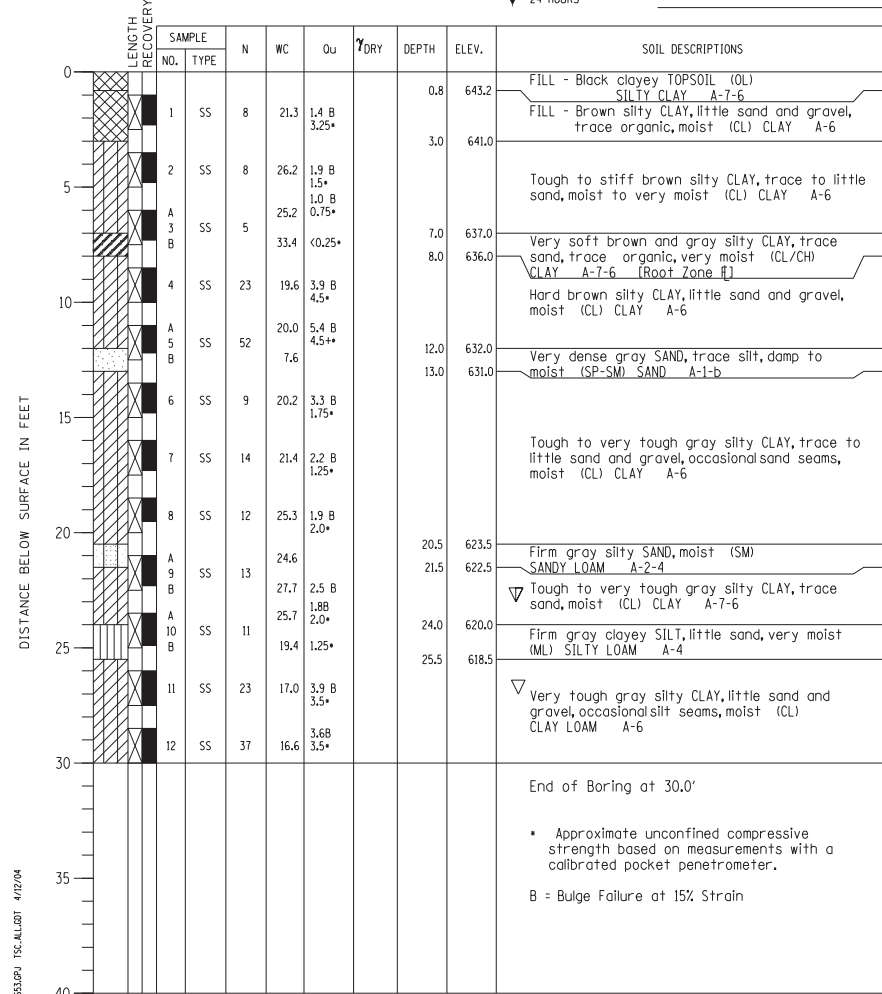


PROJECT Balmoral Avenue Extension - Phase II, Rosemont, Illinois  
 CLIENT Christopher B. Burke Engineering, Ltd., Rosemont, Illinois  
 BORING 9 DATE STARTED 7-24-02 DATE COMPLETED 7-24-02 JOB L-52,653



ELEVATIONS WATER LEVEL OBSERVATIONS  
 GROUND SURFACE 644.0 WHILE DRILLING 23.0'  
 END OF BORING 614.0 AT END OF BORING 27.0'  
 24 HOURS

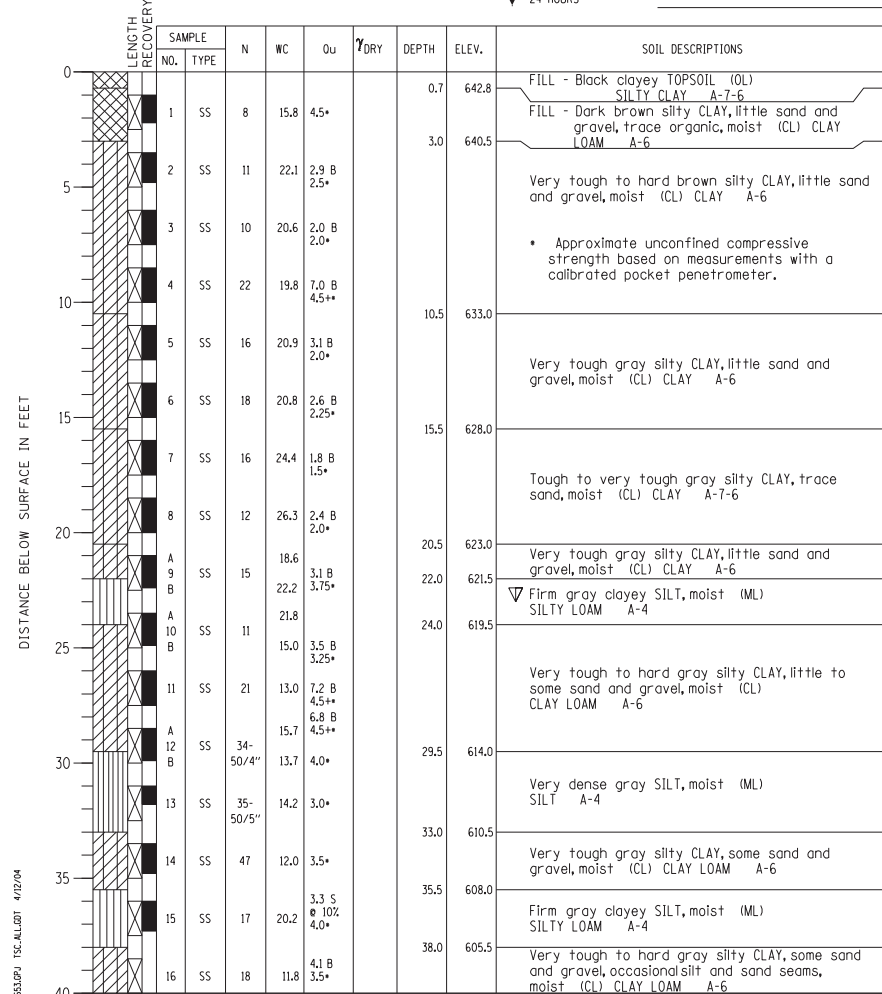


BORING NO. 9  
 Station 17+81.10  
 Offset 2.58' RT

PROJECT Balmoral Avenue Extension - Phase II, Rosemont, Illinois  
 CLIENT Christopher B. Burke Engineering, Ltd., Rosemont, Illinois  
 BORING 11 DATE STARTED 7-24-02 DATE COMPLETED 7-24-02 JOB L-52,653



ELEVATIONS WATER LEVEL OBSERVATIONS  
 GROUND SURFACE 643.5 WHILE DRILLING 23.0'  
 END OF BORING 603.5 AT END OF BORING Dry  
 24 HOURS

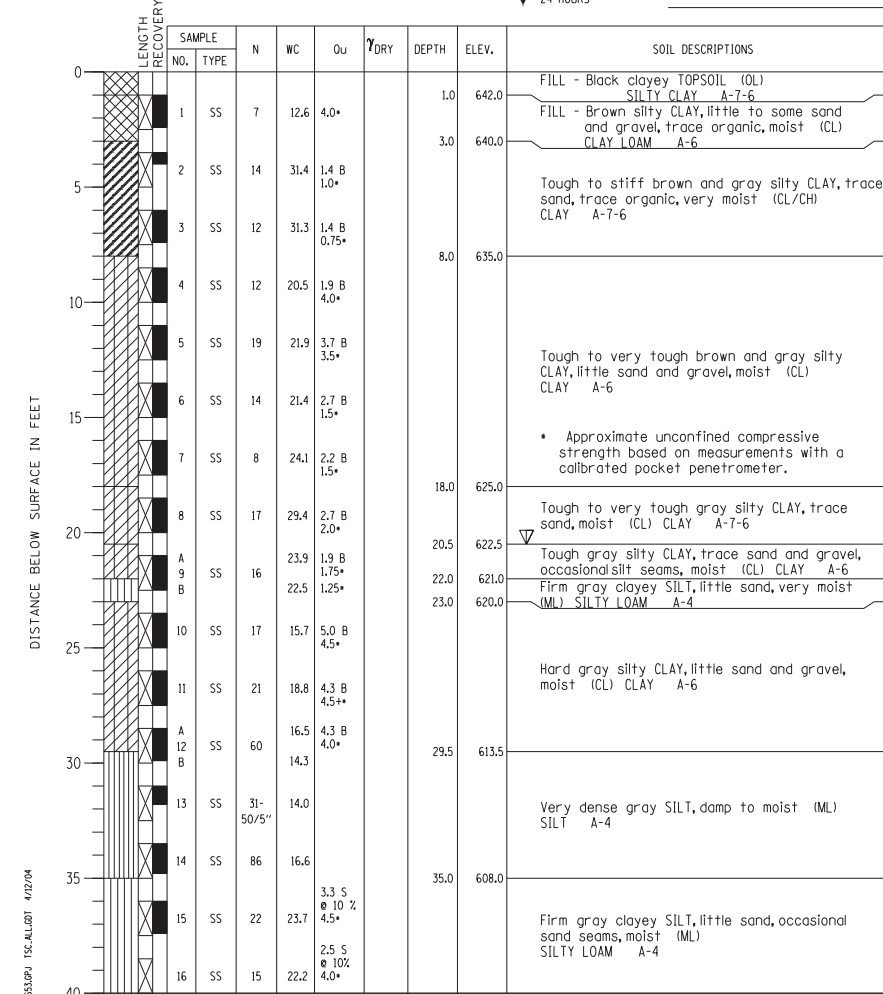


BORING NO. 11  
 Station 18+56.10  
 Offset 2.57' RT

PROJECT Balmoral Avenue Extension - Phase II, Rosemont, Illinois  
 CLIENT Christopher B. Burke Engineering, Ltd., Rosemont, Illinois  
 BORING 13 DATE STARTED 7-24-02 DATE COMPLETED 7-24-02 JOB L-52,653



ELEVATIONS WATER LEVEL OBSERVATIONS  
 GROUND SURFACE 643.0 WHILE DRILLING 20.5'  
 END OF BORING 603.0 AT END OF BORING Dry  
 24 HOURS



BORING NO. 13  
 Station 19+21.17  
 Offset 2.58' RT

N:\ROSEMONT\11000\CADD\_Sheets\DI60637-shr-well-12-cb.dgn

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 8575 W. Higgins Road, Suite 600  
 Rosemont, Illinois 60018  
 (847) 924-6500

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PLOT SCALE =	CHECKED - MM	REVISED
PLOT DATE =	DRAWN - PDR	REVISED
	CHECKED - MM	REVISED

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

BORING LOGS  
 WEST RETAINING WALL - STRUCTURE NO. 016-1400  
 SHEET NO. S-12 OF S-13 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	401
CONTRACT NO. 60G37				
ILLINOIS FED. AID PROJECT				

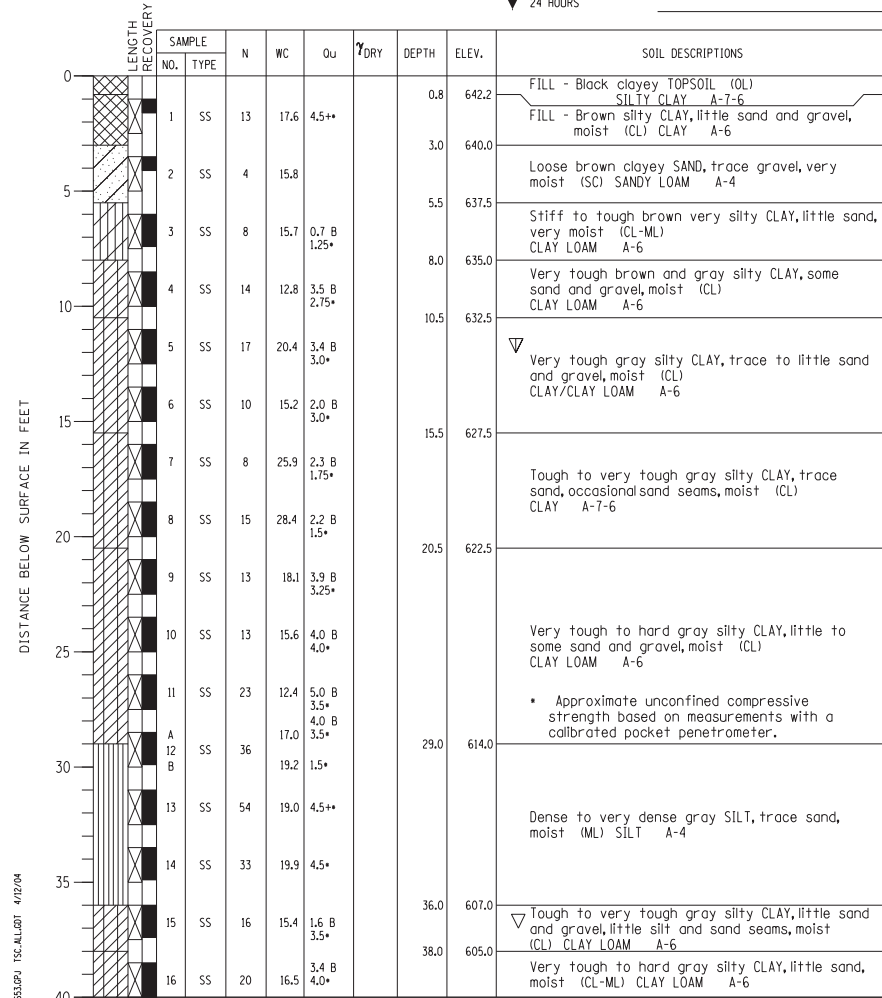
PROJECT Balmoral Avenue Extension - Phase II, Rosemont, Illinois

CLIENT Christopher B. Burke Engineering, Ltd., Rosemont, Illinois



BORING 15 DATE STARTED 8-6-02 DATE COMPLETED 8-6-02 JOB L-52,653

ELEVATIONS WATER LEVEL OBSERVATIONS  
 GROUND SURFACE 643.0 WHILE DRILLING 12.0'  
 END OF BORING 603.0 AT END OF BORING 37.0'  
 24 HOURS



Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual. End of Boring at 40.0'

BORING NO. 15  
 Station 20+00.50  
 Offset 11.51' RT

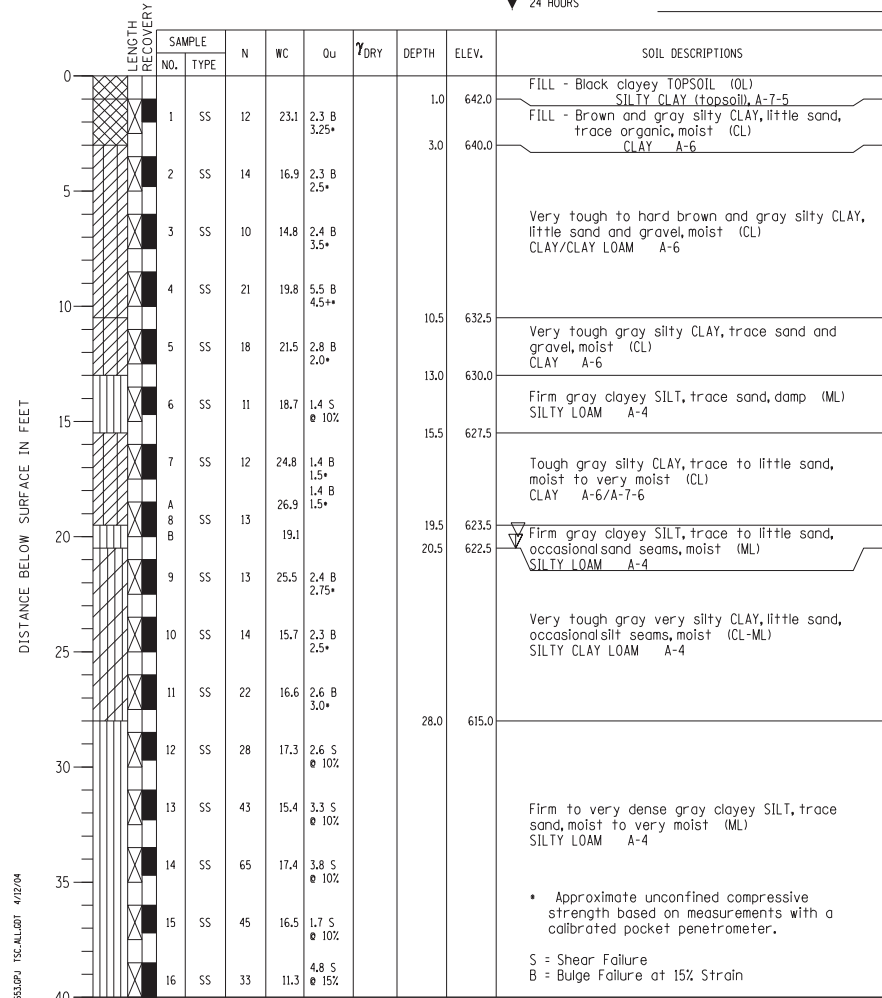
PROJECT Balmoral Avenue Extension - Phase II, Rosemont, Illinois

CLIENT Christopher B. Burke Engineering, Ltd., Rosemont, Illinois



BORING 15A DATE STARTED 10-8-02 DATE COMPLETED 10-8-02 JOB L-52,653

ELEVATIONS WATER LEVEL OBSERVATIONS  
 GROUND SURFACE 643.0 WHILE DRILLING 20.5'  
 END OF BORING 603.0 AT END OF BORING 20.0'  
 24 HOURS



Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual. End of Boring at 40.0'

BORING NO. 15A  
 Station 20+57.90  
 Offset 54.33' RT

N:\ROSEMONT\11000\CADD\_Sheets\DI60637-shr-well-13-cb.dgn

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PLOT SCALE =	CHECKED - MM	REVISED
PLOT DATE =	DRAWN - PDR	REVISED
	CHECKED - MM	REVISED

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

BORING LOGS  
 WEST RETAINING WALL - STRUCTURE NO. 016-1400  
 SHEET NO. S-13 OF S-13 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	402
CONTRACT NO. 60G37				
ILLINOIS FED. AID PROJECT				

Bench Mark: MON 144 - Located East of Spine Road and West of Mannheim Road at the Southeastly side of O'Hare Airport. Elev. 643.22

Existing Structure: None

During Stage II Construction Two-Way Traffic Will Be Maintained on N.B. Mannheim Road.

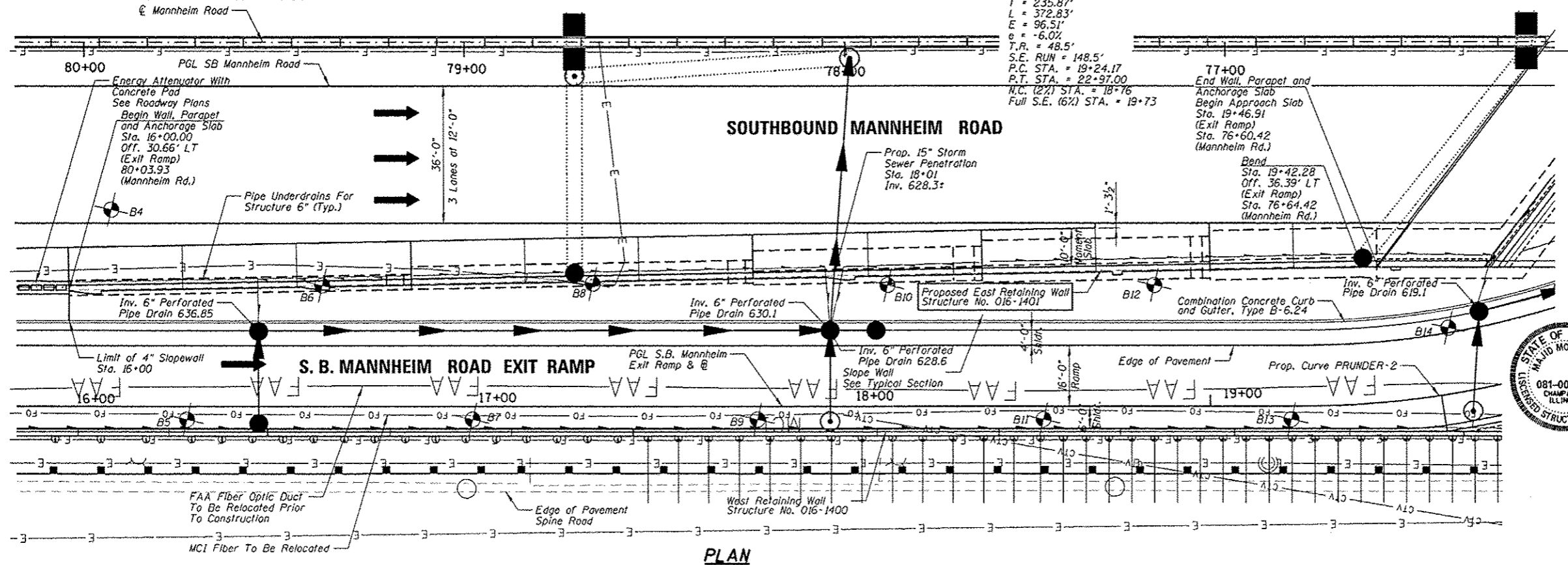
**CURVE DATA**

PROP. CURVE PRUNDER-2  
 P.I. STA. = 21+60.04  
 $\Delta = 89^\circ 00' 23" (LT)$   
 $D = 23^\circ 52' 24"$   
 $R = 240.00'$   
 $T = 235.87'$   
 $L = 372.83'$   
 $E = 96.51'$   
 $e = -6.0\%$   
 $T.R. = 48.5'$   
 $S.E. RUN = 148.5'$   
 $P.C. STA. = 19+24.17$   
 $P.T. STA. = 22+97.00$   
 $M.C. (2%) STA. = 18+76$   
 $Full S.E. (6%) STA. = 19+73$



Mark	Station	Offset	T/Wall Elevation	T/Parapet Elevation
1	16+00.00	30.66' LT	641.43	645.72
2	16+29.99	31.21' LT	641.29	645.58
3	16+59.98	31.77' LT	641.15	645.44
4	16+89.98	32.33' LT	641.01	645.30
5	17+19.97	32.89' LT	640.87	645.16
6	17+49.97	33.44' LT	640.73	645.02
7	17+79.96	34.00' LT	640.59	644.88
8	18+09.96	34.56' LT	640.45	644.74
9	18+39.95	35.12' LT	640.31	644.60
10	18+69.95	35.67' LT	639.16	644.05
11	18+99.94	36.23' LT	639.46	643.75
12	19+21.79	36.64' LT	639.19	643.48
13	19+42.26	36.39' LT	638.96	643.25
14	19+46.91	35.72' LT	639.03	643.20

NOTE: All Offsets Are Measured From The Proposed Baseline Of S.B. Mannheim Road Exit Ramp To The Front Face Of The Retaining Wall. See Typical Section Thru Wall on Sheet S-6.

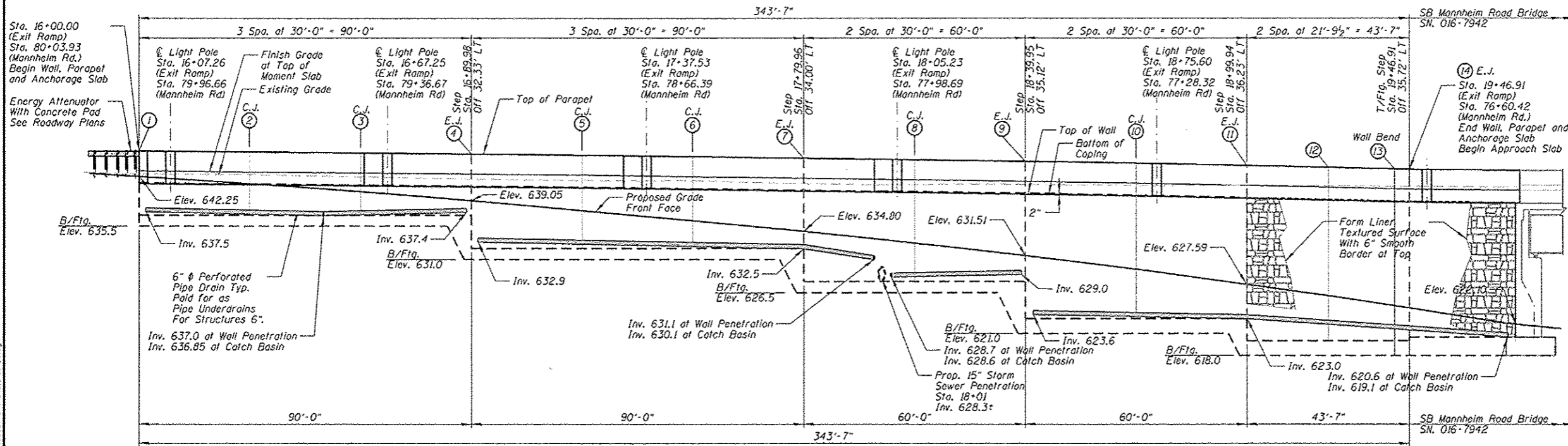


**PLAN**



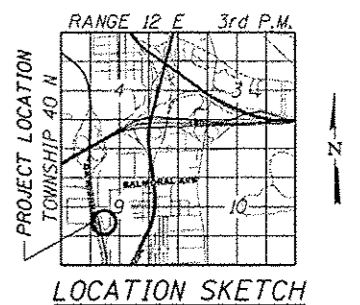
*Majid Mobasseri* 10/18/12  
**MAJID MOBASSERI**  
 ILLINOIS REGISTRATION NO. 081-005058  
 STRUCTURAL ENGINEER  
 EXPIRATION DATE: 11/30/14

**APPROVED**  
 For Structural Adequacy Only  
*Carl Krueger*  
 Engineer of Bridges & Structures



**ELEVATION**

NOTE: See Sheet S-2 For Profile Grade - S.B. Mannheim Road Exit Ramp and Profile Grade - S.B. Mannheim Road.



**GENERAL PLAN AND ELEVATION**  
**EAST RETAINING WALL**  
**SOUTHBOUND EXIT RAMP**  
 E.A.P. RTE. 330-SEC 0105 WRS&HB  
 COOK COUNTY  
 STRUCTURE NO. 016-1401

**DESIGN SPECIFICATIONS**  
 2002 AASHTO Standard Specifications for Highway Bridges, 17th Edition.

**DESIGN STRESSES**  
 FIELD UNITS  
 $f_c = 3,500 \text{ psi}$   
 $f_y = 60,000 \text{ psi (Reinf.)}$

**LOADING**  
 Live Load Surcharge = 2 ft of Earth  
 Traffic Impact Load = 2 kip over 5 ft  
 Length of Parapet

CHRISTOPHER B. BURKE ENGINEERING, LTD.  
 2015 N. Higgins Road, Suite 100  
 Downers Grove, IL 60155  
 (630) 833-0000

USER NAME	DESIGNED	REVISIONS
JMB	JMB	1
MM	MM	2
PDR	PDR	3
MM	MM	4

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION  
 EAST RETAINING WALL - STRUCTURE NO. 016-1401

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	60	403

CONTRACT NO. 60637  
 ILLINOIS FED. AID PROJECT

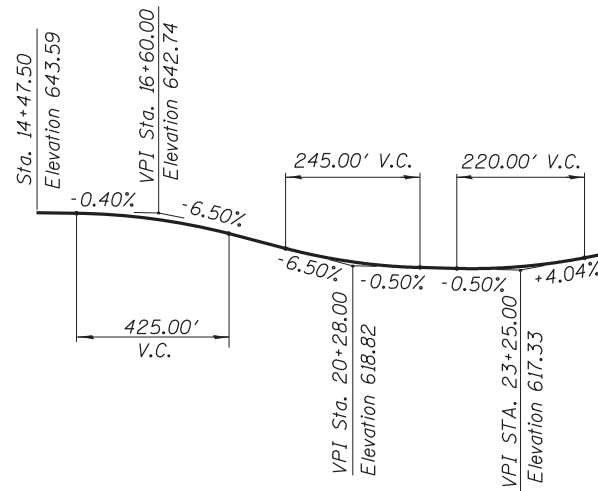
**GENERAL NOTES**

1. Slipforming of the parapets is not allowed.
2. Reinforcement bars designated (E) shall be epoxy coated.

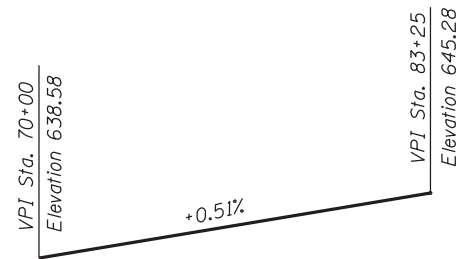
**INDEX OF SHEETS**

- S-1 General Plan and Elevation
- S-2 Index, General Notes and Total Bill of Material
- S-3 Plan and Elevation (1 of 2)
- S-4 Plan and Elevation (2 of 2)
- S-5 Typical Sections
- S-6 Typical Sections and Details
- S-7 Parapet and Anchorage Slab Reinforcement (1 of 4)
- S-8 Parapet and Anchorage Slab Reinforcement (2 of 4)
- S-9 Parapet and Anchorage Slab Reinforcement (3 of 4)
- S-10 Parapet and Anchorage Slab Reinforcement (4 of 4)
- S-11 Parapet and Anchorage Slab Details (1 of 2)
- S-12 Parapet and Anchorage Slab Details (2 of 2)
- S-13 Boring Logs
- S-14 Boring Logs

EAST RETAINING WALL TOTAL BILL OF MATERIAL		
ITEM	UNIT	TOTAL
Porous Granular Backfill	Cu Yd	545
Aggregate Subgrade Improvement 12"	Sq Yd	400
Structure Excavation	Cu Yd	2,383
Concrete Structures	Cu Yd	391.2
Concrete Superstructure	Cu Yd	231.2
Form Liner Textured Surface	Sq Ft	2,750
Reinforcement Bars, Epoxy Coated	Pound	76,040
Slope Wall 4 Inch	Sq Yd	430
Geocomposite Wall Drain	Sq Yd	410
Pipe Underdrains For Structures 6"	Foot	381



**PROFILE GRADE - S.B. MANNHEIM ROAD EXIT RAMP**



**PROFILE GRADE - S.B. MANNHEIM ROAD**

N:\ROSEMONT\11000\CADD\_Sheets\DI166037-shr-eve11-02-cebdgr

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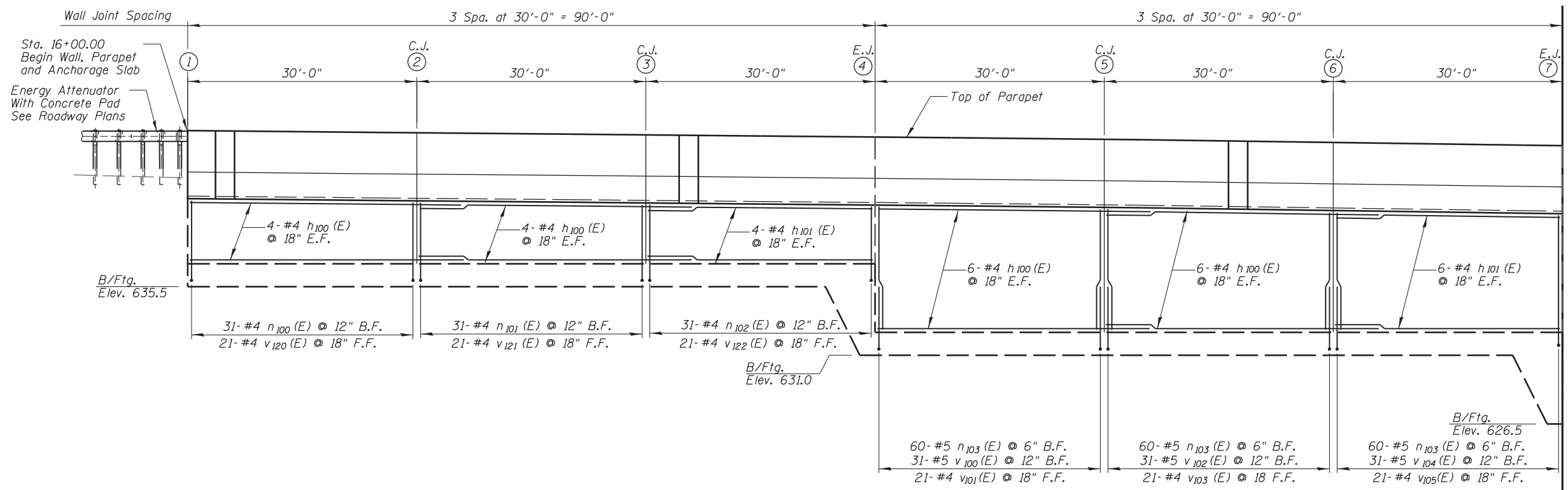
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	CHECKED - MM	REVISED
PLOT SCALE =	DRAWN - PDR	REVISED
PLOT DATE =	CHECKED - MM	REVISED

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES AND BILL OF MATERIAL  
 EAST RETAINING WALL - STRUCTURE NO. 016-1401**

SHEET NO. S-2 OF S-14 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	404
CONTRACT NO. 60G37				
ILLINOIS FED. AID PROJECT				



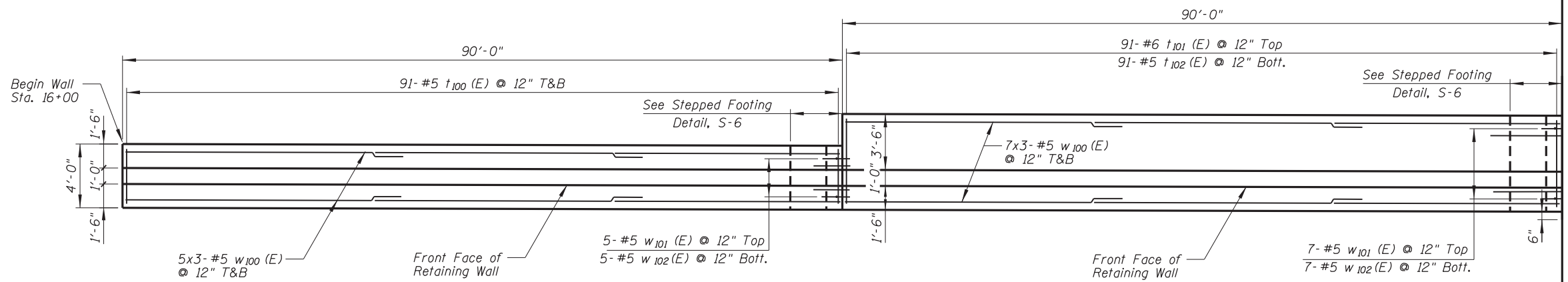
MATCHLINE - STA. 17+79.96

Note: See Sheet S-1 for Stations And Elevations At Joints.

**MIN. BAR LAP**

Bar	Bar Lap
#4	2'-11"
#5	3'-8"

**ELEVATION**



MATCHLINE - STA. 17+79.96

**FOOTING PLAN**

N:\PROJECTS\11000\CADD\_Sheets\1160037-shr-elev-1-03-cbd.dgn

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	CHECKED - MM	REVISED
PLOT SCALE =	DRAWN - PDR	REVISED
PLOT DATE =	CHECKED - MM	REVISED

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

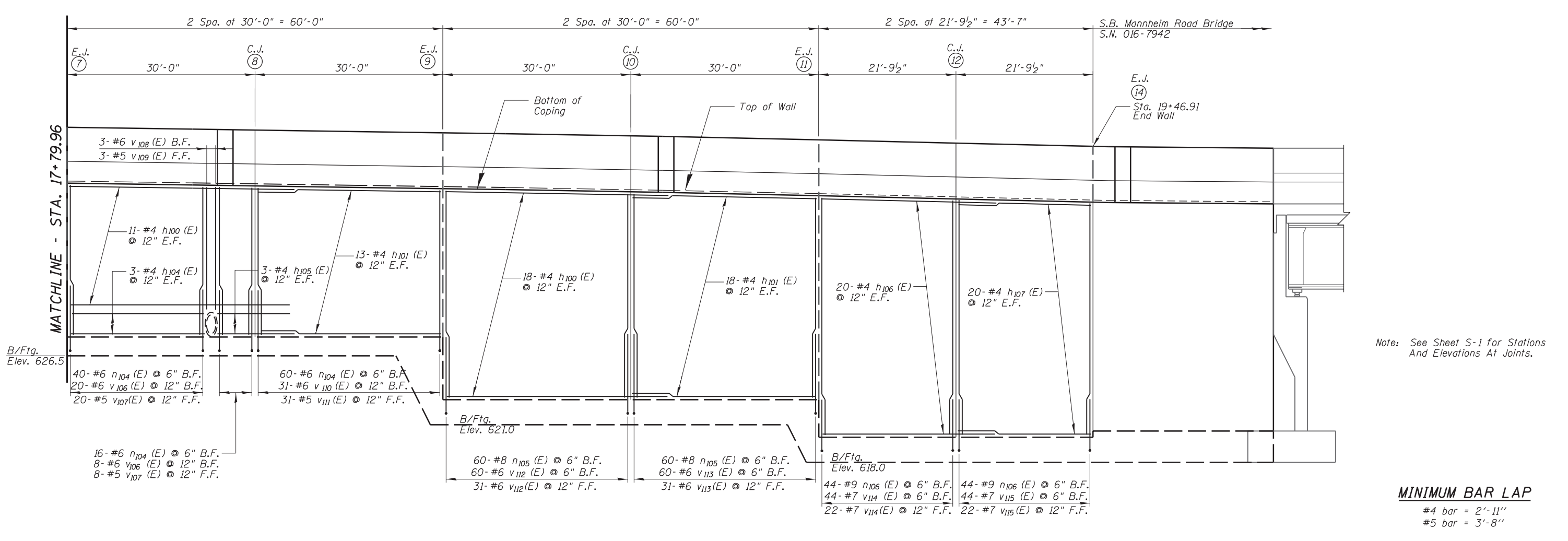
**PLAN AND ELEVATION  
 EAST RETAINING WALL - STRUCTURE NO. 016-1401**

SHEET NO. S-3 OF S-14 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	405
CONTRACT NO. 60G37				

ILLINOIS FED. AID PROJECT

N:\PROJECTS\11000\CADD\_Sheets\1166037-shr-ewall-1-94-ceb.dgn

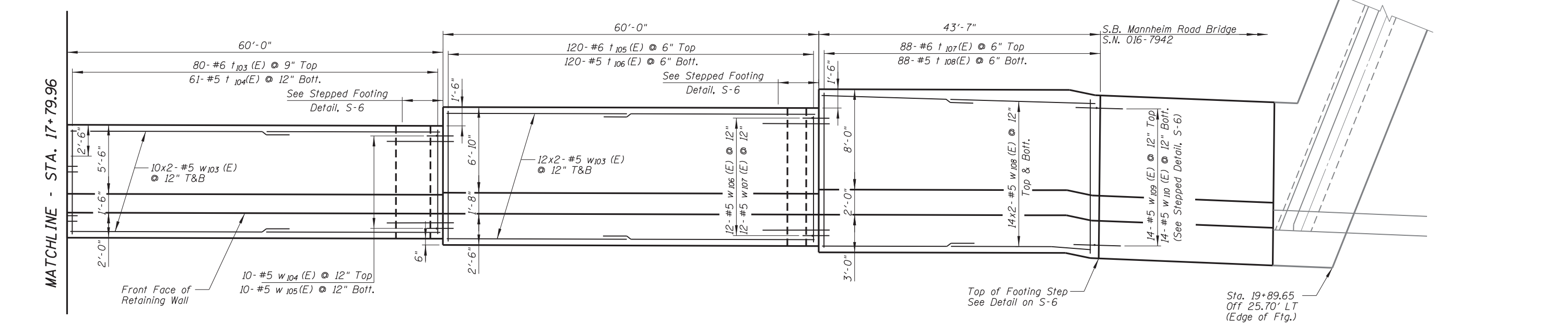


Note: See Sheet S-1 for Stations And Elevations At Joints.

**MINIMUM BAR LAP**

#4 bar = 2'-11"  
#5 bar = 3'-8"

**ELEVATION**



**FOOTING PLAN**

**CHRISTOPHER B. BURKE ENGINEERING, LTD.**  
8575 W. Higgins Road, Suite 600  
Rosemont, Illinois 60018  
(847) 924-6500

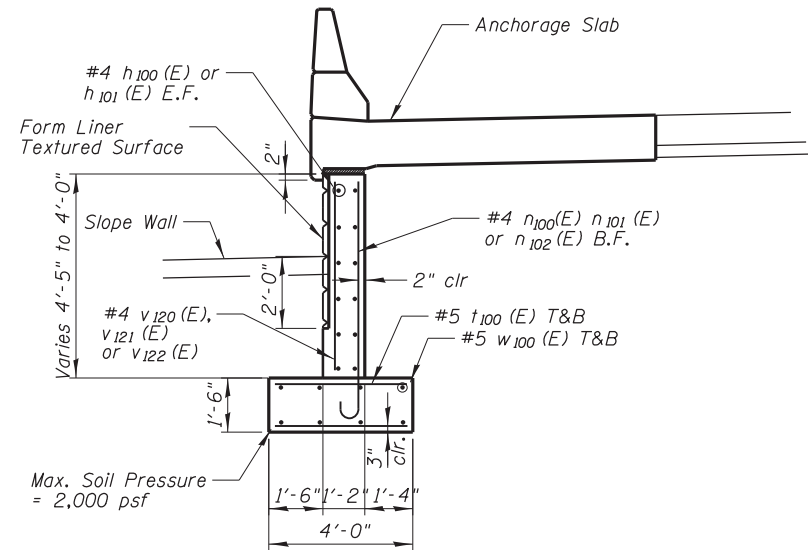
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PLOT SCALE =	CHECKED - MM	REVISED
PLOT DATE =	DRAWN - PDR	REVISED
	CHECKED - MM	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

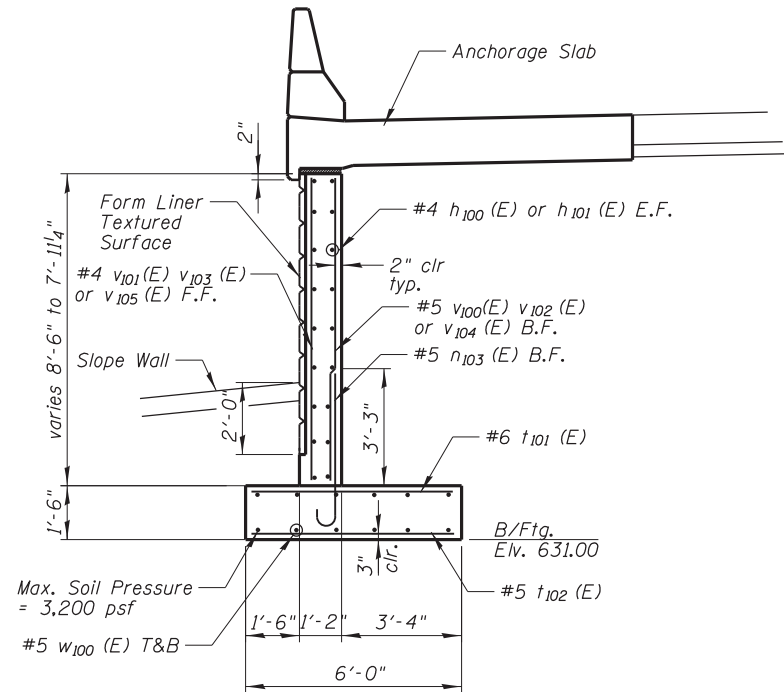
**PLAN AND ELEVATION  
EAST RETAINING WALL - STRUCTURE NO. 016-1401**

SHEET NO. S-4 OF S-14 SHEETS

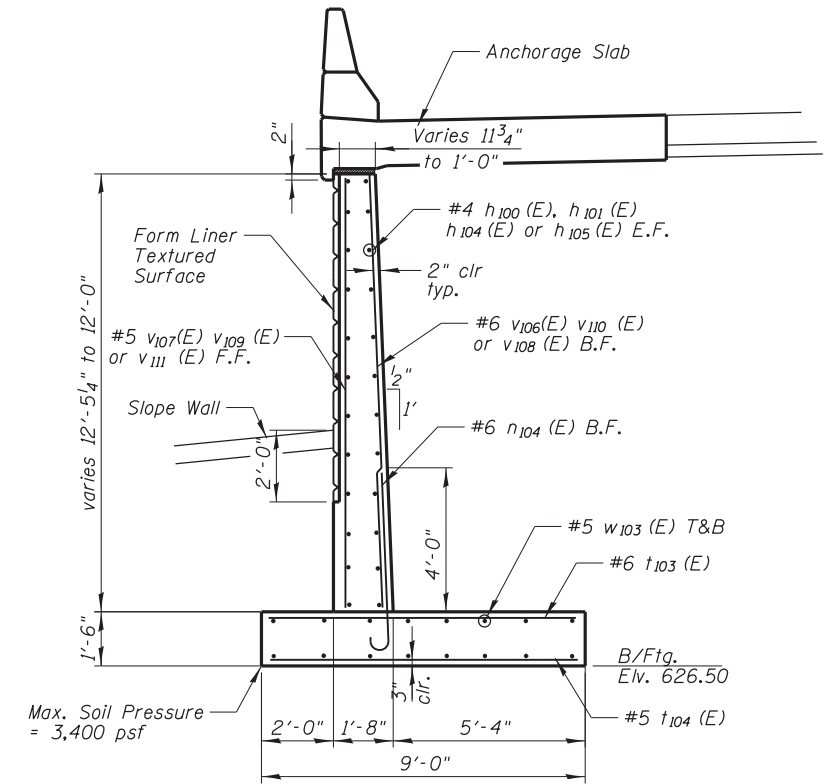
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	406
CONTRACT NO. 60G37				
ILLINOIS FED. AID PROJECT				



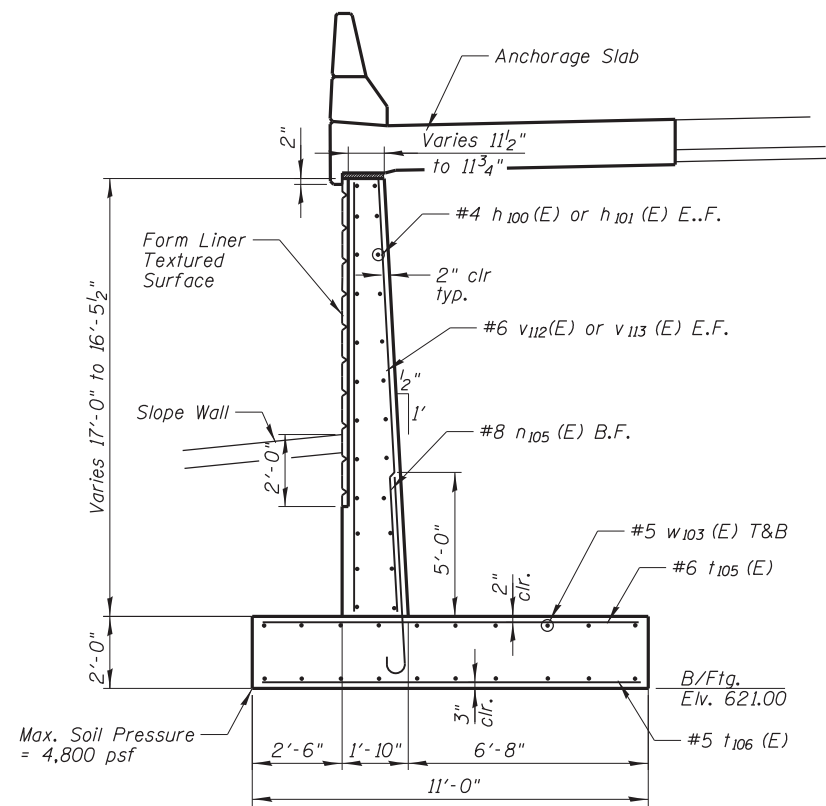
SECTION-STA. 16+00 TO STA. 16+89.98



SECTION-STA. 16+89.98 TO STA. 17+79.96

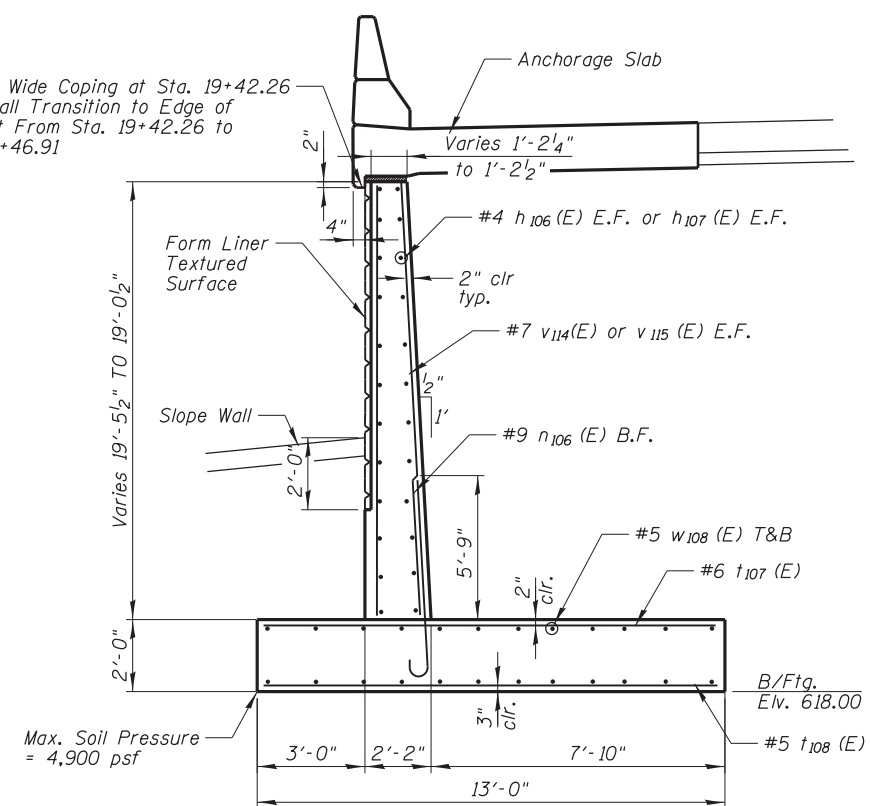


SECTION-STA. 17+79.96 TO STA. 18+39.95



SECTION-STA. 18+39.95 TO STA. 18+99.94

End 4" Wide Coping at Sta. 19+42.26  
Wall Shall Transition to Edge of  
Parapet From Sta. 19+42.26 to  
Sta. 19+46.91



SECTION-STA. 18+99.94 TO STA. 19+46.91

N:\PROJECTS\11000\CADD\_Sheets\1166037-shr-ewall-195-ceb.dgn

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PLOT DATE =	DRAWN - PDR	REVISED
	CHECKED - MM	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TYPICAL SECTIONS  
EAST RETAINING WALL - STRUCTURE NO. 016-1401**

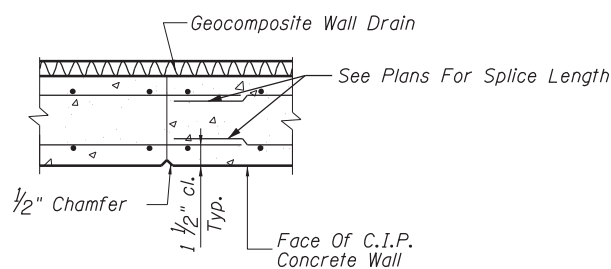
SHEET NO. S-5 OF S-14 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	407
CONTRACT NO. 60G37				
ILLINOIS FED. AID PROJECT				

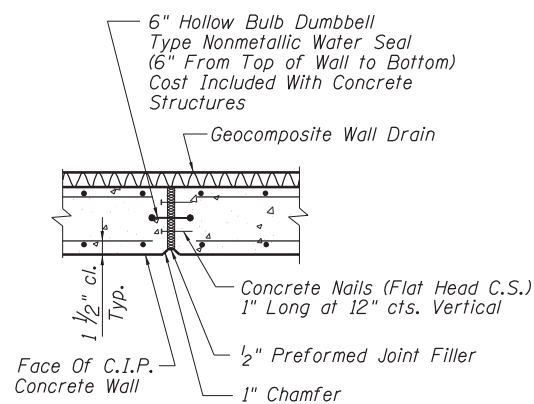
**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h 100 (E)	98	#4	32'-11"	—
h 101 (E)	82	#4	29'-8"	—
h 102 (E)	4	#5	6'-6"	—
h 103 (E)	8	#5	2'-6"	—
h 104 (E)	6	#4	19'-10"	—
h 105 (E)	6	#4	11'-6"	—
h 106 (E)	40	#4	24'-9"	—
h 107 (E)	40	#4	21'-6"	—
n 100 (E)	31	#4	5'-11"	J
n 101 (E)	31	#4	5'-9"	J
n 102 (E)	31	#4	5'-7"	J
n 103 (E)	180	#5	5'-1"	J
n 104 (E)	124	#6	6'-2"	J
n 105 (E)	120	#8	7'-8"	J
n 106 (E)	88	#9	8'-9"	J
t 100 (E)	185	#5	3'-8"	—
t 101 (E)	91	#6	5'-8"	—
t 102 (E)	94	#5	5'-8"	—
t 103 (E)	80	#6	8'-8"	—
t 104 (E)	65	#5	8'-8"	—
t 105 (E)	120	#6	10'-8"	—
t 106 (E)	124	#5	10'-8"	—
t 107 (E)	88	#6	12'-8"	—
t 108 (E)	88	#5	12'-8"	—
v 100 (E)	31	#5	8'-2"	—
v 101 (E)	21	#4	8'-2"	—
v 102 (E)	31	#5	8'-0"	—
v 103 (E)	21	#4	8'-0"	—
v 104 (E)	31	#5	7'-10"	—
v 105 (E)	21	#4	7'-10"	—
v 106 (E)	32	#6	12'-1"	—
v 107 (E)	32	#5	12'-1"	—
v 108 (E)	3	#6	10'-4"	—
v 109 (E)	3	#5	10'-4"	—
v 110 (E)	31	#6	11'-10"	—
v 111 (E)	31	#5	11'-10"	—
v 112 (E)	91	#6	16'-8"	—
v 113 (E)	91	#6	16'-4"	—
v 114 (E)	66	#7	19'-1"	—
v 115 (E)	66	#7	18'-10"	—
v 120 (E)	21	#4	4'-2"	—
v 121 (E)	21	#4	4'-0"	—
v 122 (E)	21	#4	3'-10"	—
w 100 (E)	72	#5	32'-11"	—
w 101 (E)	12	#5	6'-11"	L
w 102 (E)	12	#5	14'-9"	L
w 103 (E)	88	#5	32'-7"	—
w 104 (E)	10	#5	7'-11"	L
w 105 (E)	10	#5	16'-2"	—
w 106 (E)	12	#5	5'-11"	L
w 107 (E)	12	#5	13'-4"	L
w 108 (E)	56	#5	24'-5"	—
w 109 (E)	14	#5	7'-9"	—
w 110 (E)	14	#5	7'-4"	—
Concrete Structures			Cu. Yd.	391.2
Reinforcement Bars, Epoxy Coated			Pound	43,300

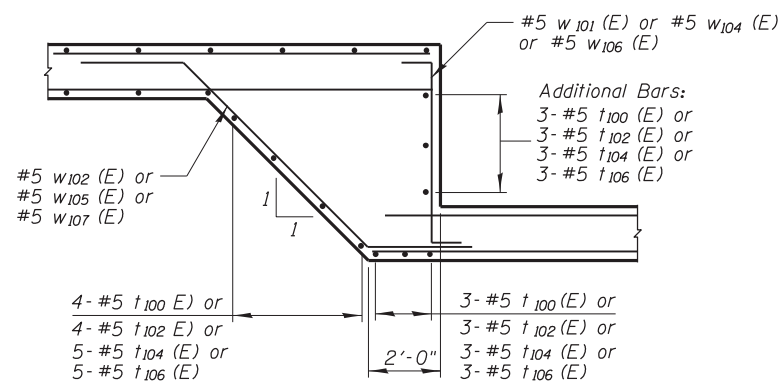
NOTES:  
 1. Reinforcement bars designated (E) shall be epoxy coated.  
 2. Bars indicated thus 1x2-#5 etc. indicates 1 line of bars with 2 lengths per line.



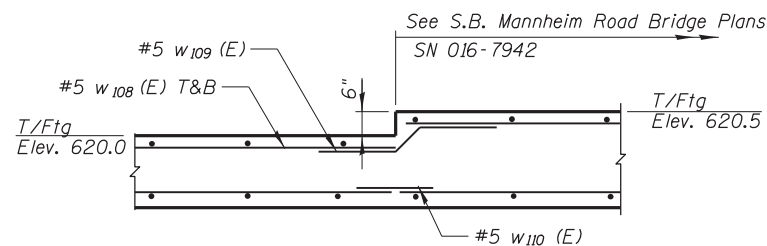
**CONSTRUCTION JOINT**  
 (Form Liner Omitted For Clarity)



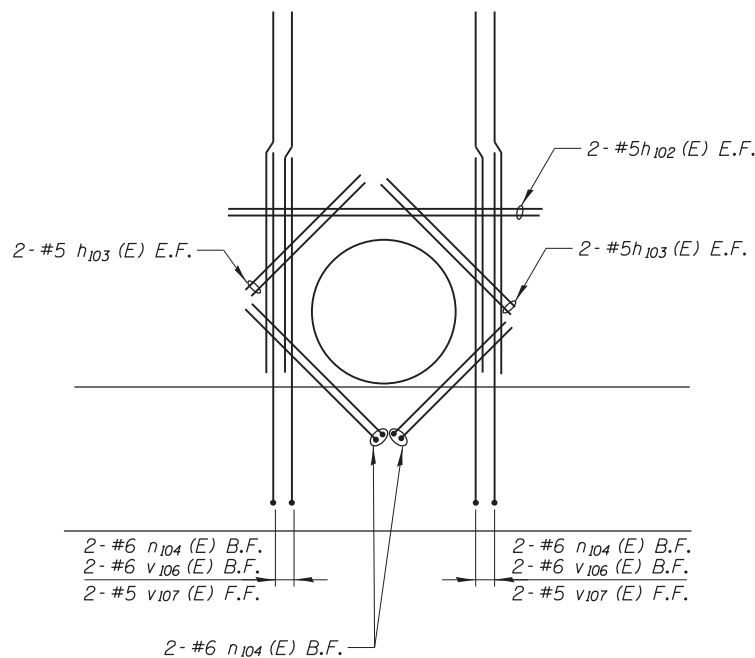
**EXPANSION JOINT**  
 (Form Liner Omitted For Clarity)



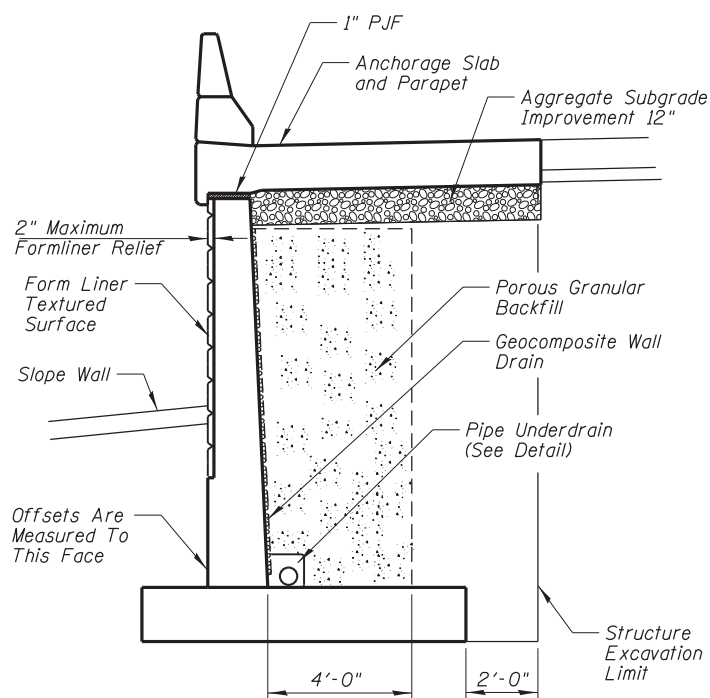
**STEPPED FOOTING DETAIL**



**STEP DETAIL - STA. 19+46.91**



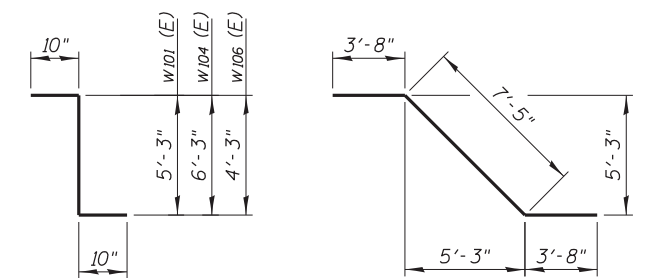
**DETAIL - ADDITIONAL BARS ON OPENING**



**TYPICAL SECTION THRU WALL**

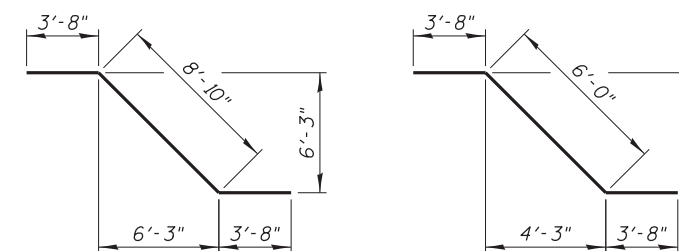
Bar	SIZE	A	B	C
n 100 (E)	#4	5'-5"	6"	4"
n 101 (E)	#4	5'-3"	6"	4"
n 102 (E)	#4	5'-1"	6"	4"
n 103 (E)	#5	4'-6"	7"	5"
n 104 (E)	#6	5'-6"	8"	6"
n 105 (E)	#8	6'-9"	11"	8"
n 106 (E)	#9	7'-6"	15"	11 3/4"

**BAR n 100 (E) to n 110 (E)**



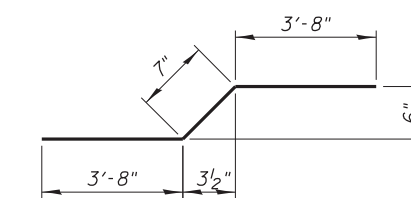
**BAR w 101 (E), w 104 (E), w 106 (E)**

**BAR w 102 (E)**

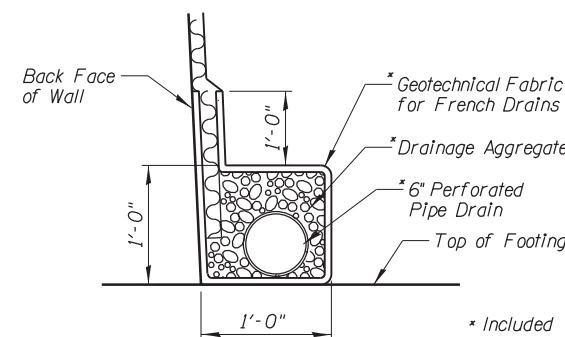


**BAR w 105 (E)**

**BAR w 107 (E)**



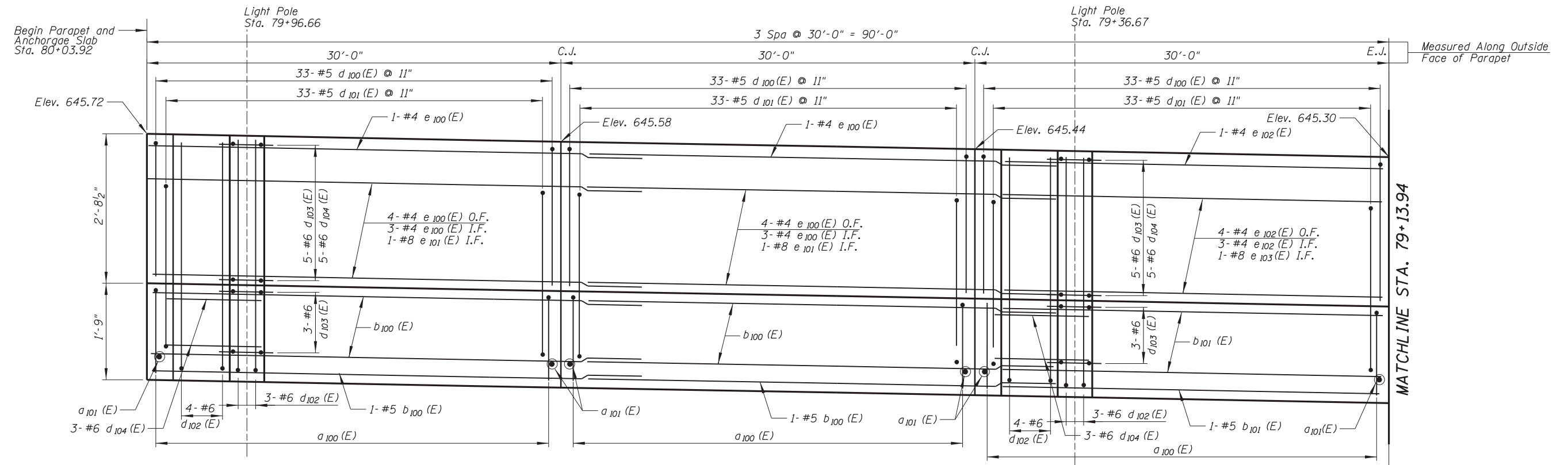
**BAR w 109 (E)**



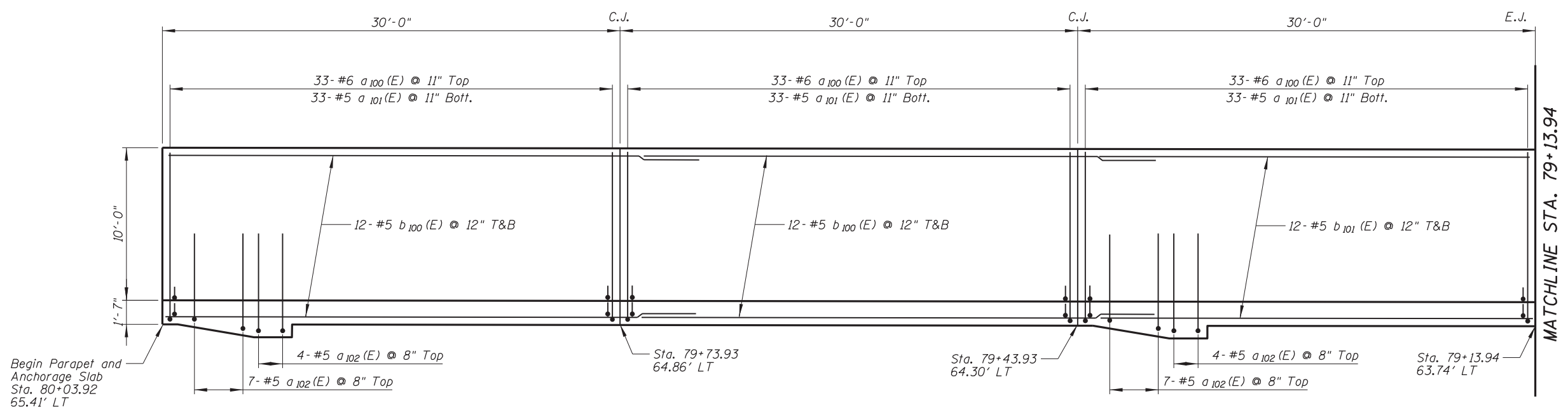
**PIPE UNDERDRAIN DETAIL**

\* Included in the cost of "Pipe Underdrains for Structures".





**ELEVATION**



**PLAN**

NOTE: All Stations and Offsets Are Measured From The  $\phi$  of Mannheim Road.

N:\ROSEMONT\11000\CADD\_Sheets\DI66037-shr-elev1-07-ceb.dgn

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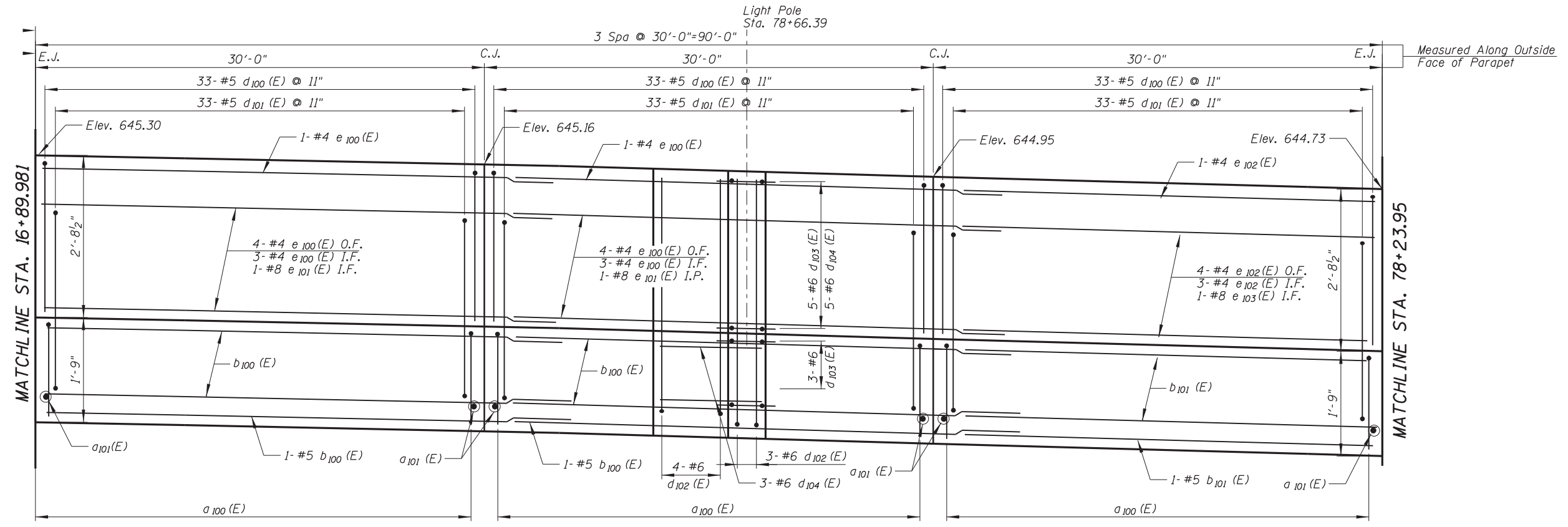
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PLOT SCALE =	CHECKED - MM	REVISED
PLOT DATE =	DRAWN - PDR	REVISED
	CHECKED - MM	REVISED

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

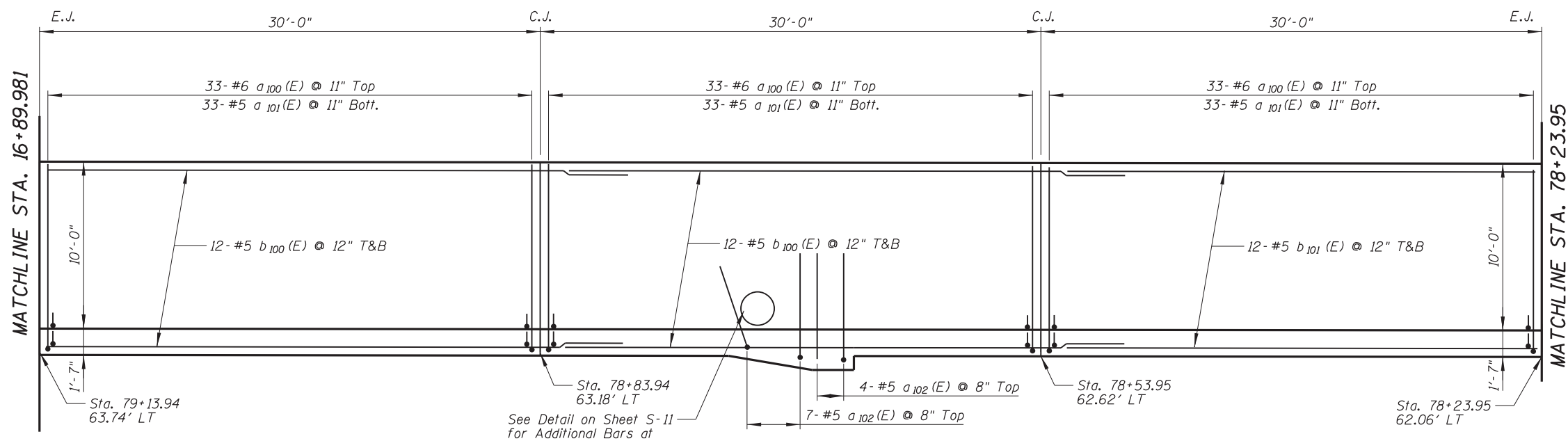
**PARAPET AND ANCHORAGE SLAB REINFORCEMENT  
 EAST RETAINING WALL - STRUCTURE NO. 016-1401**

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	409
CONTRACT NO. 60G37				
ILLINOIS FED. AID PROJECT				

SHEET NO. S-7 OF S-14 SHEETS



**ELEVATION**



**PLAN**

NOTE: All Stations and Offsets Are Measured From The  $\text{C}$  of Mannheim Road.

N:\ROSEMONT\11000\3\CADD\_Sheets\DI160037-shr-elev1-98-ceb.dgn

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PLOT DATE =	DRAWN - PDR	REVISED
	CHECKED - MM	REVISED

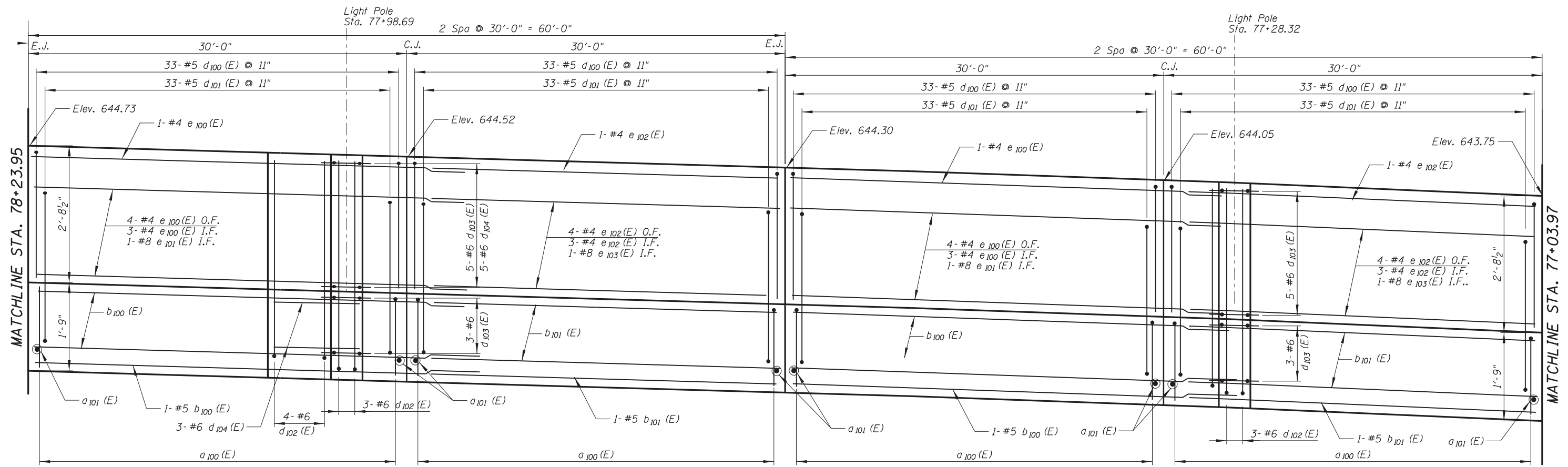
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**PARAPET AND ACHORAGE SLAB REINFORCEMENT  
 EAST RETAINING WALL - STRUCTURE NO. 016-1401**

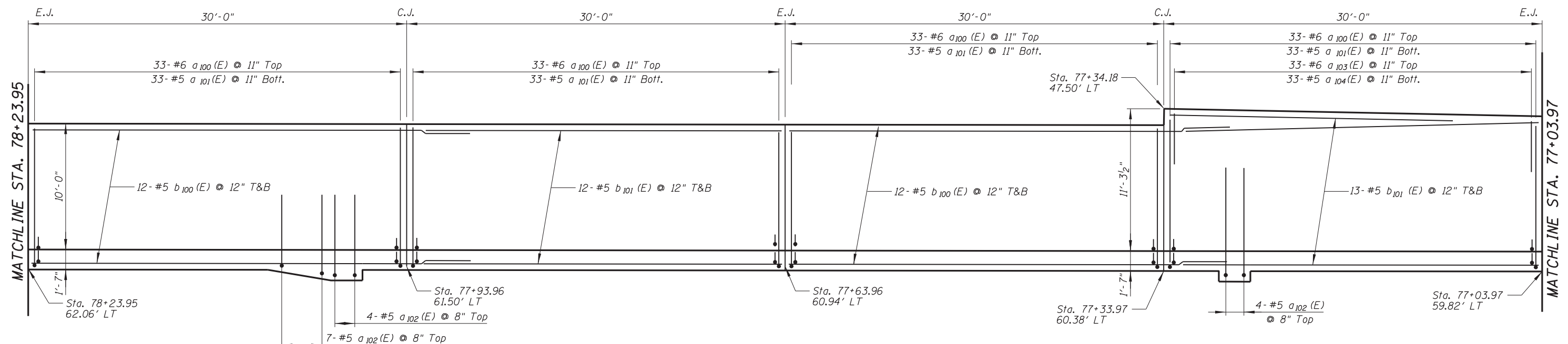
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	410
CONTRACT NO. 60G37				

SHEET NO. S-8 OF S-14 SHEETS

ILLINOIS FED. AID PROJECT



**ELEVATION**



**PLAN**

NOTE: All Stations and Offsets Are Measured From The  $\mathcal{C}$  of Mannheim Road.

N:\ROSEMONT\11000\CADD\_Sheets\DI66037-shr-ewell-09-cbd.dgn

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PLOT SCALE =	CHECKED - MM	REVISED
PLOT DATE =	DRAWN - PDR	REVISED
	CHECKED - MM	REVISED

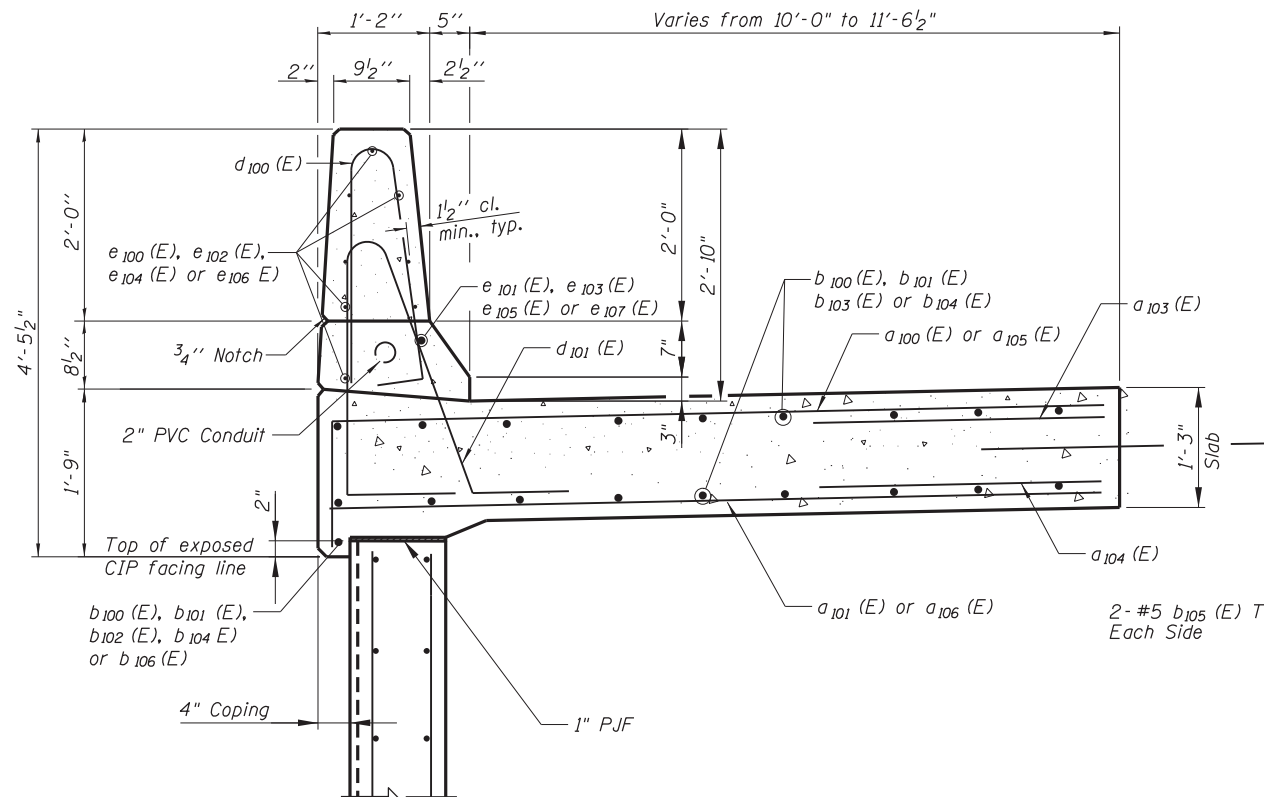
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**PARAPET AND ANCHORAGE SLAB REINFORCEMENT  
 EAST RETAINING WALL - STRUCTURE NO. 016-1401**

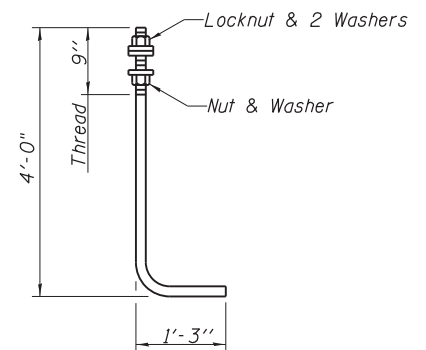
SHEET NO. S-9 OF S-14 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	411
CONTRACT NO. 60G37				
ILLINOIS FED. AID PROJECT				

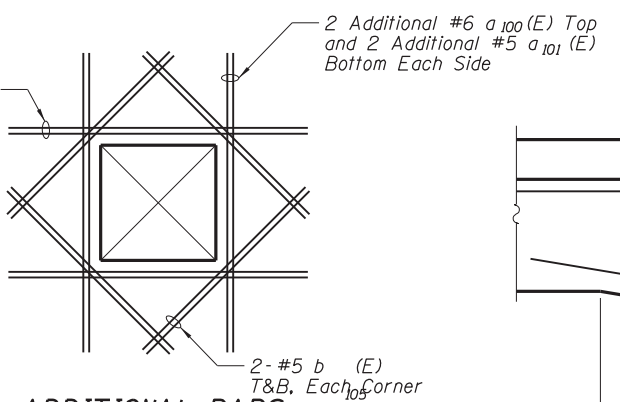




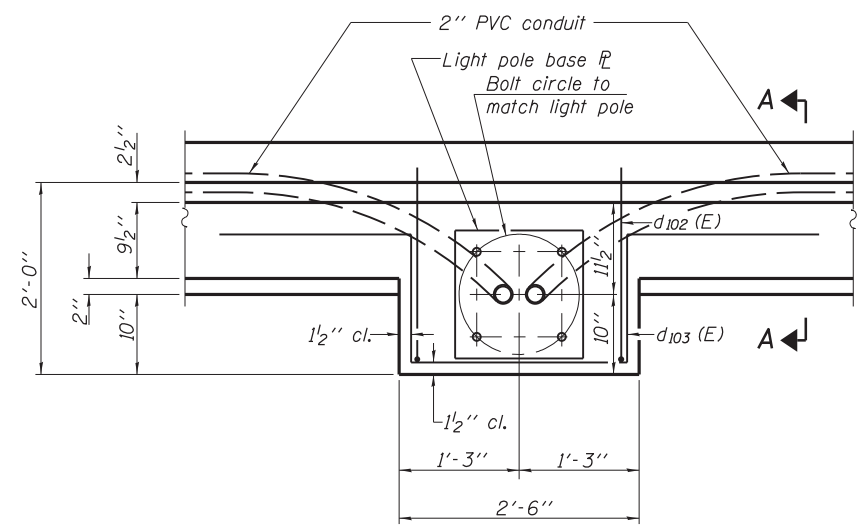
**TYPICAL MOMENT SLAB SECTION**



**ANCHOR ROD**  
Diameter as specified for light poles.  
(ASTM F 1554 Grade 105) full length  
hot dipped galvanized

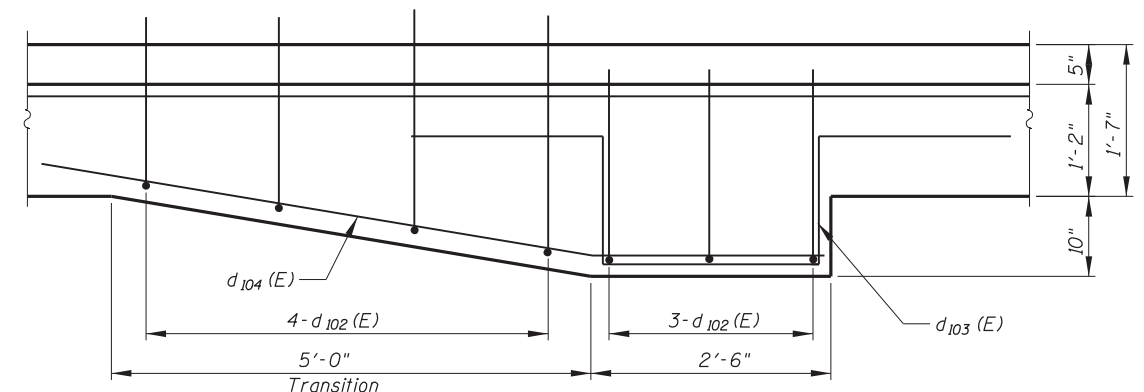


**ADDITIONAL BARS AT WALL OPENINGS**

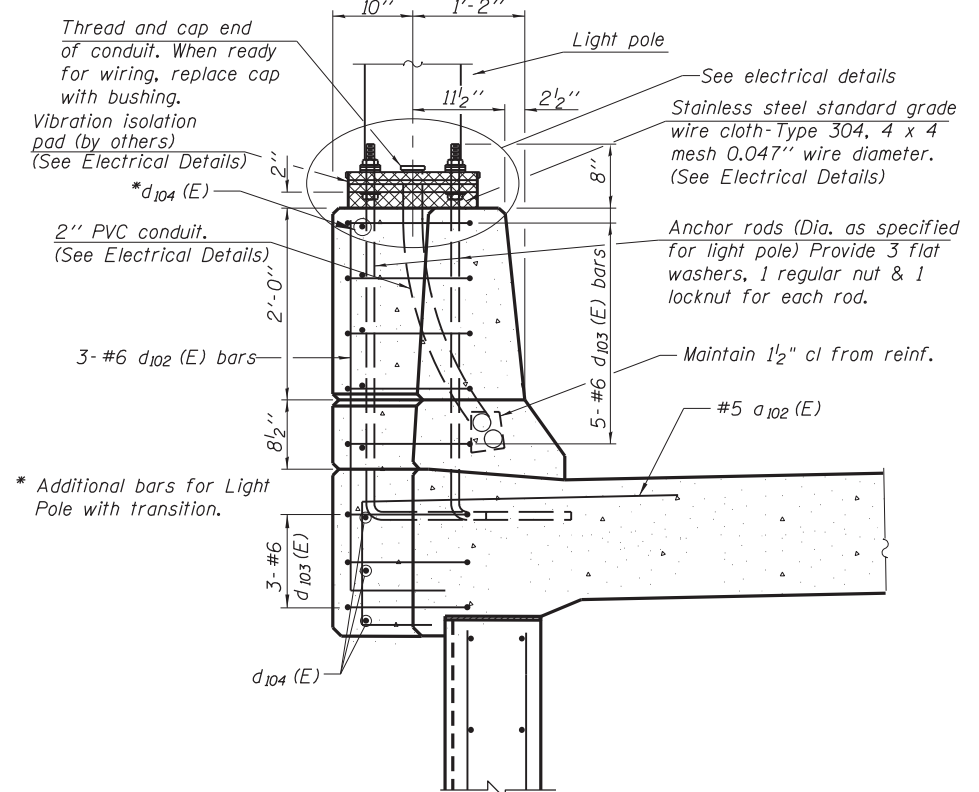


**PLAN-PARAPET WITH LIGHT POLE**

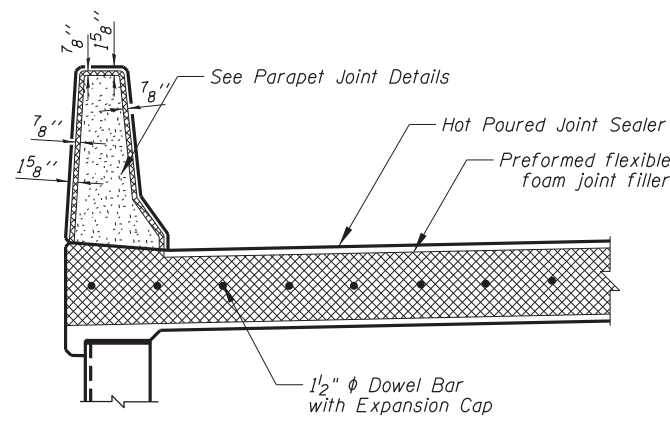
Note: Cost of anchor rods and conduit is included with Concrete Superstructure.



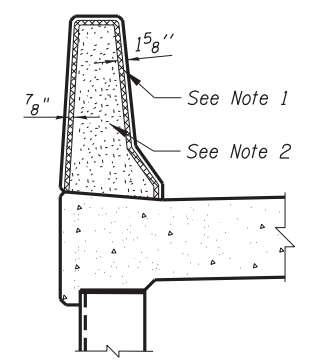
**PLAN-PARAPET WITH TRANSITION FOR LIGHT POLE**



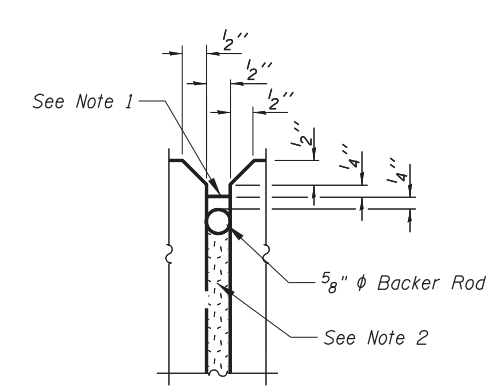
**SECTION A-A**



**TRANSVERSE EXPANSION JOINT DETAIL**

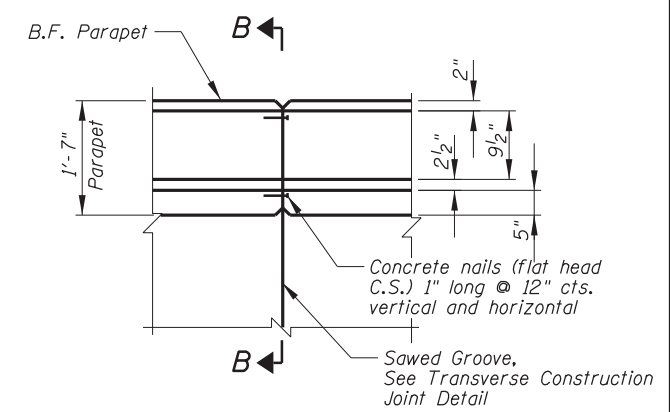


**SECTION B-B**



**PARAPET JOINT DETAILS**

- Parapet Joint Notes:**
1. Non-staining gray one component non-sag elastomeric gun grade polyurethane sealant meeting the requirements of ASTM C-920, Type S, Grade NS, Class 25, use T with a 5/8" backer rod.
  2. 1/2" Preformed Self-Expanding Cork Joint Filler according to Article 1051.07 of the Standard Specifications. Cost included with Concrete Superstructure.



**PLAN**

N:\ROSEMONT\11000\CADD\_Sheets\DI160037-shr-ewell-011-cb.dgn

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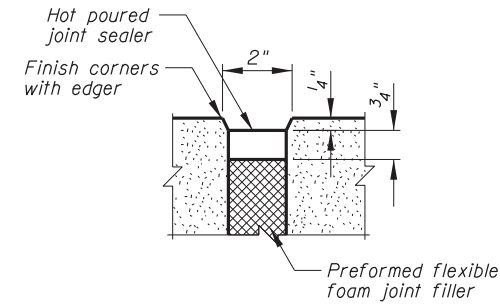
USER NAME =	DESIGNED - JMB	REVISED
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PLOT DATE =	DRAWN - PDR	REVISED
	CHECKED - MM	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

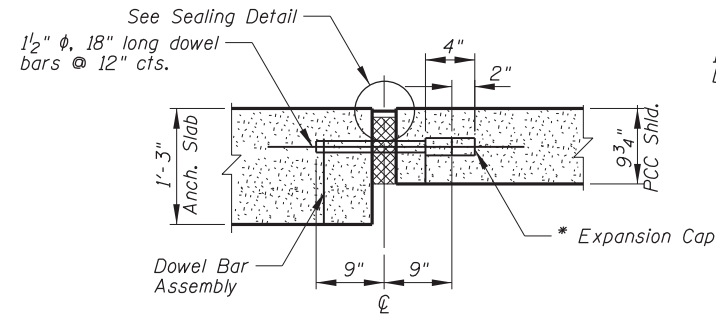
**PARAPET AND ANCHORAGE SLAB DETAILS  
EAST RETAINING WALL - STRUCTURE NO. 016-1401**

SHEET NO. S-11 OF S-14 SHEETS

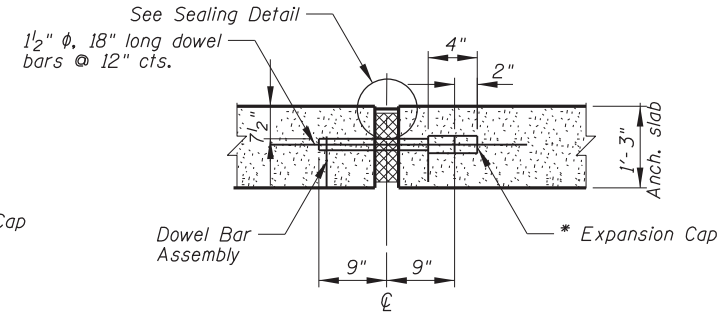
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	413
CONTRACT NO. 60G37				
ILLINOIS FED. AID PROJECT				



**SEALING DETAIL**



**ANCHORAGE SLAB TO PCC SHOULDER**



**ANCHORAGE SLAB TO ANCHORAGE SLAB**

**TRANSVERSE EXPANSION JOINT**

Expansion Joint and Dowel Bars included in the Cost of Concrete Superstructures.

\* Expansion caps shall be installed on the exposed end of each dowel bar once the header has been removed and the joint filler material has been installed.

N:\PROJECTS\11000\CADD\_Sheets\1166037-shr-ewell-012-cb.dgn

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 DEPARTMENT OF TRANSPORTATION**

**PARAPET AND ANCHORAGE SLAB DETAILS  
 EAST RETAINING WALL - STRUCTURE NO. 016-1401**

SHEET NO. S-12 OF S-14 SHEETS

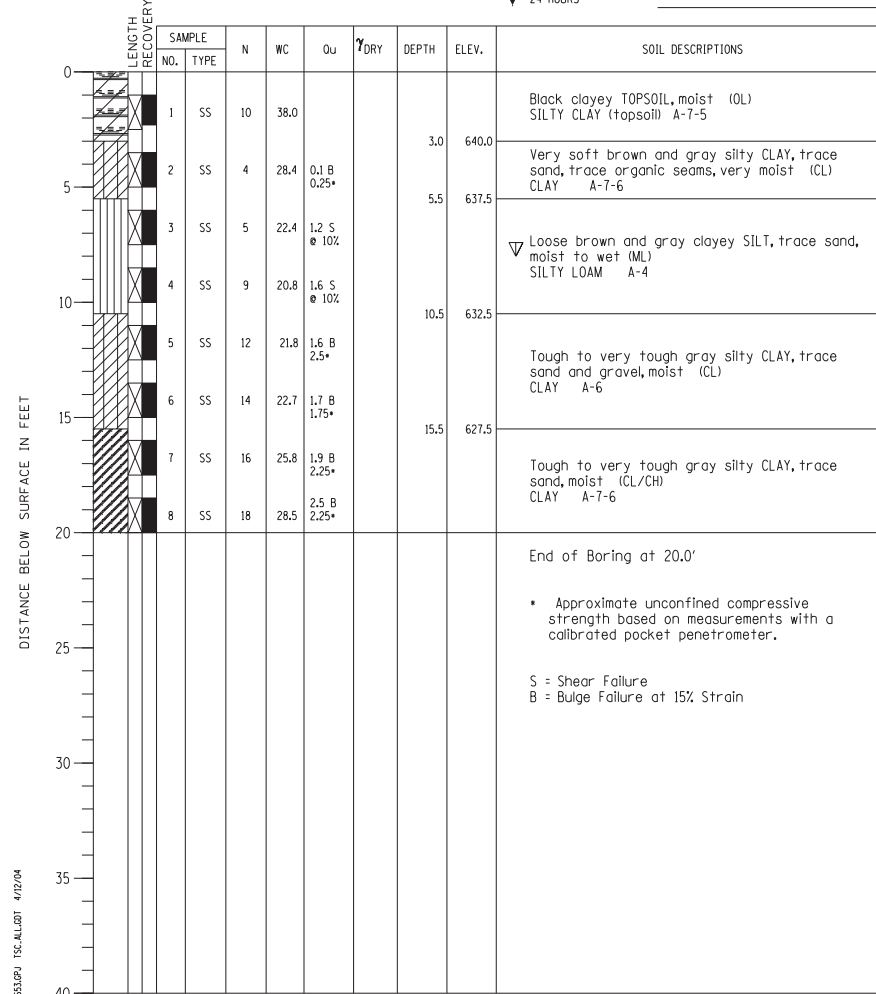
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	414
CONTRACT NO. 60G37				
ILLINOIS FED. AID PROJECT				

PROJECT Balmoral Avenue Extension - Phase II, Rosemont, Illinois  
 CLIENT Christopher B. Burke Engineering, Ltd., Rosemont, Illinois  
 BORING 4 DATE STARTED 10-8-02 DATE COMPLETED 10-8-02 JOB L-52,653



ELEVATIONS  
 GROUND SURFACE 643.0  
 END OF BORING 623.0

WATER LEVEL OBSERVATIONS  
 WHILE DRILLING 8.0'  
 AT END OF BORING Dry  
 24 HOURS



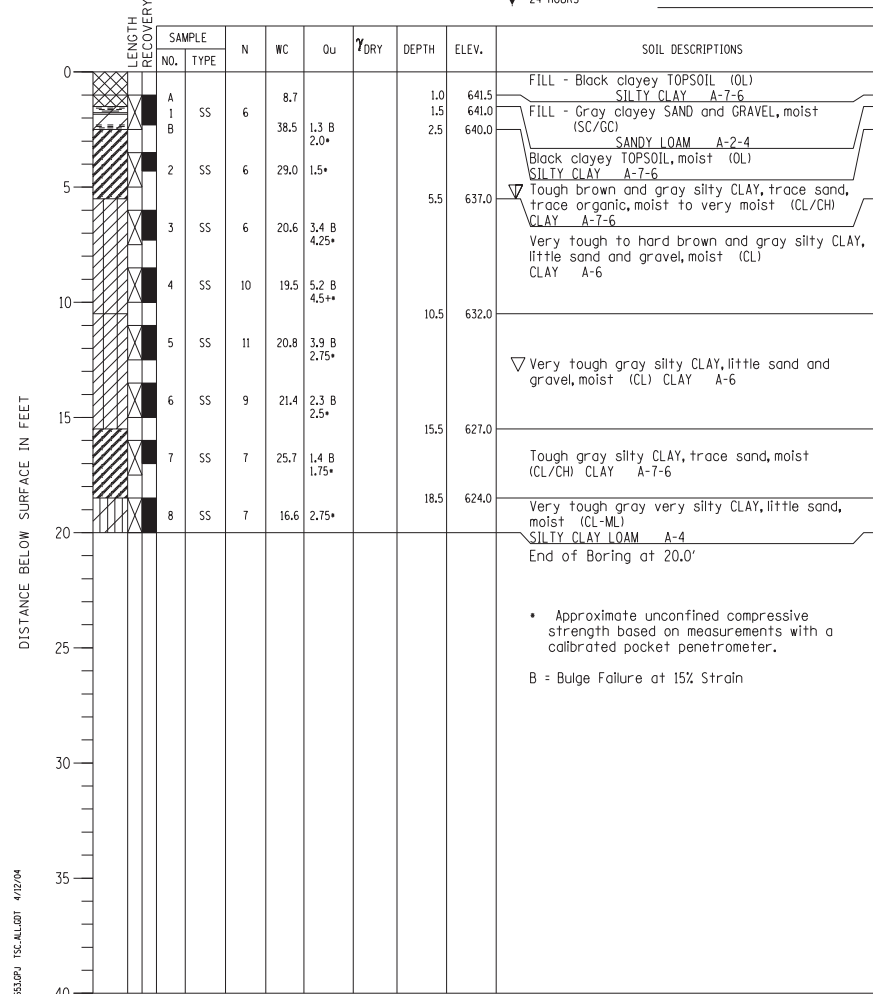
BORING NO. 4  
 Station 16+11.11  
 Offset 51.82' LT

PROJECT Balmoral Avenue Extension - Phase II, Rosemont, Illinois  
 CLIENT Christopher B. Burke Engineering, Ltd., Rosemont, Illinois  
 BORING 6 DATE STARTED 7-19-02 DATE COMPLETED 7-19-02 JOB L-52,653



ELEVATIONS  
 GROUND SURFACE 642.5  
 END OF BORING 622.5

WATER LEVEL OBSERVATIONS  
 WHILE DRILLING 5.5'  
 AT END OF BORING 13.0'  
 24 HOURS



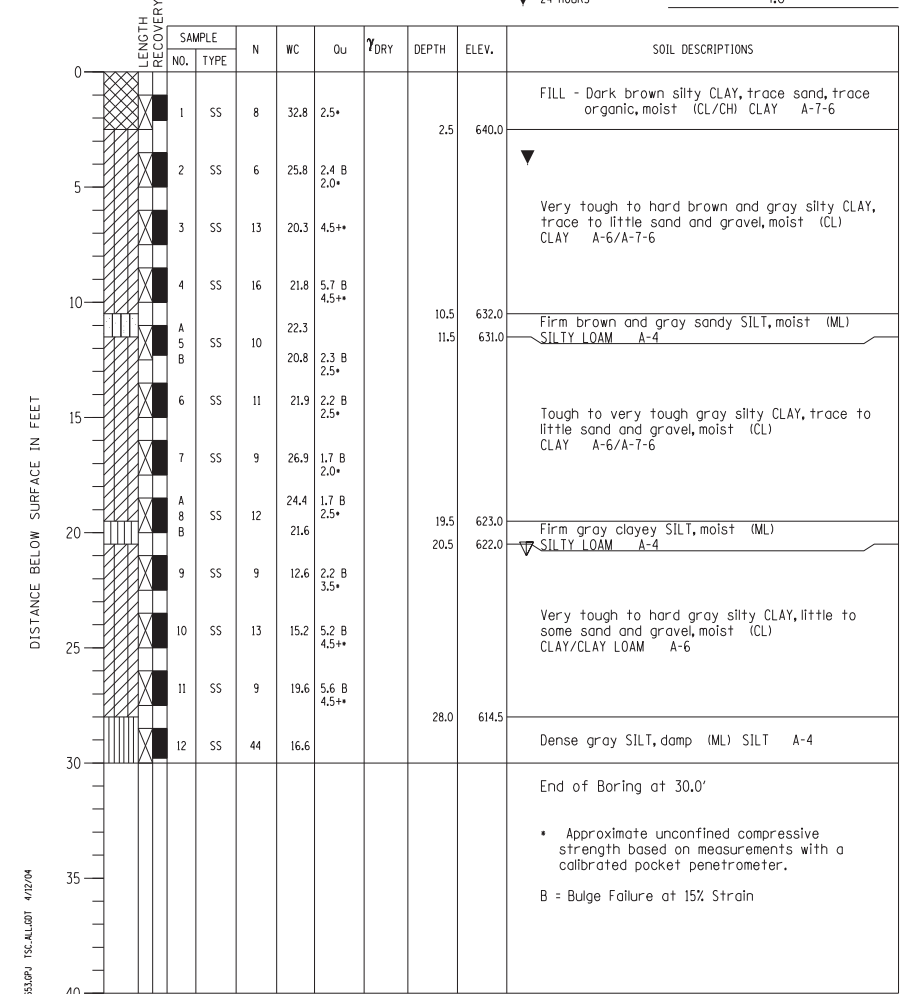
BORING NO. 6  
 Station 16+66.58  
 Offset 31.89' LT

PROJECT Balmoral Avenue Extension - Phase II, Rosemont, Illinois  
 CLIENT Christopher B. Burke Engineering, Ltd., Rosemont, Illinois  
 BORING 8 DATE STARTED 7-19-02 DATE COMPLETED 7-19-02 JOB L-52,653



ELEVATIONS  
 GROUND SURFACE 642.5  
 END OF BORING 612.5

WATER LEVEL OBSERVATIONS  
 WHILE DRILLING 21.0'  
 AT END OF BORING Dry  
 24 HOURS



BORING NO. 8  
 Station 17+37.76  
 Offset 32.35' LT

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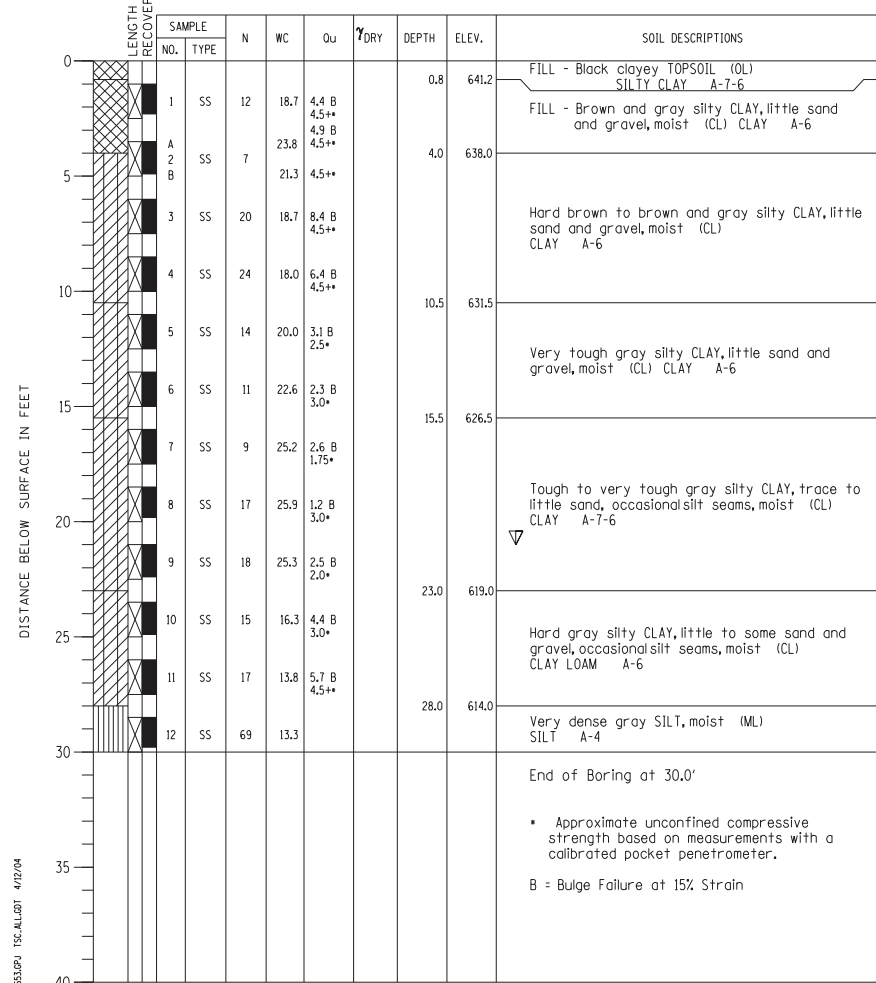
BORING LOGS  
 EAST RETAINING WALL - STRUCTURE NO. 016-1401  
 SHEET NO. S-13 OF S-14 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	415
CONTRACT NO. 60G37				
ILLINOIS FED. AID PROJECT				

PROJECT Balmoral Avenue Extension - Phase II, Rosemont, Illinois  
 CLIENT Christopher B. Burke Engineering, Ltd., Rosemont, Illinois  
 BORING 10 DATE STARTED 7-23-02 DATE COMPLETED 7-23-02 JOB L-52,653



ELEVATIONS WATER LEVEL OBSERVATIONS  
 GROUND SURFACE 642.0 WHILE DRILLING 21.0'  
 END OF BORING 612.0 AT END OF BORING Dry  
 24 HOURS

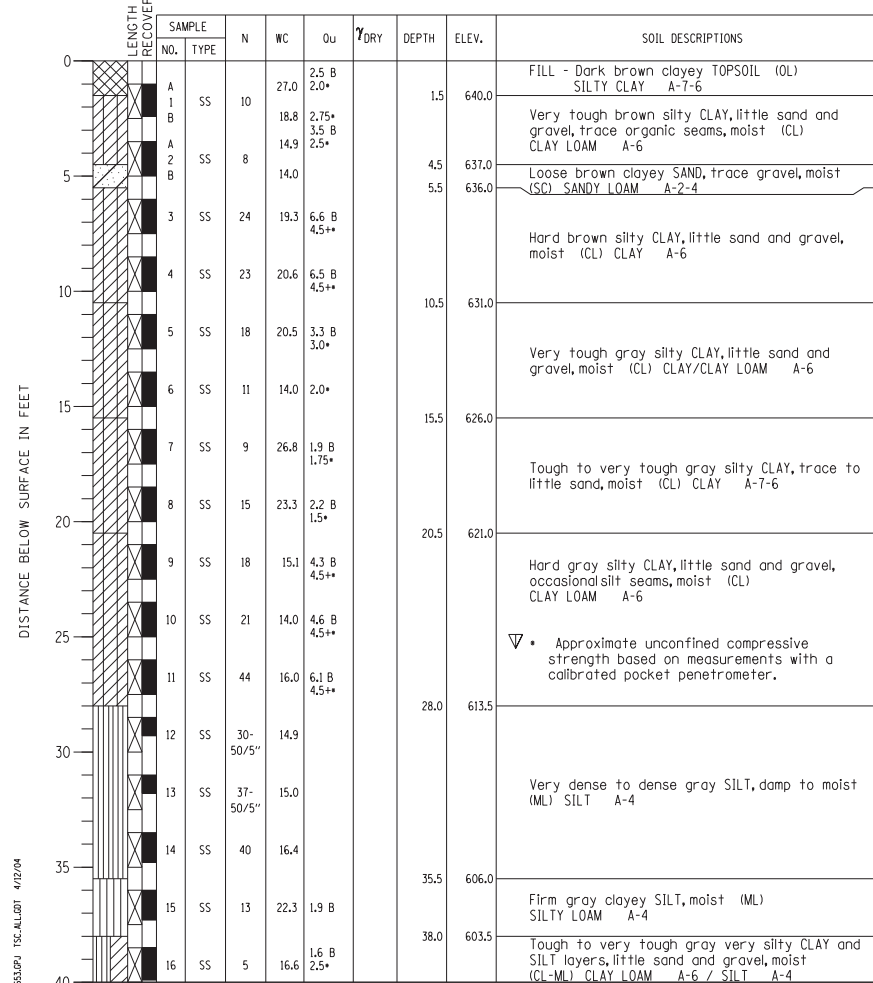


BORING NO. 10  
 Station 18+15.02  
 Offset 31.95' LT

PROJECT Balmoral Avenue Extension - Phase II, Rosemont, Illinois  
 CLIENT Christopher B. Burke Engineering, Ltd., Rosemont, Illinois  
 BORING 12 DATE STARTED 7-23-02 DATE COMPLETED 7-23-02 JOB L-52,653



ELEVATIONS WATER LEVEL OBSERVATIONS  
 GROUND SURFACE 641.5 WHILE DRILLING 25.5'  
 END OF BORING 601.5 AT END OF BORING Dry  
 24 HOURS

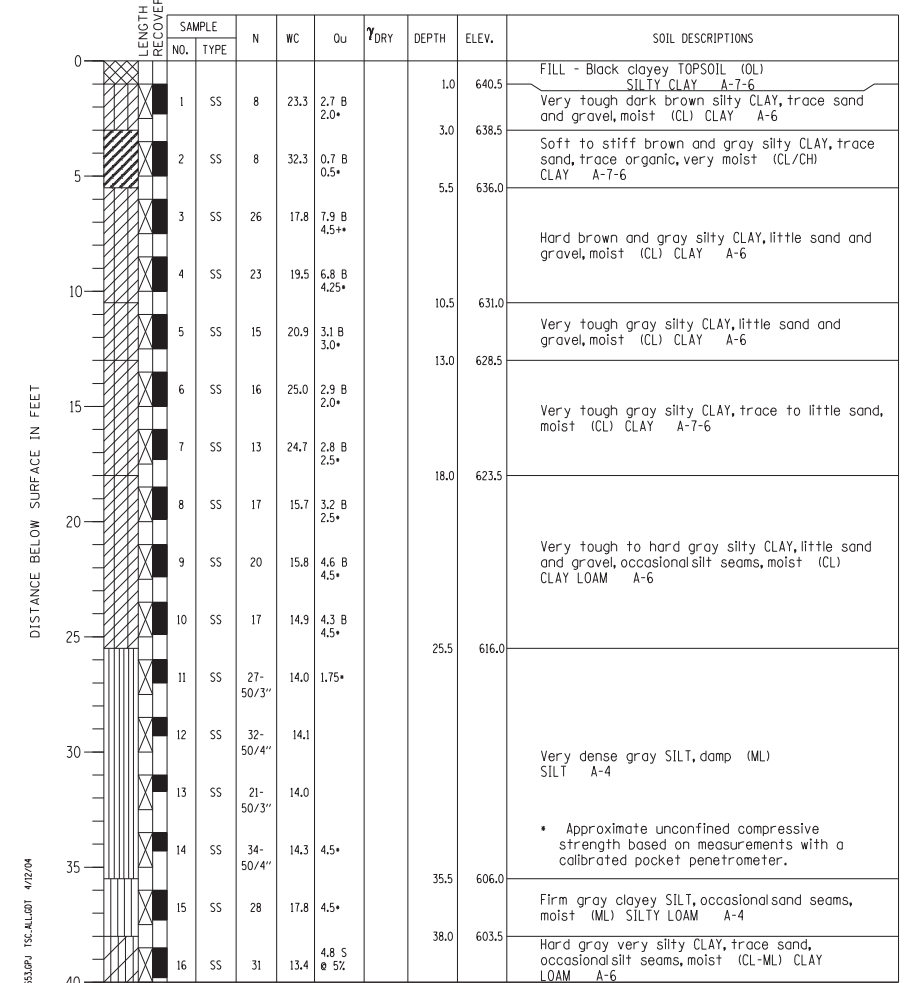


BORING NO. 12  
 Station 18+85.27  
 Offset 31.91' LT

PROJECT Balmoral Avenue Extension - Phase II, Rosemont, Illinois  
 CLIENT Christopher B. Burke Engineering, Ltd., Rosemont, Illinois  
 BORING 14 DATE STARTED 7-23-02 DATE COMPLETED 7-23-02 JOB L-52,653



ELEVATIONS WATER LEVEL OBSERVATIONS  
 GROUND SURFACE 641.5 WHILE DRILLING Dry  
 END OF BORING 601.5 AT END OF BORING Dry  
 24 HOURS



BORING NO. 14  
 Station 19+65.47  
 Offset 17.30' LT

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PLOT DATE =	CHECKED - MM	REVISED

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BORING LOGS  
 EAST RETAINING WALL - STRUCTURE NO. 016-1401

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	416
CONTRACT NO. 60G37				

SHEET NO. S-14 OF S-14 SHEETS

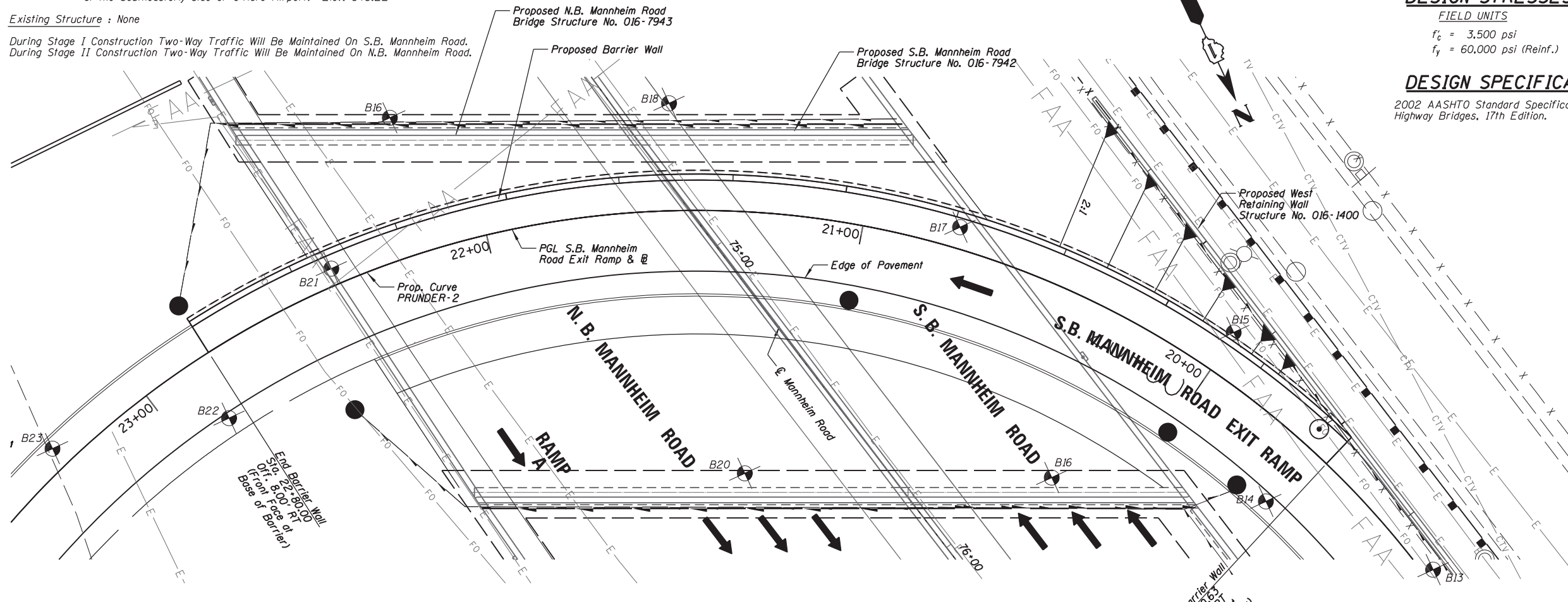
ILLINOIS FED. AID PROJECT



Bench Mark: MON 144 - Located East of Spine Road and West of Mannheim Road at the Southeastly side of O'Hare Airport. Elev. 643.22

Existing Structure : None

During Stage I Construction Two-Way Traffic Will Be Maintained On S.B. Mannheim Road.  
During Stage II Construction Two-Way Traffic Will Be Maintained On N.B. Mannheim Road.



PLAN

**DESIGN STRESSES**

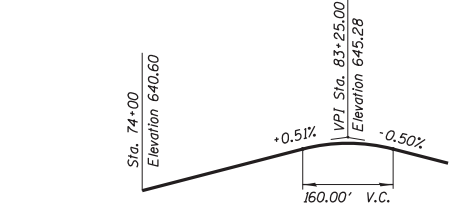
FIELD UNITS  
 $f'_c = 3,500$  psi  
 $f_y = 60,000$  psi (Reinf.)

**DESIGN SPECIFICATIONS**

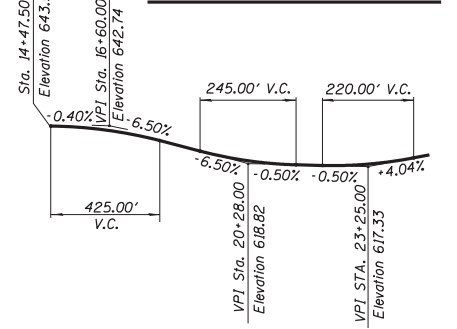
2002 AASHTO Standard Specifications for Highway Bridges, 17th Edition.

**CURVE DATA**

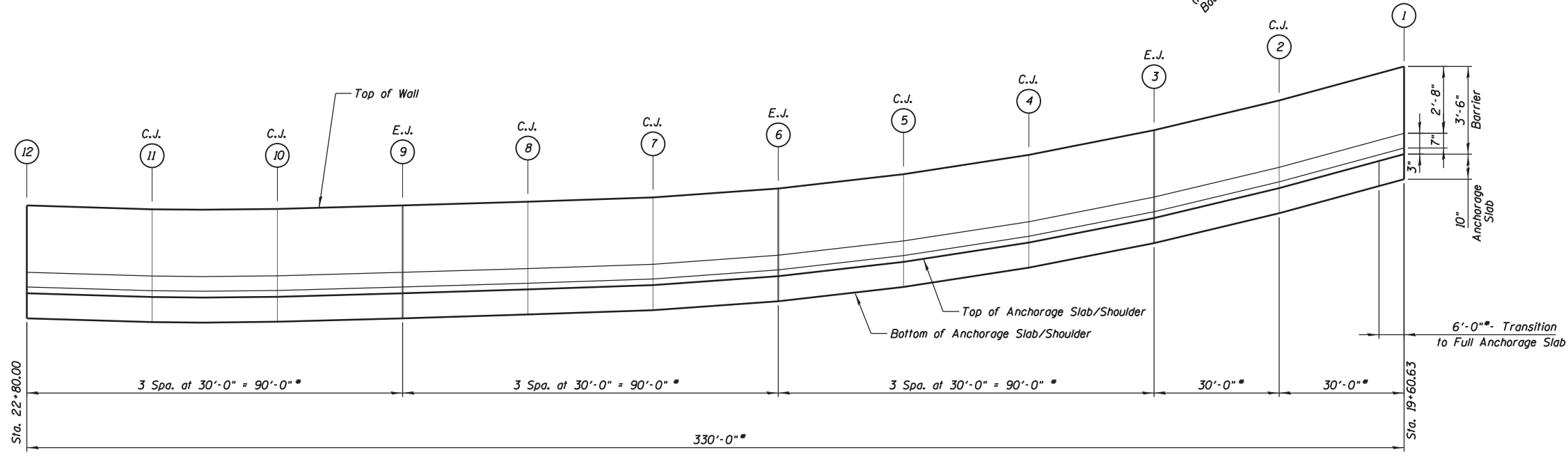
PROP. CURVE PRUNDER-2  
 PI STA. = 21+60.04  
 $\Delta = 89^\circ 00' 23''$  (LT)  
 $D = 23^\circ 52' 24''$   
 $R = 240.00'$   
 $T = 235.83'$   
 $L = 372.83'$   
 $E = 96.51'$   
 $e = -6.0\%$   
 $T.R. = 0'$   
 $S.E. RUN = 97'$   
 $P.C. STA. = 19+24.17$   
 $P.T. STA. = 22+97.00$



PROFILE GRADE - S.B. MANNHEIM ROAD



PROFILE GRADE - S.B. MANNHEIM ROAD EXIT RAMP



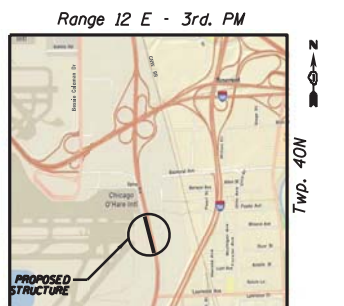
ELEVATION

\* - Measured Along the Front Face of the Barrier Wall at the Base of the Barrier

NOTE: Weep Holes Omitted For Clarity

Mark	Station	Offset	B/Barrier Elevation	T/Barrier Elevation
1	19+60.63	8.00' RT	623.81	627.31
2	19+89.66	8.00' RT	622.66	626.16
3	20+18.70	8.00' RT	621.47	624.97
4	20+47.73	8.00' RT	620.49	623.99
5	20+76.76	8.00' RT	619.72	623.22
6	21+05.79	8.00' RT	619.15	622.65
7	21+34.82	8.00' RT	618.79	622.29
8	21+63.86	8.00' RT	618.62	622.12
9	21+92.89	8.00' RT	618.47	621.97
10	22+21.92	8.00' RT	618.33	621.83
11	22+50.95	8.00' RT	618.32	621.82
12	22+80.00	8.00' RT	618.47	621.97

NOTE: All Offsets Are Measured From The Proposed Baseline Of S.B. Mannheim Road Exit Ramp To The Front Face Of The Barrier Wall at the Base of the Barrier.



LOCATION SKETCH

N:\ROSEMONT\11000\CADD\_Sheets\DI66037-sh-t-bwall-01-eb.dgn

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PLOT DATE	DRAWN - PDR	REVISED
	CHECKED - MM	REVISED

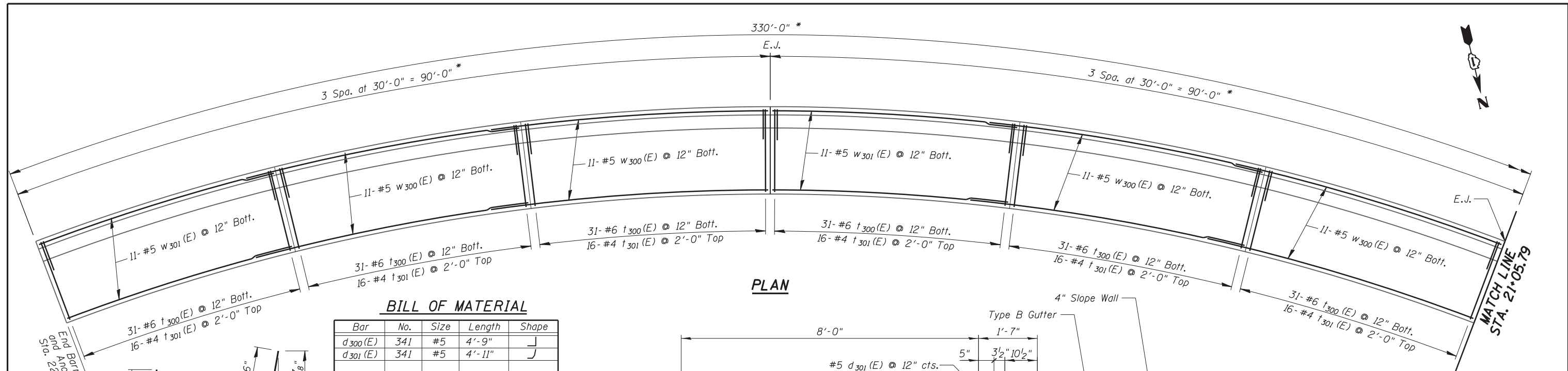
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION  
 BARRIER WALL

SHEET NO. S-1 OF S-3 SHEETS

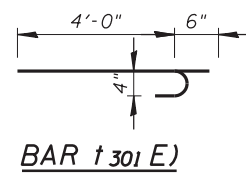
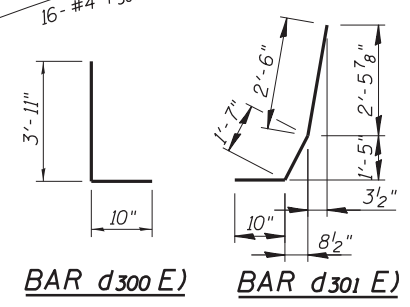
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	417
CONTRACT NO. 60G37			ILLINOIS FED. AID PROJECT	



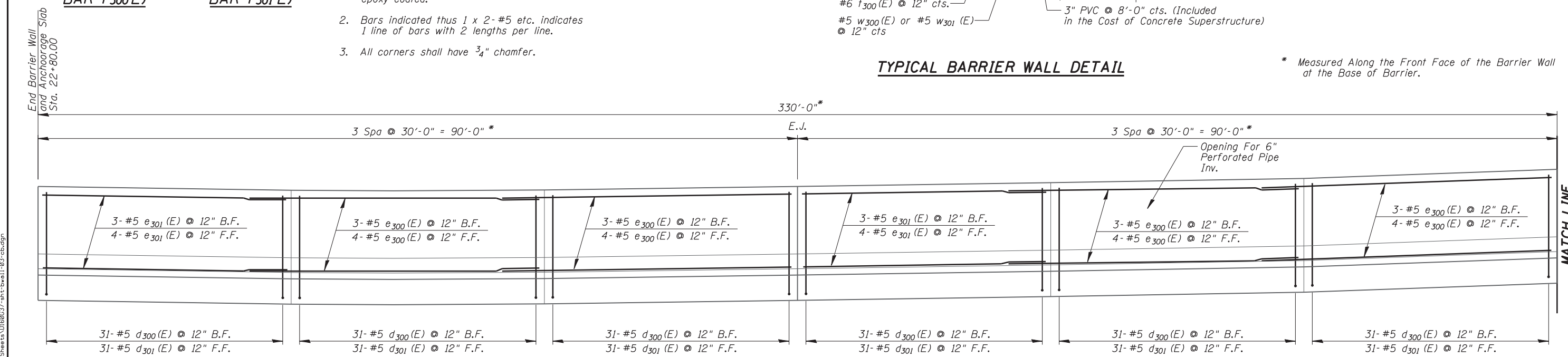
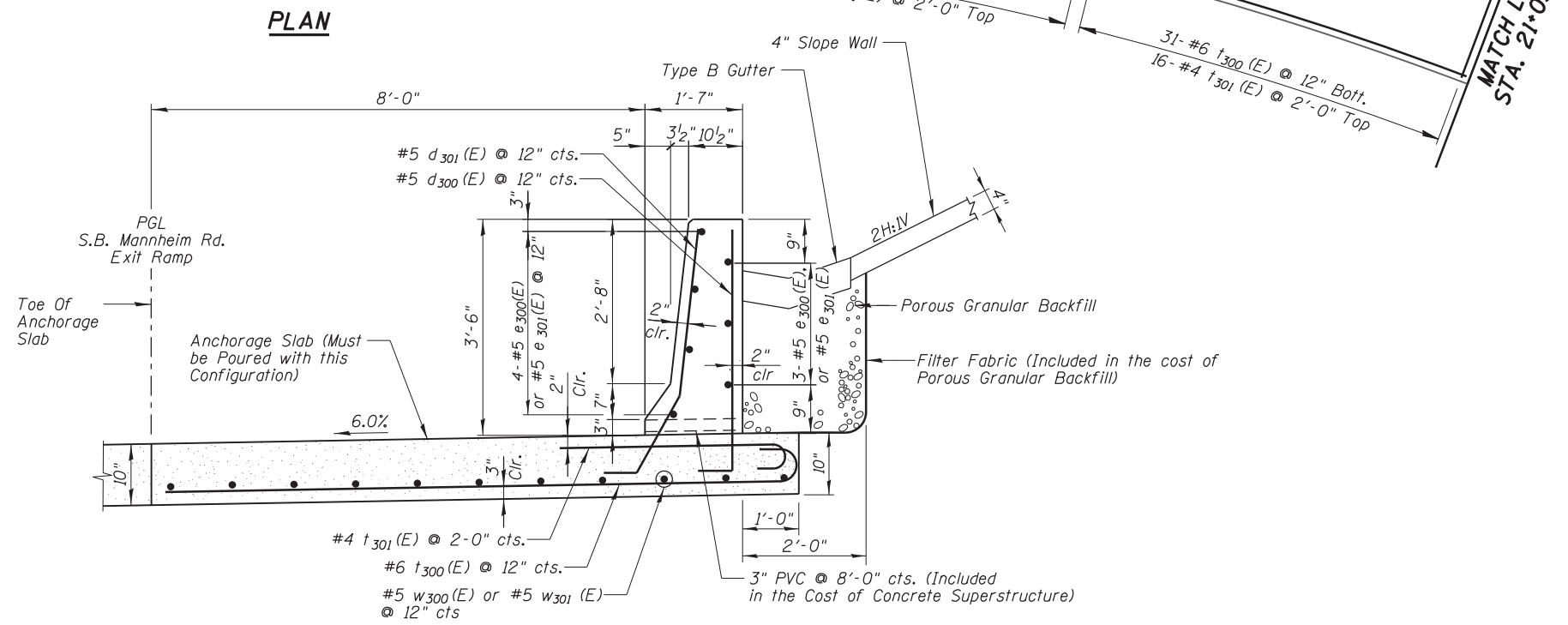


**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
d <sub>300</sub> (E)	341	#5	4'-9"	J
d <sub>301</sub> (E)	341	#5	4'-11"	J
e <sub>300</sub> (E)	49	#5	33'-9"	—
e <sub>301</sub> (E)	28	#5	29'-8"	—
t <sub>300</sub> (E)	341	#6	10'-8"	U
t <sub>301</sub> (E)	176	#4	4'-6"	U
t <sub>302</sub> (E)	16	#5	6'-0"	—
w <sub>300</sub> (E)	77	#5	33'-8"	—
w <sub>301</sub> (E)	44	#5	28'-10"	—
Concrete Structures			Cu. Yd.	155.7
Reinforcement Bars, Epoxy Coated			Pound	16,150
Porous Granular Backfill			Cu. Yd.	65



- NOTES:**
1. Reinforcement bars designated (E) shall be epoxy coated.
  2. Bars indicated thus 1 x 2-#5 etc. indicates 1 line of bars with 2 lengths per line.
  3. All corners shall have 3/4" chamfer.



**ELEVATION**

N:\ROSEMONT\11000\CADD\_Sheets\DI166037-sh-t-bwall-03-ceb.dgn

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 8575 W. Higgins Road, Suite 600  
 Rosemont, Illinois 60018  
 (847) 924-8900

USER NAME =	DESIGNED - JMB	REVISED
PLOT SCALE =	CHECKED - MM	REVISED
PLOT DATE	DRAWN - PDR	REVISED
	CHECKED - MM	REVISED

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**ANCHORAGE SLAB PLAN  
 AND BARRIER WALL ELEVATION  
 STA. 21 + 05.79 TO STA. 22 + 80.00**

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	419
CONTRACT NO. 60G37				

SHEET NO. S-3 OF S-3 SHEETS

ILLINOIS FED. AID PROJECT







































**GENERAL I.T.S. NOTES**

1. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF CABINETS AND FIBER OPTIC CABLE NEAR PUMP STATION NO. 24 PRIOR TO BIDDING THE JOB.
2. THE CONTRACTOR SHALL EXERCISE CARE WITH THE INSTALLATION OF UNDERGROUND EQUIPMENT AS THERE MAY BE EXISTING PRIVATELY OWNED FACILITIES WITHIN THE PROJECT LIMITS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT ANY UTILITIES IN THE WORK ZONE AND REQUEST UTILITY LOCATES.
3. FIBER OPTIC CABLE SLACK SHALL BE AS FOLLOWS: 100 FEET FOR EACH CABLE (96 AND 12 FIBER) AT HANDHOLES AND COMMUNICATIONS VAULTS WHERE SPLICING IS INDICATED. FIBER OPTIC CABLE SLACK SHALL BE 50 FEET FOR EACH CABLE AT HANDHOLES WHERE NO SPLICING IS INVOLVED.
4. THE ELECTRICAL MAINTENANCE CONTRACTOR (EMC) SHALL BE CONTACTED FOR EXISTING STATE OWNED FACILITIES LOCATES.
5. NO END TO END SPLICES OF THE 96 STRAND FIBER OPTIC CABLE SHALL BE PERMITTED UNLESS APPROVED BY THE RESIDENT ENGINEER. ANY END TO END SPLICES SHALL BE DONE IN A COMMUNICATIONS VAULT. ANY COSTS TO INSTALL ADDITIONAL COMMUNICATIONS VAULTS, SPLICE CLOSURES, AND FIBER SPLICES TO ACCOMMODATE END TO END SPLICING SHALL BE AT NO ADDITIONAL COST TO THE DEPARTMENT.
6. ALL CONDUIT SHALL BE INSTALLED A MINIMUM OF 30" BELOW GRADE.
7. WHERE ELECTRIC POWER IS INDICATED FROM AN EXISTING CONTROLLER, THE CONTRACTOR SHALL EXPEDITIOUSLY INSTALL THE REQUIRED CIRCUIT BREAKER(S) AND UNDERGROUND WORK. MAINTENANCE OF THE TRAFFIC SIGNAL INSTALLATION SHALL BE THE CONTRACTOR'S RESPONSIBILITY DURING THE MODIFICATION OF THE CONTROLLER.

**CONDUIT AND CABLE LEGEND**

REMOVAL	EXISTING	PROPOSED	
			CONDUIT AS LABELED ON PLANS
			FIBER OPTIC CABLE AS LABELED ON PLANS
			POWER CABLES AS LABELED ON PLANS
			CONDUIT EMBEDDED IN STRUCTURE
			DYNAMIC MESSAGE SIGN ON STRUCTURE
			CCTV CAMERA
			ELECTRICAL SERVICE INSTALLATION
			ITS CABINET, GROUND MOUNTED
			ITS CABINET, POLE-MOUNTED
			HANDHOLE
			HEAVY DUTY HANDHOLE
			COMMUNICATION VAULT
			JUNCTION BOX, COMPOSITE CONCRETE, EMBEDDED IN STRUCTURE, 20"x18"x10"

**COMMUNICATIONS DIAGRAM LEGEND**

	SPLICE CLOSURE
	FIBER OPTIC INTERCONNECT CENTER
	DYNAMIC MESSAGE SIGN CONTROLLER
	DIGITAL VIDEO ENCODER
	DYNAMIC MESSAGE SIGN
	CCTV CAMERA
	ETHERNET SWITCH

**ABBREVIATIONS**

PREFIX	COMPONENT
CSF	CABLE SPLICE, FIBER OPTIC, FUSION
CTD	CCTV CAMERA, DOME
CNTRL	DYNAMIC MESSAGE SIGN CONTROLLER
DCF	DISTRIBUTION CABLE, FIBER OPTIC
DMS	DYNAMIC MESSAGE SIGN
DVE	DIGITAL VIDEO ENCODER
ECC	ELECTRICAL CABLE IN CONDUIT
EMB	CONDUIT EMBEDDED IN STRUCTURE
ETH	ETHERNET CABLE
FOC	FIBER OPTIC CABLE
FOIC	FIBER OPTIC INTERCONNECT CENTER
GSC	GALVANIZED STEEL CONDUIT
HHL	HANDHOLE
IDT	INNERDUCT
LCF	LATERAL CABLE, FIBER OPTIC
SWE	SWITCH, ETHERNET
TCF	TRUNK CABLE, FIBER OPTIC
US12	FIBER OPTIC CABLE DESIGNATOR, MANNHEIM ROAD
S	FIBER OPTIC CABLE DESIGNATOR, SOUTH OF I-190
PS24	FIBER OPTIC CABLE DESIGNATOR, PUMP STATION NO. 24

ITS-01



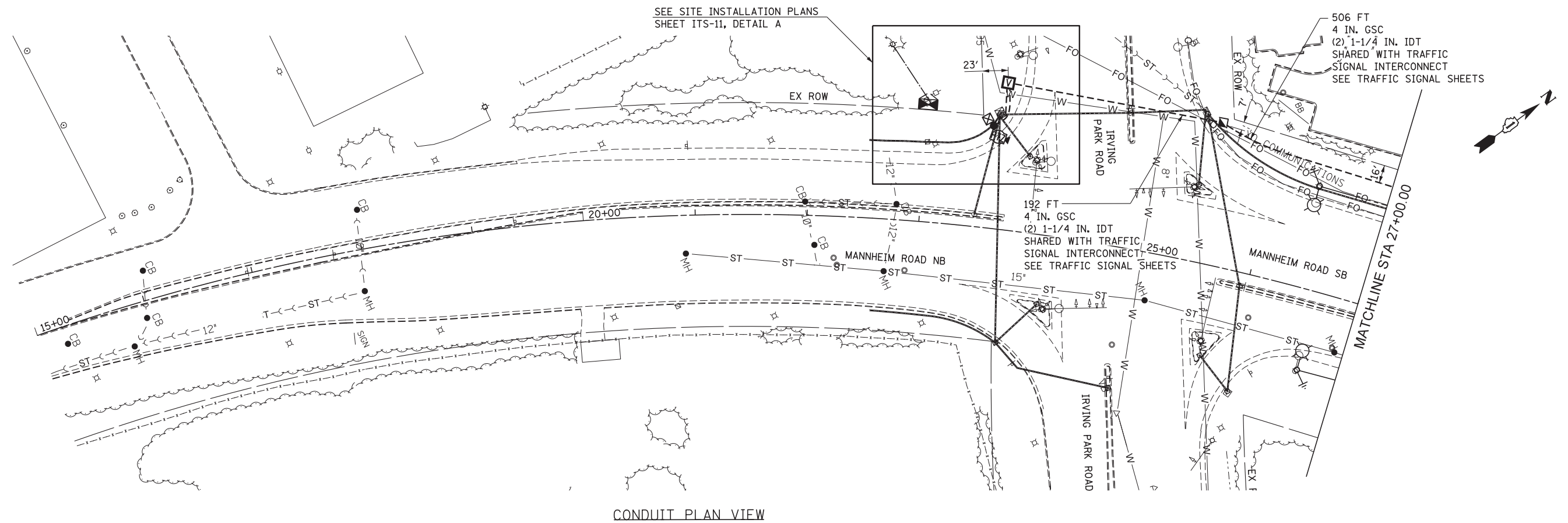
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	DRAWN BCC	REVISED -
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PLOT DATE = 08-OCT-2012	DATE 10/19/12	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

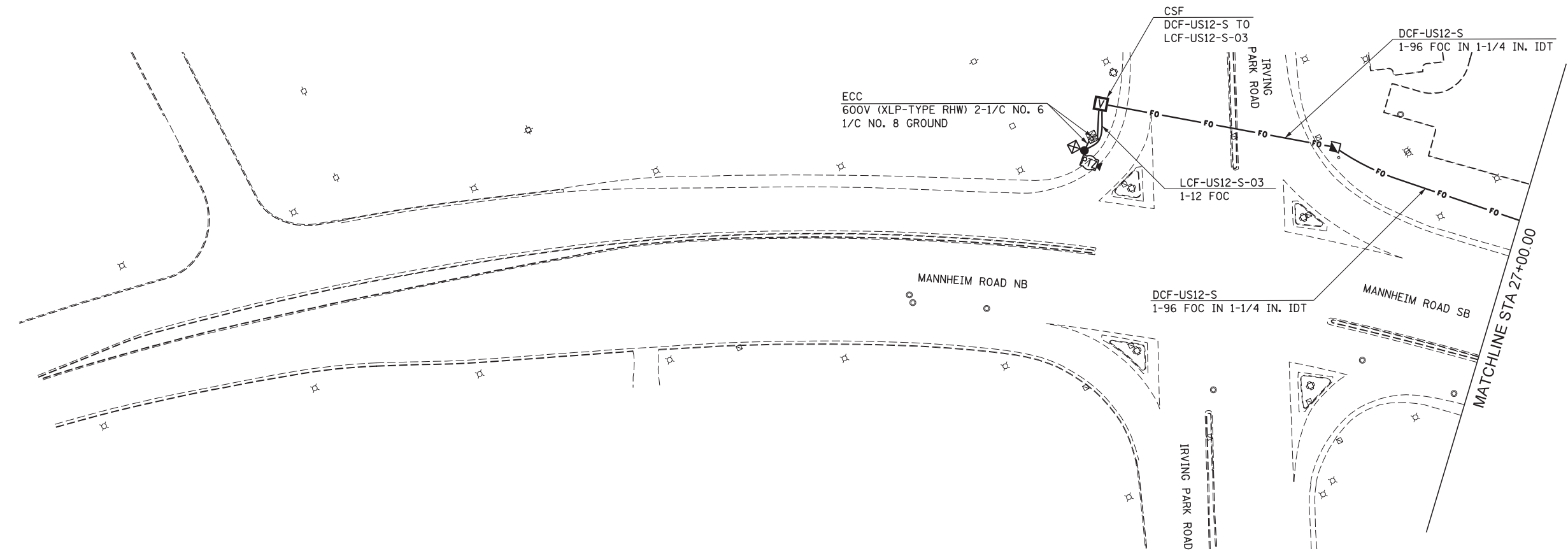
ITS GENERAL NOTES AND LEGEND

SCALE: SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	437
				CONTRACT NO. 60G37
ILLINOIS FED. AID PROJECT				



CONDUIT PLAN VIEW



CABLE PLAN VIEW



USER NAME = mkostr	DESIGNED DJJ	REVISED -
	DRAWN BCC	REVISED -
PLOT SCALE = 50:1	CHECKED YJ	REVISED -
PLOT DATE = 08-OCT-2012	DATE 10/19/12	REVISED -

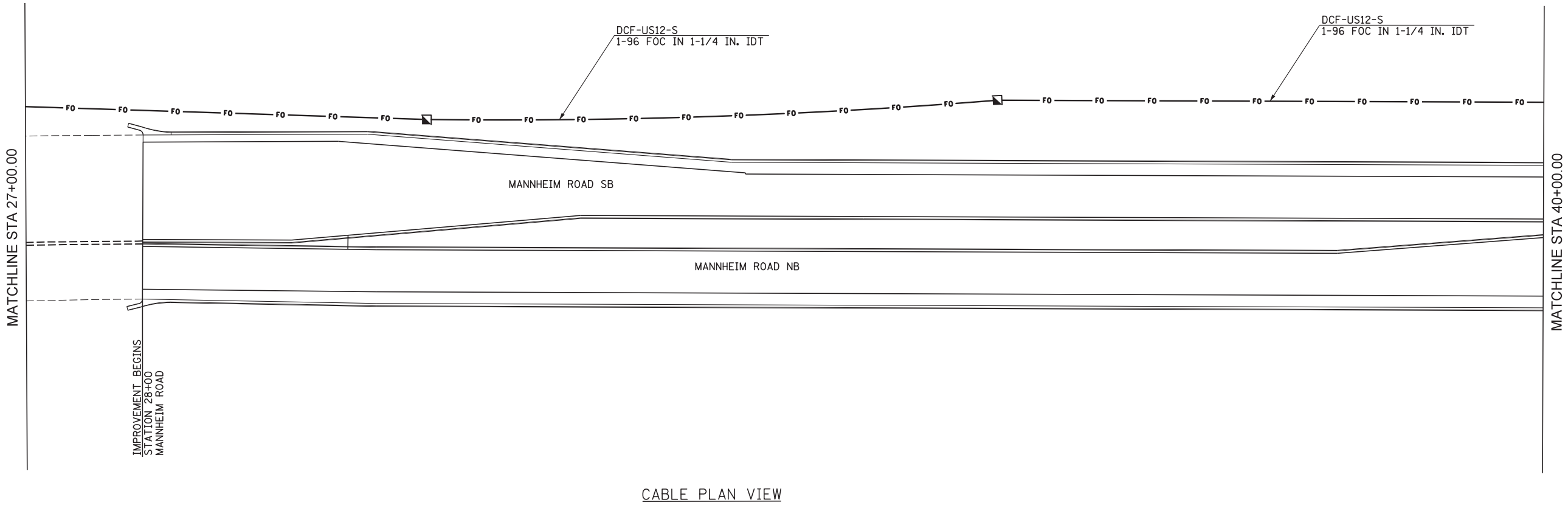
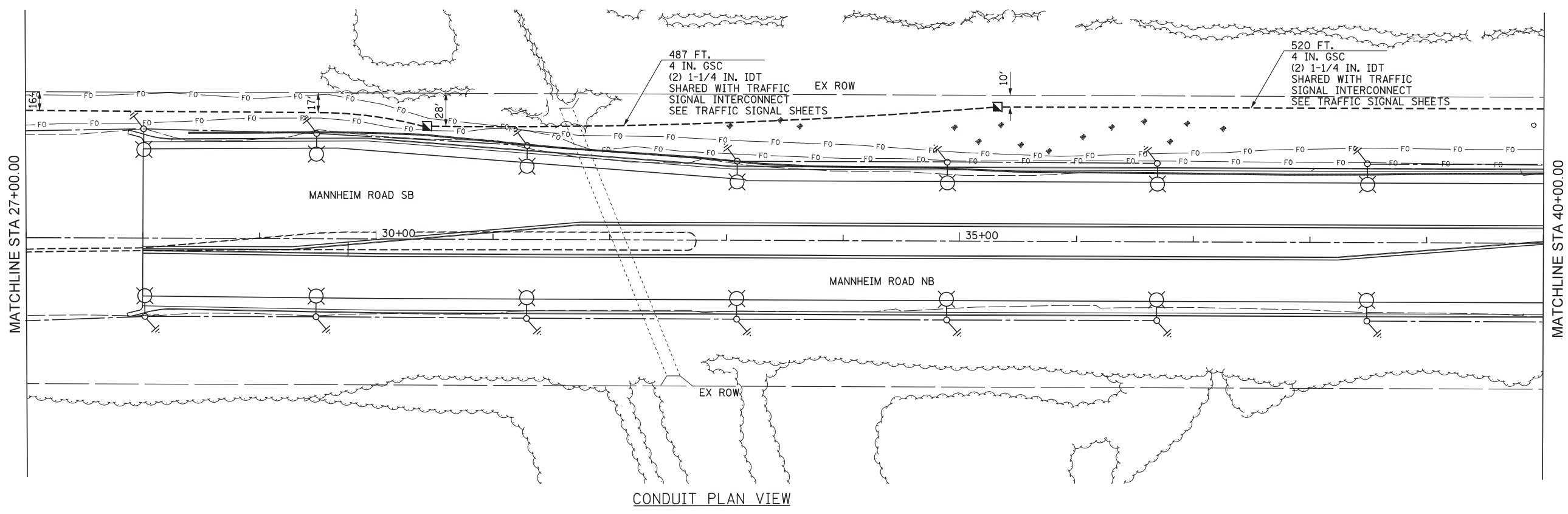
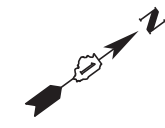
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ITS CONDUIT AND CABLE PLANS  
MANNHEIM ROAD

SCALE: 1" = 50' SHEET NO. 1 OF 9 SHEETS STA. 15+00.00 TO STA. 27+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	438
				CONTRACT NO. 60G37
ILLINOIS FED. AID PROJECT				

ITS-02



IMPROVEMENT BEGINS  
STATION 28+00  
MANNHEIM ROAD



USER NAME = mkostr	DESIGNED DJJ	REVISED -
PLOT SCALE = 50:1	DRAWN BCC	REVISED -
PLOT DATE = 08-OCT-2012	CHECKED YJ	REVISED -
	DATE 10/19/12	REVISED -

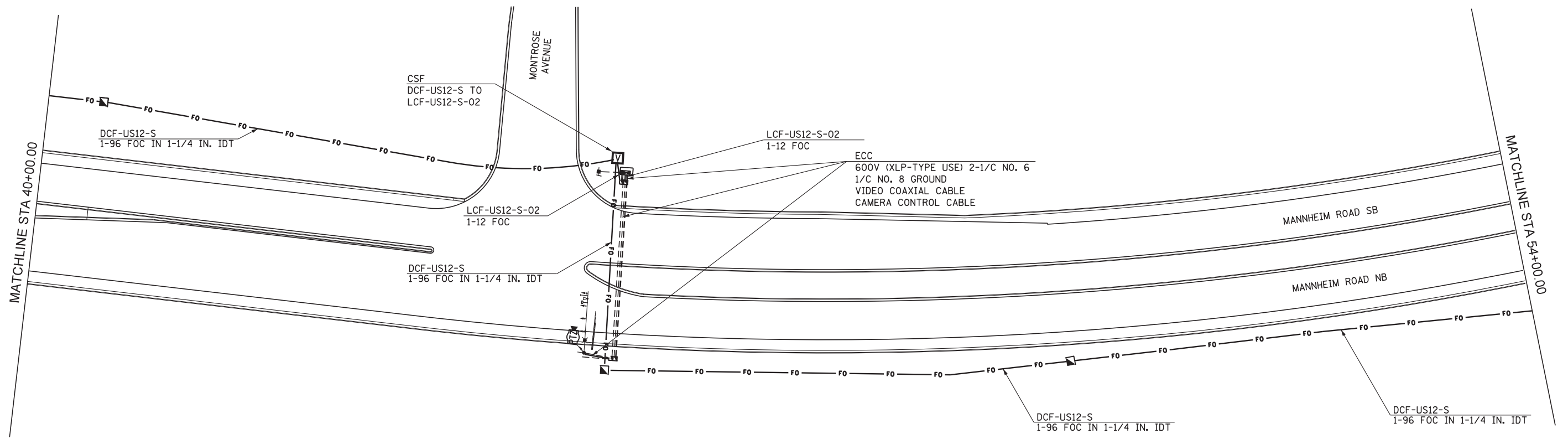
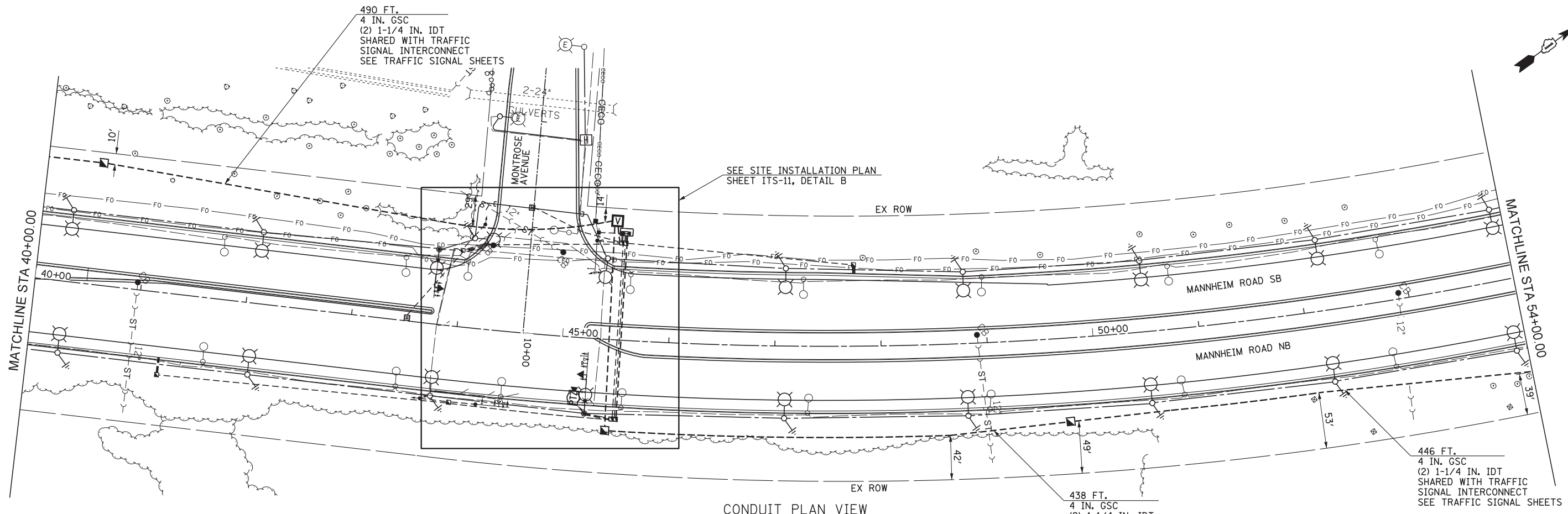
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ITS CONDUIT AND CABLE PLANS  
MANNHEIM ROAD

SCALE: 1" = 50' SHEET NO. 2 OF 9 SHEETS STA. 27+00.00 TO STA. 40+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	439
				CONTRACT NO. 60G37

ITS-03



ITS-04



USER NAME = mko31r	DESIGNED DJJ	REVISED -
	DRAWN BCC	REVISED -
PLOT SCALE = 50:1	CHECKED YJ	REVISED -
PLOT DATE = 29-NOV-2012	DATE	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ITS CONDUIT AND CABLE PLANS  
MANNHEIM ROAD

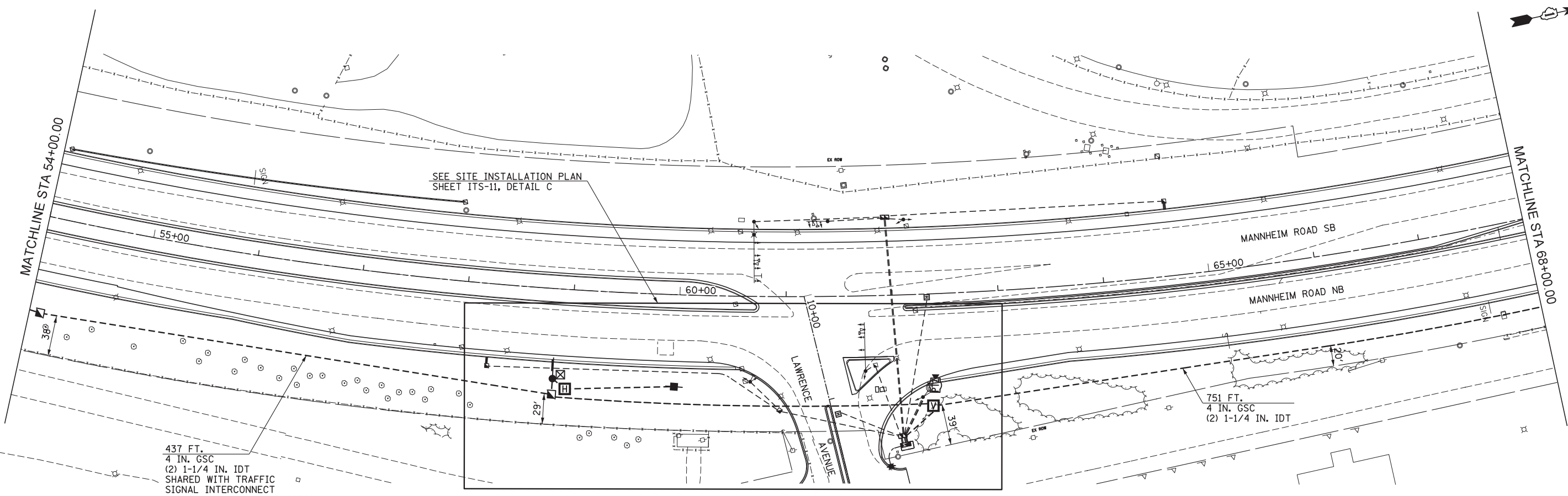
SCALE: 1" = 50' SHEET NO. 3 OF 9 SHEETS STA. 40+00.00 TO STA. 54+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	440
CONTRACT NO. 60G37				

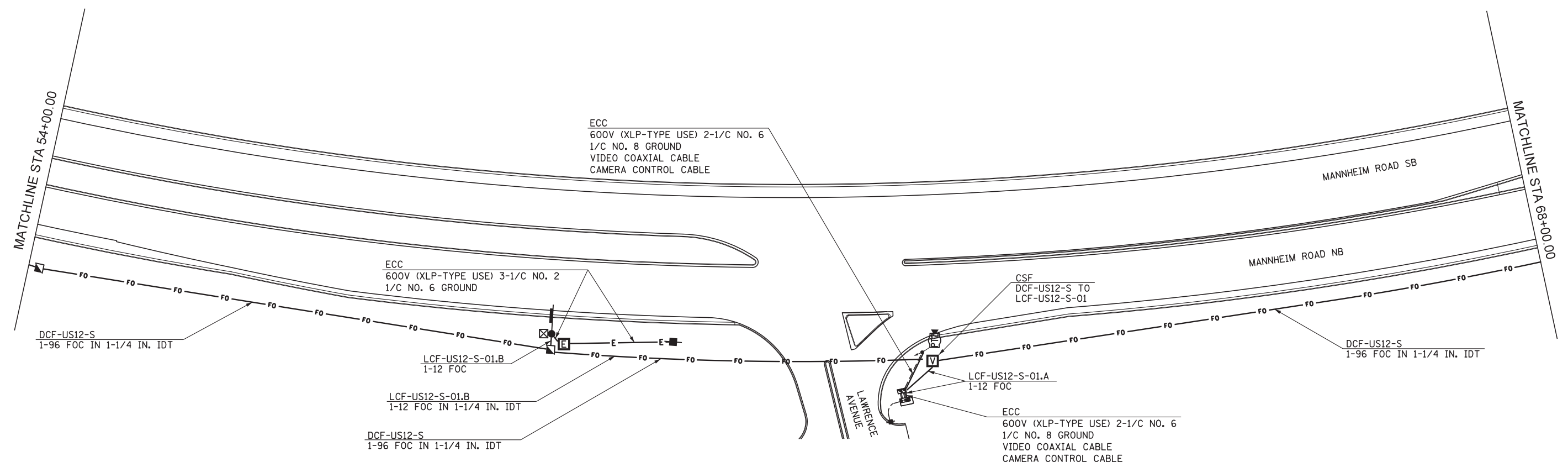
ILLINOIS FED. AID PROJECT

FILE NAME = IP\_PWP\dms47844\DI60G37-shr-its\_03.dgn





CONDUIT PLAN VIEW



CABLE PLAN VIEW



USER NAME = mksosir	DESIGNED DJJ	REVISED -
	DRAWN BCC	REVISED -
PLOT SCALE = 50:1	CHECKED YJ	REVISED -
PLOT DATE = 29-NOV-2012	DATE	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

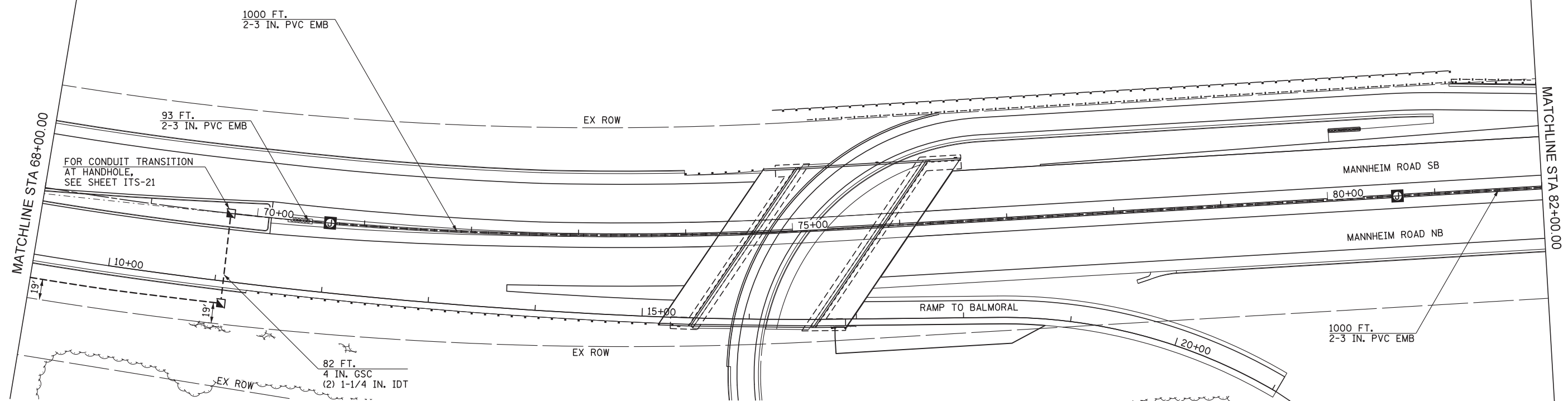
ITS CONDUIT AND CABLE PLANS  
MANNHEIM ROAD

SCALE: 1" = 50' SHEET NO. 4 OF 9 SHEETS STA. 54+00.00 TO STA. 68+00.00

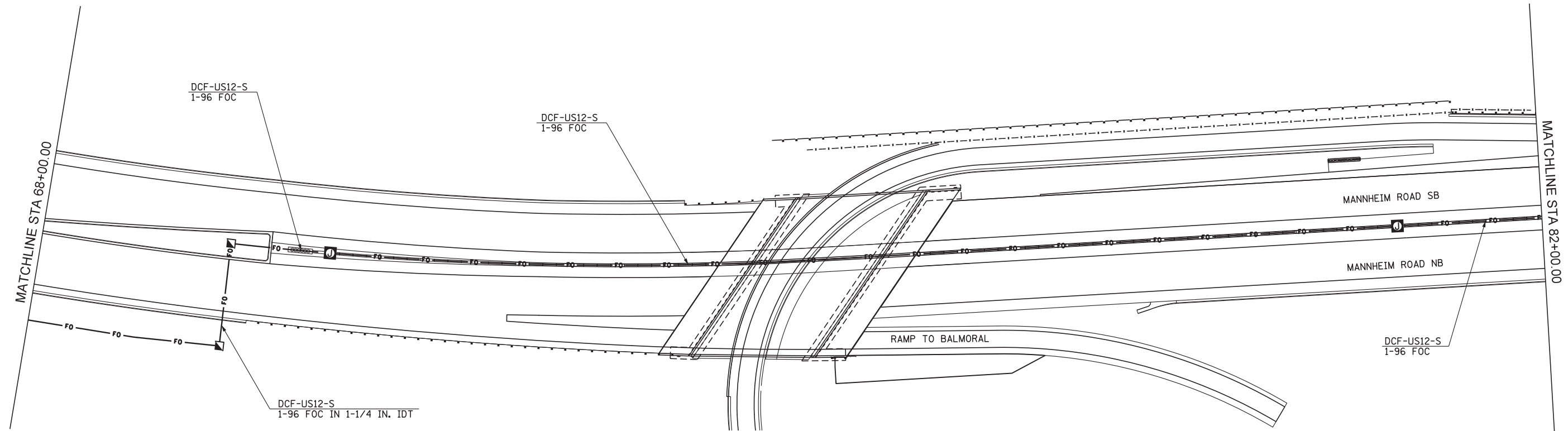
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330	0105 WRS&HB	COOK	605	441
CONTRACT NO. 60G37				
ILLINOIS FED. AID PROJECT				

ITS-05

FILE NAME = IP\_PWP\dms47844\DI68G37-shr-its\_04.dgn



CONDUIT PLAN VIEW



CABLE PLAN VIEW



USER NAME = mkosir	DESIGNED DJJ	REVISED -
PLOT SCALE = 50:1	DRAWN BCC	REVISED -
PLOT DATE = 08-OCT-2012	CHECKED YJ	REVISED -
	DATE 10/19/12	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ITS CONDUIT AND CABLE PLANS  
MANNHEIM ROAD

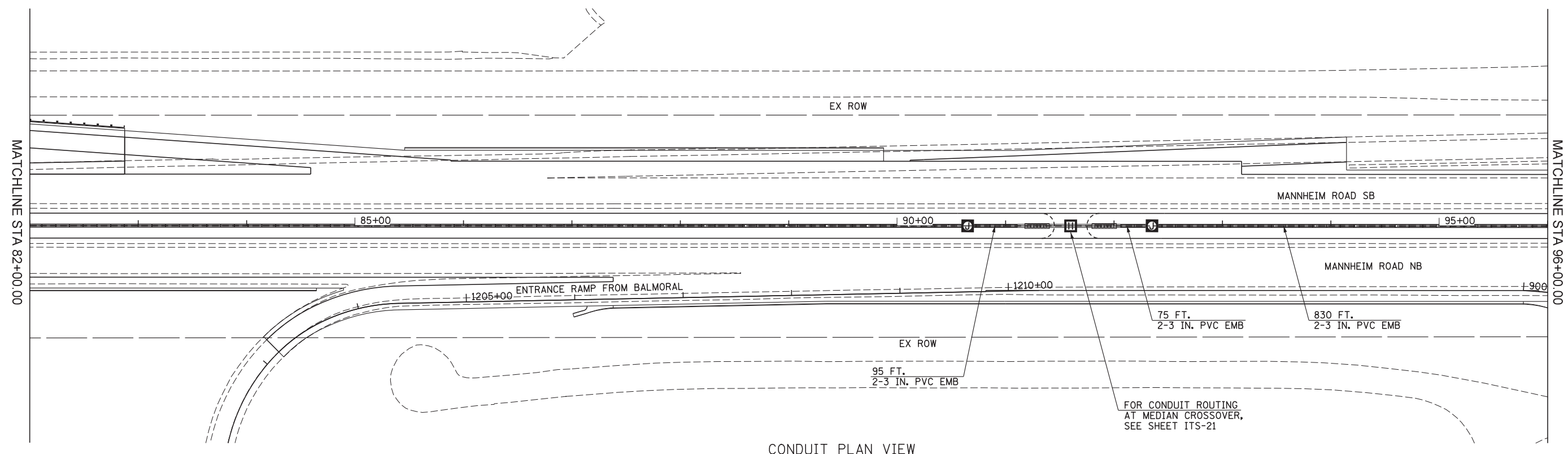
SCALE: 1" = 50' SHEET NO. 5 OF 9 SHEETS STA. 68+00.00 TO STA. 82+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	442
CONTRACT NO. 60G37				

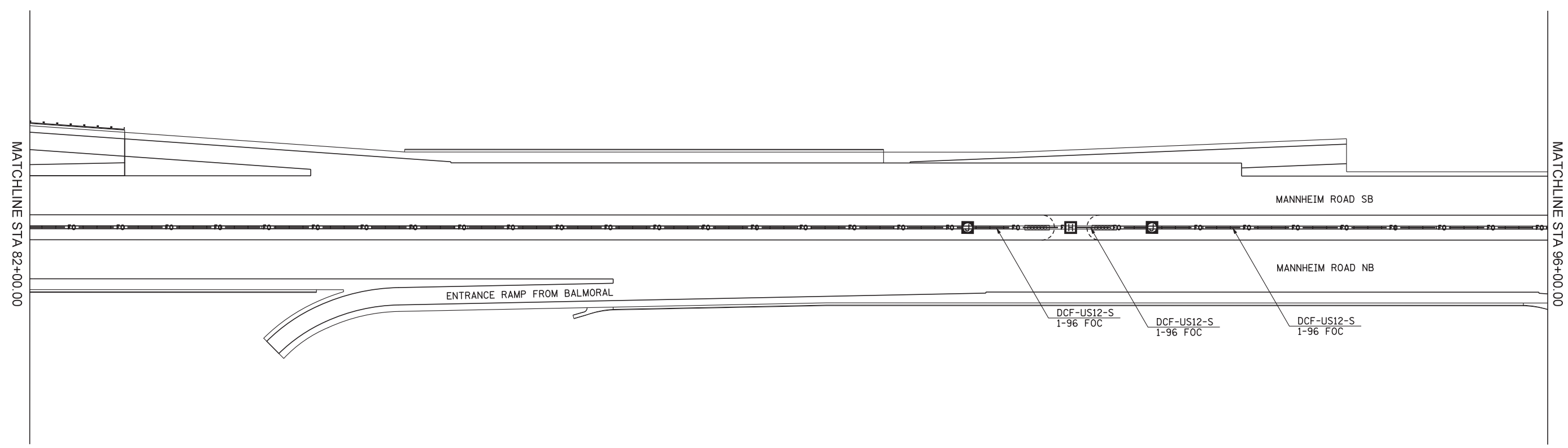
ITS-06

FILE NAME = IP\_PWP\dms47844\DI60G37-shr-its\_05.dgn

ILLINOIS FED. AID PROJECT



CONDUIT PLAN VIEW



CABLE PLAN VIEW



USER NAME = mkosir	DESIGNED DJJ	REVISED -
	DRAWN BCC	REVISED -
PLOT SCALE = 50:1	CHECKED YJ	REVISED -
PLOT DATE = 08-OCT-2012	DATE 10/19/12	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

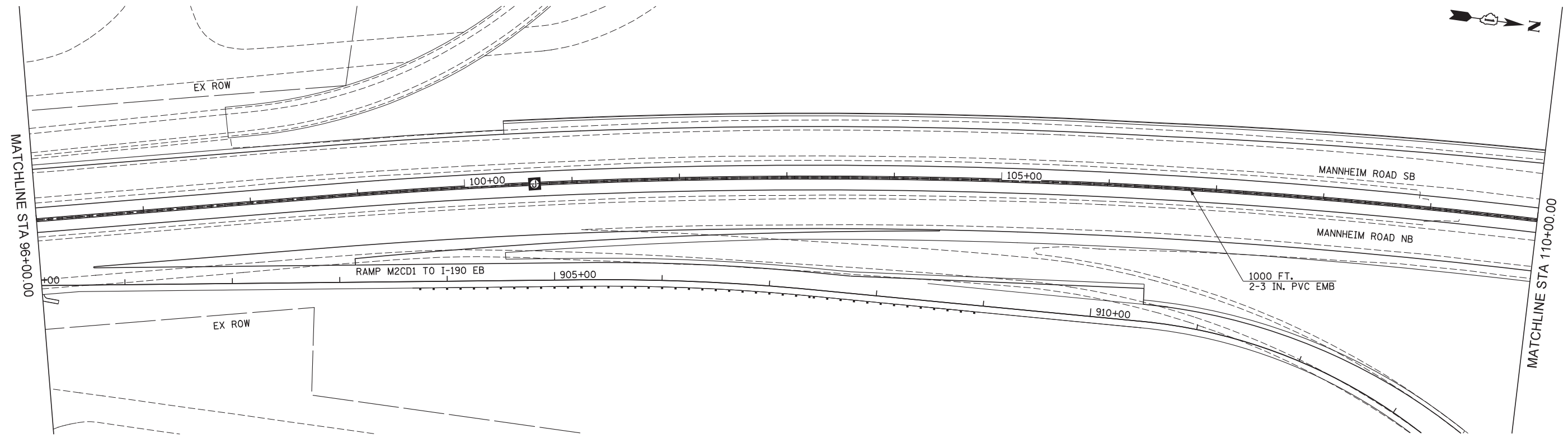
ITS CONDUIT AND CABLE PLANS  
MANNHEIM ROAD

SCALE: 1" = 50' SHEET NO. 6 OF 9 SHEETS STA. 82+00.00 TO STA. 96+00.00

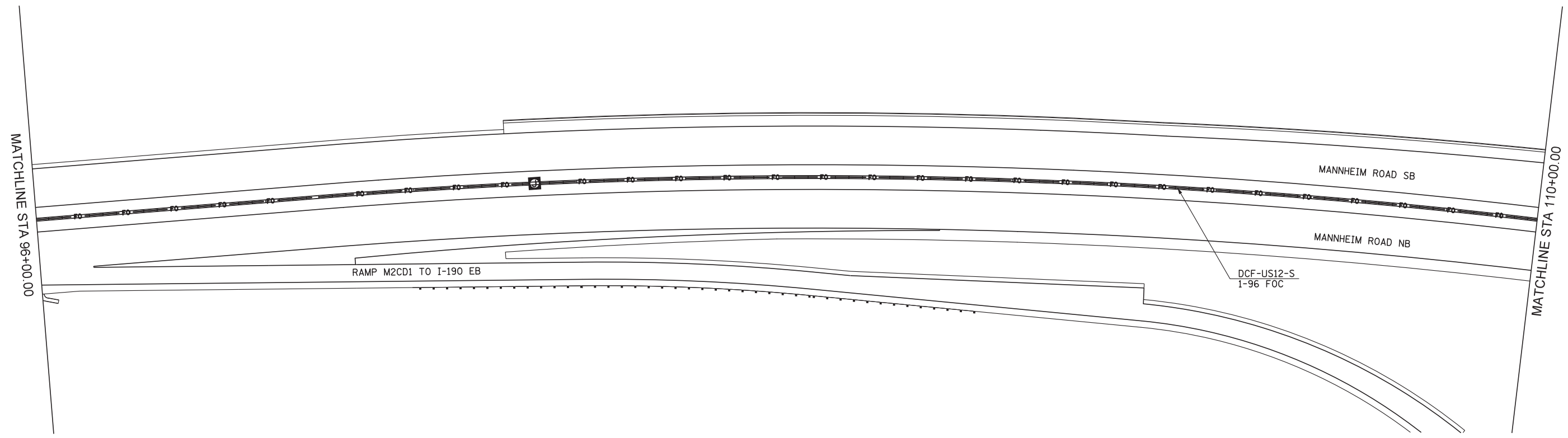
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	443
CONTRACT NO. 60G37				
ILLINOIS FED. AID PROJECT				

ITS-07

FILE NAME = IP\_PWP\dms47844\DI60G37-shr-its\_06.dgn



CONDUIT PLAN VIEW



CABLE PLAN VIEW

ITS-08



USER NAME = mkosir	DESIGNED DJJ	REVISED -
	DRAWN BCC	REVISED -
PLOT SCALE = 50:1	CHECKED YJ	REVISED -
PLOT DATE = 08-OCT-2012	DATE 10/19/12	REVISED -

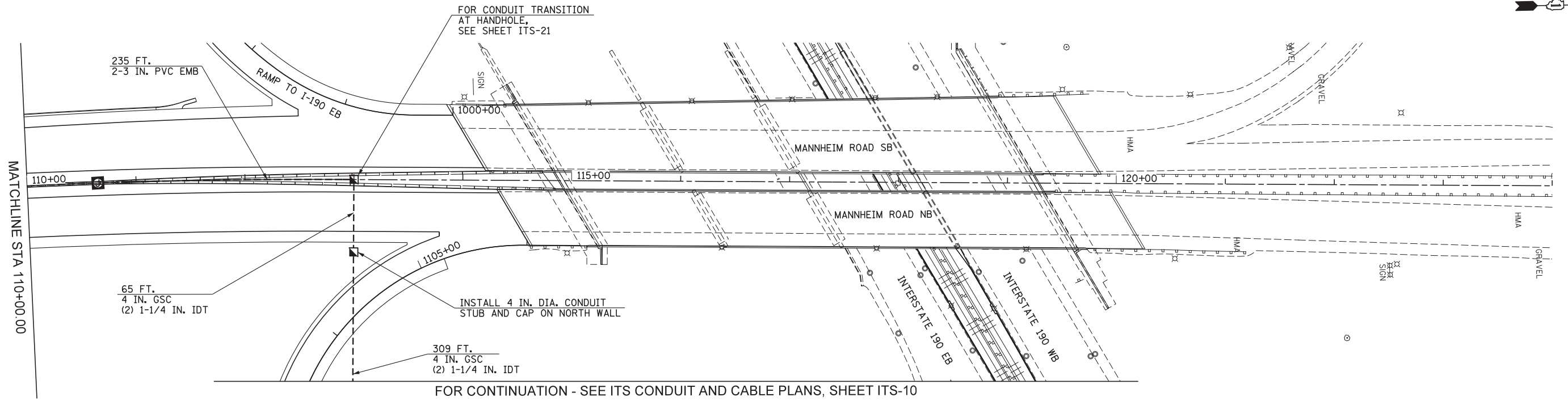
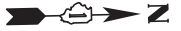
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ITS CONDUIT AND CABLE PLANS  
MANNHEIM ROAD

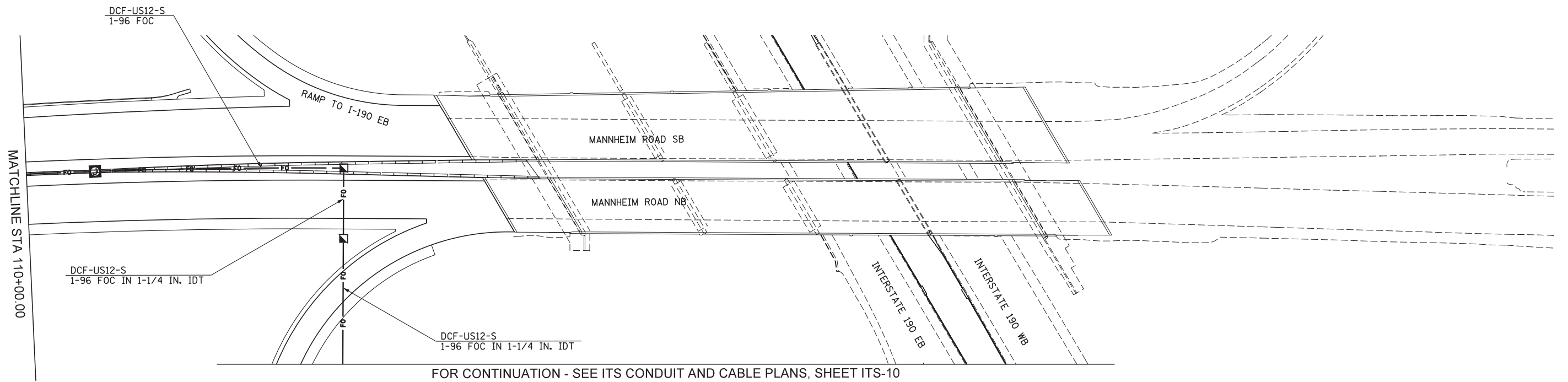
SCALE: 1" = 50' SHEET NO. 7 OF 9 SHEETS STA. 96+00.00 TO STA. 110+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	444
				CONTRACT NO. 60G37
ILLINOIS FED. AID PROJECT				

FILE NAME = IP\_PWP\dms47844\DI60G37-shr-its\_07.dgn



CONDUIT PLAN VIEW



CABLE PLAN VIEW

ITS-09



USER NAME = mko31r	DESIGNED DJJ	REVISED -
	DRAWN BCC	REVISED -
PLOT SCALE = 50:1	CHECKED YJ	REVISED -
PLOT DATE = 19-OCT-2012	DATE 10/19/12	REVISED -

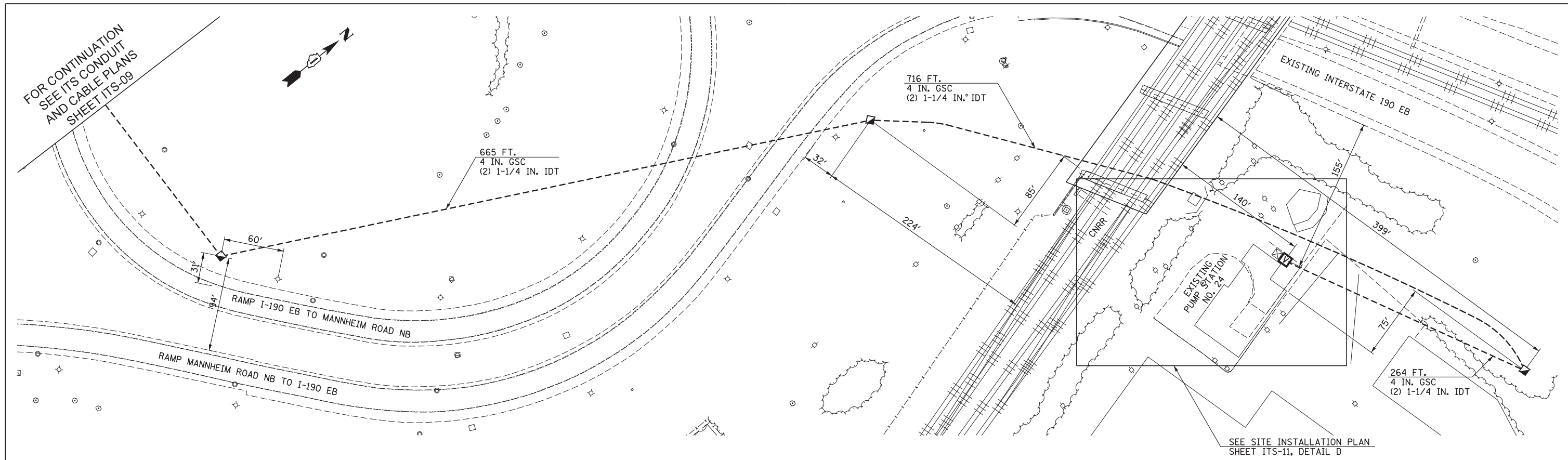
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ITS CONDUIT AND CABLE PLANS  
MANNHEIM ROAD

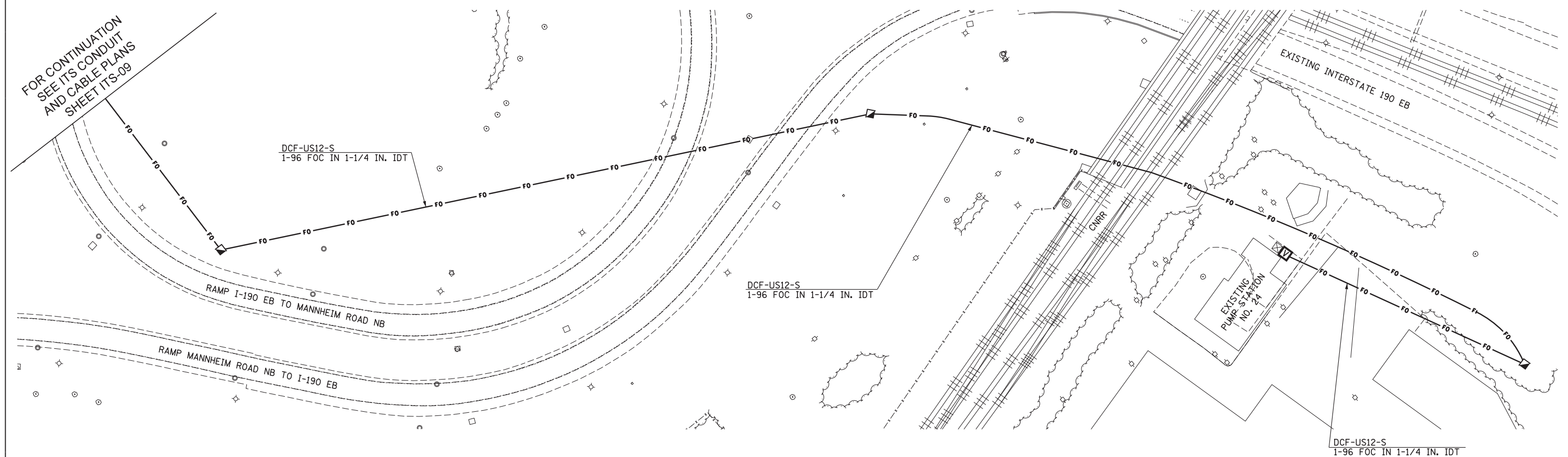
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	445
CONTRACT NO. 60G37				

SCALE: 1" = 50' SHEET NO. 8 OF 9 SHEETS STA. 110+00.00 TO STA. EOP

ILLINOIS FED. AID PROJECT



CONDUIT PLAN VIEW



CABLE PLAN VIEW



USER NAME = mko31r	DESIGNED DJJ	REVISED -
	DRAWN BCC	REVISED -
PLOT SCALE = 50:1	CHECKED YJ	REVISED -
PLOT DATE = 08-OCT-2012	DATE 10/19/12	REVISED -

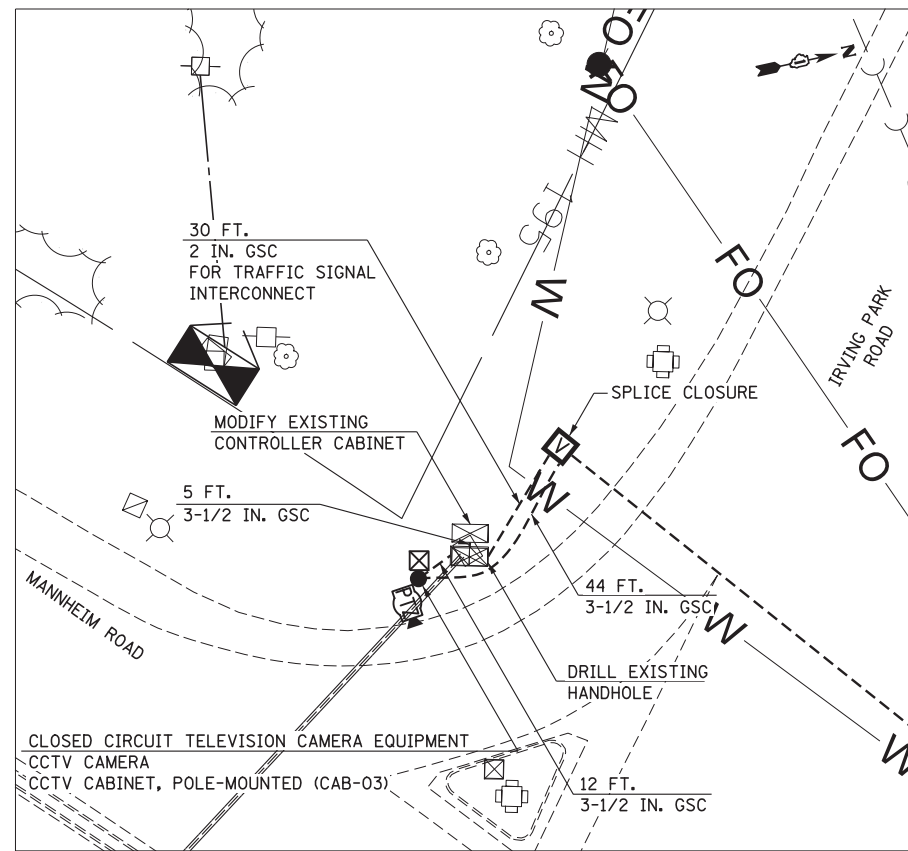
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ITS CONDUIT AND CABLE  
MANNHEIM ROAD

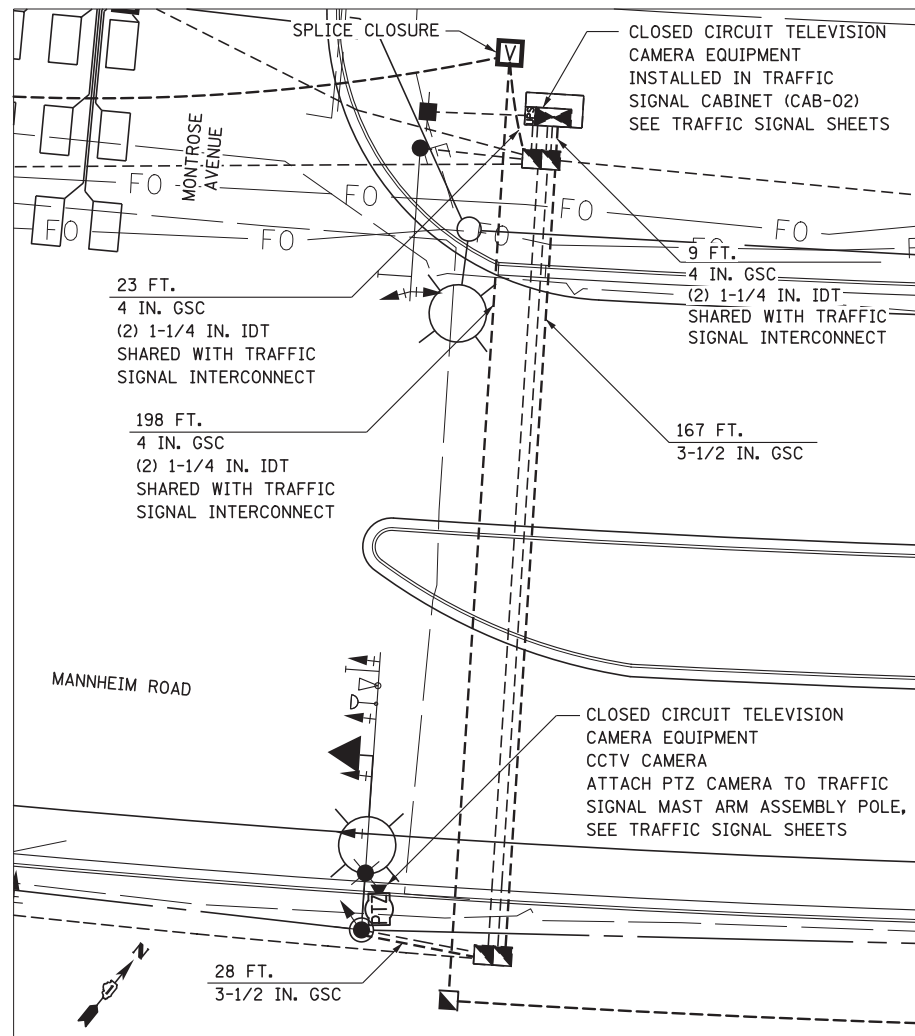
SCALE: 1" = 50' SHEET NO. 9 OF 9 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	446
				CONTRACT NO. 60G37
ILLINOIS FED. AID PROJECT				

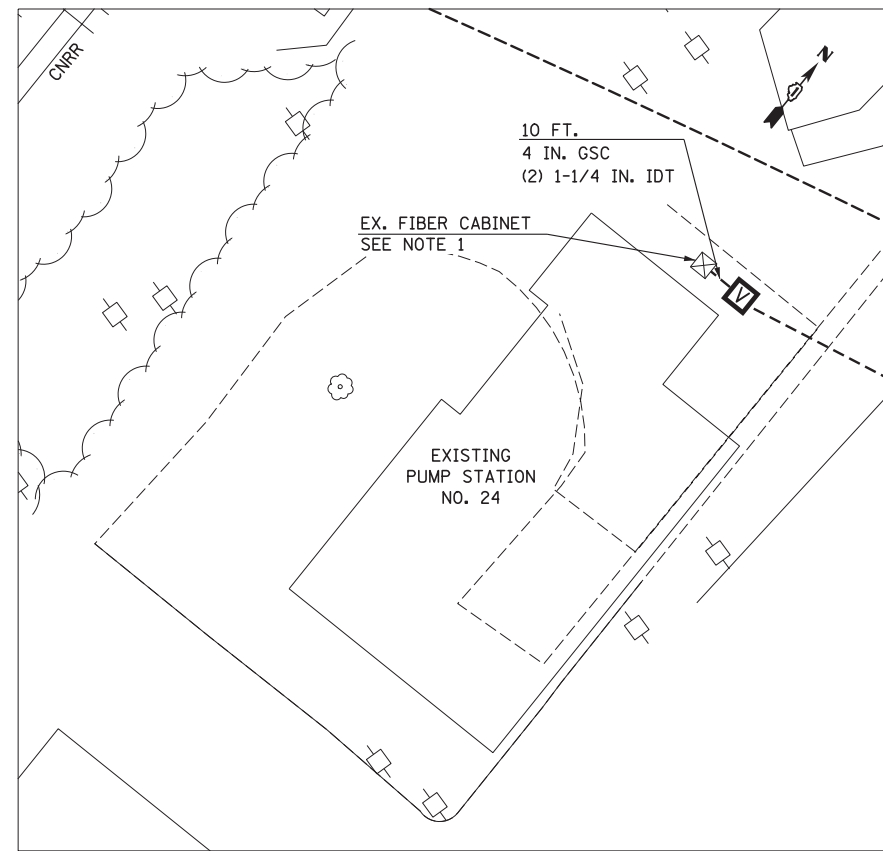
ITS-10



CONDUIT DETAIL A



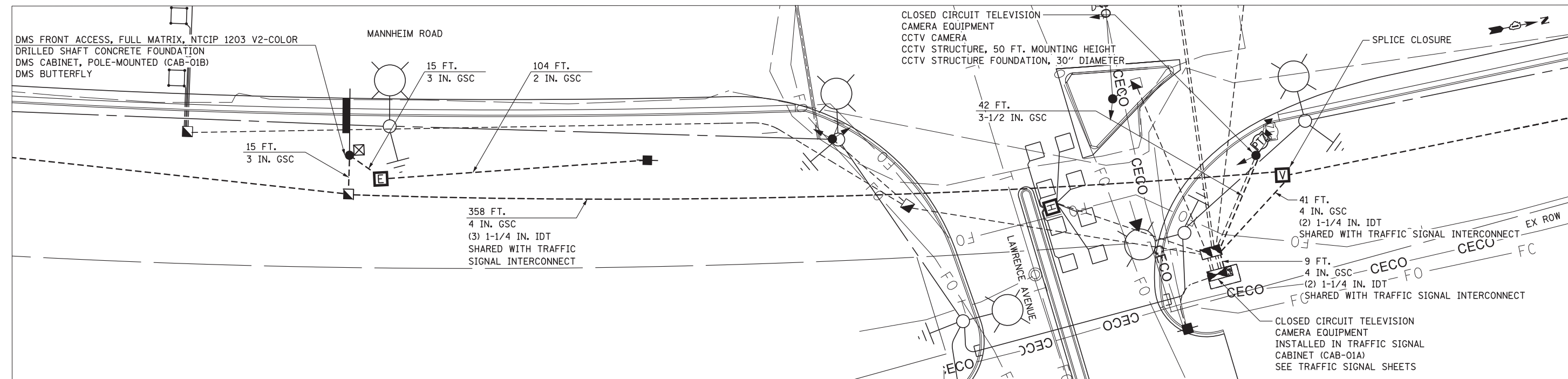
CONDUIT DETAIL B



CONDUIT DETAIL D

NOTE:

1. IDOT DISTRICT 1 WILL RELOCATE OR REPLACE THE EXISTING FIBER CABINET. THE CONTRACTOR SHALL COORDINATE WITH IDOT DISTRICT 1 TO INSTALL THE CONDUIT AND FIBER OPTIC CABLE TO THE NEW FIBER CABINET LOCATION.



CONDUIT DETAIL C



USER NAME = micosir	DESIGNED DJJ	REVISED -
PLOT SCALE = 20:1	DRAWN BCC	REVISED -
PLOT DATE = 29-NOV-2012	CHECKED YJ	REVISED -
	DATE	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

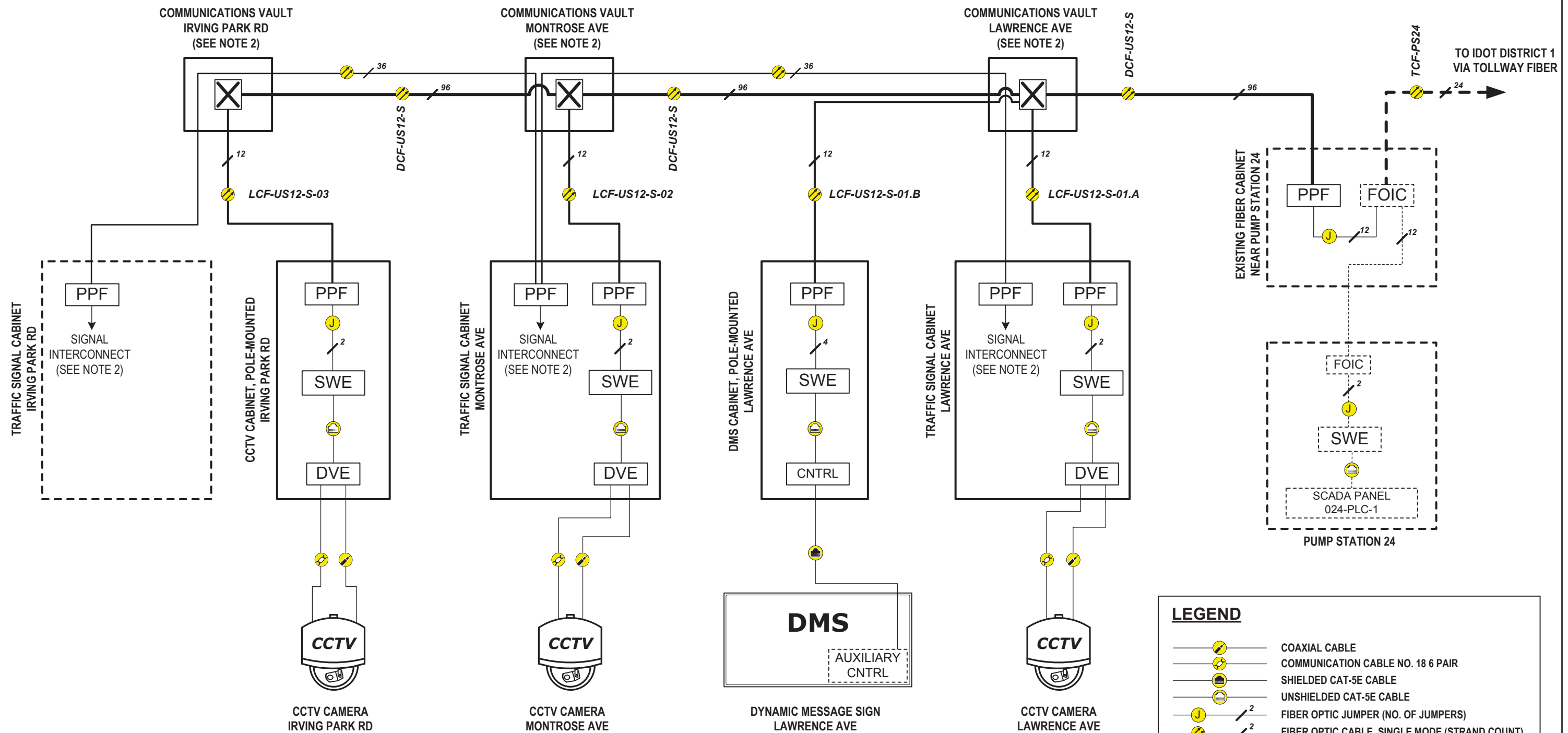
SITE INSTALLATION PLANS

SCALE: 1" = 20' SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	447
CONTRACT NO. 60G37				

ITS-11

ILLINOIS FED. AID PROJECT



DEVICE	IP ADDRESS
SWITCH	
DVE	

DEVICE	IP ADDRESS
SWITCH	
DVE	

DEVICE	IP ADDRESS
SWITCH	
CNTRL	

DEVICE	IP ADDRESS
SWITCH	
DVE	

**LEGEND**

- COAXIAL CABLE
- COMMUNICATION CABLE NO. 18 6 PAIR
- SHIELDED CAT-5E CABLE
- UNSHIELDED CAT-5E CABLE
- FIBER OPTIC JUMPER (NO. OF JUMPERS)
- FIBER OPTIC CABLE, SINGLE MODE (STRAND COUNT)
- SPLICE CLOSURE
- PATCH PANEL, FIBER
- DMS CONTROLLER
- DIGITAL VIDEO ENCODER
- DYNAMIC MESSAGE SIGN
- CCTV CAMERA
- SWITCH, ETHERNET

NOTES:  
 1. DASHED LINES INDICATED EXISTING EQUIPMENT, CABLES, AND ENCLOSURES  
 2. SEE TRAFFIC SIGNAL INTERCONNECT SHEETS FOR INFORMATION ON TRAFFIC SIGNAL FIBER OPTIC CABLE



USER NAME = \$USERS\$	DESIGNED JJZ	REVISED -
	DRAWN JJZ	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED YJ	REVISED -
PLOT DATE = \$DATE\$	DATE 10/19/2012	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

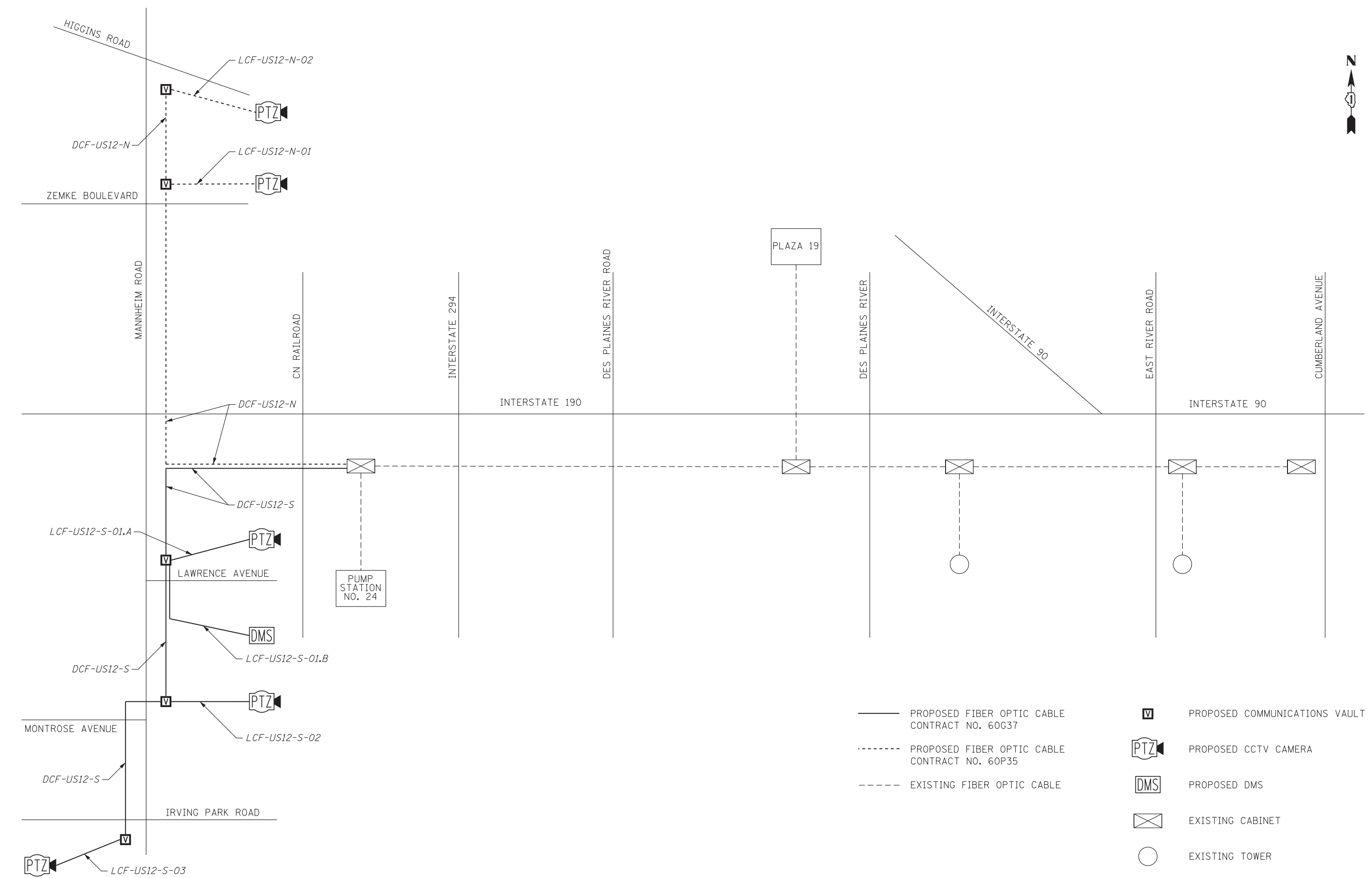
COMMUNICATION OVERVIEW PLAN

SCALE: SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE. 330	SECTION 0105-WRS-1	COUNTY COOK	TOTAL SHEETS 605	SHEET NO. 448
CONTRACT NO. 60G37				
ILLINOIS FED. AID PROJECT				

ITS-12





- PROPOSED FIBER OPTIC CABLE CONTRACT NO. 60G37
- - - - PROPOSED FIBER OPTIC CABLE CONTRACT NO. 60P35
- - - - EXISTING FIBER OPTIC CABLE
- V** PROPOSED COMMUNICATIONS VAULT
- PTZ** PROPOSED CCTV CAMERA
- DMS** PROPOSED DMS
- X** EXISTING CABINET
- O** EXISTING TOWER



USER NAME = mko31r	DESIGNED DJJ	REVISED -
	DRAWN BCC	REVISED -
PLOT SCALE = 50:1	CHECKED YJ	REVISED -
PLOT DATE = 08-OCT-2012	DATE 10/19/12	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SINGLE LINE FIBER DIAGRAM  
MANNHEIM ROAD AND PS NO. 24 TO PLAZA 19**

SCALE: NTS SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	449
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60G37	

**ITS-13**

FILE NAME = IP\_PWP\dms47844\0160G37-shr-its-diagram\_01.dgn

DISTRIBUTION CABLE FIBER ASSIGNMENTS				EXISTING PUMP STATION NO. 24, FIBER OPTIC CABLE			
DISTRIBUTION CABLE DESIGNATION				IRVING PARK ROAD COMMUNICATIONS VAULT			
DCF-US12-S	DCF-US12-S	DCF-US12-S	DCF-US12-S	ORIGINATION	ORIGINATION	ORIGINATION	ORIGINATION
DESTINATION	DESTINATION	DESTINATION	DESTINATION	DESTINATION	DESTINATION	DESTINATION	DESTINATION
BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT	BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT
BLUE	Blue	1	UNASSIGNED-DARK	SLATE	Blue	49	UNASSIGNED-DARK
	Orange	2	UNASSIGNED-DARK		Orange	50	UNASSIGNED-DARK
	Green	3	UNASSIGNED-DARK		Green	51	UNASSIGNED-DARK
	Brown	4	UNASSIGNED-DARK		Brown	52	UNASSIGNED-DARK
	Slate	5	UNASSIGNED-DARK		Slate	53	UNASSIGNED-DARK
	White	6	UNASSIGNED-DARK		White	54	UNASSIGNED-DARK
	Red	7	UNASSIGNED-DARK		Red	55	UNASSIGNED-DARK
	Black	8	UNASSIGNED-DARK		Black	56	UNASSIGNED-DARK
	Yellow	9	LCF-US12-S-03, BLU/BLU 1		Yellow	57	UNASSIGNED-DARK
	Violet	10	LCF-US12-S-03, BLU/ORA 2		Violet	58	UNASSIGNED-DARK
	Rose	11	LCF-US12-S-03, BLU/GRE 3		Rose	59	UNASSIGNED-DARK
	Aqua	12	LCF-US12-S-03, BLU/BRO 4		Aqua	60	UNASSIGNED-DARK
ORANGE	Blue	13	UNASSIGNED-DARK	WHITE	Blue	61	UNASSIGNED-DARK
	Orange	14	UNASSIGNED-DARK		Orange	62	UNASSIGNED-DARK
	Green	15	UNASSIGNED-DARK		Green	63	UNASSIGNED-DARK
	Brown	16	UNASSIGNED-DARK		Brown	64	UNASSIGNED-DARK
	Slate	17	UNASSIGNED-DARK		Slate	65	UNASSIGNED-DARK
	White	18	UNASSIGNED-DARK		White	66	UNASSIGNED-DARK
	Red	19	UNASSIGNED-DARK		Red	67	UNASSIGNED-DARK
	Black	20	UNASSIGNED-DARK		Black	68	UNASSIGNED-DARK
	Yellow	21	UNASSIGNED-DARK		Yellow	69	UNASSIGNED-DARK
	Violet	22	UNASSIGNED-DARK		Violet	70	UNASSIGNED-DARK
	Rose	23	UNASSIGNED-DARK		Rose	71	UNASSIGNED-DARK
	Aqua	24	UNASSIGNED-DARK		Aqua	72	UNASSIGNED-DARK
GREEN	Blue	25	UNASSIGNED-DARK	RED	Blue	73	UNASSIGNED-DARK
	Orange	26	UNASSIGNED-DARK		Orange	74	UNASSIGNED-DARK
	Green	27	UNASSIGNED-DARK		Green	75	UNASSIGNED-DARK
	Brown	28	UNASSIGNED-DARK		Brown	76	UNASSIGNED-DARK
	Slate	29	UNASSIGNED-DARK		Slate	77	UNASSIGNED-DARK
	White	30	UNASSIGNED-DARK		White	78	UNASSIGNED-DARK
	Red	31	UNASSIGNED-DARK		Red	79	UNASSIGNED-DARK
	Black	32	UNASSIGNED-DARK		Black	80	UNASSIGNED-DARK
	Yellow	33	UNASSIGNED-DARK		Yellow	81	UNASSIGNED-DARK
	Violet	34	UNASSIGNED-DARK		Violet	82	UNASSIGNED-DARK
	Rose	35	UNASSIGNED-DARK		Rose	83	UNASSIGNED-DARK
	Aqua	36	UNASSIGNED-DARK		Aqua	84	UNASSIGNED-DARK
BROWN	Blue	37	UNASSIGNED-DARK	BLACK	Blue	85	UNASSIGNED-DARK
	Orange	38	UNASSIGNED-DARK		Orange	86	UNASSIGNED-DARK
	Green	39	UNASSIGNED-DARK		Green	87	UNASSIGNED-DARK
	Brown	40	UNASSIGNED-DARK		Brown	88	UNASSIGNED-DARK
	Slate	41	UNASSIGNED-DARK		Slate	89	UNASSIGNED-DARK
	White	42	UNASSIGNED-DARK		White	90	UNASSIGNED-DARK
	Red	43	UNASSIGNED-DARK		Red	91	UNASSIGNED-DARK
	Black	44	UNASSIGNED-DARK		Black	92	UNASSIGNED-DARK
	Yellow	45	UNASSIGNED-DARK		Yellow	93	UNASSIGNED-DARK
	Violet	46	UNASSIGNED-DARK		Violet	94	UNASSIGNED-DARK
	Rose	47	UNASSIGNED-DARK		Rose	95	UNASSIGNED-DARK
	Aqua	48	UNASSIGNED-DARK		Aqua	96	UNASSIGNED-DARK

LATERAL CABLE FIBER ASSIGNMENTS		
LCF-US12-S-03		
FIBER NO.	FUNCTION	CONNECTION
1	CCTV CAMERA - SWE	DCF-US12-S, BLU/YEL 9
2	CCTV CAMERA - SWE	DCF-US12-S, BLU/VIO 10
3	CCTV CAMERA - CABINET SPARE	DCF-US12-S, BLU/ROS 11
4	CCTV CAMERA - CABINET SPARE	DCF-US12-S, BLU/AQU 12
5	UNASSIGNED-DARK	
6	UNASSIGNED-DARK	
7	UNASSIGNED-DARK	
8	UNASSIGNED-DARK	
9	UNASSIGNED-DARK	
10	UNASSIGNED-DARK	
11	UNASSIGNED-DARK	
12	UNASSIGNED-DARK	

LATERAL CABLE FIBER ASSIGNMENTS		
LCF-		
FIBER NO.	FUNCTION	CONNECTION
1		
2		
3		
4		
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9		
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11		
12		

LATERAL CABLE FIBER ASSIGNMENTS		
LCF-		
FIBER NO.	FUNCTION	CONNECTION
1		
2		
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4		
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11		
12		

LATERAL CABLE FIBER ASSIGNMENTS		
LCF-		
FIBER NO.	FUNCTION	CONNECTION
1		
2		
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4		
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8		
9		
10		
11		
12		



USER NAME = mkosir	DESIGNED DJJ	REVISED -
	DRAWN BCC	REVISED -
PLOT SCALE = 50:1	CHECKED YJ	REVISED -
PLOT DATE = 08-OCT-2012	DATE 10/19/12	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TWELVE FIBER LATERAL CABLE FIBER ASSIGNMENTS  
IRVING PARK ROAD

SCALE: NTS SHEET NO. 2 OF 7 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	451
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60G37	

ITS-15

DISTRIBUTION CABLE FIBER ASSIGNMENTS				EXISTING PUMP STATION NO. 24, FIBER OPTIC CABLE			
DISTRIBUTION CABLE DESIGNATION				IRVING PARK ROAD COMMUNICATIONS VAULT			
DCF-US12-S				ORIGINATION			
DESTINATION							
BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT	BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT
BLUE	Blue 1	1	DCF-US12-S, BLU/BLU - FUSION SPLICE PASS THROUGH	SLATE	Blue 1	49	UNASSIGNED-DARK
	Orange 2	2	DCF-US12-S, BLU/ORA - FUSION SPLICE PASS THROUGH		Orange 2	50	UNASSIGNED-DARK
	Green 3	3	DCF-US12-S, BLU/GRE - FUSION SPLICE PASS THROUGH		Green 3	51	UNASSIGNED-DARK
	Brown 4	4	DCF-US12-S, BLU/BRO - FUSION SPLICE PASS THROUGH		Brown 4	52	UNASSIGNED-DARK
	Slate 5	5	LCF-US12-S-02, BLU/BLU 1 - COMMUNICATIONS VAULT		Slate 5	53	UNASSIGNED-DARK
	White 6	6	LCF-US12-S-02, BLU/ORA 2 - COMMUNICATIONS VAULT		White 6	54	UNASSIGNED-DARK
	Red 7	7	LCF-US12-S-02, BLU/GRE 3 - COMMUNICATIONS VAULT		Red 7	55	UNASSIGNED-DARK
	Black 8	8	LCF-US12-S-02, BLU/BRO 4 - COMMUNICATIONS VAULT		Black 8	56	UNASSIGNED-DARK
	Yellow 9	9	DCF-US12-S, BLU/YEL - FUSION SPLICE PASS THROUGH		Yellow 9	57	UNASSIGNED-DARK
	Violet 10	10	DCF-US12-S, BLU/VIO - FUSION SPLICE PASS THROUGH		Violet 10	58	UNASSIGNED-DARK
	Rose 11	11	DCF-US12-S, BLU/ROS - FUSION SPLICE PASS THROUGH		Rose 11	59	UNASSIGNED-DARK
	Aqua 12	12	DCF-US12-S, BLU/AQU - FUSION SPLICE PASS THROUGH		Aqua 12	60	UNASSIGNED-DARK
ORANGE	Blue 1	13	UNASSIGNED-DARK	WHITE	Blue 1	61	UNASSIGNED-DARK
	Orange 2	14	UNASSIGNED-DARK		Orange 2	62	UNASSIGNED-DARK
	Green 3	15	UNASSIGNED-DARK		Green 3	63	UNASSIGNED-DARK
	Brown 4	16	UNASSIGNED-DARK		Brown 4	64	UNASSIGNED-DARK
	Slate 5	17	UNASSIGNED-DARK		Slate 5	65	UNASSIGNED-DARK
	White 6	18	UNASSIGNED-DARK		White 6	66	UNASSIGNED-DARK
	Red 7	19	UNASSIGNED-DARK		Red 7	67	UNASSIGNED-DARK
	Black 8	20	UNASSIGNED-DARK		Black 8	68	UNASSIGNED-DARK
	Yellow 9	21	UNASSIGNED-DARK		Yellow 9	69	UNASSIGNED-DARK
	Violet 10	22	UNASSIGNED-DARK		Violet 10	70	UNASSIGNED-DARK
	Rose 11	23	UNASSIGNED-DARK		Rose 11	71	UNASSIGNED-DARK
	Aqua 12	24	UNASSIGNED-DARK		Aqua 12	72	UNASSIGNED-DARK
GREEN	Blue 1	25	UNASSIGNED-DARK	RED	Blue 1	73	UNASSIGNED-DARK
	Orange 2	26	UNASSIGNED-DARK		Orange 2	74	UNASSIGNED-DARK
	Green 3	27	UNASSIGNED-DARK		Green 3	75	UNASSIGNED-DARK
	Brown 4	28	UNASSIGNED-DARK		Brown 4	76	UNASSIGNED-DARK
	Slate 5	29	UNASSIGNED-DARK		Slate 5	77	UNASSIGNED-DARK
	White 6	30	UNASSIGNED-DARK		White 6	78	UNASSIGNED-DARK
	Red 7	31	UNASSIGNED-DARK		Red 7	79	UNASSIGNED-DARK
	Black 8	32	UNASSIGNED-DARK		Black 8	80	UNASSIGNED-DARK
	Yellow 9	33	UNASSIGNED-DARK		Yellow 9	81	UNASSIGNED-DARK
	Violet 10	34	UNASSIGNED-DARK		Violet 10	82	UNASSIGNED-DARK
	Rose 11	35	UNASSIGNED-DARK		Rose 11	83	UNASSIGNED-DARK
	Aqua 12	36	UNASSIGNED-DARK		Aqua 12	84	UNASSIGNED-DARK
BROWN	Blue 1	37	UNASSIGNED-DARK	BLACK	Blue 1	85	UNASSIGNED-DARK
	Orange 2	38	UNASSIGNED-DARK		Orange 2	86	UNASSIGNED-DARK
	Green 3	39	UNASSIGNED-DARK		Green 3	87	UNASSIGNED-DARK
	Brown 4	40	UNASSIGNED-DARK		Brown 4	88	UNASSIGNED-DARK
	Slate 5	41	UNASSIGNED-DARK		Slate 5	89	UNASSIGNED-DARK
	White 6	42	UNASSIGNED-DARK		White 6	90	UNASSIGNED-DARK
	Red 7	43	UNASSIGNED-DARK		Red 7	91	UNASSIGNED-DARK
	Black 8	44	UNASSIGNED-DARK		Black 8	92	UNASSIGNED-DARK
	Yellow 9	45	UNASSIGNED-DARK		Yellow 9	93	UNASSIGNED-DARK
	Violet 10	46	UNASSIGNED-DARK		Violet 10	94	UNASSIGNED-DARK
	Rose 11	47	UNASSIGNED-DARK		Rose 11	95	UNASSIGNED-DARK
	Aqua 12	48	UNASSIGNED-DARK		Aqua 12	96	UNASSIGNED-DARK



USER NAME = mks01r	DESIGNED DJJ	REVISED -
	DRAWN BCC	REVISED -
PLOT SCALE = 50:1	CHECKED YJ	REVISED -
PLOT DATE = 08-OCT-2012	DATE 10/19/12	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DISTRIBUTION CABLE FIBER ASSIGNMENTS  
MONTROSE AVENUE

SCALE: NTS SHEET NO. 3 OF 7 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	452
			CONTRACT NO. 60G37	
ILLINOIS FED. AID PROJECT				

LATERAL CABLE FIBER ASSIGNMENTS		
LCF-US12-S-02		
FIBER NO.	FUNCTION	CONNECTION
1	CCTV CAMERA - SWE	DCF-US12-S, BLU/SLA 5
2	CCTV CAMERA - SWE	DCF-US12-S, BLU/WHI 6
3	CCTV CAMERA - CABINET SPARE	DCF-US12-S, BLU/RED 7
4	CCTV CAMERA - CABINET SPARE	DCF-US12-S, BLU/BLA 8
5	UNASSIGNED-DARK	
6	UNASSIGNED-DARK	
7	UNASSIGNED-DARK	
8	UNASSIGNED-DARK	
9	UNASSIGNED-DARK	
10	UNASSIGNED-DARK	
11	UNASSIGNED-DARK	
12	UNASSIGNED-DARK	

LATERAL CABLE FIBER ASSIGNMENTS		
LCF-		
FIBER NO.	FUNCTION	CONNECTION
1		
2		
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9		
10		
11		
12		

LATERAL CABLE FIBER ASSIGNMENTS		
LCF-		
FIBER NO.	FUNCTION	CONNECTION
1		
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3		
4		
5		
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9		
10		
11		
12		

LATERAL CABLE FIBER ASSIGNMENTS		
LCF-		
FIBER NO.	FUNCTION	CONNECTION
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		



USER NAME = mkosir	DESIGNED DJJ	REVISED -
	DRAWN BCC	REVISED -
PLOT SCALE = 50:1	CHECKED YJ	REVISED -
PLOT DATE = 08-OCT-2012	DATE 10/19/12	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TWELVE FIBER LATERAL CABLE FIBER ASSIGNMENTS  
MONTROSE AVENUE

SCALE: NTS SHEET NO. 4 OF 7 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	453
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60G37	

ITS-17

DISTRIBUTION CABLE FIBER ASSIGNMENTS				ORIGINATION			
DISTRIBUTION CABLE DESIGNATION		DCF-US12-S		DESTINATION		EXISTING PUMP STATION NO. 24, FIBER OPTIC CABLE	
BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT	BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT
BLUE	Blue	1	LCF-US12-S-01.A, BLU/BLU 1 - COMMUNICATIONS VAULT	SLATE	Blue	49	UNASSIGNED-DARK
	Orange	2	LCF-US12-S-01.A, BLU/ORA 2 - COMMUNICATIONS VAULT		Orange	50	UNASSIGNED-DARK
	Green	3	LCF-US12-S-01.B, BLU/BLU 1 - COMMUNICATIONS VAULT		Green	51	UNASSIGNED-DARK
	Brown	4	LCF-US12-S-01.B, BLU/ORA 2 - COMMUNICATIONS VAULT		Brown	52	UNASSIGNED-DARK
	Slate	5	DCF-US12-S, BLU/SLA - FUSION SPLICE PASS THROUGH		Slate	53	UNASSIGNED-DARK
	White	6	DCF-US12-S, BLU/WHI - FUSION SPLICE PASS THROUGH		White	54	UNASSIGNED-DARK
	Red	7	DCF-US12-S, BLU/RED - FUSION SPLICE PASS THROUGH		Red	55	UNASSIGNED-DARK
	Black	8	DCF-US12-S, BLU/BLA - FUSION SPLICE PASS THROUGH		Black	56	UNASSIGNED-DARK
	Yellow	9	DCF-US12-S, BLU/YEL - FUSION SPLICE PASS THROUGH		Yellow	57	UNASSIGNED-DARK
	Violet	10	DCF-US12-S, BLU/VIO - FUSION SPLICE PASS THROUGH		Violet	58	UNASSIGNED-DARK
	Rose	11	DCF-US12-S, BLU/ROS - FUSION SPLICE PASS THROUGH		Rose	59	UNASSIGNED-DARK
	Aqua	12	DCF-US12-S, BLU/AQU - FUSION SPLICE PASS THROUGH		Aqua	60	UNASSIGNED-DARK
ORANGE	Blue	13	UNASSIGNED-DARK	WHITE	Blue	61	UNASSIGNED-DARK
	Orange	14	UNASSIGNED-DARK		Orange	62	UNASSIGNED-DARK
	Green	15	UNASSIGNED-DARK		Green	63	UNASSIGNED-DARK
	Brown	16	UNASSIGNED-DARK		Brown	64	UNASSIGNED-DARK
	Slate	17	UNASSIGNED-DARK		Slate	65	UNASSIGNED-DARK
	White	18	UNASSIGNED-DARK		White	66	UNASSIGNED-DARK
	Red	19	UNASSIGNED-DARK		Red	67	UNASSIGNED-DARK
	Black	20	UNASSIGNED-DARK		Black	68	UNASSIGNED-DARK
	Yellow	21	UNASSIGNED-DARK		Yellow	69	UNASSIGNED-DARK
	Violet	22	UNASSIGNED-DARK		Violet	70	UNASSIGNED-DARK
	Rose	23	UNASSIGNED-DARK		Rose	71	UNASSIGNED-DARK
	Aqua	24	UNASSIGNED-DARK		Aqua	72	UNASSIGNED-DARK
GREEN	Blue	25	UNASSIGNED-DARK	RED	Blue	73	UNASSIGNED-DARK
	Orange	26	UNASSIGNED-DARK		Orange	74	UNASSIGNED-DARK
	Green	27	UNASSIGNED-DARK		Green	75	UNASSIGNED-DARK
	Brown	28	UNASSIGNED-DARK		Brown	76	UNASSIGNED-DARK
	Slate	29	UNASSIGNED-DARK		Slate	77	UNASSIGNED-DARK
	White	30	UNASSIGNED-DARK		White	78	UNASSIGNED-DARK
	Red	31	UNASSIGNED-DARK		Red	79	UNASSIGNED-DARK
	Black	32	UNASSIGNED-DARK		Black	80	UNASSIGNED-DARK
	Yellow	33	UNASSIGNED-DARK		Yellow	81	UNASSIGNED-DARK
	Violet	34	UNASSIGNED-DARK		Violet	82	UNASSIGNED-DARK
	Rose	35	UNASSIGNED-DARK		Rose	83	UNASSIGNED-DARK
	Aqua	36	UNASSIGNED-DARK		Aqua	84	UNASSIGNED-DARK
BROWN	Blue	37	UNASSIGNED-DARK	BLACK	Blue	85	UNASSIGNED-DARK
	Orange	38	UNASSIGNED-DARK		Orange	86	UNASSIGNED-DARK
	Green	39	UNASSIGNED-DARK		Green	87	UNASSIGNED-DARK
	Brown	40	UNASSIGNED-DARK		Brown	88	UNASSIGNED-DARK
	Slate	41	UNASSIGNED-DARK		Slate	89	UNASSIGNED-DARK
	White	42	UNASSIGNED-DARK		White	90	UNASSIGNED-DARK
	Red	43	UNASSIGNED-DARK		Red	91	UNASSIGNED-DARK
	Black	44	UNASSIGNED-DARK		Black	92	UNASSIGNED-DARK
	Yellow	45	UNASSIGNED-DARK		Yellow	93	UNASSIGNED-DARK
	Violet	46	UNASSIGNED-DARK		Violet	94	UNASSIGNED-DARK
	Rose	47	UNASSIGNED-DARK		Rose	95	UNASSIGNED-DARK
	Aqua	48	UNASSIGNED-DARK		Aqua	96	UNASSIGNED-DARK



USER NAME = micosir	DESIGNED DJJ	REVISED -
	DRAWN BCC	REVISED -
PLOT SCALE = 50:1	CHECKED YJ	REVISED -
PLOT DATE = 08-OCT-2012	DATE 10/19/12	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DISTRIBUTION CABLE FIBER ASSIGNMENTS  
LAWRENCE AVENUE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	454
			CONTRACT NO. 60G37	
ILLINOIS FED. AID PROJECT				

SCALE: NTS SHEET NO. 5 OF 7 SHEETS STA. TO STA.

LATERAL CABLE FIBER ASSIGNMENTS		
LCF-US12-S-01.A		
FIBER NO.	FUNCTION	CONNECTION
1	CCTV CAMERA - SWE	DCF-US12-S, BLU/BLU 1
2	CCTV CAMERA - SWE	DCF-US12-S, BLU/ORA 2
3	UNASSIGNED-DARK	
4	UNASSIGNED-DARK	
5	UNASSIGNED-DARK	
6	UNASSIGNED-DARK	
7	UNASSIGNED-DARK	
8	UNASSIGNED-DARK	
9	UNASSIGNED-DARK	
10	UNASSIGNED-DARK	
11	UNASSIGNED-DARK	
12	UNASSIGNED-DARK	

LATERAL CABLE FIBER ASSIGNMENTS		
LCF-US12-S-01.B		
FIBER NO.	FUNCTION	CONNECTION
1	DMS - SWE	DCF-US12-S, BLU/GRE 3
2	DMS - SWE	DCF-US12-S, BLU/BRO 4
3	UNASSIGNED-DARK	
4	UNASSIGNED-DARK	
5	UNASSIGNED-DARK	
6	UNASSIGNED-DARK	
7	UNASSIGNED-DARK	
8	UNASSIGNED-DARK	
9	UNASSIGNED-DARK	
10	UNASSIGNED-DARK	
11	UNASSIGNED-DARK	
12	UNASSIGNED-DARK	

LATERAL CABLE FIBER ASSIGNMENTS		
LCF-		
FIBER NO.	FUNCTION	CONNECTION
1		
2		
3		
4		
5		
6		
7		
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9		
10		
11		
12		

LATERAL CABLE FIBER ASSIGNMENTS		
LCF-		
FIBER NO.	FUNCTION	CONNECTION
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		



USER NAME = mkosir	DESIGNED DJJ	REVISED -
	DRAWN BCC	REVISED -
PLOT SCALE = 50:1	CHECKED YJ	REVISED -
PLOT DATE = 08-OCT-2012	DATE 10/19/12	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TWELVE FIBER LATERAL CABLE FIBER ASSIGNMENTS  
LAWRENCE AVENUE

SCALE: NTS SHEET NO. 6 OF 7 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	455
			CONTRACT NO. 60G37	
ILLINOIS FED. AID PROJECT				

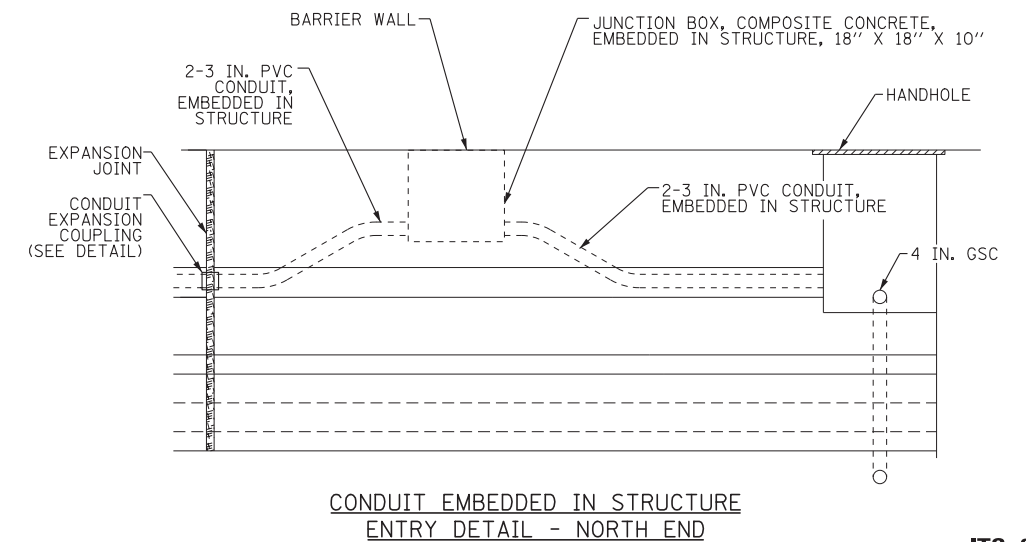
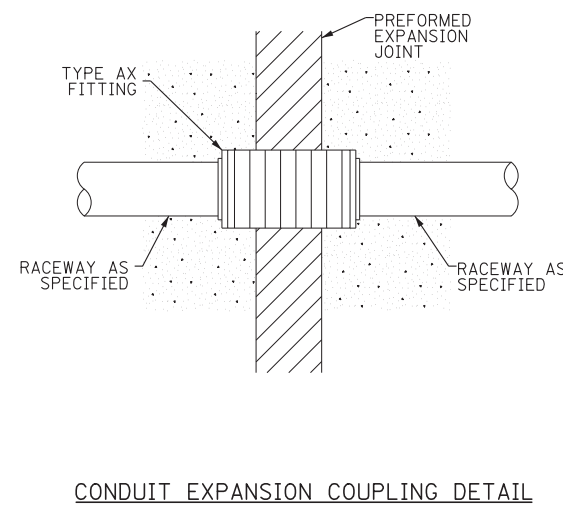
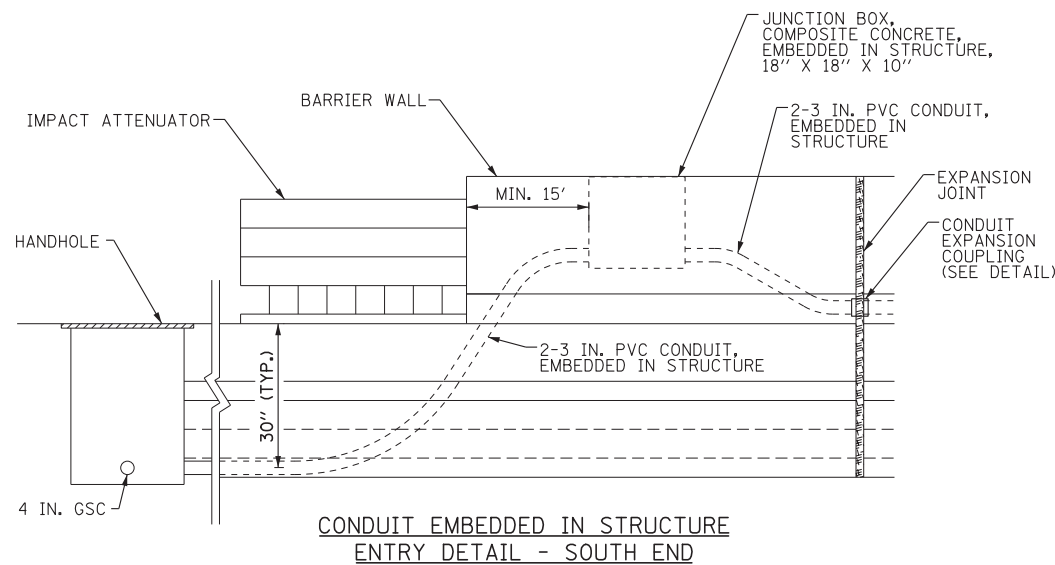
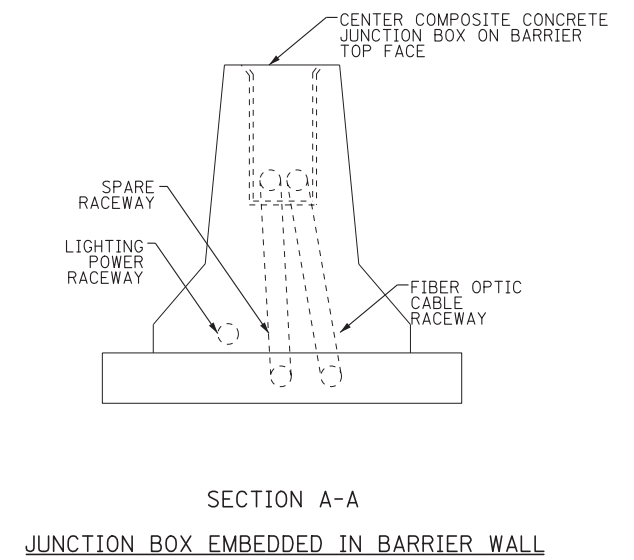
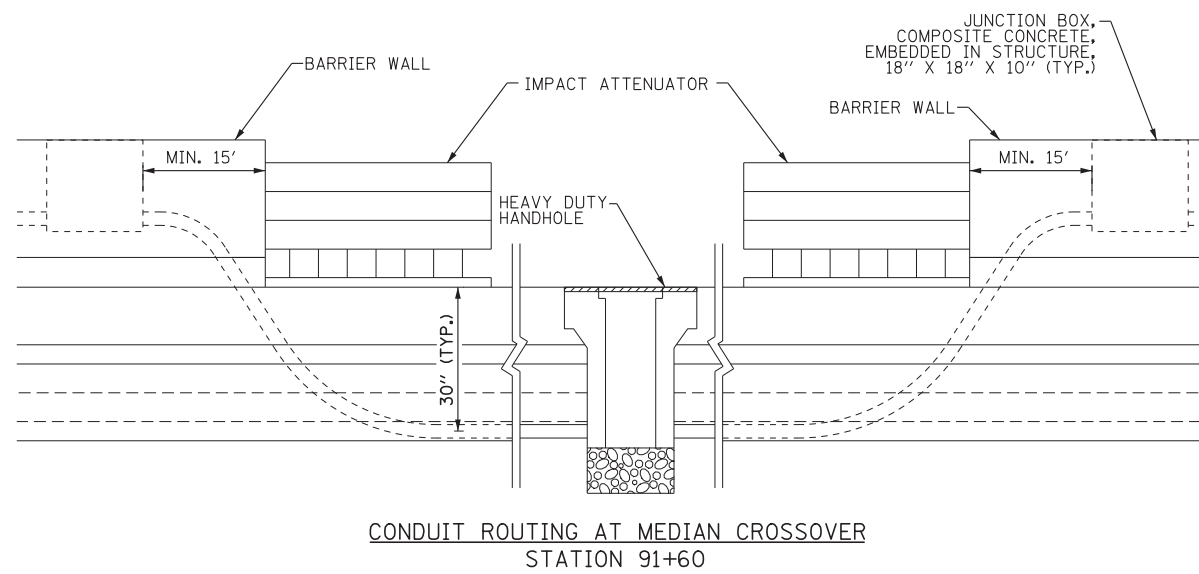
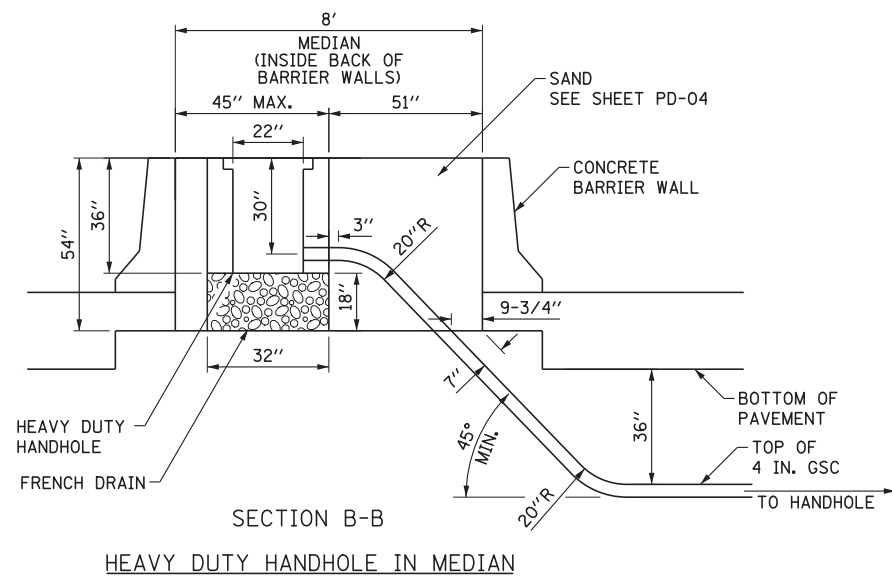
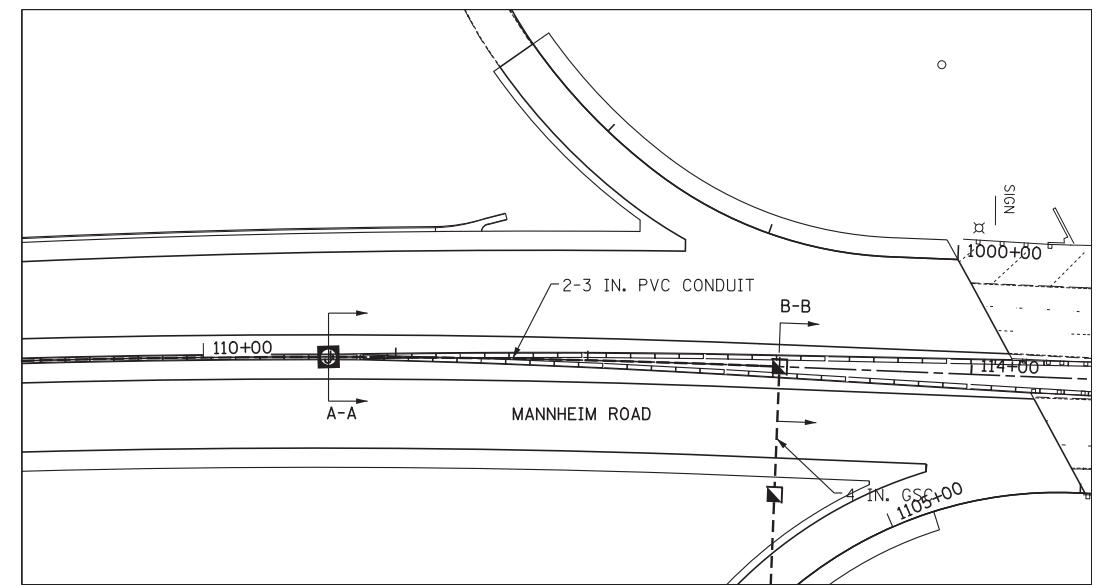
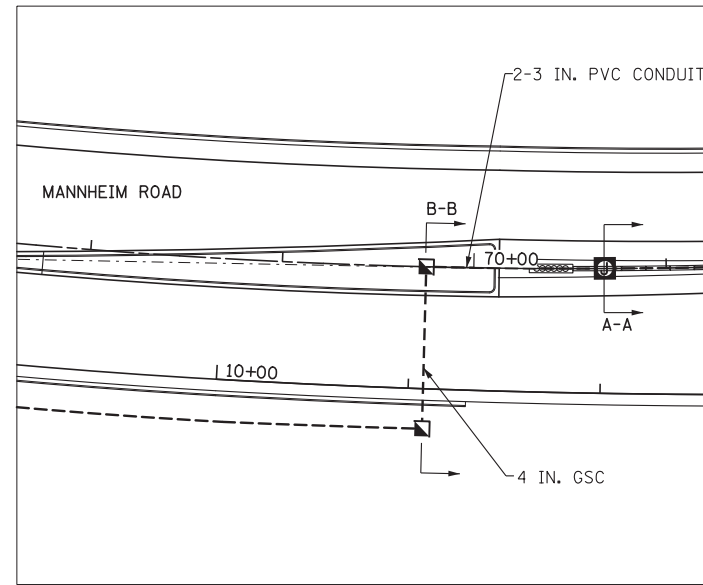
DISTRIBUTION CABLE FIBER ASSIGNMENTS				ORIGINATION			
DISTRIBUTION CABLE DESIGNATION DCF-US12-S				EXISTING PUMP STATION NO. 24, FIBER OPTIC CABLE			
DCF-US12-S				IRVING PARK ROAD COMMUNICATIONS VAULT			
BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT	BUFFER TUBE	FIBER	FIBER NO.	ASSIGNMENT
BLUE	Blue	1	TCF-PS24, ORA/BLU 1	SLATE	Blue	1	UNASSIGNED-DARK
	Orange	2	TCF-PS24, ORA/ORA 2		Orange	2	UNASSIGNED-DARK
	Green	3	TCF-PS24, ORA/GRE 3		Green	3	UNASSIGNED-DARK
	Brown	4	TCF-PS24, ORA/BRO 4		Brown	4	UNASSIGNED-DARK
	Slate	5	TCF-PS24, ORA/SLA 5		Slate	5	UNASSIGNED-DARK
	White	6	TCF-PS24, ORA/WHI 6		White	6	UNASSIGNED-DARK
	Red	7	TCF-PS24, ORA/RED 7		Red	7	UNASSIGNED-DARK
	Black	8	TCF-PS24, ORA/BLA 8		Black	8	UNASSIGNED-DARK
	Yellow	9	TCF-PS24, ORA/YEL 9		Yellow	9	UNASSIGNED-DARK
	Violet	10	TCF-PS24, ORA/VIO 10		Violet	10	UNASSIGNED-DARK
	Rose	11	TCF-PS24, ORA/ROS 11		Rose	11	UNASSIGNED-DARK
	Aqua	12	TCF-PS24, ORA/AQU 12		Aqua	12	UNASSIGNED-DARK
ORANGE	Blue	1	UNASSIGNED-DARK	WHITE	Blue	1	UNASSIGNED-DARK
	Orange	2	UNASSIGNED-DARK		Orange	2	UNASSIGNED-DARK
	Green	3	UNASSIGNED-DARK		Green	3	UNASSIGNED-DARK
	Brown	4	UNASSIGNED-DARK		Brown	4	UNASSIGNED-DARK
	Slate	5	UNASSIGNED-DARK		Slate	5	UNASSIGNED-DARK
	White	6	UNASSIGNED-DARK		White	6	UNASSIGNED-DARK
	Red	7	UNASSIGNED-DARK		Red	7	UNASSIGNED-DARK
	Black	8	UNASSIGNED-DARK		Black	8	UNASSIGNED-DARK
	Yellow	9	UNASSIGNED-DARK		Yellow	9	UNASSIGNED-DARK
	Violet	10	UNASSIGNED-DARK		Violet	10	UNASSIGNED-DARK
	Rose	11	UNASSIGNED-DARK		Rose	11	UNASSIGNED-DARK
	Aqua	12	UNASSIGNED-DARK		Aqua	12	UNASSIGNED-DARK
GREEN	Blue	1	UNASSIGNED-DARK	RED	Blue	1	UNASSIGNED-DARK
	Orange	2	UNASSIGNED-DARK		Orange	2	UNASSIGNED-DARK
	Green	3	UNASSIGNED-DARK		Green	3	UNASSIGNED-DARK
	Brown	4	UNASSIGNED-DARK		Brown	4	UNASSIGNED-DARK
	Slate	5	UNASSIGNED-DARK		Slate	5	UNASSIGNED-DARK
	White	6	UNASSIGNED-DARK		White	6	UNASSIGNED-DARK
	Red	7	UNASSIGNED-DARK		Red	7	UNASSIGNED-DARK
	Black	8	UNASSIGNED-DARK		Black	8	UNASSIGNED-DARK
	Yellow	9	UNASSIGNED-DARK		Yellow	9	UNASSIGNED-DARK
	Violet	10	UNASSIGNED-DARK		Violet	10	UNASSIGNED-DARK
	Rose	11	UNASSIGNED-DARK		Rose	11	UNASSIGNED-DARK
	Aqua	12	UNASSIGNED-DARK		Aqua	12	UNASSIGNED-DARK
BROWN	Blue	1	UNASSIGNED-DARK	BLACK	Blue	1	UNASSIGNED-DARK
	Orange	2	UNASSIGNED-DARK		Orange	2	UNASSIGNED-DARK
	Green	3	UNASSIGNED-DARK		Green	3	UNASSIGNED-DARK
	Brown	4	UNASSIGNED-DARK		Brown	4	UNASSIGNED-DARK
	Slate	5	UNASSIGNED-DARK		Slate	5	UNASSIGNED-DARK
	White	6	UNASSIGNED-DARK		White	6	UNASSIGNED-DARK
	Red	7	UNASSIGNED-DARK		Red	7	UNASSIGNED-DARK
	Black	8	UNASSIGNED-DARK		Black	8	UNASSIGNED-DARK
	Yellow	9	UNASSIGNED-DARK		Yellow	9	UNASSIGNED-DARK
	Violet	10	UNASSIGNED-DARK		Violet	10	UNASSIGNED-DARK
	Rose	11	UNASSIGNED-DARK		Rose	11	UNASSIGNED-DARK
	Aqua	12	UNASSIGNED-DARK		Aqua	12	UNASSIGNED-DARK

**NOTE:**  
 FIBER ASSIGNMENTS ARE UNCONFIRMED. IDOT IS INVESTIGATING. CONTRACTOR SHALL CONFIRM PROPER FIBER ASSIGNMENTS IN THE FIELD IN COORDINATION WITH IDOT.

ITS-20

<b>HNTB</b>	USER NAME = mksosr	DESIGNED DJJ	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DISTRIBUTION CABLE FIBER ASSIGNMENTS FIBER CABINET NEAR PUMP STATION NO. 24</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 50:1	DRAWN BCC	REVISED -					330	0105 WRS&HB	COOK	605	456
	PLOT DATE = 08-OCT-2012	CHECKED YJ	REVISED -					CONTRACT NO. 60G37				
		DATE 10/19/12	REVISED -					SCALE: NTS	SHEET NO. 7 OF 7 SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT	





USER NAME = mikosir	DESIGNED DJJ	REVISED -
PLOT SCALE = 50:1	DRAWN BCC	REVISED -
PLOT DATE = 19-OCT-2012	CHECKED YJ	REVISED -
	DATE 10/19/12	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CONDUIT TRANSITION  
UNDERGROUND / CONCRETE BARRIER DETAIL

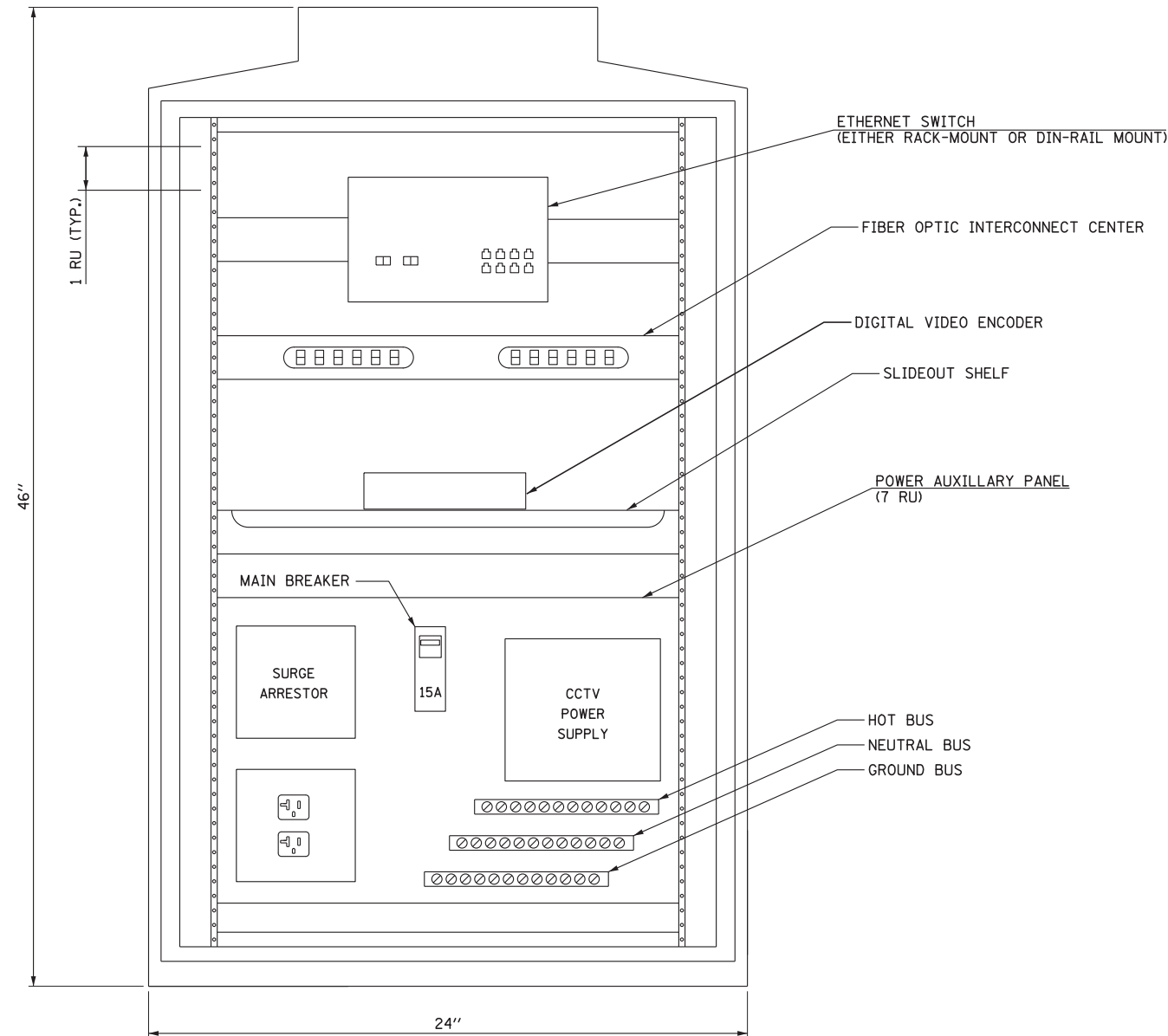
SCALE: SHEET NO. 1 OF 5 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	457
CONTRACT NO. 60G37				
ILLINOIS FED. AID PROJECT				

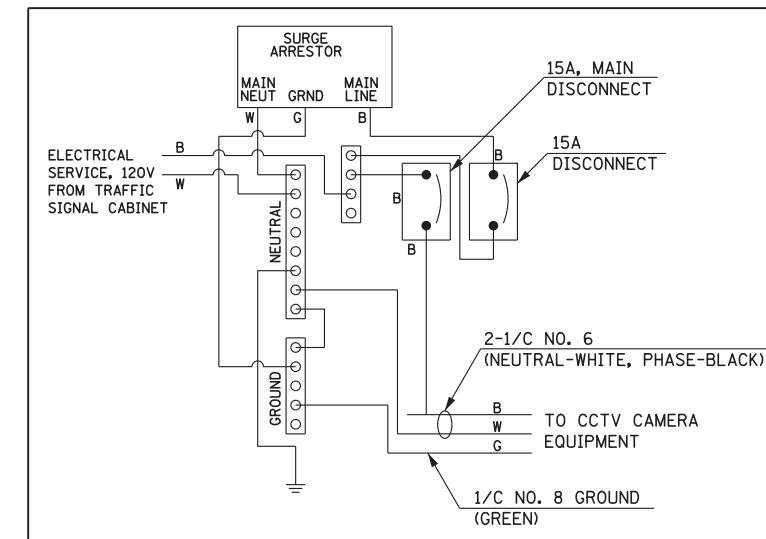
ITS-21

**NOTES:**

1. CABINET DIMENSIONS ARE ROUNDED TO THE NEAREST INCH.
2. THE CABINET SHALL BE MOUNTED TO THE POLE USING FOUR STAINLESS STEEL STRAPS.



**SUGGESTED EQUIPMENT LAYOUT**  
CCTV EQUIPMENT IN TRAFFIC SIGNAL CABINET



ITS-22



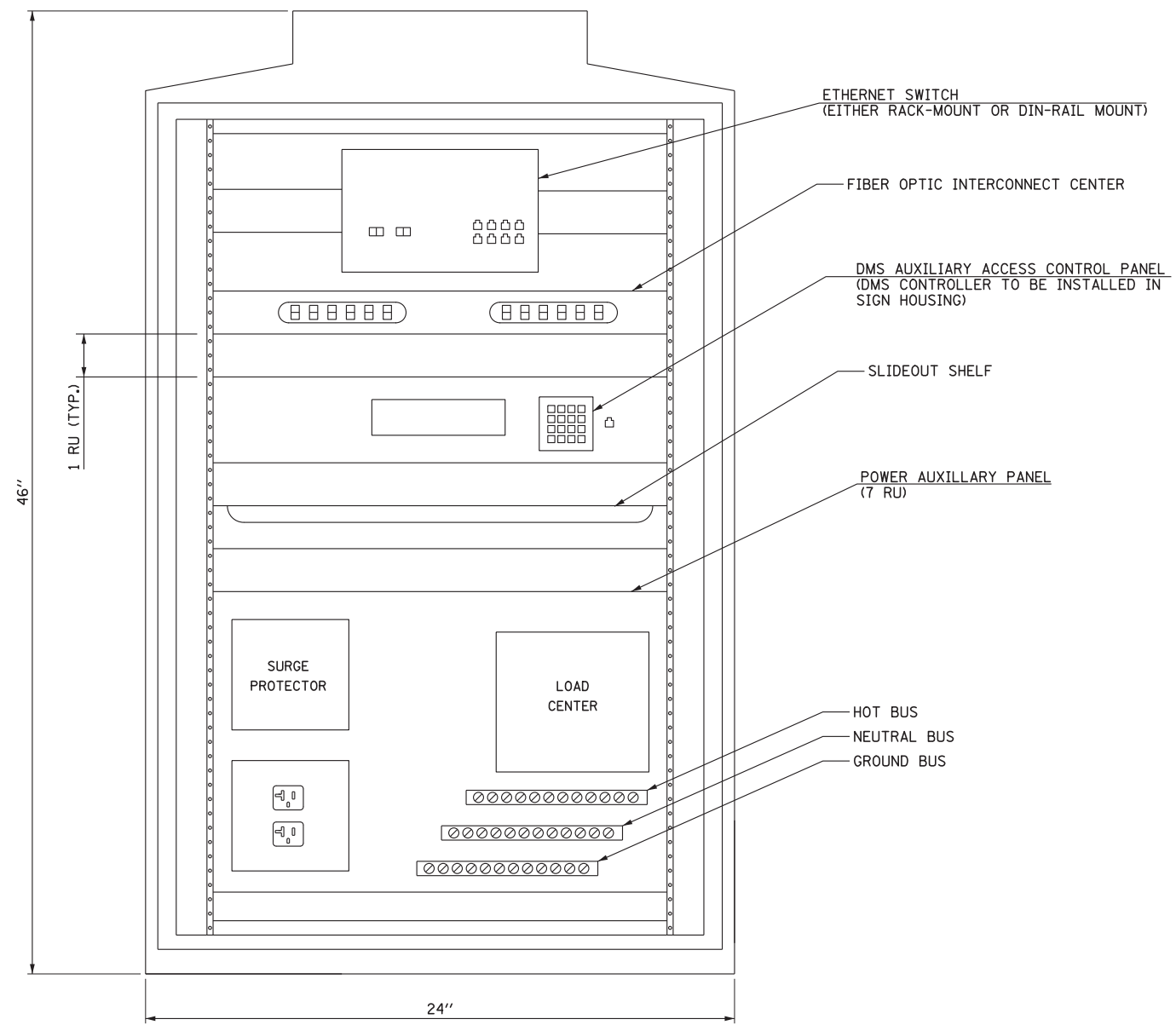
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DRAWN BCC	CHECKED YJ	REVISED -
PLOT SCALE = 50:1	DATE 10/19/12	REVISED -
PLOT DATE = 08-OCT-2012		

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**CCTV EQUIPMENT DETAIL**

SCALE: SHEET NO. 2 OF 5 SHEETS STA. TO STA.

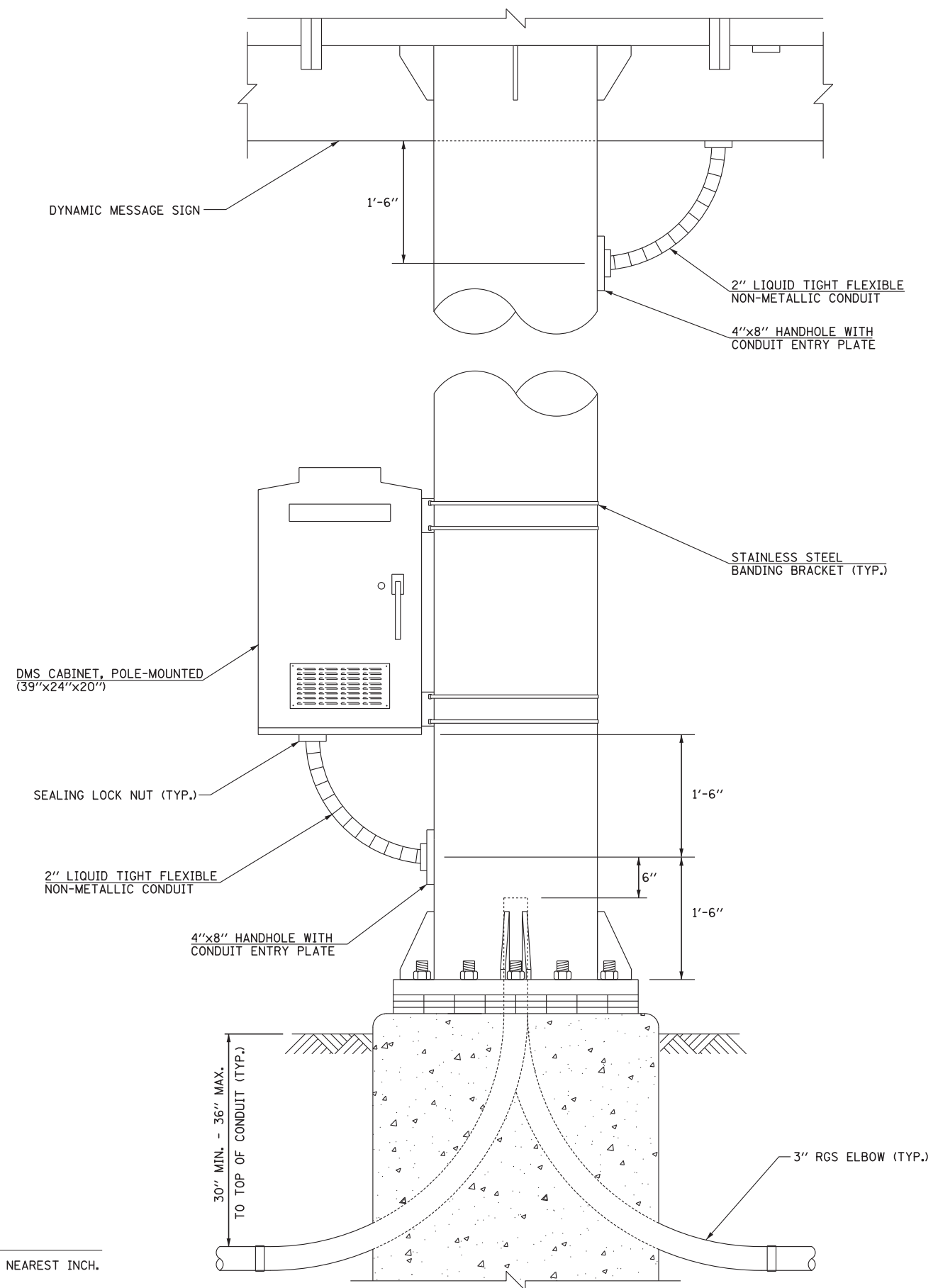
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	458
CONTRACT NO. 60G37				
ILLINOIS FED. AID PROJECT				



SUGGESTED EQUIPMENT LAYOUT

**NOTES:**

1. CABINET DIMENSIONS ARE ROUNDED TO THE NEAREST INCH.
2. THE CABINET SHALL BE MOUNTED TO THE POLE USING FOUR STAINLESS STEEL STRAPS.



DMS CABINET, POLE-MOUNTED INSTALLATION DETAIL



USER NAME = mkosir	DESIGNED DJJ	REVISED -
PLOT SCALE = 50:1	DRAWN BCC	REVISED -
PLOT DATE = 08-OCT-2012	CHECKED YJ	REVISED -
	DATE 10/19/12	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**DMS CABINET, POLE-MOUNTED DETAILS**

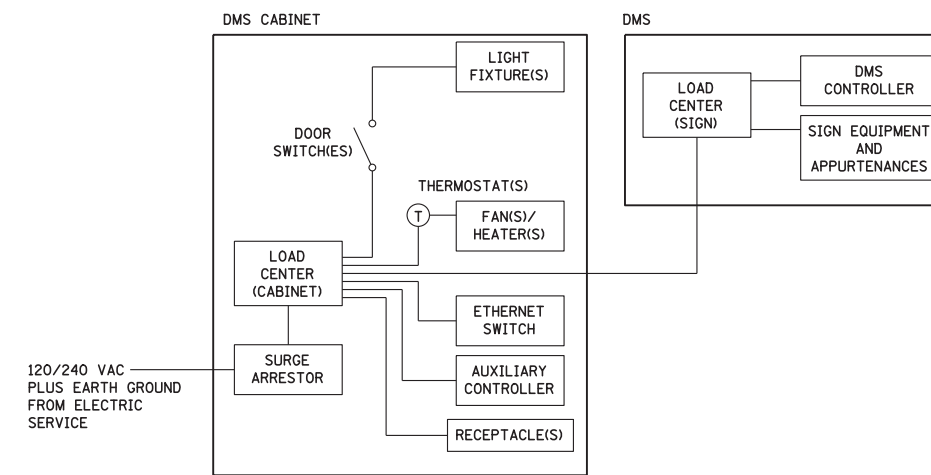
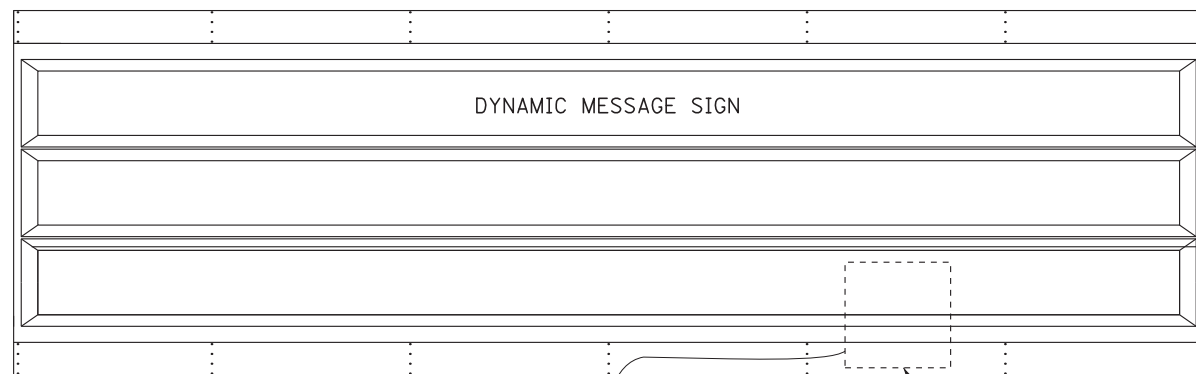
SCALE: SHEET NO. 3 OF 5 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	459
CONTRACT NO. 60G37				
ILLINOIS FED. AID PROJECT				

ITS-23

**NOTES:**

PLANS AND DETAILS INDICATE THE GENERAL NATURE AND REQUIREMENTS. THEY DO NOT SHOW EVERY ACCESSORY AND ATTACHMENT, AND THEY DO NOT RELIEVE THE CONTRACTOR OF THE REQUIREMENTS OF THE SPECIFICATIONS AND SPECIAL PROVISIONS TO ASCERTAIN UTILITY REQUIREMENTS AND TO COORDINATE ACCORDINGLY. FURNISHING ALL ITEMS AND WORK NOT PROVIDED BY THE UTILITY, BUT NECESSARY FOR A COMPLETE SERVICE INSTALLATION IS REQUIRED AND SHALL BE INCLUDED IN THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.



SEE COMMUNICATIONS OVERVIEW PLAN AND FIBER ASSIGNMENTS FOR ADDITIONAL DETAILS.

DMS POWER DISTRIBUTION PANEL IN DMS CONTROLLER

DMS CABINET POLE-MOUNTED SEE DMS CABINET DETAIL

40A-120/240V CIRCUIT SIZED AS PER PLANS

STAINLESS STEEL MOUNTING BRACKETS SEE DMS CABINET DETAIL

INTERCONNECT CENTER

CABINET POWER DISTRIBUTION PANEL SEE PANEL DIAGRAM ABOVE

LIQUIDTIGHT FLEXIBLE CONDUIT

3 IN. GSC

3 IN. GSC

80A-120/240V CIRCUIT SIZED AS PER PLANS

2 IN. GSC

80A-120/240V CIRCUIT SIZED AS PER PLANS

GRADE

30 IN. (MIN.) - 36 IN. (MAX.) TO TOP OF CONDUIT (TYP.)

TO MONTROSE AVENUE COMMUNICATIONS VAULT SEE SHEET ITS-05

DCF-US12-S 1-96 FOC IN 1-1/4 IN. IDT

4 IN. GSC (2) 1-1/4 IN. IDT

HANDHOLE

4 IN. GSC (3) 1-1/4 IN. IDT

LCF-US12-S-01.B 1-12 FOC IN 1-1/4 IN. IDT

TO LAWRENCE AVENUE COMMUNICATIONS VAULT SEE SHEET ITS-05

DCF-US12-S 1-96 FOC IN 1-1/4 IN. IDT

LCF-US12-S-01.B 1-12 FOC IN 1-1/4 IN. IDT

HEAVY DUTY HANDHOLE

TO COMED ELECTRIC SERVICE METER FOLLOW IDOT HIGHWAY STANDARD 805001 ELECTRIC SERVICE INSTALLATION DETAILS



USER NAME = micosir	DESIGNED DJJ	REVISED -
	DRAWN BCC	REVISED -
PLOT SCALE = 50:1	CHECKED YJ	REVISED -
PLOT DATE = 08-OCT-2012	DATE 10/19/12	REVISED -

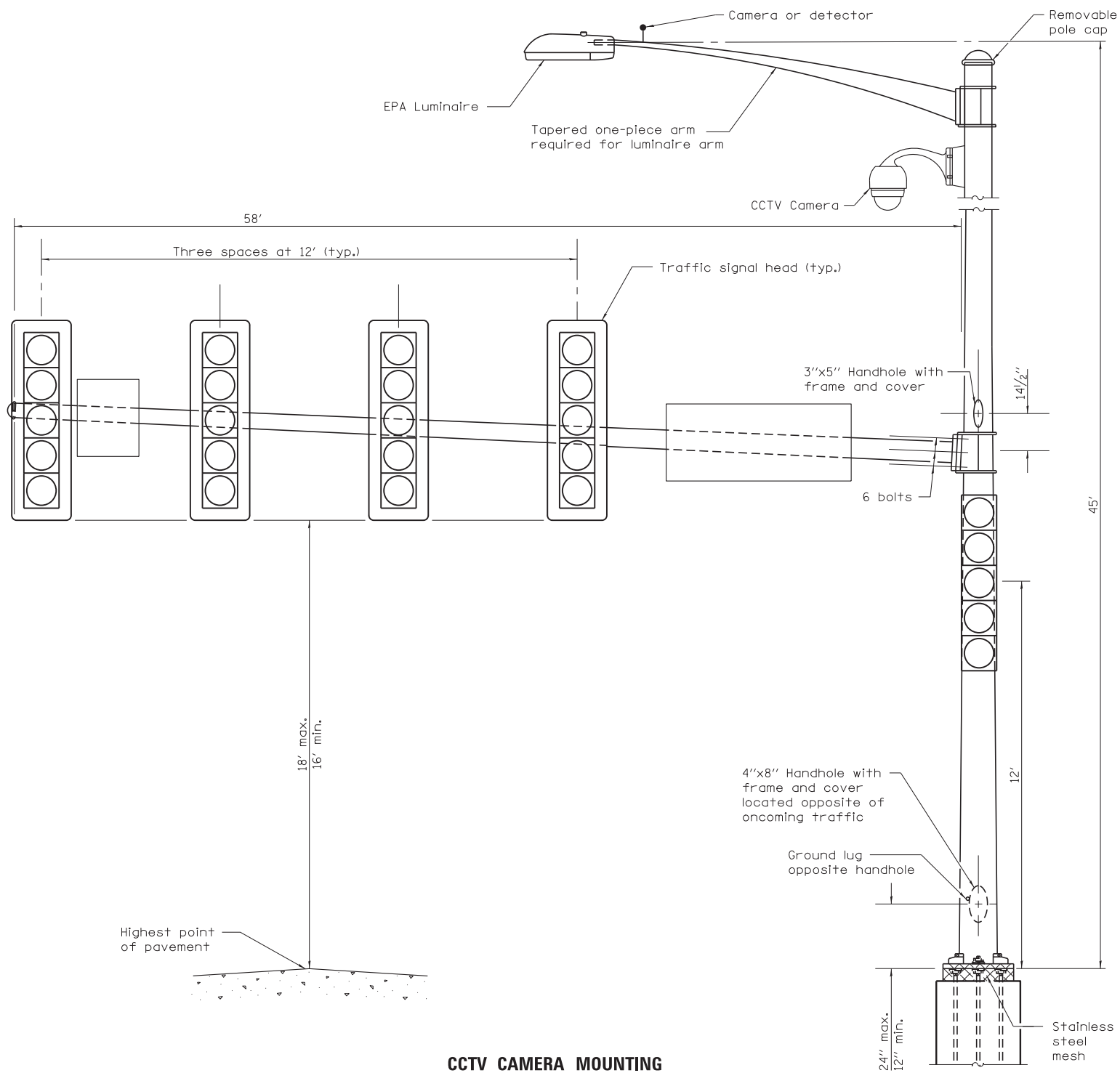
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DMS CONDUIT, CABLING, AND  
ELECTRIC SERVICE DETAILS

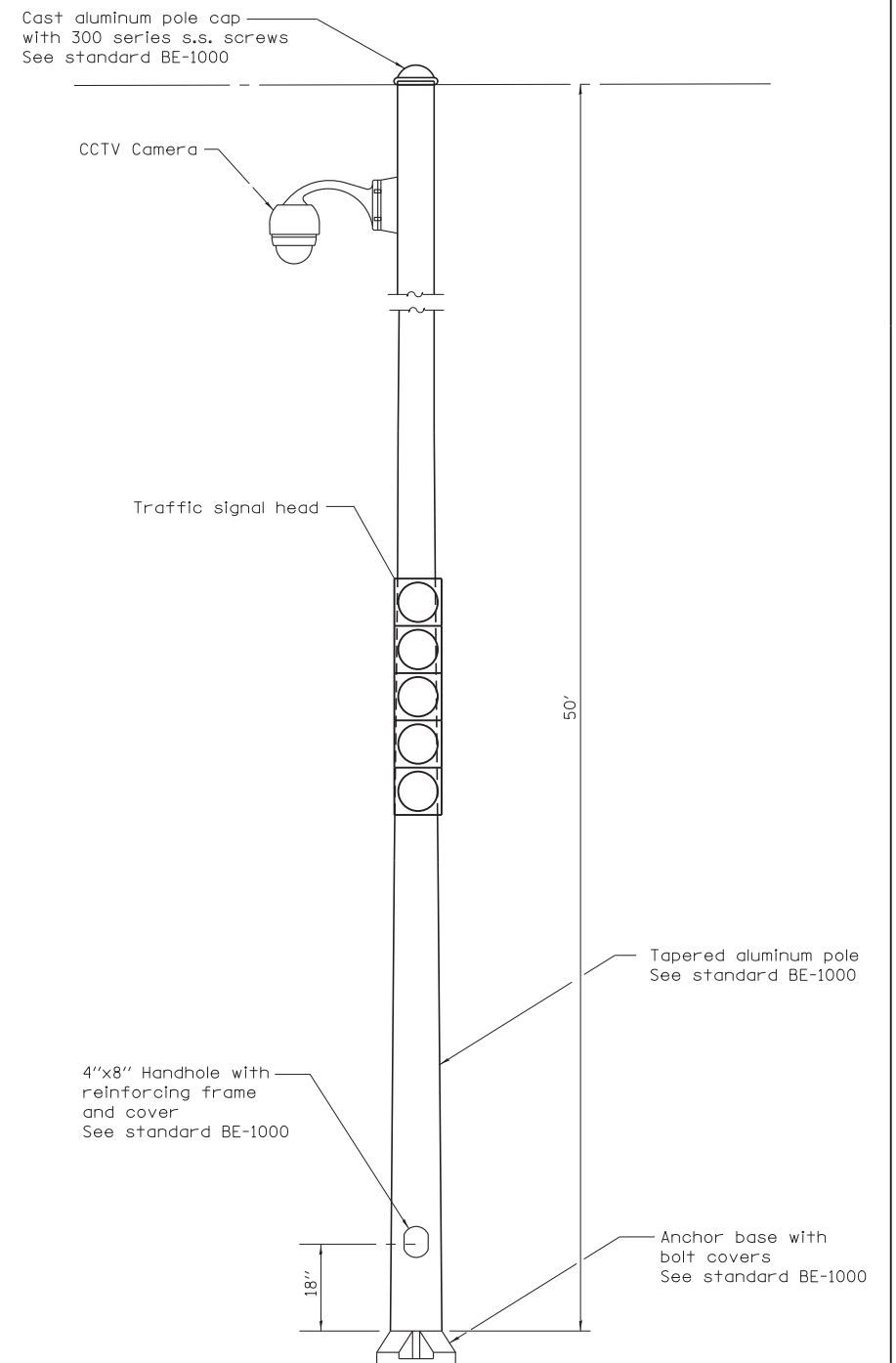
SCALE: SHEET NO. 4 OF 5 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	460
CONTRACT NO. 60G37				
ILLINOIS FED. AID PROJECT				

ITS-24



**CCTV CAMERA MOUNTING  
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE  
MONTROSE AVENUE**



**CCTV CAMERA STRUCTURE ALUMINUM POLE  
BRACKET MOUNTED TRAFFIC SIGNAL HEAD  
LAWRENCE AVENUE**



USER NAME = mko31r	DESIGNED DJJ	REVISED -
	DRAWN BCC	REVISED -
PLOT SCALE = 50:1	CHECKED YJ	REVISED -
PLOT DATE = 08-OCT-2012	DATE 10/19/12	REVISED -

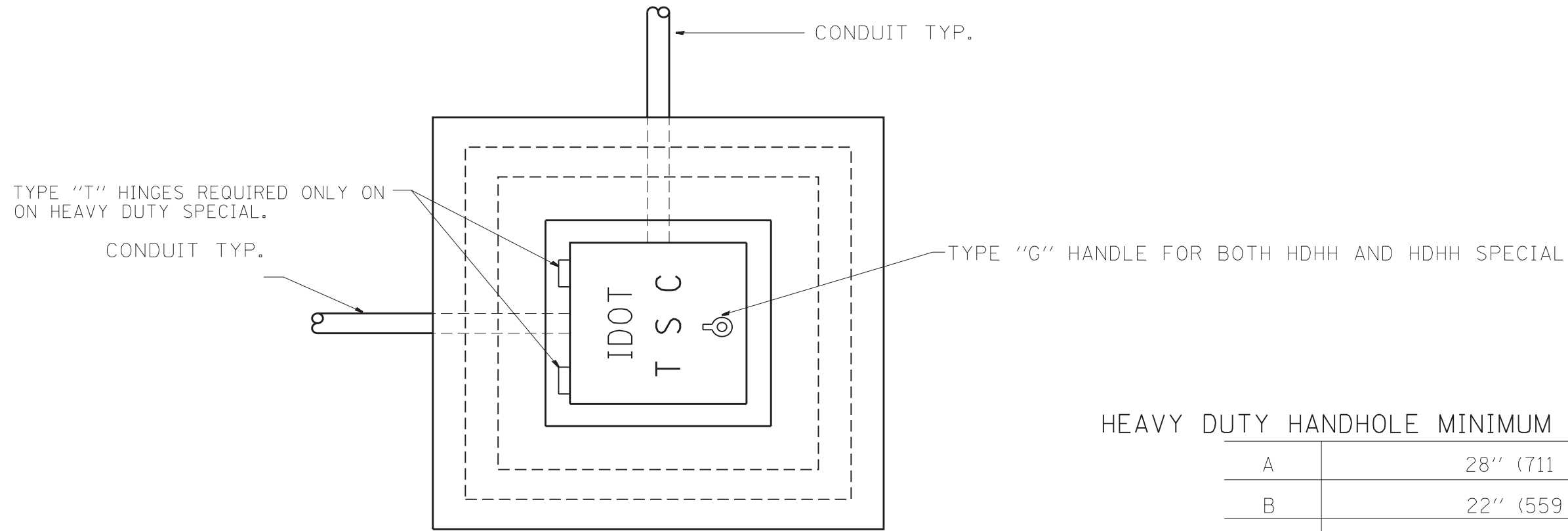
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CCTV CAMERA MOUNTING  
TRAFFIC SIGNAL POLES**

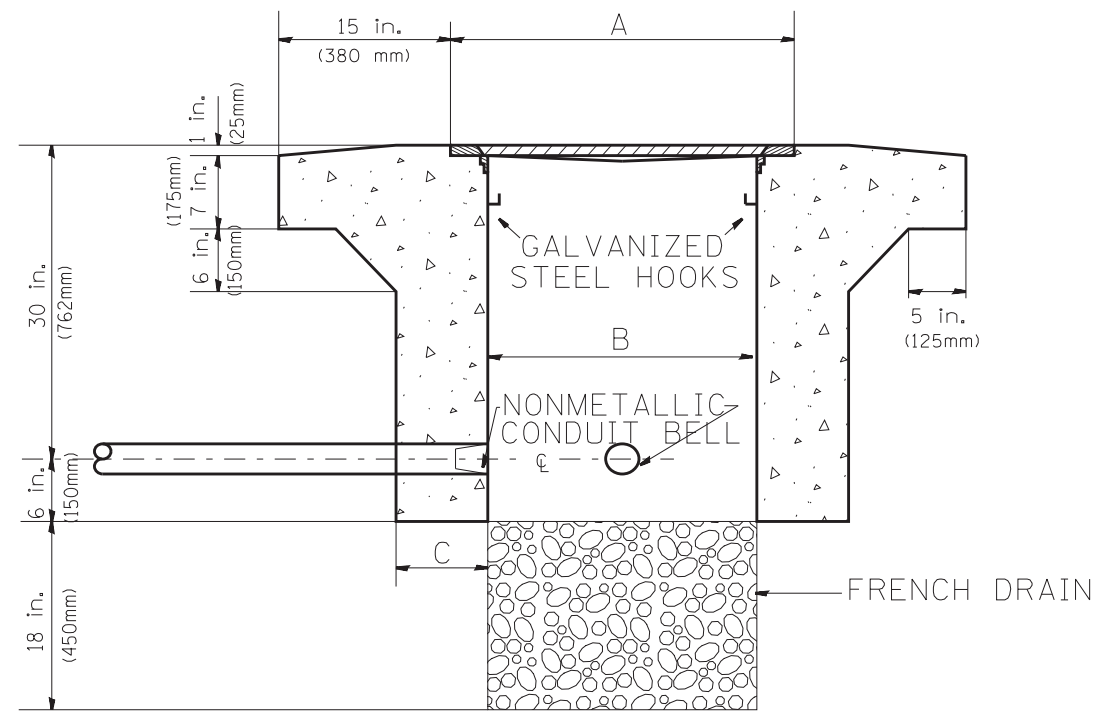
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	461
CONTRACT NO. 60G37				
ILLINOIS FED. AID PROJECT				

ITS-25



PLAN



ELEVATION

PC CONCRETE - HEAVY DUTY HAND HOLE

HEAVY DUTY HANDHOLE MINIMUM DIMENSIONS (UNHINGED)

A	28" (711 mm)
B	22" (559 mm)
C	8" (200 mm)

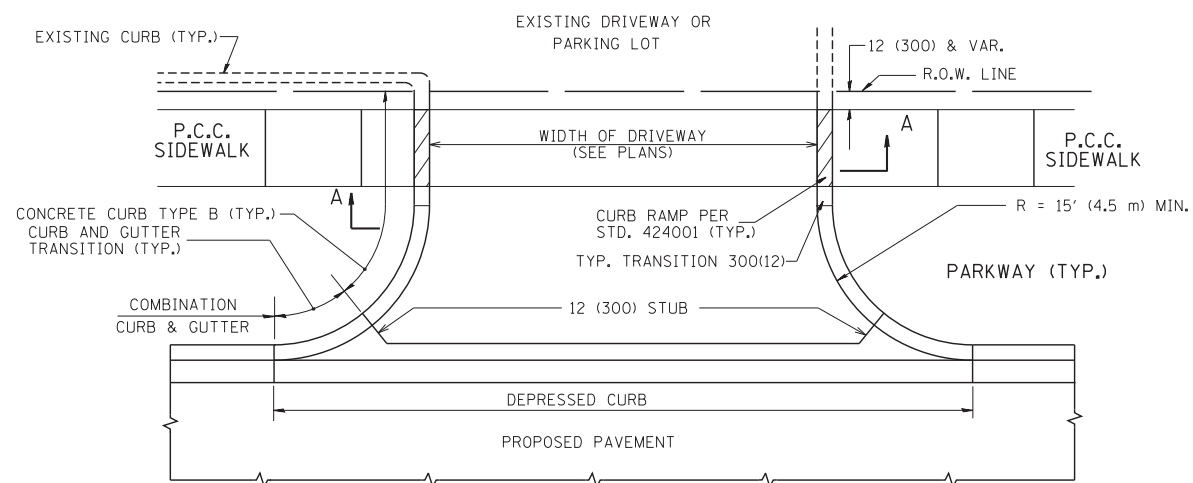
(FRAME AND COVER 260 LBS. (118 Kg.) MIN.)

HEAVY DUTY HANDHOLE SPECIAL MINIMUM DIMENSIONS

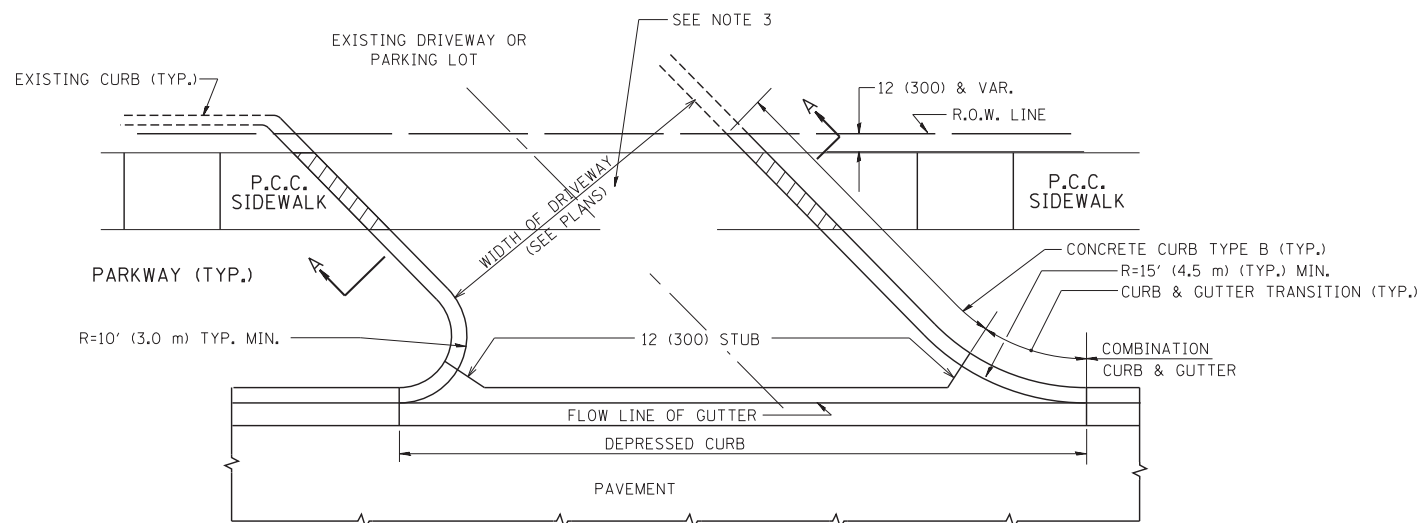
A	31.5" (800 mm)
B	30" (762 mm)
C	10" (250 mm)

(FRAME AND COVER 405 LBS. (184 Kg. (405))

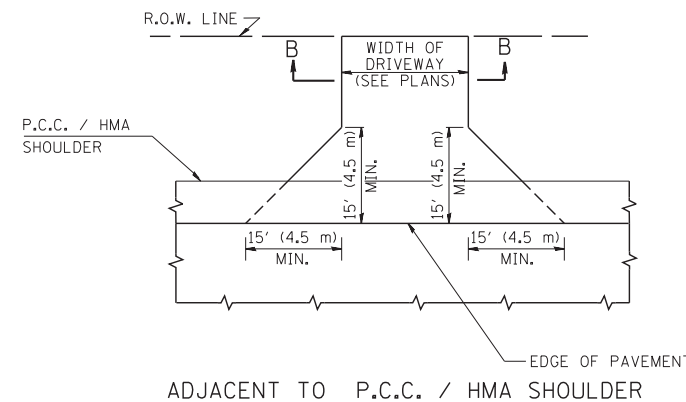
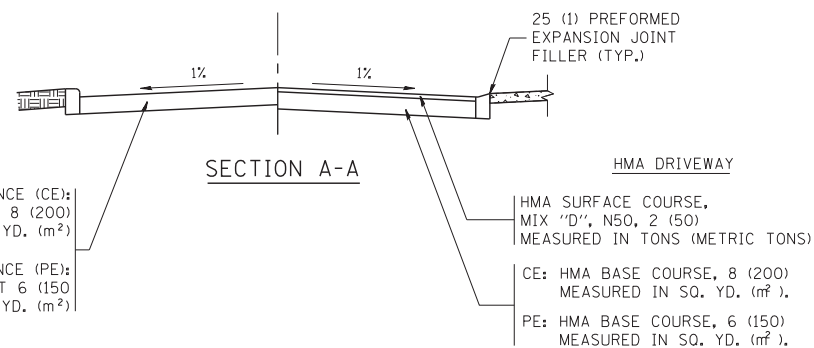
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PLOT SCALE = 100.0000' / 1in.	CHECKED - R.L.	REVISED -											
PLOT DATE = 2/17/2012	DATE - 09/11/96	REVISED -											



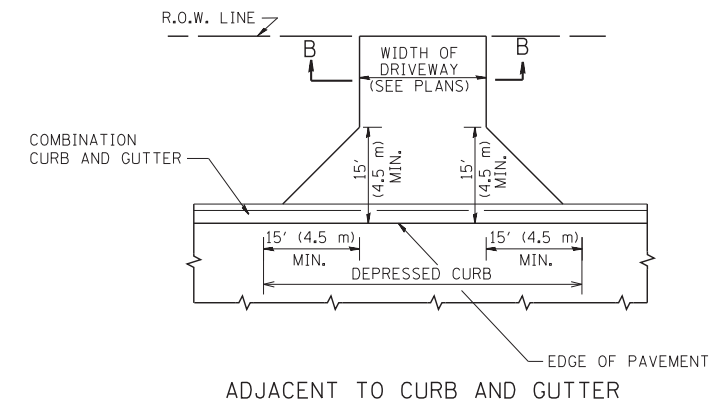
WITH CONCRETE CURB, TYPE B



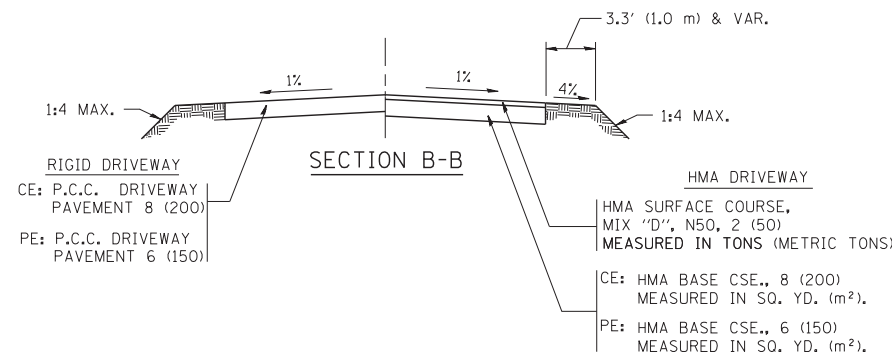
WITH CONCRETE CURB, TYPE B



ADJACENT TO P.C.C. / HMA SHOULDER



ADJACENT TO CURB AND GUTTER



RURAL FIELD ENTRANCE (FE)  
HMA SURFACE COURSE,  
MIX 'D', N50, 2 (50)  
MEASURED IN TONS (METRIC TONS)  
AGGREGATE BASE CSE., TYPE B, 8 (200)  
MEASURED IN SQ. YD. (m²).

**GENERAL NOTES:**

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATIONS IN THE PERMIT HANDBOOK. DRIVEWAYS SHALL BE REPLACED IN KIND, UNLESS OTHERWISE NOTED ON THE PLANS.

COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

WHEN THE P.C.C. SIDEWALK EXTENDS THROUGH THE DRIVEWAY, THE THICKNESS OF THE SIDEWALK IN THE DRIVEWAY AREA SHALL BE THE SAME AS THE DRIVEWAY THICKNESS. SIDEWALK WILL BE PAID FOR AS P.C.C. SIDEWALK OF THE THICKNESS SPECIFIED. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

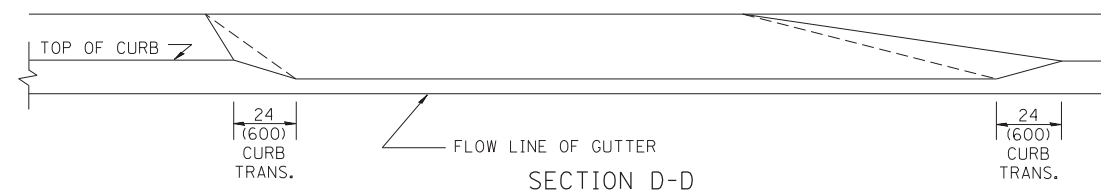
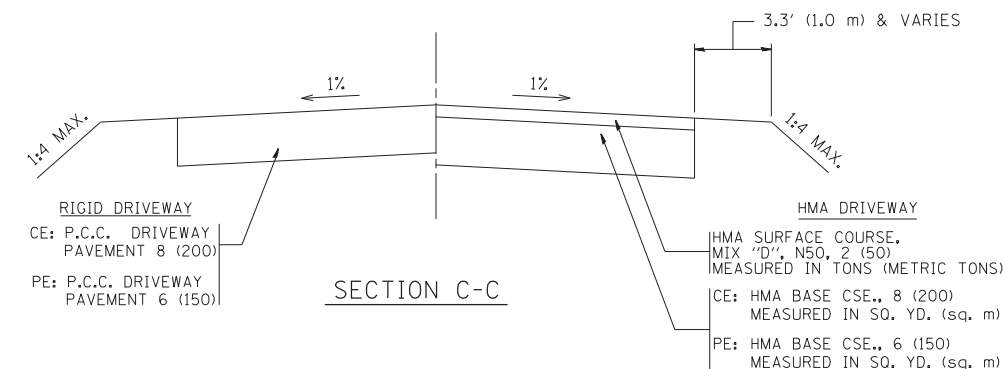
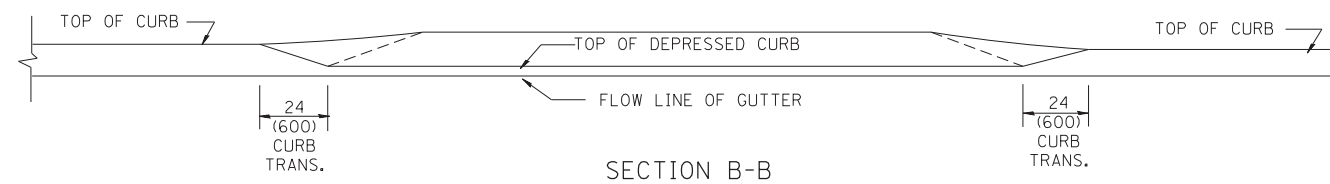
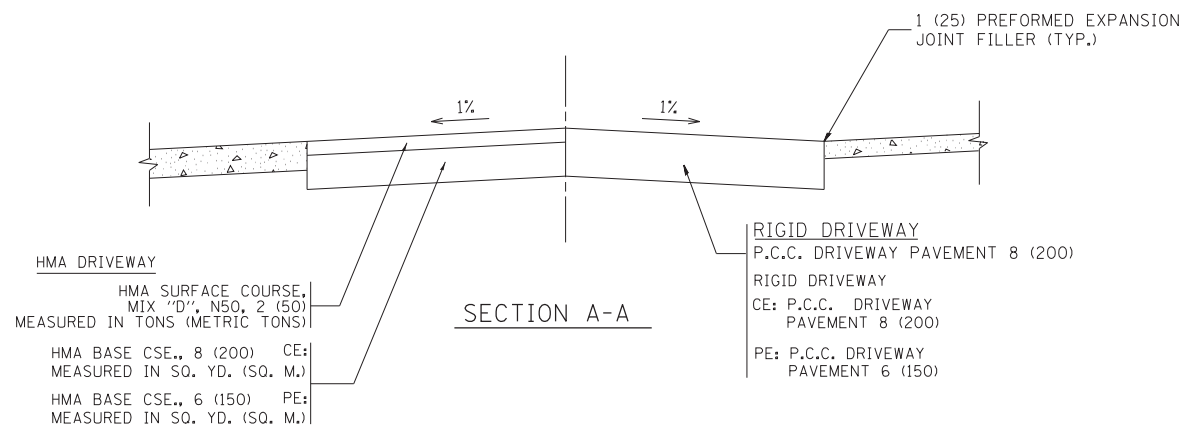
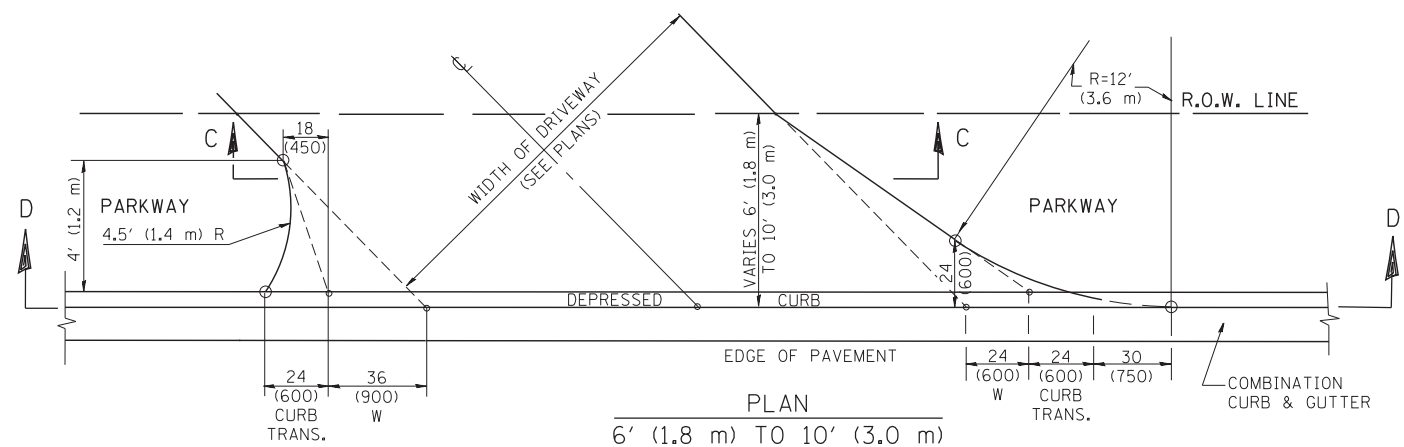
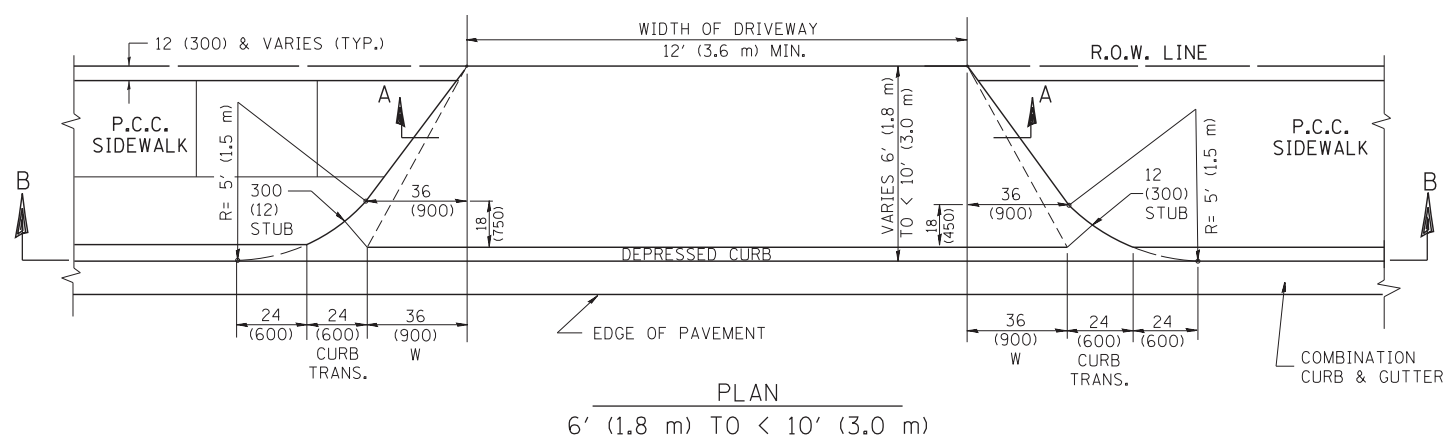
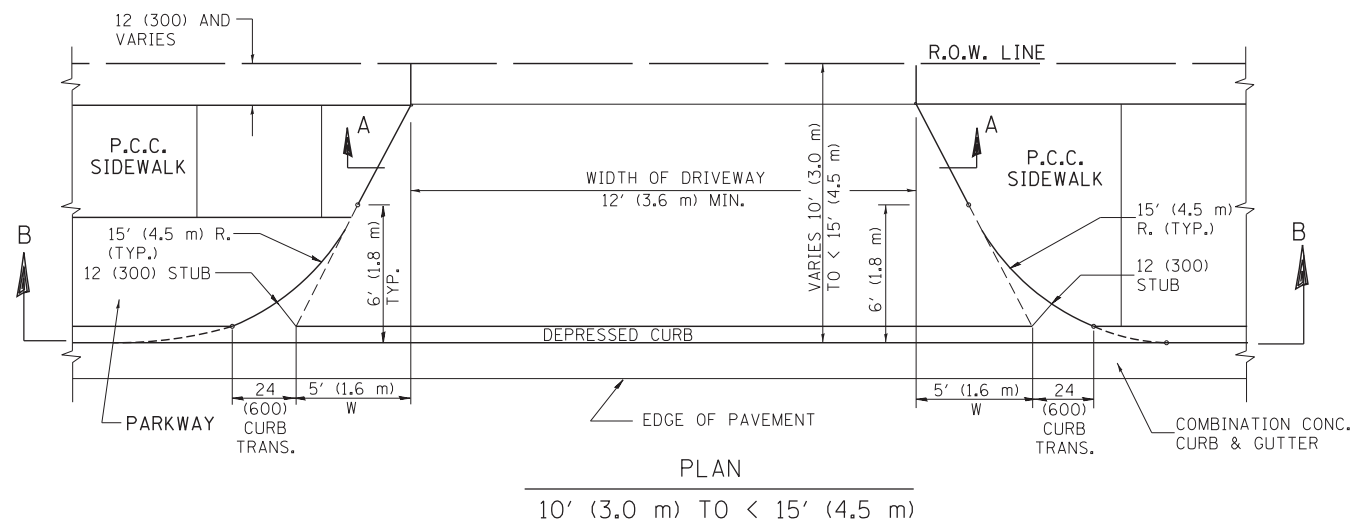
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	PLOT DATE = 9/6/2011	DATE - 11-04-95	REVISED - R. BORO 09-06-11

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W.  
AND FACE OF CURB & EDGE OF SHOULDER >= 15' (4.5 m)**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			605	463
BD0156-07 (BD-01)			CONTRACT NO.	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



GENERAL NOTES

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATION 10 IN THE PERMIT HANDBOOK. WHERE SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED WITH RIGID PAVEMENT. WHERE NO SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED IN KIND. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

WHEN THE DISTANCE BETWEEN R.O.W. AND THE BACK OF CURB IS EQUAL TO OR LESS THAN 8' (2.4 m), THE P.C.C. SIDEWALK SHALL EXTEND TO THE BACK OF CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

THE 1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

"W" VARIES FROM 36 (900) TO 5' (1.5 m) PROPORTIONAL TO THE LENGTH (L), FROM 6' (1.8 m) TO 10' (3 m).

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE NOTED.

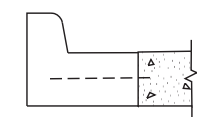
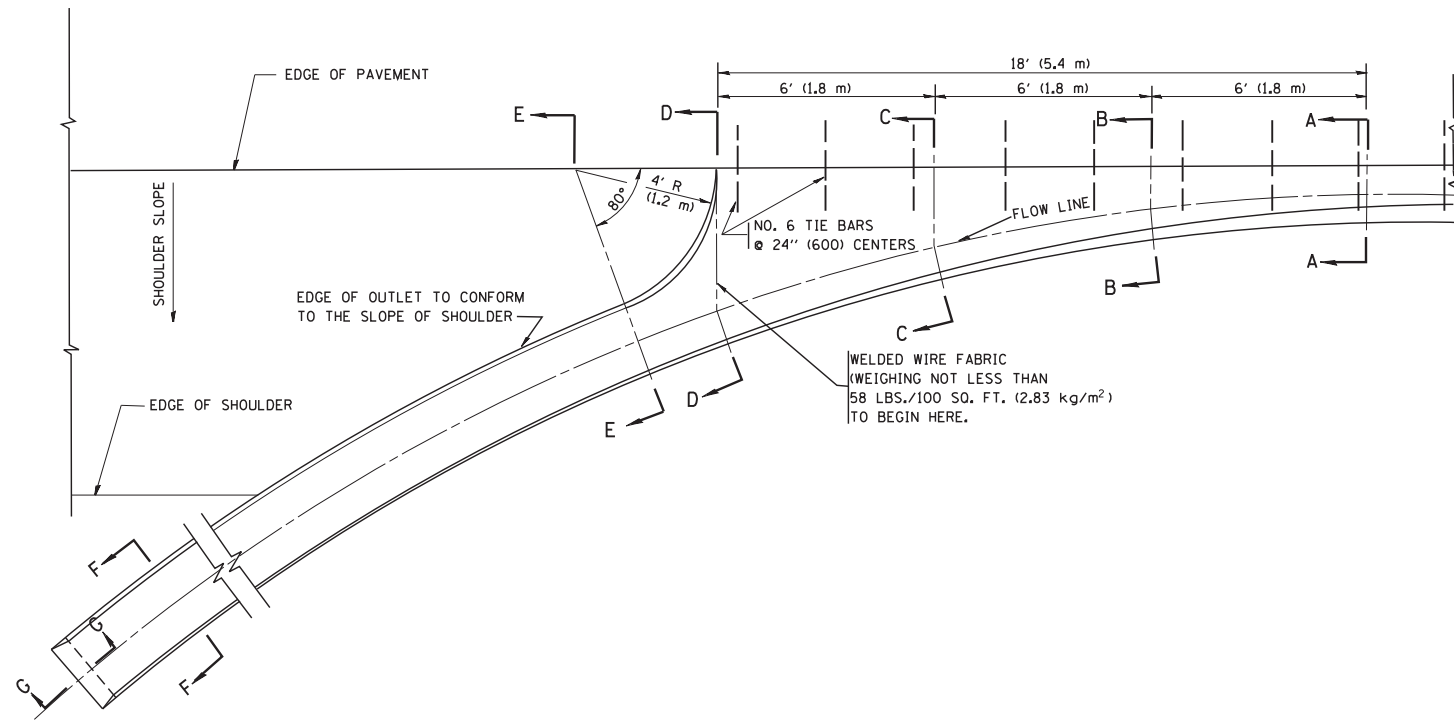
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	PLOT SCALE = 50.0000' / in.	CHECKED -	REVISED - R. BORO 01-01-07
	PLOT DATE = 10/28/2011	DATE - 11-06-95	REVISED - R. BORO 09-06-11

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DRIVEWAY DETAILS			
DISTANCE BETWEEN ROW AND FACE OF CURB < 15' (4.5 m)			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

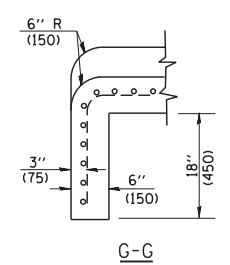
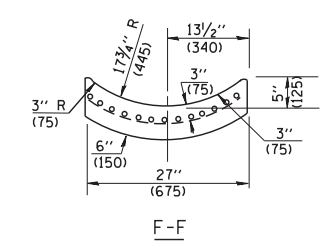
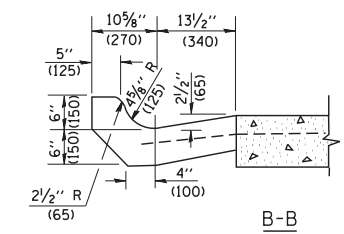
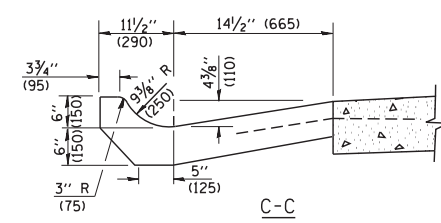
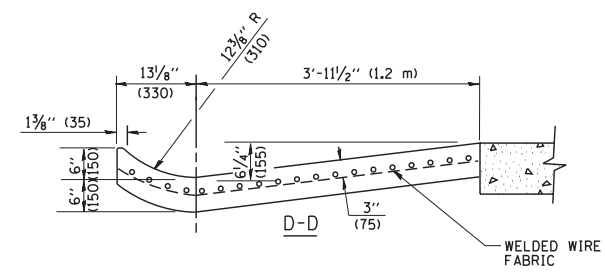
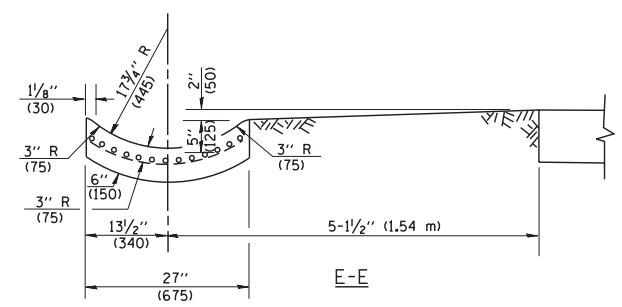
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	BD400-02 (BD-02)		605	464
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				





A-A \*

\* DIMENSIONS OF THE CURB & GUTTER AT SECTION A-A ARE SHOWN ON STATE STANDARD 606001. FOR DETAILS OF OUTLET FOR CONCRETE CURB & GUTTER, TYPE B-6.24 (B-15.60) SEE STATE STANDARD 606006.



**GENERAL NOTES**

GUTTER OUTLET SHALL BE TIED TO THE PAVEMENT IN ACCORDANCE WITH DETAILS FOR LONGITUDINAL CONSTRUCTION JOINT SHOWN ON STANDARD 420001.

TIE BARS SHALL BE NO. 20 (NO.6) AT 24\"/>

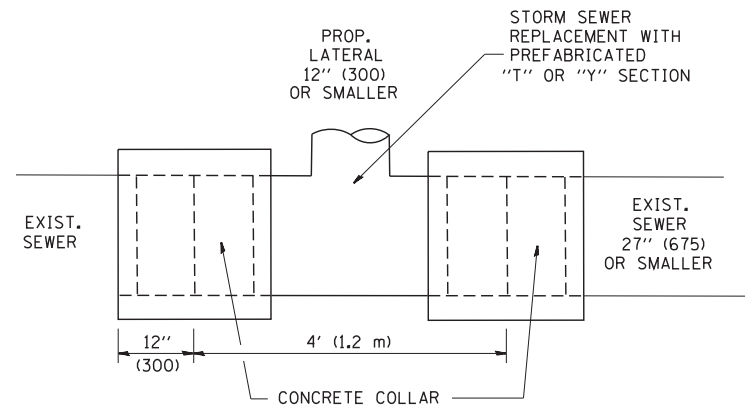
IF THE AVERAGE GRADE OF PAVEMENT FOR THE DISTANCE FROM SECTION A-A TO D-D EXCEEDS 2%, THIS DISTANCE SHALL BE INCREASED 6' (1.8 m) FOR EACH 1% INCREASE IN GRADE.

**QUANTITIES**

FOR SECTION A-A TO E-E AND CURTAIN WALL =  
 1.25 CU. YDS. (0.96 m<sup>3</sup>) CLASS S1 CONCRETE (OUTLET) FOR 9\"/>

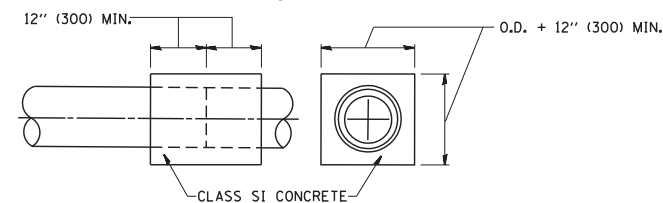
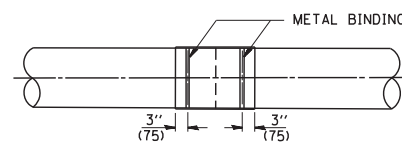
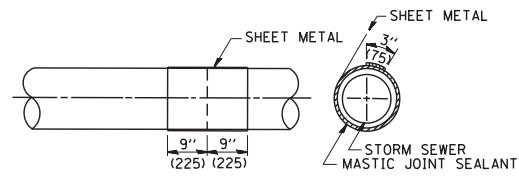
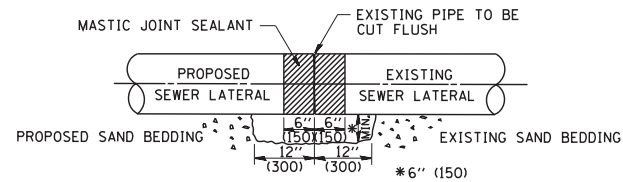
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME = W:\diststd\22x34\bd03.dgn	USER NAME = gaglionobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 09-09-94	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>OUTLET FOR CONCRETE CURB AND GUTTER</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - R. SHAH 10-25-94		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	605	465		
PLOT DATE = 1/4/2008	DATE - 08-04-86	REVISED - E. GOMEZ 12-21-00	REVISED -	BD600-01 (BD-03)			CONTRACT NO.		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			



DETAIL "A"

LATERAL CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER

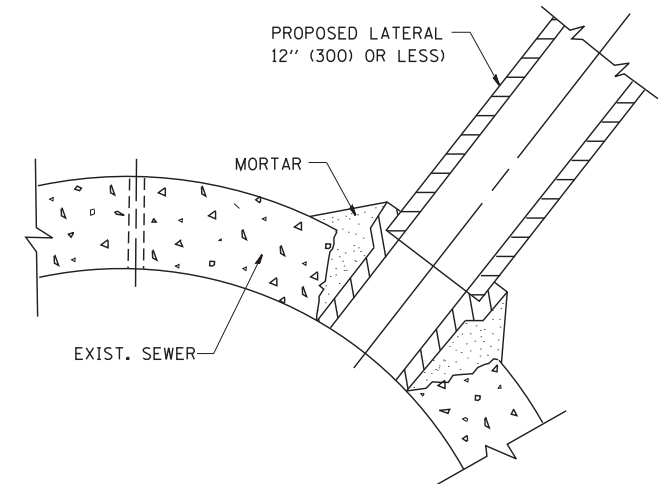


DETAIL "B"

CLASS SI CONCRETE COLLAR

CONSTRUCTION SEQUENCE

- CUT THE EXISTING END OF THE PIPE SO AS TO PRESENT A FLUSH BUTT JOINT. BRUSH AND CLEAN ALL PIPES.
- APPLY THE MASTIC JOINT SEALANT TO THE FIRST 6" (150) OF EACH PIPE.
- BUTT THE PIPES TOGETHER LEAVING A MINIMUM OF 12" x 6" (300 x 150) DEEP EXCAVATION UNDER AND AROUND EACH PIPE END.
- CUT A PIECE OF SHEET METAL GAGE NO. 19 1.1 (0.0418) 18" (450) WIDE BY THE OUTSIDE CIRCUMFERENCE OF THE PIPE PLUS 3" (75) LONG.
- WRAP THE SHEET METAL AROUND THE PIPES, 9" (225) ON EACH SIDE OF THE JOINT, STARTING AT THE TOP OF THE PIPE.
- LAP THE SHEET METAL AT LEAST 3" (75) AT THE TOP OF THE PIPE AND PLACE THE MASTIC JOINT SEALANT BETWEEN THE LAP.
- PLACE TWO METAL BANDS AROUND THE SHEET METAL AND TIGHTEN.
- WIPE OFF ANY EXCESS MASTIC JOINT SEALANT THAT OOOZES OUT FROM BETWEEN THE SHEET METAL AND THE PIPES.
- PLACE CLASS SI CONCRETE AROUND THE JOINT.



DETAIL "C"

PROPOSED LATERAL CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER

NOTES

MATERIAL

MATERIAL USED FOR THE TEE OR WYE SECTION SHALL BE COMPATIBLE WITH THE EXISTING STORM SEWER OR THE PROPOSED STORM SEWER.

CONSTRUCTION METHODS

- THIS WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS.
- CONNECTION TO AN EXISTING STORM SEWER SHALL BE BY EITHER OF THE FOLLOWING METHODS:
  - PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER SEE DETAIL "A" AND "B".
  - PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER SEE DETAIL "C".

IF THE EXISTING SEWER PIPE IS CRACKED, BROKEN OR OTHERWISE DAMAGED BY THE CONTRACTOR IN MAKING THE CIRCULAR OPENING, THE CONTRACTOR SHALL REPLACE THAT SECTION OF PIPE WITH PIPE EQUAL AND SIMILAR IN ALL RESPECTS TO THE PIPE IN THE EXISTING SEWER, IN A CAREFUL WORKMANLIKE MANNER, WITHOUT EXTRA COMPENSATION.

GENERAL

CARE MUST BE TAKEN TO PREVENT DEBRIS FROM ENTERING THE SEWER. ALL DEBRIS WHICH ENTERS THE SEWER MUST BE REMOVED. THE SEWER MUST BE LEFT CLEAN AND UNOBSTRUCTED UPON COMPLETION OF THE CONTRACT.

CARE MUST BE TAKEN TO PREVENT ANY PART OF THE NEW PIPE CONNECTION FROM PROJECTING INTO THE EXISTING SEWER.

BASIS OF PAYMENT

TEE OR WYE CONNECTIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR STORM SEWER TEE OR WYE OF THE TYPE AND SIZE SPECIFIED IN THE PLANS. THIS PRICE SHALL INCLUDE ALL EXCAVATION OF THE TRENCH, REMOVAL OF THE EXISTING STORM SEWER, FURNISHING AND INSTALLING THE SPECIFIED TEE OR WYE SECTION, FURNISHING AND INSTALLING THE REQUIRED CONCRETE COLLAR, AND ALL OTHER MATERIAL NECESSARY TO COMPLETE THIS WORK AS SHOWN AND SPECIFIED.

REMOVAL AND REINSTALLATION OF EXISTING STORM SEWER ADJACENT TO THE PROPOSED TEE OR WYE SECTION, FOR THE PURPOSE OF FACILITATING THE INSTALLATION OF THE TEE OR WYE SECTION, WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WORK.

TRENCH BACKFILL, EXCAVATION IN ROCK AND REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL BELOW PLAN BEDDING GRADE WILL BE PAID FOR SEPARATELY.

CONCRETE COLLAR FOR CONNECTING A PROPOSED STORM SEWER TO AN EXISTING STORM SEWER WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

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		DRAWN -	REVISED - R. SHAH 09-09-94
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - R. SHAH 10-25-94
	PLOT DATE = 1/4/2008	DATE - 07-25-90	REVISED - R. SHAH 06-12-96

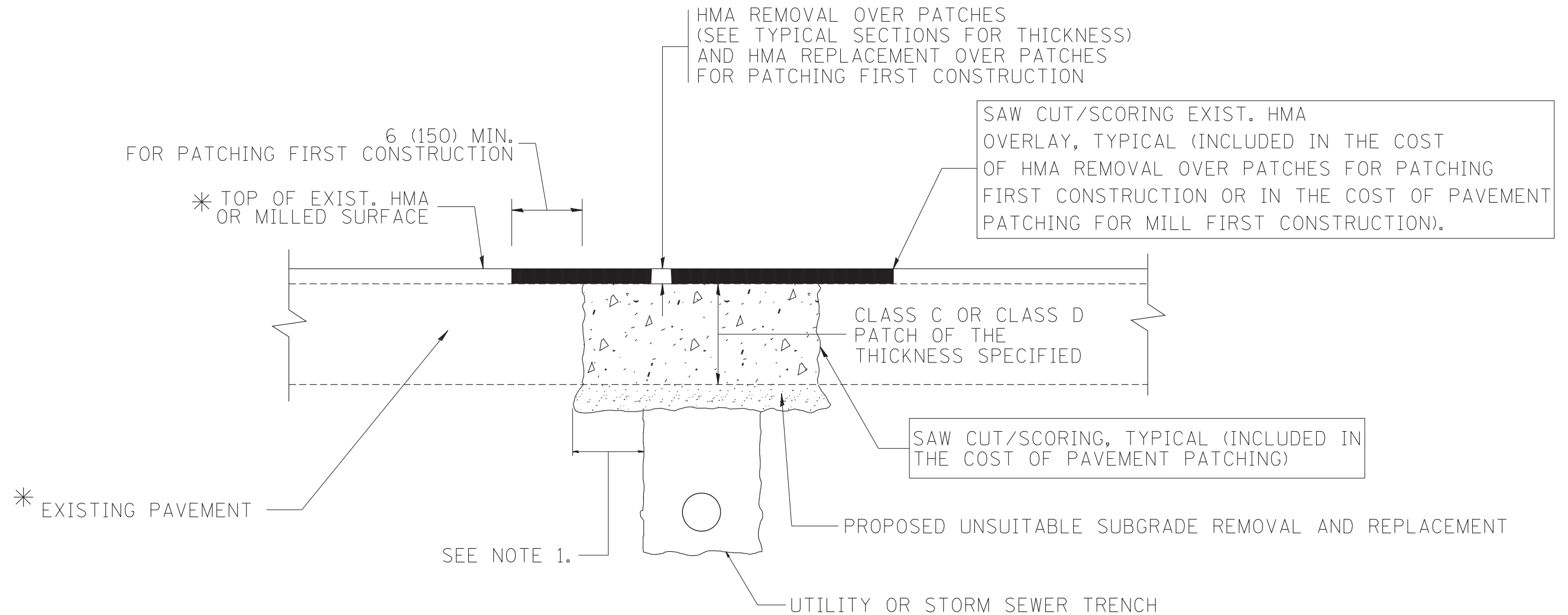
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DETAIL OF STORM SEWER  
CONNECTION TO EXISTING SEWER

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			605	466
BD500-01 (BD-7)			CONTRACT NO.	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				





\* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

**NOTES:**

1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

1. MILL HMA FIRST IF THERE IS AT LEAST 4 1/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

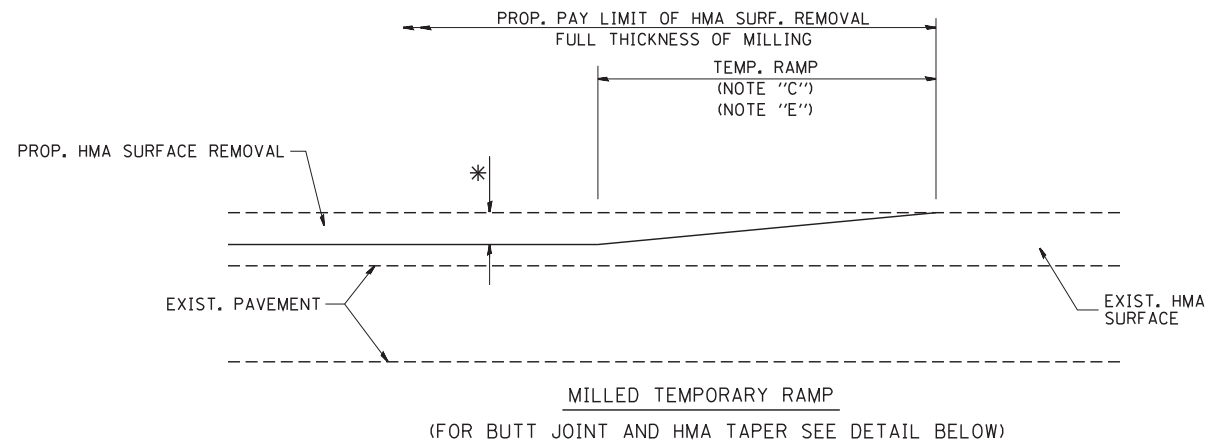
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

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		DRAWN -	REVISED - R. BORO 01-01-07
		PLOT SCALE = 50.000' / IN.	REVISED - R. BORO 09-04-07
		PLOT DATE = 10/27/2008	REVISED - K. ENG 10-27-08

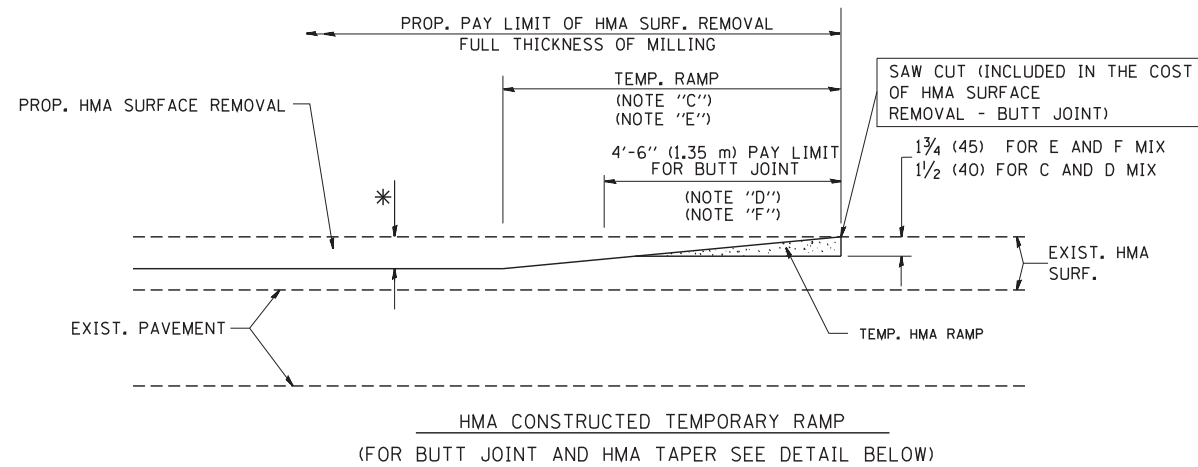
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT</b>	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS
STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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BD400-04 (BD-22)			CONTRACT NO.	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

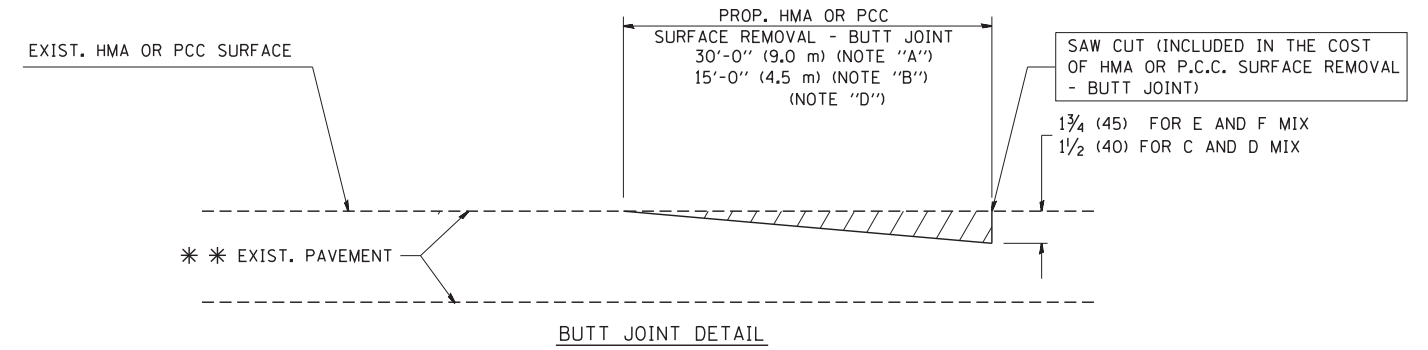


**OPTION 1**

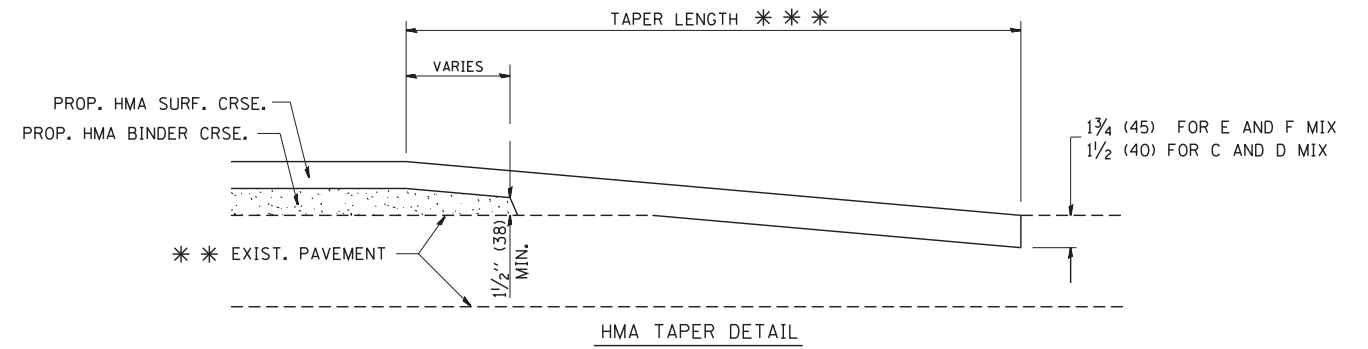


**OPTION 2**

**TYPICAL TEMPORARY RAMP**



**BUTT JOINT DETAIL**



**HMA TAPER DETAIL**

**TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY**

\*\*\* PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

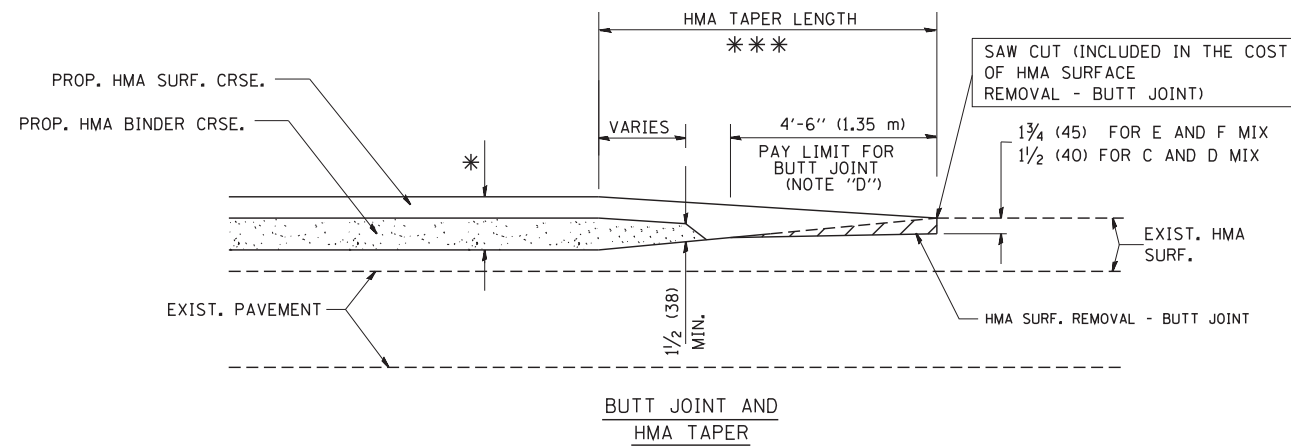
**NOTES**

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
  - B: MINOR SIDE ROADS.
  - C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
  - D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
  - E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
  - F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
  - G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- \* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- \*\*\* 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")  
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

**BASIS OF PAYMENT:**

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.



**TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING**

FILE NAME = W:\diststd\22x34\bd32.dgn	USER NAME = gaglionobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
		DRAWN -	REVISED - A. ABBAS 03-21-97
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BUTT JOINT AND  
HMA TAPER DETAILS**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

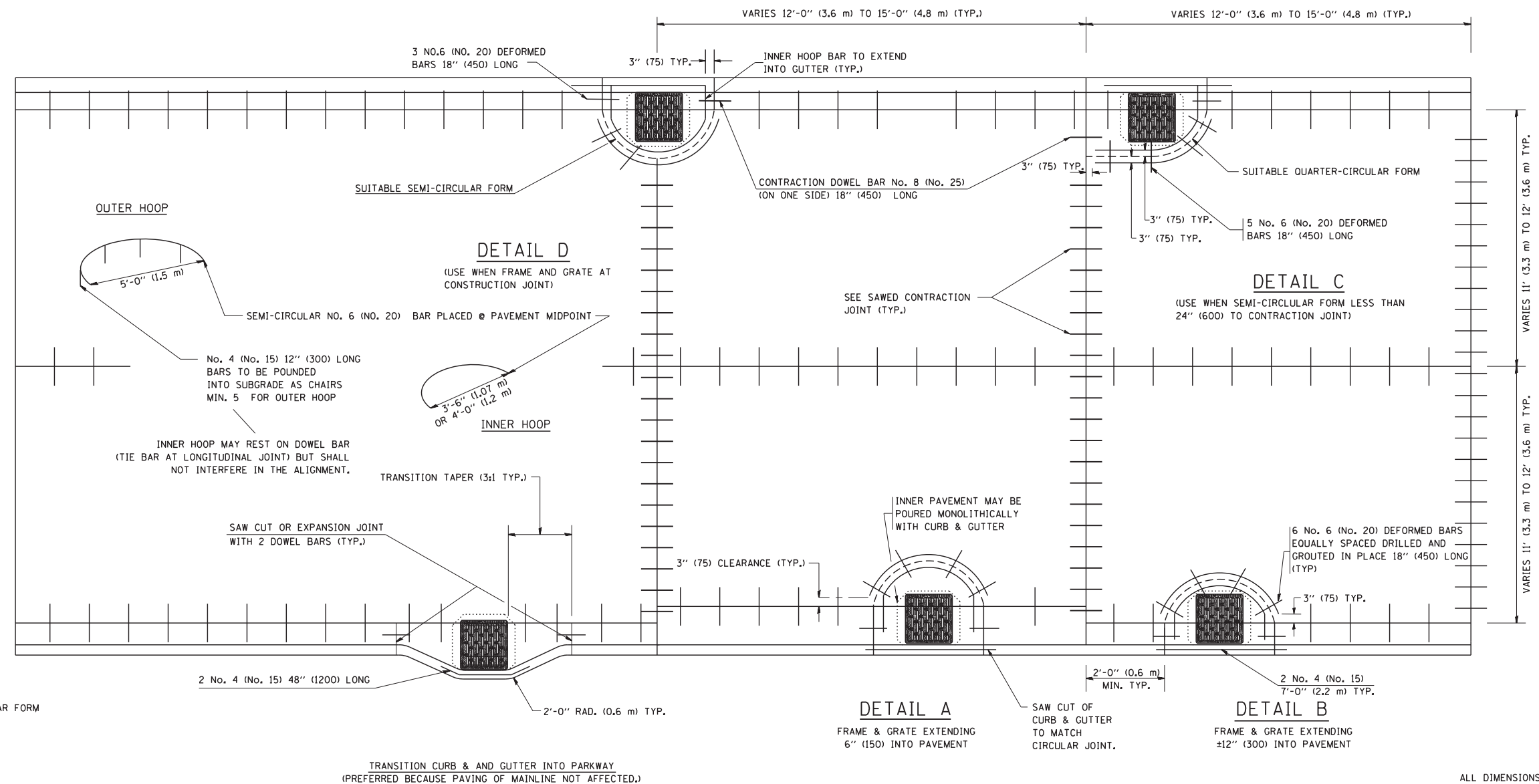
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			605	469
<b>BD400-05 BD32</b>		CONTRACT NO.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

FRAME EXTENSION INTO PAVEMENT	INNER HOOP REINFORCEMENT DIAMETER	SEMI CIRCULAR FORM DIAMETER	OUTER HOOP REINFORCEMENT DIAMETER
UP TO 8" (200)	3'-6" (1.1 m)	4'-0" (1.2 m)	5'-0" (1.5 m)
> 8" (200) TO 14" (360)	4'-0" (1.2 m)	4'-6" (1.4 m)	5'-0" (1.5 m)

DESIGNER NOTE:  
THIS DETAIL IS TO BE USED  
WHEN THE GUTTER FLAG IS  
LESS THAN 24"

NOTES :

1. THE ROUNDOUT AND ADDED REINFORCEMENT WILL NOT BE PAID SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE PAVEMENT.
2. TRANSVERSE JOINTS MAY BE MOVED TO ACCOMMODATE ROUNDOUT. EDGE OF CIRCULAR JOINT SHALL BE MINIMUM 12" (300) FROM TRANSVERSE JOINT. RELOCATED TRANSVERSE JOINT SHALL BE CONTINUOUS FROM EDGE OF PAVEMENT TO EDGE OF PAVEMENT.
3. SEMI-CIRCULAR FORM SHALL BE REMOVED PRIOR TO DRILL AND GROUT OF TIE BARS.
4. ALL REINFORCED BARS SHALL BE EPOXY COATED.
5. DRILL AND GROUT IS PREFERRED, HOWEVER TIE BARS CAN BE POURED IN PLACE IF CLEARANCE IS PROVIDED TO OUTER EDGE OF FRAME. MINIMUM 2" (50) CLEARANCE.
6. WOOD SHIMS SHALL BE USED TO ADJUST ALL FRAMES. AFTER ADJUSTING MORTAR HAS CURED, THE WOOD SHIMS SHALL BE REMOVED AND THE VOIDS UNDER THE FRAMES FILLED WITH NON SHRINK GROUT.
7. HOOP REINFORCEMENT SHALL BE ONE PIECE CONSTRUCTION.
8. CIRCULAR FRAMES AND GRATES MAY BE SUBSTITUTED.
9. CURB DOWELS MUST BE PLACED LEVEL & TRUE TO ALLOW CONTRACTION MOVEMENT.



LEGEND:

- ..... CASTING
- SUITABLE SEMI-CIRCULAR FORM

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE NOTED

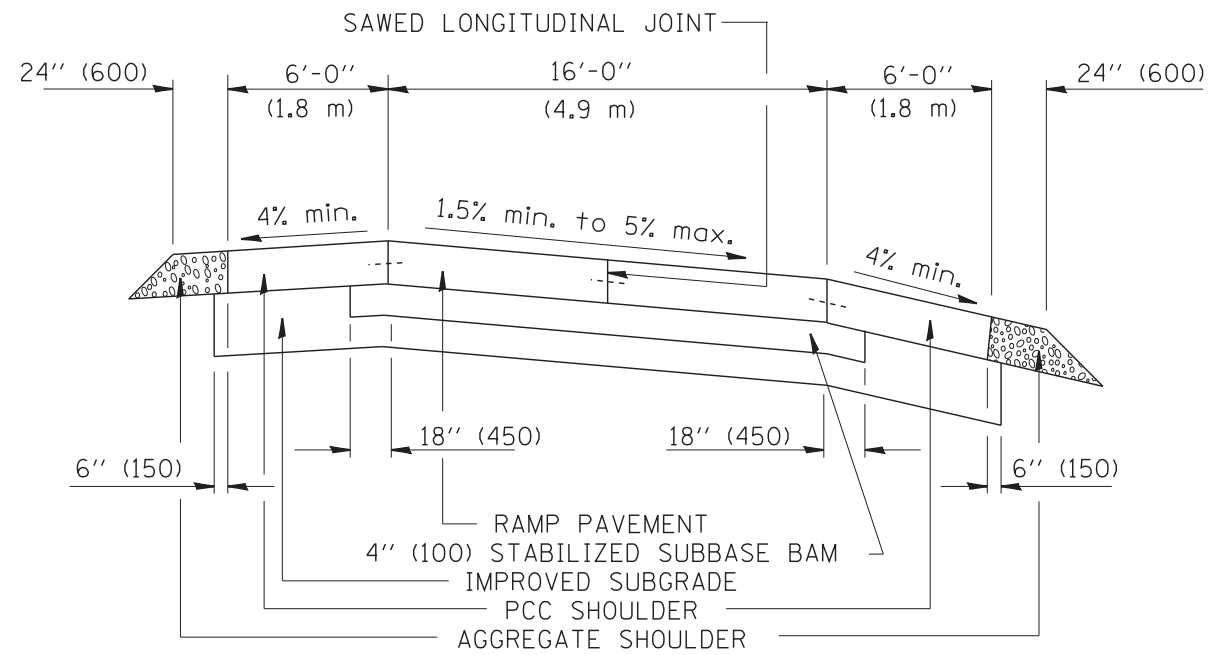
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		DRAWN - TOM MATOUSEK	REVISED - T. MATOUSEK 10-02-00
	PLOT SCALE = 50.0000' / IN.	CHECKED - A. ABBAS	REVISED - T. MATOUSEK 04-25-02
	PLOT DATE = 1/4/2008	DATE - 01-04-99	REVISED - P. LAFLEUR 08-27-02

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PCC PAVEMENT ROUNDOUTS AT  
CURB AND GUTTER

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

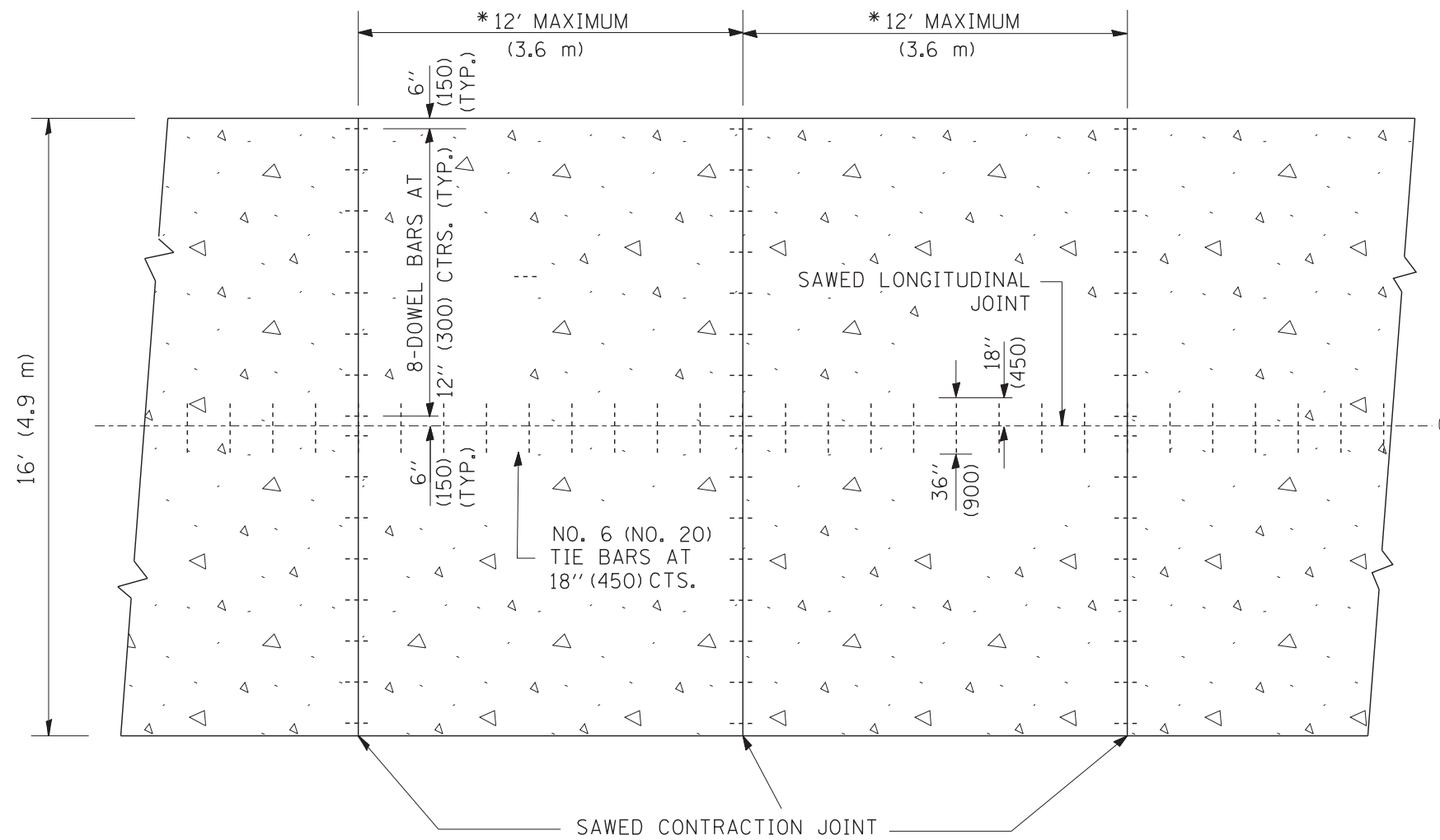
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FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO.	



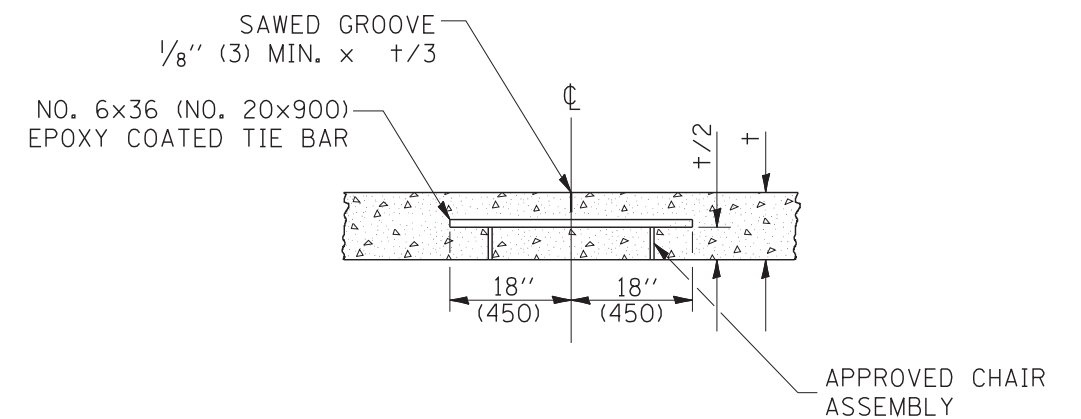
SECTION

NOTES:

1. CENTERLINE JOINT REMAINS IN THE CENTER WHEN RAMP TRANSITIONS TO TWO (2) RAMPS AT 12' (3.6 m).
2. ALL BARS TO BE EPOXY COATED.



PLAN



SAWED LONGITUDINAL JOINT

ALL DIMENSIONS ARE IN INCHES  
(MILLIMETERS) UNLESS OTHERWISE NOTED

FILE NAME =  
W:\diststd\22x34\bd49.dgn

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PLOT SCALE = 50.0000' / IN.  
PLOT DATE = 1/4/2008

DESIGNED -  
DRAWN - TOM MATOUSEK  
CHECKED - A. ABBAS  
DATE - 10-18-02

REVISED -  
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REVISED -  
REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

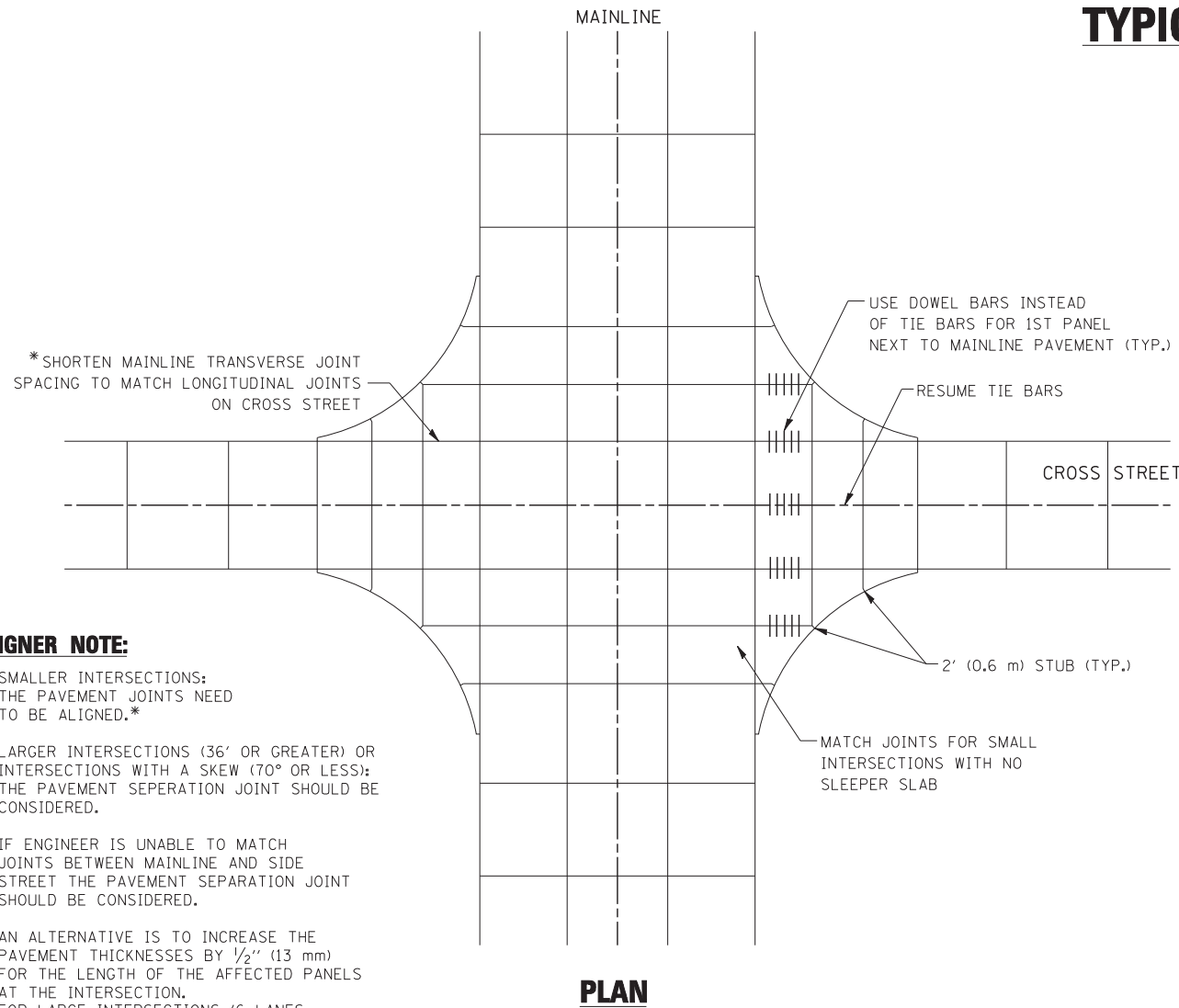
**DETAIL FOR CENTERLINE SAW CUT 16' (4.9 m) AND  
VARIABLE JOINTED PCC PAVEMENT FOR RAMPS**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	BD49		605	471
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO.	

# TYPICAL APPLICATION

**THE USE OF CROSS STREET PAVEMENT SEPARATION JOINTS FOR SKEWED OR LARGE INTERSECTIONS WHERE JOINTS MAY NOT MATCH**



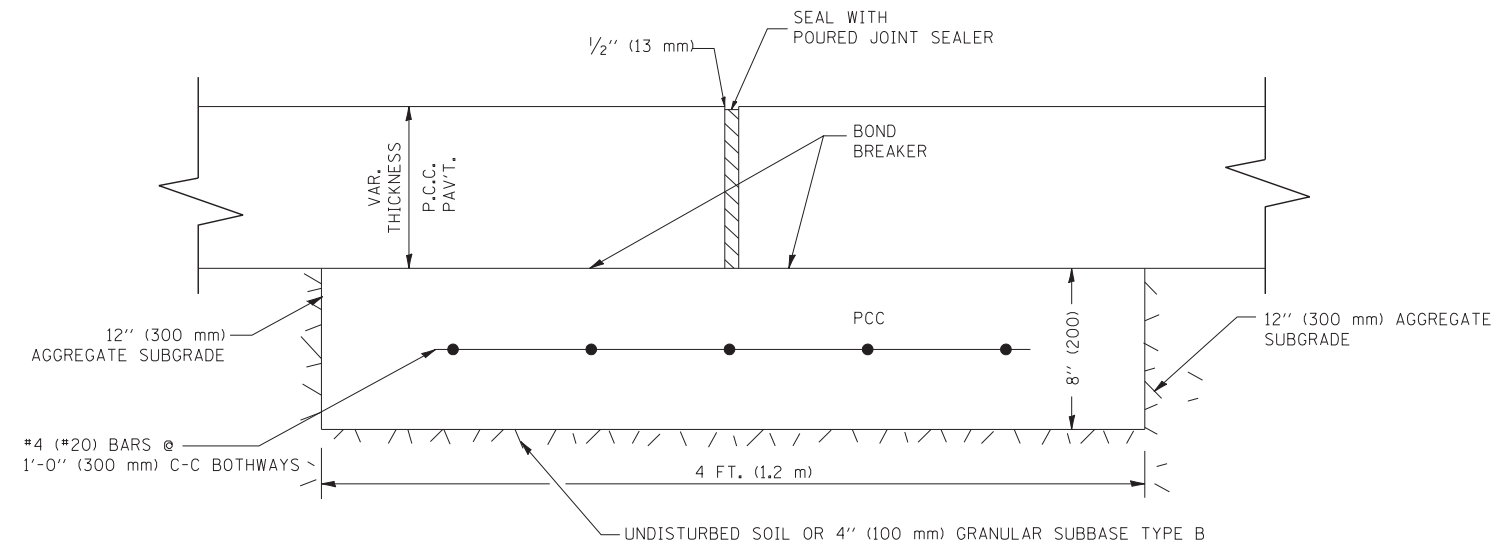
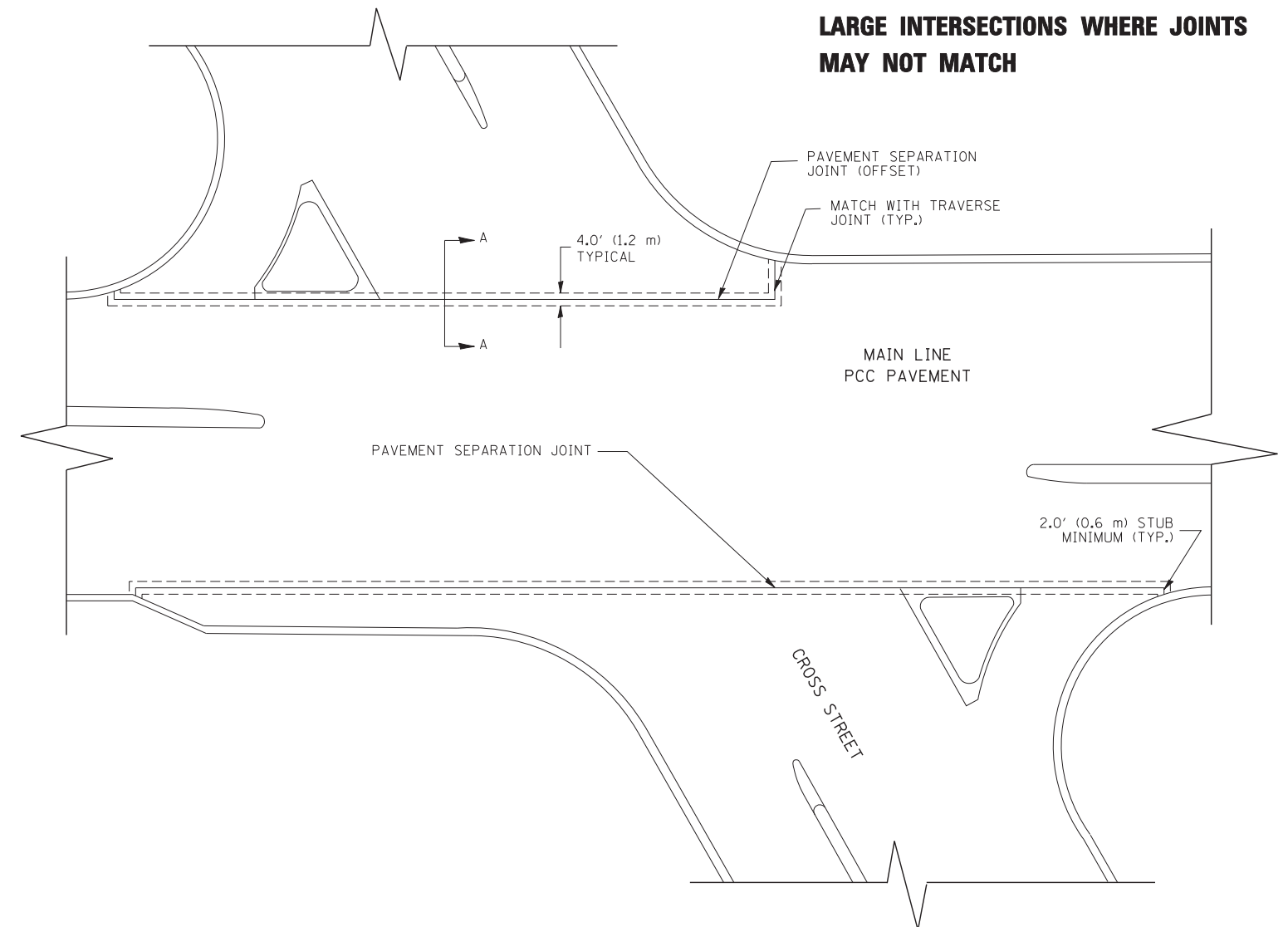
**PLAN**

**DESIGNER NOTE:**

1. SMALLER INTERSECTIONS: THE PAVEMENT JOINTS NEED TO BE ALIGNED.\*
2. LARGER INTERSECTIONS (36' OR GREATER) OR INTERSECTIONS WITH A SKEW (70° OR LESS): THE PAVEMENT SEPERATION JOINT SHOULD BE CONSIDERED.
3. IF ENGINEER IS UNABLE TO MATCH JOINTS BETWEEN MAINLINE AND SIDE STREET THE PAVEMENT SEPARATION JOINT SHOULD BE CONSIDERED.
4. AN ALTERNATIVE IS TO INCREASE THE PAVEMENT THICKNESSES BY 1/2" (13 mm) FOR THE LENGTH OF THE AFFECTED PANELS AT THE INTERSECTION. FOR LARGE INTERSECTIONS (6 LANES OR MORE) WHERE JOINTS CAN BE MATCHED, USE #8 (25) DOWEL BARS INSTEAD OF #8 (25) TIE BARS AT EDGE OF MAINLINE PAVEMENT WHEN NO PAVEMENT SEPARATION JOINTS USED.

**NOTE:**

1. JOINT FILLER SHALL CONSIST OF A SHEET OF 1/2" (13 mm) BITUMINOUS PREFORMED FIBER JOINT FILLER CONFORMING TO ARTICLE 1051.03 OF THE STANDARD SPECIFICATIONS.
2. THE JOINT SHALL BE SEALED WITH A HOT POUR JOINT SEALER CONFORMING TO ARTICLE 1050.02 OF THE STANDARD SPECIFICATIONS.
3. A SINGLE LAYER OF FELT ROOFING PAPER SHALL SERVE AS A BOND BREAKER.
4. JOINT SHALL CONTINUE THROUGH COMBINATION CURB & GUTTER OR PCC SHOULDER.
5. PAVEMENT SEPARATION JOINT IS TO BE PAID FOR AS "SLEEPER SLAB" AND IS TO BE MEASURED IN PLACE BY THE LINEAL FOOT.
6. BOND BREAKER AND 1/2" (13 mm) JOINT AND FILLER SHALL BE INCIDENTAL TO THE PAY ITEM "SLEEPER SLAB".



**PROPOSED SECTION A-A**

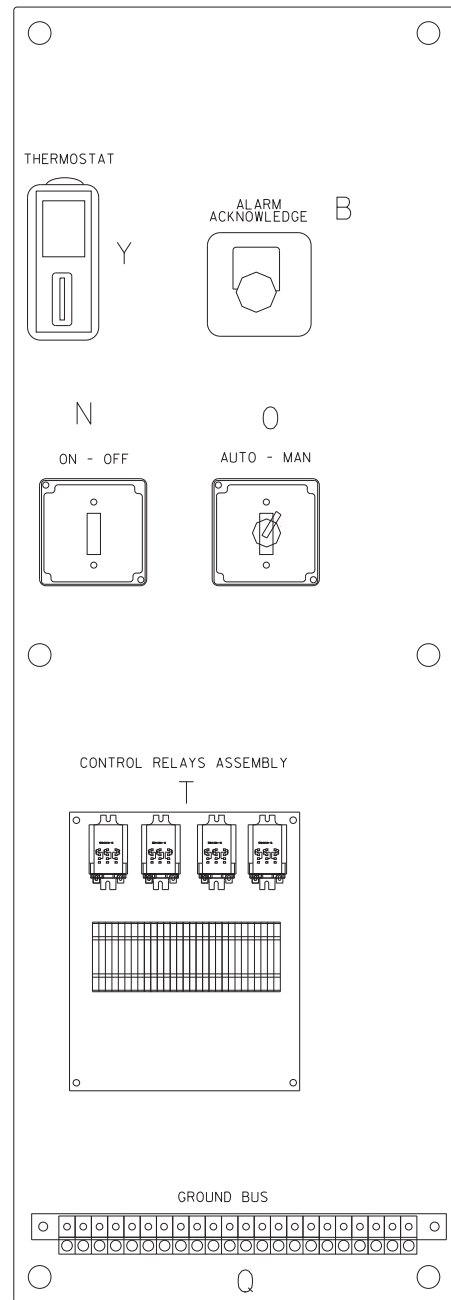
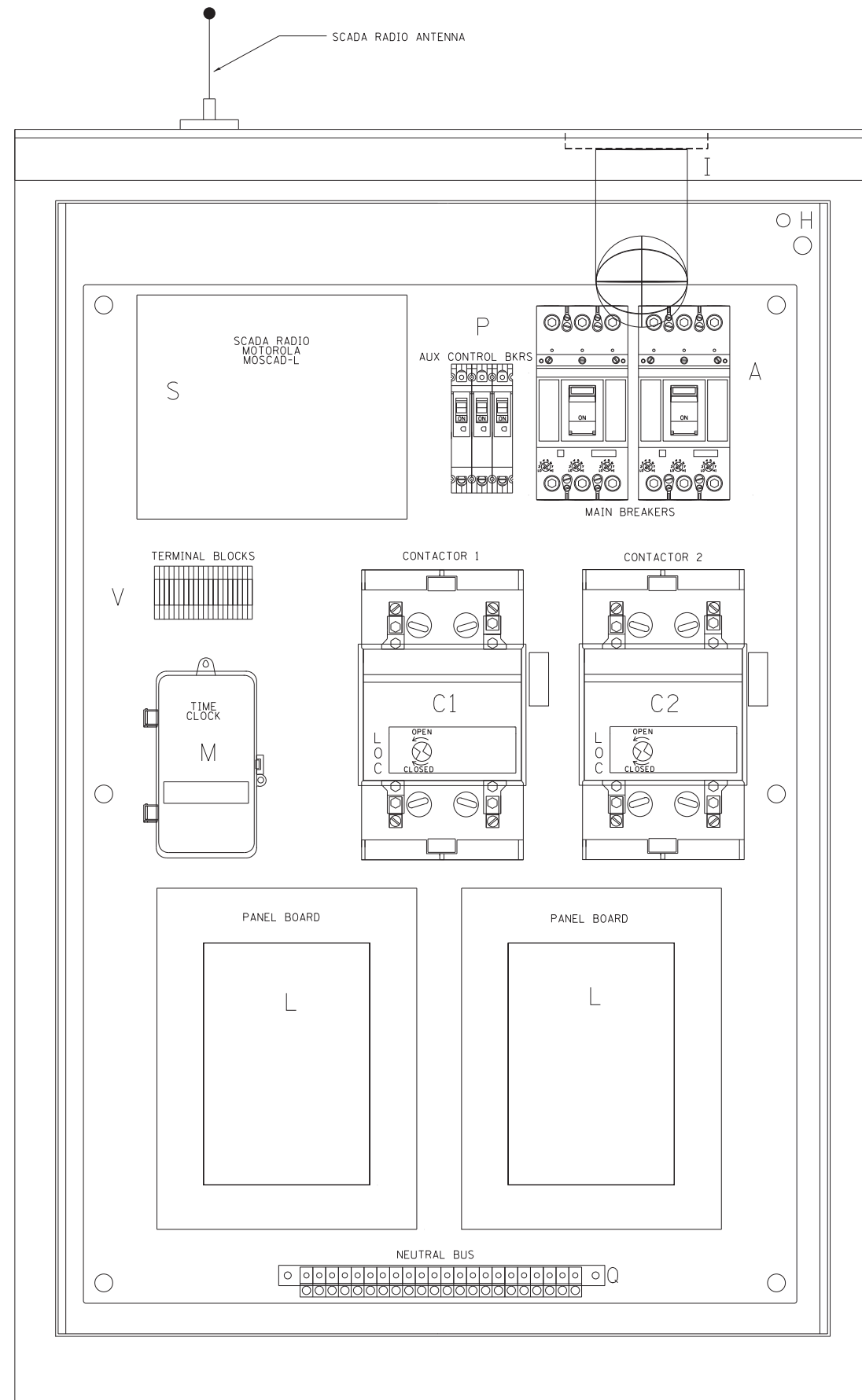
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

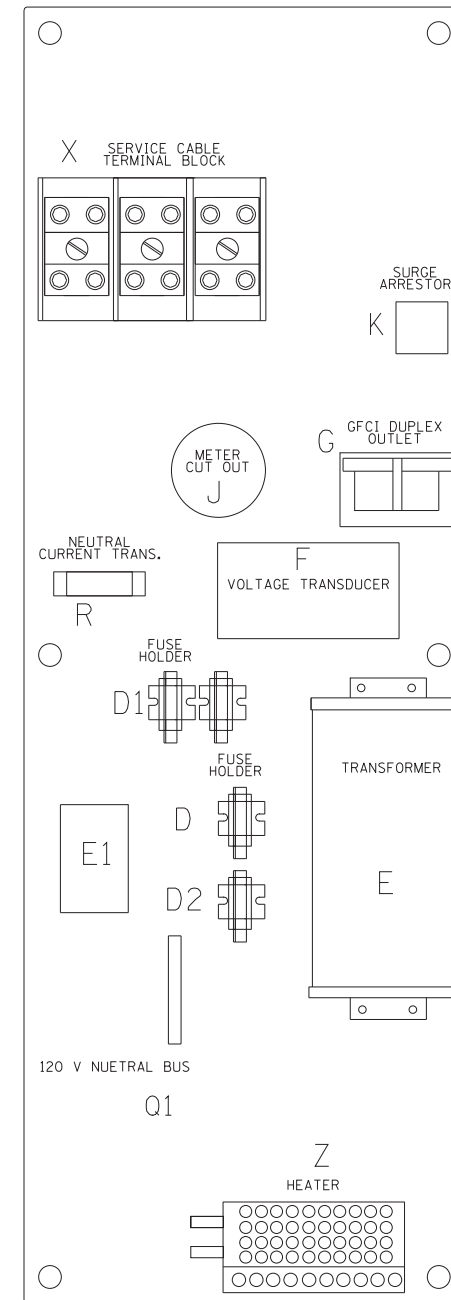
DETAIL OF PAVEMENT SEPARATION JOINT FOR JOINTED PCC PAVEMENTS AT INTERSECTIONS			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	<b>BD52</b>		605	472
ILLINOIS FED. AID PROJECT			CONTRACT NO.	





LEFT SIDE PANEL



RIGHT SIDE PANEL

BILL OF MATERIALS		
ITEM	QTY	DESCRIPTION
A	2	MAIN CIRCUIT BREAKERS 2 POLE 200 AMP WITH AUX CONTACT
B	1	ACKNOWLEDGE SWITCH, PUSH BUTTON WITH YELLOW INSERT
C1, C2 *	2	CONTACTOR 2 POLE 200 AMP 240V COIL WITH AUX CONTACTS
D	1	FINGERSAFE FUSE HOLDER WITH KTK-20 FUSE
D1	2	FINGERSAFE FUSE HOLDER WITH KTK-1/2 FUSE
D2	1	FINGERSAFE FUSE HOLDER WITH KTK-2A FUSE
E	1	2.0 KVA 277V-240/120 TRANSFORMER
E1	1	0.25 KVA 240/120 - 24 VAC TRANSFORMER
F	1	VOLTAGE TRANSUDCER WITH COVERED TERMINALS
G	1	20 AMP GFCI DUPLEX OUTLET W/COVER
H	2	DOOR SWITCH
I	1	LIGHT FIXTURE
J	1	METER FITTING 1 PHASE 3 WIRE 200 AMP
K	1	SURGE ARRESTER
L	2	PANEL BOARD 480/240V 1 PHASE, 250 AMP COPPER BUS
M	1	2 CHANNEL DIGITAL TIME CLOCK
N	1	MOMENTARY SWITCH ON - OFF
O	1	SQUARE D, 9001KS11BH13, 2 POSITION SWITCH IN 9001KY1 ENCLOSURE OR APPROVED EQUAL
P	2	BREAKER 1P 15A
Q	2	COPPER GROUND AND NEUTRAL BUS 1 x 16 x 1/4
Q1	1	COPPER NEUTRAL BUS WITH 1 #6 AND 8 #12 CONDUCTOR POINTS
R	1	CURRENT TRANSUDCER
S	1	MOTOROLA MOSCAD-L RADIO, 240 V
T *	1	CONTROL RELAY ASSEMBLY 240V COILS WITH 4 3 PDT 25A RELAYS (W389ACX-15) (R1, R2, R3, R4) . QTY 32 TERMINAL BLOCKS
V	20	TERMINAL BLOCKS
X *	1	620 AMP SLPICE BLOCK
Y	1	40-80 DEG THERMOSTAT
Z	1	375 WATT HEATER

\* TERMINALS SHALL BE COVERED WITH CLEAR PLEXIGLASS SHEET

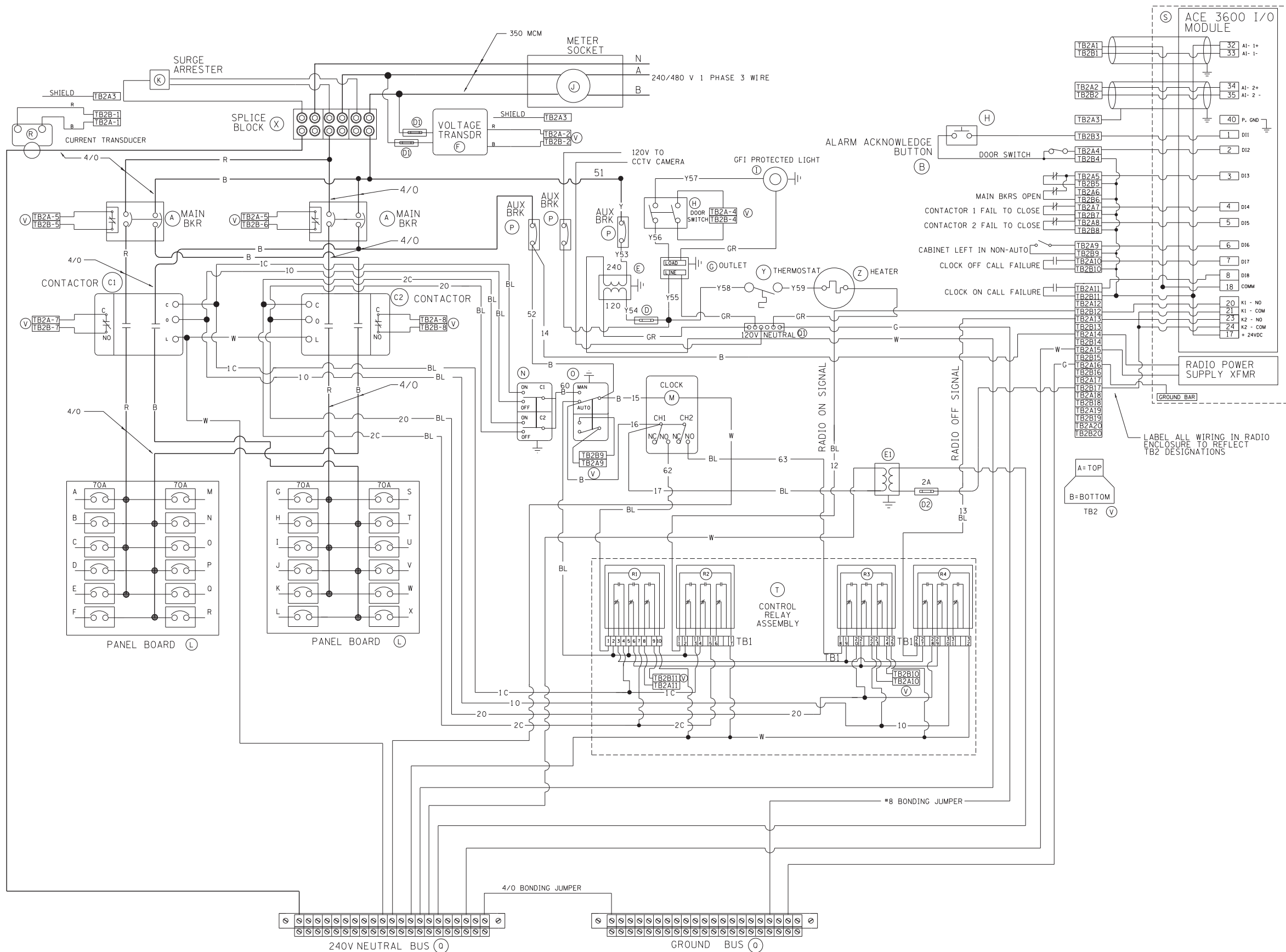
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		CHECKED -	REVISED - R. TOMSONS 03-10-10
		DATE -	REVISED - R. TOMSONS 03-29-12

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

LIGHTING CONTROLLER, BASE MOUNTED, 480VOLT, 200AMP (DUAL) RADIO SCADA

SCALE: NONE SHEET NO. 1 OF 4 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	BE-205		605	473
CONTRACT NO.				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



BILL OF MATERIALS		
ITEM #	QTY	DESCRIPTION
A	2	MAIN CIRCUIT BREAKERS 2 POLE 200 AMP WITH AUX CONTACT
B	1	ACKNOWLEDGE SWITCH, PUSH BUTTON WITH YELLOW INSERT
C1, C2	2	CONTACTOR 2 POLE 200 AMP 240V COIL WITH AUX CONTACTS
D1	2	FINGERSAFE FUSE HOLDER WITH KTK-20A FUSE
D2	1	FINGERSAFE FUSE HOLDER WITH KTK- 2A FUSE
E	1	2.0 KVA 277V-240/120 TRANSFORMER
E1	1	0.25 KVA 240/120-24 VAC TRANSFORMER
F	1	VOLTAGE TRANSDUCER
G	1	15 AMP GFCI DUPLEX OUTLET W/COVER
H	2	DOOR SWITCH A-20G0-B7-K
I	1	LIGHT FIXTURE
J	1	METER FITTING 1 PHASE 3 WIRE 200 AMP
K	1	SURGE ARRESTER
L	2	PANEL BOARD 480/240V 1 PHASE, 250 AMP COPPER BUS
M	1	2 CHANNEL DIGITAL TIME CLOCK
N	1	MOMENTARY SWITCH ON - OFF
O	1	SQUARE D, 900IKS1BH13, 2 POSITION SWITCH IN 900IKY1 ENCLOSURE
P	2	BREAKER IP 15A
Q	2	COPPER GROUND AND NEUTRAL BUS 1 x 16 x 1/4
Q1	1	COPPER NEUTRAL BUS WITH 1 1/0 AND #6 CONDUCTOR POINTS
R	1	CURRENT TRANSDUCER
S	1	MOTOROLA ACE 3600
T	1	CONTROL RELAY ASSEMBLY 240V COILS WITH 4 3 PDT 25A RELAYS (W389ACX-15) (R1, R2, R3, R4) . QTY 32
V	20	TERMINAL BLOCKS
X	1	620 AMP SPLICE BLOCK
Y	1	40-80 DEG THERMOSTAT
Z	1	375 WATT HEATER

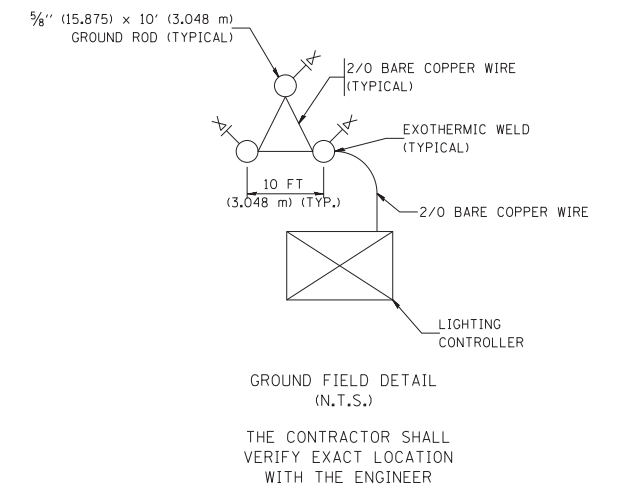
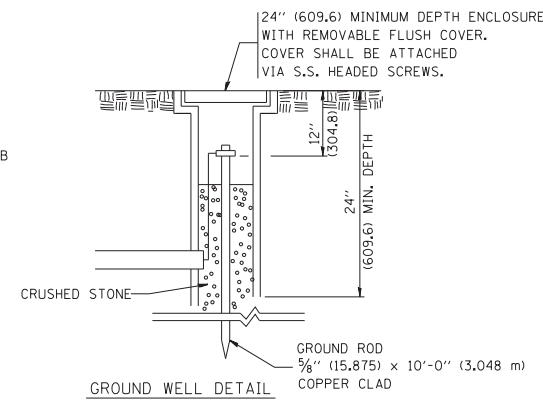
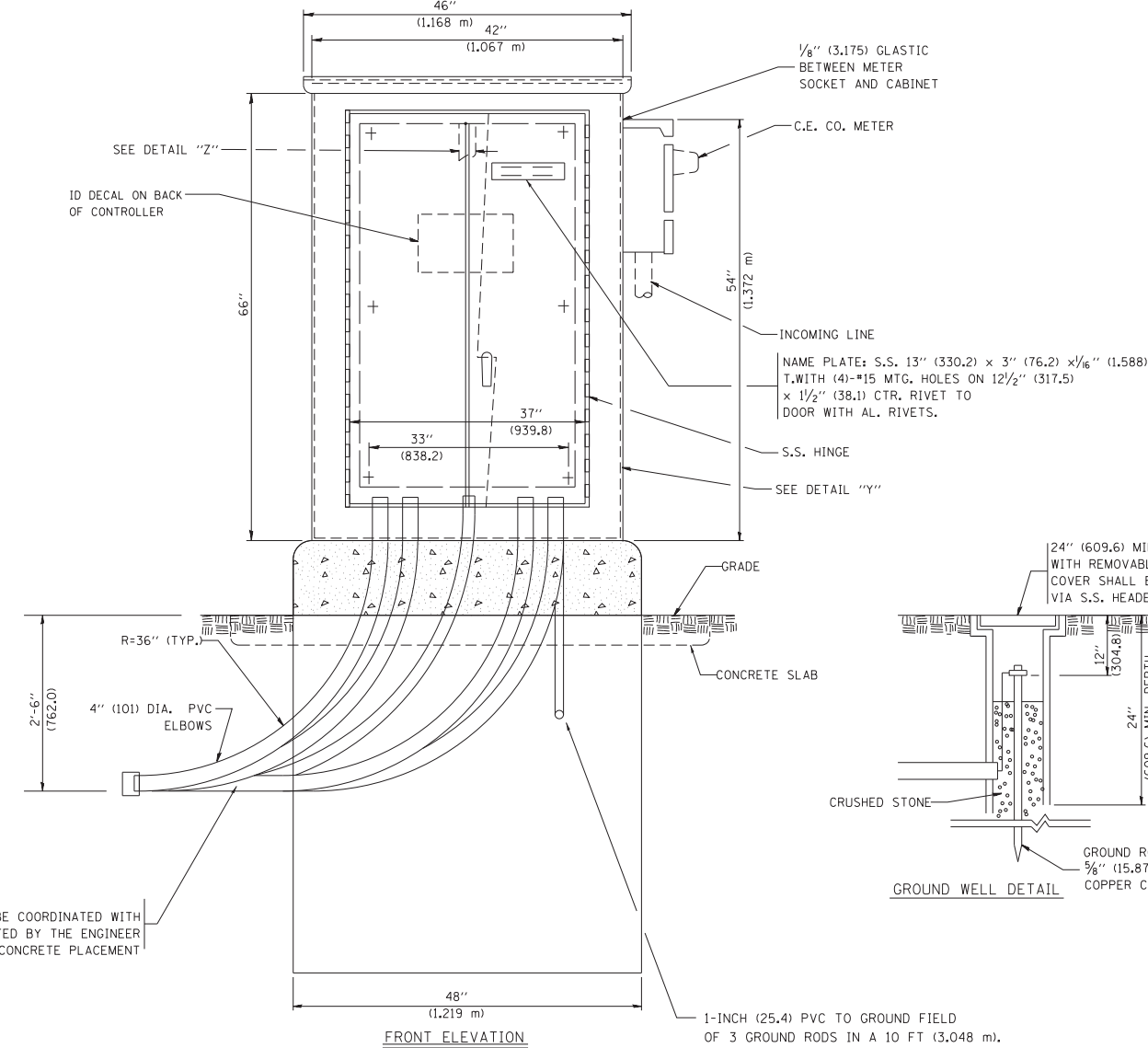
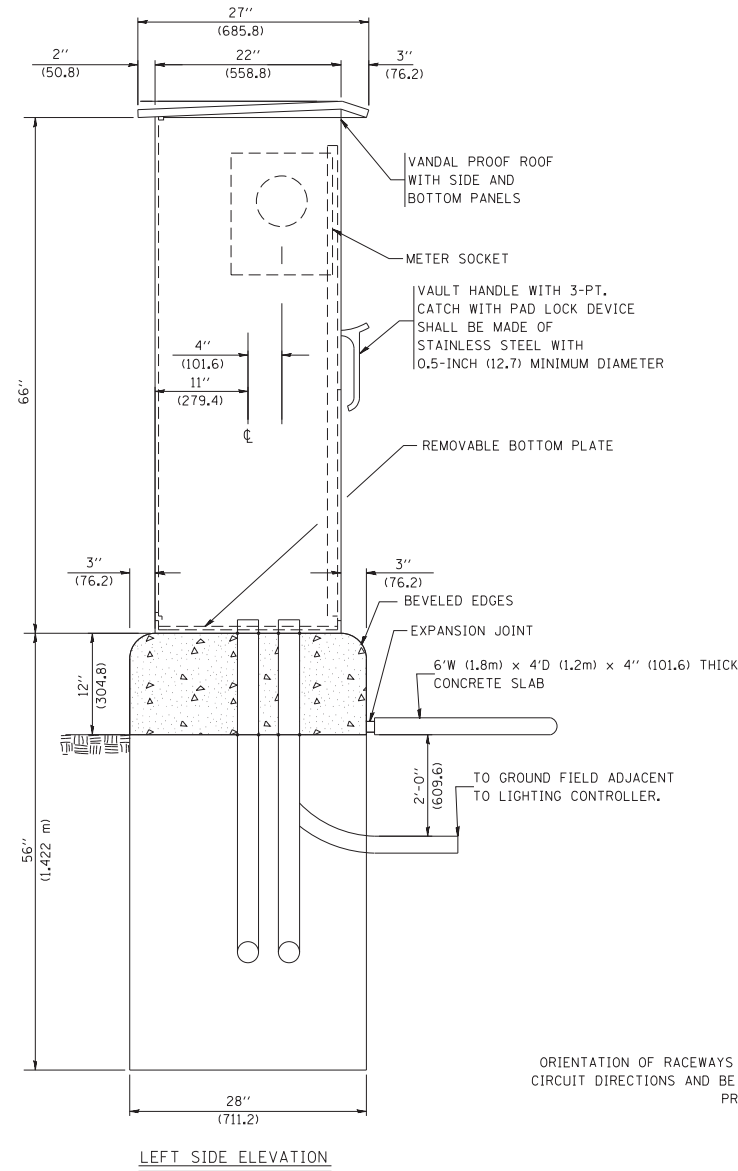
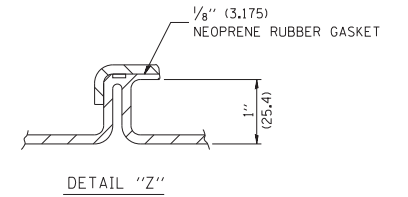
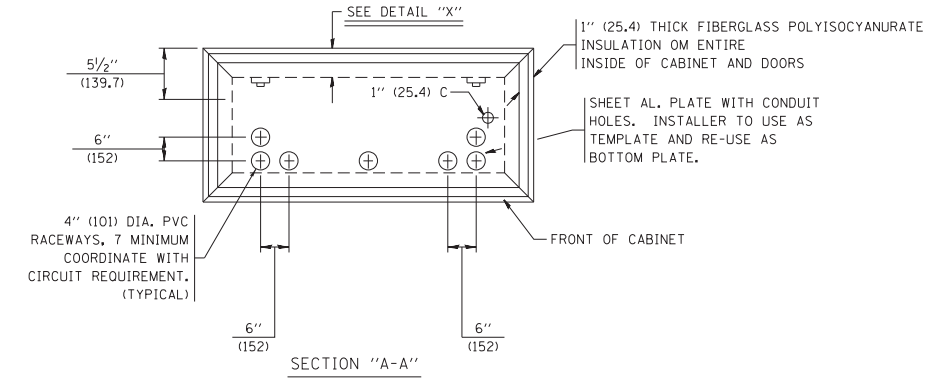
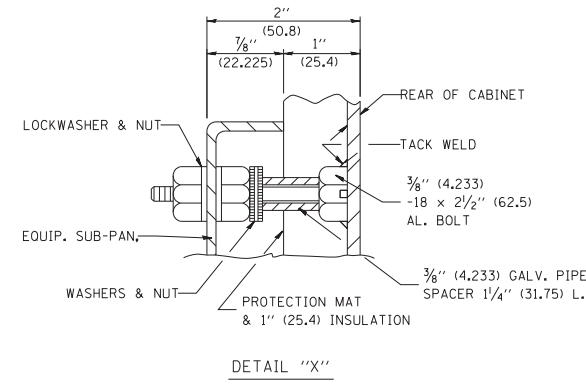
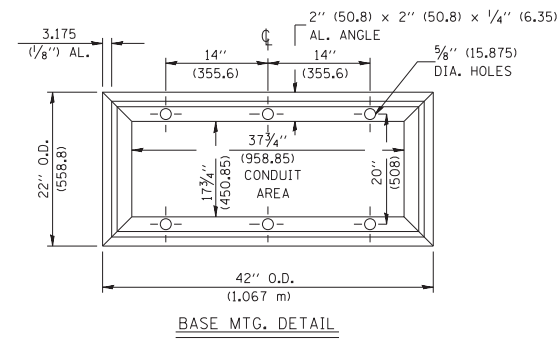
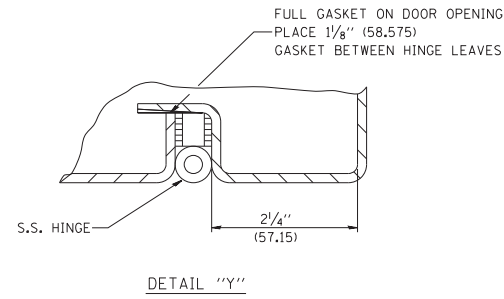
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		CHECKED -	REVISED - R. TOMSONS 03-10-10
		DATE -	REVISED - R. TOMSONS 03-29-12

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**LIGHTING CONTROLLER, BASE MOUNTED, 480VOLT, 200AMP (DUAL) RADIO SCADA**

SCALE: NONE      SHEET NO. 2 OF 4 SHEETS      STA.      TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	BE-205		605	474
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	



ORIENTATION OF RACEWAYS SHALL BE COORDINATED WITH CIRCUIT DIRECTIONS AND BE INSPECTED BY THE ENGINEER PRIOR TO CONCRETE PLACEMENT

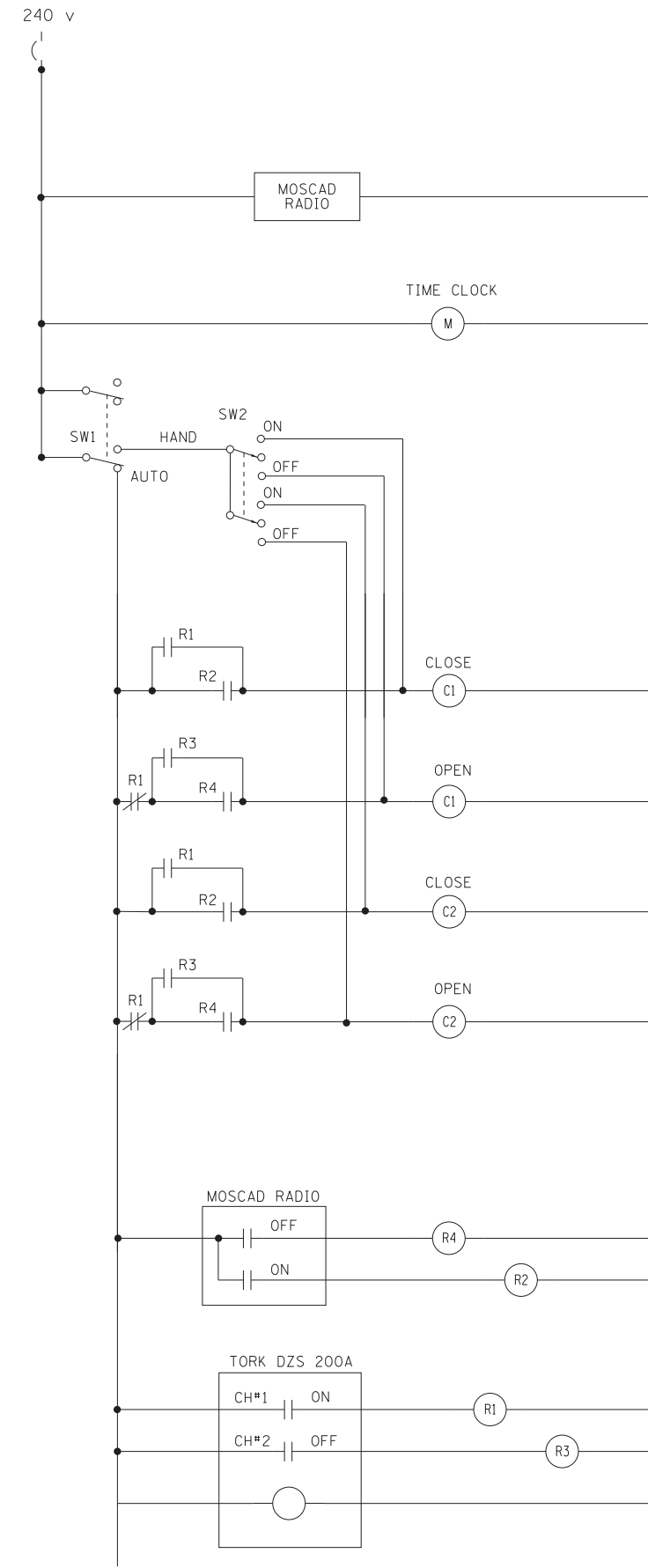
1-INCH (25.4) PVC TO GROUND FIELD OF 3 GROUND RODS IN A 10 FT (3.048 m). TRIANGLE CONNECTED VIA BARE COPPER WIRE. VERIFY EXACT LOCATION OF GROUND FIELD WITH THE ENGINEER. NO GROUND WELL SHALL BE PLACED IN CONCRETE PAD IN FRONT OF CONTROLLER.

FILE NAME =	USER NAME = drivakosgn	DESIGNED -	REVISED - R. TOMSONS 08-19-04	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>LIGHTING CONTROLLER, BASE MOUNTED, 480VOLT, 200AMP (DUAL) RADIO SCADA</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pw\work\p\dot\drivakosgn\d0108315\be205.dgn		DRAWN -	REVISED - R. TOMSONS 05-11-09								605	475
		PLOT SCALE = 50.000' / in.	REVISED - R. TOMSONS 03-10-10					<b>BE-205</b>		<b>CONTRACT NO.</b>		
		PLOT DATE = 3/29/2012	REVISED - R. TOMSONS 03-29-12					FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
				SCALE: NONE	SHEET NO. 3 OF 4 SHEETS	STA.	TO STA.					

# NOTES

- CABINET SHALL BE FABRICATED FROM 0.125-INCH (3.175) SHEET ALUMINUM #3003H14, FORMED AND ARC WELDED.
- ALL SCREWS AND HARDWARE SHALL BE PLATED, GALVANIZED, OR MADE OF BRASS, ALUMINUM OR STAINLESS STEEL, UNLESS OTHERWISE NOTED.
- NAME PLATE SHALL HAVE ENGRAVED 0.75-INCH (19.05) HIGH LETTERS FILLED IN BLACK: "STATE OF ILLINOIS LIGHTING CONTROLS" UNLESS OTHERWISE SPECIFIED.
- ONE INCH THICK POLYISOCYANURATE INSULATION SHALL BE INSTALL AND PERMANENTLY CEMENTED ON ALL SIDES OF THE CABINET AND DOORS.
- CABINET SHALL BE PRIMED AND PAINTED AS SPECIFIED.
- ELECTRIC UTILITY METER BOX SHALL BE MOUNTED ON THE SIDE OF CONTROL CABINET AS SHOWN ON THE PANEL LAYOUT DIAGRAM.
- THE COMPLETED CONTROLLER SHALL BE U.L. LISTED AS AN INDUSTRIAL CONTROL PANEL UNDER UL508.
- 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.
- CIRCUIT BREAKERS AND CONTACTORS AND OTHER COMPONENTS SHALL BE MOUNTED ON 0.125-INCH (3.175) THICK GLASTIC INSULATION BACK PANEL.
- ALL DEVICES SHALL BE FRONT REMOVABLE.
- TIME CLOCK CHANNEL 1 N.O. CONTACT IS CLOSED NIGHT AND OPEN DAY (LIGHTS ON).
- 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.)
- 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.
- ALL LUGS SHALL BE OF COPPER SCREWS AND CONNECTORS, SPRING HELD.
- ALL WIRING TERMINATIONS SHALL BE RATED NOT LESS THAN 75 DEGREE CENTIGRADE.
- ALL CONTROL WIRING SHALL BE 600V #12 TYPE MTW, SCADA WIRING SHALL BE #18.
- ALL POWER WIRING SHALL BE 600V TYPE RHH/RHW.
- ALL WIRING WITHIN THE CABINET SHALL BE COLOR CODED AS INDICATED:
 

R - RED	Y - YELLOW
B - BLACK	W - WHITE
BL- BLUE	G - GREEN
	GR - GREY
- 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.
- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED.
- SCHEMATIC SHOWN WITH BREAKER OPEN, CONTACTOR OPEN, CABINET DOOR CLOSED, CLOCK NOT ACTIVE (DE-ENERGIZED STATE).
- 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	MAINS) 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 WILL BE 4-20 MA ONLY. DIGITAL OUTPUT RELAYS WILL BE ELECTRICALLY ENERGIZED AND MOMENTARILY HELD  
MIXED I/O MODULE MODEL NUMBER V436

FILE NAME =	USER NAME = drivakosgn	DESIGNED -	REVISED - R. TOMSONS 08-19-04
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	PLOT DATE = 3/29/2012	DATE -	REVISED - R. TOMSONS 03-29-12

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

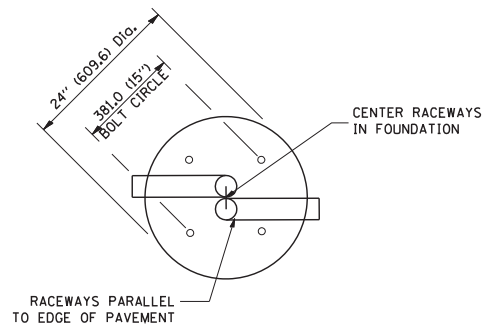
LIGHTING CONTROLLER, BASE MOUNTED, 480VOLT, 200AMP (DUAL) RADIO SCADA

SCALE: NONE SHEET NO. 4 OF 4 SHEETS STA. TO STA.

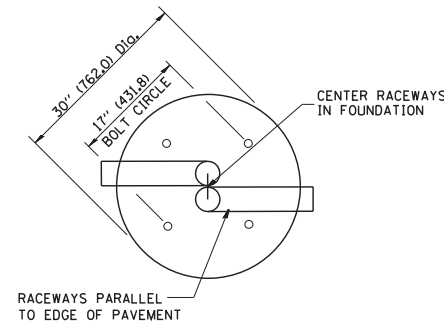
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	BE-205		605	476
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

**LIGHT POLE FOUNDATION DEPTH TABLE**  
40 FT. (12.192 m) TO 47.5 FT. (14.478 m) MOUNTING HEIGHT

SOIL CONDITIONS	DESIGN DEPTH "D" OF FOUNDATION	
	SINGLE ARM POLE	TWIN ARM POLE
SOFT CLAY O <sub>u</sub> = 0.375 TON/SO. FT.	13'-0" (3.96 m)	15'-0" (4.57 m)
MEDIUM CLAY O <sub>u</sub> = 0.75 TON/SO.FT	9'-6" (2.93 m)	10'-9" (3.23 m)
STIFF CLAY O <sub>u</sub> = 1.50 TON/SO. FT.	7'-0" (2.13 m)	8'-0" (2.44 m)
LOOSE SAND φ = 34°	9'-0" (2.74 m)	10'-0" (3.05 m)
MEDIUM SAND φ = 37.5°	8'-3" (2.52 m)	9'-0" (2.74 m)
DENSE SAND φ = 40°	7'-9" (2.36 m)	9'-0" (2.74 m)



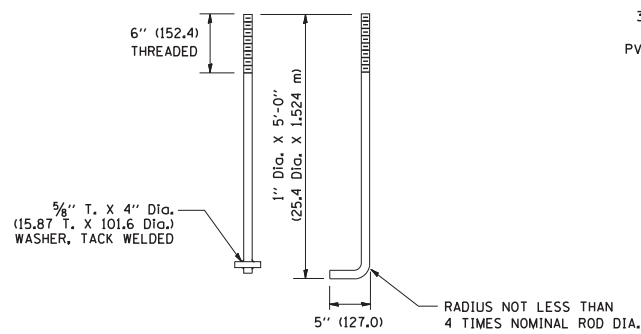
**TOP VIEW**



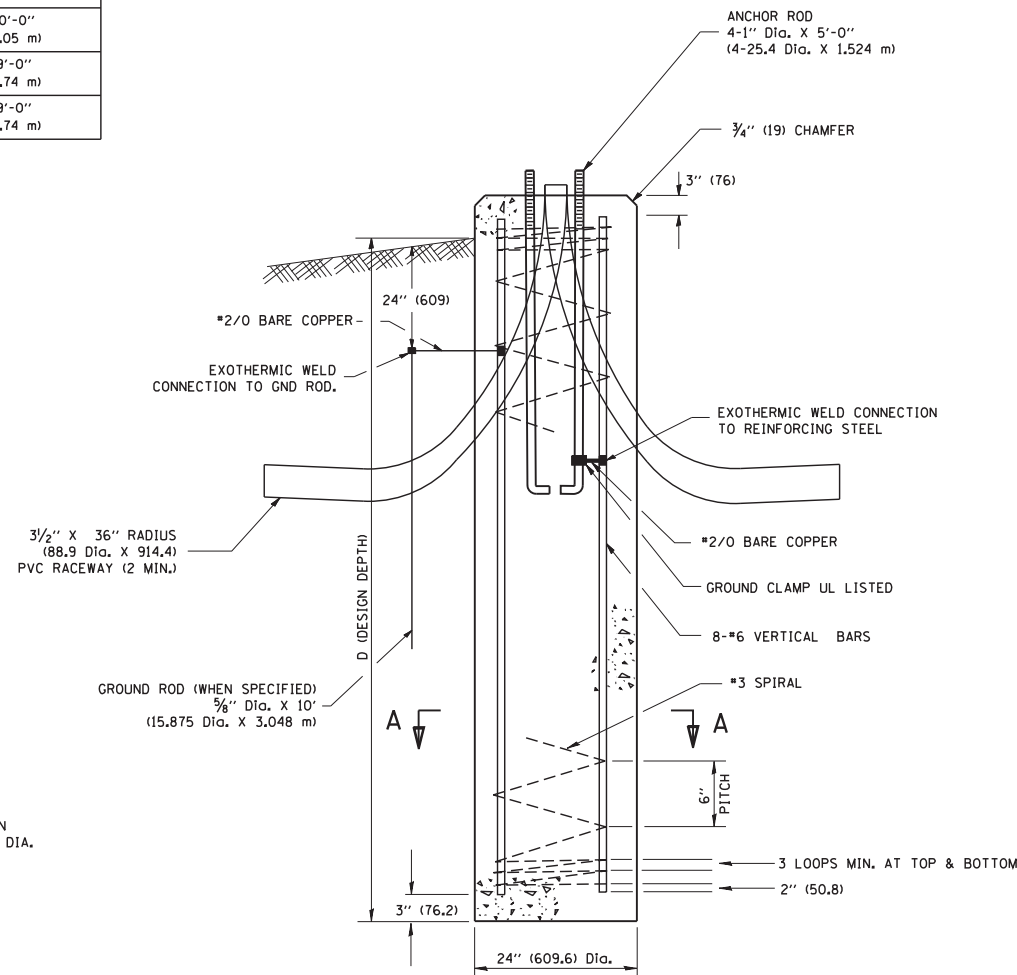
**TOP VIEW**

**NOTES**

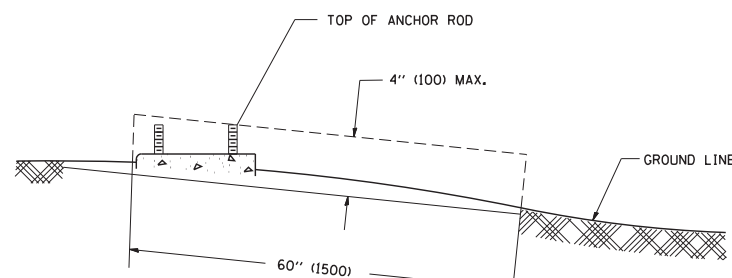
- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED.
- THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 100MM (4 IN.) ABOVE THE FINISHED GRADE WITHIN A 60 IN. (1.5 m) CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED, IN ACCORDANCE WITH AASHTO GUIDELINES. IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SEE FOUNDATION EXTENSION DETAIL.
- THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUGER, OF THE SAME DIAMETER AS THE FOUNDATION. IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
- THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL. A LINER OR FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION. FOUNDATION TOP SHALL BE CHAMFERED 3/4-IN. (20 mm).
- THE CONCRETE SHALL BE CLASS SI. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
- THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
- THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
- ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UMG MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
- THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 6 INCHES (150 mm) WITH A MINIMUM OF 3 INCHES (75 mm) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
- ANCHOR RODS SHALL PROJECT 2 3/4" (69.9 mm) ABOVE THE TOP OF THE FOUNDATION. IF BREAKAWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
- THE CONTRACTOR SHALL USE A #3 SPIRAL AT 6" (152.4 mm) PITCH OR MAY SUBSTITUTE #3 TIES AT 12" (304.8 mm) O.C. WITH THE APPROVAL OF THE ENGINEER.
- THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
- THE RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.



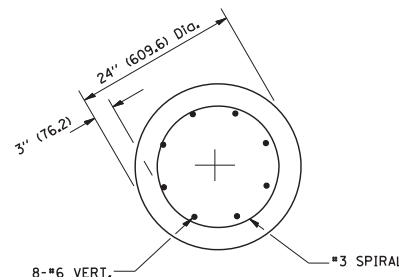
**ANCHOR ROD DETAIL**



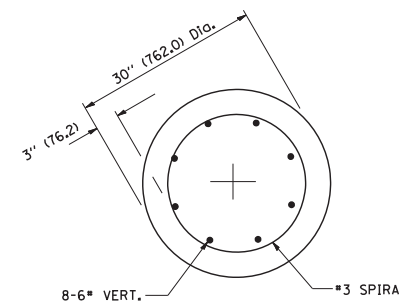
**FOUNDATION DETAIL**



**FOUNDATION EXTENSION DETAIL**



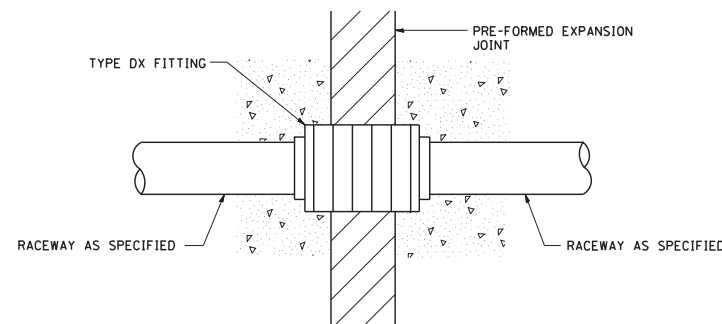
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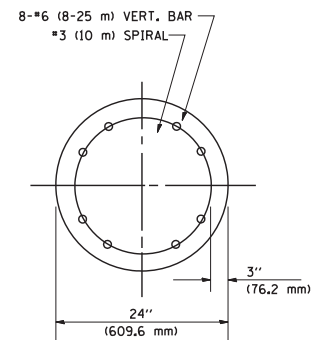
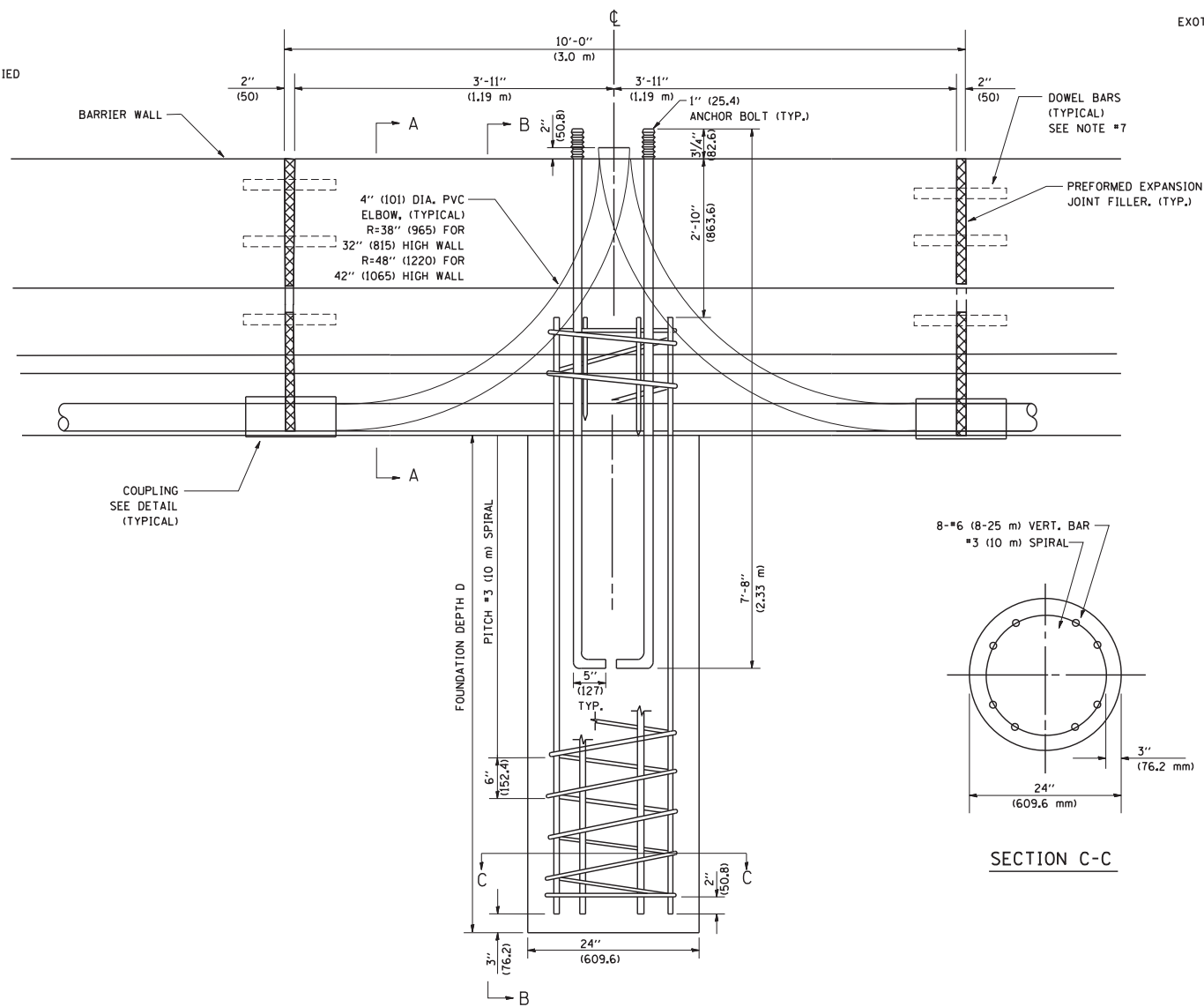
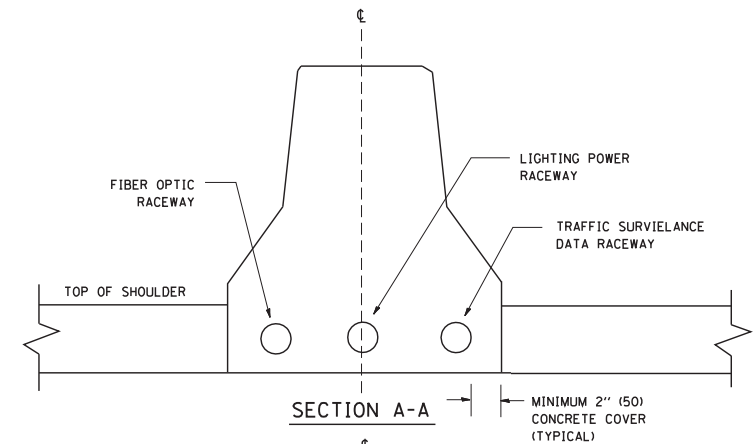
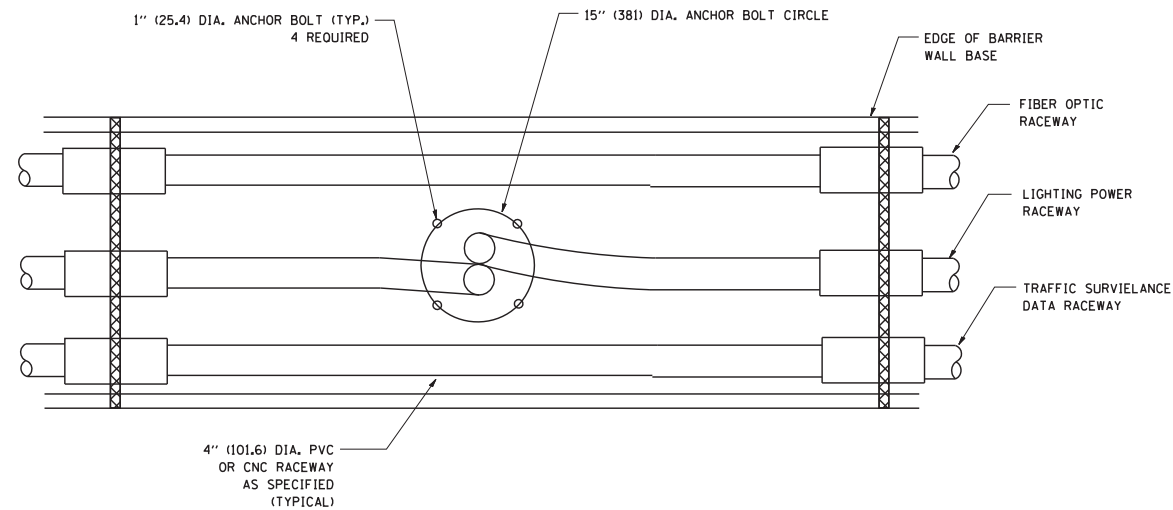
**SECTION A-A**

NOTES:

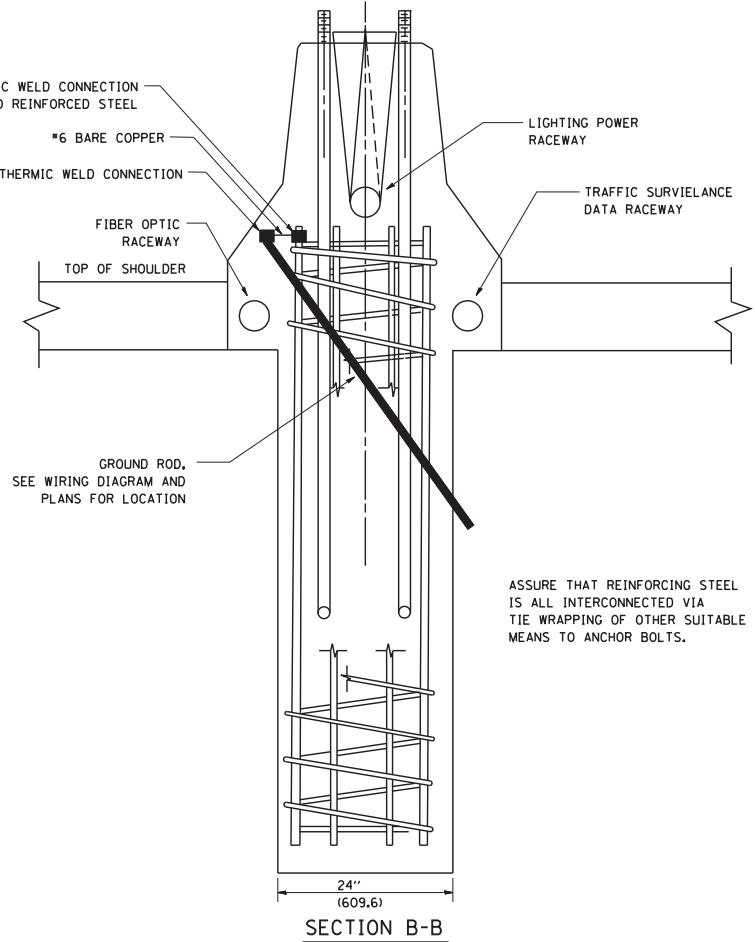
1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
2. THE ANCHOR BOLTS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED IN THE FORMS.
3. THE CONTRACTOR AT HIS OPTION MAY SUBSTITUTE #4 (15 m) TIES AT 12" (304.8 m) CTRS. FOR THE #3 (3 m) SPIRAL, TACKWELDED TYPE BOLT MAY BE SUBSTITUTED FOR THE HOOK TYPE BOLT.
4. COLD BENDING OF THE HOOK BOLT SHALL NOT BE ALLOWED.
5. EXCAVATION FOR THE POLE FOUNDATION SHALL BE MADE WITH AN AUGER 24 INCHES (609.6 m) IN DIAMETER.
6. THE ENGINEER SHALL DETERMINE THE TYPE OF SOIL DURING EXCAVATION AND SELECT THE DESIGN DEPTH OF FOUNDATION FROM THE DESIGN TABLE USING THE DOMINANT CHARACTERISTIC OF THE SOIL ENCOUNTERED.
7. BARRIER WALL EXPANSION AND CONSTRUCTION JOINTS SHALL BE IN ACCORDANCE WITH STANDARD DETAIL 637001-02 AND 637006 AS APPLICABLE.



CONDUIT DEFLECTION FITTING DETAIL



SECTION C-C



SECTION B-B

ASSURE THAT REINFORCING STEEL IS ALL INTERCONNECTED VIA TIE WRAPPING OF OTHER SUITABLE MEANS TO ANCHOR BOLTS.

FOUNDATION DEPTH

TYPE OF SOIL	FOUND FEPTH D	REINFORCEMENT IN FOUNDATION	
		VERTICAL BARS	SPIRAL
ROCK OR SOLIDIFIED SLAG	5'-0" (1.52 m)	NONE	NONE
DENSE SAND	7'-9" (2.36 m)	8-#6 x 9'-0" (8-20 m x 2.74 m)	#3 x 90' (3 m x 27.43 m)
MEDIUM SAND	8'-3" (2.51 m)	8-#6 x 9'-5" (8-20 m x 2.87 m)	#3 x 94' (3 m x 28.65 m)
LOOSE SAND	9'-0" (2.74 m)	8-#6 x 10'-2" (8-20 m x 3.09 m)	#3 x 100' (3 m x 30.48 m)
STIFF CLAY	7'-0" (2.13 m)	8-#6 x 10'-8" (8-20 m x 2.48 m)	#3 x 80' (3 m x 24.38 m)
MEDIUM CLAY	9'-6" (2.89 m)	8-#6 x 10'-8" (8-20 m x 3.25 m)	#3 x 104' (3 m x 31.69 m)
SOFT CLAY	13'-0" (3.96 m)	8-#6 x 14'-2" (8-20 m x 4.32 m)	#3 x 144' (3 m x 43.89 m)

DESIGN: 80 MPH AASHTO

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 PLOT DATE = 1/4/2008

DESIGNED -  
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 CHECKED -  
 DATE -

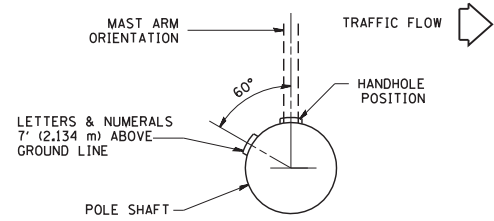
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STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

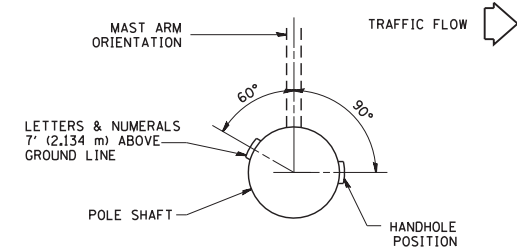
24" (609.6 mm) DIA. LIGHT POLE FOUNDATION  
 INTEGRAL WITH DOUBLE FACE BARRIER WALL

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

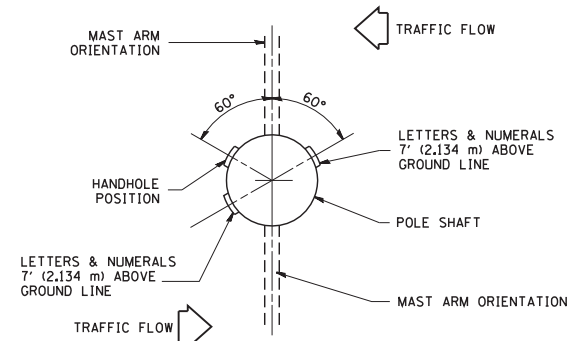
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	BE-322		605	478
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO.	



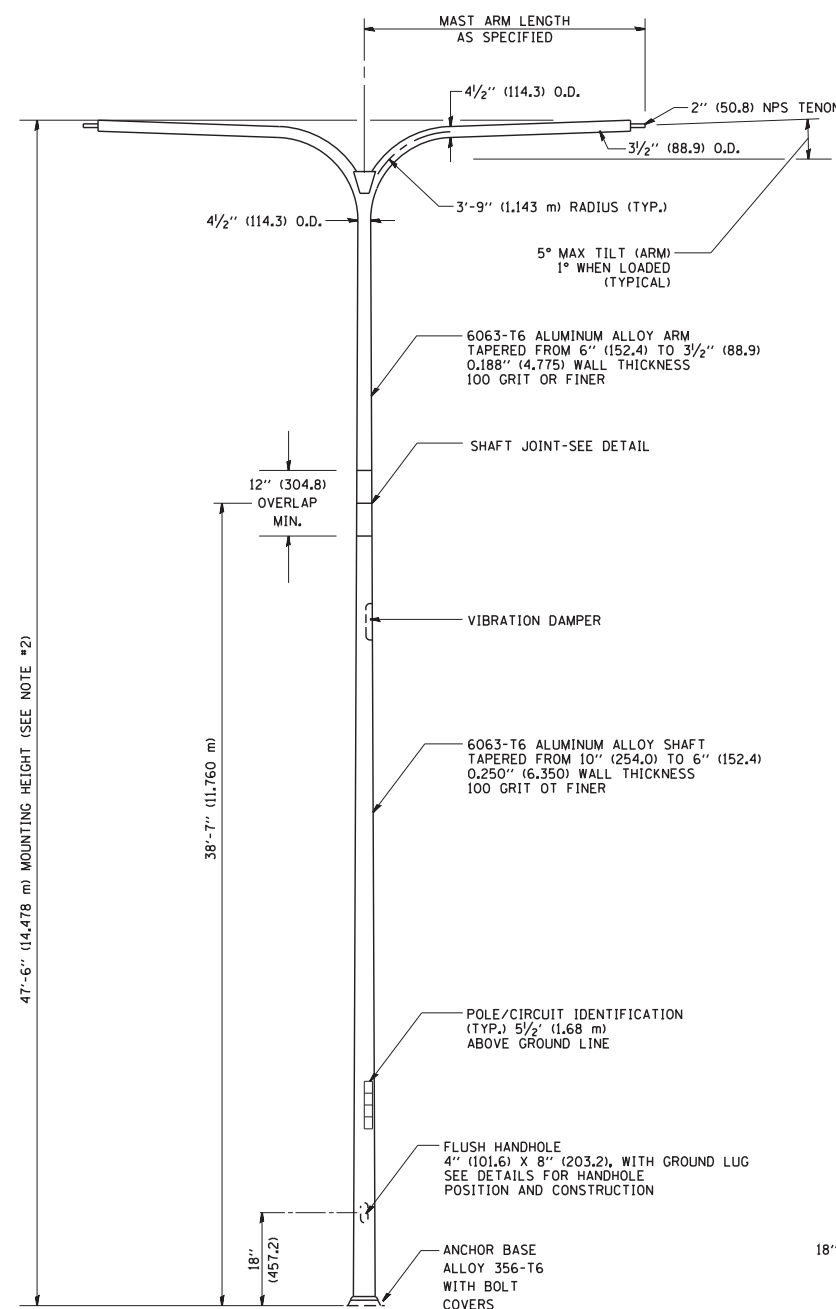
POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES MOUNTED ON BRIDGE PARAPET OR BARRIER WALL



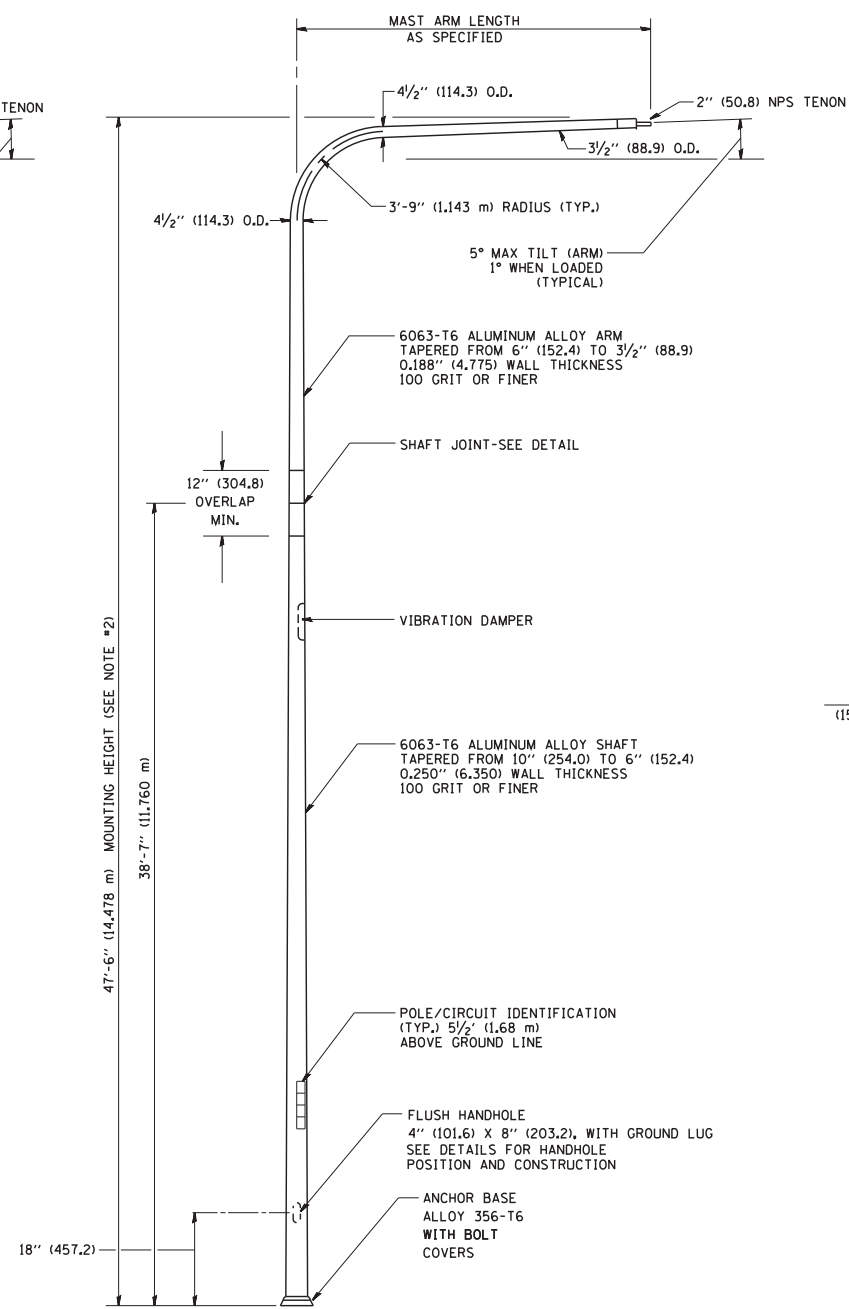
POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES



POSITION OF HANDHOLE AND POLE NUMBER FOR TWIN MAST ARM POLES

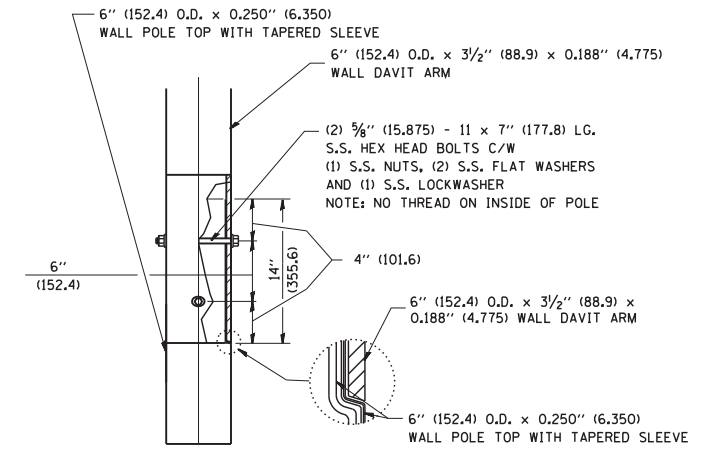


TWIN ARM POLE

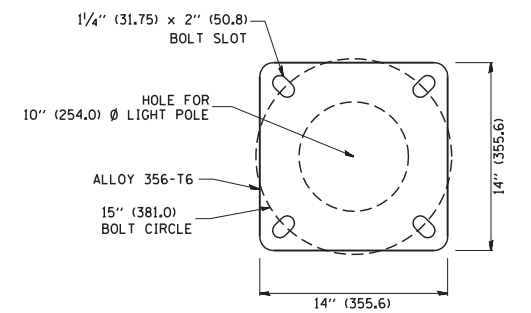


SINGLE ARM POLE

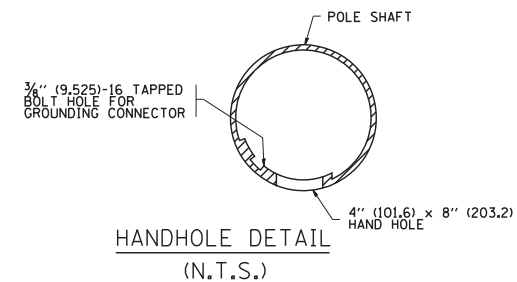
- NOTES:
1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
  2. MOUNTING HEIGHT IS DEFINED AS THE DISTANCE FROM THE CENTERLINE OF THE TENON TO THE BOTTOM OF THE ANCHOR BASE.
  3. TWO PIECE SHAFT WILL BE MATCHED MARKED AND INTERCHANGEABLE BETWEEN DIFFERENT UNITS. FIELD DRILLING OF THE HOLES WILL NOT BE ALLOWED.
  4. THE LIGHT POLE WILL MEET AASHTO DESIGN CRITERIA AS SPECIFIED.
  5. THE INSTALLING CONTRACTOR WILL PROVIDE A UL LISTED GROUNDING CONNECTOR, BURNDY K2C23, T&B SP4DL OR APPROVED EQUAL.
  6. LIGHT POLES WILL NOT BE INSTALLED WITHOUT MAST ARMS AND LUMINAIRES.
  7. LIGHT POLES WILL BE SET PLUMB ON THE FOUNDATION WITHOUT THE USE OF LEVELING NUTS, WASHERS OR SHIMS.
  8. LIGHTING UNIT IDENTIFICATION NUMBERS SHALL BE INSTALLED BEFORE THE LIGHTING UNIT IS ENERGIZED.



DAVIT ARM CONNECTION  
[14" (355.6) OVERLAP SHOWN]



LIGHT POLE BASE PLATE DETAIL  
(FOR POLE MOUNTED ON 15 INCH (381.0) BOLT CIRCLE FOUNDATION)



HANDHOLE DETAIL  
(N.T.S.)

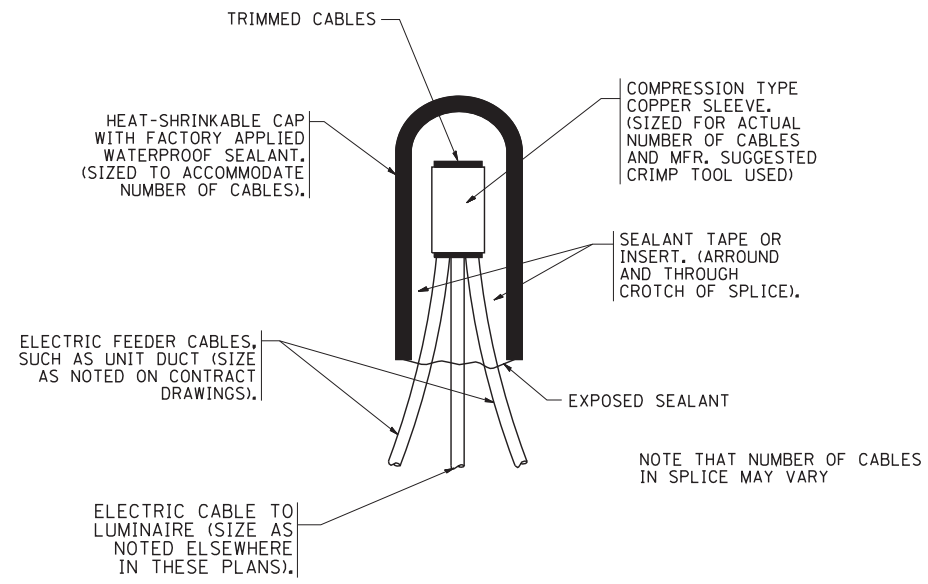
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W:\diststd\22x34\be410.dgn		DRAWN - LEY	REVISED - D. DREW 05-07-92
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - R. TOMSONS 09-06-00
	PLOT DATE = 1/4/2008	DATE -	REVISED - R. TOMSONS 09-02-03

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DAVIT LIGHT POLE  
47'-6" (14.478 m) MOUNTING HEIGHT

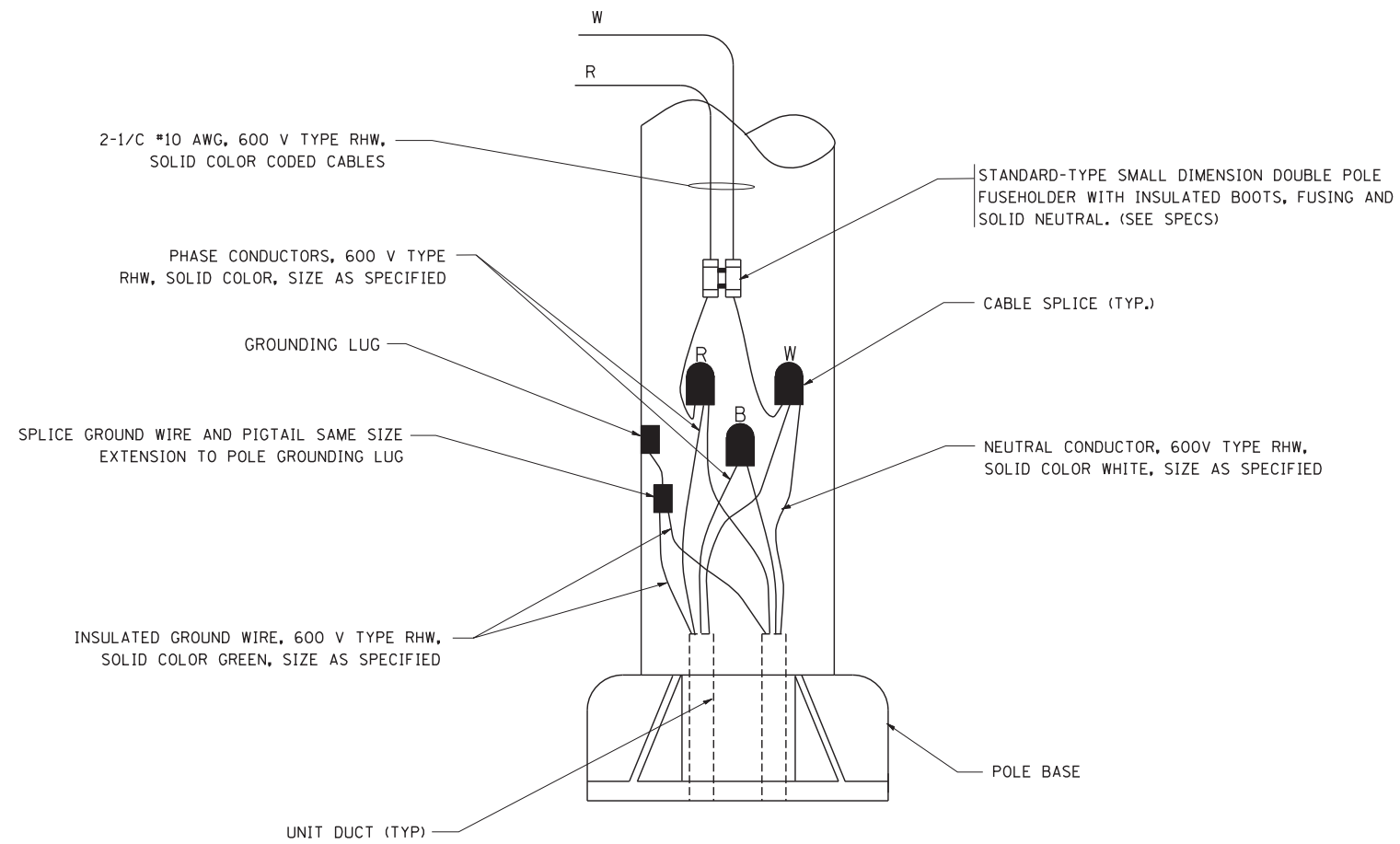
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	BE-410		605	479
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO.	



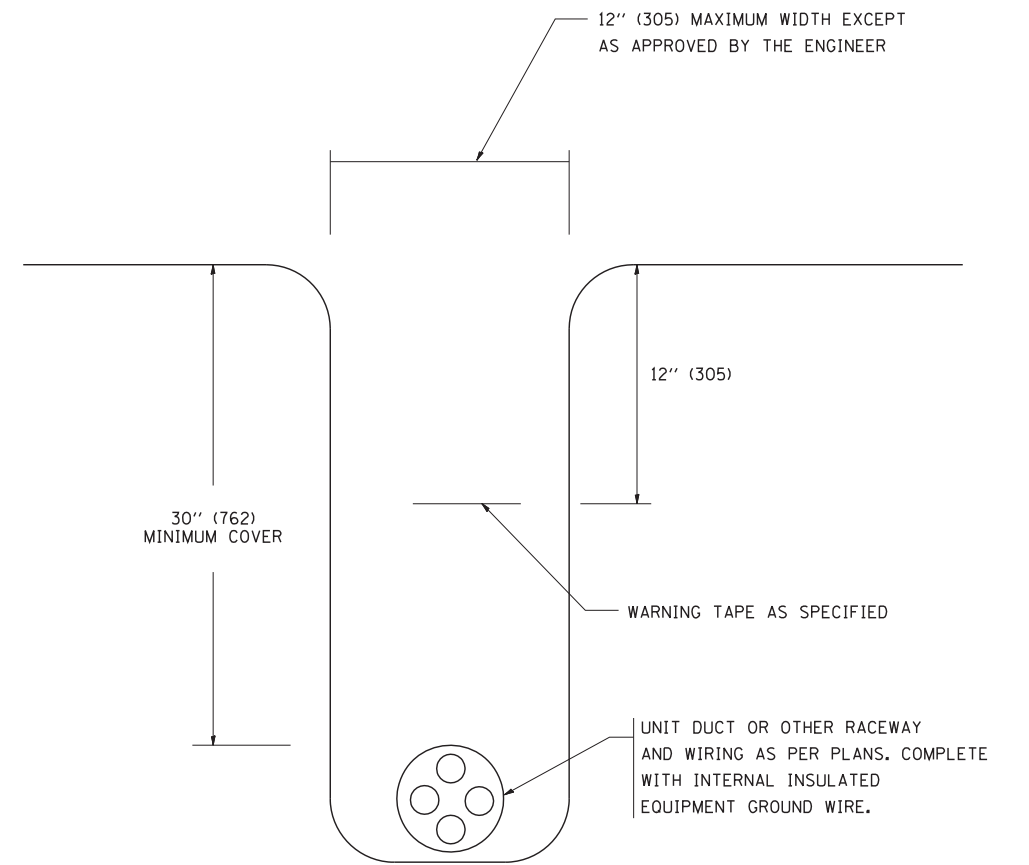
**TYPICAL SPLICE DETAIL**

N.T.S.



**POLE WIRING DETAIL**

N.T.S.



**TYPICAL WIRING IN TRENCH DETAIL**

N.T.S.

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W:\diststd\22x34\be702.dgn	
PLOT SCALE = 50.000' / IN.	PLOT DATE = 1/4/2008

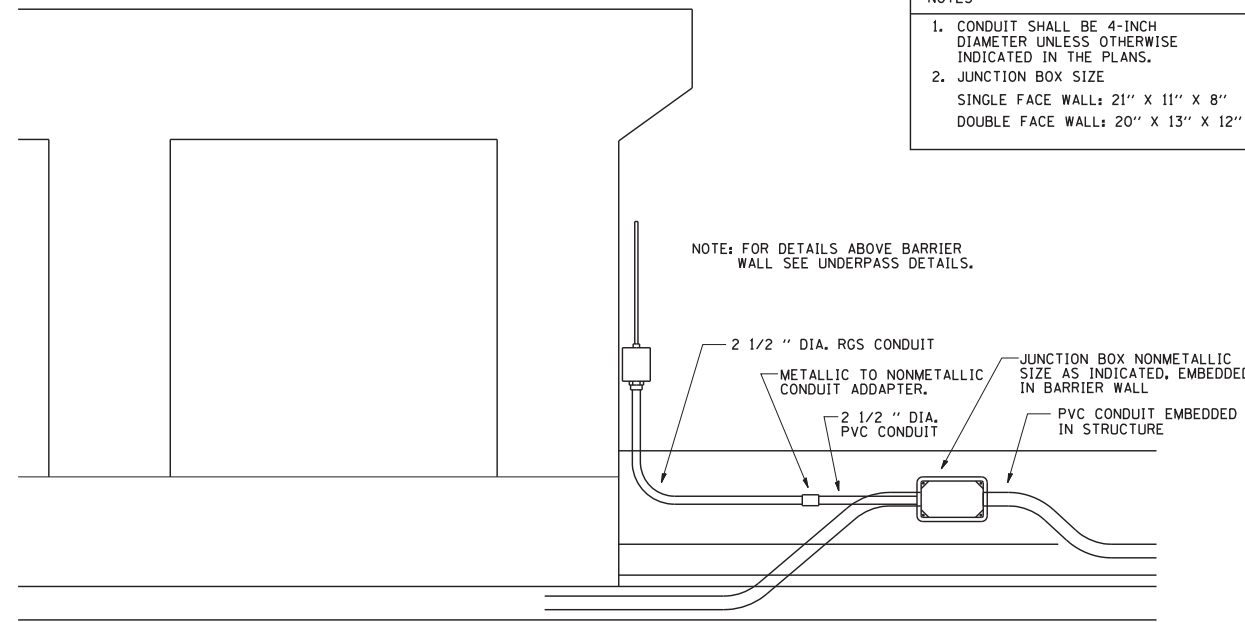
DESIGNED -	REVISED - 08-08-03
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>MISC. ELECTRICAL DETAILS</b>			
<b>SHEET A</b>			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			605	480
<b>BE-702</b>		CONTRACT NO.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



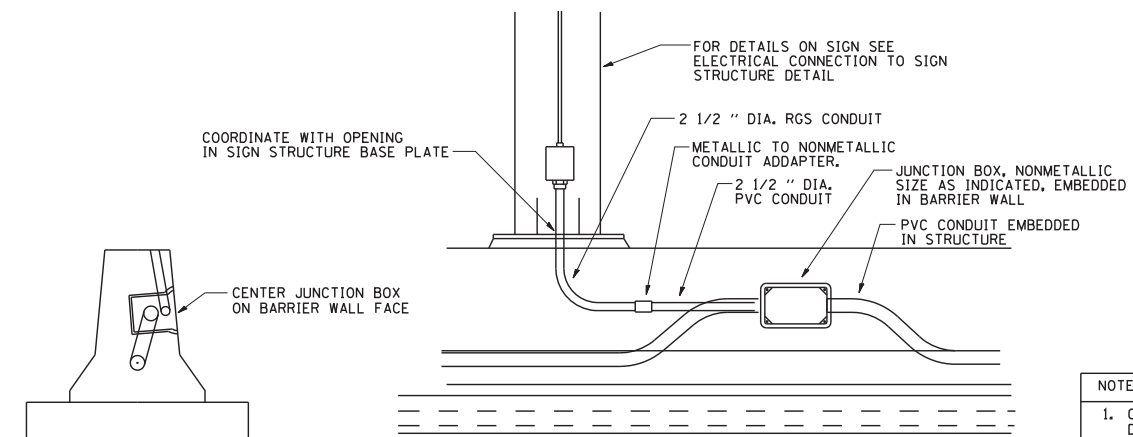


NOTES

1. CONDUIT SHALL BE 4-INCH DIAMETER UNLESS OTHERWISE INDICATED IN THE PLANS.
2. JUNCTION BOX SIZE  
SINGLE FACE WALL: 21" X 11" X 8"  
DOUBLE FACE WALL: 20" X 13" X 12"

NOTE: FOR DETAILS ABOVE BARRIER WALL SEE UNDERPASS DETAILS.

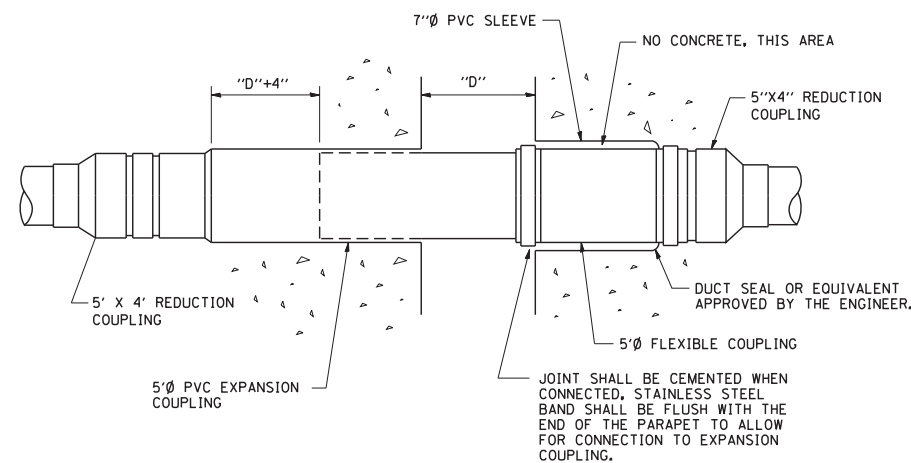
ED - BWD  
ELECTRIC CONNECTION TO UNDERPASS LIGHTING



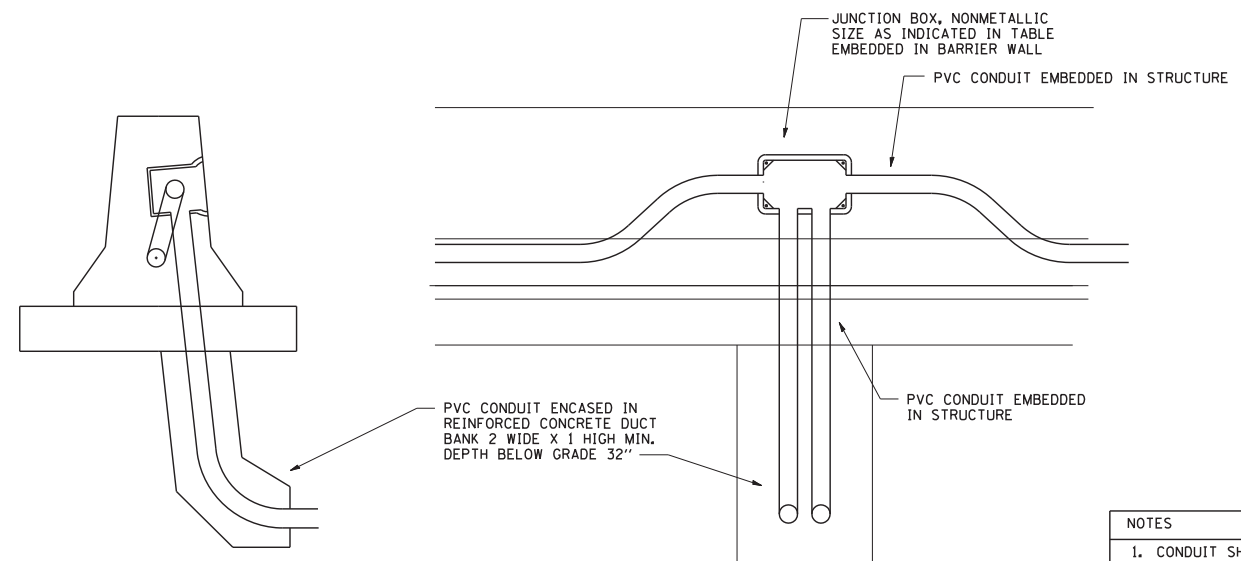
NOTES

1. CONDUIT SHALL BE 4-INCH DIAMETER UNLESS OTHERWISE INDICATED IN THE PLANS.
2. JUNCTION BOX SIZE  
SINGLE FACE WALL: 21" X 11" X 8"  
DOUBLE FACE WALL: 20" X 13" X 12"

ED - SGN  
JUNCTION BOX EMBEDDED IN BARRIER WALL FOR SIGN LIGHTING



INSTALLATION OF CONDUIT  
IN BRIDGE PARAPET EXPANSION JOINT  
(N.T.S.)



NOTES

1. CONDUIT SHALL BE 4-INCH DIAMETER UNLESS OTHERWISE INDICATED IN THE PLANS.
2. JUNCTION BOX SIZE  
SINGLE FACE WALL: 21" X 11" X 8"  
DOUBLE FACE WALL: 20" X 13" X 12"

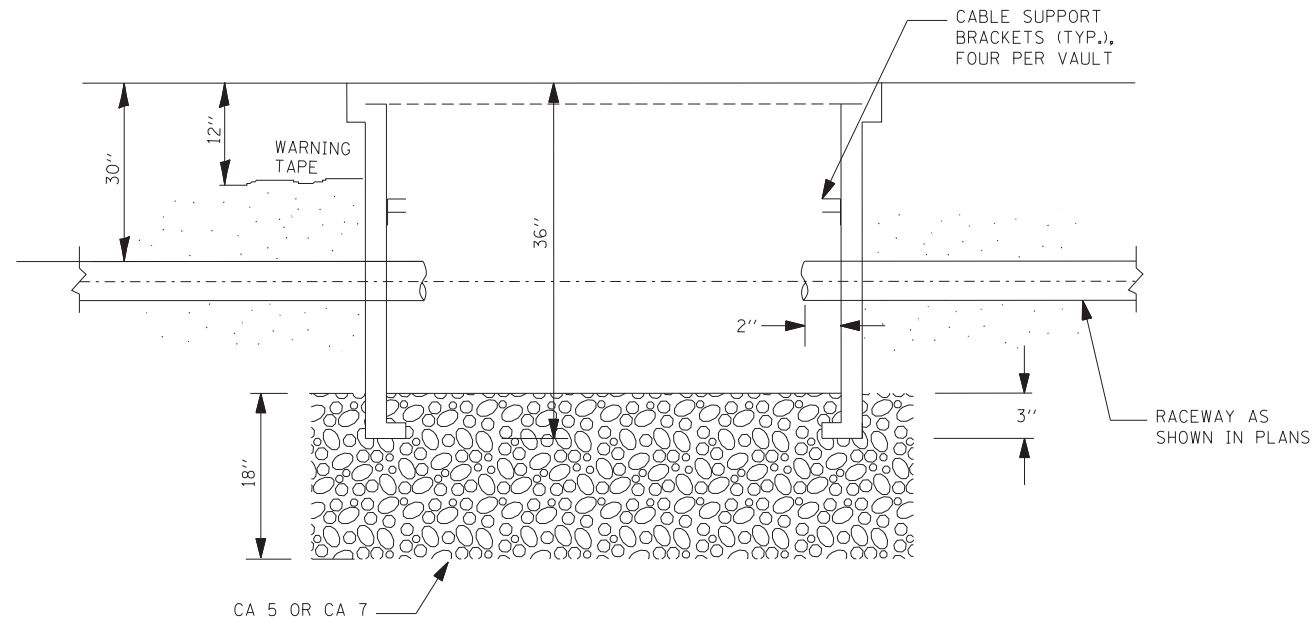
ED - BW  
JUNCTION BOX EMBEDDED IN BARRIER WALL

FILE NAME = be703.dgn	USER NAME = gaglianobt	DESIGNED - DRAWN -	REVISED - REVISED -
PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -	REVISED -
PLOT DATE = 2/5/2009	DATE - 01-20-2009	REVISED -	REVISED -

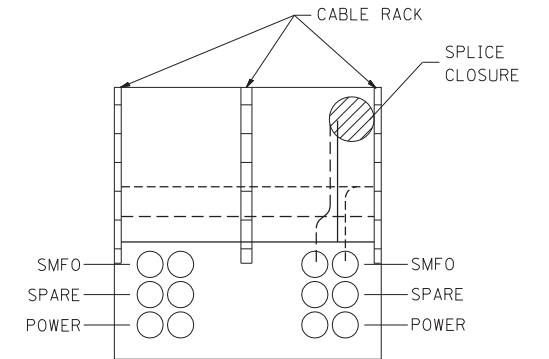
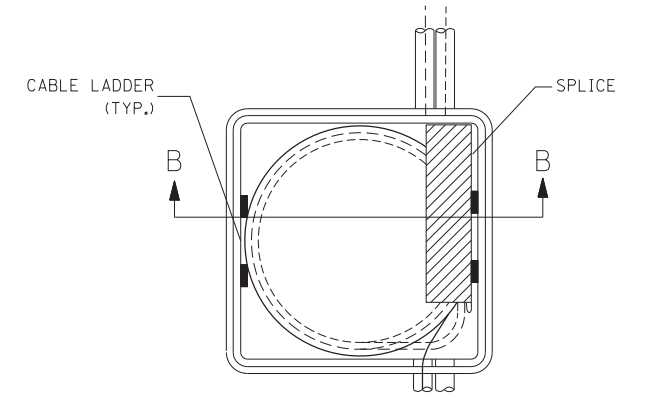
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS ELECTRICAL DETAILS, SHEET B			
J BOX EMBEDDED IN BARRIER WALL - INSTALLATION OF CONDUIT IN BRIDGE PARAPET EXPANSION JOINT - ELECTRIC CONNECTION TO UNDERPASS LIGHTING			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

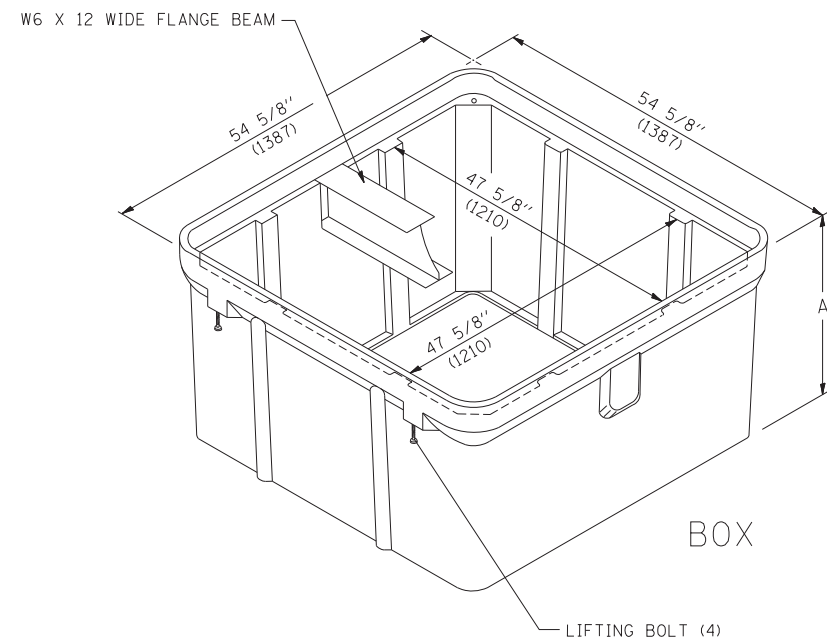
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BE-703			CONTRACT NO.	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



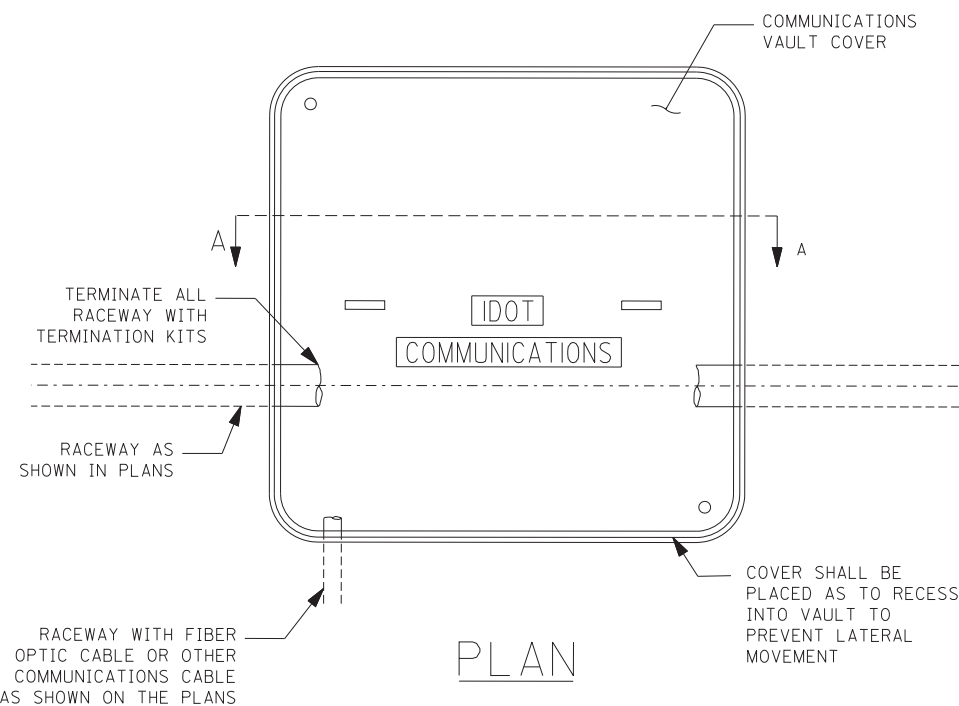
SECTION A-A



SECTION B-B



ISOMETRIC

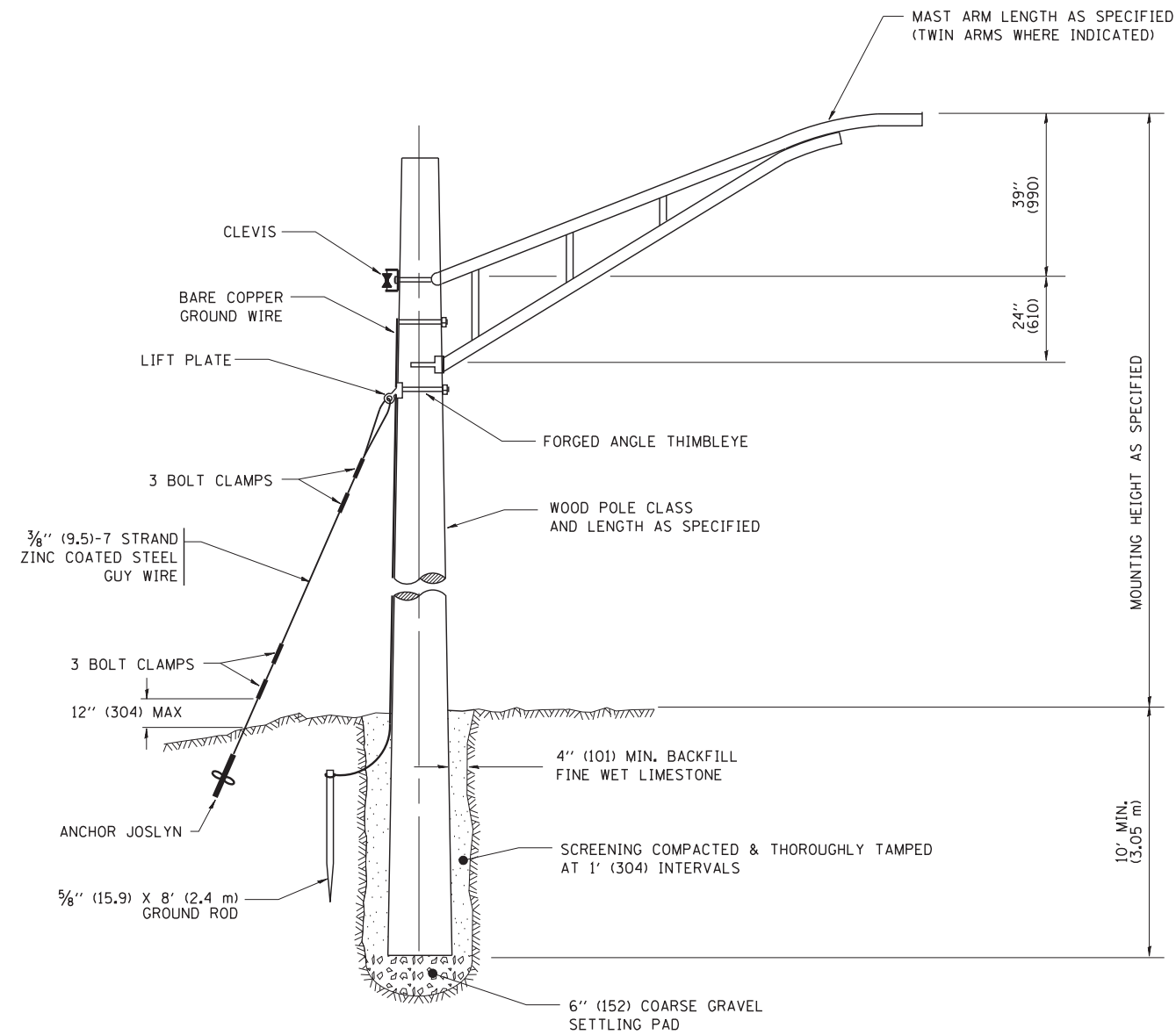


PLAN

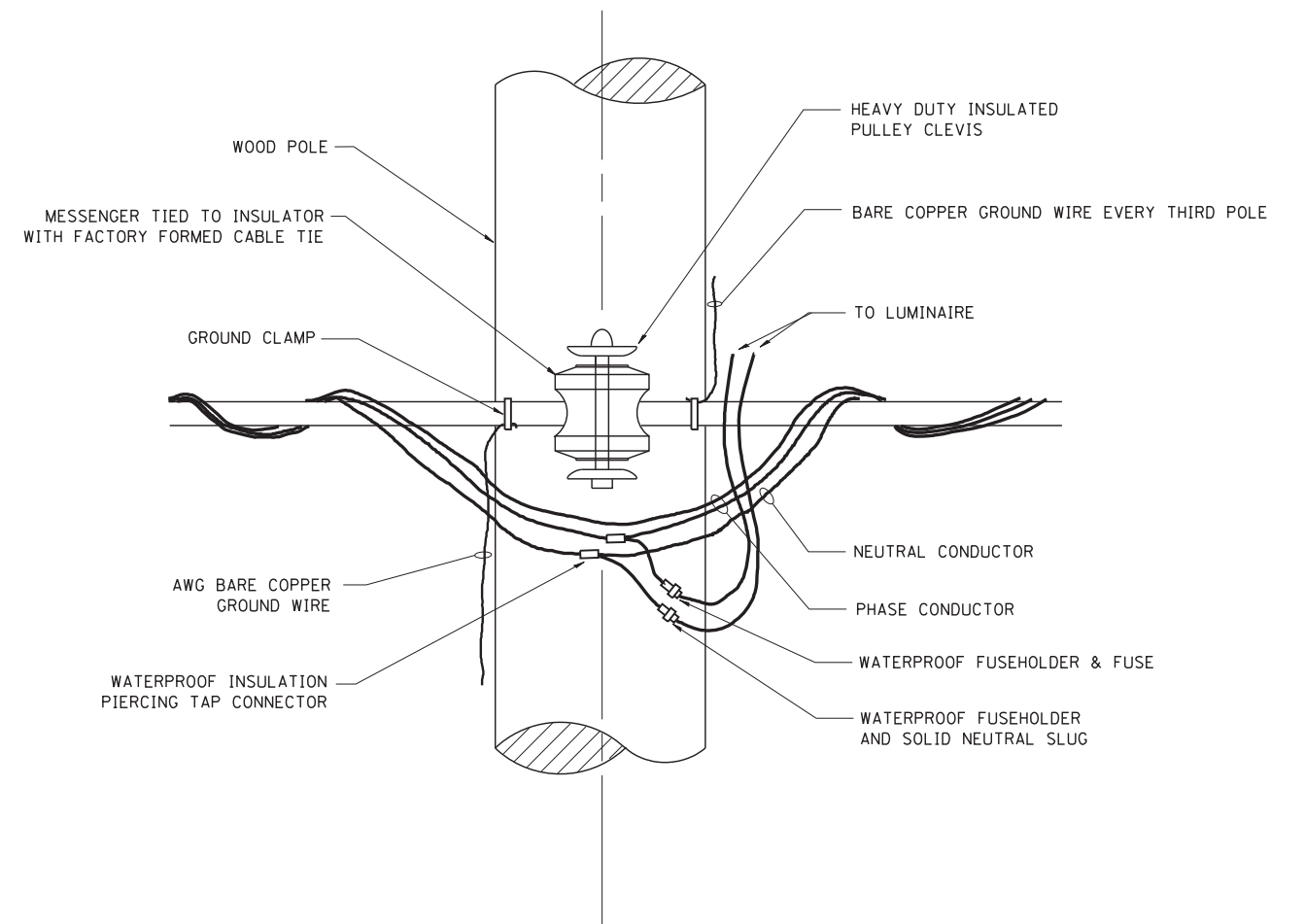
NOTES:

1. BOX SHALL HAVE AN OPEN BASE.
2. COVER SHALL WITHSTAND A 22,500/33,750 DESIGN/TEST LOADING AND SHALL LOCK.
3. ALL OPENINGS IN STRUCTURE MUST BE MACHINED AT TIME OF FABRICATION OR PUNCH DRIVEN AT TIME OF PLACEMENT, IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS.
4. FIELD PLACEMENT OF COMMUNICATIONS VAULT SHALL BE AS DIRECTED BY THE ENGINEER.
5. ALL DIMENSIONS ARE MINIMUM AND A LARGER SIZE HANDHOLE MAY BE USED, WITH THE APPROVAL OF THE ENGINEER, TO FACILITATE USING A MANUFACTURER'S STANDARD PRODUCT.

FILE NAME =	USER NAME = leuso	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>COMMUNICATIONS VAULT, COMPOSITE CONCRETE</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT DATE = 3/29/2010		DATE - 03-22-10	REVISED -					FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



TEMPORARY LIGHT POLE DETAIL

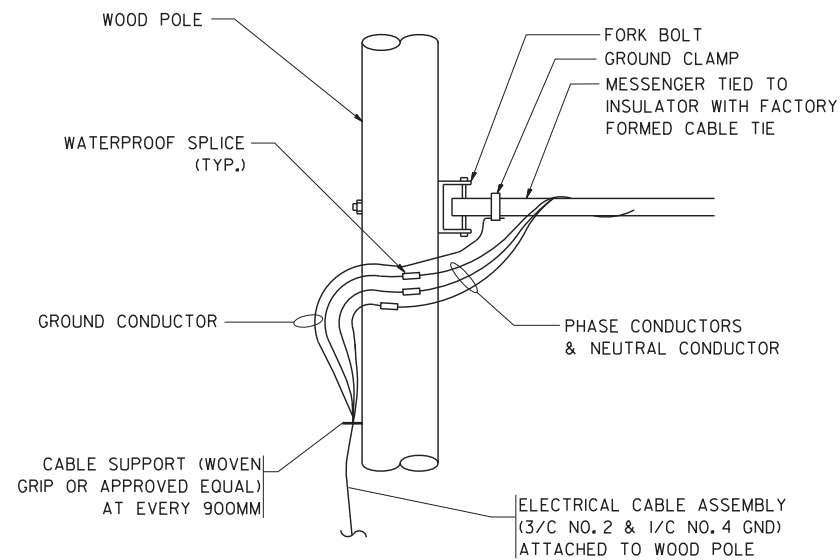


TEMPORARY LIGHT POLE ATTACHMENT DETAIL

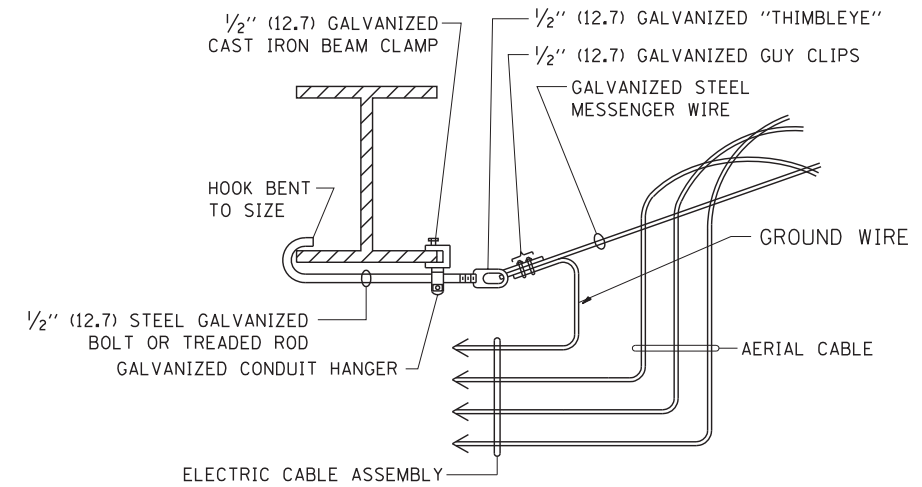
**NOTES:**

1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED

FILE NAME = W:\diststd\22x34\be800.dgn	USER NAME = gaglionobt	DESIGNED -	REVISED - 08-08-03	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY LIGHT POLE DETAILS</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT DATE = 1/4/2008	CHECKED -	DATE -	REVISED -				<b>BE-800</b>		CONTRACT NO.			
FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT												



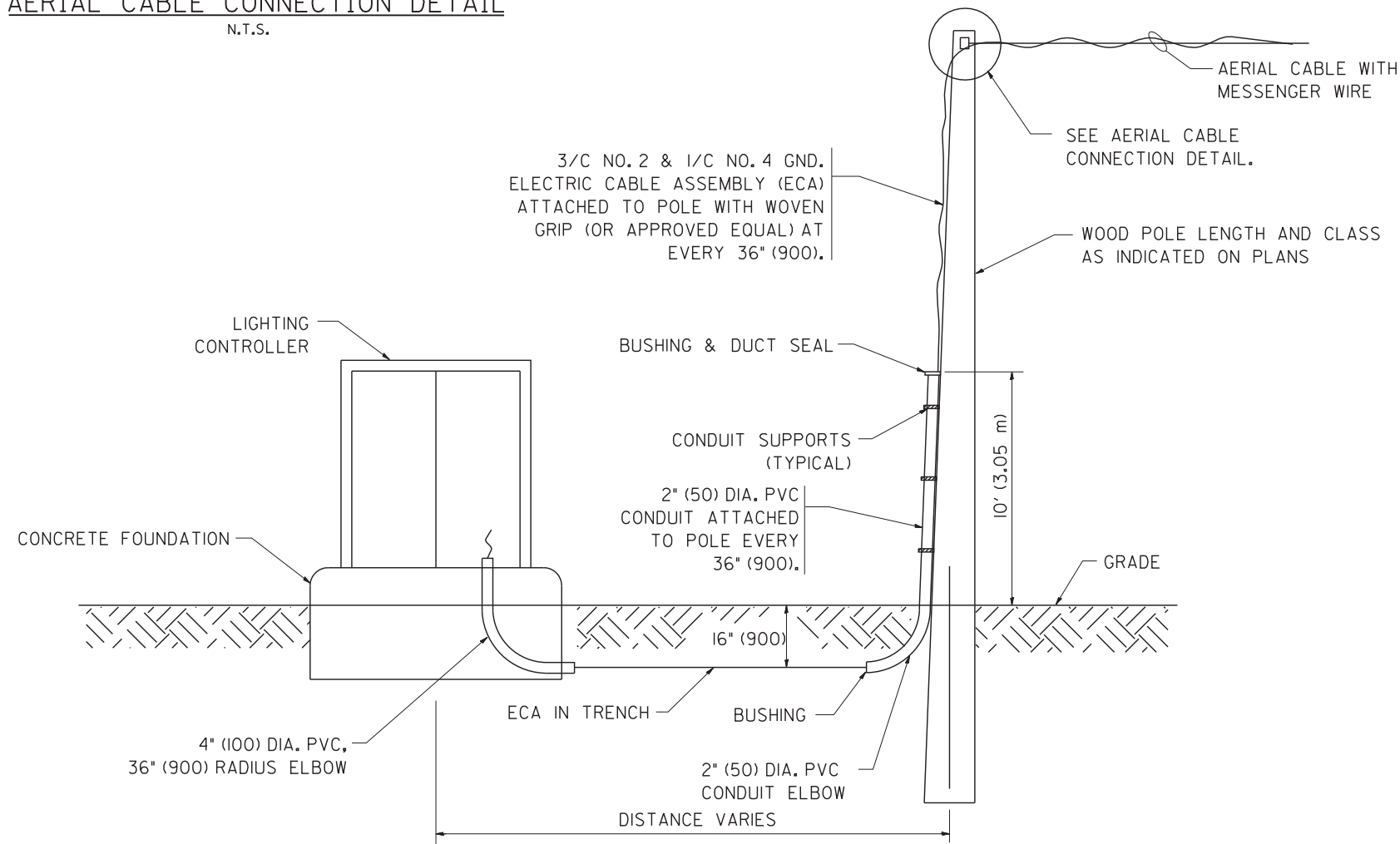
**AERIAL CABLE CONNECTION DETAIL**  
N.T.S.



**AERIAL CABLE ATTACHED TO STRUCTURE**  
NOT TO SCALE

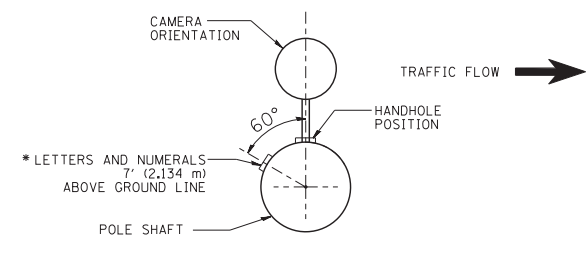
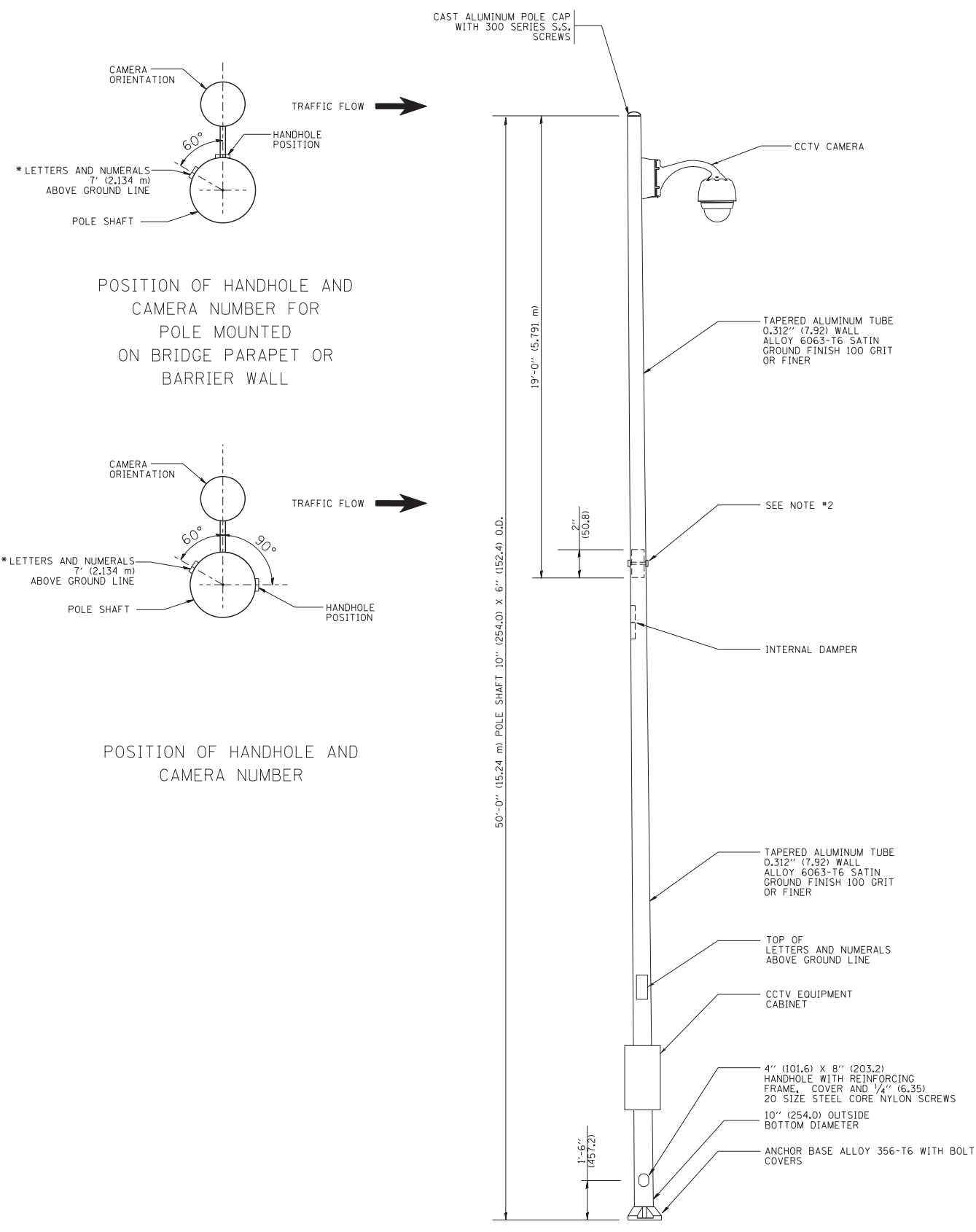
**NOTES:**

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.

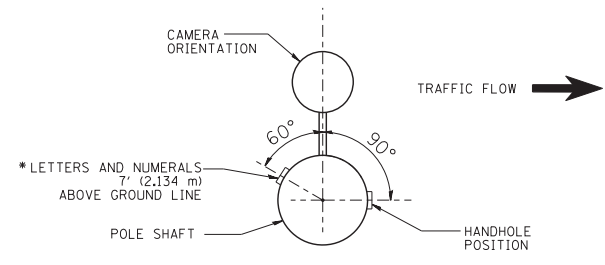


**WOOD POLE TO LIGHTING CONTROLLER WIRING CONNECTION DETAIL**  
N.T.S.

FILE NAME = W:\diststd\22x34\be001.dgn	USER NAME = gaglianobt	DESIGNED - DRAWN -	REVISED - REVISED -	08-08-03	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY AERIAL CABLE INSTALLATION</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED -	REVISED -			<b>BE-001</b>			605	484			
PLOT DATE = 1/4/2008	DATE -	REVISED -	REVISED -			SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT			

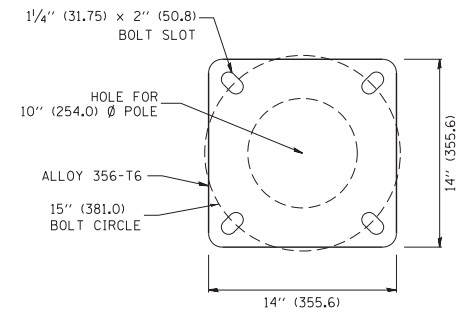


POSITION OF HANDHOLE AND CAMERA NUMBER FOR POLE MOUNTED ON BRIDGE PARAPET OR BARRIER WALL

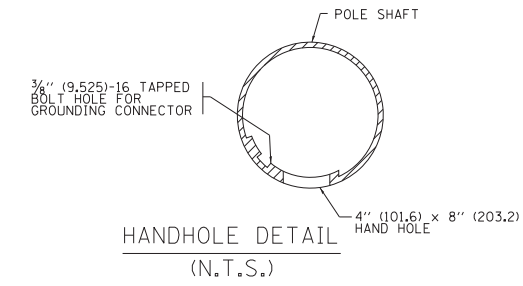


POSITION OF HANDHOLE AND CAMERA NUMBER

- NOTES:**
1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
  2. TWO PIECE SHAFT WILL BE MATCHED MARKED AND INTERCHANGEABLE BETWEEN DIFFERENT UNITS. FIELD DRILLING OF THE HOLES WILL NOT BE ALLOWED.
  3. THE POLE WILL MEET AASHTO DESIGN CRITERIA AS SPECIFIED.
  4. THE INSTALLING CONTRACTOR WILL PROVIDE A UL LISTED GROUNDING CONNECTOR, BURNDY K2C23, T&B SP4DL OR APPROVED EQUAL.
  5. POLES WILL BE INSTALLED IN ACCORDANCE TO MANUFACTURER'S INSTRUCTIONS.
  6. POLES WILL BE SET PLUMB ON THE FOUNDATION WITHOUT THE USE OF LEVELING NUTS, WASHERS OR SHIMS.



POLE BASE PLATE DETAIL  
15 INCH (381.0) BOLT CIRCLE

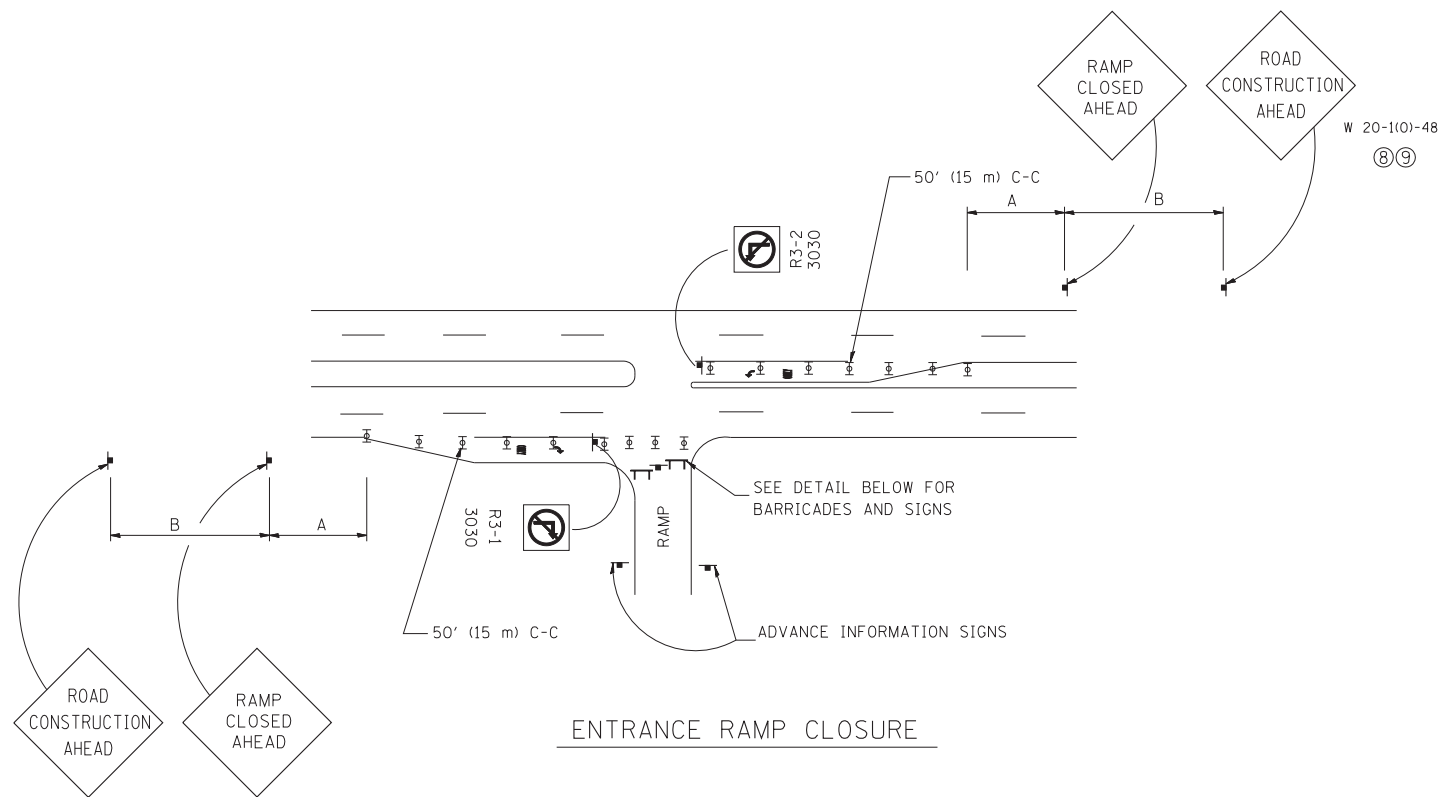


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	PLOT SCALE = 50.000' / in.	CHECKED -	REVISED -
	PLOT DATE = 4/24/2012	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>CCTV CAMERA STRUCTURE</b>			
<b>50' (15.24 m) MOUNTING HEIGHT</b>			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			605	485
<b>BE-1000</b>			CONTRACT NO.	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



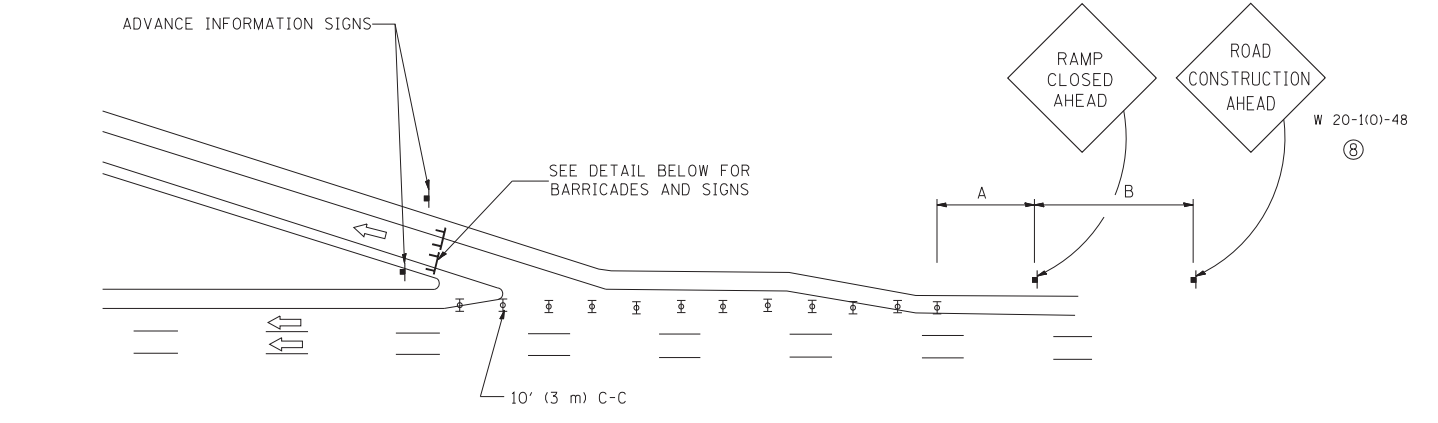
ENTRANCE RAMP CLOSURE

SIGN SPACING TABLE

FACILITY	DISTANCE BETWEEN SIGNS	
	A	B
EXPRESSWAY >24 HOURS	1000' (300 m)	1500' (450 m)
EXPRESSWAY <24 HOURS	500' (150 m)	500' (150 m)
ARTERIAL ≥45 MPH	350' (100 m)	350' (100 m)
ARTERIAL <45 MPH	150' (45 m)	150' (45 m)

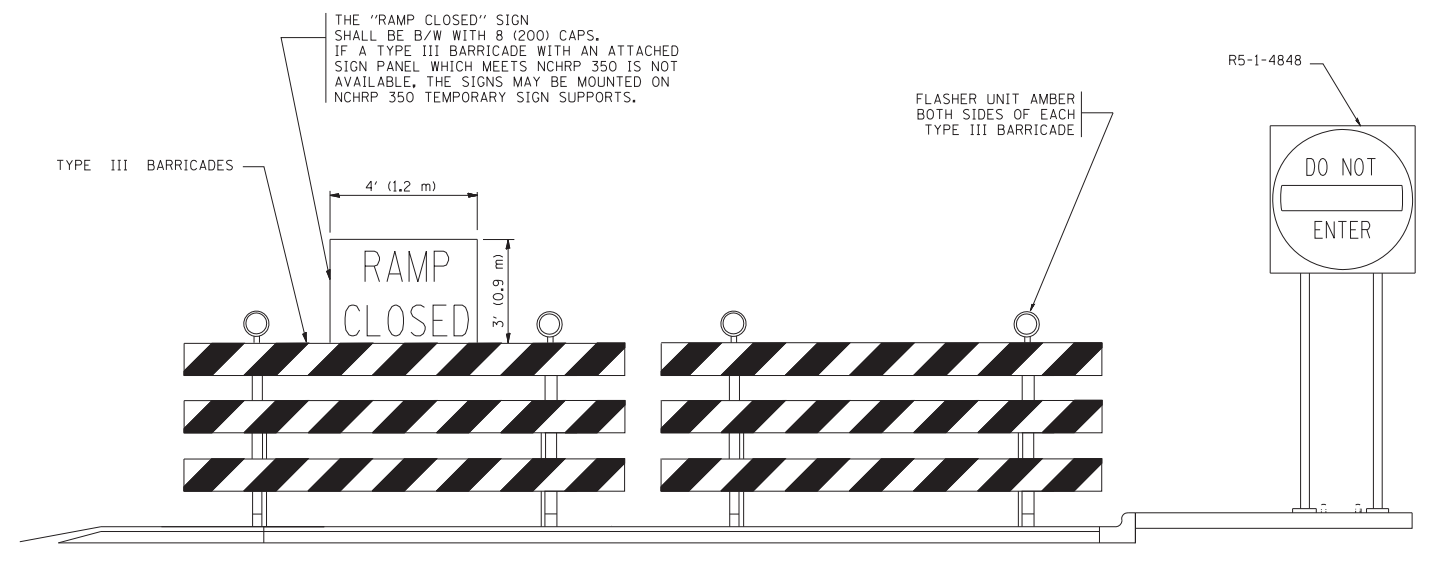
DISTANCES MAY BE SHORTENED DEPENDING UPON THE PROXIMITY OF ADJACENT RAMPS OR INTERSECTIONS.

W 20-1(0)-48  
⑧⑨

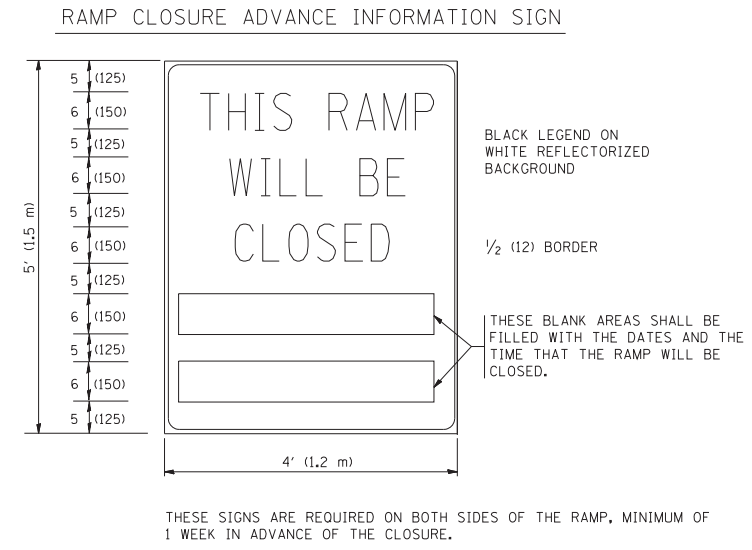
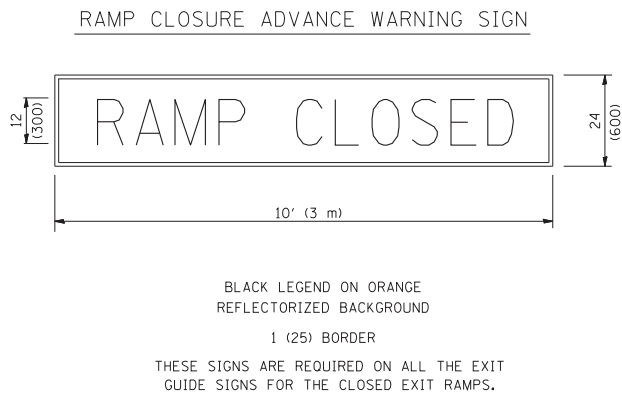


EXIT RAMP CLOSURE

- SYMBOLS
- ⊥ TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH STEADY BURN MONO-DIRECTIONAL LIGHT
  - ⊏ TYPE III BARRICADE WITH FLASHING LIGHT



DETAIL FOR REQUIRED BARRICADES & SIGNS



GENERAL NOTES:

- ① CONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (700) HIGH.
- ② STEADY BURN LIGHTS WILL NOT BE REQUIRED FOR DAY OPERATIONS.
- ③ A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES.
- ④ ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH DIRECT MOTORISTS TO A CLOSED ENTRANCE RAMP SHALL BE COVERED.
- ⑤ THE SIGNING AND BARRICADING WHICH IS REQUIRED BY THIS DETAIL SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).
- ⑥ AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL RAMP CLOSURES.
- ⑦ THE RAMP CLOSURE ADVANCE INFORMATION SIGNS SHALL BE ERECTED IF THE CLOSURE TIME EXCEEDS TWENTY-FOUR (24) HOURS. ADDITIONAL ADVANCE WARNING SIGNS ON EXIT GUIDE SIGNING WILL BE REQUIRED FOR EXIT RAMP CLOSURES THAT EXCEED TWENTY-FOUR (24) HOURS IN LENGTH.
- ⑧ ROAD CONSTRUCTION AHEAD SIGNS MAY BE OMITTED WHEN THIS DETAIL IS USED IN CONJUNCTION WITH OTHER TRAFFIC CONTROL THAT ALREADY INCLUDES A ROAD CONSTRUCTION AHEAD SIGN.
- ⑨ ARTERIAL ROAD CONSTRUCTION AHEAD SIGNS MAY BE OMITTED ON CLOSURES LESS THAN 24 HOURS IN DURATION.

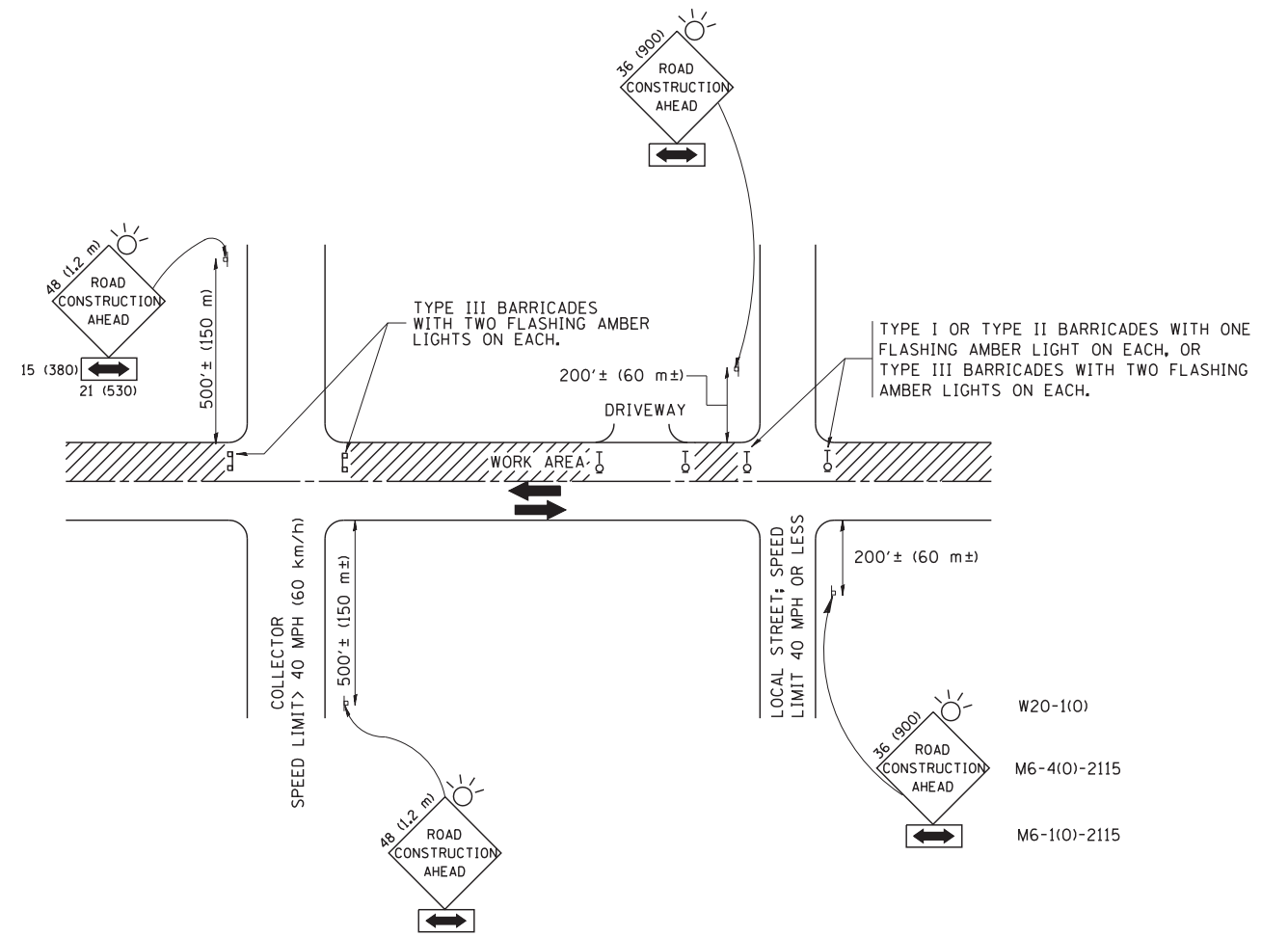
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME = W:\diststd\22x34\tc08.dgn	USER NAME = lqjso	DESIGNED - DWS	REVISED - DWS/JAF 12-02
		DRAWN -	REVISED - JAF 02-06
		CHECKED -	REVISED - SPB 01-07
		DATE - 02-83	REVISED - SPB 12-09

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

FREeway ENTRANCE AND EXIT RAMP CLOSURE DETAILS			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	TC-08		605	486
CONTRACT NO.				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



## TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

### NOTES:

#### A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

a) ONE **ROAD CONSTRUCTION AHEAD** SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.

b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.

2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

a) ONE **ROAD CONSTRUCTION AHEAD** SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.

b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.

3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

#### B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.

D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

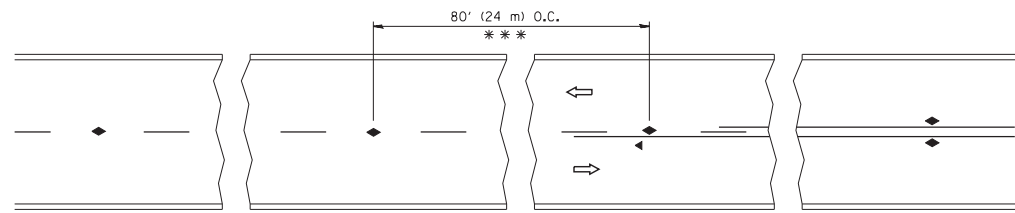
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		DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED - T. RAMMACH 01-06-00

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION FOR  
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

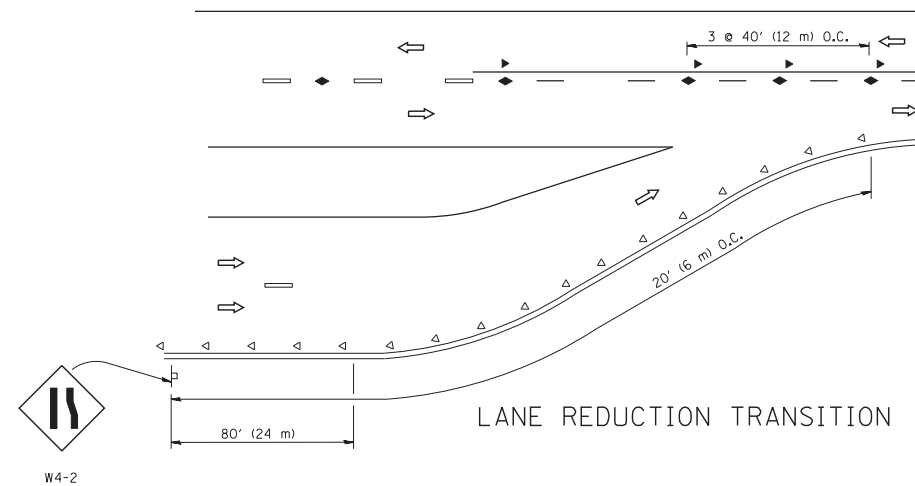
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			605	487
TC-10			CONTRACT NO.	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

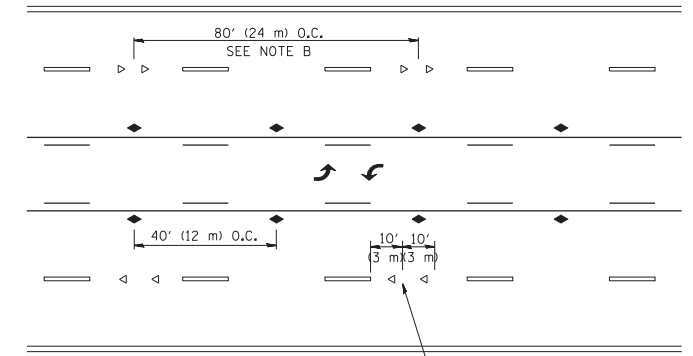


\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

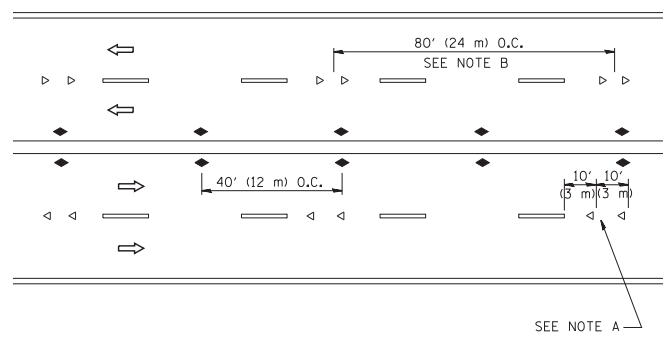
TWO-LANE/TWO-WAY



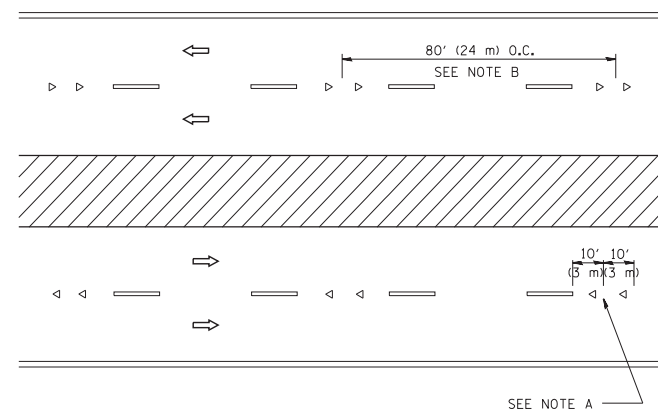
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

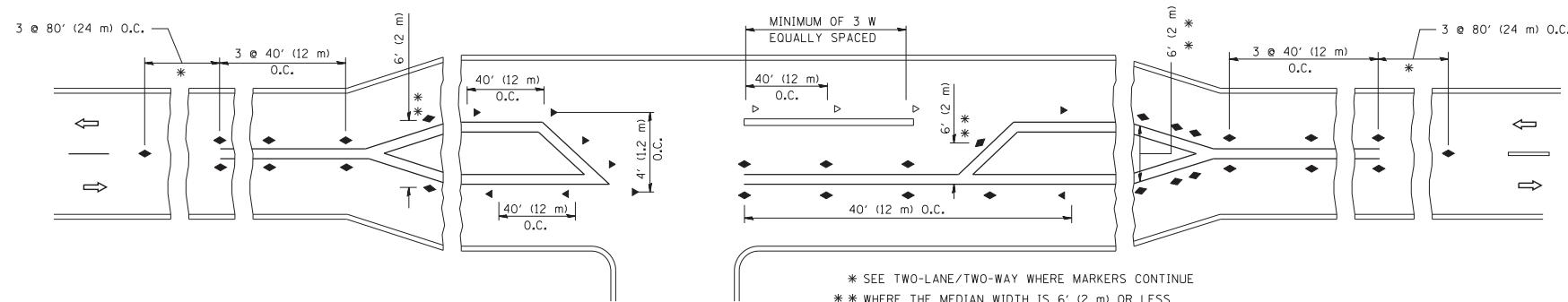
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHALL BE INCLUDED IN THE PLANS WHEN STANDARD SPECIFICATIONS ARE NOT BEING USED.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.



LEFT TURN

\* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE  
 \*\* WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

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

FILE NAME =	USER NAME = lryso	DESIGNED -	REVISED - T. RAMMACHER 09-19-94
ct:\pw\work\p\idot\lryso\d0108315\l1.dgn		DRAWN -	REVISED - T. RAMMACHER 03-12-99
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - T. RAMMACHER 01-06-00
	PLOT DATE = 3/2/2011	DATE -	REVISED - C. JUCIUS 09-09-09

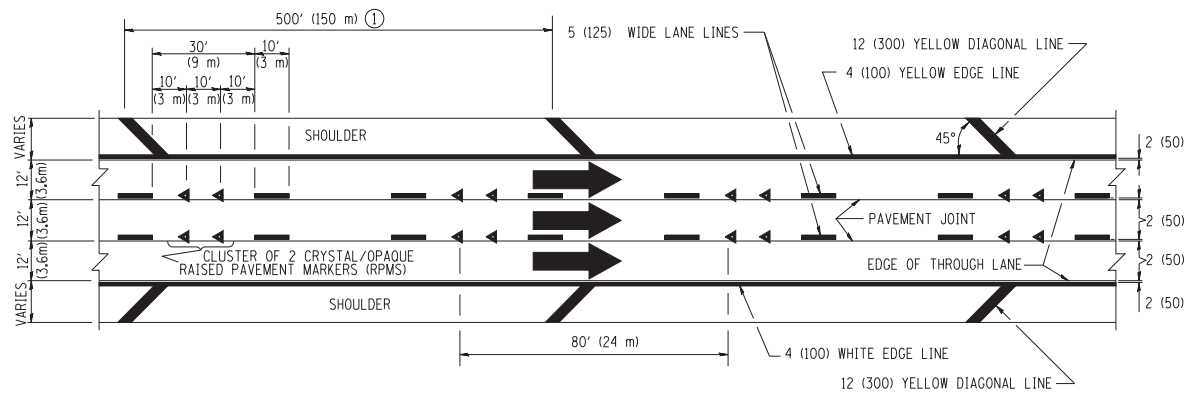
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TYPICAL APPLICATIONS  
RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			605	488
TC-11			CONTRACT NO.	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

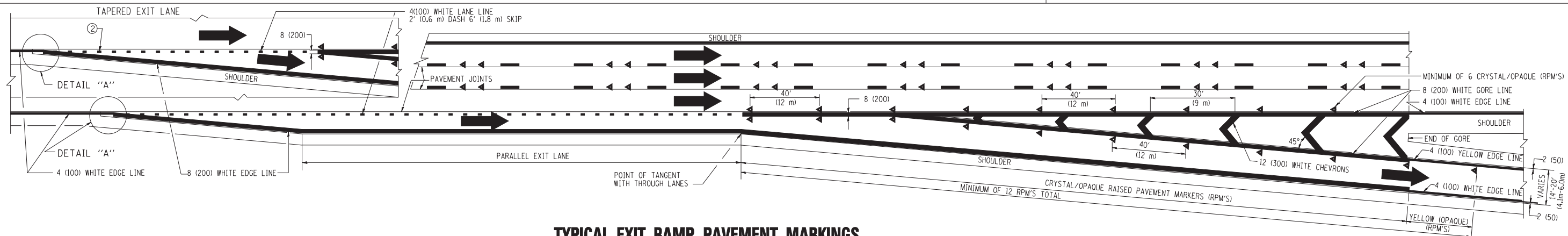




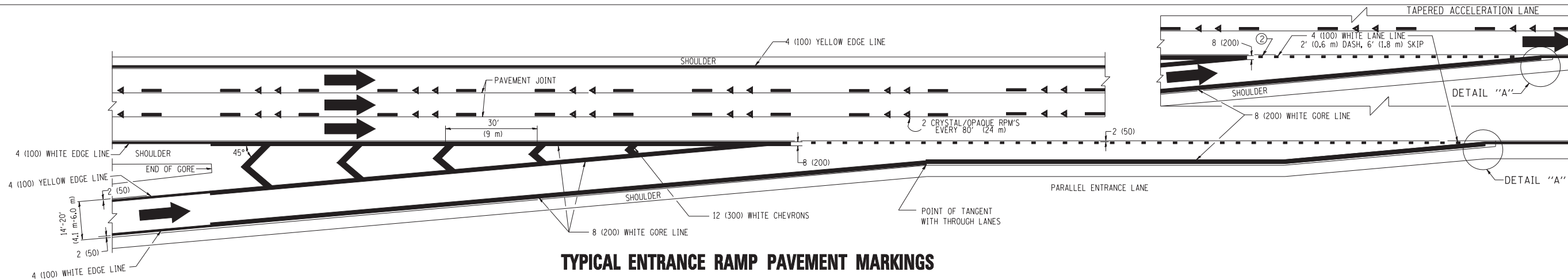
**TYPICAL EDGE LINES & LANE LINES**

**PAVEMENT MARKING MATERIALS**

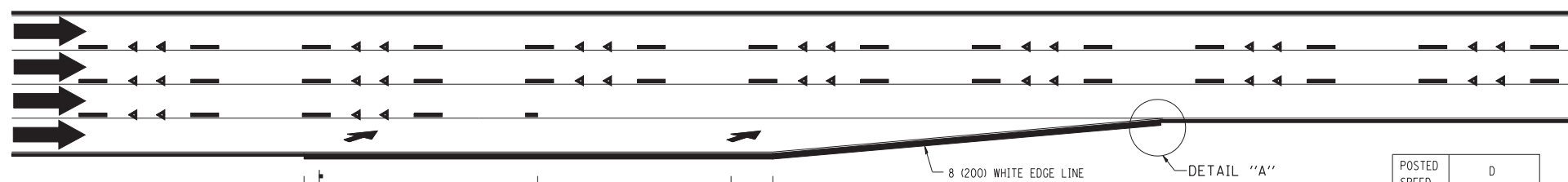
1. THERMO PLASTIC PAVEMENT MARKING LINE SHALL BE USED FOR THE EDGE LINES, GORE LINES, AND DIAGONAL LINES ON BITUMINOUS PAVEMENT ONLY.
2. PREFORMED PLASTIC TYPE B PAVEMENT MARKING LINE SHALL BE USED FOR ALL LANE LINES ON BITUMINOUS PAVEMENT.
3. POLYUREA PAVEMENT MARKING SHALL BE USED FOR ALL MARKINGS ON PCC.



**TYPICAL EXIT RAMP PAVEMENT MARKINGS**

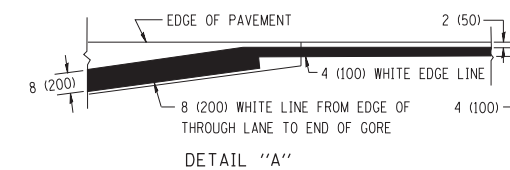


**TYPICAL ENTRANCE RAMP PAVEMENT MARKINGS**



**LANE REDUCTION PAVEMENT MARKINGS**

POSTED SPEED LIMIT	D DISTANCE
45 MPH	750' (230 m)
55 MPH	950' (290 m)
65 MPH	1200' (365 m)



**NOTES:**

- ① THE DIAGONAL LINES SHALL BE SPACED AT 40' (12 m) C-C ACROSS ALL STRUCTURES WHICH ARE 500' (150 m) OR LESS IN LENGTH. THE DIAGONAL LINES ARE NOT REQUIRED ON SHOULDERS WHICH ARE 6' (1.8 m) OR LESS IN WIDTH.
- ② 4" (2' DASH, 6' SKIP) MARKING ON TAPERED ENTRANCE AND EXIT RAMP SHALL BE OMITTED ON TANGENT SECTIONS.

FILE NAME =  
 c:\pwwork\pwwid001\LEYSAN\d0108315\c12.dgn

USER NAME = leysa  
 PLOT SCALE = 50.000' / IN.  
 PLOT DATE = 1/22/2010

DESIGNED - D.W.S.  
 DRAWN -  
 CHECKED -  
 DATE - 01-90

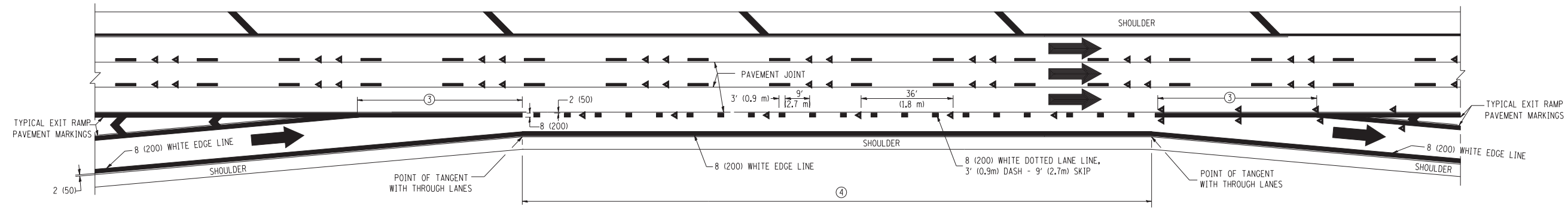
REVISED - D.W.S. 07-96  
 REVISED - J.A.F. 02-06  
 REVISED - S.P.B. 01-07  
 REVISED - S.P.B. 01-10

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

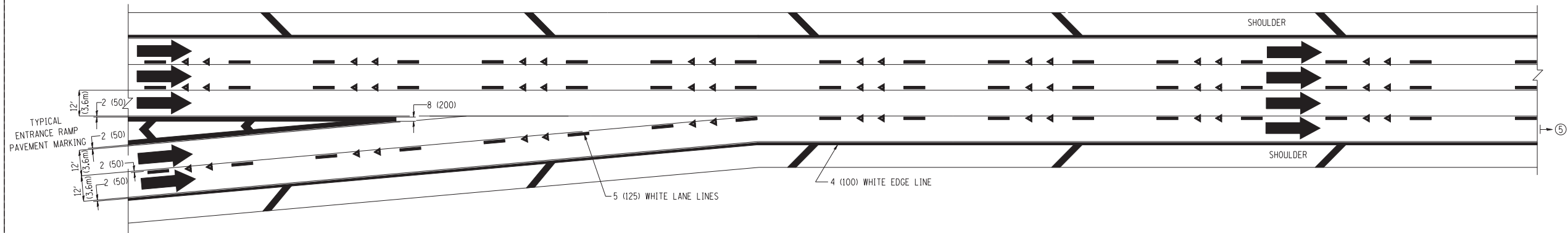
**MULTI-LANE FREEWAY  
 PAVEMENT MARKING DETAILS**

SCALE: NONE SHEET NO. 1 OF 2 SHEETS STA. TO STA.

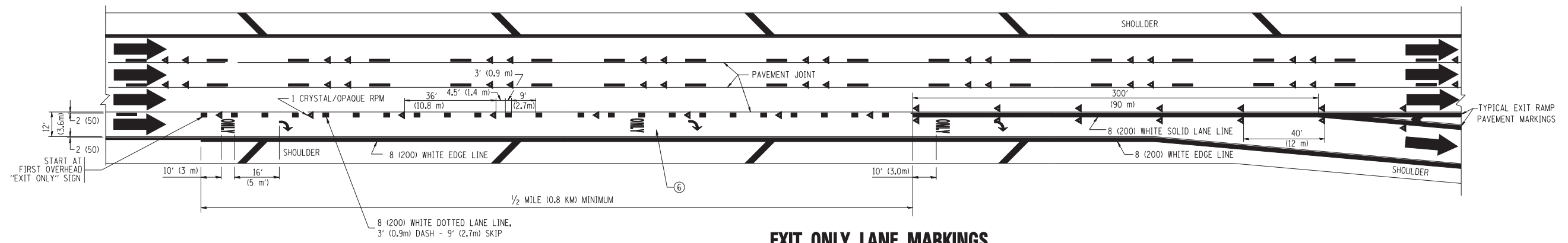
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CONTRACT NO.				
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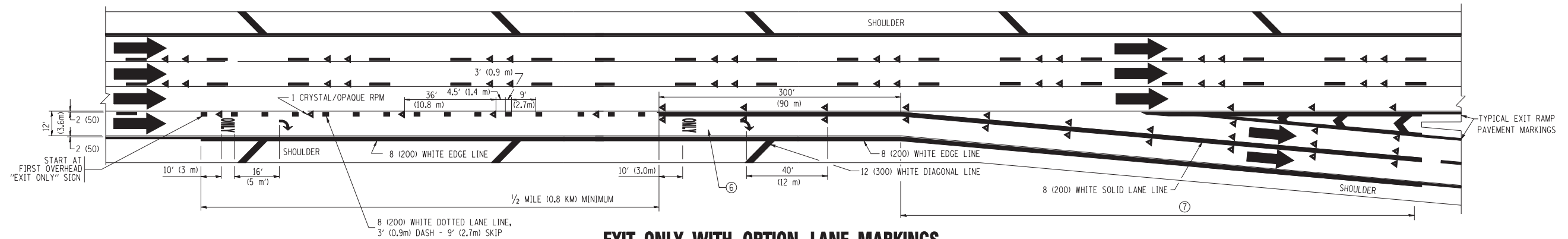
**AUXILIARY LANE MARKINGS**



**TWO LANE ENTRANCE RAMP WITH MERGE MARKINGS**



**EXIT ONLY LANE MARKINGS**



**EXIT ONLY WITH OPTION LANE MARKINGS**

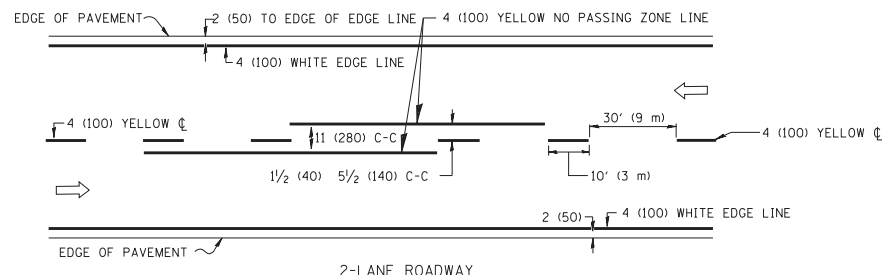
- NOTES**
- ③ OMIT WHEN LENGTH OF AUXILIARY LANE IS LESS THAN 500' (150 m).
  - ④ 8-INCH WIDE DOTTED LANE LINE MARKINGS SHALL BE USED WHEN THE LENGTH OF THE AUXILIARY LANE IS 2 MILES OR LESS.
  - ⑤ FOR TWO-LANE ENTRANCE RAMP, IF RIGHT LANE ENDS, USE TYPICAL ENTRANCE RAMP PAVEMENT MARKINGS.
  - ⑥ ONLY AND ARROWS EQUALLY SPACED, 500' (150 m) MAXIMUM SPACING. FULL SIZE LETTERS AND ARROW SHALL BE USED.
  - ⑦ CONTINUE 8" SOLID LANE LINE THROUGH EXIT TO END OF PAVED GORE.

FILE NAME =	USER NAME = leysa	DESIGNED - D.W.S.	REVISED - D.W.S. 07-96
ce:\pw\work\PWIDOT\LEYSAN\0108315\tc12.dgn		DRAWN -	REVISED - J.A.F. 02-06
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - S.P.B. 01-07
	PLOT DATE = 1/22/2010	DATE - 01-90	REVISED - S.P.B. 01-10

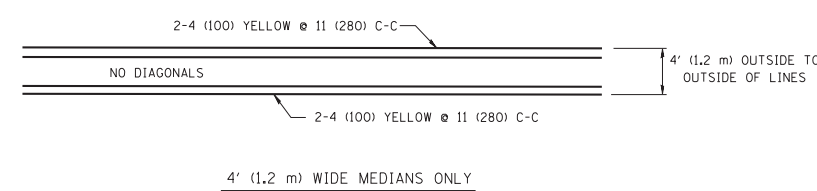
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>MULTI-LANE FREEWAY PAVEMENT MARKING DETAILS</b>			
SCALE: NONE	SHEET NO. 2 OF 2 SHEETS	STA.	TO STA.

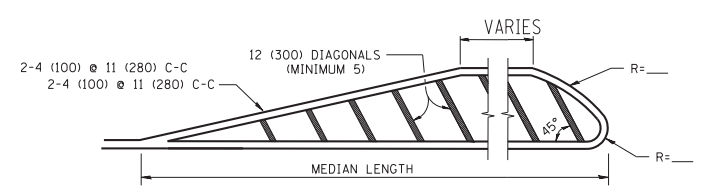
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO.	



2-LANE ROADWAY

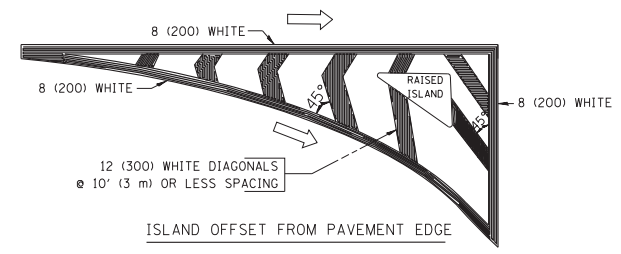


4' (1.2 m) WIDE MEDIANS ONLY

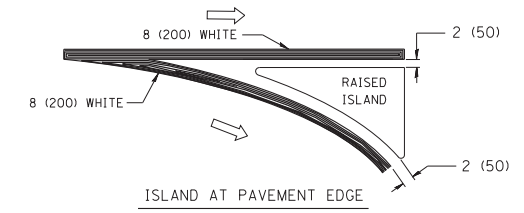


MEDIANS OVER 4' (1.2 m) WIDE

DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))  
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)  
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

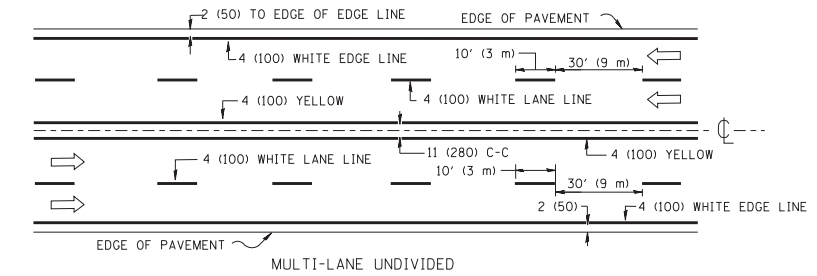


ISLAND OFFSET FROM PAVEMENT EDGE

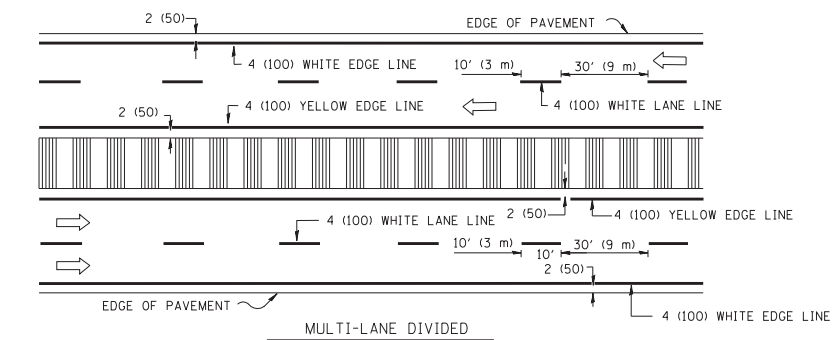


ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING



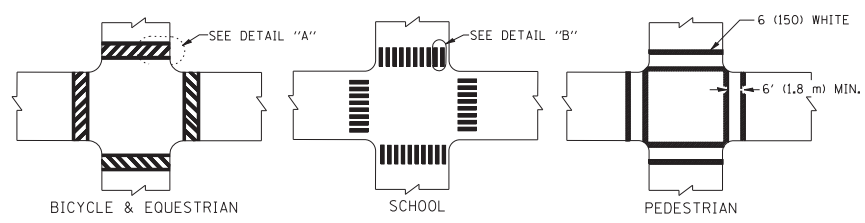
MULTI-LANE UNDIVIDED



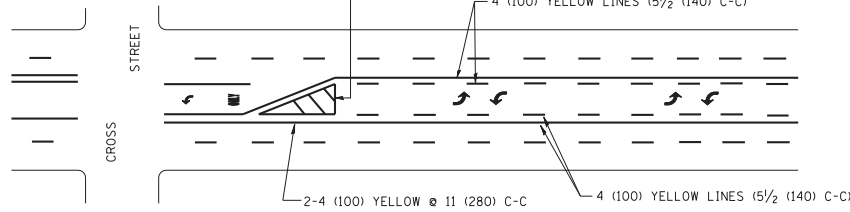
MULTI-LANE DIVIDED WITH MOUNTABLE MEDIAN

NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

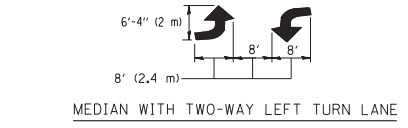
TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING



TYPICAL PAINTED MEDIAN MARKING

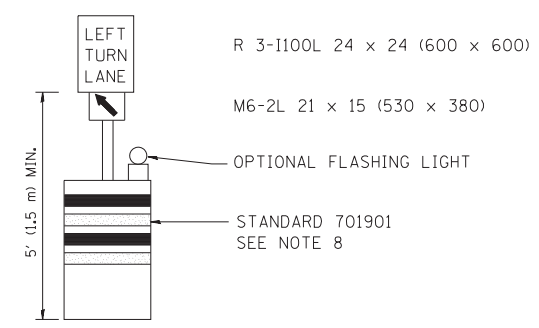
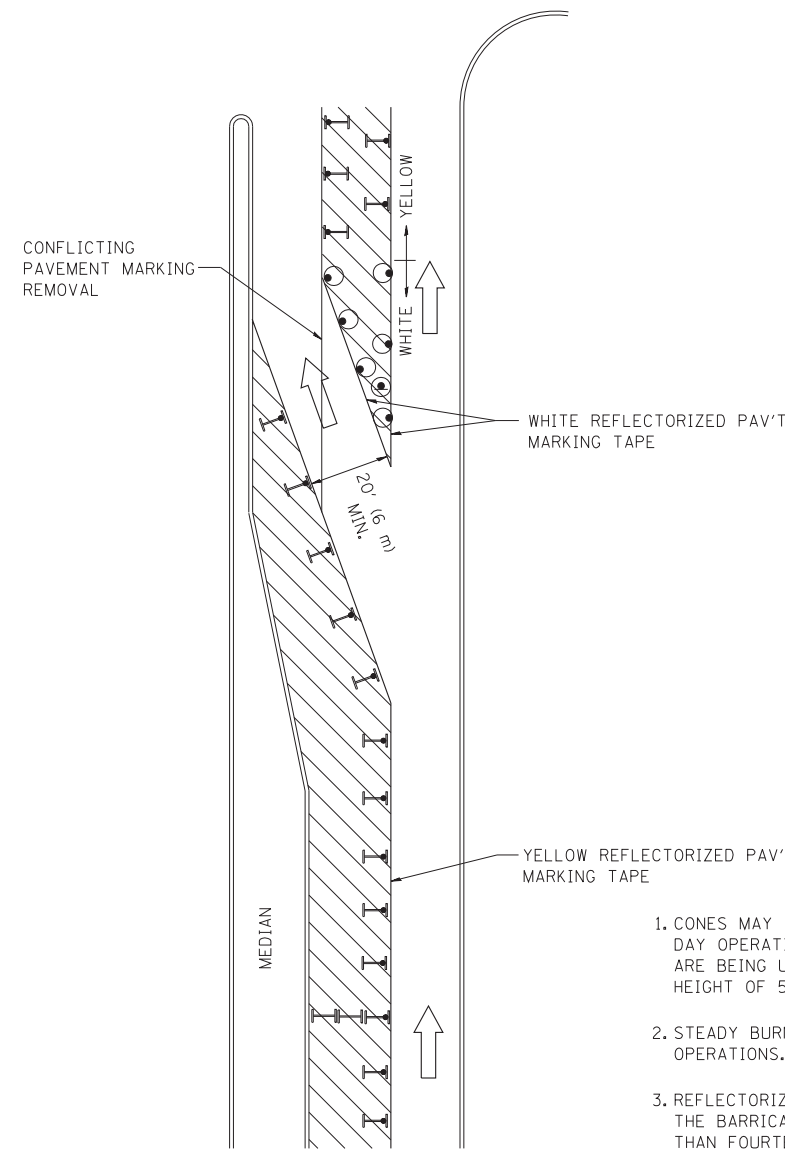


TYPICAL TURN LANE MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION	4 (100)	SOLID	YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE
NO PASSING ZONE LINES: FOR BOTH DIRECTIONS	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	8' (2.4m) LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45°	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" 15 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m²) EACH "X"=54.0 SQ. FT. (5.0 m²)
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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









**GENERAL NOTES**

1. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT. WHEN CONES ARE BEING USED, THE "LEFT TURN LANE" SIGN MAY BE SKID MOUNTED AT A MINIMUM HEIGHT OF 5' (1.5 m).
2. STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
3. REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH TURN BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.
4. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-100 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
5. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
6. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
7. FORM OPER 725 IS REQUIRED.
8. IF A DRUM OR TYPE II BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 REQUIREMENTS IS NOT AVAILABLE, THE SIGNS SHALL BE MOUNTED, ABOVE THE BARRICADES, ON SEPARATE SIGNS SUPPORTS THAT MEET NCHRP 350 PREQUIREMENTS.
9. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

**LEGEND**

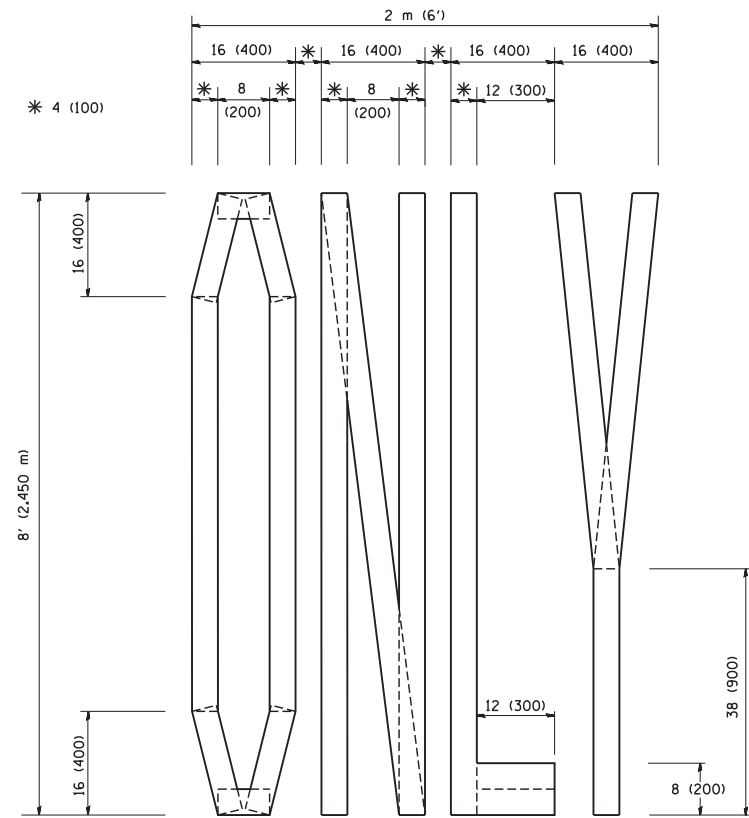
-  WORK AREA
-  LANE OPEN TO TRAFFIC
-  TYPE I OR II BARRICADE WITH STEADY BURN LIGHT
-  DRUM WITH STEADY BURN LIGHT
-  DRUM WITH SIGN (WITH OPTIONAL FLASHING LIGHT) SEE DETAIL
-  TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

FILE NAME =	USER NAME = drivakosgn	REVISED -T. RAMMACHER 09-08-94	REVISED - R. BORO 09-14-09
ct:\pw\work\PWIDOT\DRIVAKOSGN\d0108315\14.dgn		REVISED - A. HOUSEH 11-07-95	REVISED -
		REVISED - A. HOUSEH 10-12-96	REVISED -
		REVISED -T. RAMMACHER 01-06-00	REVISED -

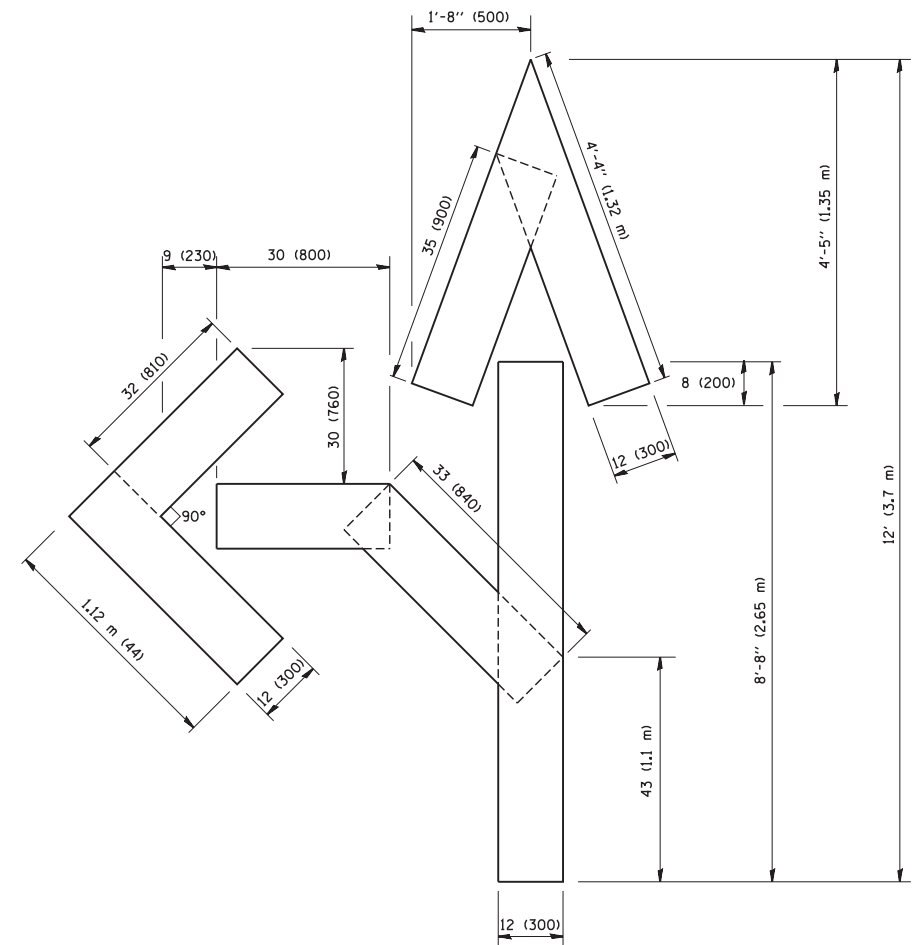
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

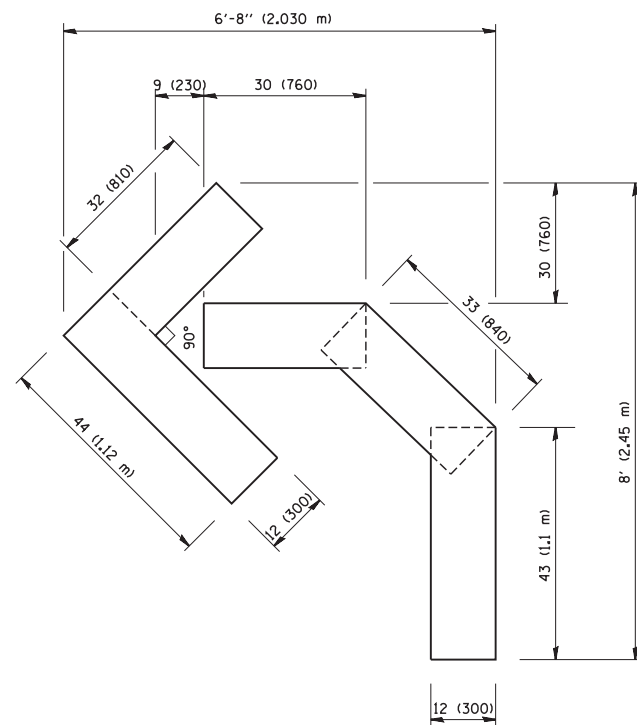
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			605	492
TC-14		CONTRACT NO.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



QUANTITY  
 4 (100) LINE = 64.1 ft. (19.7 m)  
 21.1 sq. ft. (1.97 sq. m)



QUANTITY  
 4 (100) LINE = 82.5 ft. (25.3 m)  
 27.5 sq. ft. (2.53 sq. m)



QUANTITY  
 4 (100) LINE = 45.5 ft. (13.9 m)  
 15.2 sq. ft. (1.39 sq. m)

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

FILE NAME = W:\diststd\22x34\tc16.dgn	USER NAME = gaglionobt	DESIGNED -	REVISED -T. RAMMACHER 06-05-96
		DRAWN -	REVISED -T. RAMMACHER 11-04-97
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -T. RAMMACHER 03-02-98
	PLOT DATE = 1/4/2008	DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00

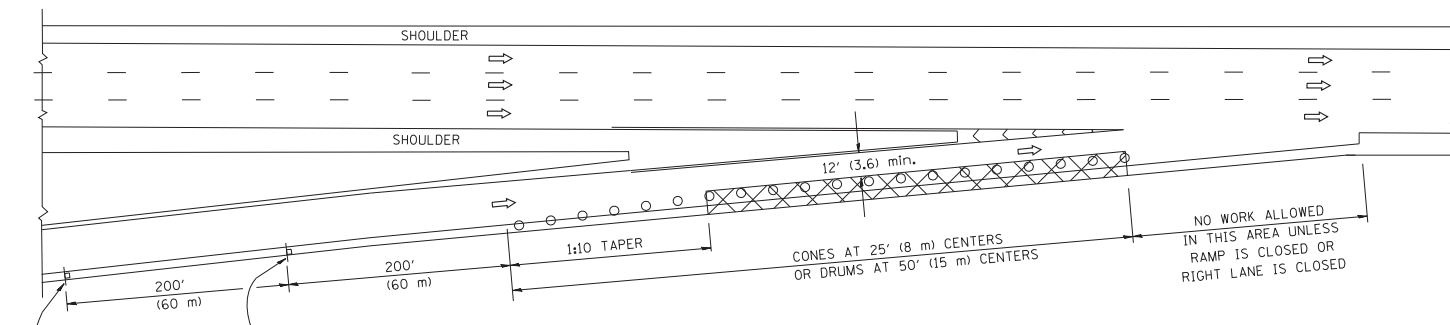
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING LETTERS AND SYMBOLS  
 FOR TRAFFIC STAGING**

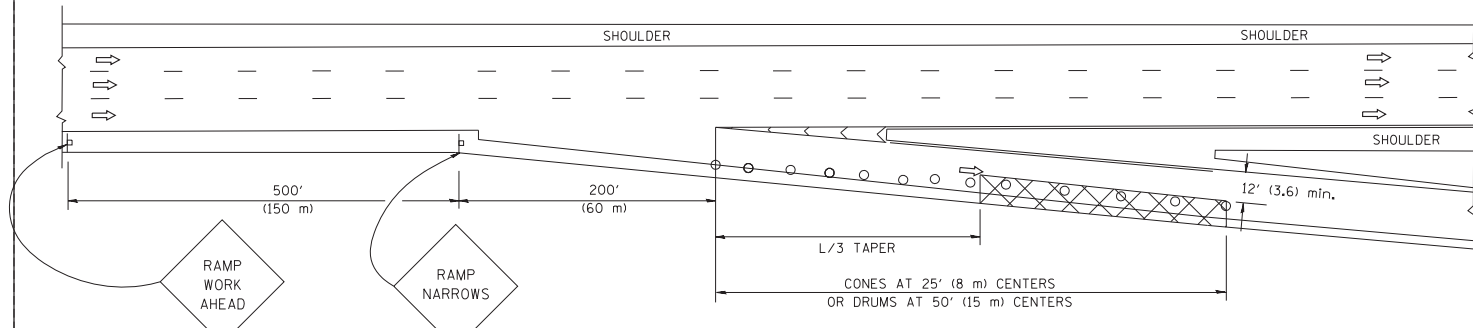
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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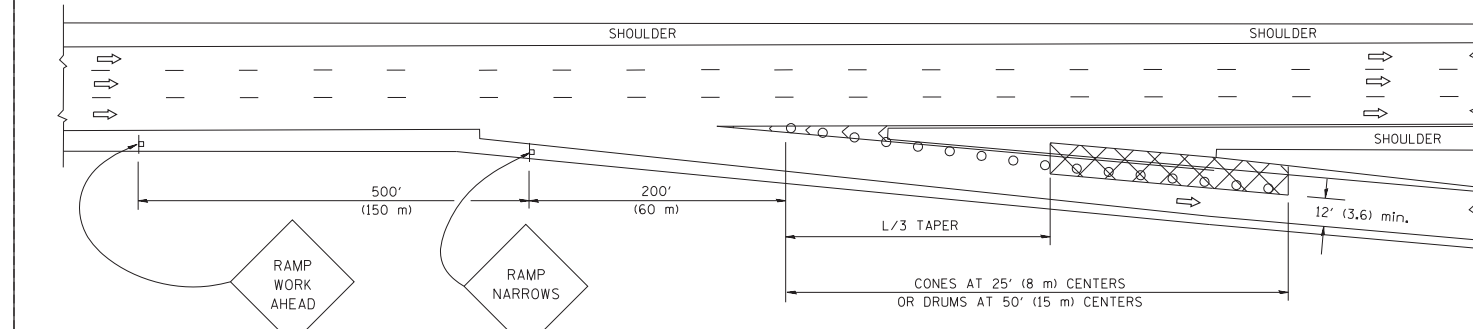
PARTIAL RAMP CLOSURE DETAILS



TYPICAL ENTRANCE RAMP



TYPICAL EXIT RAMP



TYPICAL EXIT RAMP

SYMBOLS

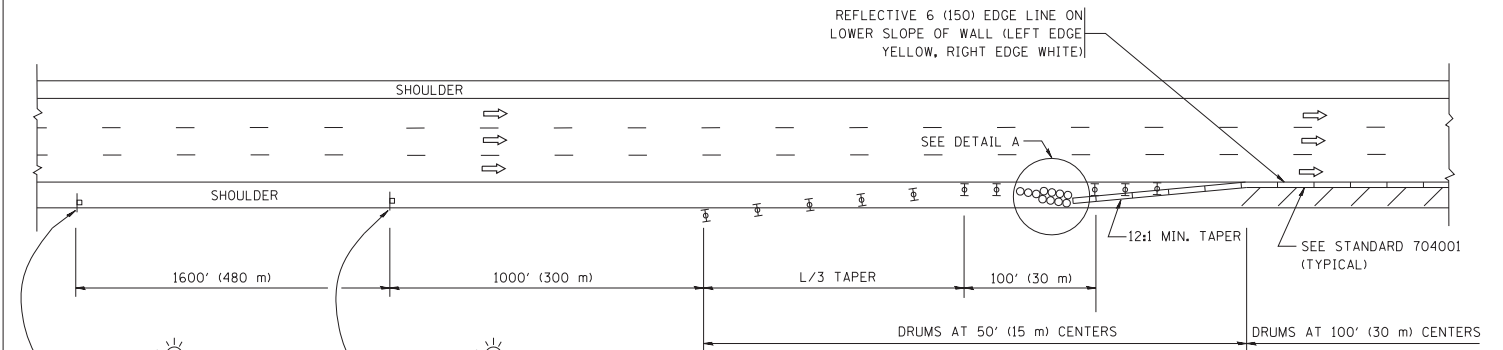
- ACTIVE WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH STEADY BURN MONO-DIRECTIONAL LIGHT
- CONE, DRUM OR BARRICADE

GENERAL NOTES

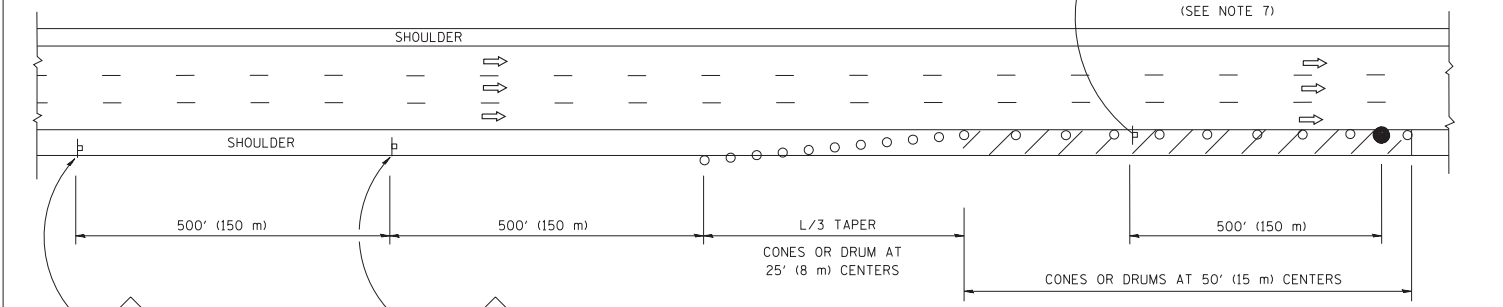
1. THE "L" DISTANCE EQUALS:
 

SPEED LIMIT	FORMULAS
45 mph (80 km/h) OR GREATER:	METRIC    ENGLISH L=0.65(W)(S)    L=(W)(S)
W = WIDTH OF OFFSET IN FEET (METERS) S = NORMAL POSTED SPEED MPH (KM/H)	
2. PLASTIC DRUMS WITH HIGH PERFORMANCE REFLECTIVE SHEETING AND STEADY BURNING LIGHTS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES.
3. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
4. FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.

SHOULDER CLOSURE DETAILS

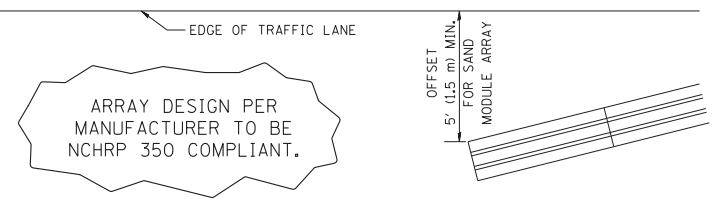


PERMANENT SHOULDER CLOSURE



DAYTIME SHOULDER CLOSURE

THIS DETAIL IS USED WHERE:  
1. VEHICLES, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH IN AN AREA CLOSER THAN 15' (4.5 m) TO THE EDGE OF PAVEMENT FOR A PERIOD IN EXCESS OF 15 MINUTES.



DETAIL "A"  
IMPACT ATTENUATOR, TEMPORARY  
(SEE NOTE 5)

5. THE IMPACT ATTENUATOR, TEMPORARY IS NOT REQUIRED WHEN THE TEMPORARY CONCRETE BARRIER WALL IS PROTECTED BY OR IS TIED INTO THE EXISTING GUARDRAIL. IF OFFSET IS LESS THAN 5 FEET USE NARROW USE TYPE DEVICE TO MEET NCHRP350.
6. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL FREEWAY CLOSURES.
7. THE FLAGGER AND FLAGGER SIGN ARE REQUIRED AT THE ABOVE WORK SITES WHEN:
  - a. FOUR OR MORE WORK VEHICLES ENTER THE TRAFFIC LANES IN A ONE HOUR PERIOD.
  - b. THE WORK AVTIVITY REQUIRES FREQUENT ENCROACHMENT INTO THE LANE OPEN TO TRAFFIC.
 THE FLAGGER SHALL BE STATIONED APPROXIMATELY 100' (30 m) TO 200' (60 m) IN ADVANCE OF THE WORKERS.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.


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		DRAWN - D.W.S.	REVISED - J.A.F. 12-06
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - S.P.B. 01-07
	PLOT DATE = 1/26/2010	DATE - 11-96	REVISED - S.P.B. 12-09


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION


TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	TC-17		605	494
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO.	

**ROUTE MARKERS**

 FOR U.S. ROUTES  
M1-40-2424

 FOR ILLINOIS ROUTES  
M1-50-2424

 R.R. UNMARKED ROUTES  
SPECIAL 24" x 18" VARIABLE  
4" BLACK LETTERS ON WHITE  
REFLECTIVE BACKGROUND

**ARROWS SIGNS**

 M5-1L-2115

 M5-1R-2115

 M6-1-2115

 M6-1-2115

 M6-3-2115

**CARDINAL DIRECTION & DETOUR SIGNS**

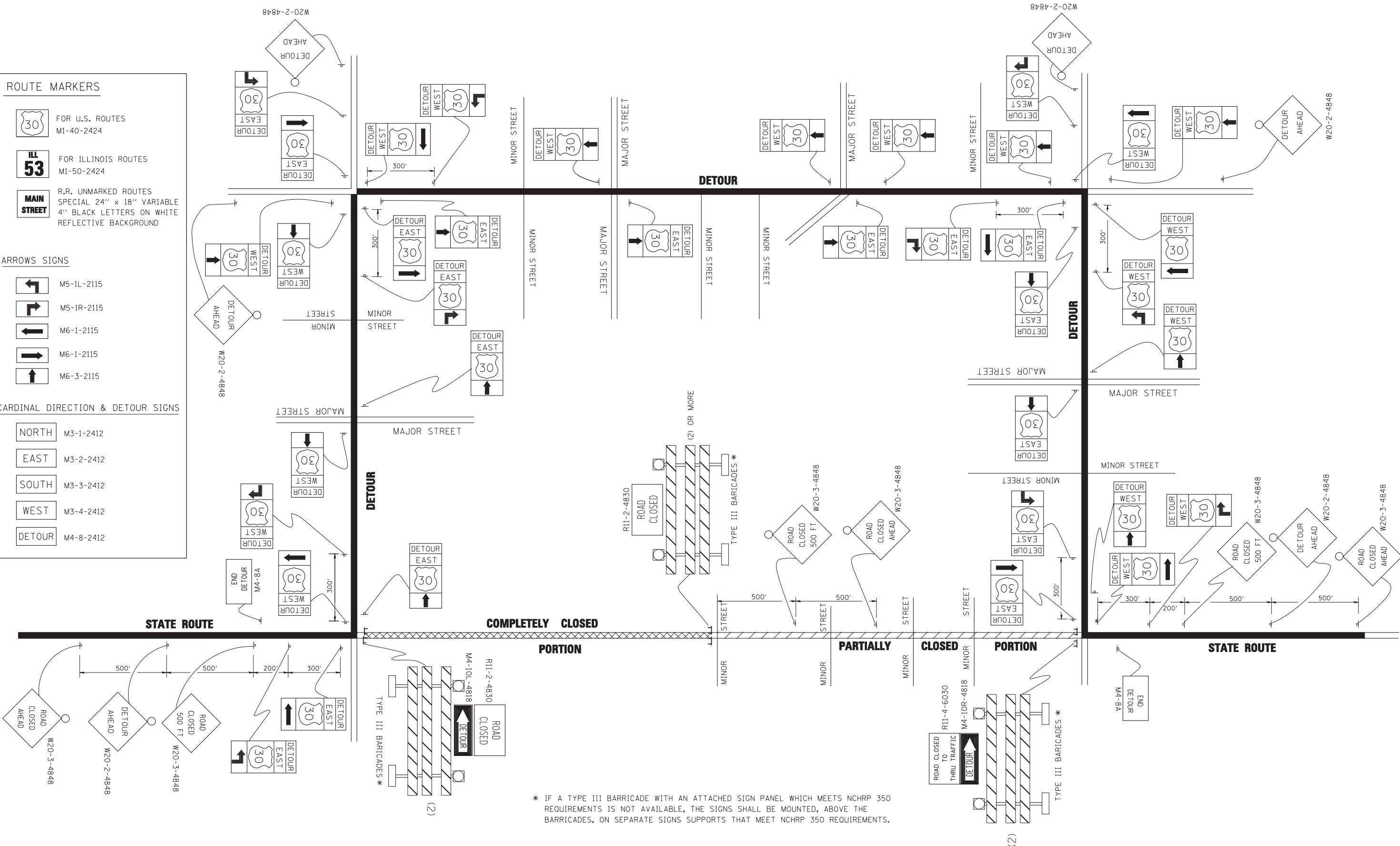
 NORTH M3-1-2412

 EAST M3-2-2412

 SOUTH M3-3-2412

 WEST M3-4-2412

 DETOUR M4-8-2412



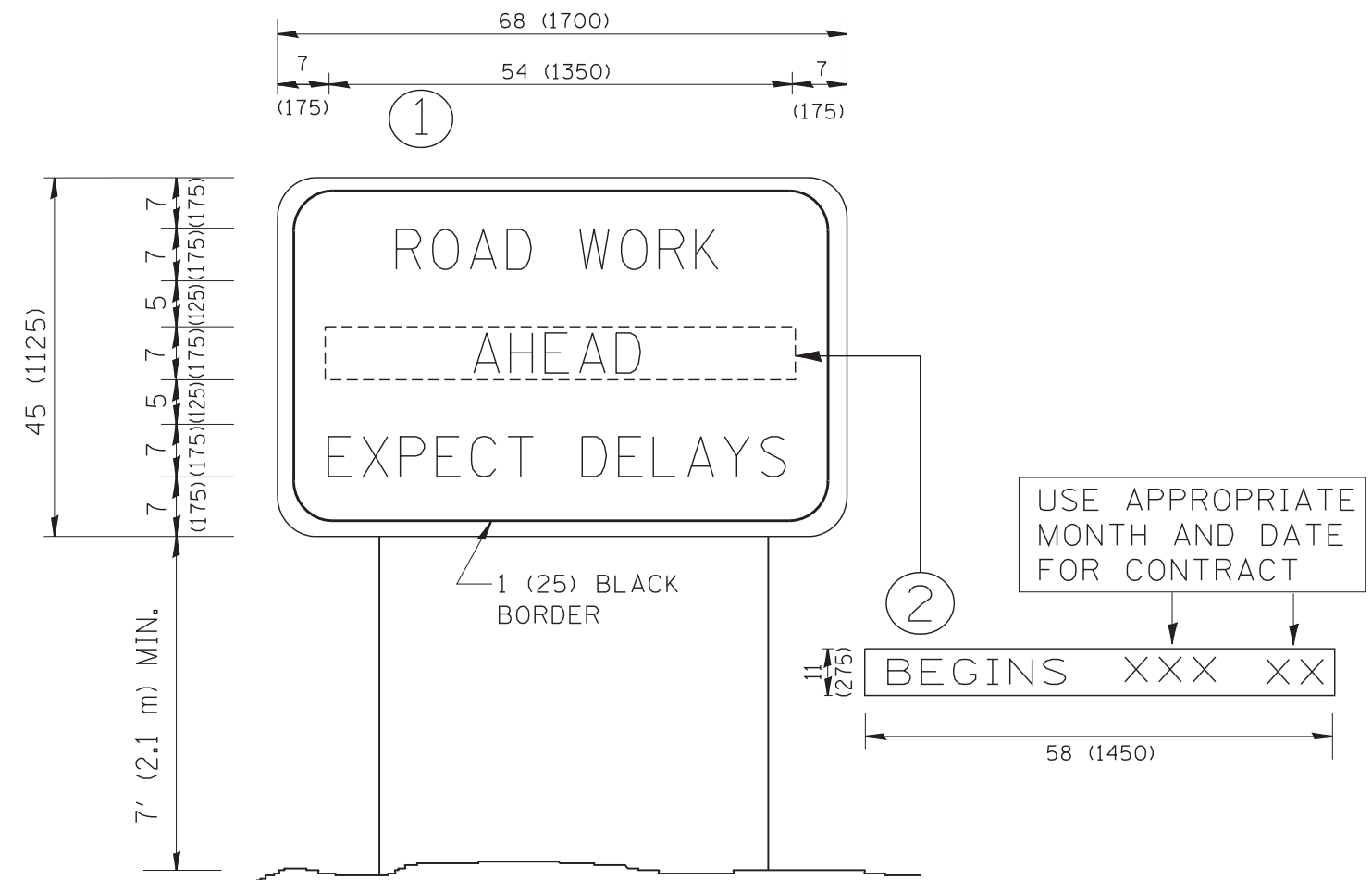
\* IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 REQUIREMENTS IS NOT AVAILABLE, THE SIGNS SHALL BE MOUNTED, ABOVE THE BARRICADES, ON SEPARATE SIGNS SUPPORTS THAT MEET NCHRP 350 REQUIREMENTS.

FILE NAME =	USER NAME = drivakosgn	DESIGNED -	REVISED - 10-18-02
ct:\pw\work\PWIDOT\DRIVAKOSGN\d0108315\1421.dgn		DRAWN -	REVISED - R. BORO 09-14-09
		PLOT SCALE = 49.9999' / IN.	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>DETOUR SIGNING FOR CLOSING STATE HIGHWAYS</b>	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	<b>TC-21</b>		605	495
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		CONTRACT NO.		



**NOTES:**

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME = W:\diststd\22x34\tc22.dgn	USER NAME = gegltonbt	DESIGNED - DRAWN -	REVISED - R. MIRS 09-15-97 REVISED - R. MIRS 12-11-97
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07

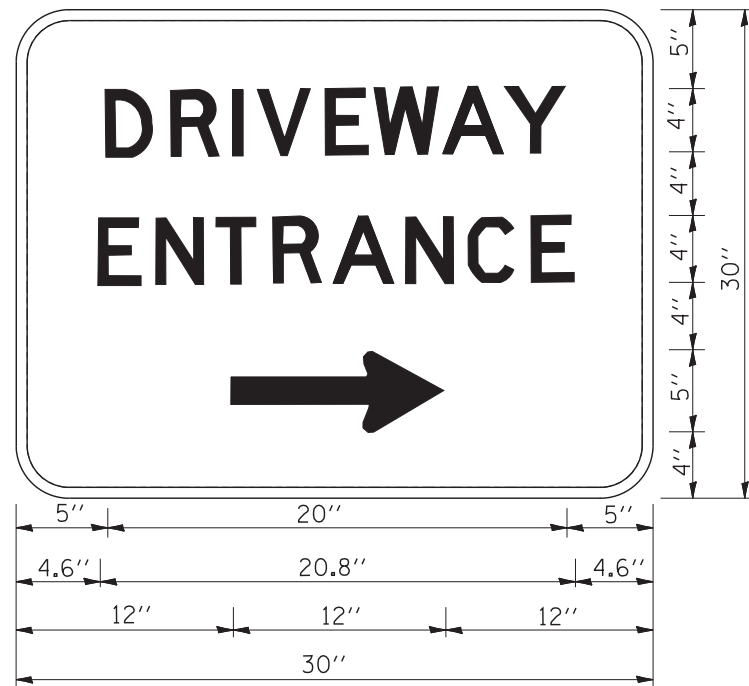
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD  
INFORMATION SIGN**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			605	496
TC-22		CONTRACT NO.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				





3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED  
 "DRIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" x 5.0"

**NOTES:**

1. HALF OF THE SIGNS WILL REQUIRE A LEFT HAND FACING ARROW.
2. TWO SIGNS SHALL BE USED AT EACH COMMERCIAL ENTRANCE  
 PLACED BACK-TO-BACK; ONE WITH A RIGHT HAND ARROW (SHOWN)  
 SHALL BE PLACED ON THE NEAR RIGHT SIDE THE DRIVEWAY  
 AND ONE WITH A LEFT HAND ARROW SHALL BE PLACED ON THE  
 FAR LEFT SIDE OF THE DRIVEWAY.
3. SIGNS TO BE PAID FOR AS ITEM "TEMPORARY INFORMATION SIGNING".

FILE NAME = W:\diststd\22x34\tc26.dgn	USER NAME = gegl@nabt	DESIGNED - DRAWN -	REVISED - C. JUCIUS 02-15-07 REVISED -
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/4/2008	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

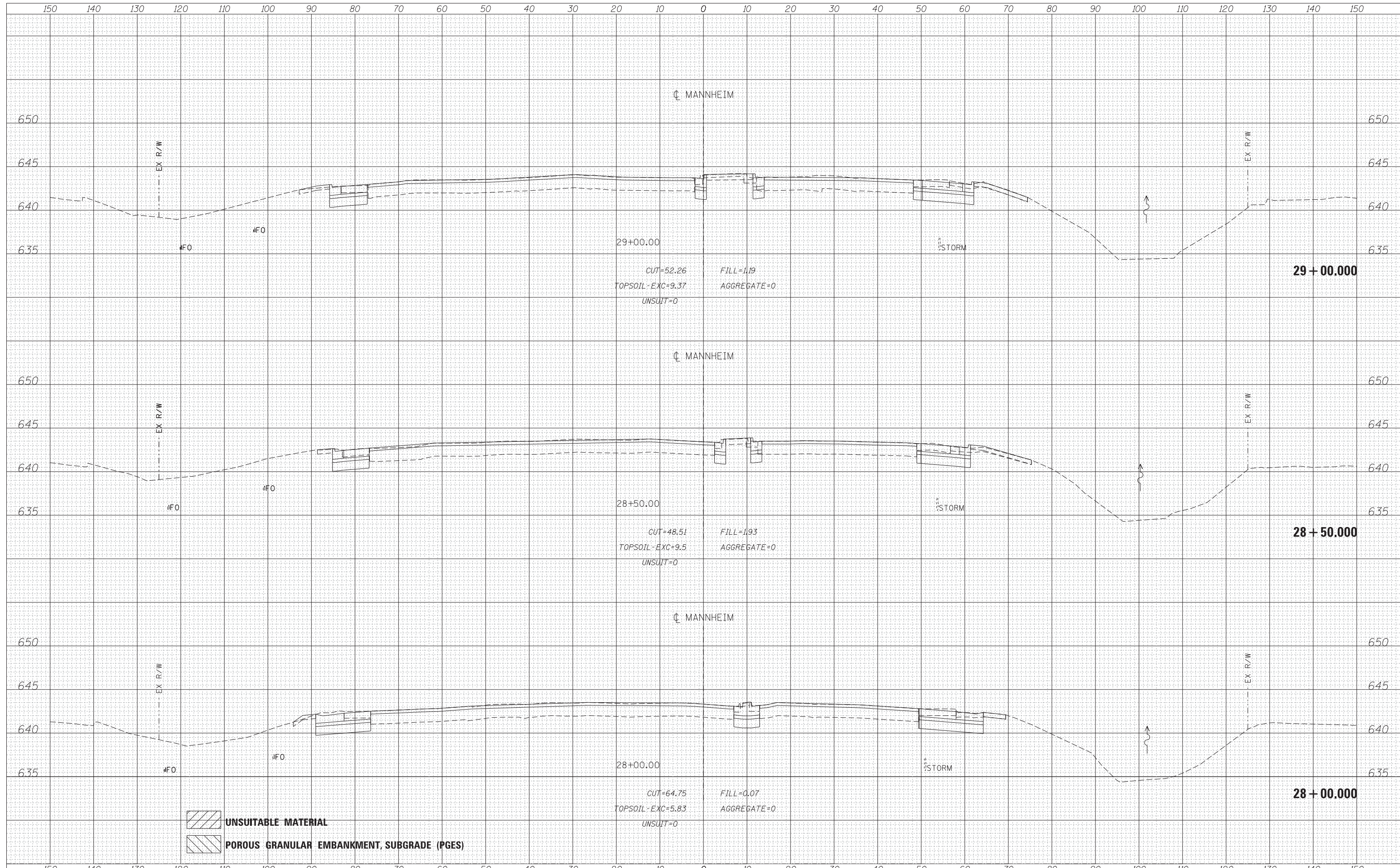
**DRIVEWAY ENTRANCE SIGNING**



SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			605	497
TC-26			CONTRACT NO.	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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

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



 UNSUITABLE MATERIAL  
 POROUS GRANULAR EMBANKMENT, SUBGRADE (PGES)



USER NAME = lsupencheck	DESIGNED - LLS	REVISED -
	DRAWN - MMK/LLS	REVISED -
PLOT SCALE = 10:1	CHECKED - LLS	REVISED -
PLOT DATE = 22-OCT-2012	DATE - 10/19/2012	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

MANNHEIM ROAD

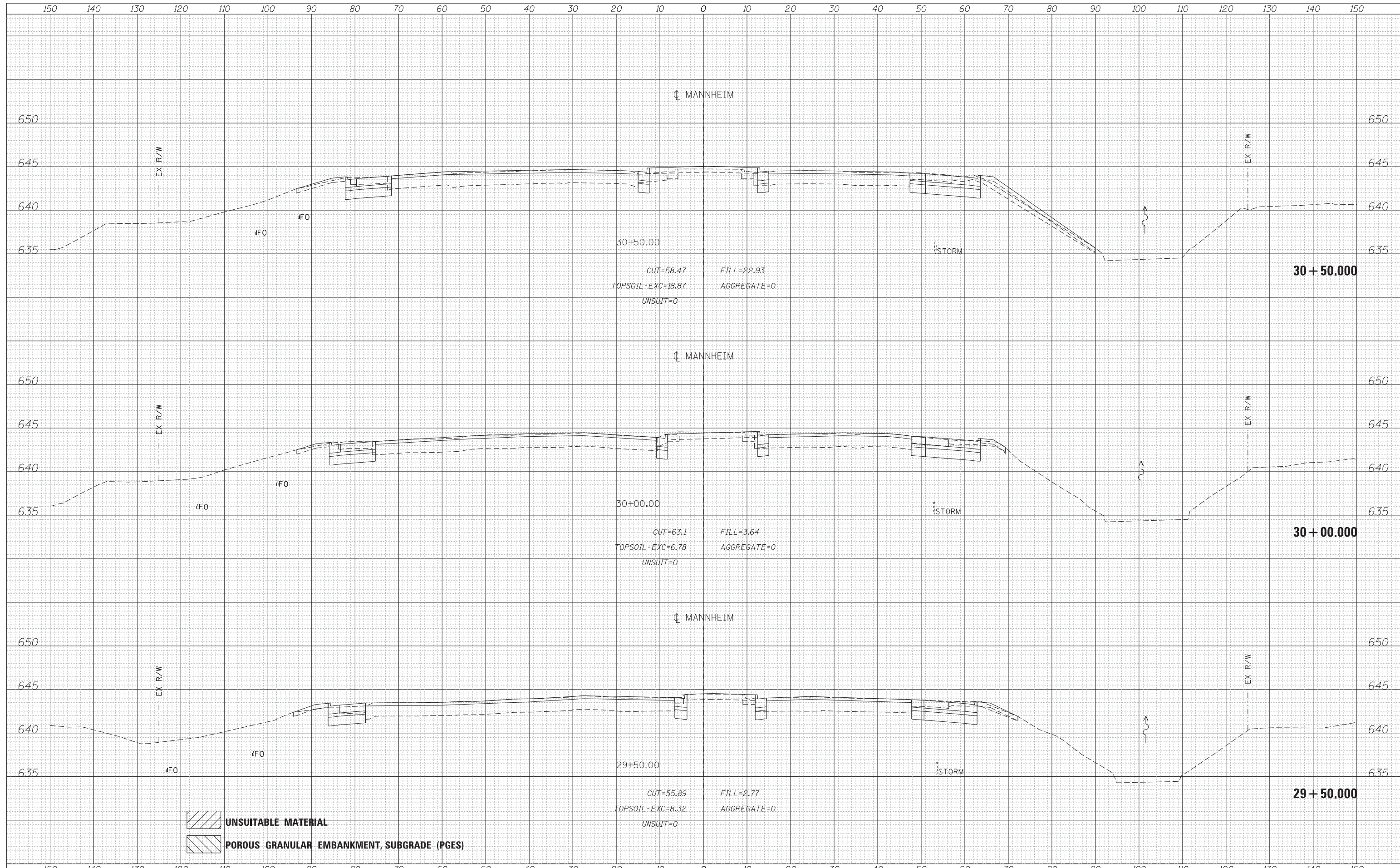
SCALE: SHEET NO. OF SHEETS STA. 28+00.000 TO STA. 29+00.000



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	498
				CONTRACT NO. 60G37
ILLINOIS FED. AID PROJECT				


FILE NAME = \\chw00\Projects\30120\B\GEOPAK\_Mannheim\DI60G37-sht-XS-Mannheim.dgn

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

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



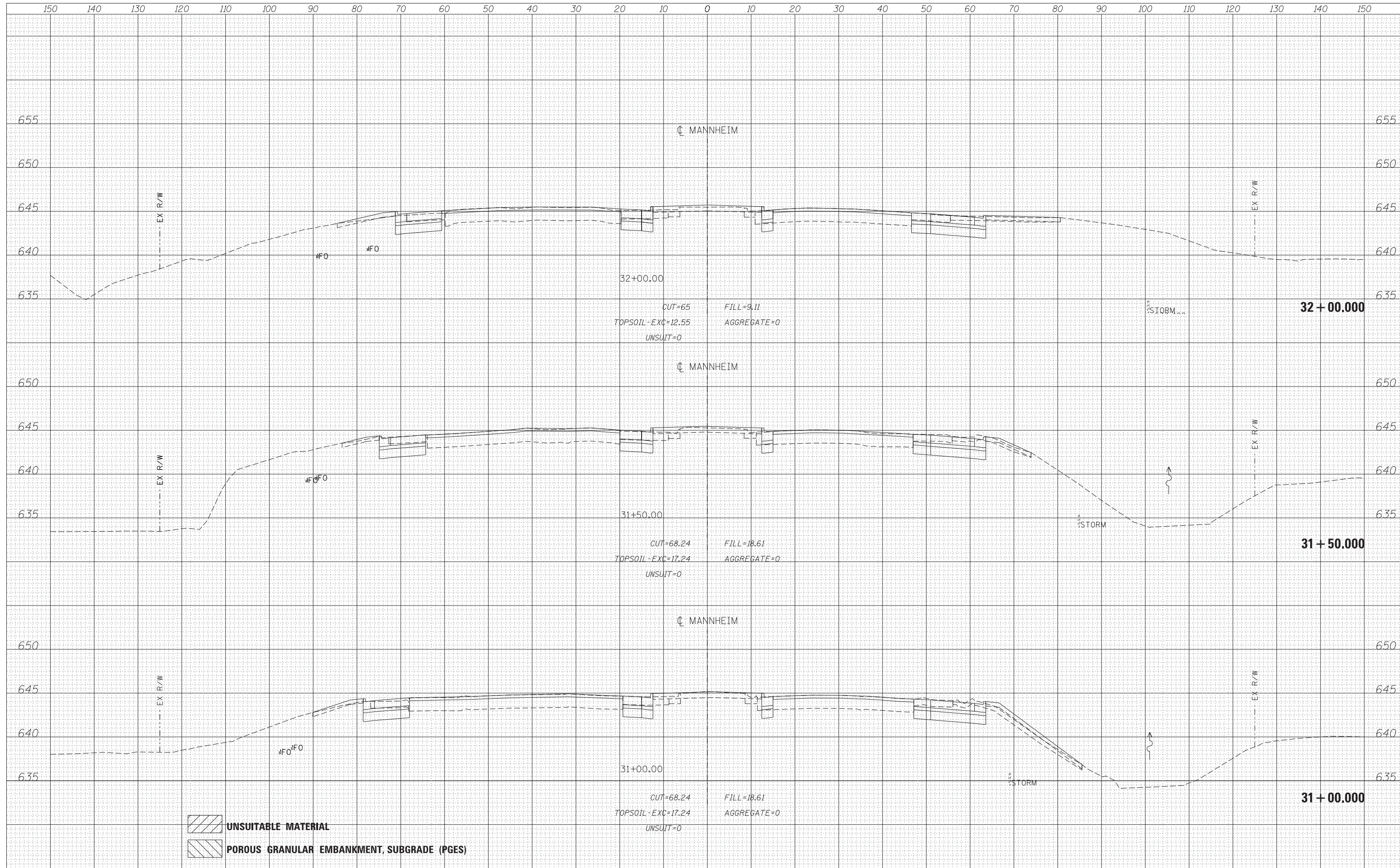
 UNSUITABLE MATERIAL  
 POROUS GRANULAR EMBANKMENT, SUBGRADE (PGES)

	USER NAME = lsupencheck	DESIGNED - LLS	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>MANNHEIM ROAD</b>			F.A.P. R.T.E. = 330	SECTION = 0105 WRS&HB	COUNTY = COOK	TOTAL SHEETS = 605	SHEET NO. = 499
	PLOT SCALE = 10:1	DRAWN - MMK/LLS	REVISED -		SCALE:	SHEET NO.	OF SHEETS	STA. 29+50.00	TO STA. 30+50.00	CONTRACT NO. 60G37		
	PLOT DATE = 22-OCT-2012	CHECKED - LLS	REVISED -							ILLINOIS FED. AID PROJECT		
	DATE = 10/19/2012	DATE = 10/19/2012	REVISED -									

FILE NAME = \\chw00\Projects\30120\B\GEOPAK\_Mannheim\DI60G37-sht-XS-Mannheim.dgn

DATE	
BY	
FINISHED	
PLOTTED	
TEMPLATE	
AREAS CHECKED	
NO.	

DATE	
BY	
ORIGINAL SURVEY	
NOTE BOOK	
AREAS CHECKED	
NO.	



USER NAME = lsupencheck	DESIGNED - LLS	REVISED -
	DRAWN - MMK/LLS	REVISED -
PLOT SCALE = 10:1	CHECKED - LLS	REVISED -
PLOT DATE = 22-OCT-2012	DATE - 10/19/2012	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**MANNHEIM ROAD**

SCALE:	SHEET NO.	OF	SHEETS	STA. 31+00.00	TO STA. 32+00.00
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	500
CONTRACT NO. 60G37				

FILE NAME = \\chw00\Projects\30120\B\GEOPAK\_Mannheim\DI60G37-sht-XS-Mannheim.dgn