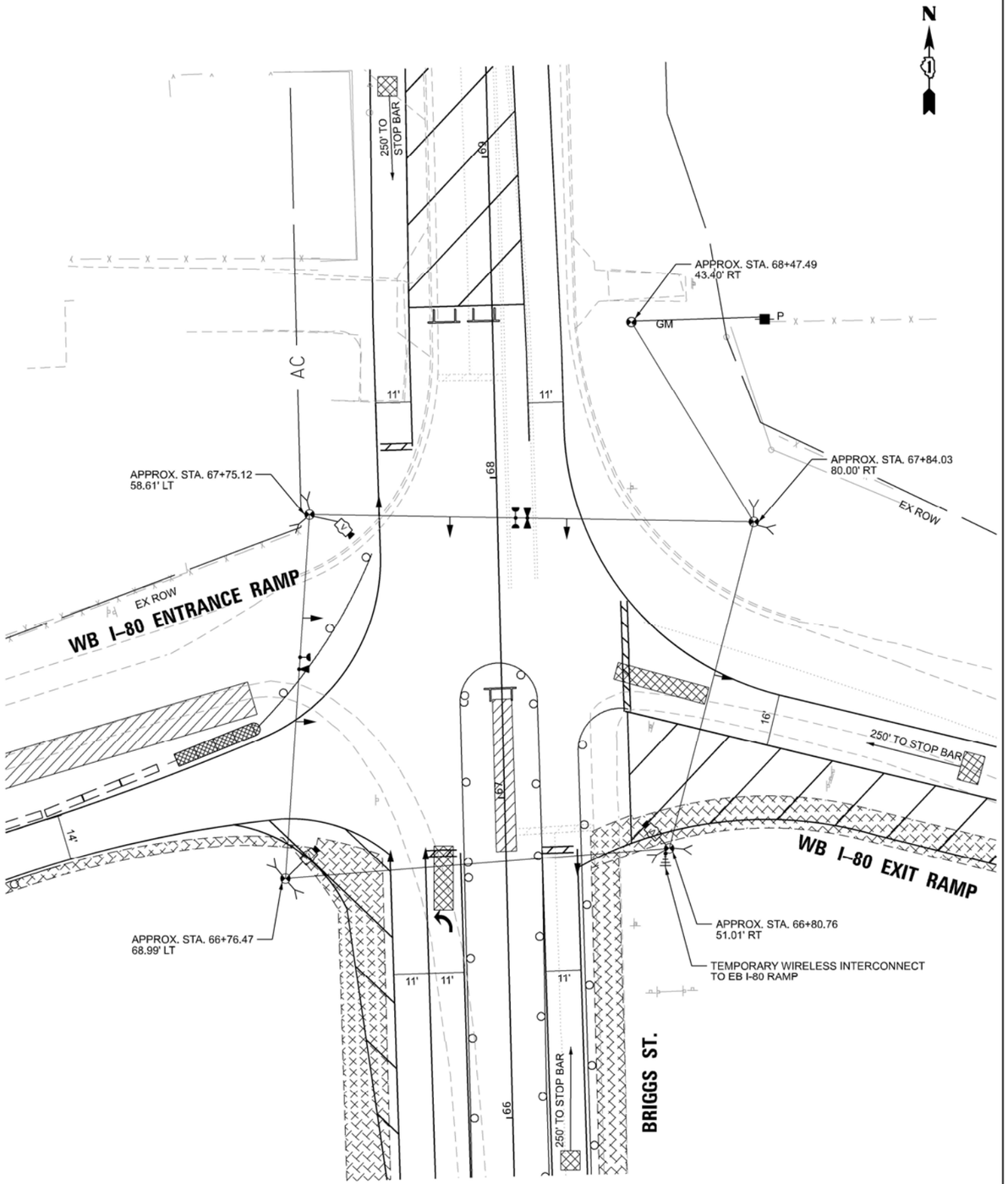
TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN (STAGE 2 & 2A)
BRIGGS ST/I–80 WB RAMP

SCALE: 1"=20' | SHEET OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	589
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			



TEMPORARY TRAFFIC SIGNAL
STAGE 2B



TEMPORARY TRAFFIC SIGNAL
STAGE 2C

TS SHT NO.21

MODEL: PR_BRIGGS_RAMP_A - PLAN 1
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-01\DMS07816\62R29-SHT-TS-11E.DGN

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Chicago, Illinois 60606

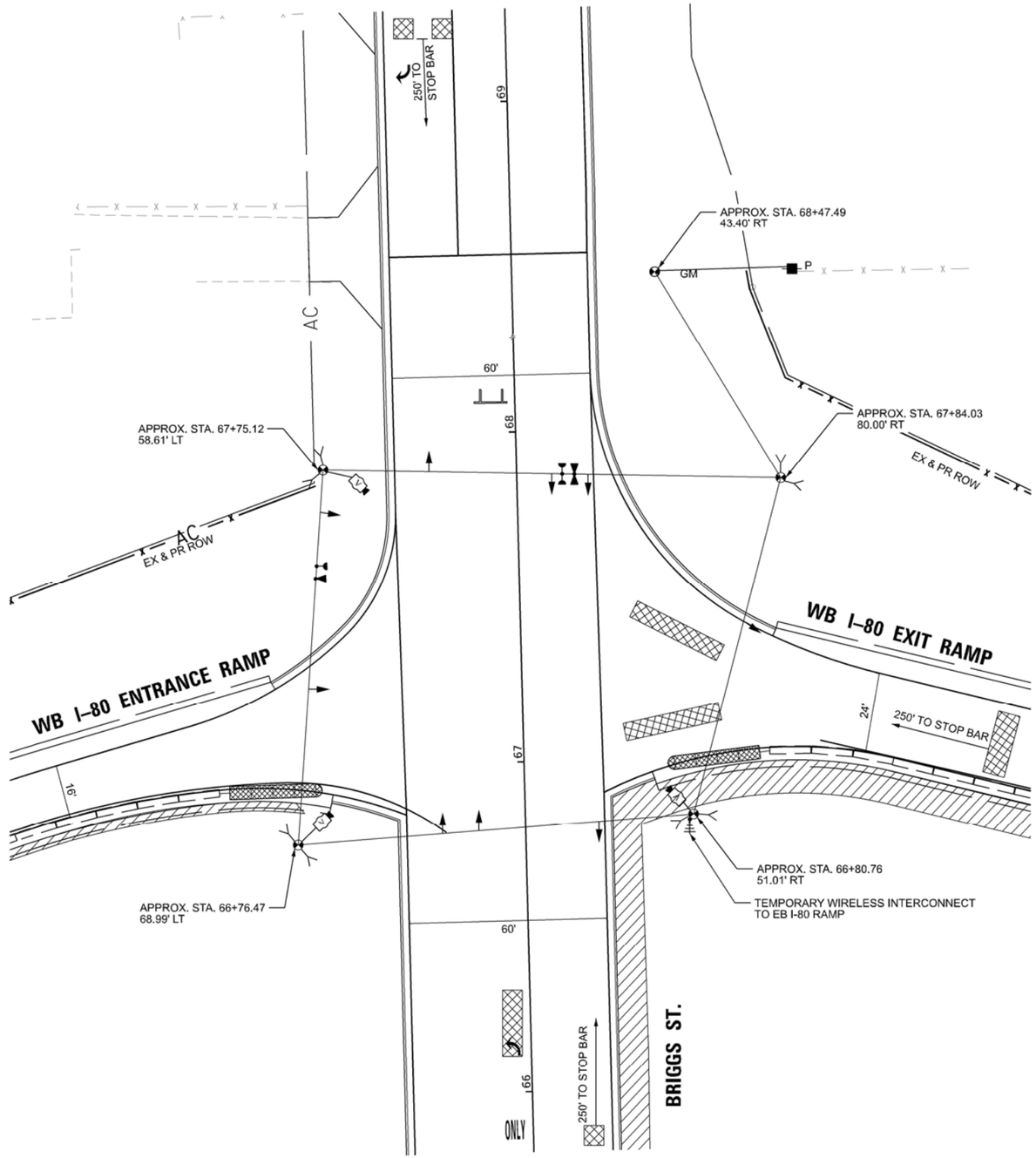
USER NAME	= NSALEHIAN	DESIGNED	- NS	REVISED	-
		DRAWN	- NS	REVISED	-
PLOT SCALE	= 0.16666633 ' / IN.	CHECKED	- TS	REVISED	-
PLOT DATE	= 6/27/2023	DATE	- 6/29/2023	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN (STAGE 2B & 2C)
BRIGGS ST/I-80 WB RAMP

SCALE: 1"=20' | SHEET | OF | SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	590
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			



TEMPORARY TRAFFIC SIGNAL
STAGE 3

TS SHT NO.22

MODEL: PR_BRIGGS_RAMP_A - PLAN 1
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-01\D0507B16\62R29-SHT-TS-11F.DGN

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Chicago, Illinois 60606

USER NAME = NSALEHIAN	DESIGNED - NS	REVISED -	
	DRAWN - NS	REVISED -	
PLOT SCALE = 0.16666633 ' / IN.	CHECKED - TS	REVISED -	
PLOT DATE = 6/27/2023	DATE - 6/29/2023	REVISED -	

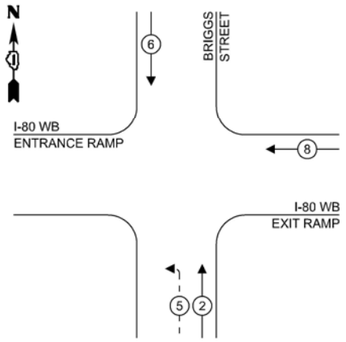
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN (STAGE 3)
BRIGGS ST–80 WB RAMP

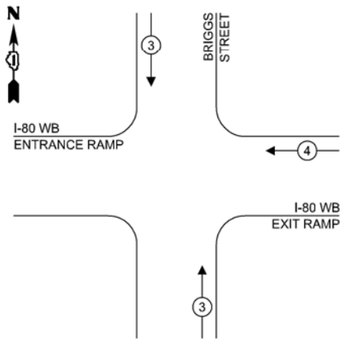
SCALE: 1"=20' | SHEET OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	591
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			

PROPOSED CONTROLLER SEQUENCE

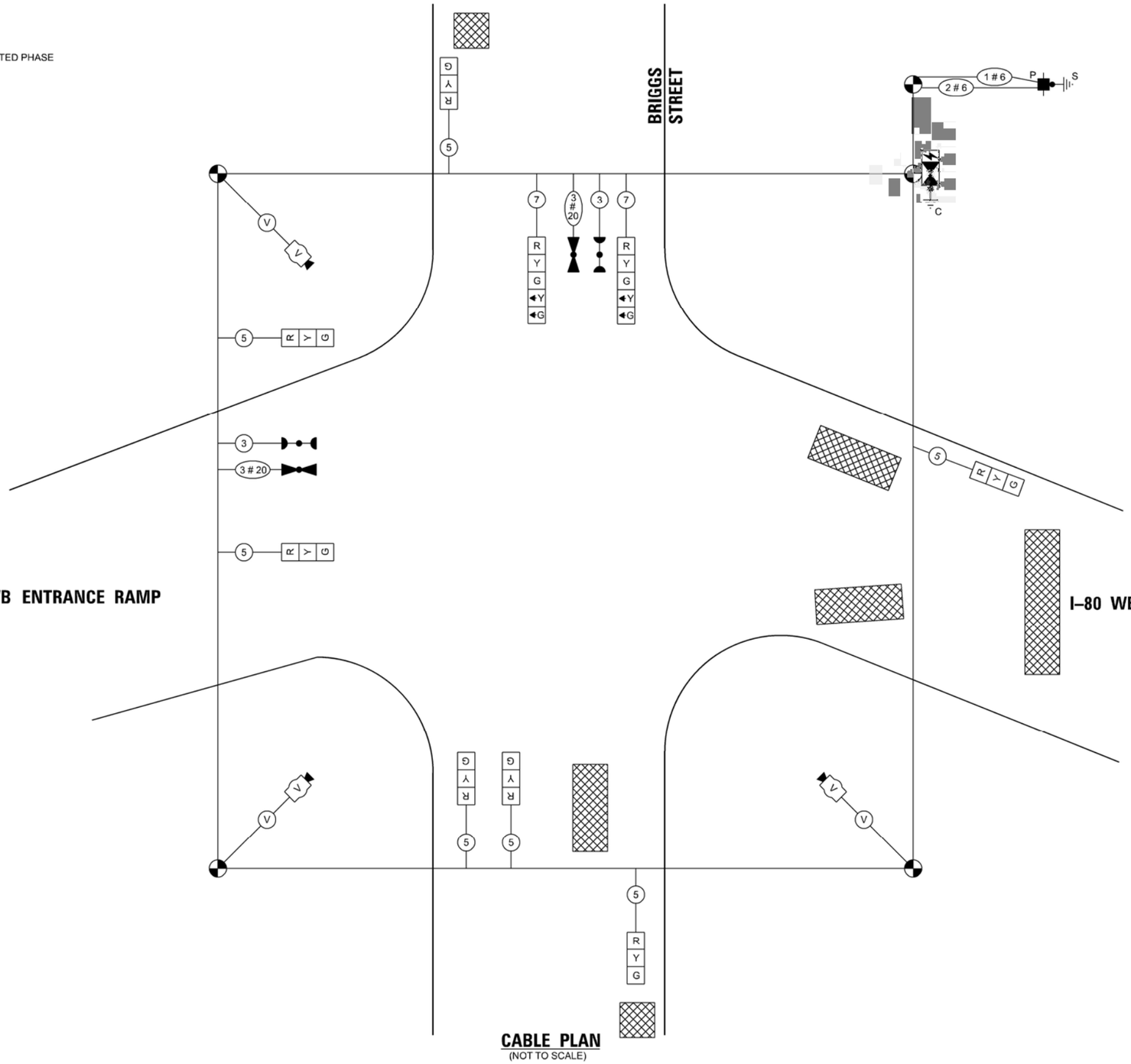


PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND:

- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OL — OVERLAP



CABLE PLAN
(NOT TO SCALE)

TRAFFIC SIGNAL ELECTRIC SERVICE REQUIREMENTS			
TYPE	QUANTITY	UNIT	Total
SIGNAL HEAD 3 - SECTION	7	11	77
4 - SECTION		14	
5 - SECTION	2	13	26
PROGRAMMABLE SIGNAL HEAD			
3 - SECTION		22	
4 - SECTION		32	
5 - SECTION		28	
PED. SIGNAL		15	
CONTROLLER	1	150	150
MASTER CONTROLLER		100	
UPS	1	25	25
DETECTION RADAR		20	
VIDEO	1	20	20
BLANK-OUT SIGN		25	
NETWORK SWITCH II OR III		35	
CELLULAR MODEM		15	
TOTAL UPS SIZING			298
UPS CHARGING		225	
BATTERY HEATER MAT		180	
CABINET HEATER		200	
FLASHER		15	
LED STREET NAME SIGN		120	
LUMINAIRE		240	
TOTAL SERVICE WIRE SIZING			298

ENERGY COST TO:
ILLINOIS DEPARTMENT OF TRANSPORTATION
201 W CENTER CT
SCHAUMBURG, IL 60196
ENERGY SUPPLY:
CONTACT: COMED
PHONE: (630)424-5704
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER:

TS SHT NO.23

MODEL: PR_BRIGGS_RAMP_A - PLAN 1
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-021DMS07816\62R29-SHT-TS-11B.DGN

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

USER NAME = NSALEHIAN	DESIGNED - NS	REVISED -	
	DRAWN - NS	REVISED -	
PLOT SCALE = 0.16666633 ' / IN.	CHECKED - TS	REVISED -	
PLOT DATE = 6/27/2023	DATE - 6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

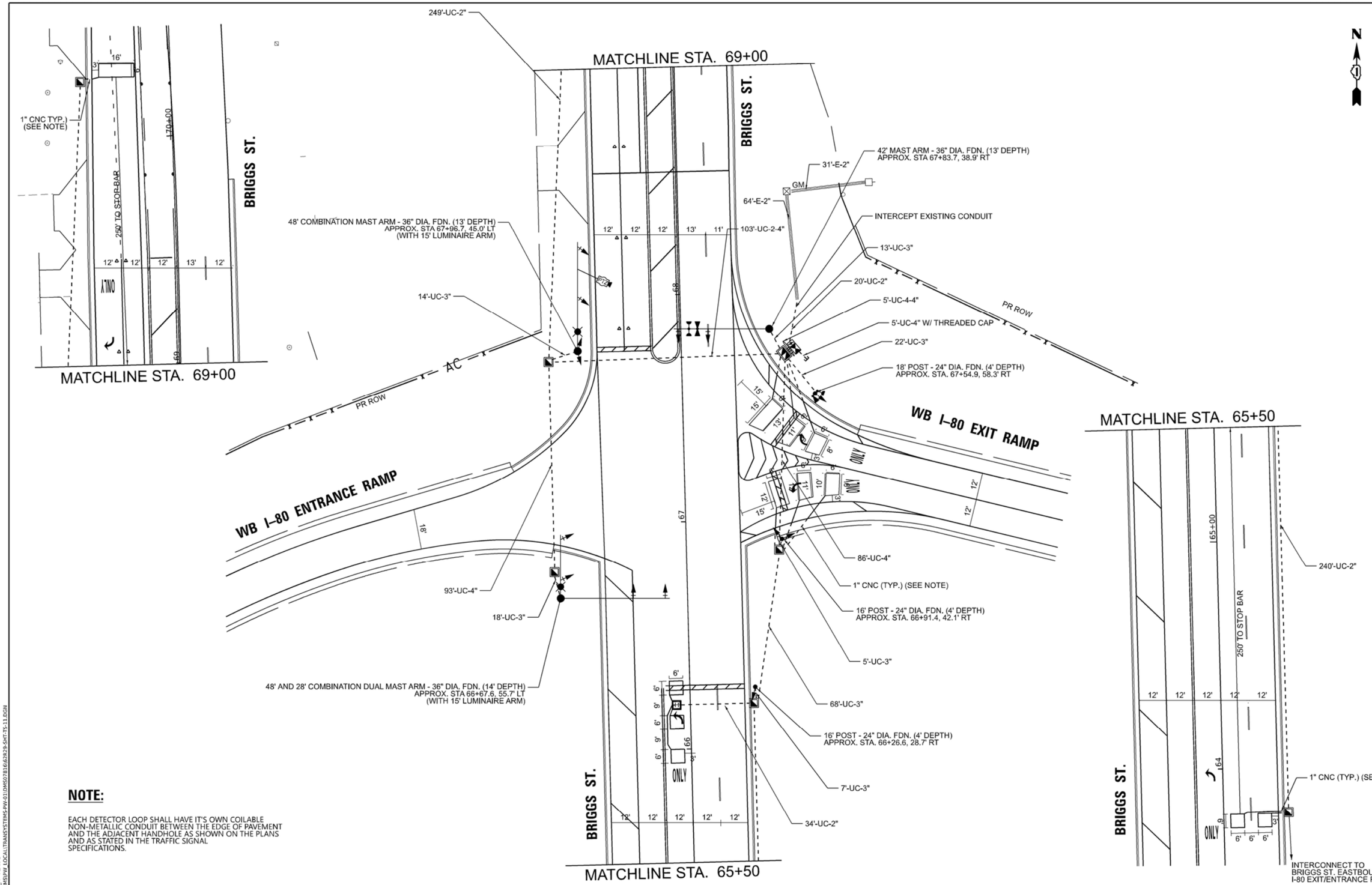
TEMPORARY CABLE PLANS, PHASE DESIGNATION DIAGRAM AND VEHICLE PREEMP SEQUENCE–BRIGGS ST AND I–80 WB EXIT/ENT. RAMP

SCALE: NONE | SHEET OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	592
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			

TS 7393
FORMER ECON 134
IDOT CENTRACS

TS SHT NO.24



NOTE:

EACH DETECTOR LOOP SHALL HAVE IT'S OWN COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.

MODEL: PR_BRIGGS_RAMP_A - PLAN 1
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-01\DMS07816\62R29-SHT-TS-11.DGN

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

USER NAME = NSALEHIAN		DESIGNED -	NS	REVISED -	
		DRAWN -	NS	REVISED -	
PLOT SCALE = 0.16666667 ' / IN.		CHECKED -	TS	REVISED -	
PLOT DATE = 6/27/2023		DATE -	6/29/2023	REVISED -	

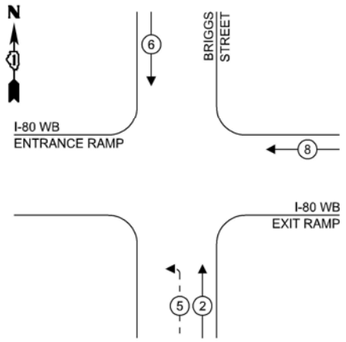
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL INSTALLATION PLAN
WESTBOUND I–80 EXIT/ENTRANCE RAMP AND BRIGGS ST

SCALE: 1"=20' | SHEET OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	593
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			

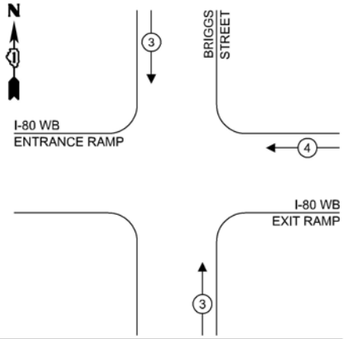
PROPOSED CONTROLLER SEQUENCE



LEGEND:

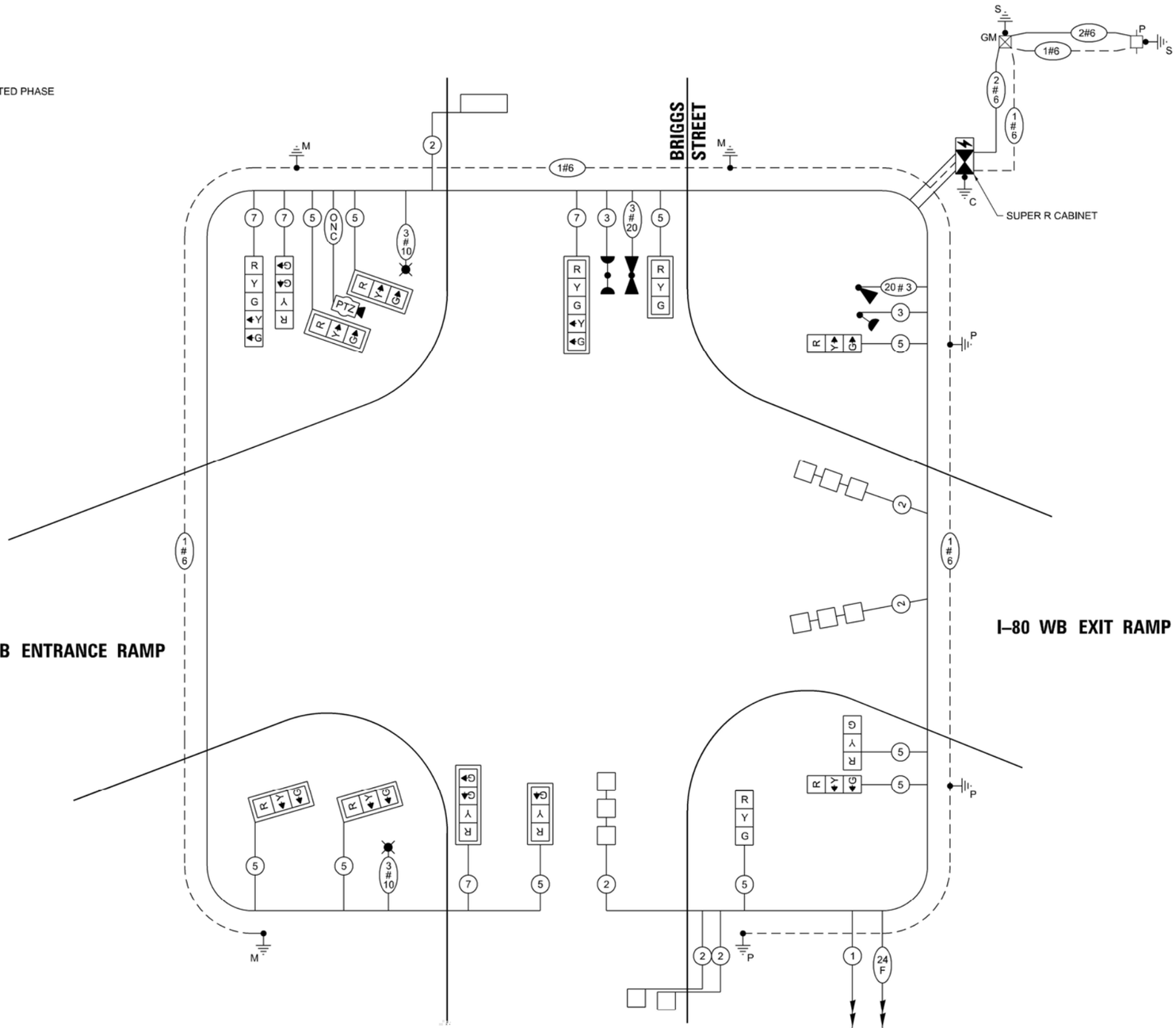
- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OL OVERLAP

PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



TRAFFIC SIGNAL ELECTRIC SERVICE REQUIREMENTS			
TYPE	QUANTITY	UNIT	Total
SIGNAL HEAD 3 - SECTION	10	11	110
4 - SECTION	2	14	28
5 - SECTION	2	13	26
PROGRAMMABLE SIGNAL HEAD			
3 - SECTION		22	
4 - SECTION		32	
5 - SECTION		28	
PED. SIGNAL		15	
CONTROLLER	1	150	150
MASTER CONTROLLER		100	
UPS	1	25	25
DETECTION RADAR		20	
VIDEO		20	
BLANK-OUT SIGN		25	
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM		15	
TOTAL UPS SIZING			374
UPS CHARGING		225	
BATTERY HEATER MAT		180	
CABINET HEATER		200	
FLASHER		15	
LED STREET NAME SIGN		120	
LUMINAIRE	2	240	
TOTAL SERVICE WIRE SIZING			374

ENERGY COST TO:
ILLINOIS DEPARTMENT OF TRANSPORTATION
201 W CENTER CT
SCHAUMBURG, IL 60196
ENERGY SUPPLY:
CONTACT: COMED
PHONE: (630)424-5704
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER:



CABLE PLAN
(NOT TO SCALE)

PROP. TRACER CABLE

PROP. INTERCONNECT TO EB I-80 RAMPS

TS SHT NO.25

TS 7393
FORMER ECON 134
IDOT CENTRACS

MODEL: PR_BRIGGS_RAMP_A - PLAN 1
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-031DMS078316\62R29-SHT-TS-12.DGN

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

USER NAME = NSALEHIAN		DESIGNED - NS		REVISED -	
		DRAWN - NS		REVISED -	
PLOT SCALE = 0.16666667 ' / IN.		CHECKED - TS		REVISED -	
PLOT DATE = 6/27/2023		DATE - 6/29/2023		REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

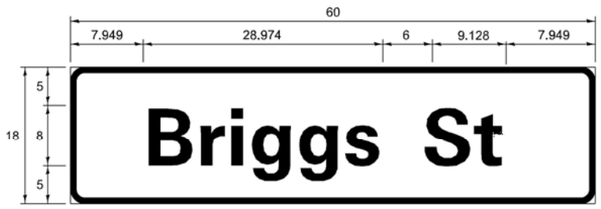
CABLE PLANS, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMP SEQUENCE–BRIGGS ST AND I–80 WB EXIT/ENT. RAMP

SCALE: NONE | SHEET OF SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	594
		CONTRACT NO. 62R29		
		ILLINOIS	FED. AID PROJECT	

SIGN PANEL – TYPE 1 OR TYPE 2

ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY REQUIRED
D	7.5	1	ZZ	2

NOTE: FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGNS DETAIL.

SCHEDULE OF QUANTITIES

	ITEM DESCRIPTION	UNITS	QUANTITY
	SIGN PANEL - TYPE 1	SQ FT	14
	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	543
	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	147
	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	307
	HANDHOLE	EACH	6
	HEAVY-DUTY HANDHOLE	EACH	1
	DOUBLE HANDHOLE	EACH	1
	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	496
	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	157
	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1955
	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	748
	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	2850
	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	131
	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1324
	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
	TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	1
	STEEL MAST ARM ASSEMBLY AND POLE 42 FT.	EACH	1
	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 48 FT.	EACH	1
	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 28 FT. AND 48 FT.	EACH	1
	CONCRETE FOUNDATION, TYPE A	FOOT	12
	CONCRETE FOUNDATION, TYPE C	FOOT	4
	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	40
	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	1
	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST-ARM MOUNTED	EACH	1
	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	1
	TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	8
	INDUCTIVE LOOP DETECTOR	EACH	6
	PREFORMED DETECTOR LOOP	FOOT	496
	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
*	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2
*	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
	REMOVE EXISTING HANDHOLE	EACH	7
	REMOVE EXISTING DOUBLE HANDHOLE	EACH	1
	REMOVE EXISTING CONCRETE FOUNDATION	EACH	8
*	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	162
	FULL-ACTUATED CONTROLLER AND TYPE SUPER R CABINET	EACH	1
	UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
	INTERCEPT EXISTING CONDUIT	EACH	1
	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
	OUTDOOR RATED NETWORK CABLE	FOOT	211
	REMOTE CONTROLLED VIDEO SYSTEM	EACH	1

* 100% COST TO THE JOLIET FIRE PROTECTION DISTRICT

TS SHT NO.24

MODEL: PR_BRIGGS_RAMP_A - PLAN 1
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-031DMS078166\R29-SHT-TS-12A.DGN

TS 7394
FORMER ECON 134
IDOT CENTRACS

TranSmart 100 S. Wacker Drive Suite 400 Chicago, Illinois 60606	USER NAME = NSALEHIAN	DESIGNED - NS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		DRAWN - NS	REVISED -	
	PLOT SCALE = 0.16666667 ' / IN.	CHECKED - TS	REVISED -	
	PLOT DATE = 7/20/2023	DATE - 6/29/2023	REVISED -	

MAST ARM MOUNTED SIGNS AND SCHEDULE OF QUANTITIES – BRIGGS ST/I–80 WB RAMP

SCALE: NONE | SHEET OF SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	899	595
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			

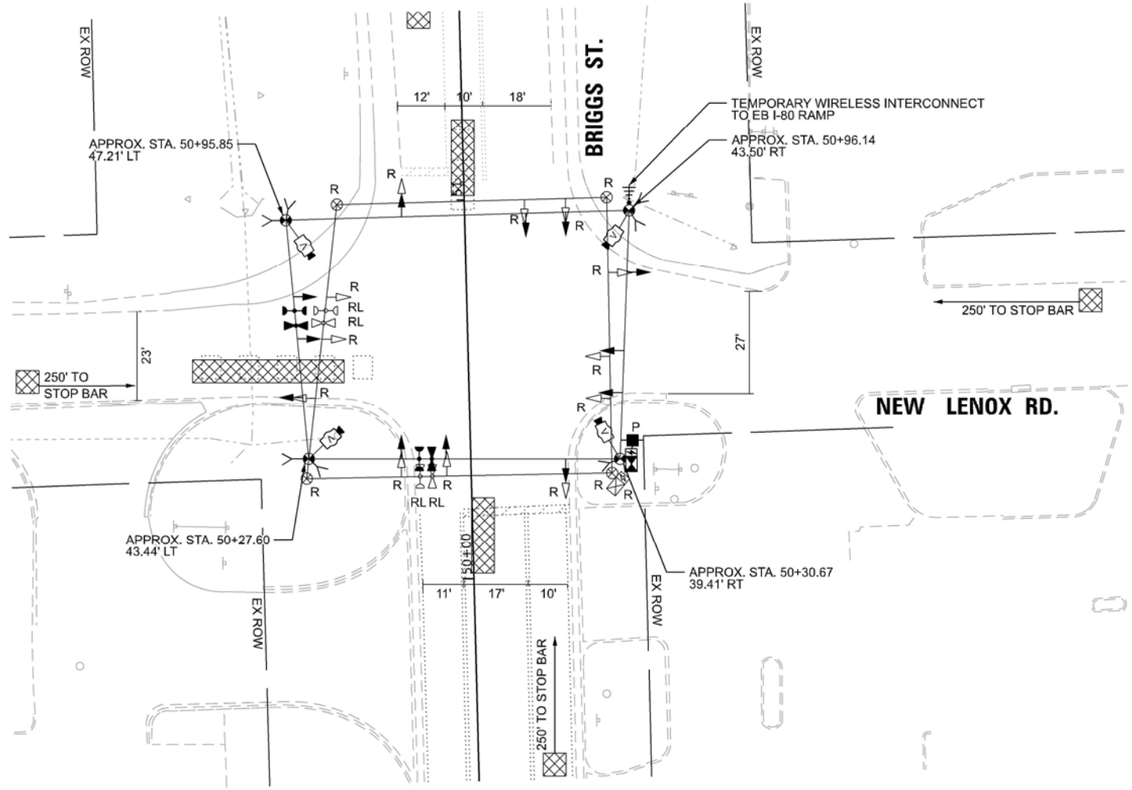
REMOVAL AND RELOCATION NOTES:

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

1	EACH	TEMPORARY CONTROLLER AND CABINET
4	EACH	TEMPORARY WOOD POLE
10	EACH	TEMPORARY 3-SECTION SIGNAL HEAD
2	EACH	TEMPORARY 5-SECTION SIGNAL HEAD
1	EACH	SERVICE INSTALLATION
1	EACH	UPS AND CABINET

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR, SAFELY STORED AND RELOCATED TO THE PROPOSED MAST ARMS AND TRAFFIC SIGNAL CONTROLLER:

2	EACH	CONFIRMATION BEACON
2	EACH	LIGHT DETECTOR
1	EACH	LIGHT DETECTOR AMPLIFIER



TS SHT NO.27

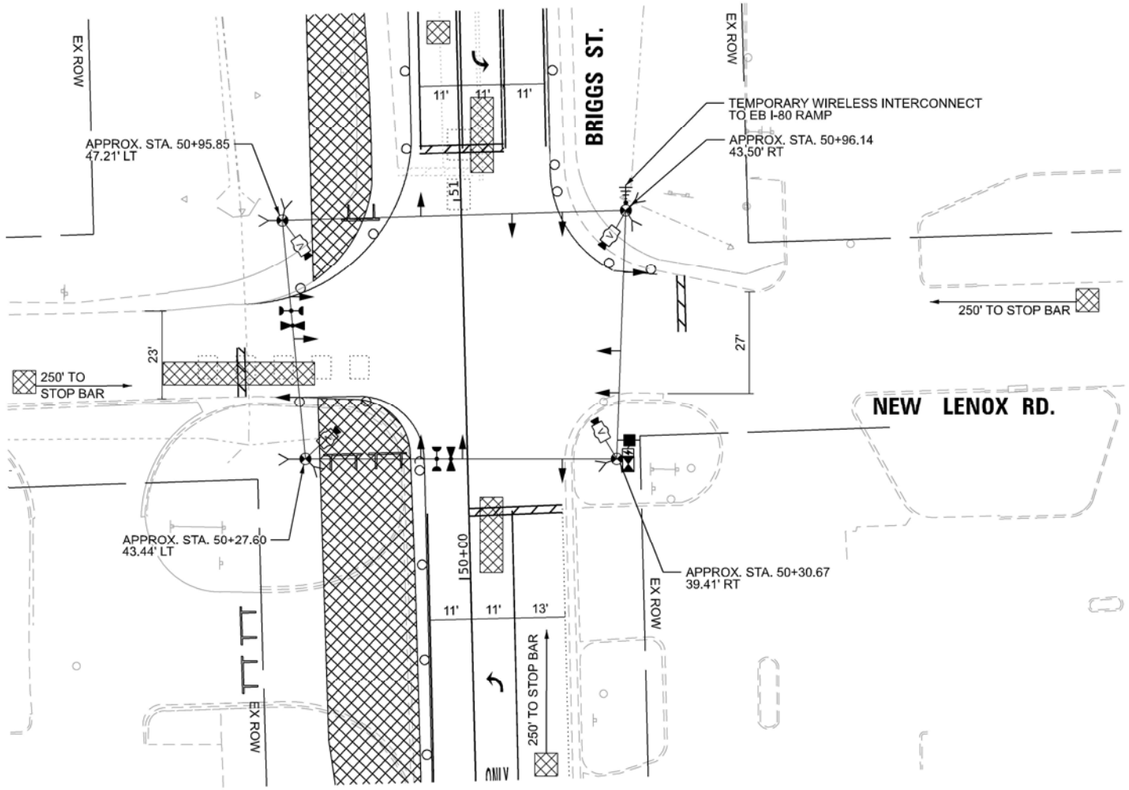
MODEL: PR_BRIGGS_RAMP_A - PLAN 1
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-011\DMS07816\62R29-SHT-TS-15.DGN

TranSmart 100 S. Wacker Drive Suite 400 Chicago, Illinois 60606	USER NAME = NSALEHIAN	DESIGNED - NS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		DRAWN - NS	REVISED -	
	PLOT SCALE = 0.16666633 ' / IN.	CHECKED - TS	REVISED -	
	PLOT DATE = 6/27/2023	DATE - 6/29/2023	REVISED -	

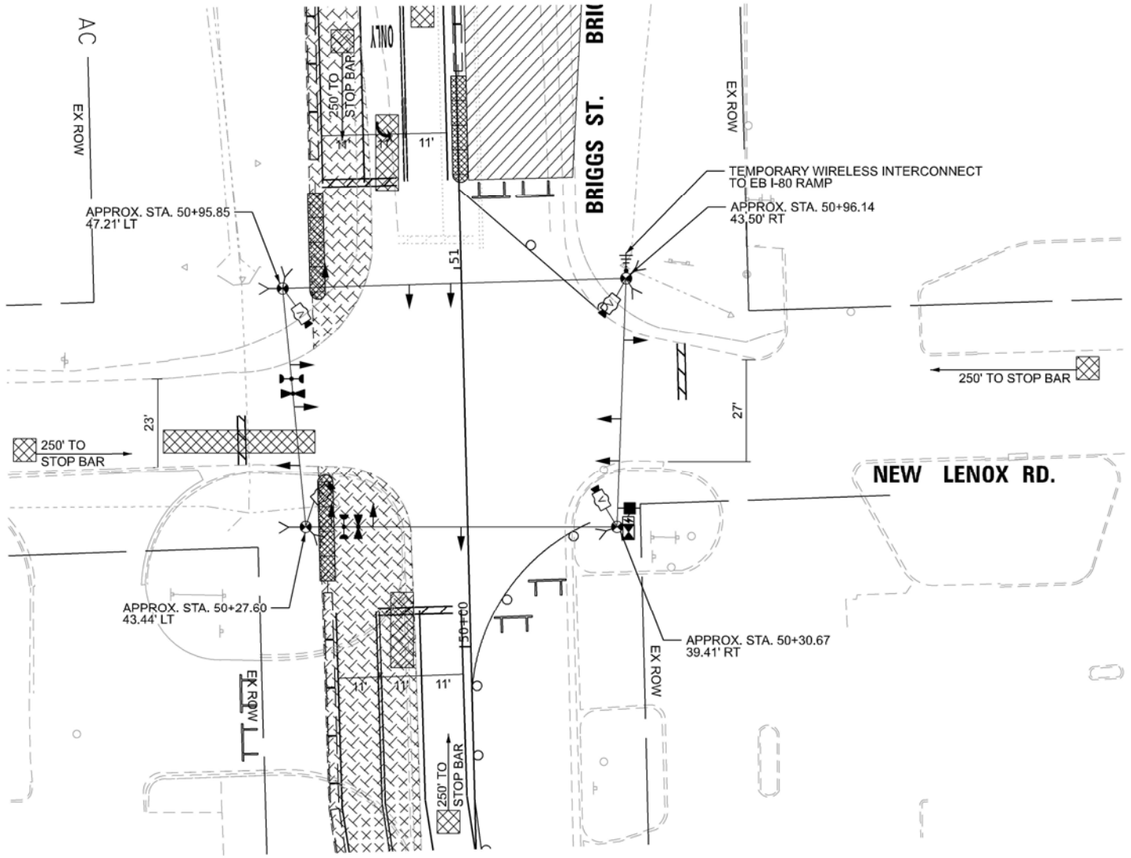
TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN(PRE-STAGE&STAGE 1A)
REMOVE EX. TRAFFIC SIGNAL EQUIPMENT-NEW LENOX RD & BRIGGS ST

SCALE: 1"=20' | SHEET OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	596
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			



TEMPORARY TRAFFIC SIGNAL PLAN
STAGE 1



TEMPORARY TRAFFIC SIGNAL PLAN
STAGE 2 & STAGE 2A

TS SHT NO.28

MODEL: PR_BRIGGS_RAMP_A - PLAN 1
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-01\D0507816\62R29-SHT-TS-16.DGN

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

USER NAME = NSALEHIAN	DESIGNED - NS	REVISED -	
	DRAWN - NS	REVISED -	
PLOT SCALE = 0.16666633 ' / IN.	CHECKED - TS	REVISED -	
PLOT DATE = 6/27/2023	DATE - 6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

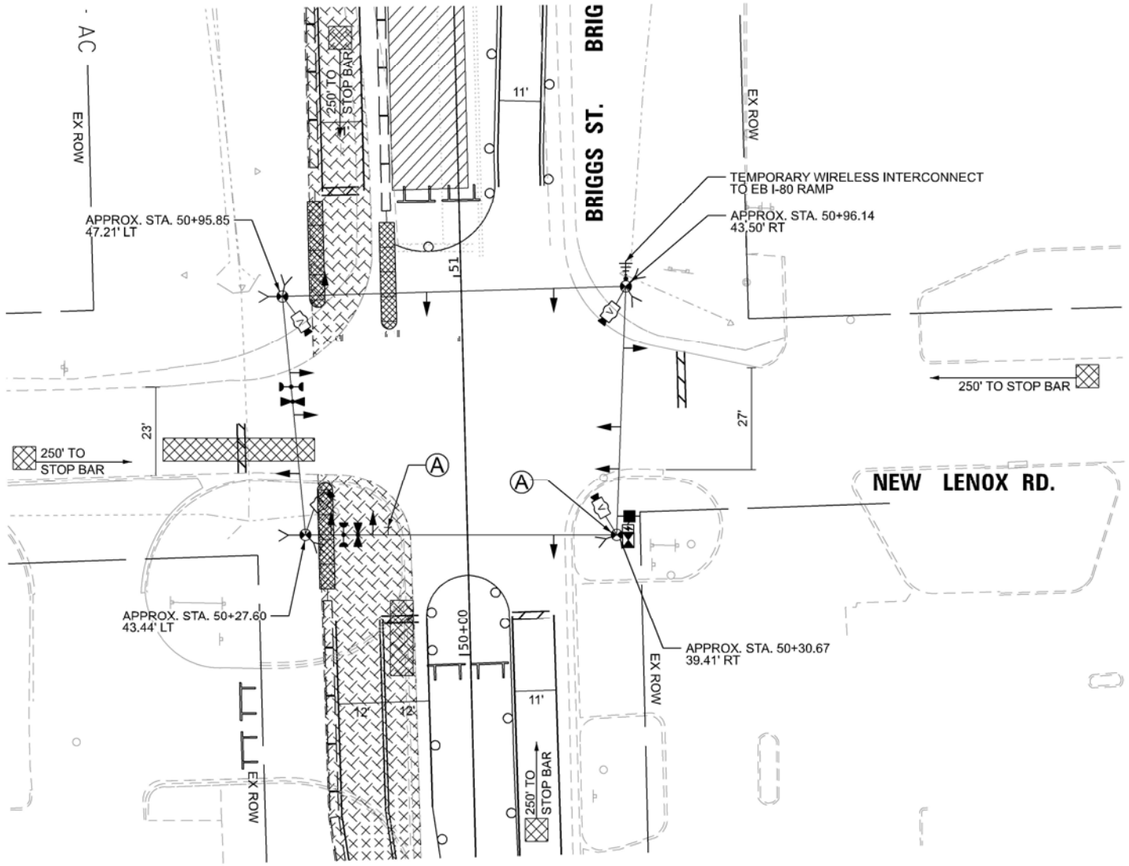
TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN (STAGE 1 & 2 & 2A)
NEW LENOX RD & BRIGGS ST

SCALE: 1"=20' | SHEET OF SHEETS | STA. | TO STA.

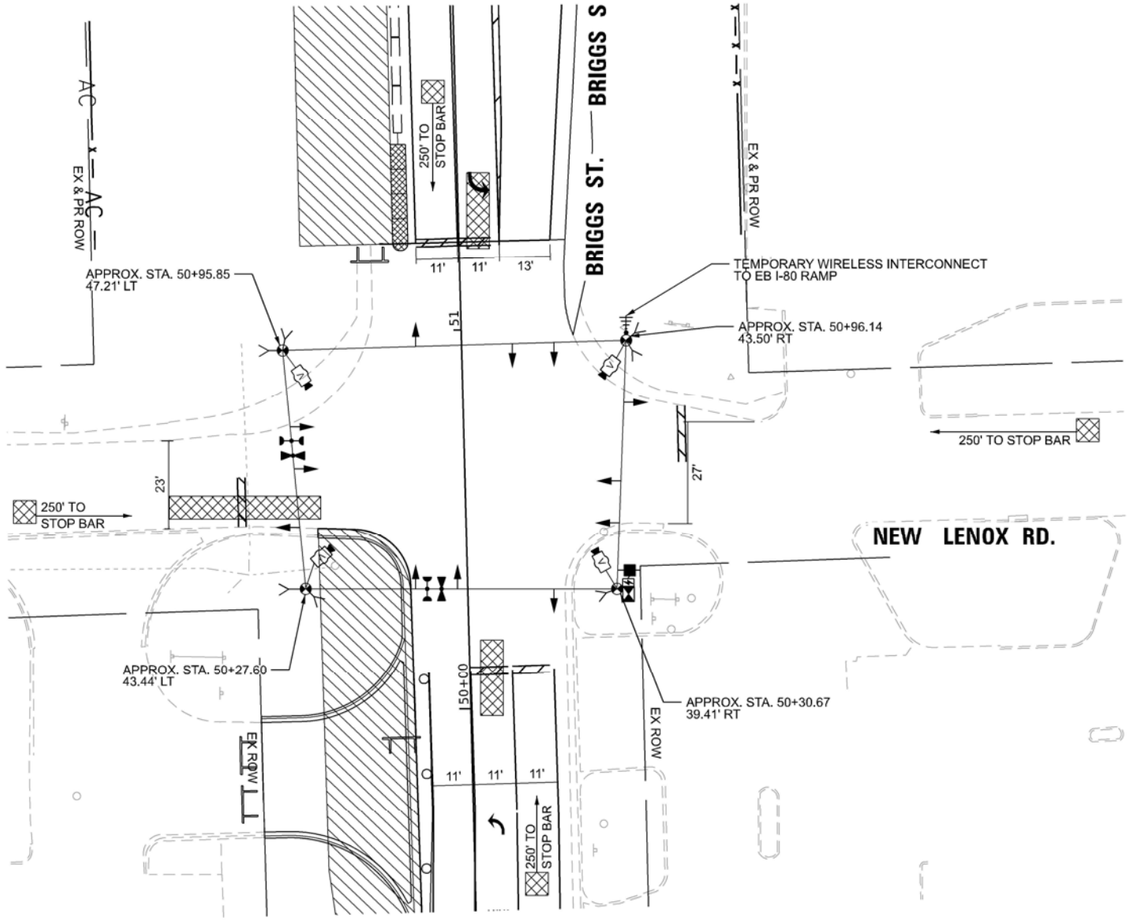
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	597
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			

LEGEND

Ⓐ R3-2 (24" x 24")



TEMPORARY TRAFFIC SIGNAL PLAN
STAGE 2B



TEMPORARY TRAFFIC SIGNAL PLAN
STAGE 3

TS SHT NO.29

MODEL: PR_BRIGGS_RAMP_A - PLAN 1
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-v11\DMS07816\62R29-SHT-TS-17.DGN

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

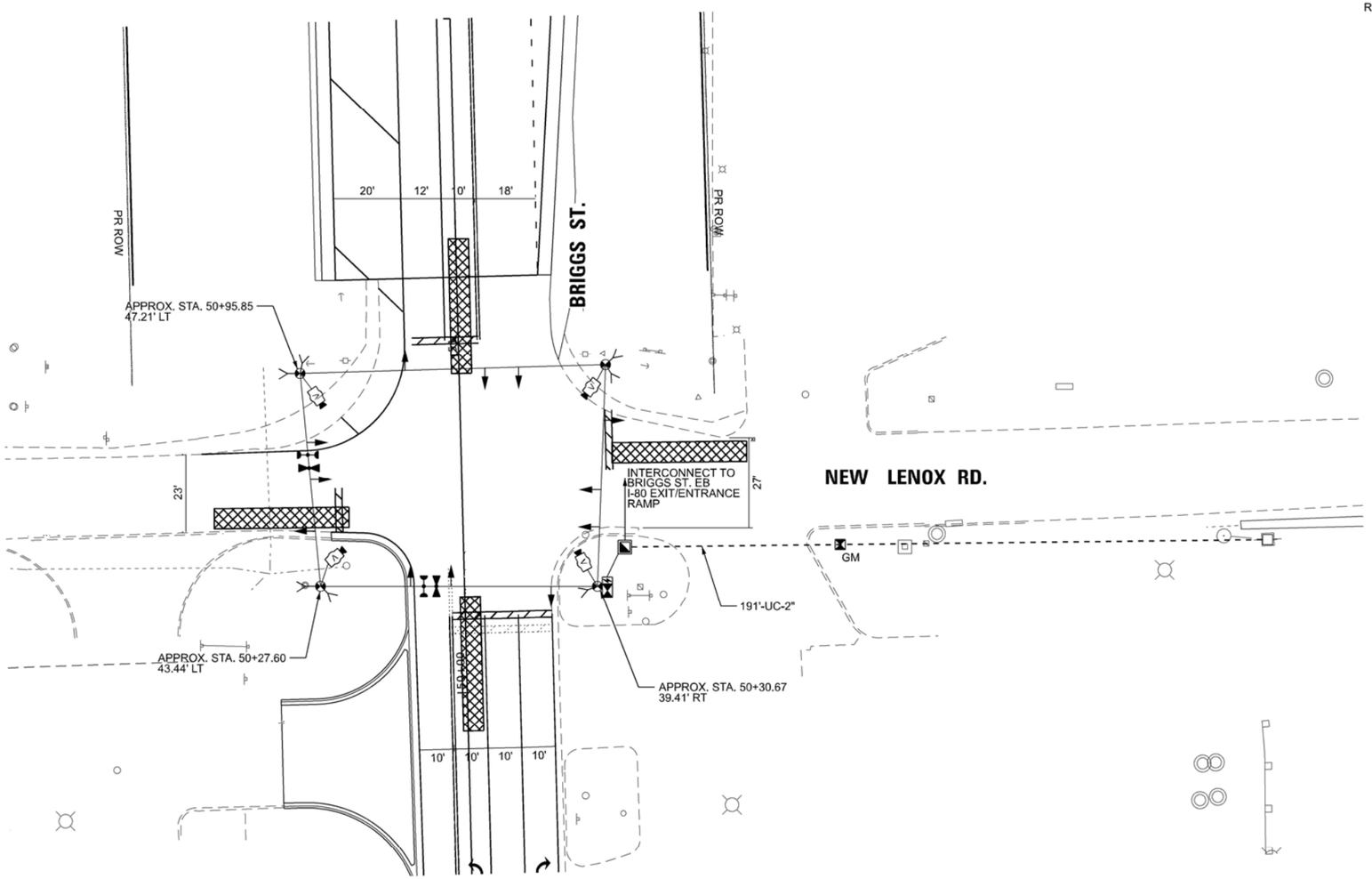
USER NAME = NSALEHIAN		DESIGNED - NS		REVISED -	
		DRAWN - NS		REVISED -	
PLOT SCALE = 0.16666633 ' / IN.		CHECKED - TS		REVISED -	
PLOT DATE = 6/27/2023		DATE - 6/29/2023		REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN (STAGE 2B & 3)
NEW LENOX RD & BRIGGS ST

SCALE: 1"=20' | SHEET OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	598
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			



TS SHT NO.30

MODEL: PR_BRIGGS_RAMP_A - PLAN 1
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-011\DMS07816\62R29-SHT-TS-18.DGN

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

USER NAME = NSALEHIAN	DESIGNED - NS	REVISED -	
	DRAWN - NS	REVISED -	
PLOT SCALE = 0.16666633 ' / IN.	CHECKED - TS	REVISED -	
PLOT DATE = 6/27/2023	DATE - 6/29/2023	REVISED -	

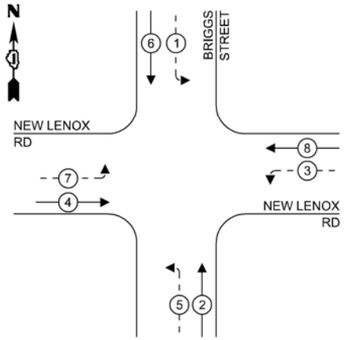
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL INSTALLATION PLAN
NEW LENOX RD AND BRIGGS ST

SCALE: 1"=20' | SHEET OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	599
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			

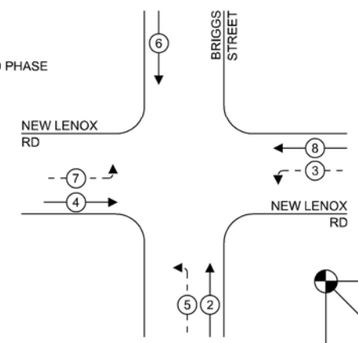
TEMPORARY & PROPOSED CONTROLLER SEQUENCE



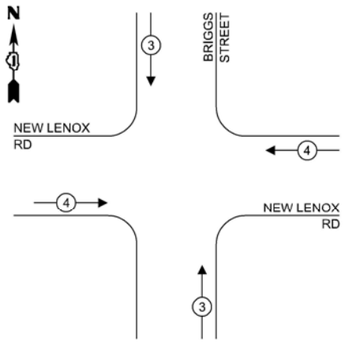
LEGEND:

- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OL OVERLAP

TEMPORARY CONTROLLER SEQUENCE STAGE 2B

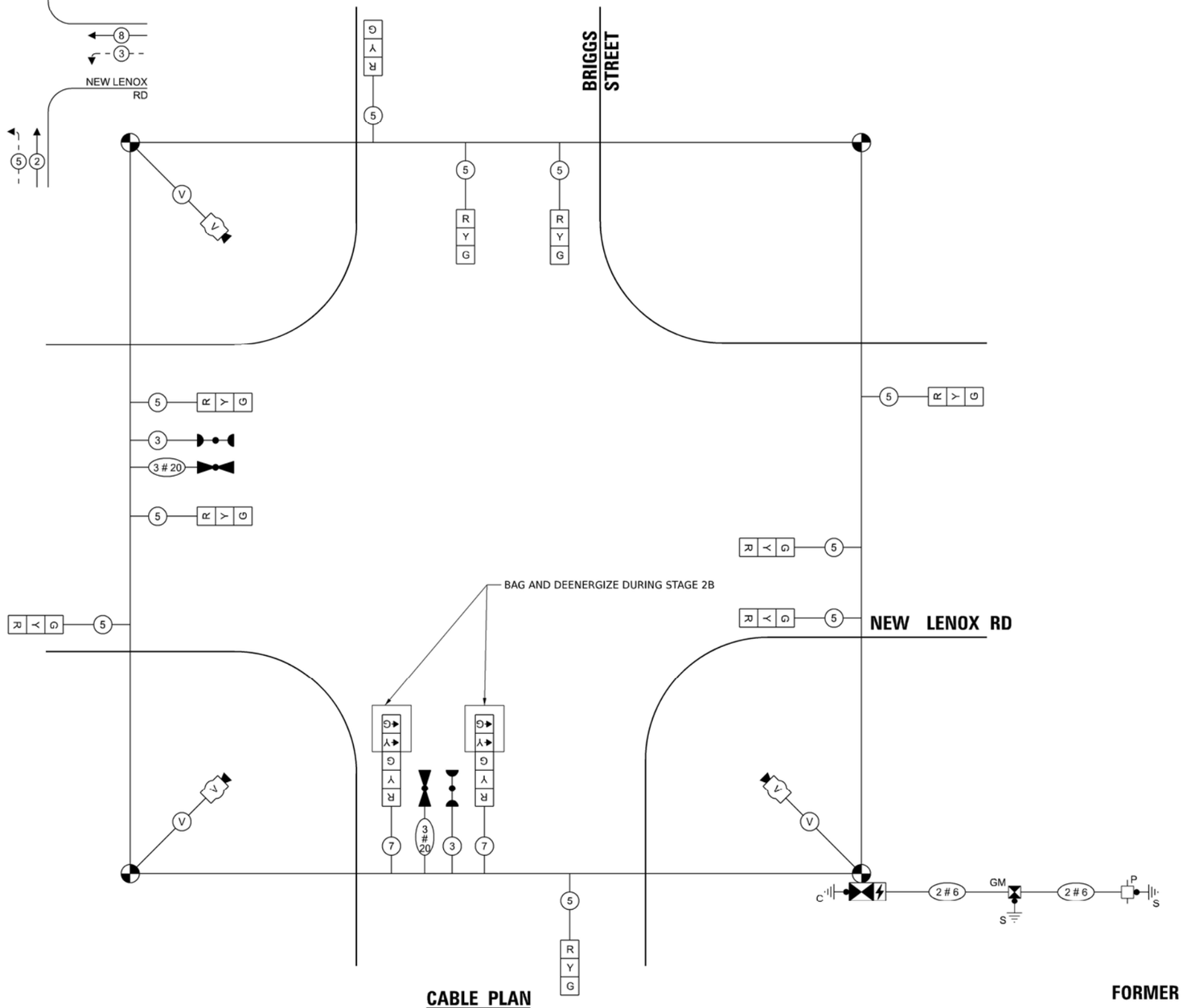


TEMPORARY & PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



TRAFFIC SIGNAL ELECTRIC SERVICE REQUIREMENTS			
TYPE	QUANTITY	UNIT	Total
SIGNAL HEAD 3 - SECTION	10	11	110
4 - SECTION		14	0
5 - SECTION	2	13	26
PROGRAMMABLE SIGNAL HEAD			
3 - SECTION		22	
4 - SECTION		32	
5 - SECTION		28	
PED. SIGNAL		15	
CONTROLLER	1	150	150
MASTER CONTROLLER		100	
UPS	1	25	25
DETECTION RADAR		20	
VIDEO	1	20	20
BLANK-OUT SIGN		25	
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM		15	
TOTAL UPS SIZING			366
UPS CHARGING		225	
BATTERY HEATER MAT		180	
CABINET HEATER		200	
FLASHER		15	
LED STREET NAME SIGN		120	
LUMINAIRE	2	240	
TOTAL SERVICE WIRE SIZING			366

ENERGY COST TO:
TBD
XX
XX
ENERGY SUPPLY:
CONTACT: COMED
PHONE: (630)424-5704
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER:



CABLE PLAN
(NOT TO SCALE)

TS 7393
FORMER ECON 134
IDOT CENTRACS

TS SHT NO.31

MODEL: PR_BRIGGS_RAMP_A - PLAN 1
FILE NAME: C:\TRANSYSTEMS\PW_LOCAL\TRANSYSTEMS-PW-01\DMS07816\62R29-SHT-TS-19.DGN

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

USER NAME = NSALEHIAN	DESIGNED - NS	REVISED -	
	DRAWN - NS	REVISED -	
PLOT SCALE = 0.16666633 ' / IN.	CHECKED - TS	REVISED -	
PLOT DATE = 6/27/2023	DATE - 6/29/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMP. AND PR. CABLE PLANS, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMP SEQUENCE–NEW LENOX RD & BRIGGS ST

SCALE: NONE | SHEET OF SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 8	WILL	883	600
		CONTRACT NO. 62R29		
	ILLINOIS FED. AID PROJECT			