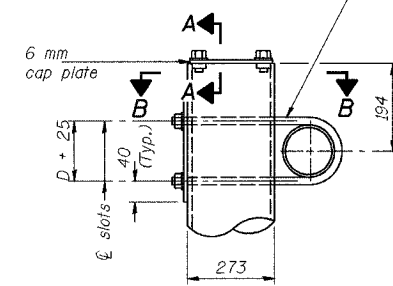


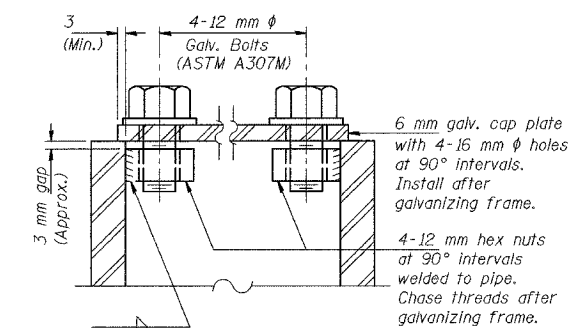
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE No.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	*	PEORIA	1360	1301
STA.		TO STA.		
ILLINOIS REGION		ILLINOIS PROJECT		
* (72-7)R-3		CONTRACT NO. 68200		

19 mm  $\phi$  U-bolt Provide two washers and two hexagon locknuts. (4)  
21 mm x 51 mm slots on  $\phi$  DN 250 pipe. (4 slots required per pipe)

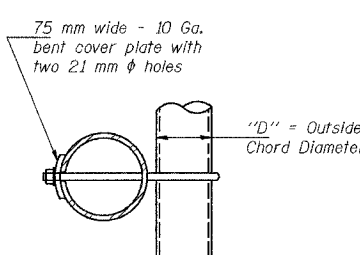


DETAIL A

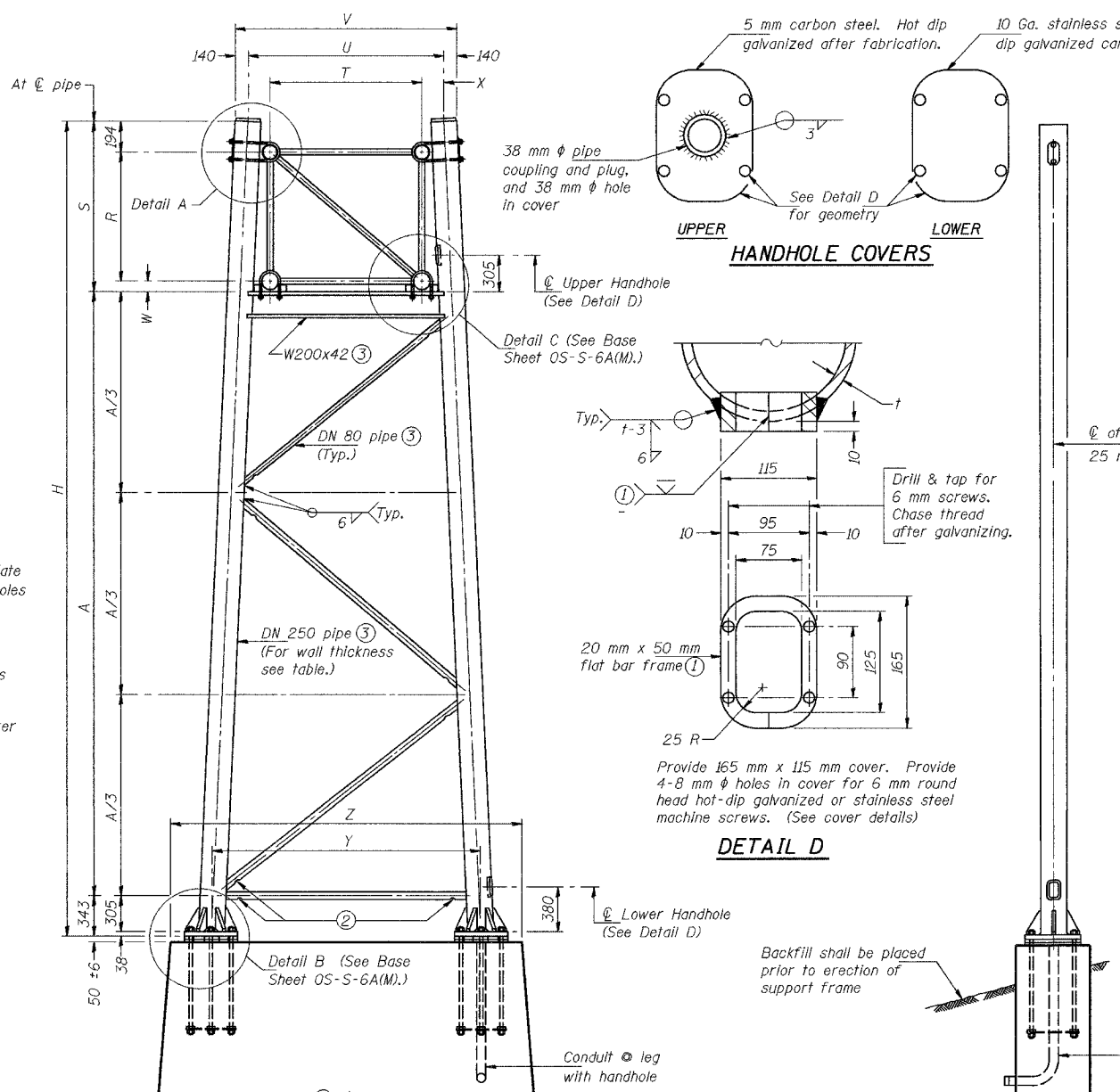


SECTION A-A

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



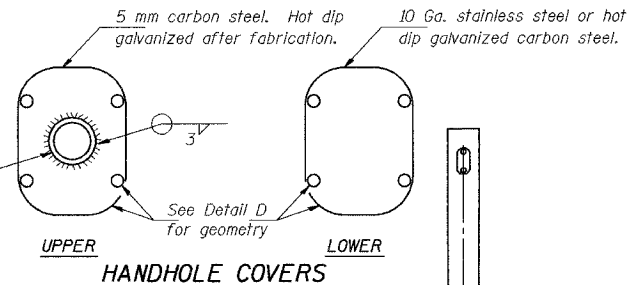
SECTION B-B



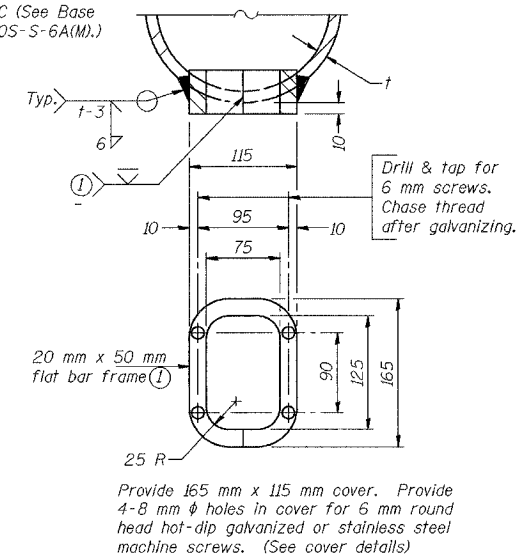
FOR FOUNDATION DETAILS SEE BASE SHEET OS-F3(M) (Spread Footing) or OS4-F3(M) (Drilled Shaft).

SIDE ELEVATION

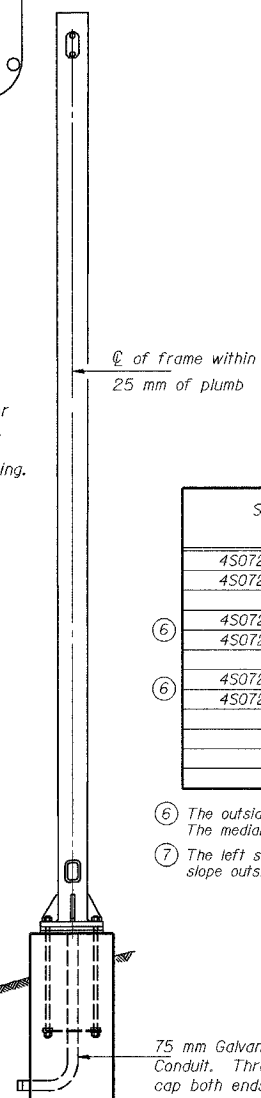
DN 250 PIPE TRUSS SUPPORT FRAME



HANDHOLE COVERS



DETAIL D



END ELEVATION

Support Design Loads: See Base Sheet OS-S-1(M) for design and loading criteria.  
Load combinations checked include deadload plus:  
a) 100% wind normal to sign, 20% parallel to sign  
b) 60% wind normal to sign, 30% parallel to sign

- In lieu of fabricated handhole frame as shown, may cut from 50 mm plate (rolling direction vertical). All cut faces to be ground to ANSI Roughness of 12.7  $\mu$ m or less.
- Galvanizing vent holes of adequate size shall be provided on underside at each end of bracing pipes. Alternately, holes may be provided in wall of pipe column. All vent holes shall be drilled and de-burred. (Typ.)
- Steel pipe, plate, carbon steel handhole covers and rolled sections shall be hot dip galvanized after fabrication. Painting is not permitted. See Base Sheet OS-S-1(M).
- See General Notes for fasteners.
- Dimensions shown are based on selection criteria in the Sign Structures Manual. Nonstandard applications must have dimensions verified or amended as appropriate.

Structure Number	Station	Support (7)	Truss Type	Pipe Wall Thickness	H (m)	A (m)
4S072I074L089.3	143+798.000	✓	I-S	7	6.713	4.710
4S072I074L089.3	143+798.000	✓	I-S	7	8.390	6.387
4S072I074L089.4	144+154.000	✓	I-S	7	7.210	5.207
4S072I074L089.4	144+154.000	✓	I-S	7	7.427	5.424
4S072I074L089.7	144+540.000	✓	I-S	7	7.130	5.127
4S072I074L089.7	144+540.000	✓	I-S	7	7.935	5.932

- The outside foundation, end supports, truss and signing are included in this contract. The median foundation was provided in a previous contract.
- The left support is located at the median barrier and the right support is located in the slope outside the roadway.

NUMBER	REVISION	DATE

SIGNING SHEET 53 OF 83

OVERHEAD SIGN STRUCTURES  
SUPPORT FRAME for STEEL TRUSS

ILLINOIS DEPARTMENT OF TRANSPORTATION

SIGNING PLAN  
W.B. I-74 STA. 143+798, S.N. 4S072I074L089.3  
W.B. I-74 STA. 144+154, S.N. 4S072I074L089.4  
W.B. I-74 STA. 144+540, S.N. 4S072I074L089.7

PEORIA CO., IL. DATE: II-II-04

Truss Type	Dimensions									
	R (m)	S (m)	T (m)	U (m)	V (m)	W (mm)	X (mm)	Y (m)	Z (m)	
I-S	1.37	1.66	1.22	1.68	1.96	100	230	2.52	3.28	
II-S (5)	1.60	1.91	1.37	1.85	2.13	120	240	2.52	3.28	

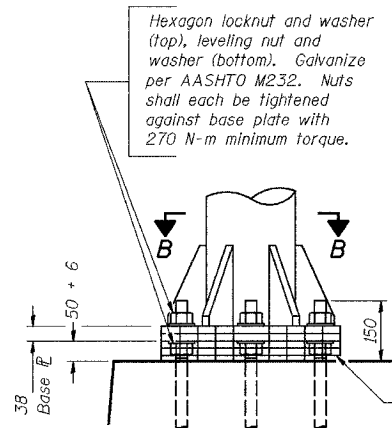
M:\Proj\3573\Sign Structures\Contract 10/sp1001-7Aoh-slt.dgn

DESIGNED	RJW	2004
CHECKED	KJN	EXAMINED
DRAWN	RJW	PASSED
CHECKED	KJN	ENGINEER OF BRIDGES AND STRUCTURES

OS-S-6(M) 10/1/2001

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

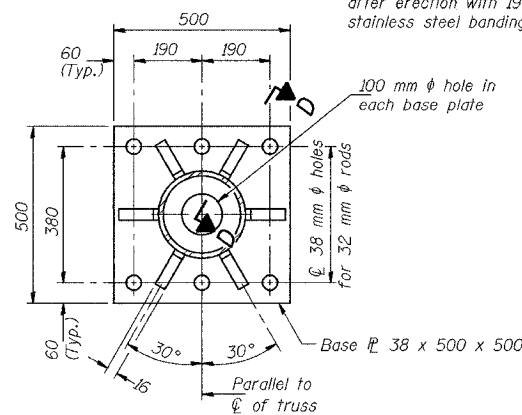
ROUTE No.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	*	PEORIA	1360	1302
STA.		TO STA.		
ILLINOIS REGION		ILLINOIS	PROJECT	
		* (72-7)R-3 CONTRACT NO. 68200		



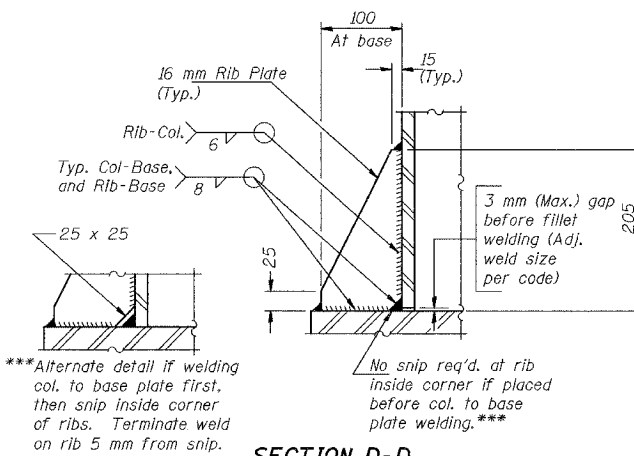
**DETAIL B**

Ribs shall be cut to fit slope of pipe.

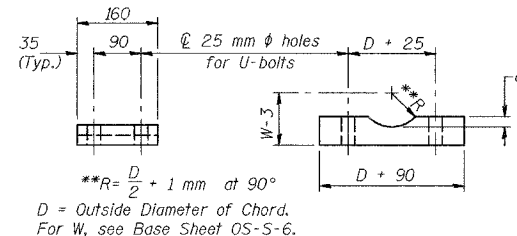
Stainless Steel Standard Grade Wire Cloth, 76 mm wide, 6 mm maximum opening with a minimum wire diameter of 1.5 mm with a minimum 50 mm lap. Secure to base plate after erection with 19 mm stainless steel banding.



**SECTION B-B**



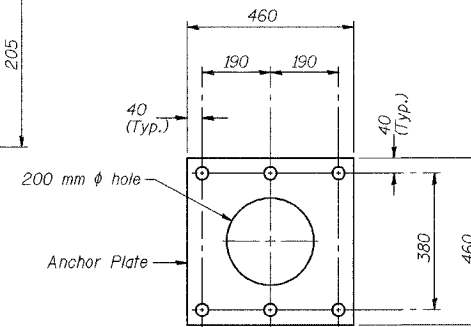
**SECTION D-D**



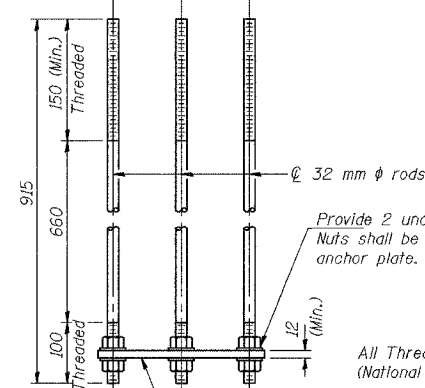
**SADDLE SHIM DETAIL**

Truss Chord Nominal Dia.	a
102	16
127	19
152	22

\*\*R =  $\frac{D}{2} + 1$  mm at 90°  
D = Outside Diameter of Chord.  
For W, see Base Sheet OS-S-6.



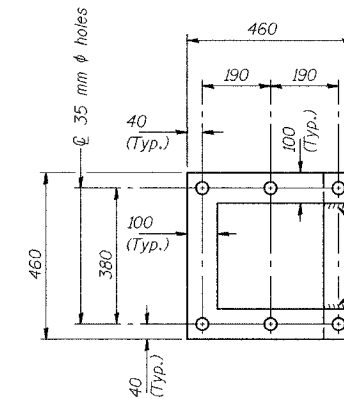
200 mm  $\phi$  hole



**ANCHOR ROD DETAIL**  
Spread Footing Foundation

Provide 2 uncoated nuts per rod. Nuts shall be "snug tight" against anchor plate.

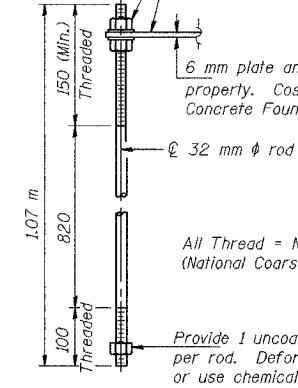
All Thread = NC (National Coarse)



**POSITIONING PLATE(S)**

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

At each location, provide 6 mm thick positioning plate(s) and six (6) additional nuts to be used with leveling nuts to maintain anchor bolts position during concrete placement.



**ANCHOR ROD DETAIL**  
Drilled Shaft Foundation

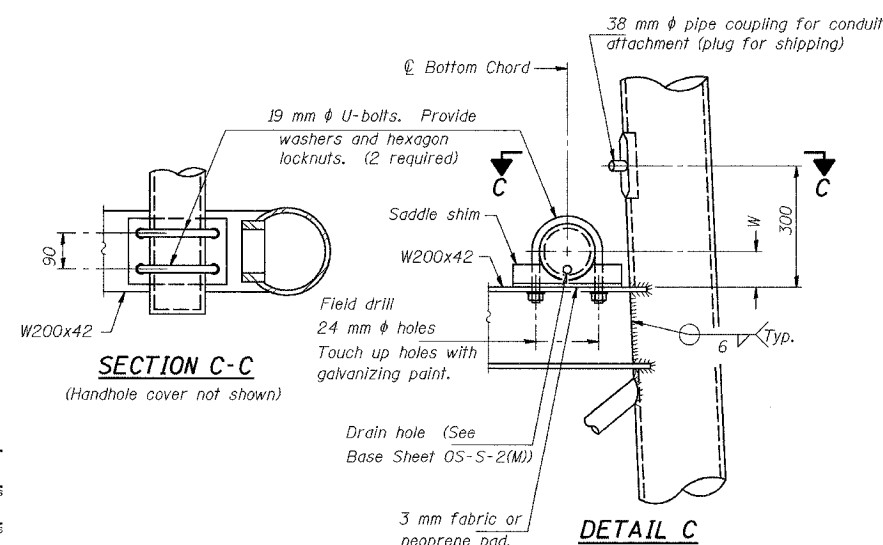
6 mm plate and extra nuts become Contractor's property. Cost included in "Drilled Shaft Concrete Foundations".

All Thread = NC (National Coarse)

Provide 1 uncoated nut per rod. Deform thread or use chemical thread lock to secure.

Anchor rods shall conform to AASHTO M314M Grade 250 or 380 (36 or 55) and meet Charpy V-Notch (CVN) energy of 20 J at 5°C. Galvanize upper 305 mm per AASHTO M232. No welding shall be permitted on rods.

**DN 250 PIPE SUPPORT FRAME DETAILS**



**SECTION C-C**  
(Handhole cover not shown)

**DETAIL C**

NUMBER	REVISION	DATE

DESIGNED	RJW	2004
CHECKED	KJN	EXAMINED
DRAWN	RJW	PASSED
CHECKED	KJN	ENGINEER OF BRIDGES AND STRUCTURES

OS-S-6A(M) 10/1/2001

SIGNING SHEET 54 OF 83

**OVERHEAD SIGN STRUCTURES  
SUPPORT FRAME DETAILS STEEL TRUSS**

ILLINOIS DEPARTMENT OF TRANSPORTATION

SIGNING PLAN  
W.B. I-74 STA. 143+798, S.N. 4S0721074L089.3  
W.B. I-74 STA. 144+154, S.N. 4S0721074L089.4  
W.B. I-74 STA. 144+540, S.N. 4S0721074L089.7

PEORIA CO., IL.

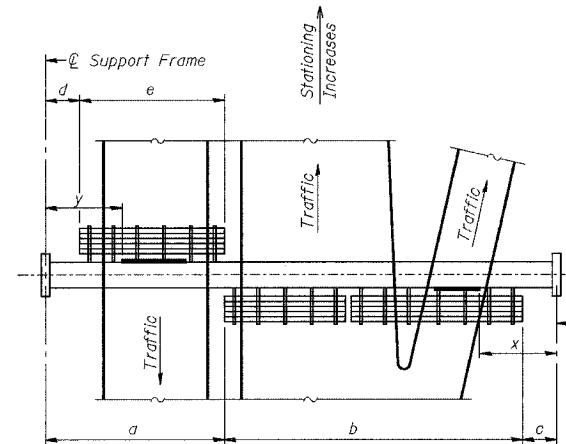
DATE: II-II-04

M:/Pro/3573/Sign Structures/Contract 10/sp1001-7Aoh-sfl.dgn

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE No.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	*	PEORIA	1300	1303
STA.		TO STA.		
F.H.W.A. REGION		ILLINOIS	PROJECT	
		* (72-7)R-3		CONTRACT NO. 68200

Walkway Grating, Walkway Supports, Handrail and Lighting are not included. Information shown on this sheet shall be used for Truss Grating, Sign Brackets and Sign Panel locations only.



**PLAN**  
**WALKWAY AND HANDRAIL SKETCH**

(Road plan beneath truss varies)  
"x" and "y" are measured along  $\phi$  of truss to edge of nearest sign panel. See Signing Plans for sign panel details and spacing between panels.

**BRACKET TABLE**

W150x14		Number Brackets Required
Sign Width Greater Than	Less Than or Equal To	
	3.0	2
3.0	4.9	3
4.9	6.7	4
6.7	8.6	5
8.6	10.4	6

Notes: \*\*Space walkway brackets W150x14 for efficiency and within limits shown:

- f = 300 mm maximum, 100 mm minimum (End of sign to  $\phi$  of nearest bracket)
- g = 300 mm maximum, 100 mm minimum (End of walkway grating to  $\phi$  of nearest support bracket)
- h = 1.85 m maximum ( $\phi$  to  $\phi$  sign and/or walkway support brackets, W150x14)
- k = 50 mm maximum gap between adjacent walkway grating sections and handrail ends

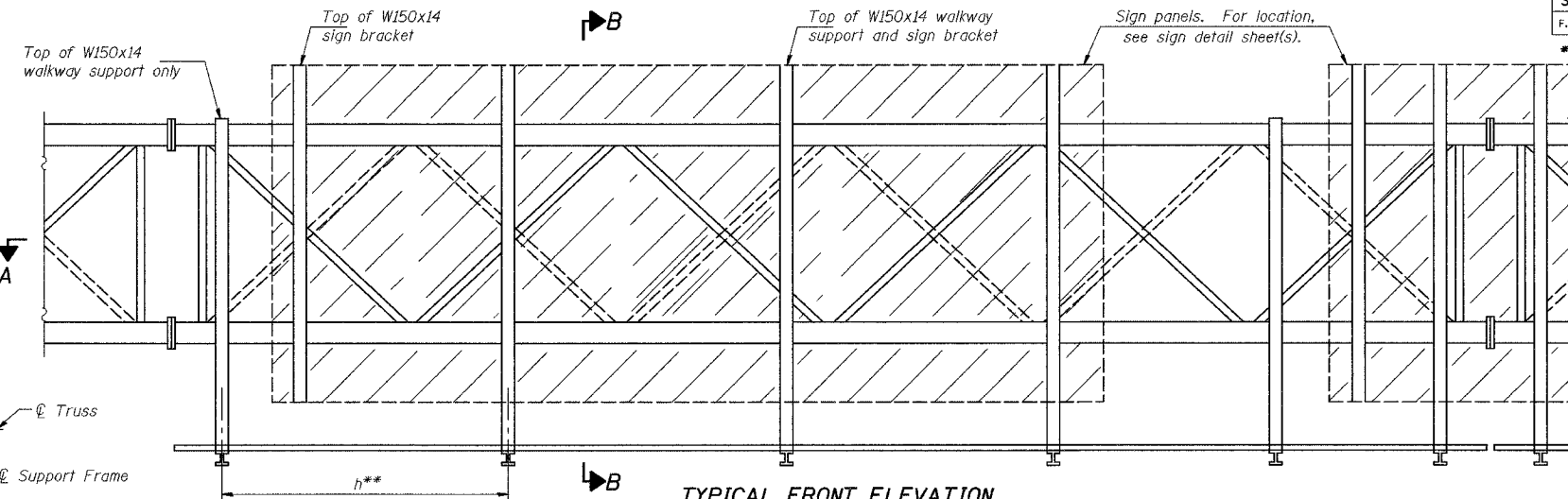
\*\*\*If walkway bracket at safety chain location is behind sign, add angle to bracket, see Alternate Safety Chain Attachment on Base Sheet OS-S-11(M).

For Details T and W, Section B-B and Grating Splice Details, see Base Sheet OS-S-10(M).  
For Details D, F, G and P and Handrail Splice Details, see Base Sheet OS-S-11(M).

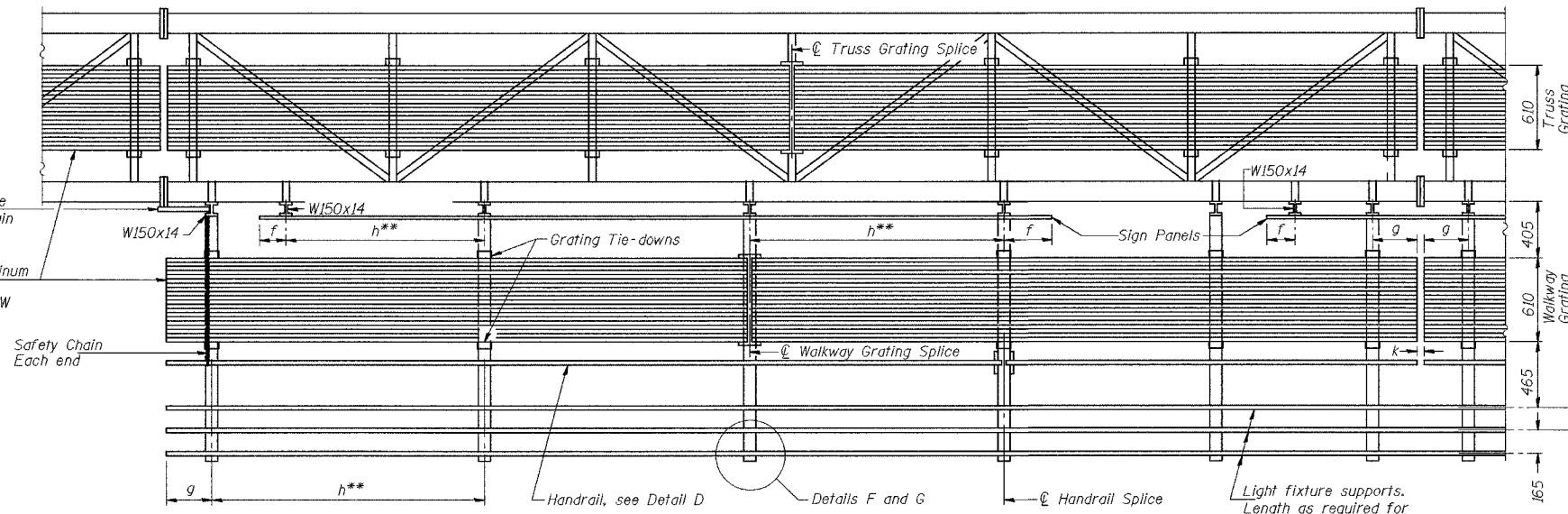
DESIGNED	RJW
CHECKED	KJN
DRAWN	RJW
CHECKED	KJN

EXAMINED	2884
PASSED	ENGINEER OF STRUCTURAL SERVICES
	ENGINEER OF BRIDGES AND STRUCTURES

NUMBER	REVISION	DATE



**TYPICAL FRONT ELEVATION**  
With lights and handrail omitted for clarity.  
For Section B-B, see Base Sheet OS-S-10(M).



**SECTION A-A**

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

Structure Number	Station	a (m)	b (m)	c (m)	d (m)	e (m)	x (m)	y (m)	Walkway Grating and Handrail Lengths
4S0721074L089.3	143+798.000							6.944	
4S0721074L089.4	144+154.000							4.774	
4S0721074L089.7	144+540.000							5.091	

1 The outside foundation, end supports, truss and signing are included in this contract. The median foundation was provided in a previous contract.

Truss grating to facilitate inspection shall run full length (center to center of support frames)  $\pm 305$  mm on overhead trusses. Cost of truss grating is included in "Overhead Sign Structure..."

SIGNING SHEET 55 OF 83

**OVERHEAD SIGN STRUCTURES  
STEEL WALKWAY DETAILS**

ILLINOIS DEPARTMENT OF TRANSPORTATION

SIGNING PLAN  
W.B. I-74 STA. 143+798, S.N. 4S0721074L089.3  
W.B. I-74 STA. 144+154, S.N. 4S0721074L089.4  
W.B. I-74 STA. 144+540, S.N. 4S0721074L089.7

PEORIA CO., IL.

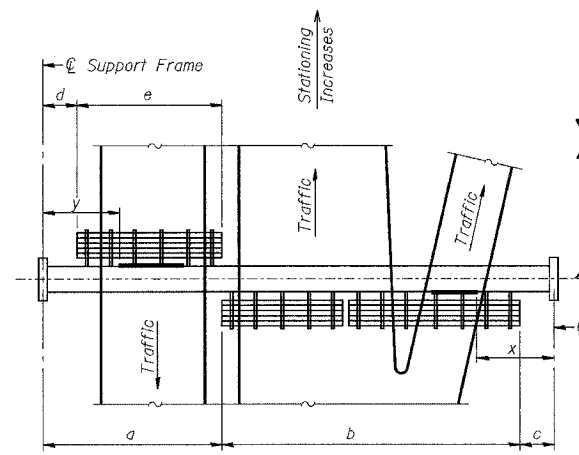
DATE: II-II-04

M:\Pro\13573\Sign Structures\Contract 10/sp1001-7Aoh-sfl.dgn

OS-S-9(M) 7/1/2001

ROUTE No.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	*	PEORIA	1360	1304
STA.		TO STA.		
F.H.W.A. REGION		ILLINOIS	PROJECT	
		CONTRACT NO. 68200		

Walkway Grating, Walkway Supports, Handrail and Lighting are not included. Information shown on this sheet shall be used for Truss Grating, Sign Brackets and Sign Panel locations only.



**PLAN WALKWAY AND HANDRAIL SKETCH**  
 (Road plan beneath truss varies)  
 "x" and "y" are measured along  $\phi$  of truss to edge of nearest sign panel. See Signing Plans for sign panel details and spacing between panels.  
 Aluminum Plank, See Detail T

**BRACKET TABLE**

W150X14		Number Brackets Required
Sign Width Greater Than	Less Than or Equal To	
3.0	3.0	2
4.9	4.9	3
6.7	6.7	4
8.6	8.6	5
10.4	10.4	6

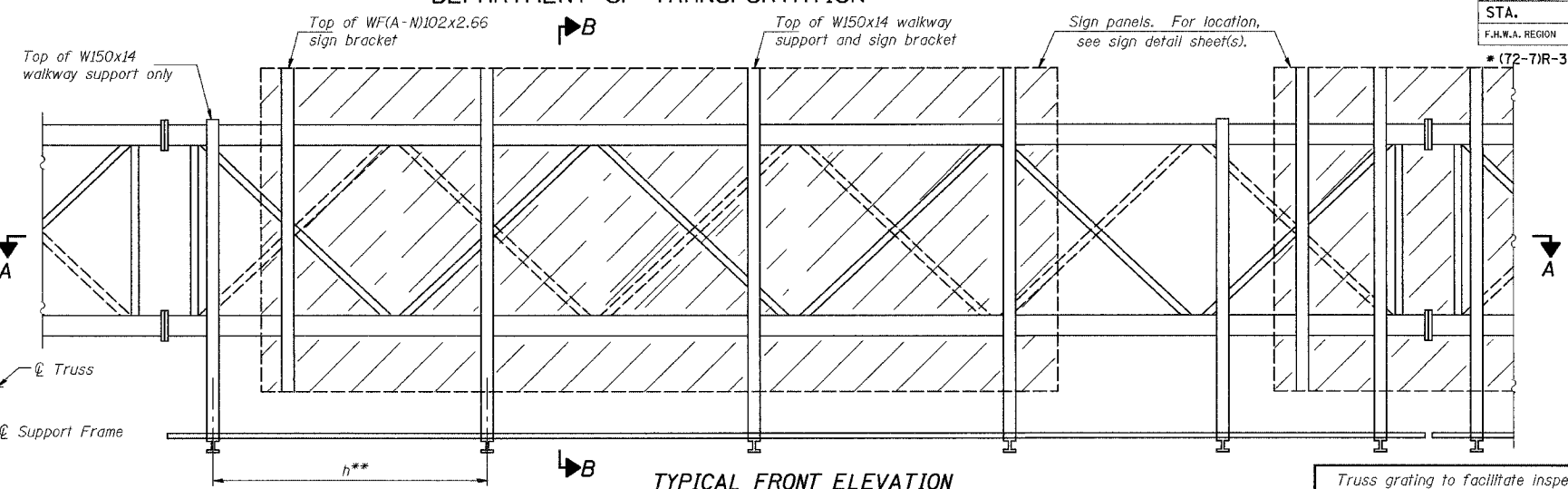
Notes: \*\*Space walkway brackets W150x14 for efficiency and within limits shown:  
 $f = 300$  mm maximum, 100 mm minimum (End of sign to  $\phi$  of nearest bracket)  
 $g = 300$  mm maximum, 100 mm minimum (End of walkway grating to  $\phi$  of nearest support bracket)  
 $h = 1.85$  m maximum ( $\phi$  to  $\phi$  sign and/or walkway support brackets, WF(A-N)102x2.66 or WF(A-N)102x4.55)  
 $k = 50$  mm maximum gap between adjacent walkway grating sections and handrail ends  
 \*\*\*If walkway bracket at safety chain location is behind sign, add angle to bracket, see Alternate Safety Chain Attachment on Base Sheet OS-S-11(M).  
 For Details T and W, Section B-B and Grating Splice Details, see Base Sheet OS-S-10(M).  
 For Details D, F, G and P and Handrail Splice Details, see Base Sheet OS-S-11(M).

DESIGNED	RJW
CHECKED	KJN
DRAWN	RJW
CHECKED	KJN

2004  
 EXAMINED  
 PASSED  
 ENGINEER OF STRUCTURAL SERVICES  
 ENGINEER OF BRIDGES AND STRUCTURES

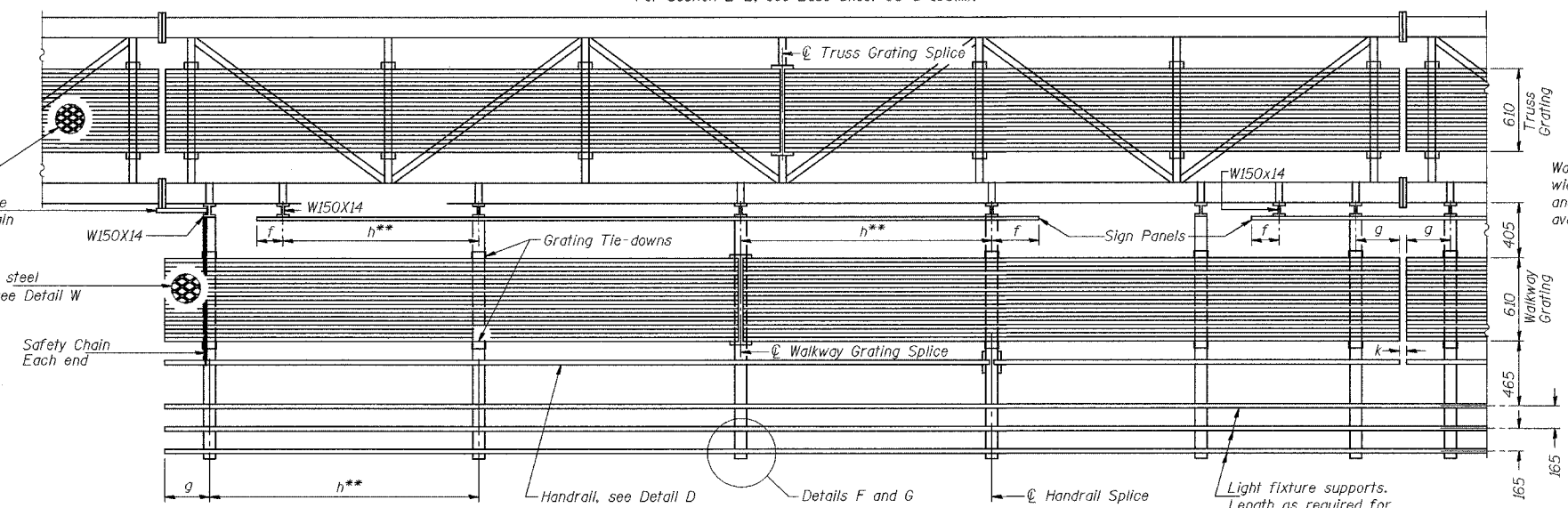
NUMBER	REVISION	DATE

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION



**TYPICAL FRONT ELEVATION**  
 With lights and handrail omitted for clarity.  
 For Section B-B, see Base Sheet OS-S-10S(M).

Truss grating to facilitate inspection shall run full length (center to center of support frames)  $\pm 305$  mm on overhead trusses. Cost of truss grating is included in "Overhead Sign Structure".



**SECTION A-A**

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

Note: Details shown are considered equal alternatives to the Steel Walkway on Base Sheet OS-S-9(M), and may be substituted by Contractor at no change in contract cost.

Structure Number	Station	a (m)	b (m)	c (m)	d (m)	e (m)	x (m)	y (m)	Walkway Grating and Handrail Lengths
450721074L089.3	143+798.000							6.944	
450721074L089.4	144+154.000							4.774	
450721074L089.7	144+540.000							5.091	

① The outside foundation, end supports, truss and signing are included in this contract. The median foundation was provided in a previous contract.

SIGNING SHEET 56 OF 83

**OVERHEAD SIGN STRUCTURES  
 ALTERNATE WALKWAY DETAILS**

ILLINOIS DEPARTMENT OF TRANSPORTATION

SIGNING PLAN  
 W.B. I-74 STA. 143+798, S.N. 450721074L089.3  
 W.B. I-74 STA. 144+154, S.N. 450721074L089.4  
 W.B. I-74 STA. 144+540, S.N. 450721074L089.7

PEORIA CO., IL.

DATE: II-II-04

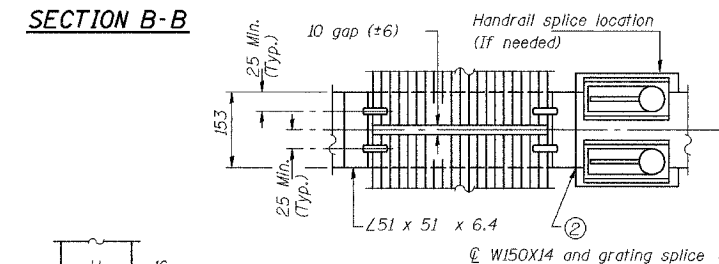
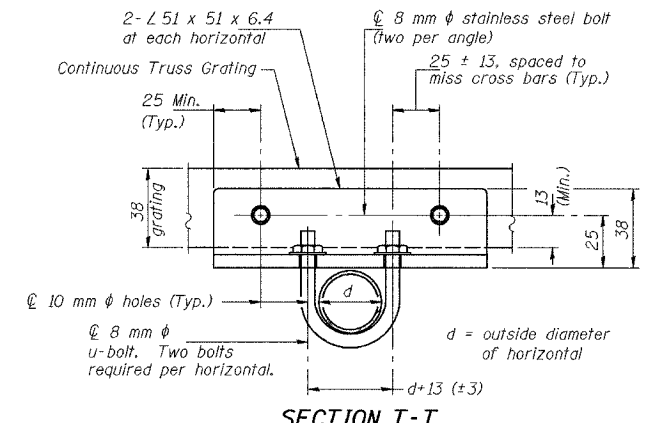
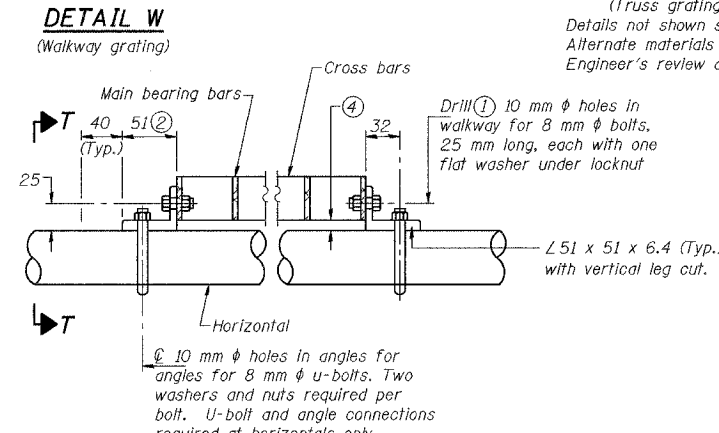
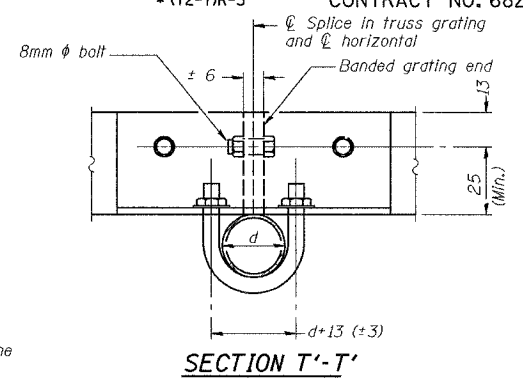
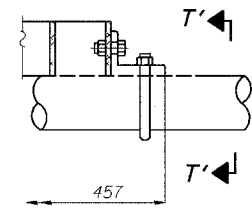
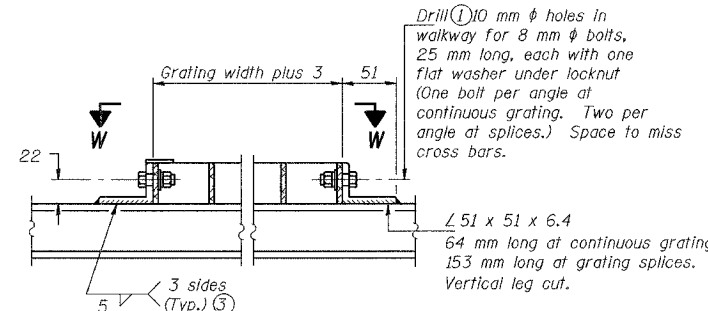
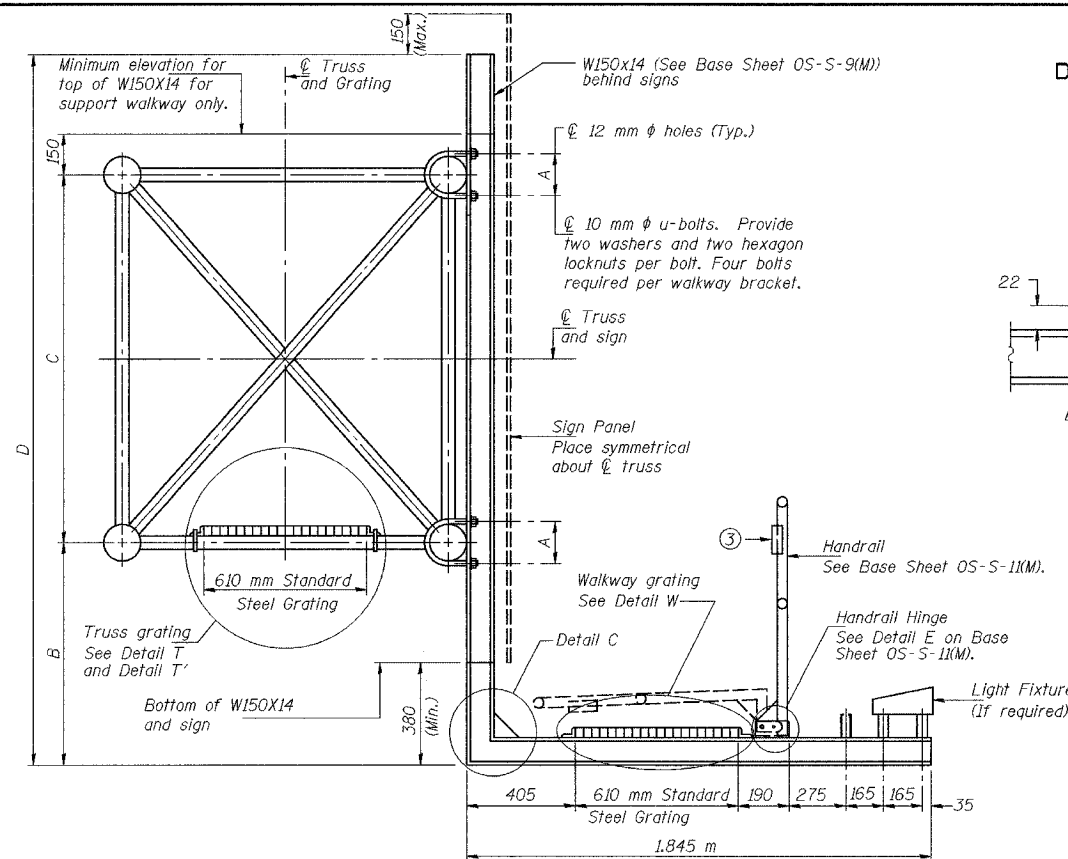
M:\Proj\3573\Sign Structures\Contract 10\sp1001-7Aoh-sfl.dgn

OS-S-9S(M) 7/1/2001

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE No.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	*	PEORIA	1360	1305
STA.		TO STA.		
F.H.W.A. REGION		ILLINOIS	PROJECT	

\* (72-7)R-3 CONTRACT NO. 68200

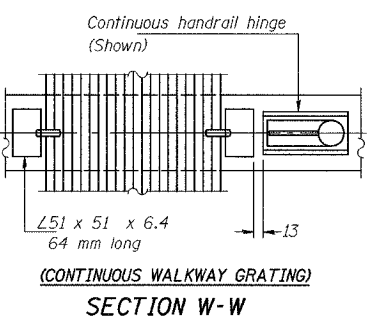
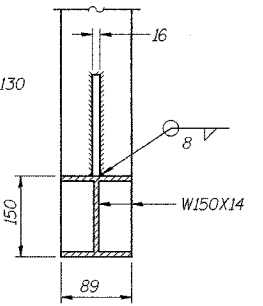
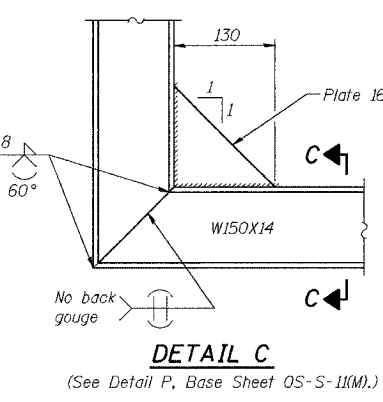


DETAIL T  
(Continuous Truss Grating)

BARS SIZES FOR STANDARD STEEL GRATING

TRUSS GRATING Main bearing bars 5 mm x 38 mm on 30 mm centers.  
Cross bars 5 mm x 38 mm on 102 mm centers.  
WALKWAY GRATING Main bearing bars 5 mm x 38 mm on 30 mm centers.  
Cross bars 5 mm x 38 mm on 102 mm centers.

Structure Number	Station	A (m)	B (m)	C (m)	D (m)
4S0721074L089.3	143+798.000	0.153	0.915	1.370	3.050
4S0721074L089.4	144+154.000	0.153	1.220	1.370	3.660
4S0721074L089.7	144+540.000	0.153	1.296	1.370	3.812



DESIGNED	RJW
CHECKED	KJN
DRAWN	RJW
CHECKED	KJN

EXAMINED  
PASSED  
ENGINEER OF STRUCTURAL SERVICES  
ENGINEER OF BRIDGES AND STRUCTURES

NUMBER	REVISION	DATE

Walkway Grating, Walkway Supports, Handrail and Lighting are not included. Information shown on this sheet shall be used for Truss Grating and Sign Brackets only.

- Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.
- If Handrail Joint present, weld angle to W150x14 and 6 mm extension bars. (See Base Sheet OS-S-11.)
- 3 mm x 13 mm x 50 mm welded to handrail posts to protect locations that contact grating.
- Tube to grating gap may vary from 0 to 13 mm (Max.) to align walkway, allow for camber, etc.
- The outside foundation, end supports, truss and signing are included in this contract. The median foundation was provided in a previous contract.

SIGNING SHEET 57 OF 83

**OVERHEAD SIGN STRUCTURES  
STEEL WALKWAY DETAILS**

ILLINOIS DEPARTMENT OF TRANSPORTATION

SIGNING PLAN  
W.B. I-74 STA. 143+798, S.N. 4S0721074L089.3  
W.B. I-74 STA. 144+154, S.N. 4S0721074L089.4  
W.B. I-74 STA. 144+540, S.N. 4S0721074L089.7

PEORIA CO., IL. DATE: II-II-04

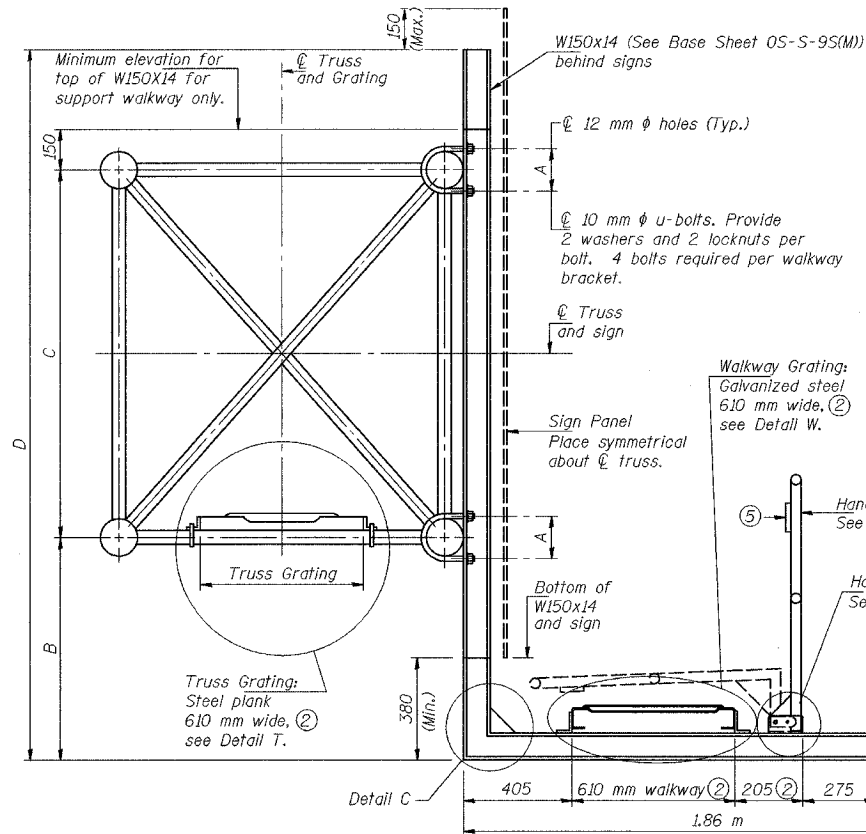
M:\Proj\3513\Sign Structures\Contract 10\sp\001-7A\oh-sft.dgn

OS-S-10(M) 10/1/2001

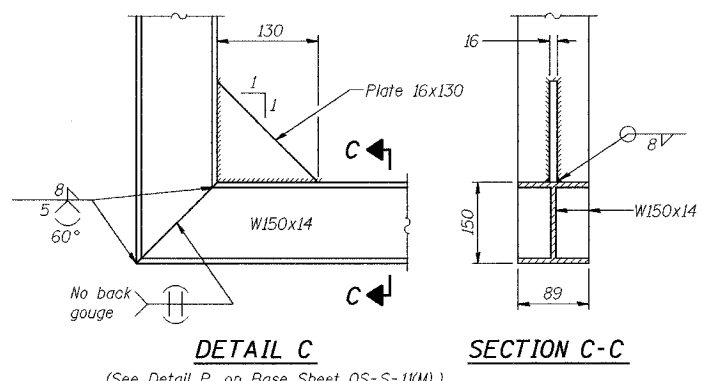
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE No.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	*	PEORIA	1360	1306
STA.		TO STA.		
F.H.W.A. REGION		ILLINOIS PROJECT		

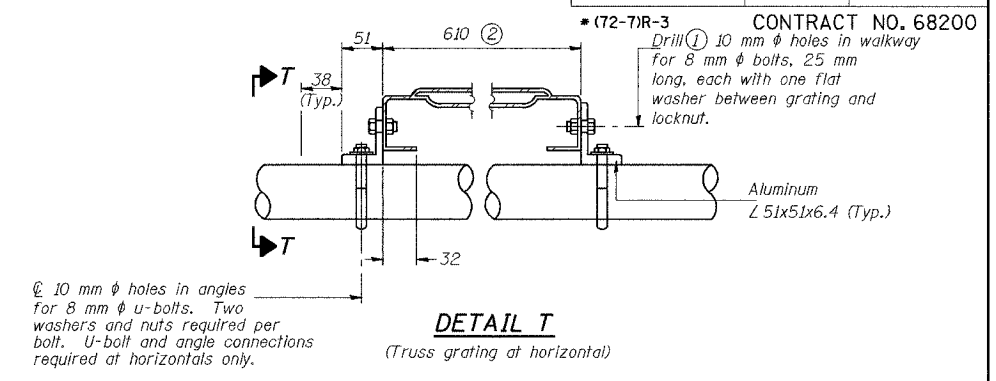
CONTRACT NO. 68200



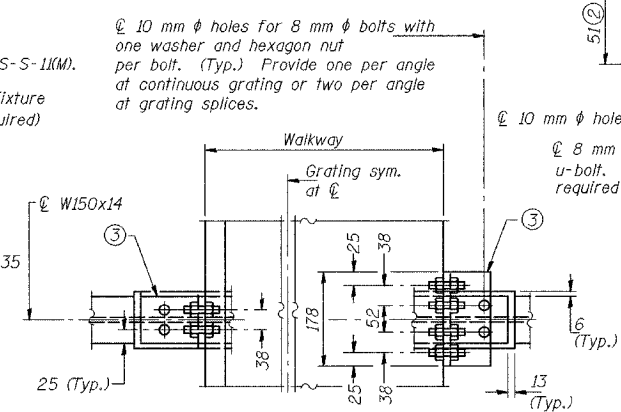
SECTION B-B



DETAIL C SECTION C-C

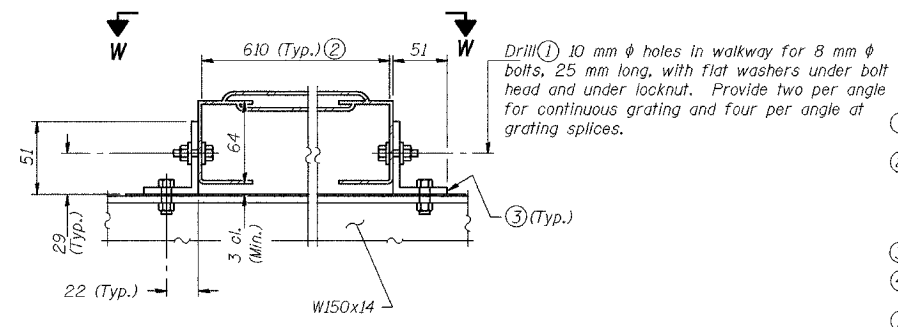


DETAIL T (Truss grating at horizontal)



SECTION T-T (Truss Grating Continuous)

SECTION T-T (Truss Grating Splice)



DETAIL W GALVANIZED STEEL WALKWAY GRATING

WALKWAY GRATING CONTINUOUS AT WALKWAY GRATING SPLICE SECTION W-W

- Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.
- Perforated or expanded metal grating providing a skid resistant (non-serrated) surface and capable of supporting a 2.22 kN concentrated load with a 1.83 m clear span. Walkway and truss grating dimensions are nominal and may vary (width  $\pm 13$  mm, depth  $\pm 13$  mm) based on available standard sizes. Cut ends of grating shall be free of burrs or hazardous projections and coated with zinc-rich primer or equivalent.
- Galvanized steel L 51x51x6.4, 90 mm long with continuous grating, 190 mm long at grating splice.
- Details shown are considered equal alternatives to the Steel Walkway on Base Sheet OS-S-10(M) and may be substituted by Contractor at no change in contract cost.
- $\bar{L}$  3 mm x 13 mm x 50 mm welded to handrail posts to protect locations that contact grating.
- Tube to grating gap may vary from 0 to 13 (Max.) to align walkway, allow for camber, etc.
- The outside foundation, end supports, truss and signing are included in this contract. The median foundation was provided in a previous contract.

Structure Number	Station	A (m)	B (m)	C (m)	D (m)
450721074L089.3	143+798.000	0.153	0.915	1.370	3.050
450721074L089.4	144+154.000	0.153	1.220	1.370	3.660
450721074L089.7	144+540.000	0.153	1.296	1.370	3.812

DESIGNED	RJW
CHECKED	KJN
DRAWN	RJW
CHECKED	KJN

EXAMINED	2884
PASSED	ENGINEER OF STRUCTURAL SERVICES
	ENGINEER OF BRIDGES AND STRUCTURES

NUMBER	REVISION	DATE

Walkway Grating, Walkway Supports, Handrail and Lighting are not included. Information shown on this sheet shall be used for Truss Grating and Sign Brackets only.

SIGNING SHEET 58 OF 83

**OVERHEAD SIGN STRUCTURES  
ALTERNATE STEEL WALKWAY DETAILS**

ILLINOIS DEPARTMENT OF TRANSPORTATION

SIGNING PLAN  
W.B. I-74 STA. 143+798, S.N. 450721074L089.3  
W.B. I-74 STA. 144+154, S.N. 450721074L089.4  
W.B. I-74 STA. 144+540, S.N. 450721074L089.7

PEORIA CO., IL. DATE: II-II-04

M:\Proj\3573\Sign Structures\Contract 10/sp1001-7Aoh-sfl.dgn

OS-S-10S(M) 10/17/2001

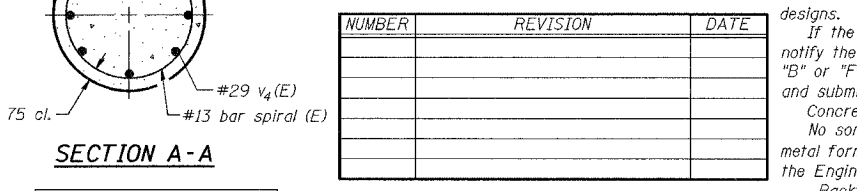
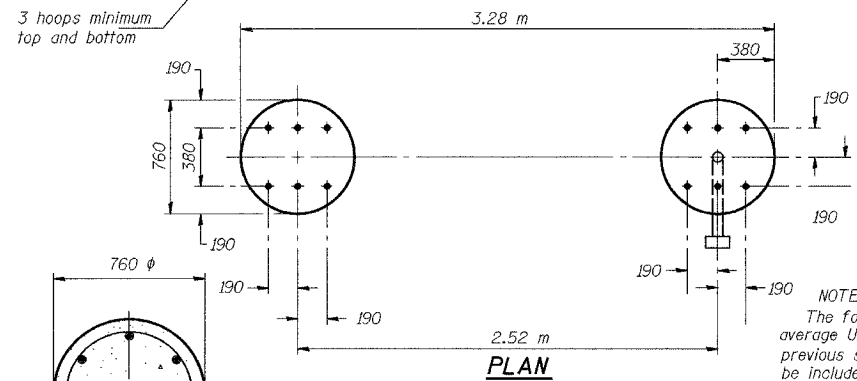
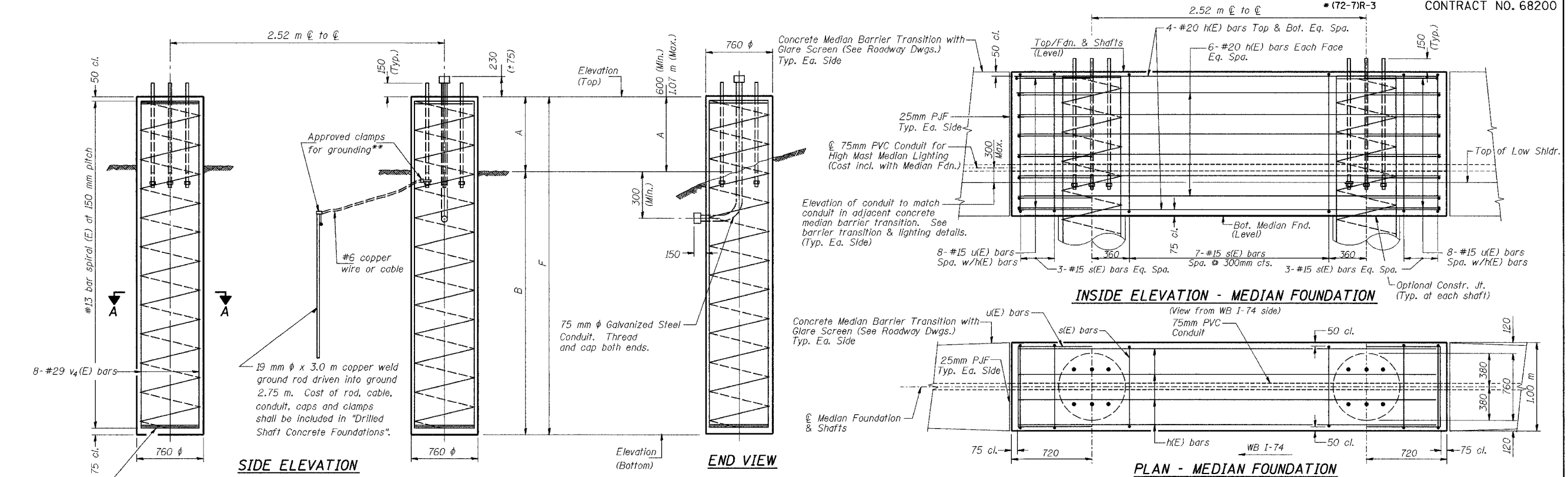
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE No.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	*	PEORIA	1360	1307
STA.		TO STA.		
F.H.W.A. REGION		ILLINOIS PROJECT		

CONTRACT NO. 68200

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

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



Structure Number	Station	Left Foundation			Right Foundation			Class S1 Concrete (cu. m.)				
		Elevation Top	Elevation Bottom	A (m)	B (m)	F (m)	Elevation Top		Elevation Bottom	A (m)	B (m)	F (m)
4S0721074L089.3	143+798.000	191.030	183.624	2.406 (1)	5.000	7.406	189.353	178.853	1.100	9.400	10.500	14.07 (2)
Median Foundation (3)	143+798.000	191.030	188.624	2.406 (1)								9.53
4S0721074L089.4	144+154.000	186.222(4)					186.005	178.905	1.100	6.000	7.100	6.44
4S0721074L089.7	144+540.000	182.210 (4)					181.405	175.305	1.100	5.000	6.100	5.53
											Total	35.57

**NOTES:**  
The foundation dimensions shown are based on the presence of mostly cohesive soils with an average Unconfined compressive Strength (Qu) of at least 120 kPa, which must be determined by previous soil investigations at the jobsite. When other conditions are indicated, the boring data will be included in the plans and the foundation dimensions shown will be the result of site specific designs.  
If the conditions encountered are different than those indicated, the Contractor shall notify the Engineer to determine if the foundation dimensions need to be modified. If dimensions "B" or "F" are revised by more than 300 mm by the contractor, "as-built" plans shall be prepared and submitted to the District Bureau of Operations for future reference.  
Concrete shall be placed monolithically, without construction joints.  
No sonotubes or decomposable forms shall be used below the lower conduit entrance. Permanent metal forms or other shielding may not be left in place below that elevation without the Engineers' written permission.  
Backfill shall be placed per Article 502 of Standard Specifications, and prior to erection of support column.  
A normal surface finish followed by a Bridge Seat Sealer application will be required on concrete surfaces above the lowest elevation 150 mm below finished ground line. Cost included in "Drilled Shaft Concrete Foundations".

**DETAILS FOR DN 250 SUPPORT FRAME**  
TYPE I-S or II-S TRUSS

**BAR LIST-EACH FOUNDATION**

Bar	Number	Size	Length	Shape
v4(E)	16	#29	D less 127	—
#13 bar spiral (E)				— see "SIDE ELEVATION"

**MEDIAN FOUNDATION (Sta. 143+798.000 only)**

Bar	Number	Size	Length	Shape
s(E)	13	#15	6.66	□
h(E)	20	#20	3.81	—
u(E)	16	#15	2.17	□

- "A" is measured from the bottom of the proposed concrete median foundation.
- The concrete quantity includes the shafts from the bottom of the median foundation to the bottom of the shafts.
- All items required to construct the median foundation shall be included in the cost of "Drilled Shaft Concrete Foundations".
- The elevation shown is at the top of the median foundation and is for information only. The median foundation was constructed in a previous contract. The contractor shall field verify the given elevation prior to fabrication of the support frame for the steel truss.

**OVERHEAD SIGN STRUCTURES  
DRILLED SHAFT DETAILS**

ILLINOIS DEPARTMENT OF TRANSPORTATION

SIGNING PLAN  
W.B. I-74 STA. 143+798, S.N. 4S0721074L089.3  
W.B. I-74 STA. 144+154, S.N. 4S0721074L089.4  
W.B. I-74 STA. 144+540, S.N. 4S0721074L089.7

PEORIA CO., IL.

DATE: II-II-04

M:\Proj\3573\Sign Structures\Contract 107\sp\1001-7Aoh-sft.dgn

OS4-F3(M) 11/1/2002

DESIGNED	RJW
CHECKED	KJN
DRAWN	RJW
CHECKED	KJN

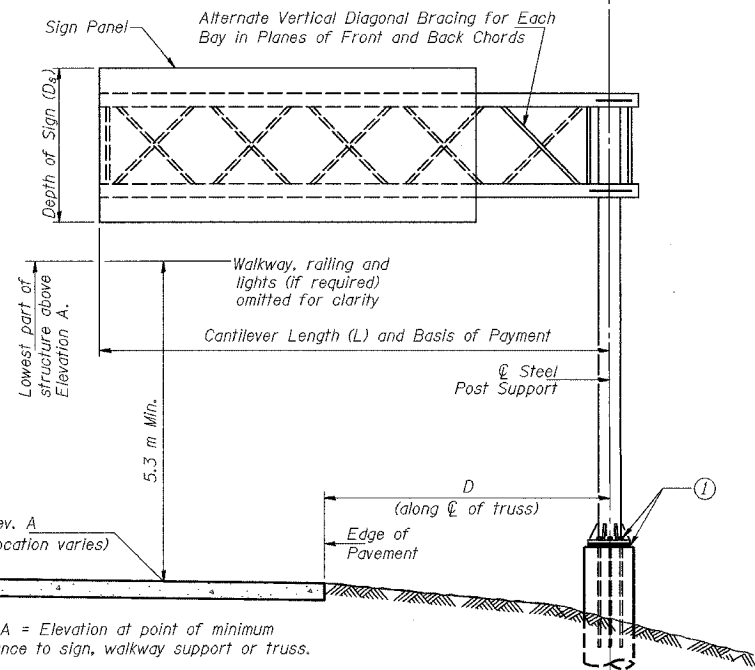
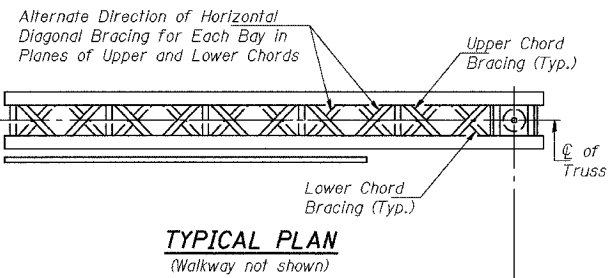
NUMBER	REVISION	DATE

2004  
EXAMINED  
PASSED  
ENGINEER OF STRUCTURAL SERVICES  
ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE No.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	•	PEORIA	1360	1358
STA.		TO STA.		
F.H.W.A. REGION		ILLINOIS	PROJECT	
		•(T2-7R-3	CONTRACT NO. 68200	

Walkway Grating, Walkway Supports, Handrail and Lighting are not included in this contract.

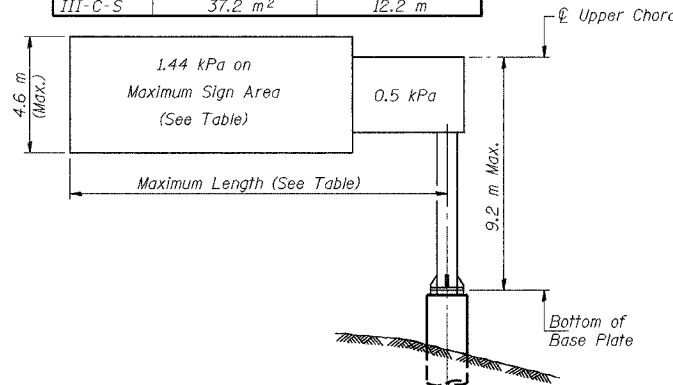


TYPICAL ELEVATION  
Looking in Direction of Traffic

Sign support structures may be subject to damaging vibrations and oscillations when sign panels are not in place during erection or maintenance of the structure. To avoid these attach temporary blank sign panels or other bracing to the structure until permanent signs are installed.

Structure Number	Station	Design Truss Type	Cantilever Length (L) (m)	Elev. A	Dim. D (m)	D <sub>s</sub> (m)	Total Sign Area (sq m)
4C0721074L089.3	143+740	II-C-S	7.877	189.708	3.677	2.591	10.88

Truss Type	Maximum Sign Area	Maximum Length
I-C-S	15.8 m <sup>2</sup>	7.6 m
II-C-S	31.6 m <sup>2</sup>	9.2 m
III-C-S	37.2 m <sup>2</sup>	12.2 m



DESIGN WIND LOADING DIAGRAM

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

- ① After adjustments to level truss and insure adequate vertical clearance, all top and leveling nuts shall be tightened against the base plate with a minimum torque of 270 N·m. Stainless steel mesh shall then be placed around the perimeter of the base plate. Secure to base plate with stainless steel banding.

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

TOTAL BILL OF MATERIAL  
CANTILEVER STEEL TRUSS

ITEM	UNIT	TOTAL
OVERHEAD SIGN STRUCTURE-CANTILEVER, TYPE I-C-S (0.61M x 1.37M)	m	
② OVERHEAD SIGN STRUCTURE-CANTILEVER, TYPE II-C-S (0.90M x 1.68M)	m	7.88
OVERHEAD SIGN STRUCTURE-CANTILEVER, TYPE III-C-S (0.90M x 2.14M)	m	
OVERHEAD SIGN WALKWAY-CANTILEVER TYPE S	m	
③ DRILLED SHAFT CONCRETE FOUNDATIONS	m <sup>3</sup>	11.08

- ② See Special Provision "Overhead Sign Structures-Special".  
③ Quantity includes median foundation. See Signing Sheet 69 of 83.

GENERAL NOTES

SPECIFICATIONS:  
DESIGN: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals. ("AASHTO Specifications")  
MEASUREMENTS: All dimensions are in millimeters (mm) except as noted.  
CONSTRUCTION: Current (at time of letting) Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Supplemental Specifications and Special Provisions. ("Standard Specifications")  
LOADING: 145 km/h WIND VELOCITY  
WIND LOADING: 1.44 kPa normal to Sign Panel Area and truss elements not behind sign Loading Diagram.  
WALKWAY LOADING: Dead load plus 2.2 kN, concentrated live load.  
ALLOWABLE UNIT STRESSES:  
Structural Steel - 138 MPa  
Reinforcing Steel - 138 MPa  
Class SI Concrete - 10 MPa  
Allowable unit stresses due to wind load in combination with other forces, are increased 1.33.  
MINIMUM CLEARANCE: Vertical Roadway Clearance = 5.3 m (All Obstructions)  
WELDING: All welds to be continuous unless otherwise shown. All welding to be done according to the current AWS D1.1 Structural Welding Code (Steel) and the Standard Specifications.

MATERIALS: All Structural Steel Pipe shall be ASTM A53 Grade B with a minimum yield of 241 MPa, or A500 Grade B or C with a minimum yield of 319 MPa. If A500 pipe is substituted for A53, then the outside diameter shall be as detailed and wall thickness greater than or equal to A53.  
All Structural Steel Plates and Shapes shall conform to AASHTO M270 Gr. 250, Gr. 345 or Gr. 345W\*\*. Stainless steel for handhole covers shall be ASTM A240, Type 302 or 304, or another alloy suitable for exterior exposure and acceptable to the Engineer.  
The steel pipe and stiffening ribs at the base plate for the column shall have a minimum longitudinal Charpy V-Notch (CVN) energy of 20 J at 5° C. (Zone 2) before galvanizing.  
FASTENERS FOR STEEL TRUSSES: All bolts noted as "high strength" (HS) must satisfy the requirements of AASHTO M164 (ASTM A325M), ASTM A449, or approved alternate, and must have matching lock nuts and washers. All bolts, u-bolts, eye bolts, lock nuts and washers not required to be high strength must satisfy the requirements of ASTM A307. All bolts, u-bolts, eye bolts, lock nuts and washers must be hot dip galvanized per AASHTO M232. All lock nuts must have nylon or steel inserts. High strength bolt and stud installation shall conform to Article 505.04(f)(2)d of the IDOT Standard Specifications for Road and Bridge Construction. Rotational Capacity ("ROCAP") testing of bolts will not be required.  
GALVANIZING: All Steel Grating, Plates, Shapes and Pipe shall be Hot Dip Galvanized after fabrication according to AASHTO M111.  
PAINTING: All steel members shall be painted according to the Special Provision "Surface Preparation and Painting of Galvanized Steel Traffic Structures". Cost Included in "Overhead Sign Structure . . .".  
ANCHOR RODS: Shall conform to AASHTO M314 Gr. 380 (55) with a minimum Charpy V-Notch (CVN) energy of 20 J at -12° C.  
CONCRETE SURFACES: All concrete surfaces above an elevation 150 mm below the lowest final ground line at each foundation shall be cleaned and coated with Bridge Seat Sealer according to the Standard Specifications.  
REINFORCEMENT BARS: Reinforcement Bars designated (E) shall be epoxy coated according to the Standard Specifications.  
\*\*If M270 Gr. 345W steel is proposed, chemistry for plate to be used shall first be approved by the Engineer as suitable for galvanizing and welding.

SIGNING SHEET 60 OF 83

CANTILEVER SIGN STRUCTURES  
GENERAL PLAN & ELEVATION  
STEEL TRUSS & STEEL POST

ILLINOIS DEPARTMENT OF TRANSPORTATION

SIGNING PLAN  
W.B. 1-74 STA. 143+740  
S.N. 4C0721074L089.3

PEORIA CO., IL.

DATE: 11-11-04

DESIGNED	RJW	2004
CHECKED	KJN	EXAMINED
DRAWN	RJW	ENGINEER OF STRUCTURAL SERVICES
CHECKED	KJN	PASSED
		ENGINEER OF BRIDGES AND STRUCTURES

OSC-S-1(KM) 10/1/2001

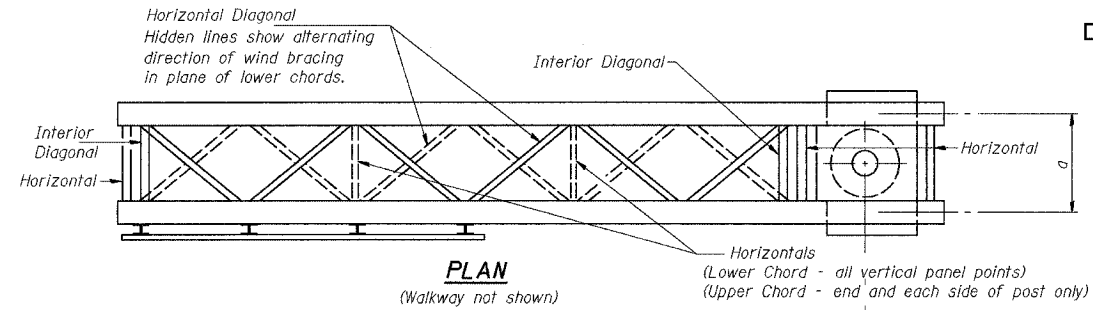
NUMBER	REVISION	DATE

M:\Proj\3573\Sign Structures\Contract 10\sp\002-74can-sfl.dgn

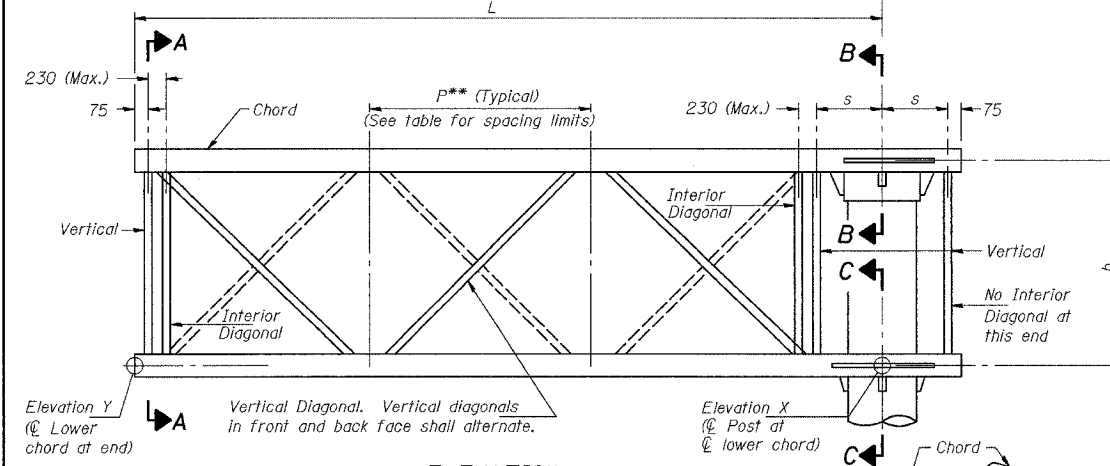


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE No.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	*	PEORIA	1360	1309
STA.	TO STA.		PROJECT	
F.H.W.A. REGION	ILLINOIS	CONTRACT NO. 68200		



**PLAN**  
(Walkway not shown)

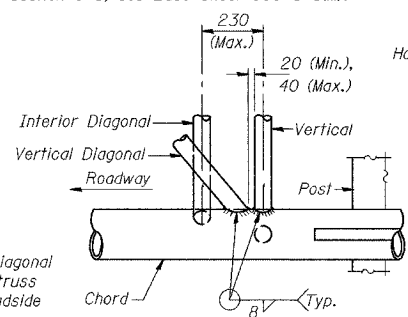


**ELEVATION**  
(Sign and walkway omitted for clarity)

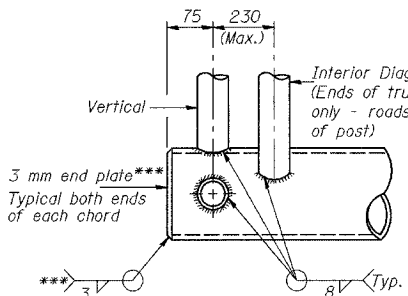
**TYPICAL TRUSS UNIT**

For Section B-B and Section C-C, see Base Sheet OSC-S-3(M).

Note: There are twice as many horizontal diagonals as there are vertical diagonals.



**POST END JOINT DETAIL**

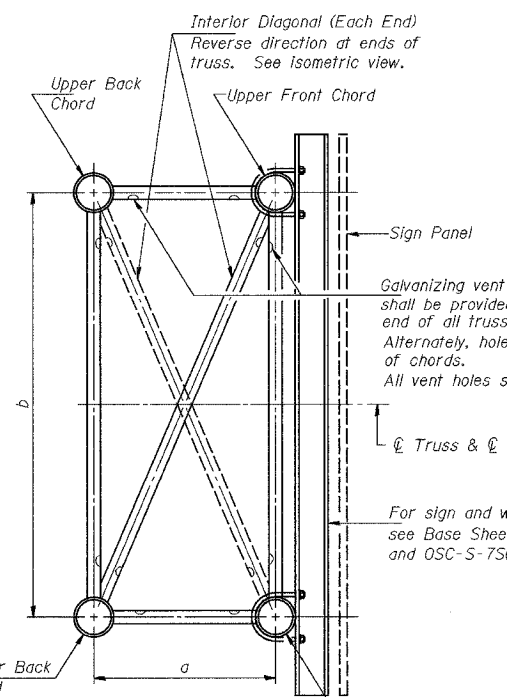


**CANTILEVER END JOINT DETAIL**

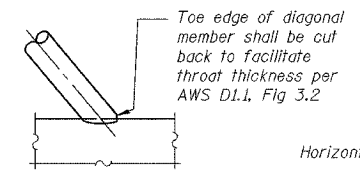
\*\*\*Contractor must use standard aluminum drive-fit cap to close ends after galvanizing. Drive-fit caps shall have 13 # drain holes at low edge.

DESIGNED	RJW	2004
CHECKED	KJN	EXAMINED
DRAWN	RJW	ENGINEER OF STRUCTURAL SERVICES
CHECKED	KJN	PASSED
		ENGINEER OF BRIDGES AND STRUCTURES

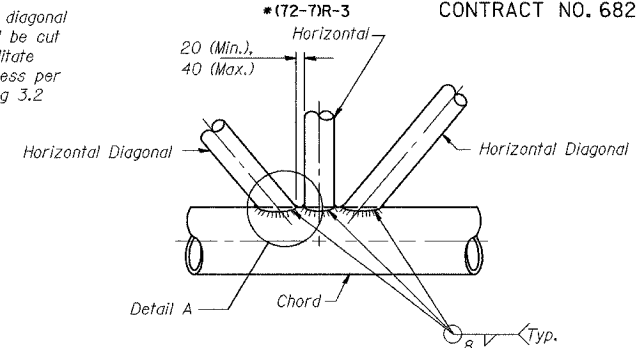
OSC-S-2(M) 10/1/2001



**SECTION A-A**



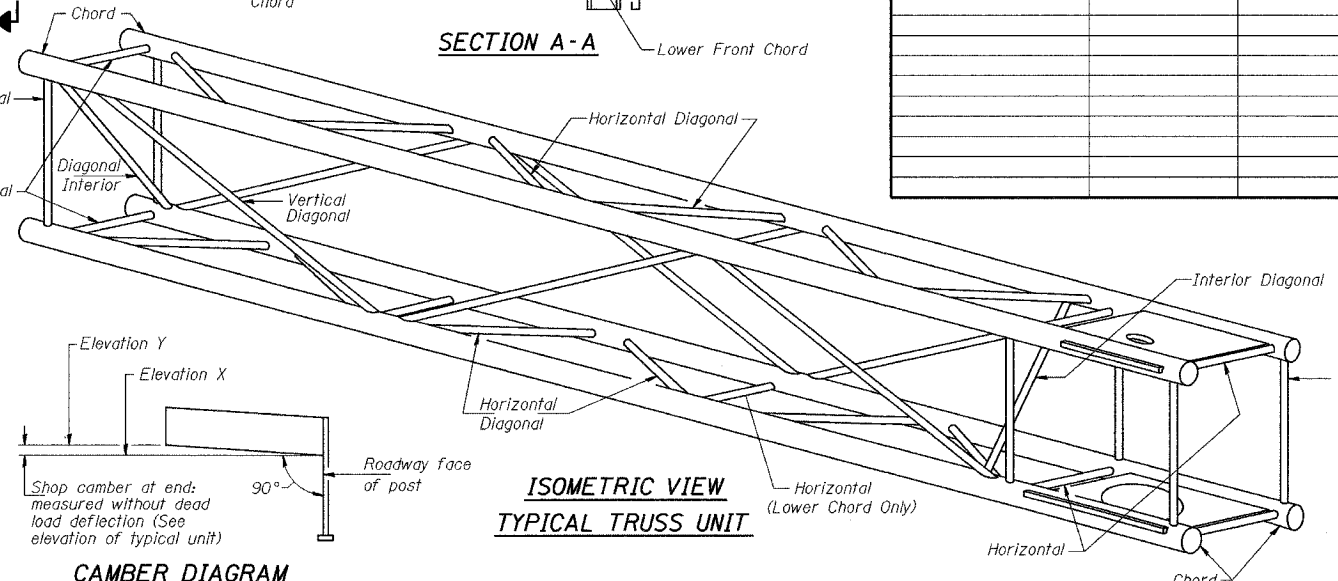
**DETAIL A**



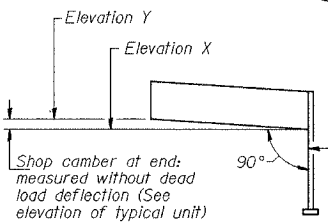
**TRUSS INTERIOR JOINT DETAILS**

All diagonals shall be detailed for minimum offset from the panel point based on the following: Offset shall be such as to provide a 20 mm minimum to 40 mm maximum clearance between any diagonal and any horizontal or vertical member, and to provide clearance for U-bolt connections of signs or walkway brackets.

Structure Number	Station	Truss Type	Design Length (L) (m)	Number of Panels Per Unit	Panel Length (P)** (m)
4C0721074L089.3	143+740	II-C-S	7.877	6	1.211



**ISOMETRIC VIEW**  
**TYPICAL TRUSS UNIT**



**CAMBER DIAGRAM**  
(For Fabrication Only)

**SHOP CAMBER TABLE**

Unit Length (L)	Shop Camber at End
4.6	63
4.9-5.2	70
5.5-6.1	75
6.4-6.7	82
7.0-7.6	89
7.9-8.2	75
8.5-9.1	82
9.5-9.8	89
10.1-10.7	95
10.8-11.5	127
11.6-12.2	140

**TRUSS UNIT TABLE**

Truss Type	Dimension "a"	Dimension "b" (m)	Dimension "s"	Limits for Panel Spacing (P)** (m)	Up. & Low. Chord		Verticals; Horizontals; Vertical, Horizontal, and Interior Diagonals	
					Nom. pipe size	Wall	Nom. pipe size	Wall
I-C-S	610	1.37	405	0.915 Min. to 1.22 Max.	127	6.5	51	3.9
II-C-S	915	1.68	535	1.07 Min. to 1.37 Max.	152	7.1	64	5.2
III-C-S (10.7 Max.)	915	2.13	535	1.22 Min. to 1.68 Max.	152	8.7	64	5.2
III-C-S (>10.7 to 12.2)	915	2.13	535	1.22 Min. to 1.68 Max.	203	8.2	75	5.5

\*\*P =  $\frac{L-s-75}{\# \text{ Panels}}$

NUMBER	REVISION	DATE

SIGNING SHEET 61 OF 83

**CANTILEVER SIGN STRUCTURES  
TRUSS DETAILS  
STEEL TRUSS & STEEL POST**

ILLINOIS DEPARTMENT OF TRANSPORTATION

SIGNING PLAN  
W.B. I-74 STA. 143+740  
S.N. 4C0721074L089.3

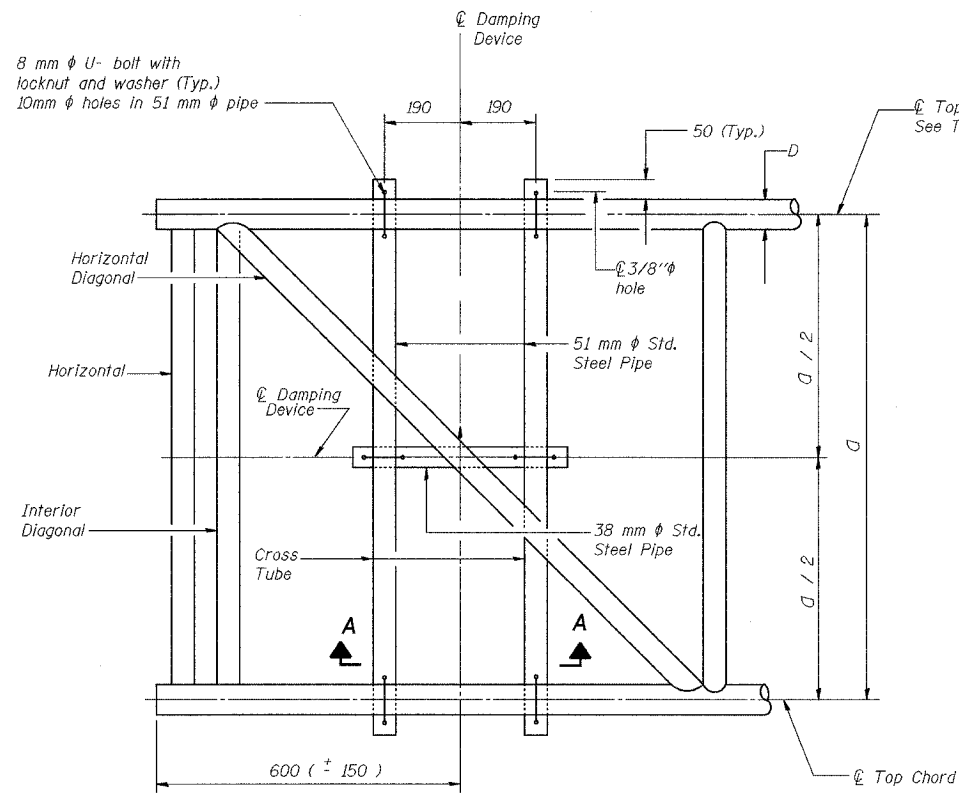
PEORIA CO., IL.

DATE: II-II-04

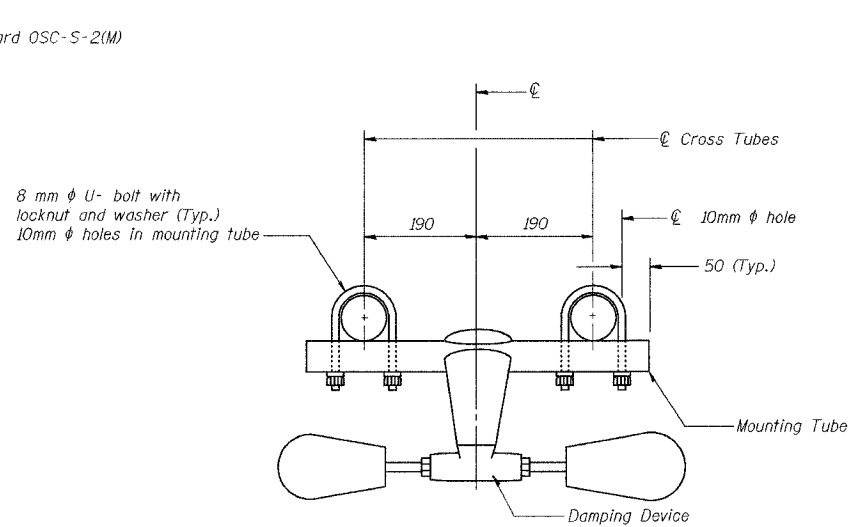
M:\Proj\3573\Sign Structures\Contract 10\sp1002-7Acan-s1.dgn

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

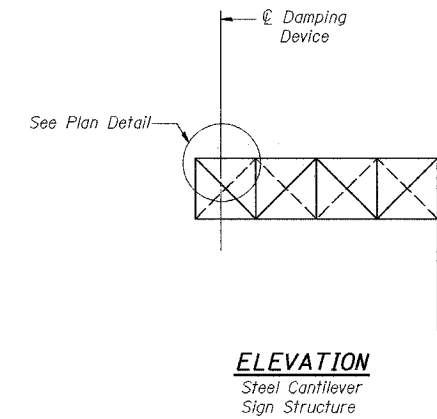
ROUTE No.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	*	PEORIA	1360	1310
STA.		TO STA.		
F.H.W.A. REGION		ILLINOIS	PROJECT	
*(72-7)R-3		CONTRACT NO. 68200		



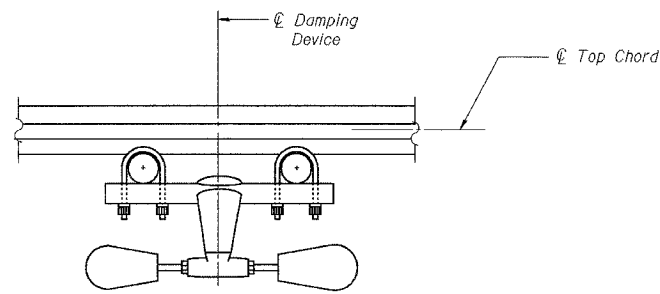
**PLAN DETAIL**



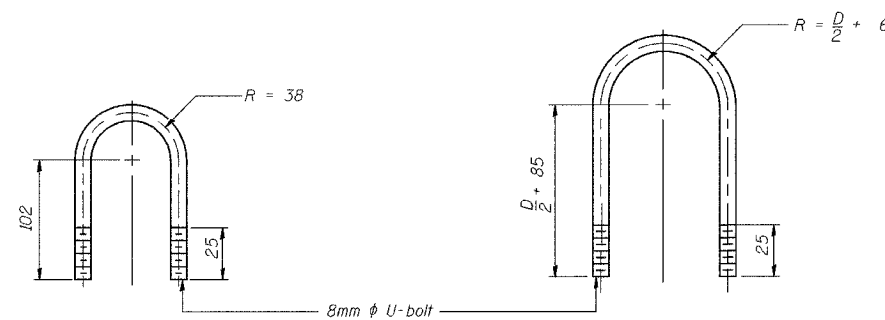
**TRUSS DAMPING  
DEVICE CONNECTION DETAIL**



**ELEVATION**  
Steel Cantilever  
Sign Structure



**SECTION A-A**



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

**TOP CHORD TO CROSS TUBE  
U-BOLT DETAIL**  
(Typical)

**GENERAL NOTES**

Damper: One damper per truss. (14 Kg Stockbridge-Type Steel)  
Cost included in "Overhead Sign Structure...".  
All dimensions are in millimeters (mm) except as noted.

M:\Proj\3573\Sign Structures\Contract 10\sp\002-TAcant-sll.dgn

DESIGNED	RJW	2004
CHECKED	KJN	EXAMINED
DRAWN	RJW	ENGINEER OF STRUCTURAL SERVICES
CHECKED	KJN	PASSED
		ENGINEER OF BRIDGES AND STRUCTURES

OSC-S-D(M) 10/11/2001

SIGNING SHEET 62 OF 83

**CANTILEVER SIGN STRUCTURES  
DAMPING DEVICE**

ILLINOIS DEPARTMENT OF TRANSPORTATION

SIGNING PLAN  
W.B. 1-74 STA. 143+740  
S.N. 4C0721074L089.3

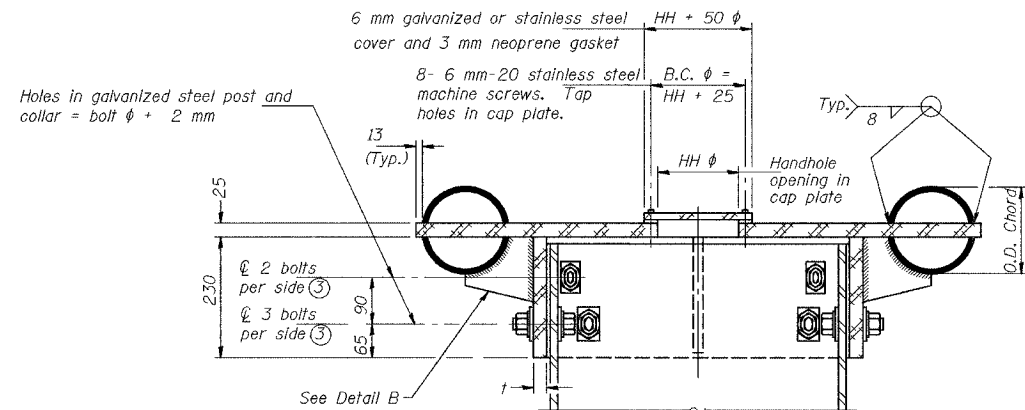
PEORIA CO., IL.

DATE: 11-11-04

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

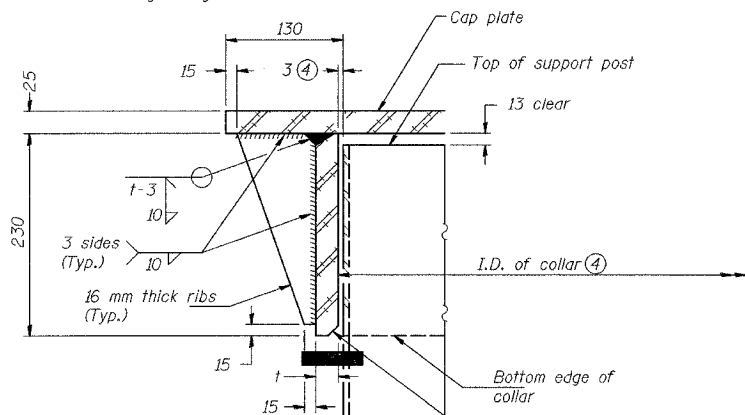
ROUTE No.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	*	PEORIA	1360	1311
STA.	TO STA.			
F.J.W.A. REGION	ILLINOIS	PROJECT		

• (72-TJR-3) CONTRACT NO. 68200

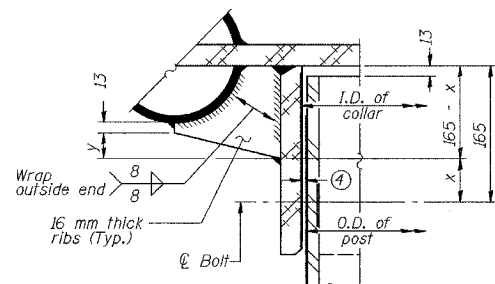


SECTION B-B

④ Collar I.D. shall equal O.D. of galvanized post plus 3 mm (+2 mm). Maximum gap between post and collar at any location shall be 3 mm before tightening bolts.

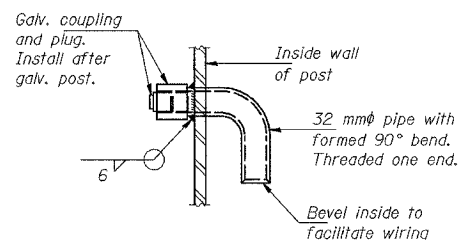


DETAIL A  
(Two locations)

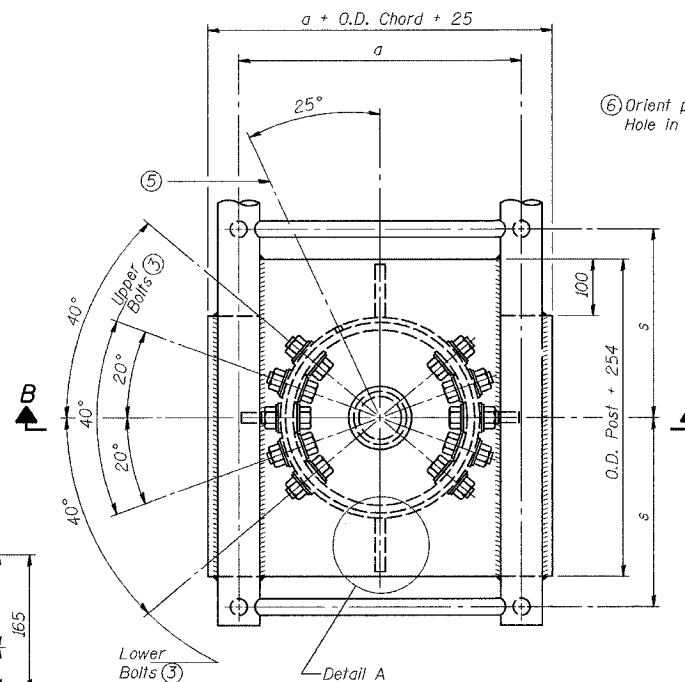


DETAIL B

Two locations  
(For details not shown, see Detail C)

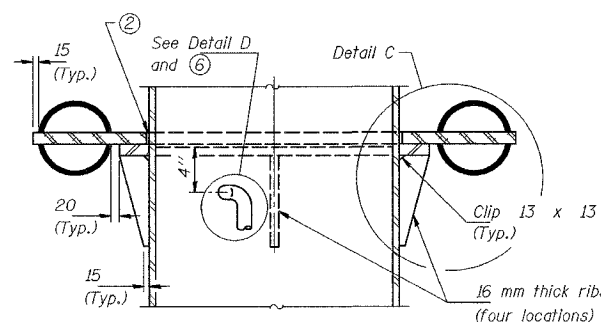


DETAIL D

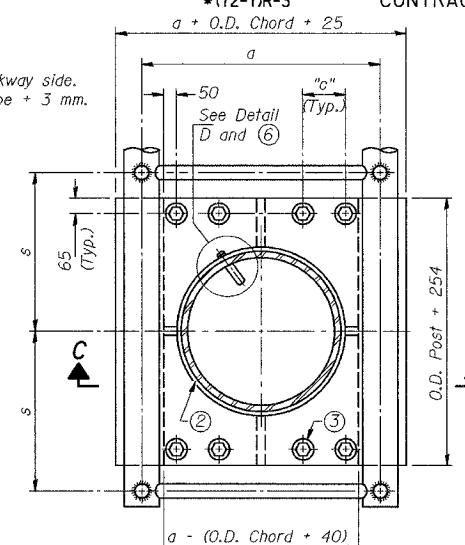


PLAN VIEW - TOP OF COLUMN

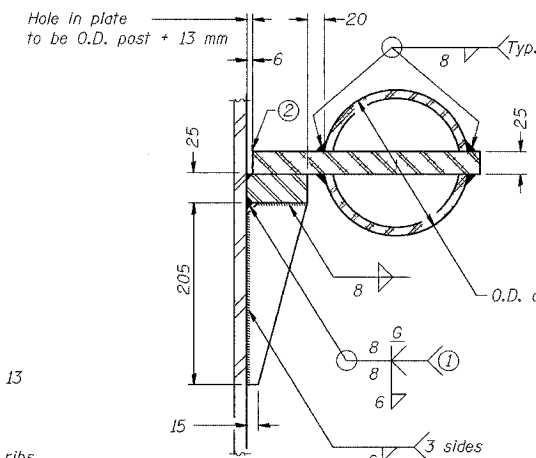
⑤ Optional full penetration weld in collar.  
(Two locations maximum....(180° apart)....X-ray or UT 100%)



SECTION C-C

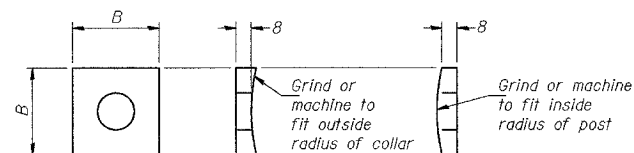


SECTION THRU POST ABOVE LOWER CHORDS



DETAIL C

① Grind top if required to fully seat plate, repair damaged galvanizing before assembly.  
② After tightening lower connection bolts, fill gap with non-hardening, silicone caulk suitable for exterior exposure and acceptable to the Engineer. Cost is included in "Overhead Sign Structure-Cantilever...".



CONTOURED WASHERS

Bolt Dia.	Contoured Washers	
	Hole Dia.	B
22	25	70
25	28	75
32	35	82

DESIGNED	RJW	2004
CHECKED	KJN	EXAMINED
DRAWN	RJW	PASSED
CHECKED	KJN	ENGINEER OF BRIDGES AND STRUCTURES

OSC-S-3(M) 10/1/2001

NUMBER	REVISION	DATE

Truss Type	Post Size	Upper & Lower Connection Bolt Diameter ③	Lower Juncture Bolt Spacing Dimension "c" ③	Opening in Cap Plate "HH"	Collar Thickness (t)	Side Ribs	
						x	y
I-C-S	406φ (160 kg/m)	22	85	205	16	45	56
II-C-S	610φ (186 kg/m)	25	90	305	22	50	32
III-C-S (10.7 Max.)	610φ (254 kg/m)	25	90	305	22	50	25
III-C-S (>10.7 to 12.2)	610φ (254 kg/m)	32	90	305	22	50	25

③ Upper and lower connection bolts in collar and bolts at lower chord connection must be high strength with matching lock nuts. Lower connection bolts must have 2 flat washers each.

SIGNING SHEET 63 OF 83

CANTILEVER SIGN STRUCTURES  
JUNCTURE DETAILS  
STEEL TRUSS & STEEL POST

ILLINOIS DEPARTMENT OF TRANSPORTATION

SIGNING PLAN  
W.B. I-74 STA. 143+740  
S.N. 4C0721074L089.3

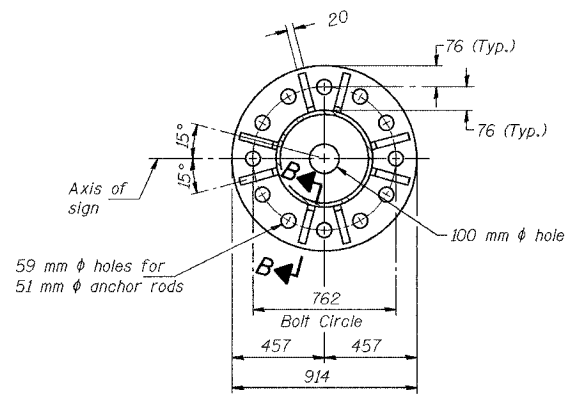
PEORIA CO., IL.

DATE: II-II-04

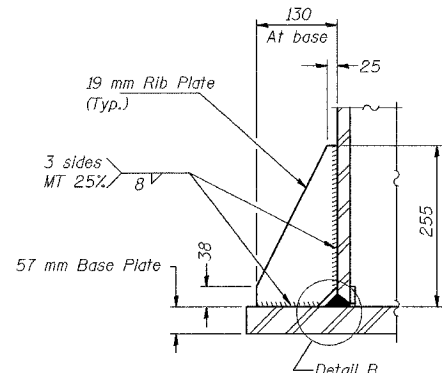
M:\Proj\3573\Sign Structures\Contract 10\sp1002-Tacan-sfl.dgn

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

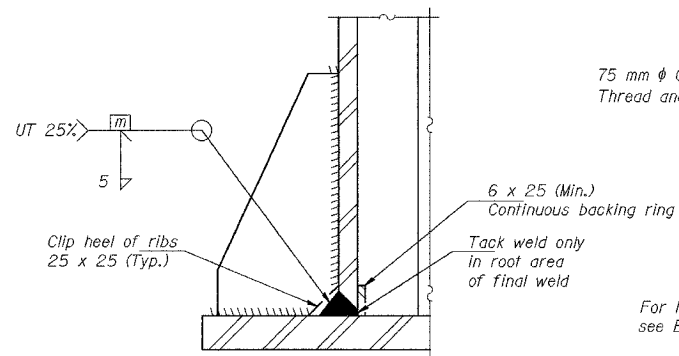
ROUTE No.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	*	PEORIA	1360	1312
STA.		TO STA.		
F.H.W.A. REGION		ILLINOIS	PROJECT	
*(72-7R-3		CONTRACT NO. 68200		



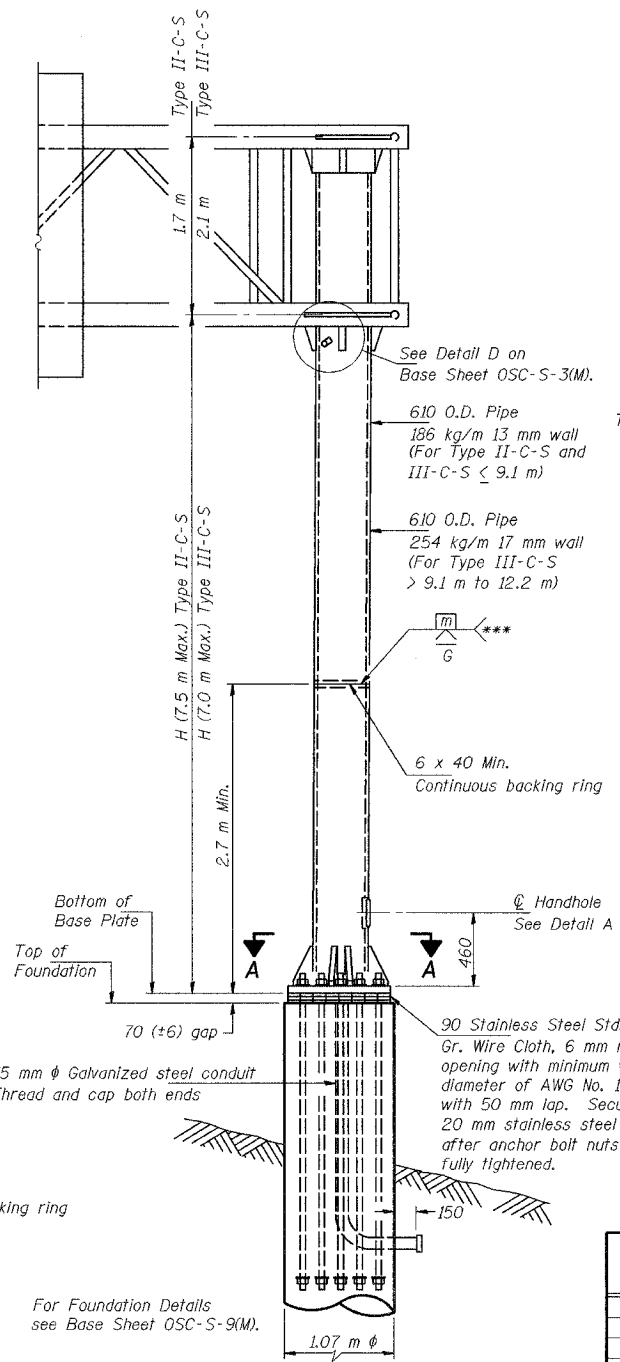
SECTION A-A



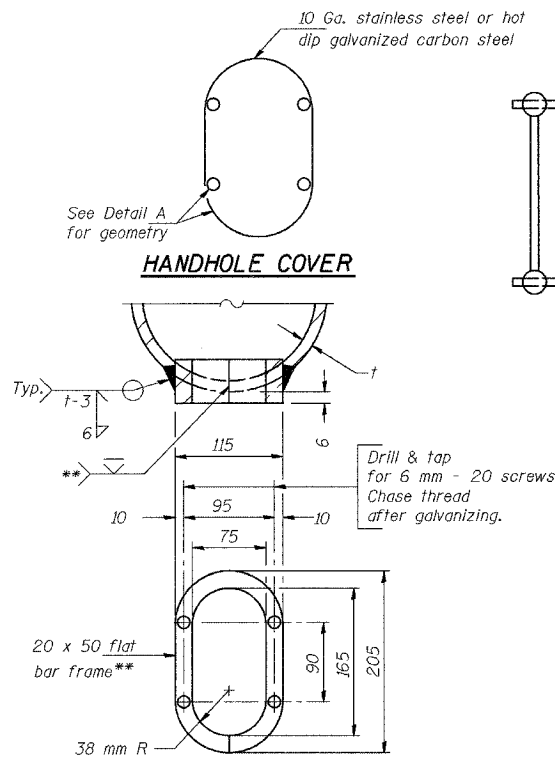
SECTION B-B



DETAIL B  
(Typical rib)



FRONT ELEVATION

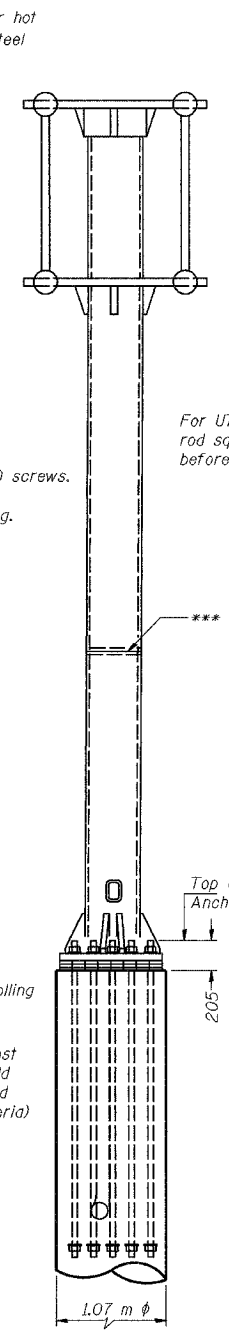


DETAIL A

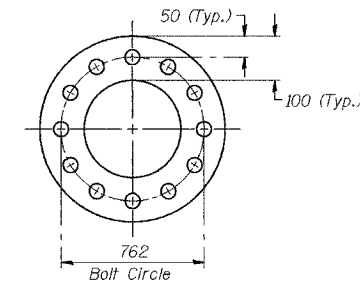
Provide 205 x 115 cover. Outside corners = 57 mm radius. Provide 4- 8 mm  $\phi$  holes in cover for 6 mm-20 round head hot dip galvanized or stainless steel machine screws. (See cover details)

\*\*Bent bars may be butt welded top and bottom or bottom only. In lieu of fabricated handhole frame as shown, may cut from 50 mm plate (rolling direction vertical). All cut faces to be ground to ANSI Roughness of 12.7  $\mu$ m or less.

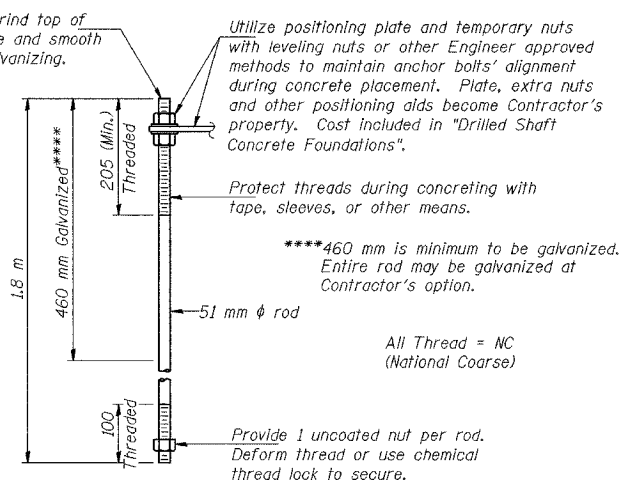
\*\*\*Butt welded joint in post is only allowed for post heights (H) over 6.10 m in length. If used, weld procedure must be preapproved by Engineer and joint shall receive 100% RT or UT (tension criteria) at Contractor's expense.



SIDE ELEVATION



SUGGESTED POSITIONING PLATE



ANCHOR ROD DETAIL

For UT, grind top of rod square and smooth before galvanizing.

Utilize positioning plate and temporary nuts with leveling nuts or other Engineer approved methods to maintain anchor bolts' alignment during concrete placement. Plate, extra nuts and other positioning aids become Contractor's property. Cost included in "Drilled Shaft Concrete Foundations".

Protect threads during concreting with tape, sleeves, or other means.

\*\*\*\*460 mm is minimum to be galvanized. Entire rod may be galvanized at Contractor's option.

All Thread = NC (National Coarse)

Provide 1 uncoated nut per rod. Deform thread or use chemical thread lock to secure.

Anchor rods shall conform to AASHTO M314 Grade 380 (55) and meet Charpy V-Notch (CVN) energy of 20 J at -12  $^{\circ}$  C. before galvanizing. Galvanize the upper 460 mm (minimum\*\*\*\*) and associated M291, Grade A, C or DH heavy hex nuts and hardened washers per AASHTO M232. No welding shall be permitted on rods. Provide an unfinished nut at bottom, a hexagon locknut and washer above base plate and a leveling nut and washer below base plate. Nuts shall each be tightened with 270 N-m minimum torque against base plate. Before or after threading, but before galvanizing, each anchor rod shall be ultrasonically tested (UT) by a Level II or III inspector, qualified in accord with ANSI guidelines, using a straight beam, 13 mm  $\phi$  3.5 mhz. transducer, to insure no rejectable flaws exist in the upper 460 mm (tension criteria). Cost of testing included in "Drilled Shaft Concrete Foundations".

Structure Number	Station	H (m)
4C0721074L089.3	143+740	3.605

DESIGNED	RJW	EXAMINED	2004
CHECKED	KJN	ENGINEER OF STRUCTURAL SERVICES	
DRAWN	RJW	PASSED	
CHECKED	KJN	ENGINEER OF BRIDGES AND STRUCTURES	

NUMBER	REVISION	DATE

OSC-S-5(M) 10/1/2001

SIGNING SHEET 64 OF 83

**CANTILEVER SIGN STRUCTURES  
TYPE II-C-S & III-C-S TRUSS SUPPORT POST  
STEEL TRUSS & STEEL POST**

ILLINOIS DEPARTMENT OF TRANSPORTATION

SIGNING PLAN  
W.B. 1-74 STA. 143+740  
S.N. 4C0721074L089.3

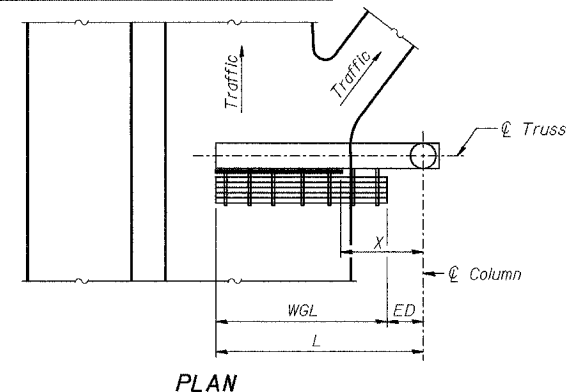
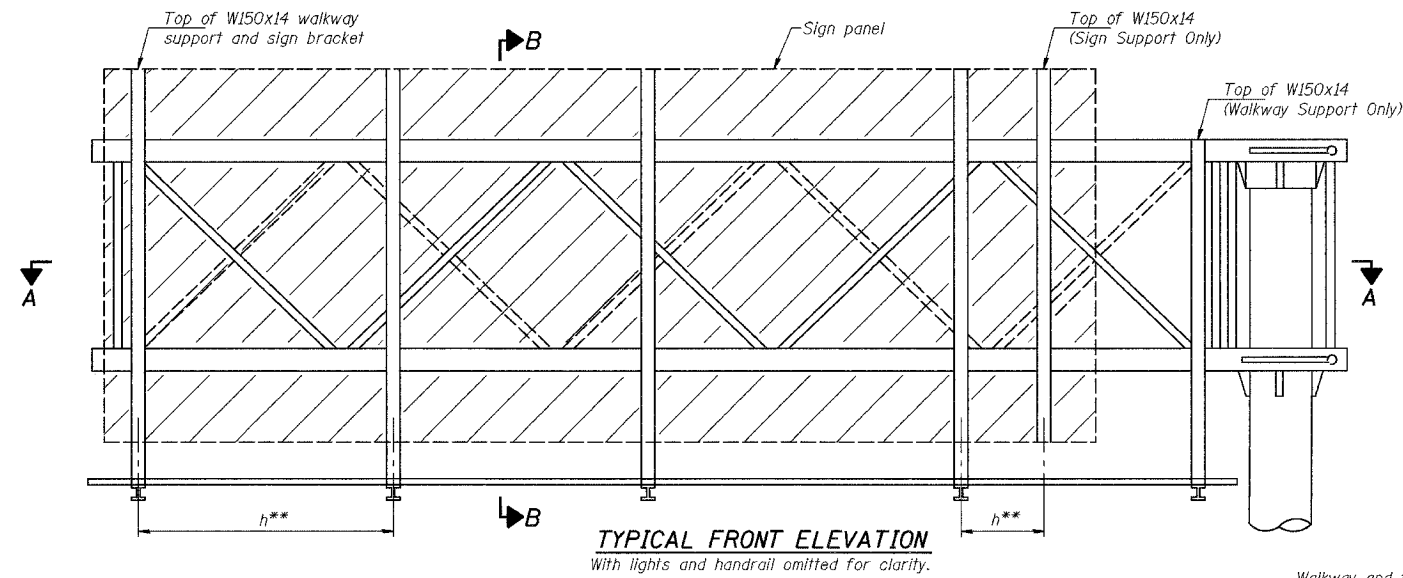
PEORIA CO., IL. DATE: 11-11-04

M:\Proj\3573\Sign Structures\Contract 10\sp1002-74can-sll.dgn

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

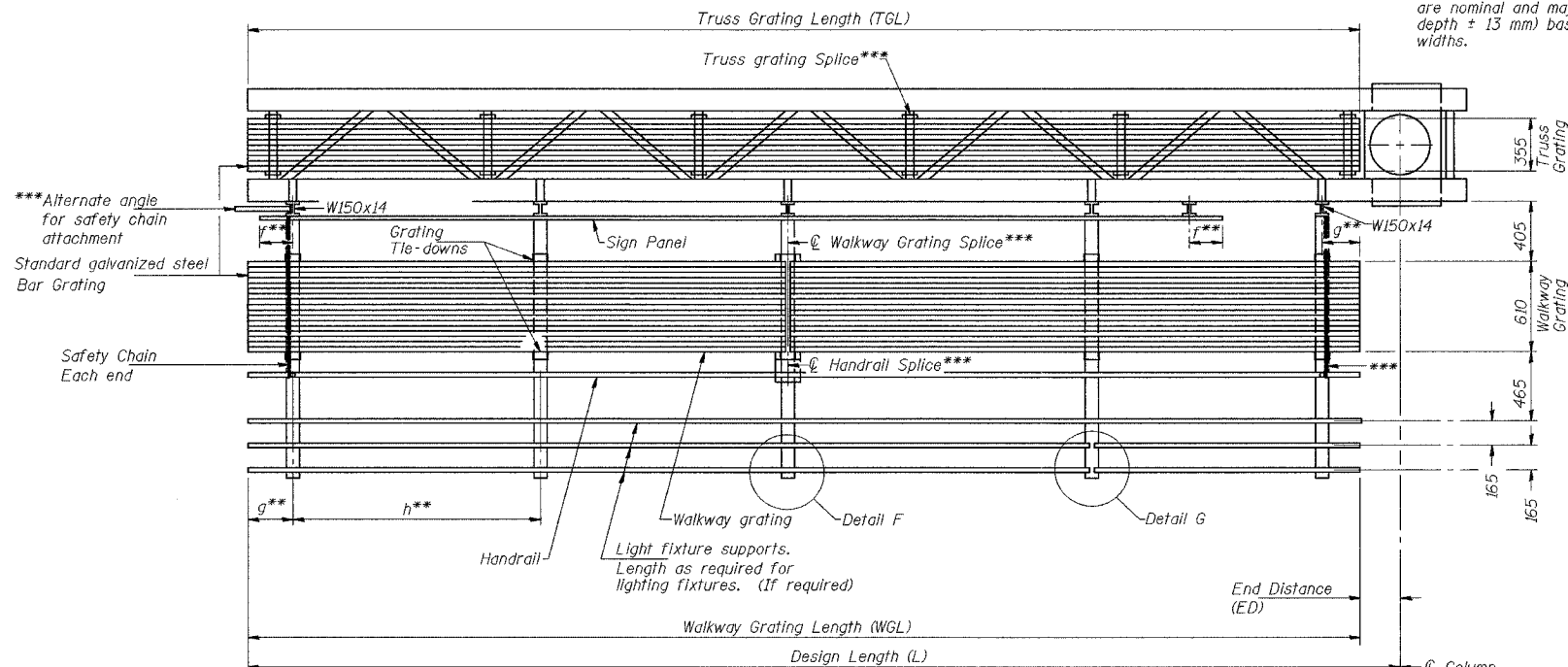
ROUTE No.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	*	PEORIA	1360	1313
STA.		TO STA.		
F.H.W.A. REGION		ILLINOIS	PROJECT	
*(72-71R-3		CONTRACT NO. 68200		

Walkway Grating, Walkway Supports, Handrail and Lighting are not included. Information shown on this sheet shall be used for Truss Grating, Sign Supports and Sign Panel locations only.



Walkway and truss grating dimensions are nominal and may vary (width ± 13 mm, depth ± 13 mm) based on available standard widths.

Structure Number	Station	WGL (m)	ED (m)	TGL (m)	X (m)
4C0721074L089.3	143+740			7.422	3.677



Notes: \*\*Space W150x14 walkway brackets and sign brackets for efficiency and within limits shown:  
 f = 300 maximum, 100 minimum (End of sign to centerline of nearest bracket)  
 g = 300 maximum, 100 minimum (End of walkway to centerline of nearest bracket)  
 h = 1.85 m maximum (centerline to centerline of sign and/or walkway support brackets, W150x14)  
 \*\*\*\*If walkway bracket at safety chain location is behind sign, add angle to bracket.  
 For details of sign placement, sign/walkway brackets, truss and walkway gratings, grating splices and Section B-B, see Base Sheet OSC-S-7(M).  
 For details of handrail, handrail splice, safety chain and Details F and G, see Base Sheet OSC-S-8(M).

Truss grating to facilitate inspection shall run full length of cantilevers. Cost of truss grating is included in "Overhead Sign Structure-Cantilever..."

Handrail and walkway grating shall span a minimum of three brackets between splices. \*\*\*Use and location of handrail or grating splices are optional, based on lengths needed and material availability.

$$TGL = L - \left( \frac{\text{Post O.D.}}{2} + 150 \right)$$

DESIGNED	RJW	2004
CHECKED	KJN	EXAMINED
DRAWN	RJW	PASSED
CHECKED	KJN	ENGINEER OF BRIDGES AND STRUCTURES

		ENGINEER OF STRUCTURAL SERVICES
		ENGINEER OF BRIDGES AND STRUCTURES

NUMBER	REVISION	DATE

**BRACKET TABLE**

W150x14		
Sign Width		Number Brackets Required
Greater Than	Less Than or Equal To	
	3.0	2
3.0	4.9	3
4.9	6.7	4
6.7	8.6	5
8.6	10.4	6

SIGNING SHEET 65 OF 83  
**CANTILEVER SIGN STRUCTURES  
 STEEL WALKWAY DETAILS  
 STEEL TRUSS & STEEL POST**

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 SIGNING PLAN  
 W.B. I-74 STA. 143+740  
 S.N. 4C0721074L089.3

PEORIA CO., IL. DATE: II-II-04

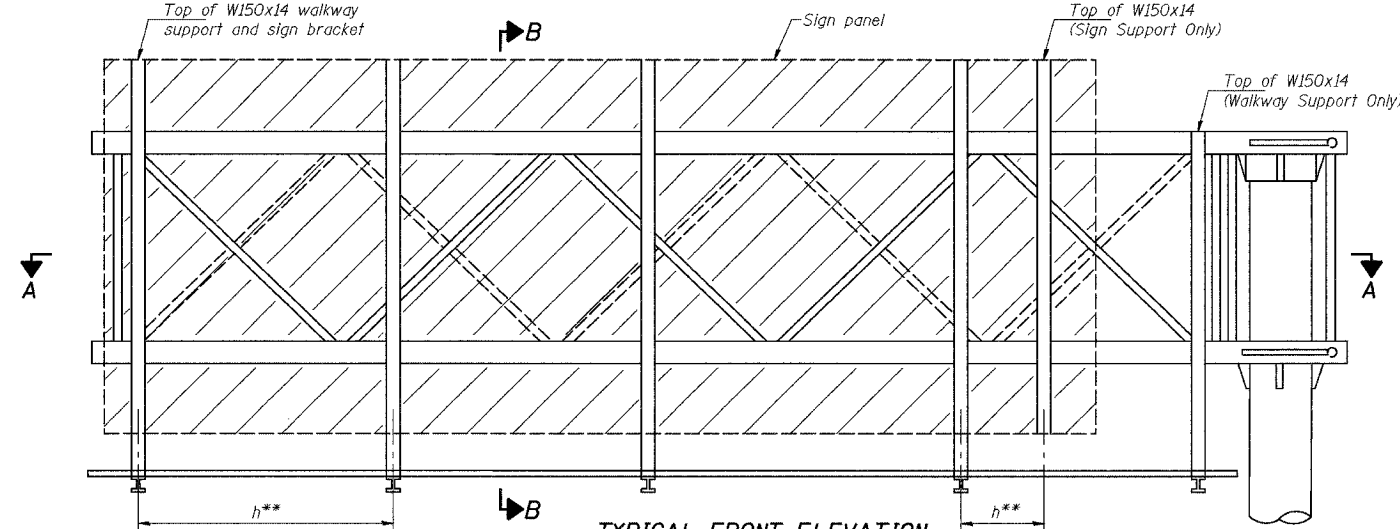
M:\Proj\3573\Sign Structures\Contract 10\sp\002-TAcan-sfl.dgn

OSC-S-6(M) 10/1/2001

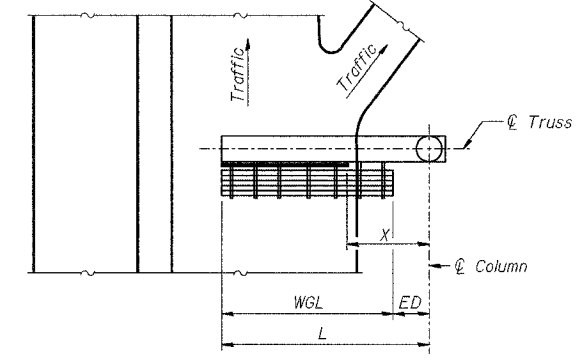
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE No.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	*	PEORIA	1360	1314
STA.	TO STA.			
F.H.W.A. REGION	ILLINOIS	PROJECT		
*(72-7R-3		CONTRACT NO. 68200		

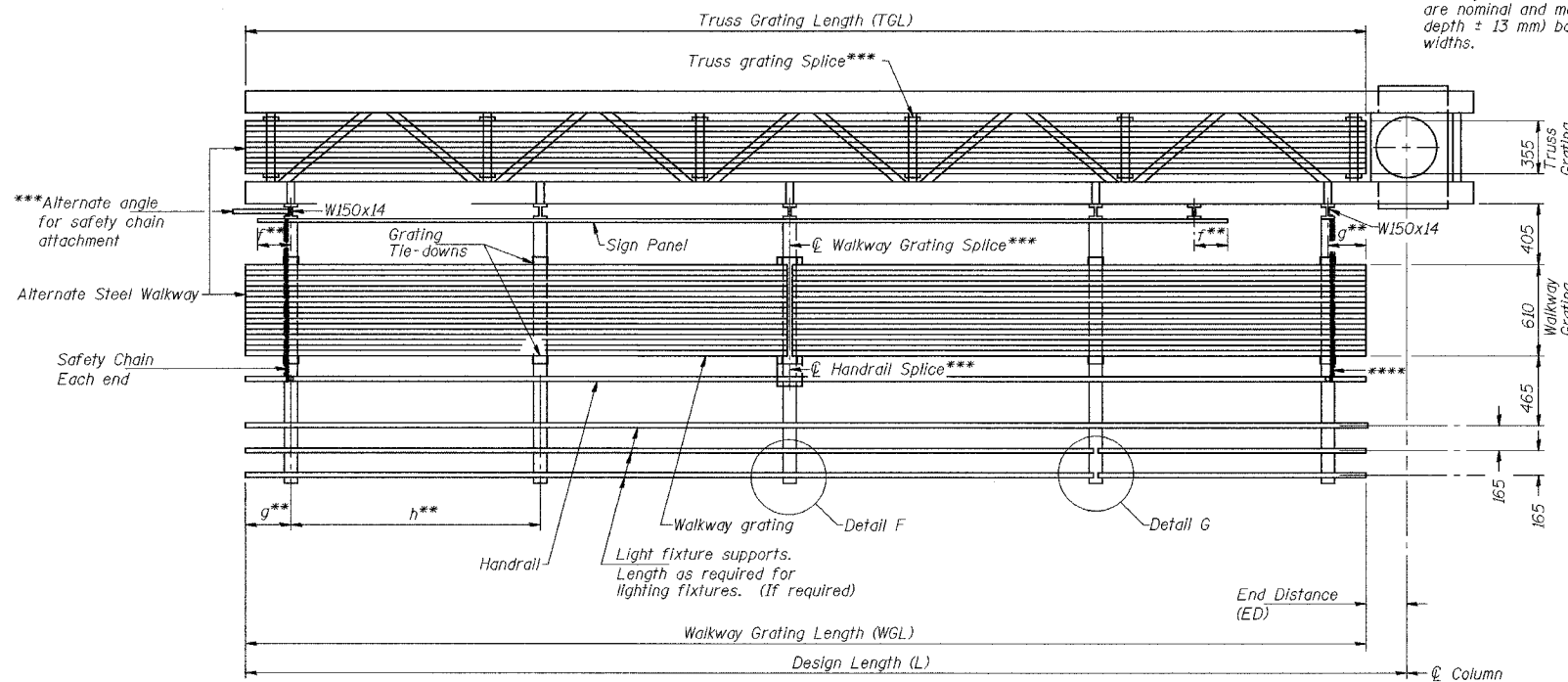
Walkway Grating, Walkway Supports, Handrail and Lighting are not included.  
Information shown on this sheet shall be used for Truss Grating, Sign Supports and Sign Panel locations only.



**TYPICAL FRONT ELEVATION**  
With lights and handrail omitted for clarity.



**PLAN**  
**WALKWAY AND HANDRAIL SKETCH**  
(Road plan beneath truss varies)  
(\*X is measured along centerline of truss to edge of sign panel)



Walkway and truss grating dimensions are nominal and may vary (width ± 13 mm, depth ± 13 mm) based on available standard widths.

Structure Number	Station	WGL (m)	ED (m)	TGL (m)	X (m)
4C0721074L089.3	143+740			7.422	3.677

Notes: \*\*Space W150x14 walkway brackets and sign brackets for efficiency and within limits shown:

- f = 300 maximum, 100 minimum (End of sign to centerline of nearest bracket)
- g = 300 maximum, 100 minimum (End of walkway to centerline of nearest bracket)
- h = 1.85 m maximum (centerline to centerline of sign and/or walkway support brackets, W150x14)

\*\*\*If walkway bracket at safety chain location is behind sign, add angle to bracket.  
For details of sign placement, sign/walkway brackets, truss and walkway gratings, grating splices and Section B-B, see Base Sheet OSC-S-75(M).  
For details of handrail, handrail splice, safety chain and Details F and G, see Base Sheet OSC-S-8(M).

**SECTION A-A**

Truss grating to facilitate inspection shall run full length of cantilevers. Cost of truss grating is included in "Overhead Sign Structure-Cantilever...".

Handrail and walkway grating shall span a minimum of three brackets between splices.  
\*\*\*Use and location of handrail or grating splices are optional, based on lengths needed and material availability.

$$TGL = L - \left( \frac{\text{Post O.D.}}{2} + 150 \right)$$

DESIGNED	RJW	EXAMINED	2004
CHECKED	KJN	ENGINEER OF STRUCTURAL SERVICES	
DRAWN	RJW	PASSED	
CHECKED	KJN	ENGINEER OF BRIDGES AND STRUCTURES	

OSC-S-6S(M) 10/1/2001

NUMBER	REVISION	DATE

**BRACKET TABLE**

W150x14		Number Brackets Required
Sign Width Greater Than	Less Than or Equal To	
	3.0	2
3.0	4.9	3
4.9	6.7	4
6.7	8.6	5
8.6	10.4	6

SIGNING SHEET 66 OF 83

**CANTILEVER SIGN STRUCTURES  
ALTERNATE STEEL WALKWAY DETAILS  
STEEL TRUSS & STEEL POST**

ILLINOIS DEPARTMENT OF TRANSPORTATION

SIGNING PLAN  
W.B. I-74 STA. 143+740  
S.N. 4C0721074L089.3

PEORIA CO., IL.

DATE: 11-04

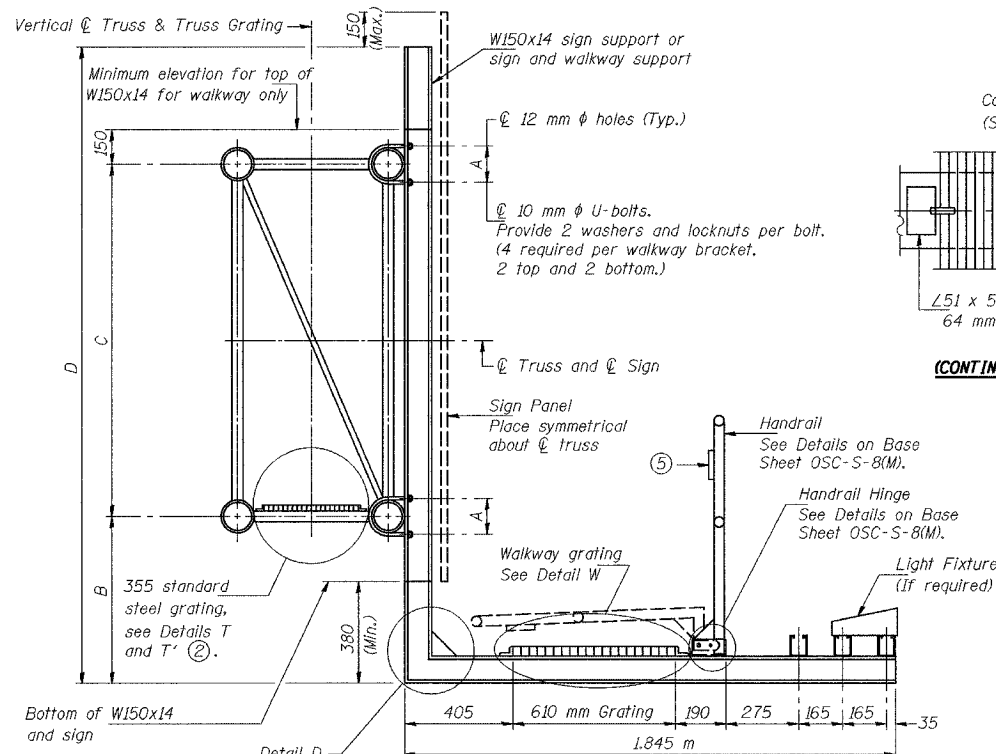
M:\Proj\3573\Sign Structures\Contract 10\sp\002-74can-sfl.dgn

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

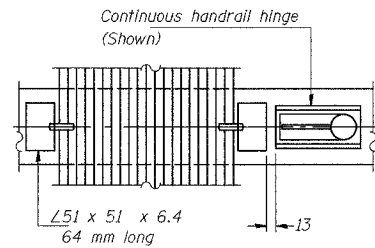
ROUTE No.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	*	PEORIA	1360	1315
STA.		TO STA.		
F.H.W.A. REGION		ILLINOIS	PROJECT	
* (72-7)R-3		CONTRACT NO. 68200		

**BARS SIZES FOR STANDARD STEEL GRATING**

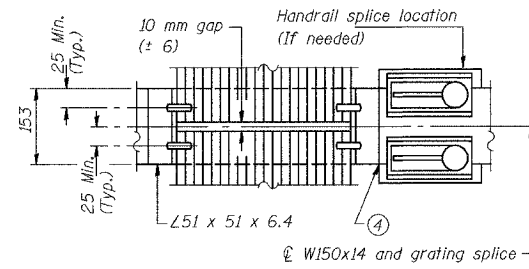
TRUSS GRATING Main bearing bars 5 mm x 38 mm on 30 mm centers.  
Cross bars 5 mm x 38 mm on 102 mm centers.  
WALKWAY GRATING Main bearing bars 5 mm x 38 mm on 30 mm centers.  
Cross bars 5 mm x 38 mm on 102 mm centers.



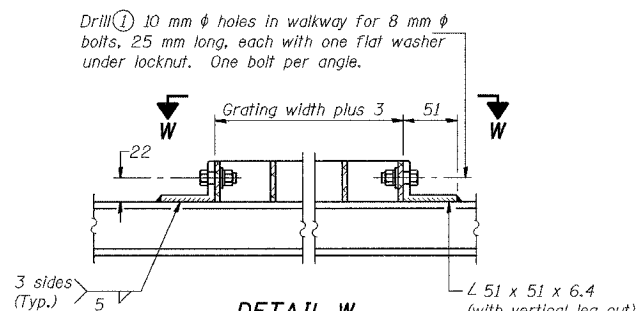
**SECTION B-B**



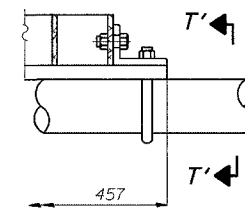
**CONTINUOUS WALKWAY GRATING**



**(AT WALKWAY GRATING SPLICE)**

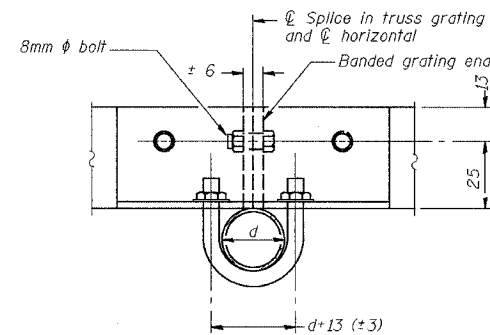


**DETAIL W**  
(Walkway grating)

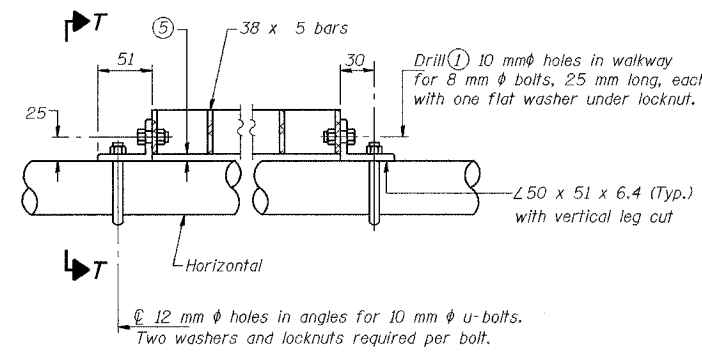


**DETAIL T'**

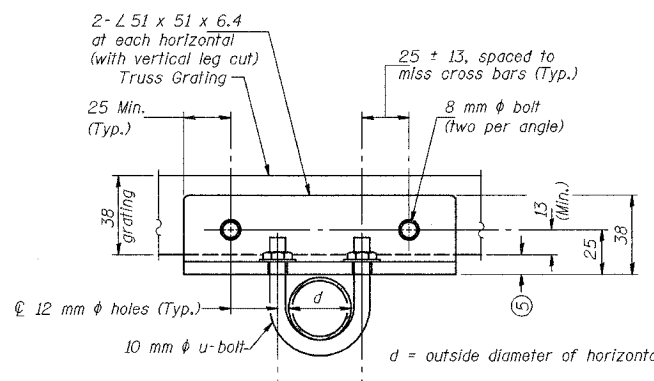
(Truss grating splice)  
Details not shown same as Detail T.  
Alternate materials may be used subject to the Engineer's review and approval.



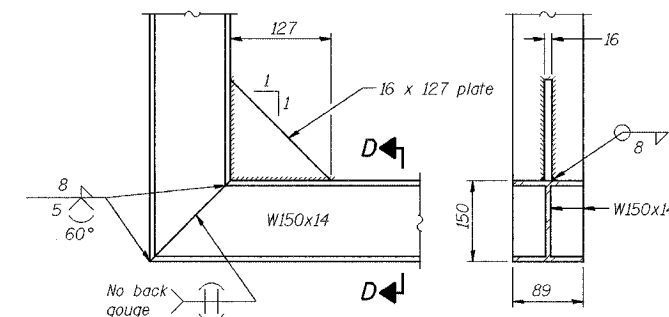
**SECTION T'-T'**



**DETAIL T**  
(Truss grating at horizontal)



**SECTION T-T'**



**DETAIL D**

**SECTION D-D**

(See Detail P, Base Sheet OSC-S-8(M).)

- Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.
- When truss grating must be spliced, use suggested detail or other methods subject to the Engineer's review and approval. Locate splice to avoid interference between cross bars and bolt locations.
- If Handrail Joint present, weld angle to W150x14 and 6 mm extension bars. (See Base Sheet OSC-S-8(M).)
- 3 mm x 13 mm x 50 mm welded to handrail posts to protect locations that contact grating.
- Tube to grating gap may vary from 0 to 13mm (Max.) to align walkway, allow for camber, etc.

**Walkway Grating, Walkway Supports, Handrail and Lighting are not included. Information shown on this sheet shall be used for Truss Grating and Sign Supports only.**

Structure Number	Station	A (m)	B (m)	C (m)	D (m)
4C0721074L089.3	143+740	0.178	0.456	1.680	2.441

NUMBER	REVISION	DATE

DESIGNED	RJW
CHECKED	KJN
DRAWN	RJW
CHECKED	KJN

EXAMINED	2004
PASSED	ENGINEER OF STRUCTURAL SERVICES
	ENGINEER OF BRIDGES AND STRUCTURES

OSC-S-7(M) 10/1/2001

I:\Pro\13573\Sign Structures\Contract 10/sp1002-7Acan-sfl.dgn

SIGNING SHEET 67 OF 83

**CANTILEVER SIGN STRUCTURES  
WALKWAY DETAILS  
STEEL TRUSS & STEEL POST**

ILLINOIS DEPARTMENT OF TRANSPORTATION

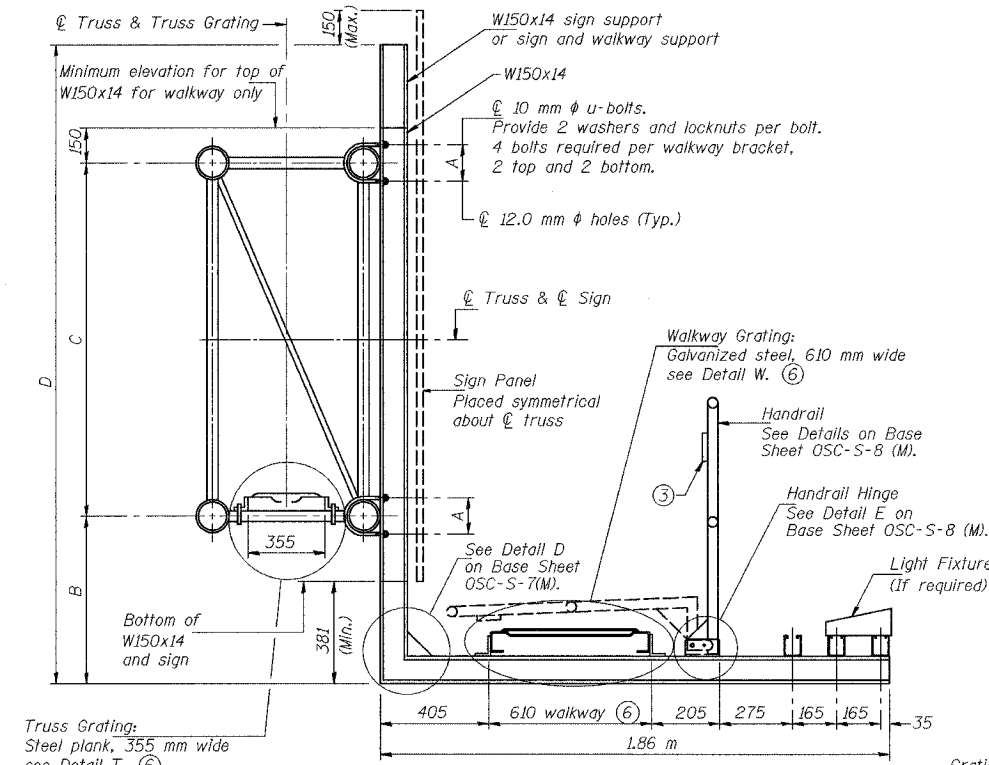
SIGNING PLAN  
W.B. 1-74 STA. 143+740  
S.N. 4C0721074L089.3

PEORIA CO., IL.

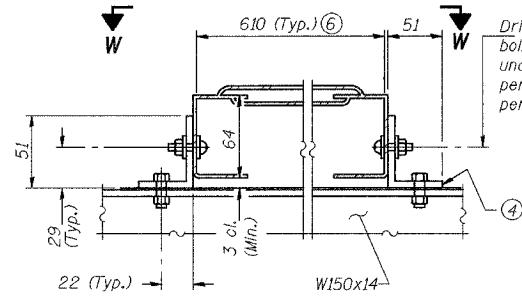
DATE: 11-1-04

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

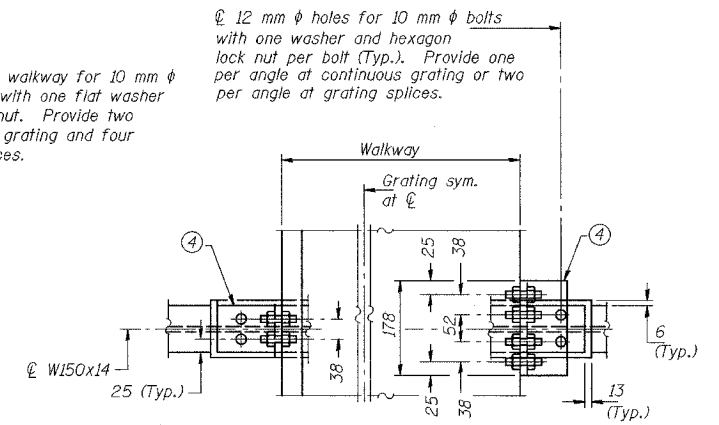
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	*	PEORIA	1360	1316
STA.		TO STA.		
F.H.W.A. REGION		ILLINOIS	PROJECT	
*(72-7)R-3		CONTRACT NO. 68200		



SECTION B-B

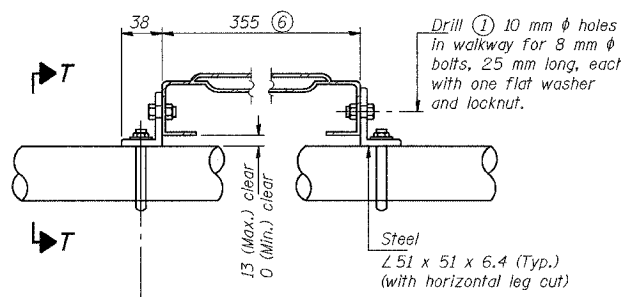


DETAIL W  
GALVANIZED STEEL WALKWAY GRATING

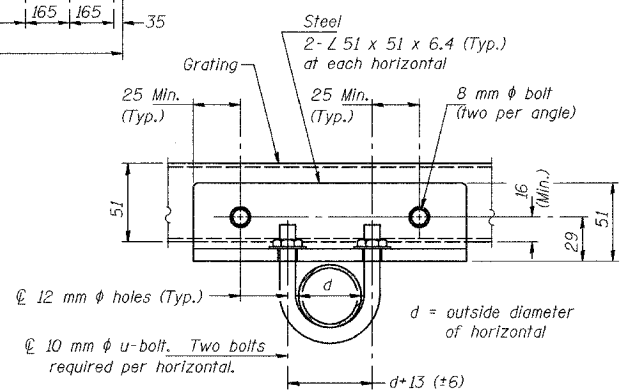


WALKWAY GRATING CONTINUOUS AT WALKWAY GRATING SPLICE

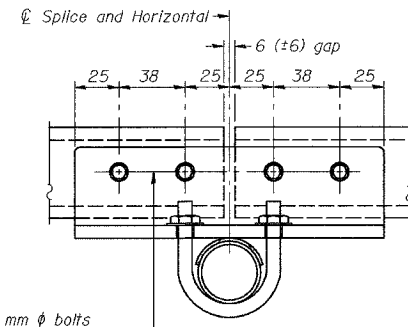
SECTION W-W



DETAIL T  
(Truss Grating at Horizontal)



SECTION T-T  
(Truss Grating Continuous)



SECTION T-T

(Truss Grating Splice)  
Details not shown same as Section T-T.  
Alternate splice details and locations may be used subject to the Engineer's review and approval.

- Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.
- When truss grating must be spliced, use suggested details or other methods in accord with grating manufacturer's recommendation and subject to the Engineer's review and approval.
- 3 mm x 13 mm x 50 mm welded to handrail posts to protect locations that contact grating.
- Galvanized steel L 51 x 51 x 6.4, 89 mm long with continuous grating 190 mm long at grating splice.
- Details shown are considered equal alternatives to Standard Steel Walkway Details and may be substituted by Contractor at no charge in contract cost.
- Perforated or expanded metal grating providing a skid resistant (non-serrated) surface and capable of supporting a 2.22 kN concentrated load with a 1.83 m clear span. Walkway and truss grating dimensions are nominal and may vary (width ± 13 mm, depth ± 13 mm) based on available standard sizes. Cut ends of grating shall be free of burrs or hazardous projections and coated with Zinc-rich primer or equivalent.

STEEL TRUSS GRATING

Structure Number	Station	A (m)	B (m)	C (m)	D (m)
4C0721074L089.3	143+740	0.178	0.456	1.680	2.441

Walkway Grating, Walkway Supports, Handrail and Lighting are not included.  
Information shown on this sheet shall be used for Truss Grating and Sign Supports only.

NUMBER	REVISION	DATE

DESIGNED	RJW	2004
CHECKED	KJN	EXAMINED
DRAWN	RJW	PASSED
CHECKED	KJN	

OSC-S-7S(M) 10/1/2001

M:\Proj\3573\Sign Structures\Contract 10\sp\002-74can-sfl.dgn

**CANTILEVER SIGN STRUCTURES  
ALTERNATE WALKWAY DETAILS**

ILLINOIS DEPARTMENT OF TRANSPORTATION

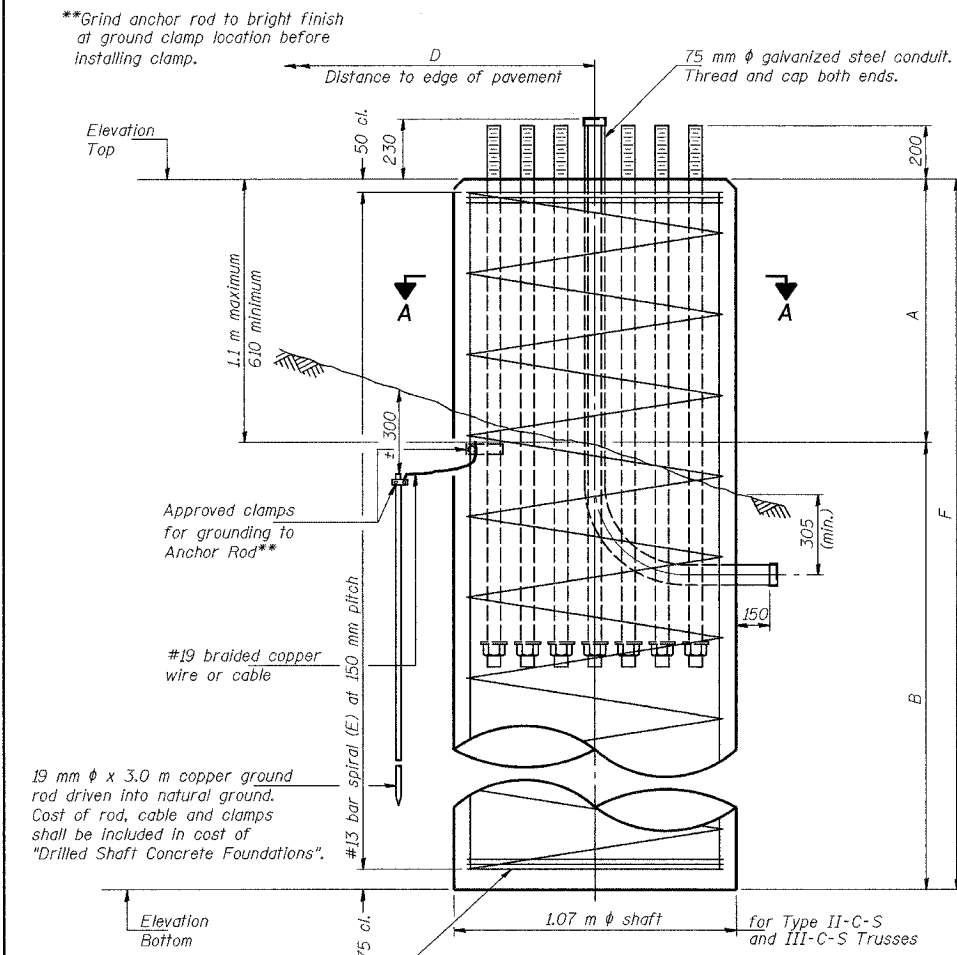
SIGNING PLAN  
W.B. 1-74 STA. 143+740  
S.N. 4C0721074L089.3

PEORIA CO., IL.      DATE: 11-11-04



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE No.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	*	PEORIA	1360	1317
STA.		TO STA.		
F.I.L.W.A. REGION		ILLINOIS	PROJECT	
*(72-71R-3		CONTRACT NO. 68200		



**NOTES:**

The foundation dimensions shown are based on the presence of mostly cohesive soils with an average Unconfined compressive Strength (Qu) of at least 120 kPa, which must be determined by previous soil investigations at the jobsite. When other conditions are indicated, the boring data will be included in the plans and the foundation dimensions shown will be the result of site specific designs. If the conditions encountered are different than those indicated, the Contractor shall notify the Engineer to determine if the foundation dimensions need to be modified. If dimensions "B" or "F" are revised by more than 300 mm by the contractor, "as-built" plans shall be prepared and submitted to the District Bureau of Operations for future reference.

No sonotubes or decomposable forms shall be used below the lower conduit entrance. Permanent metal forms or other shielding may not be left in place below that elevation without the Engineers' written permission.

Concrete shall be placed monolithically, without construction joints.

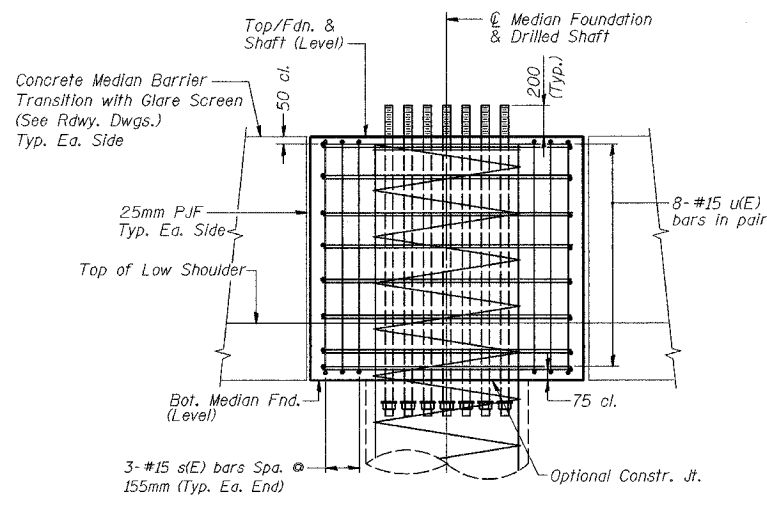
Backfill shall be placed per Article 502 of Standard Specifications, and prior to erection of support column.

A normal surface finish followed by a Bridge Seat Sealer application will be required on concrete surfaces above the lowest elevation 150 mm below finished ground line. Cost included in "Drilled Shaft Concrete Foundations".

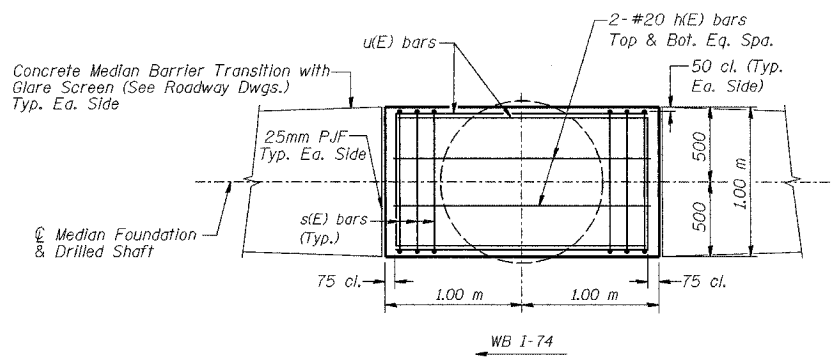
DESIGNED	RJW
CHECKED	KJN
DRAWN	RJW
CHECKED	KJN

2004  
EXAMINED  
ENGINEER OF STRUCTURAL SERVICES  
PASSED  
ENGINEER OF BRIDGES AND STRUCTURES

NUMBER	REVISION	DATE



**INSIDE ELEVATION - MEDIAN FOUNDATION**  
(View From WB I-74 side)



**PLAN - MEDIAN FOUNDATION**

Note: 25mm P/JF shall be placed between each vertical face of the Median Foundation and the proposed Concrete Shoulders. See Shoulder details in Roadway Dwgs.

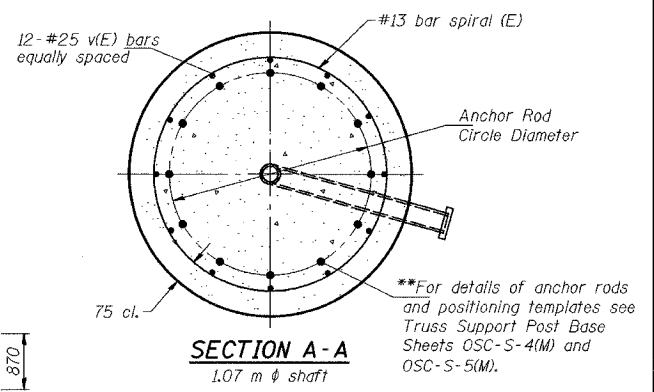
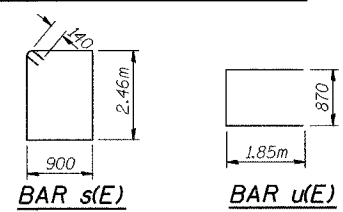
FOUNDATION DATA									
Structure Number	Station	Truss Type	Shaft Diameter (m)	Elevation Top	Elevation Bottom	A (m)	B (m)	F (m)	Class SI Concrete Cubic Meters
4C0721074L089.3	143+740	II-C-S	1.07	191.889	182.715	2.574(1)	6.60	9.174	5.93 (2)
Median Foundation (3)				191.889	189.315	2.574(1)			5.15
									Total 11.08

**BAR LIST-EACH FOUNDATION**  
(Includes shaft & Median Foundation)

Bar	Number	Size	Length	Shape
v(E)	16	#29	D less 127	—
#13 bar spiral (E) - see "SIDE ELEVATION"				

**BAR LIST-MEDIAN FOUNDATION**

Bar	Number	Size	Length	Shape
s(E)	6	#15	7.00	□
h(E)	4	#20	1.85	—
u(E)	16	#15	4.57	□



SIGNING SHEET 69 OF 83

**CANTILEVER SIGN STRUCTURES  
DRILLED SHAFT  
STEEL TRUSS & STEEL POST**

ILLINOIS DEPARTMENT OF TRANSPORTATION

SIGNING PLAN  
W.B. I-74 STA. 143+740  
S.N. 4C0721074L089.3

PEORIA CO., IL. DATE: 11-11-04

FOUNDATION DESIGN TABLE									
Truss Type	Post Base Sheet	Maximum Cantilever Length (m)	Maximum Total Sign Area (sq m)	Shaft Diameter (m)	"B" Depth (m)	Anchor Rods No.	Anchor Rod Diameter (mm)	Anchor Rod Circle Diameter (mm)	
I-C-S	OSC-S-4(M)	7.6	15.8	0.92	4.7	8	51	560	
II-C-S	OSC-S-5(M)	9.2	15.8	1.07	4.6	12	51	762	
III-C-S	OSC-S-5(M)	9.2	31.6	1.07	6.6	12	51	762	
III-C-S	OSC-S-5(M)	10.7	15.8	1.07	5.8	12	51	762	
III-C-S	OSC-S-5(M)	10.7	23.2	1.07	6.9	12	51	762	
III-C-S	OSC-S-5(M)	10.7	37.2	1.07	8.1	12	51	762	
III-C-S	OSC-S-5(M)	12.2	37.2	1.07	9.1	12	51	762	

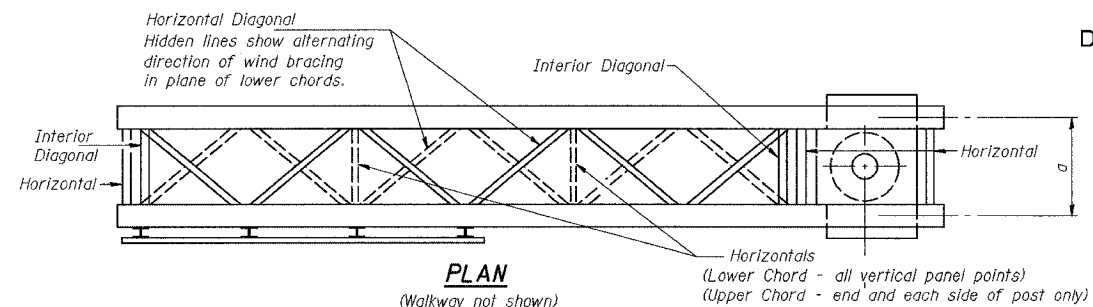
M:\Proj\3573\Sign Structures\Contract 10\sp1002-7Acan-sfl.dgn



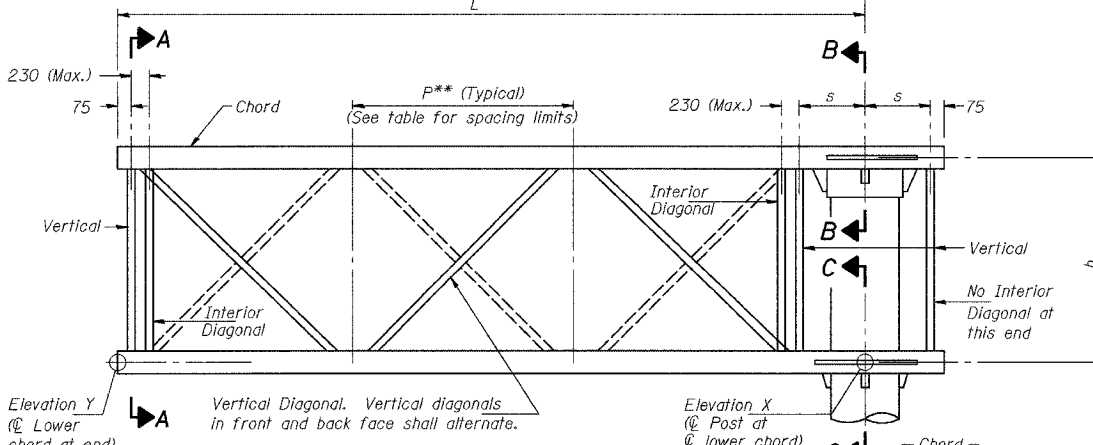
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE No.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI74	*	PEORIA	1360	1319
STA.		TO STA.		
F.H.W.A. REGION		ILLINOIS	PROJECT	

CONTRACT NO. 68200



**PLAN**  
(Walkway not shown)

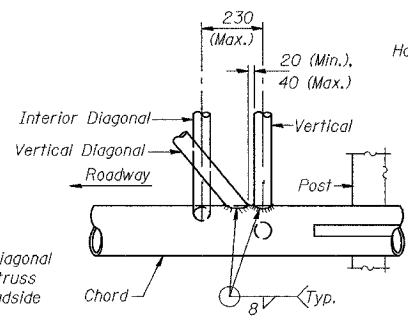


**ELEVATION**  
(Sign and walkway omitted for clarity)

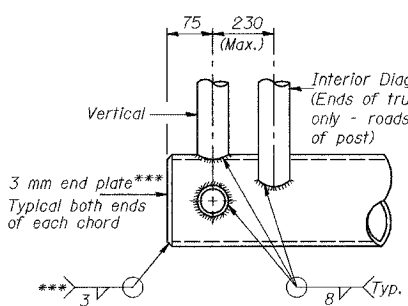
**TYPICAL TRUSS UNIT**

For Section B-B and Section C-C, see Base Sheet OSC-A-3(M).

Note: There are twice as many horizontal diagonals as there are vertical diagonals.



**POST END JOINT DETAIL**

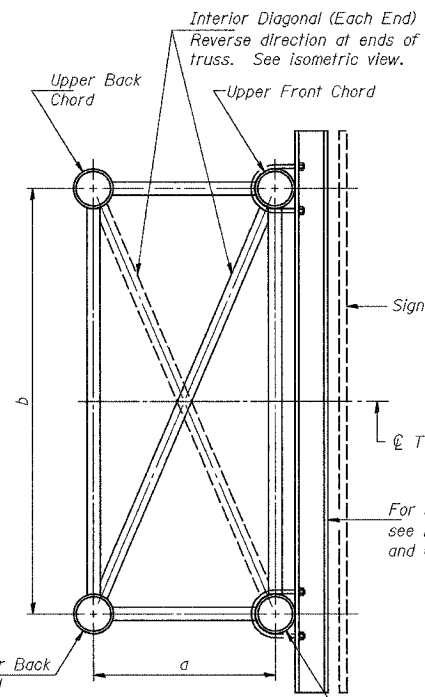


**CANTILEVER END JOINT DETAIL**

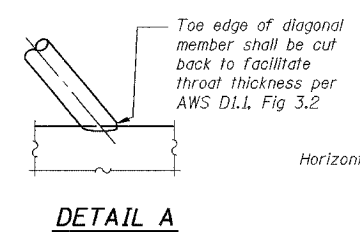
\*\*\*Contractor may alternatively use standard aluminum drive-fit cap to close ends.

DESIGNED	RJW	EXAMINED	2004
CHECKED	KJN	ENGINEER OF STRUCTURAL SERVICES	
DRAWN	RJW	PASSED	
CHECKED	KJN	ENGINEER OF BRIDGES AND STRUCTURES	

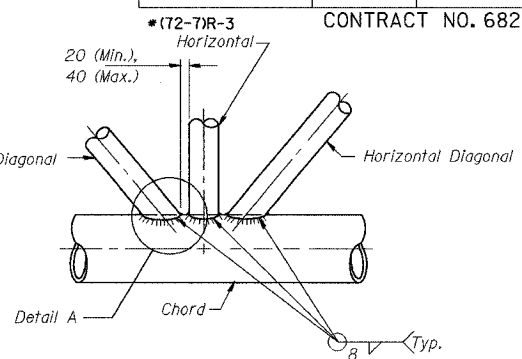
OSC-A-2(M) 11/1/2002



**SECTION A-A**



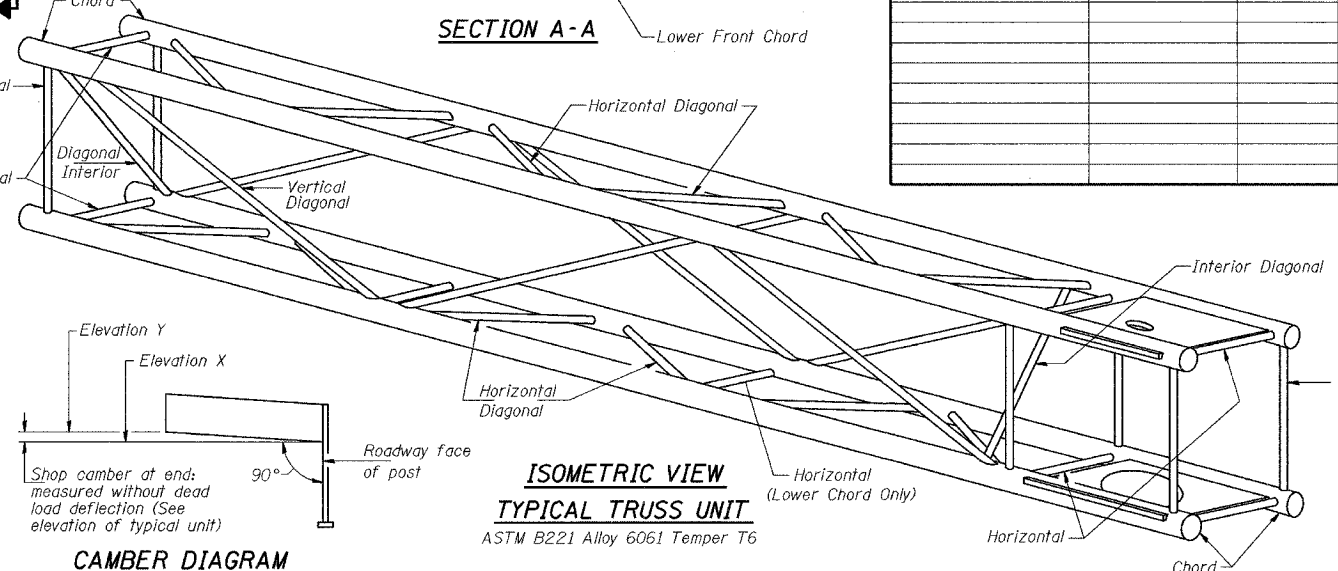
**DETAIL A**



**TRUSS INTERIOR JOINT DETAILS**

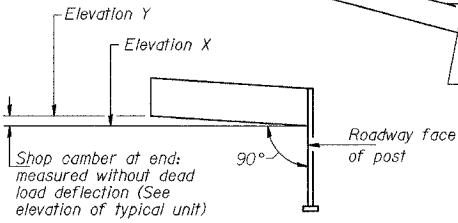
All diagonals shall be detailed for minimum offset from the panel point based on the following: Offset shall be such as to provide a 20 mm minimum to 40 mm maximum clearance between any diagonal and any horizontal or vertical member, and to provide clearance for U-bolt connections of signs or walkway brackets.

Structure Number	Station	Truss Type	Design Length (L)	Number of Panels Per Unit	Panel Length (P)**
4C072U150R024.7	39+700	III-C-A	10.80	7	1.456
4C072U150R024.9	40+105	III-C-A	11.84	8	1.404



**ISOMETRIC VIEW**  
**TYPICAL TRUSS UNIT**

ASTM B221 Alloy 6061 Temper T6



**CAMBER DIAGRAM**  
(For Fabrication Only)

**SHOP CAMBER TABLE**

Unit Length (L)	Shop Camber at End
4.6	40
4.9-5.2	45
5.5-6.1	50
6.4-6.7	60
7.0-7.6	65
7.9-8.2	70
8.5-9.1	76
9.5-9.8	83
10.1-10.7	90
10.8-11.5	102
11.6-12.2	114

**TRUSS UNIT TABLE**

Truss Type	Dimension "a"	Dimension "b" (m)	Dimension "s"	Limits for Panel Spacing (P)** (m)	Up. & Low. Chord O.D. Wall	Verticals; Horizontal; and Interior Diagonals O.D.	Vertical; Horizontal; and Interior Diagonals Wall
I-C-A	610	1.37	405	0.915 Min. to 1.22 Max.	127 8	64	8
II-C-A	915	1.68	535	1.07 Min. to 1.37 Max.	165 8	83	8
III-C-A (10.7 Max.)	915	2.13	535	1.22 Min. to 1.68 Max.	178 10	89	10
III-C-A (>10.7 to 12.2)	915	2.13	535	1.22 Min. to 1.68 Max.	203 10	89	10

\*\*P =  $\frac{L-s-75}{\# \text{ Panels}}$

NUMBER	REVISION	DATE

SIGNING SHEET 71 OF 83

**CANTILEVER SIGN STRUCTURES TRUSS DETAILS ALUMINUM TRUSS & STEEL POST**

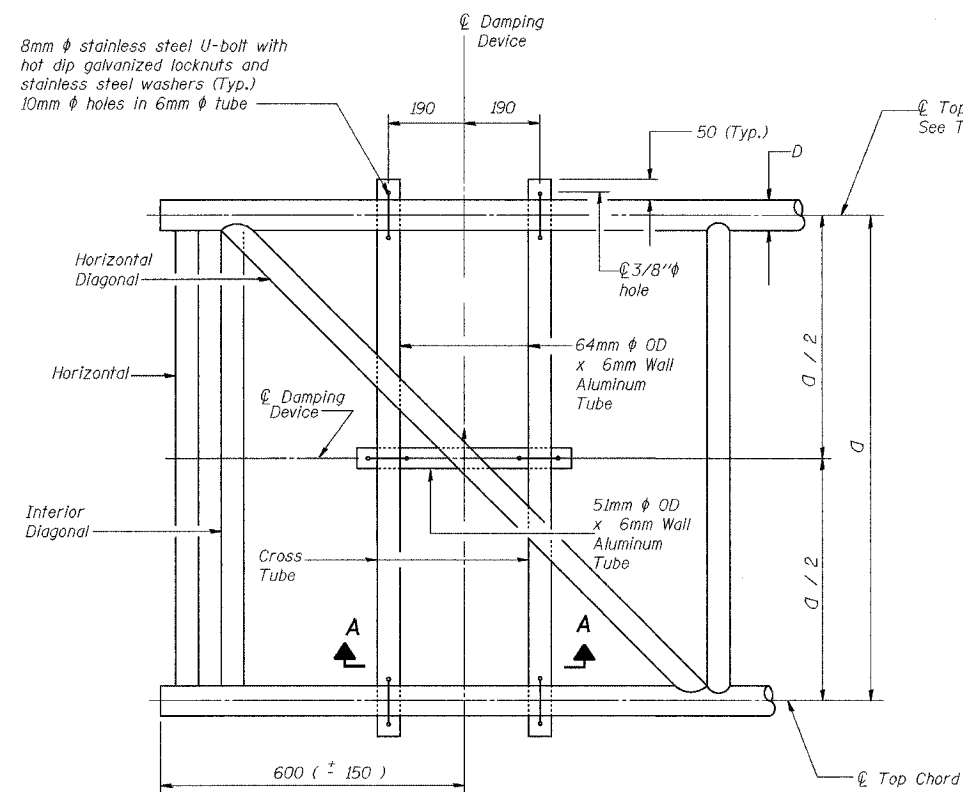
ILLINOIS DEPARTMENT OF TRANSPORTATION  
SIGNING PLAN  
WAR MEMORIAL DR. STA. 39+700, 4C072U150R024.7  
WAR MEMORIAL DR. STA. 40+105, 4C072U150R024.9

PEORIA CO., IL. DATE: 11-11-04

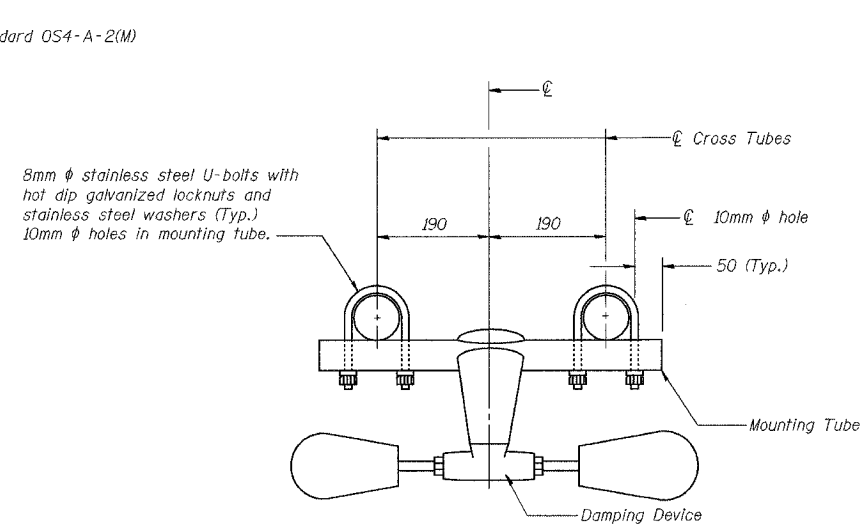
M:\Proj\3573\Sign Structures\Contract 10\sp\003-7\Acad-alm.dgn

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

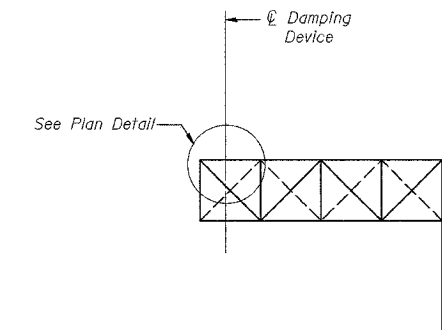
ROUTE No.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI74	*	PEORIA	1360	1326
STA.		TO STA.		
F.H.W.A. REGION		ILLINOIS	PROJECT	
*172-71R-3		CONTRACT NO. 68200		



**PLAN DETAIL**



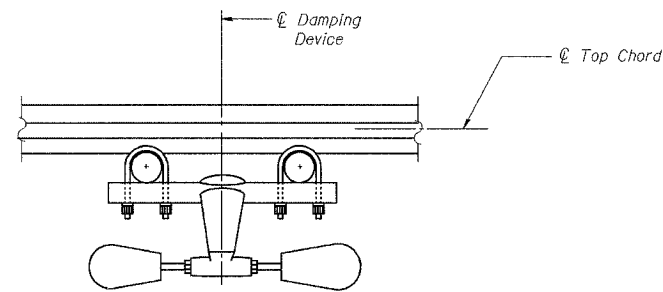
**TRUSS DAMPING DEVICE CONNECTION DETAIL**



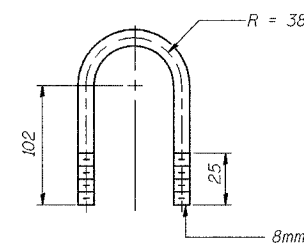
**ELEVATION**  
Aluminum Cantilever Sign Structure

**GENERAL NOTES**

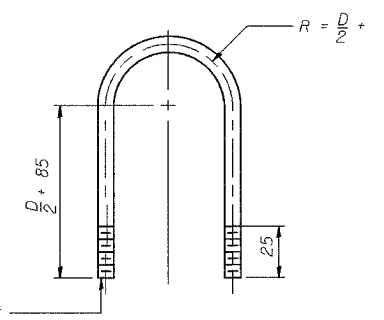
- Damper: One damper per truss. (14 Kg Stockbridge-Type Aluminum)
- Materials: Aluminum tubes shall be ASTM B221(M) alloy 6061 temper T6
- All dimensions are in millimeters (mm) except as noted.



**SECTION A-A**



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



**TOP CHORD TO CROSS TUBE U-BOLT DETAIL**  
(Typical)

DESIGNED	RJW	2004
CHECKED	KJN	EXAMINED
DRAWN	RJW	ENGINEER OF STRUCTURAL SERVICES
CHECKED	KJN	PASSED
		ENGINEER OF BRIDGES AND STRUCTURES

OSC-A-D(M) 11/1/2002

SIGNING SHEET 72 OF 83

**CANTILEVER SIGN STRUCTURE  
DAMPING DEVICE**

ILLINOIS DEPARTMENT OF TRANSPORTATION  
SIGNING PLAN  
WAR MEMORIAL DR. STA. 39+700, 4C072UI50R024.7  
WAR MEMORIAL DR. STA. 40+105, 4C072UI50R024.9

PEORIA CO., IL.

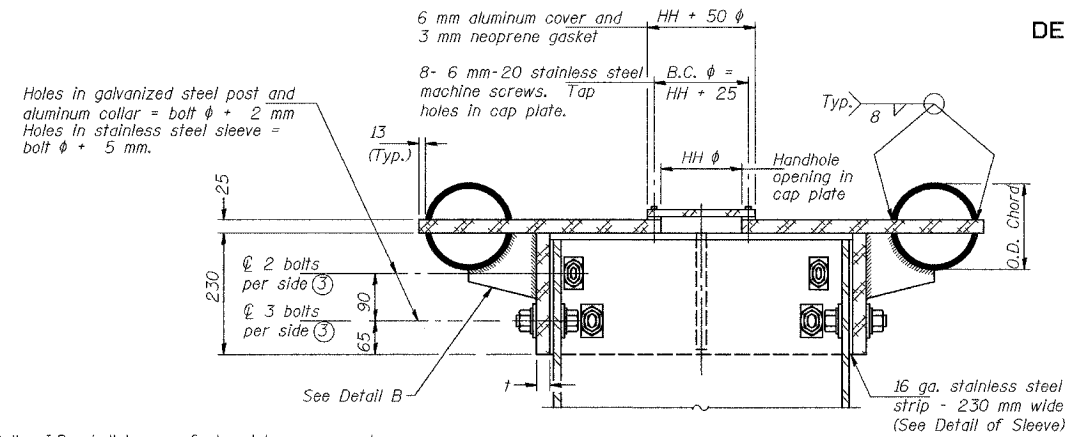
DATE: 11-04

M:\Proj\3573\Sign Structures\Contract 10/sp1003-TAcad-alm.dgn

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

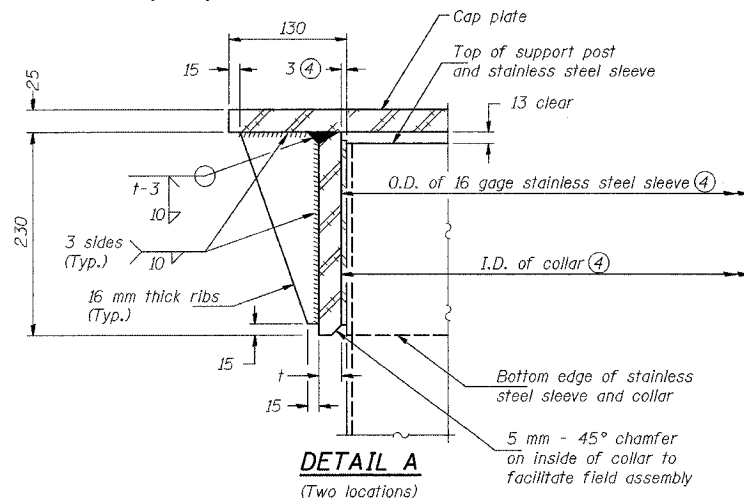
ROUTE No.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI74	*	PEORIA	1360	1321
STA.		TO STA.		
F.H.W.A. REGION		ILLINOIS	PROJECT	

\*(72-7R-3) CONTRACT NO. 68200

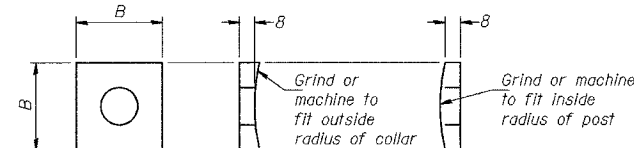


④ Collar I.D. shall be manufactured to correspond to O.D. of actual galvanized post and stainless steel sleeve plus 3 mm ( $\pm 2$  mm). Maximum gap between post and collar at any location equals 3 mm before tightening bolts.

**SECTION B-B**  
Bolts, washers (including contoured washers), and locknuts shall be stainless steel.

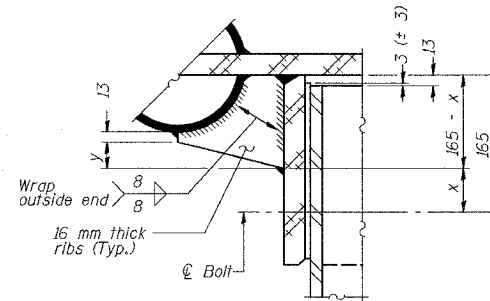


**DETAIL A**  
(Two locations)



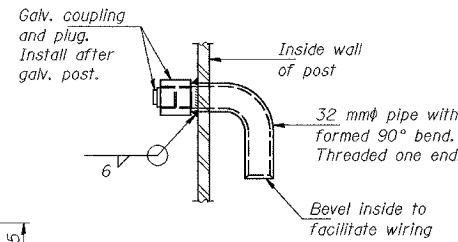
**CONTOURED WASHERS**

Bolt Dia.	Contoured Washers	
	Hole Dia.	B
22	25	64
25	29	75
32	35	83



**DETAIL B**

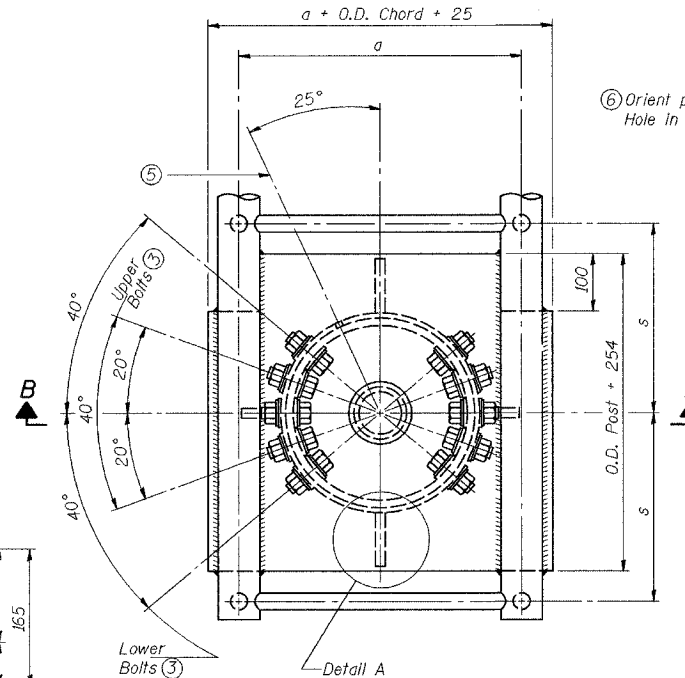
Two locations  
(For details not shown, see Detail C)



**DETAIL D**

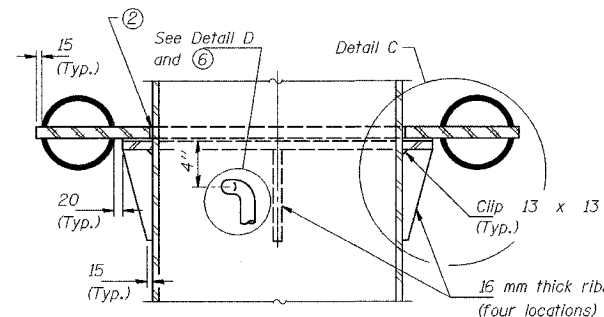
**DETAIL OF STAINLESS STEEL SLEEVE**

Weld to post after galvanizing. (Prepare post surface to insure tight, uniform fit and allow welding.) Welds to be 40 mm long at 150 mm cts. along top edge and at 6 mm opening.

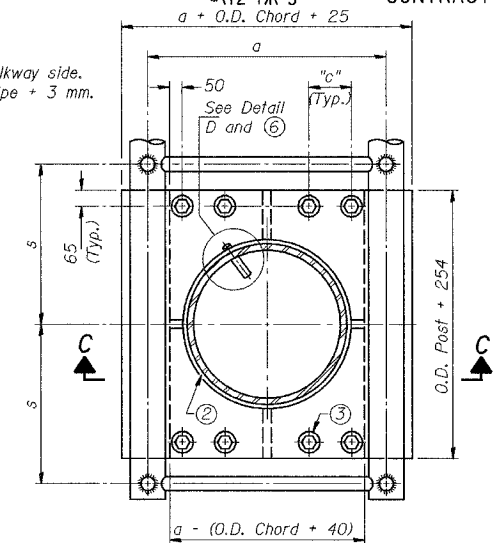


**PLAN VIEW - TOP OF COLUMN**

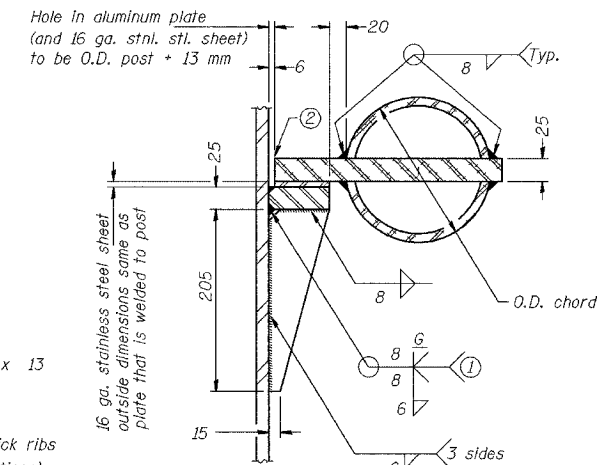
⑤ Optional full penetration weld in collar. (Two locations maximum... (180 degrees apart)... X-ray or UT 100%)



**SECTION C-C**



**SECTION THRU POST ABOVE LOWER CHORDS**



**DETAIL C**

① Grind top if required to fully seat aluminum plate and stainless steel sheet.  
② After tightening lower connection bolts, fill gap with non-hardening, silicone caulk suitable for exterior exposure and acceptable to the Engineer. Cost is included in "Overhead Sign Structure-Cantilever...".

SIGNING SHEET 73 OF 83

**CANTILEVER SIGN STRUCTURES  
JUNCTURE DETAILS  
ALUMINUM TRUSS & STEEL POST**

ILLINOIS DEPARTMENT OF TRANSPORTATION  
SIGNING PLAN  
WAR MEMORIAL DR. STA. 39+700, 4C072UJ50R024.7  
WAR MEMORIAL DR. STA. 40+105, 4C072UJ50R024.9

PEORIA CO., IL.

DATE: II-II-04

DESIGNED	RJW	EXAMINED	2004
CHECKED	KJN	PASSED	ENGINEER OF STRUCTURAL SERVICES
DRAWN	RJW		ENGINEER OF BRIDGES AND STRUCTURES
CHECKED	KJN		

OSC-A-3(M) 11/1/2002

NUMBER	REVISION	DATE

Truss Type	Post Size	Upper & Lower Connection Bolt Diameter ③	Lower Juncture Bolt Spacing Dimension "c" ③	Opening in Cap Plate "HH"	Collar Thickness (t)	Side Ribs	
						x	y
I-C-A	406 phi (124 kg/m)	22	85	205	16	45	56
II-C-A	610 phi (152 kg/m)	25	90	305	22	50	32
III-C-A (10.7 Max.)	610 phi (186 kg/m)	32	90	305	22	50	25
III-C-A (>10.7 to 12.2)	610 phi (254 kg/m)	32	90	305	22	50	25

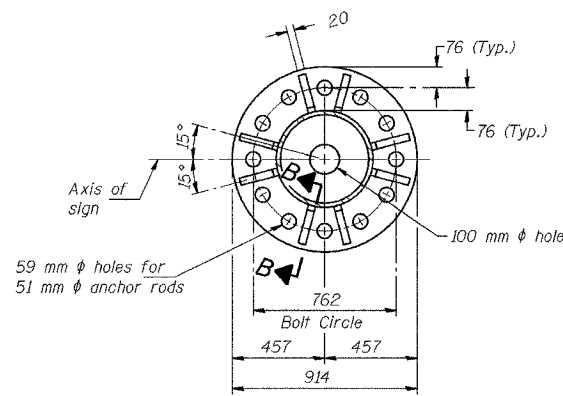
③ Upper and lower connection bolts in collar and bolts at lower chord connection shall be high strength with matching locknuts. Connection bolts shall have two stainless steel flat washers each.

M:\Proj\3573\Sign Structures\Contract 10\sp\003-7Acan-alm.dgn

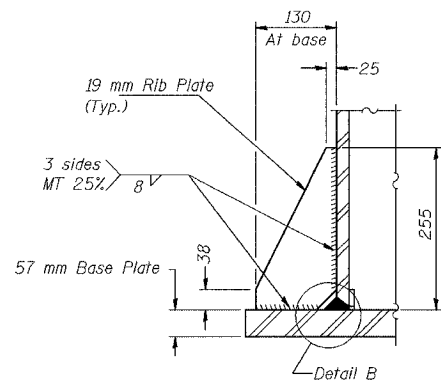
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE No.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI74	*	PEORIA	1360	1322
STA.	TO STA.			
ILLINOIS REGION	ILLINOIS	PROJECT		

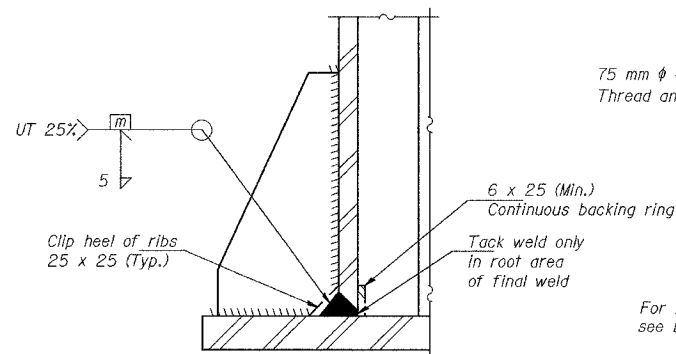
\*(72-7)R-3 CONTRACT NO. 68200



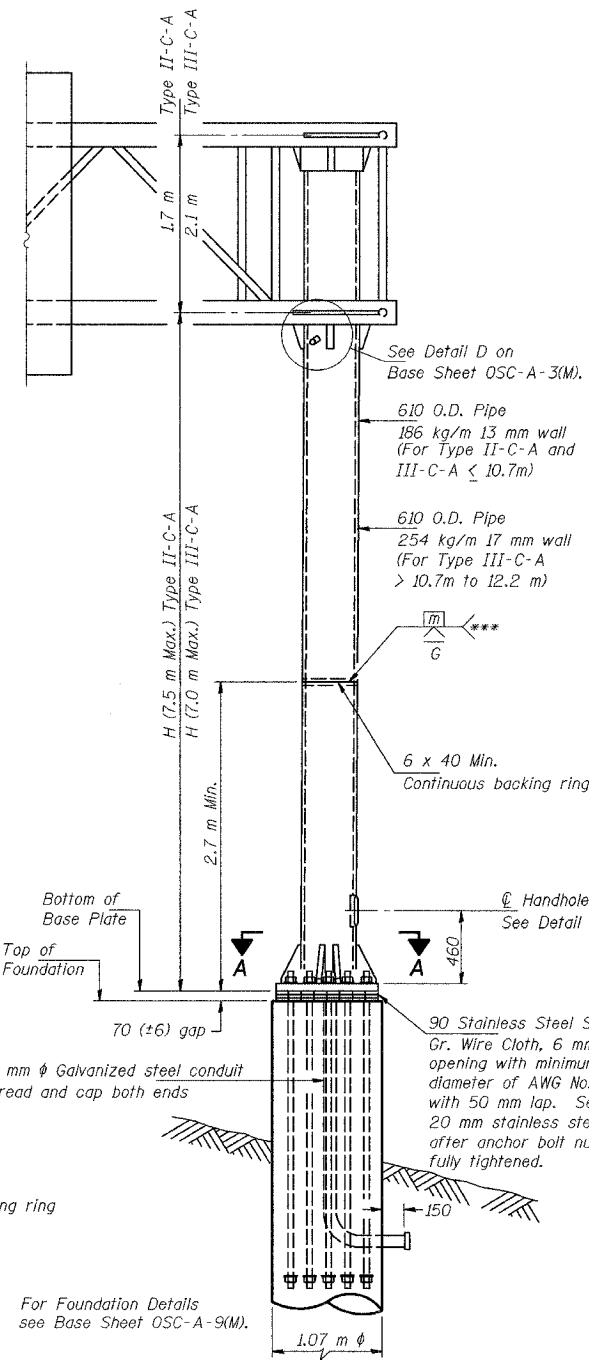
SECTION A-A



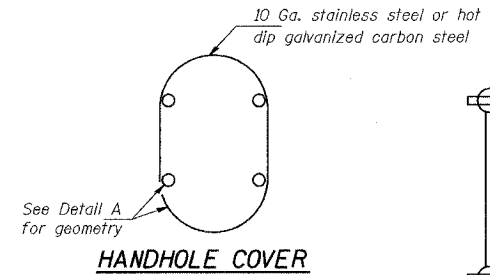
SECTION B-B



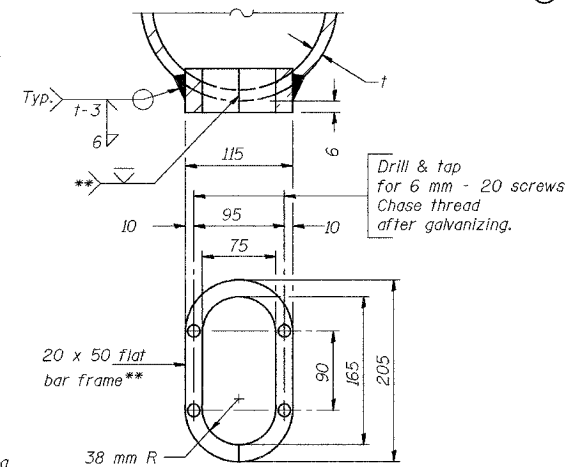
DETAIL B  
(Typical rib)



FRONT ELEVATION



HANDHOLE COVER

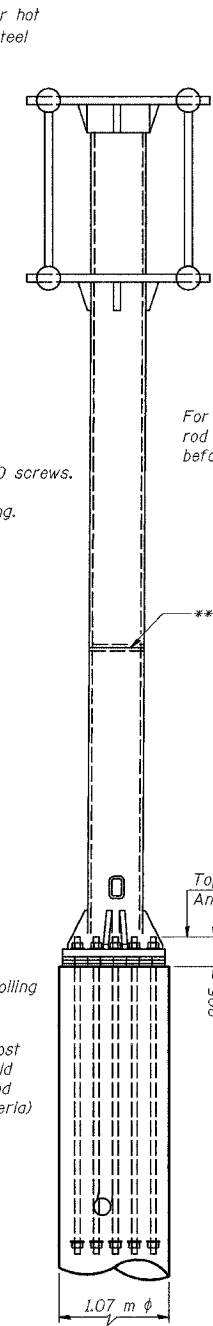


DETAIL A

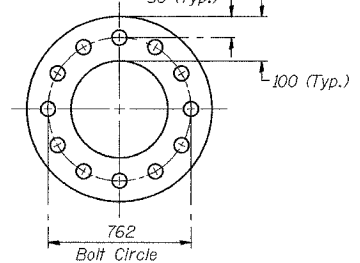
Provide 205x115 cover. Outside corners = 57 mm radius. Provide 4-8 mm diameter holes in cover for 6 mm-20 round head hot dip galvanized or stainless steel machine screws. (See cover details)

\*\*Bent bars may be butt welded top and bottom or bottom only. In lieu of fabricated handhole frame as shown, may cut from 50 mm plate (rolling direction vertical). All cut faces to be ground to ANSI Roughness of 12.7 µm or less.

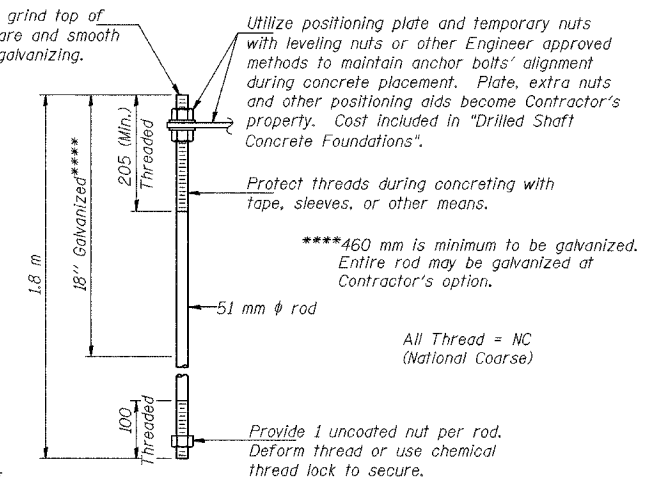
\*\*\*Butt welded joint in post is only allowed for post heights (H) over 6.10 m in length. If used, weld procedure must be preapproved by Engineer and joint shall receive 100% RT or UT (tension criteria) at Contractor's expense.



SIDE ELEVATION



SUGGESTED POSITIONING PLATE



ANCHOR ROD DETAIL

Anchor rods shall conform to AASHTO M314 Grade 380 (55) and meet Charpy V-Notch (CVN) energy of 20 J at -12 °C. before galvanizing. Galvanize the upper 460 mm (minimum\*\*\*\*) and associated M291, Grade A, C or DH heavy hex nuts and hardened washers per AASHTO M232. No welding shall be permitted on rods. Provide an unfinished nut at bottom, a hexagon locknut and washer above base plate and a leveling nut and washer below base plate. Nuts shall each be tightened with 270 N-m minimum torque against base plate. Before or after threading, but before galvanizing, each anchor rod shall be ultrasonically tested (UT) by a Level II or III Inspector, qualified in accord with ANSI guidelines, using a straight beam, 13 mm diameter, 3.5 mhz. transducer, to insure no rejectable flaws exist in the upper 460 mm (tension criteria). Cost of testing included in "Drilled Shaft Concrete Foundations".

\*\*\*\*460 mm is minimum to be galvanized. Entire rod may be galvanized at Contractor's option.

All Thread = NC (National Coarse)

Provide 1 uncoated nut per rod. Deform thread or use chemical thread lock to secure.

Structure Number	Station	H (m)
4C072U150R024.7	39+700	3.860
4C072U150R024.9	40+105	5.186

DESIGNED	RJW	2004
CHECKED	KJN	EXAMINED
DRAWN	RJW	PASSED
CHECKED	KJN	ENGINEER OF BRIDGES AND STRUCTURES

OSC-A-5(M) 11/1/2002

NUMBER	REVISION	DATE

SIGNING SHEET 74 OF 83

CANTILEVER SIGN STRUCTURES  
TYPE II-C-A & III-C-A TRUSS SUPPORT POST  
ALUMINUM TRUSS & STEEL POST

ILLINOIS DEPARTMENT OF TRANSPORTATION  
SIGNING PLAN  
WAR MEMORIAL DR. STA. 39+700, 4C072U150R024.7  
WAR MEMORIAL DR. STA. 40+105, 4C072U150R024.9

PEORIA CO., IL.

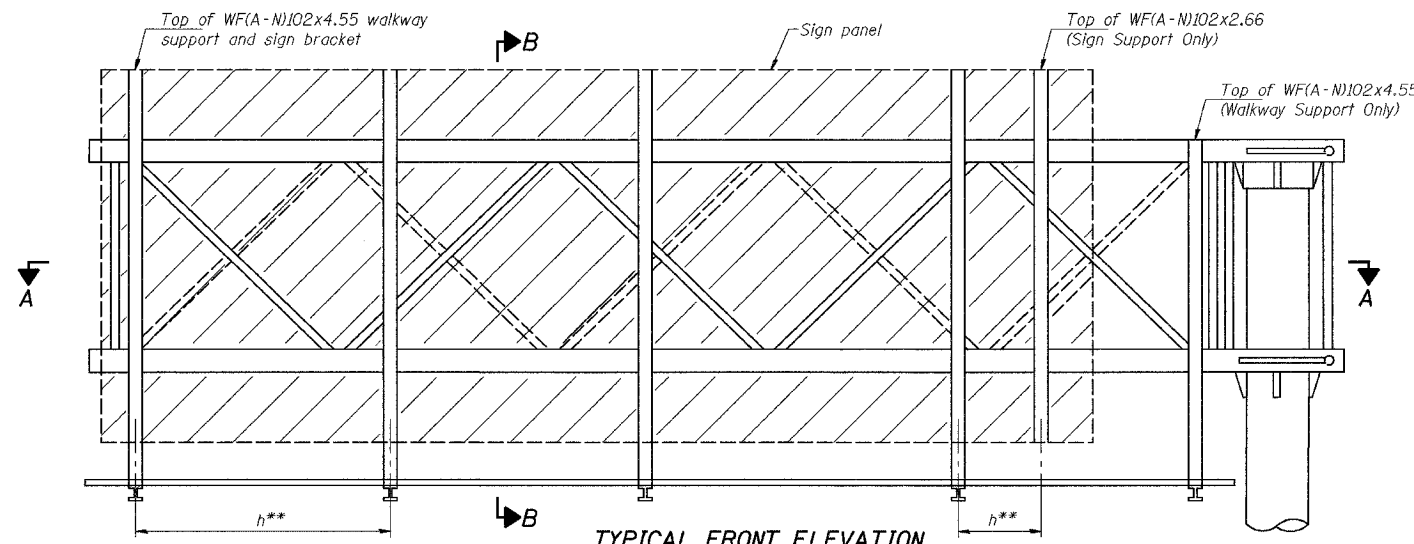
DATE: 11-04

M:\Proj\3573\Sign Structures\Contract 10\sp1003-7Acan-alm.dgn

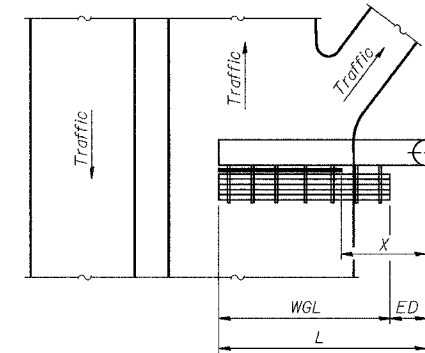
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	*	PEORIA	1340	1323
STA.		TO STA.		
F.H.W.A. REGION		ILLINOIS	PROJECT	
*(72-71R-3		CONTRACT NO. 68200		

Walkway Grating, Walkway Supports, Handrail and Lighting are not included. Information shown on this sheet shall be used for Truss Grating, Sign Supports and Sign Panel locations only.

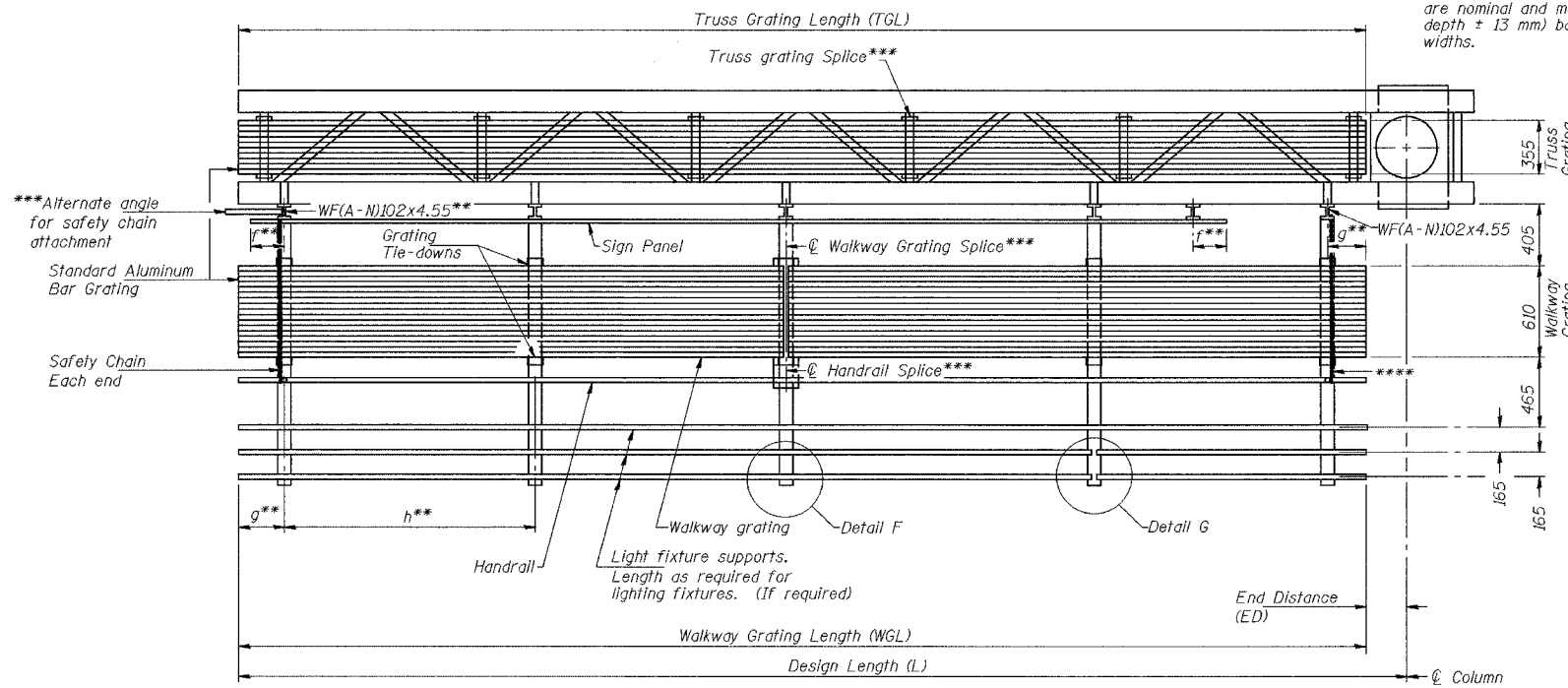


**TYPICAL FRONT ELEVATION**  
With lights and handrail omitted for clarity.



**WALKWAY AND HANDRAIL SKETCH**  
(Road plan beneath truss varies)  
("X" is measured along centerline of truss to edge of sign panel)

Walkway and truss grating dimensions are nominal and may vary (width ± 13 mm, depth ± 13 mm) based on available standard widths.



**SECTION A-A**

Truss grating to facilitate inspection shall run full length of cantilevers. Cost of truss grating is included in "Overhead Sign Structure-Cantilever...".

Handrail and walkway grating shall span a minimum of three brackets between splices. \*\*\*Use and location of handrail or grating splices are optional, based on lengths needed and material availability.

$$TGL = L - \left( \frac{\text{Post O.D.}}{2} + 150 \right)$$

NUMBER	REVISION	DATE

DESIGNED	RJW	2004
CHECKED	KJN	EXAMINED
DRAWN	RJW	PASSED
CHECKED	KJN	ENGINEER OF BRIDGES AND STRUCTURES

OSC-A-6(M) 11/1/2002

Structure Number	Station	WGL (m)	ED (m)	TGL (m)	X (m)
4C072U150R024.7	39+700			10.345	6.60
4C072U150R024.9	40+105			11.385	7.04

Notes: \*\*Space walkway brackets WF(A-N)102x4.55 and sign brackets WF(A-N)102x2.66 for efficiency and within limits shown:  
f = 300 maximum, 100 minimum (End of sign to centerline of nearest bracket)  
g = 300 maximum, 100 minimum (End of walkway to centerline of nearest bracket)  
h = 1.85 m maximum (centerline to centerline of sign and/or walkway support brackets, WF(A-N)102x2.66 or WF(A-N)102x4.55)  
\*\*\*\*If walkway bracket at safety chain location is behind sign, add angle to bracket.  
For details of sign placement, sign/walkway brackets, truss and walkway gratings, grating splices and Section B-B, see Base Sheet OSC-A-7(M).  
For details of handrail, handrail splice, safety chain and Details F and G, see Base Sheet OSC-A-8(M).

**BRACKET TABLE**

Sign Width		Number Brackets Required
Greater Than	Less Than or Equal To	
3.0	4.9	2
4.9	6.7	3
6.7	8.6	4
8.6	10.4	5
		6

**CANTILEVER SIGN STRUCTURES  
ALUMINUM WALKWAY DETAILS  
ALUMINUM TRUSS & STEEL POST**

ILLINOIS DEPARTMENT OF TRANSPORTATION  
SIGNING PLAN  
WAR MEMORIAL DR. STA. 39+700, 4C072U150R024.7  
WAR MEMORIAL DR. STA. 40+105, 4C072U150R024.9

PEORIA CO., IL.

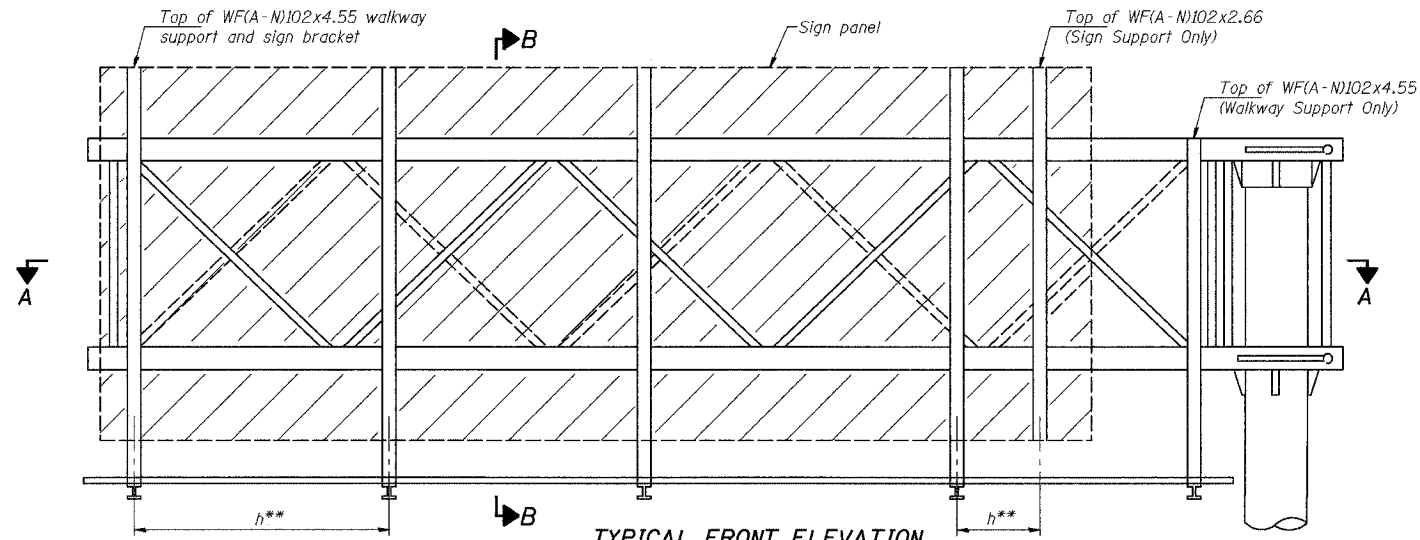
DATE: 11-11-04

M:\Proj\3573\Sign Structures\Contract 10\sp1003-TAcan-dim.dgn

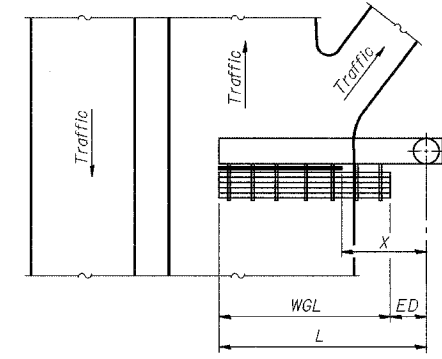
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE No.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI74	*	PEORIA	1360	1324
STA.		TO STA.		
F.H.W.A. REGION		ILLINOIS	PROJECT	
*(72-7R-3		CONTRACT NO. 68200		

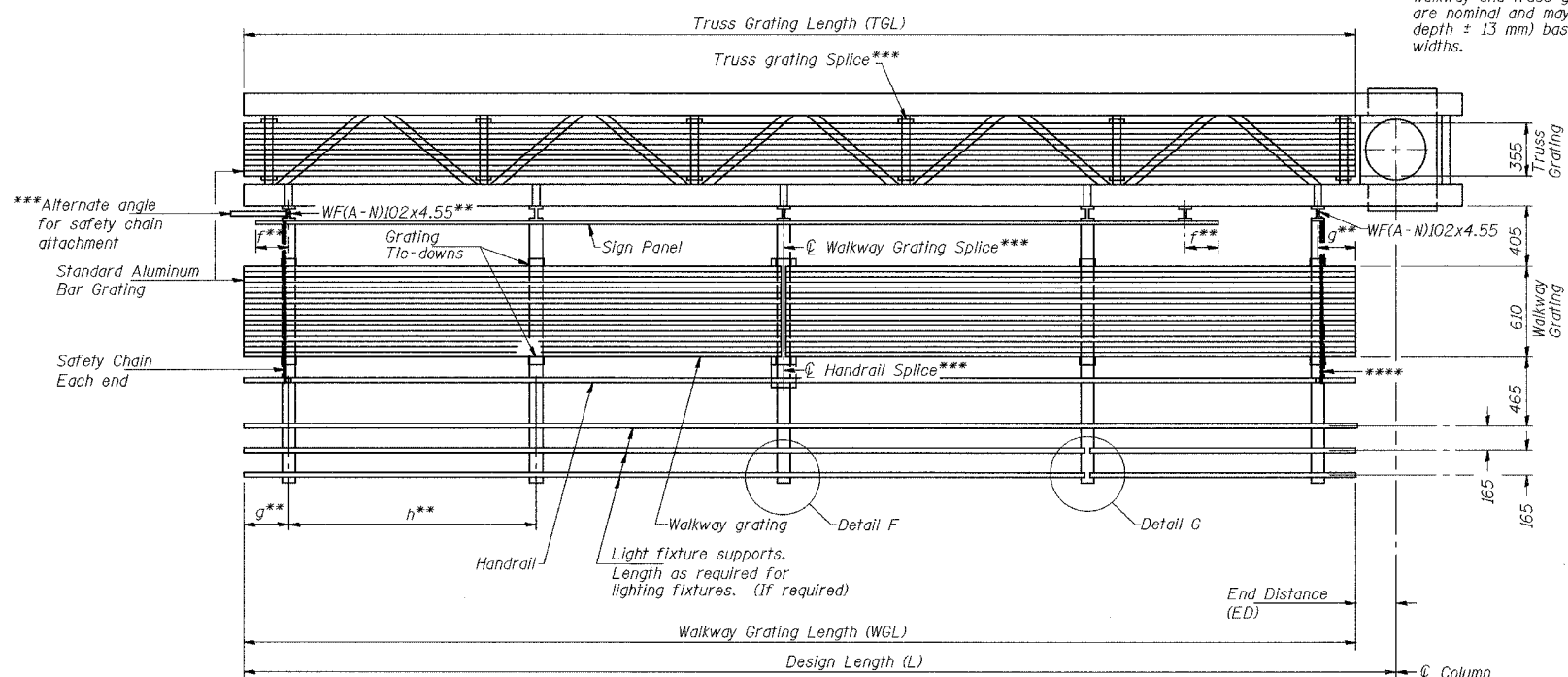
Walkway Grating, Walkway Supports, Handrail and Lighting are not included. Information shown on this sheet shall be used for Truss Grating, Sign Supports and Sign Panel locations only.



**TYPICAL FRONT ELEVATION**  
With lights and handrail omitted for clarity.



**WALKWAY AND HANDRAIL SKETCH**  
(Road plan beneath truss varies)  
("X" is measured along centerline of truss to edge of sign panel)



**SECTION A-A**

Truss grating to facilitate inspection shall run full length of cantilevers. Cost of truss grating is included in "Overhead Sign Structure-Cantilever..."

Handrail and walkway grating shall span a minimum of three brackets between splices.  
\*\*\*Use and location of handrail or grating splices are optional, based on lengths needed and material availability.

$$TGL = L - \frac{(\text{Post O.D.} + 150)}{2}$$

DESIGNED	RJW	2004
CHECKED	KJN	EXAMINED
DRAWN	RJW	PASSED
CHECKED	KJN	ENGINEER OF BRIDGES AND STRUCTURES

NUMBER	REVISION	DATE

Structure Number	Station	WGL (m)	ED (m)	TGL (m)	X (m)
4C072U150R024.7	39+700			10.345	6.60
4C072U150R024.9	40+105			11.385	7.04

Notes: \*\*Space walkway brackets WFA(N)102x4.55 and sign brackets WFA(N)102x2.66 for efficiency and within limits shown:  
f = 300 maximum, 100 minimum (End of sign to centerline of nearest bracket)  
g = 300 maximum, 100 minimum (End of walkway to centerline of nearest bracket)  
h = 1.85 m maximum (centerline to centerline of sign and/or walkway support brackets, WFA(N)102x2.66 or WFA(N)102x4.55)  
\*\*\*\*If walkway bracket at safety chain location is behind sign, add angle to bracket.  
For details of sign placement, sign/walkway brackets, truss and walkway gratings, grating splices and Section B-B, see Base Sheet OSC-A-7S(M).  
For details of handrail, handrail splice, safety chain and Details F and G, see Base Sheet OSC-A-8(M).

**BRACKET TABLE**

Sign Width		Number Brackets Required
Greater Than	Less Than or Equal To	
3.0	3.0	2
4.9	4.9	3
6.7	6.7	4
8.6	8.6	5
10.4	10.4	6

**CANTILEVER SIGN STRUCTURES  
ALTERNATE ALUMINUM WALKWAY DETAILS  
ALUMINUM TRUSS & STEEL POST**

ILLINOIS DEPARTMENT OF TRANSPORTATION  
SIGNING PLAN  
WAR MEMORIAL DR. STA. 39+700, 4C072U150R024.7  
WAR MEMORIAL DR. STA. 40+105, 4C072U150R024.9

PEORIA CO., IL. DATE: 11-04

M:\Proj\3573\Sign Structures\Contract 10\sp\003-7Acan-alm.dgn

OSC-A-6S(M) 11/1/2002



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI74	*	PEORIA	1360	1325
STA.		TO STA.		
F.I.R.W.A. REGION		ILLINOIS	PROJECT	
		(72-71R-3)	CONTRACT NO. 68200	

**SPECIFICATIONS FOR STANDARD ALUMINUM GRATING**

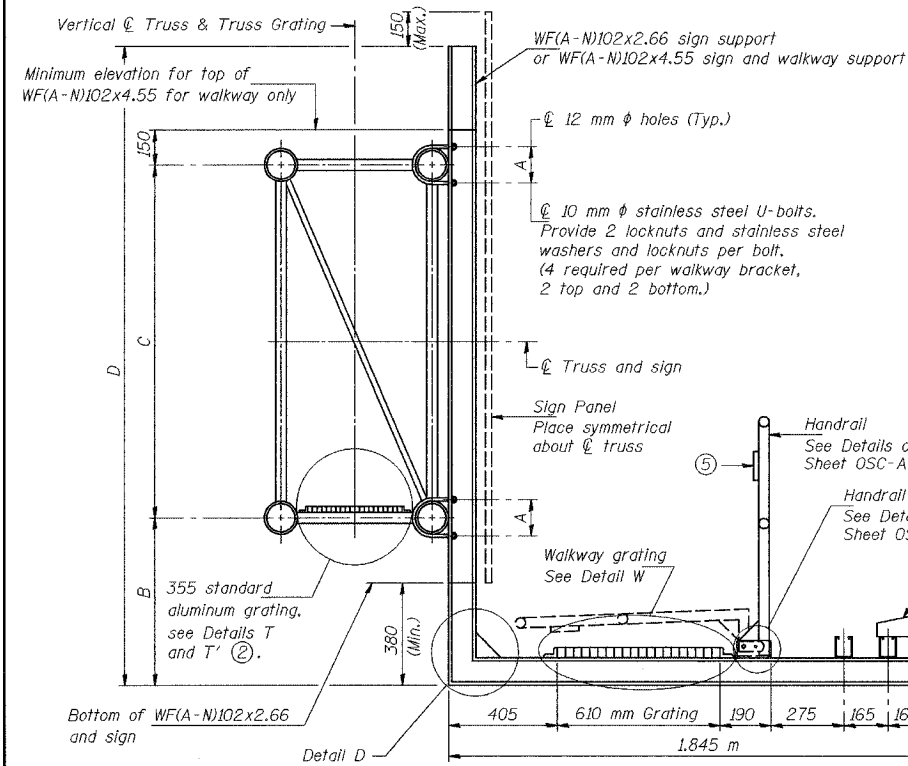
Main Bearing Bars (MBB) shall be 5 mm x 38 mm on 30 mm centers and conform to ASTM B211 Alloy 6061-T6.  
Cross bars (CB) shall be 5 mm x 38 mm on 102 mm centers and conform to ASTM B221 Alloy 6063-T5 or 6061-T6.

OR

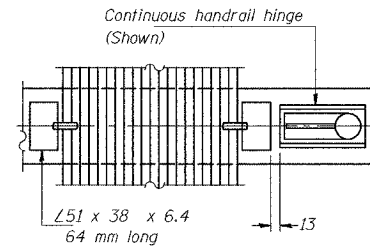
Aluminum Grating with modified "4" sections for main bearing bars shall meet the following requirements:

Main bars shall conform to ASTM B221 Alloy 6061-T6 and have a minimum section modulus equal to  $1.16 \times 10^3 \text{ mm}^3$  per bar, a depth of 38 mm, spaced on 30 mm centers.

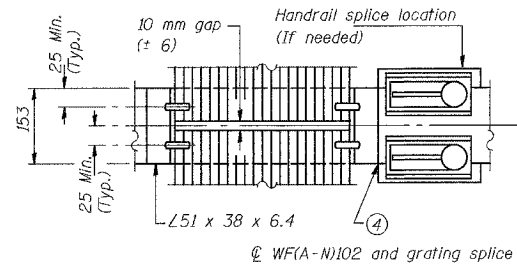
Cross bars shall conform to ASTM B221 Alloy 6063-T5 or T-42 and spaced on 100 mm centers.



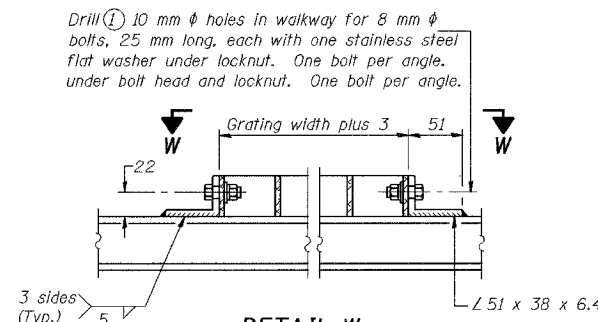
SECTION B-B



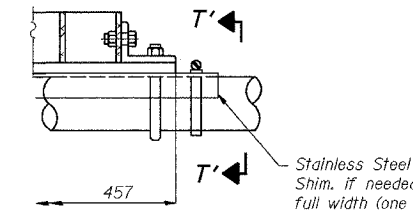
(CONTINUOUS WALKWAY GRATING)



SECTION W-W

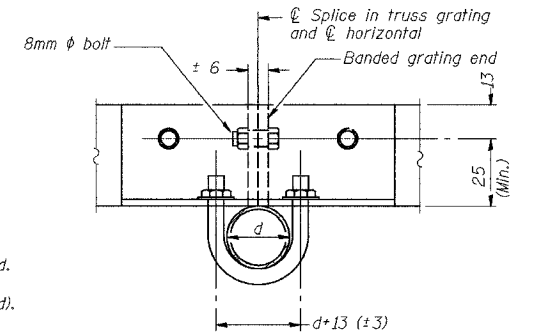


DETAIL W  
(Walkway grating)

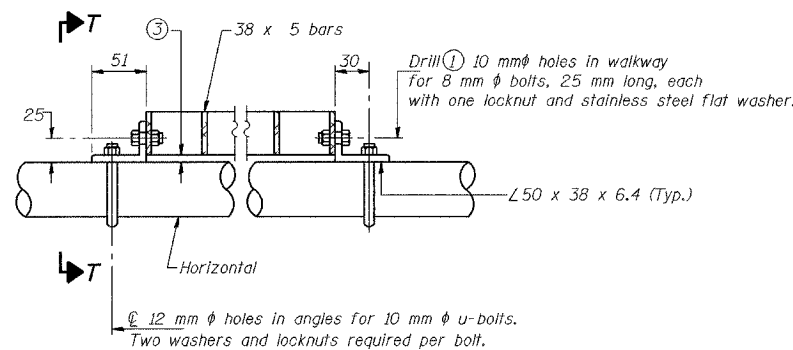


DETAIL T'

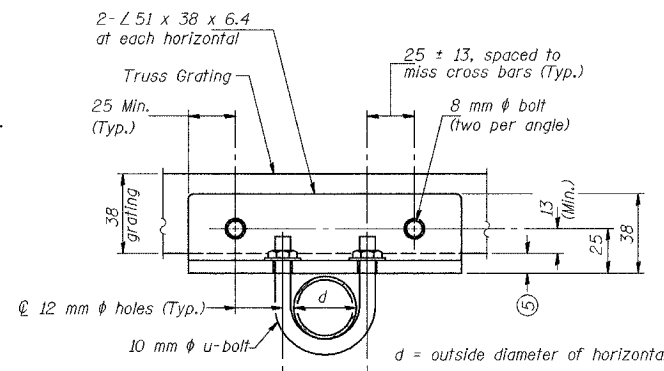
(Truss grating splice)  
Details not shown same as Detail T.  
Alternate materials may be used subject to the Engineer's review and approval.



SECTION T'-T'

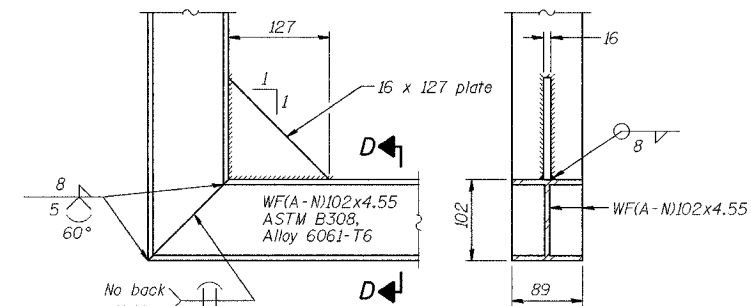


DETAIL T  
(Truss grating at horizontal)



SECTION T-T'

Walkway Grating, Walkway Supports, Handrail and Lighting are not included.  
Information shown on this sheet shall be used for Truss Grating and Sign Supports only.



DETAIL D

SECTION D-D

(See Detail P, Base Sheet OSC-A-8(M).)

SIGNING SHEET 77 OF 83

CANTILEVER SIGN STRUCTURES  
WALKWAY DETAILS  
ALUMINUM TRUSS & STEEL POST

ILLINOIS DEPARTMENT OF TRANSPORTATION

SIGNING PLAN

WAR MEMORIAL DR. STA. 39+700, 4C072U150R024.7  
WAR MEMORIAL DR. STA. 40+105, 4C072U150R024.9

PEORIA CO., IL.

DATE: II-II-04

Structure Number	Station	A (m)	B (m)	C (m)	D (m)
4C072U150R024.7	39+700	0.215	0.307	2.130	2.593
4C072U150R024.9	40+105	0.215	0.231	2.130	2.441

- Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.
- When truss grating must be spliced, use suggested detail or other methods subject to the Engineer's review and approval. Locate splice to avoid interference between cross bars and bolt locations.
- If Handrail Joint present, weld angle to WF(A-N)102 and 6 mm extension bars. (See Base Sheet OSC-A-8(M).)
- 3 mm x 13 mm x 50 mm welded to handrail posts to protect locations that contact grating.
- Tube to grating gap may vary from 0 to 13mm (Max.) to align walkway, allow for camber, etc. Continuous Truss Grating

NUMBER	REVISION	DATE

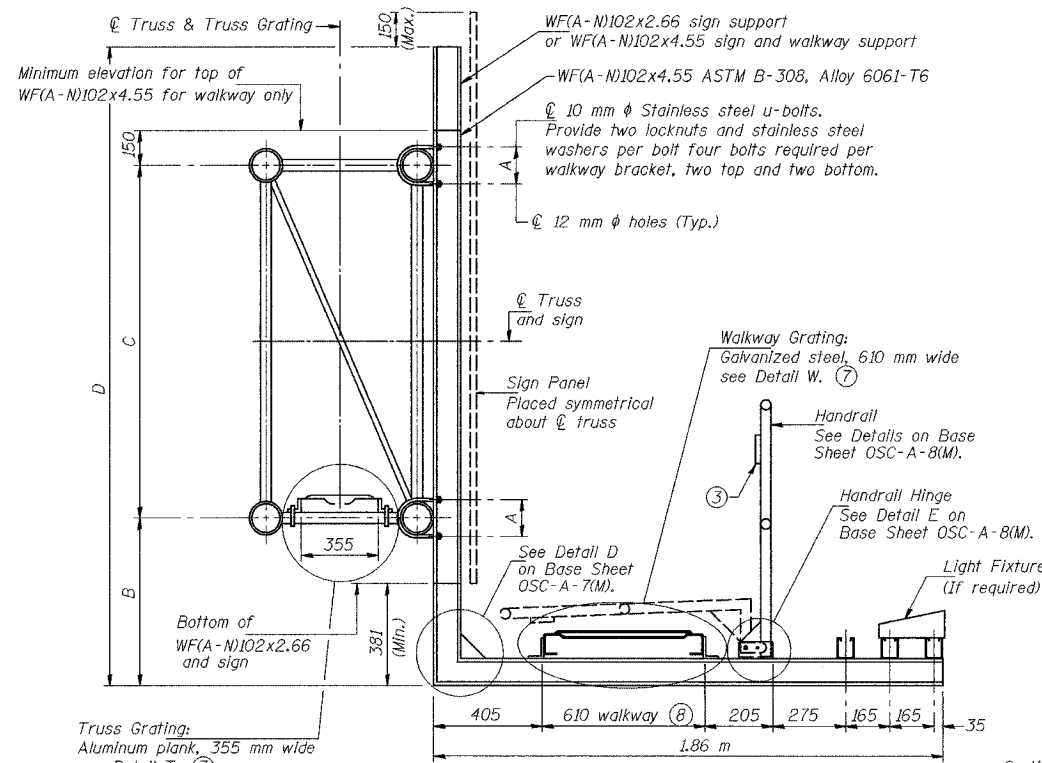
DESIGNED	RJW	EXAMINED	2004
CHECKED	KJN	PASSED	
DRAWN	RJW		
CHECKED	KJN		

OSC-A-7(M) 11/1/2002

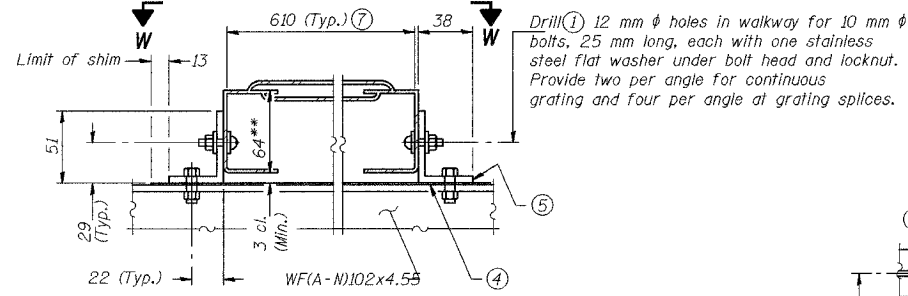
M:\Proj\3573\Sign Structures\Contract 10\sp1003-7Acan-alm.dgn

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

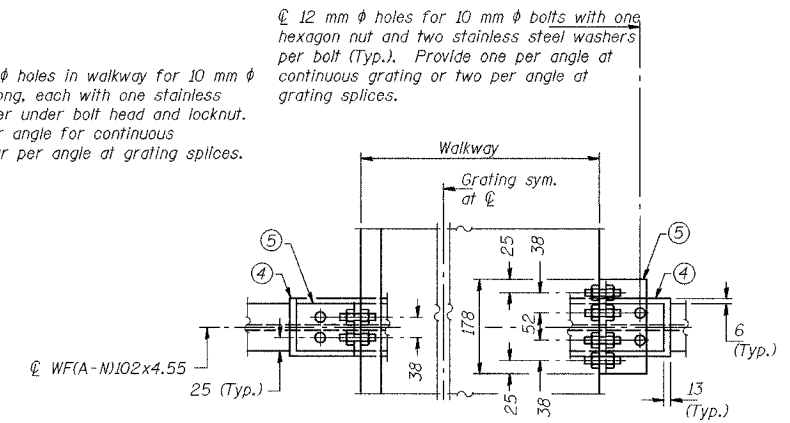
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	*	PEORIA	1360	1326
STA.		TO STA.		
F.H.W.A. REGION		ILLINOIS	PROJECT	
*(72-7)R-3		CONTRACT NO. 68200		



SECTION B-B

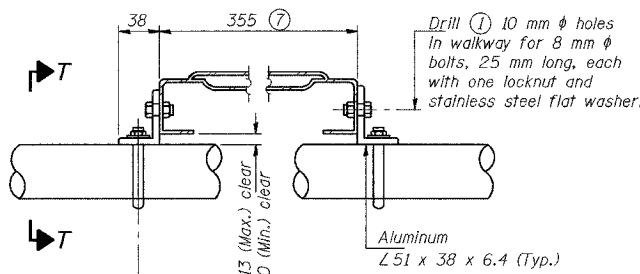


DETAIL W  
GALVANIZED STEEL WALKWAY GRATING

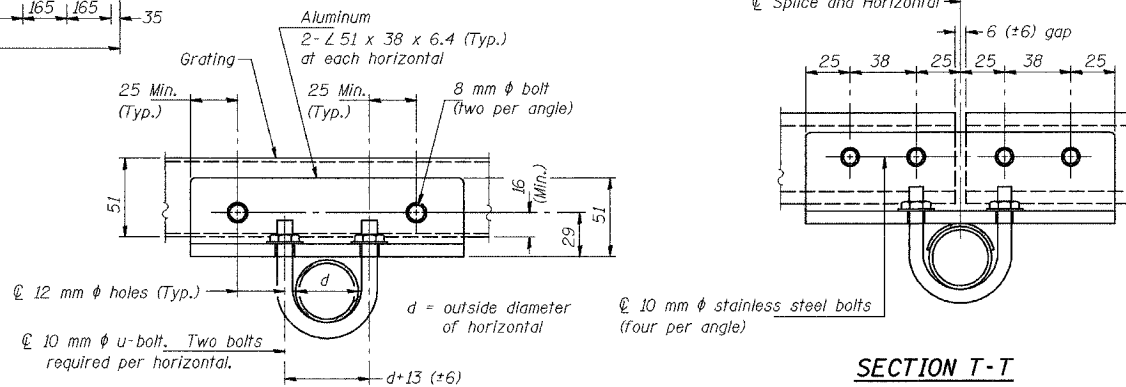


WALKWAY GRATING CONTINUOUS AT WALKWAY GRATING SPLICE

SECTION W-W



DETAIL T  
(Truss Grating at Horizontal)



SECTION T-T  
(Truss Grating Continuous)

SECTION T-T  
(Truss Grating Splice)

Details not shown same as Section T-T. Alternate splice details and locations may be used subject to the Engineer's review and approval.

ALUMINUM TRUSS GRATING

Walkway Grating, Walkway Supports, Handrail and Lighting are not included. Information shown on this sheet shall be used for Truss Grating and Sign Supports only.

NUMBER	REVISION	DATE

DESIGNED	RJW	2004
CHECKED	KJN	EXAMINED
DRAWN	RJW	PASSED
CHECKED	KJN	ENGINEER OF BRIDGES AND STRUCTURES

OSC-A-7S(M) 11/1/2002

- Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.
- When truss grating must be spliced, use suggested details or other methods in accord with grating manufacturer's recommendation and subject to the Engineer's review and approval.
- 3 mm x 13 mm x 50 mm welded to handrail posts to protect locations that contact grating.
- 1.6 (or 16 ga.) x 64 mm x 102 mm stainless steel shim adhered to top of WF(A-N)102x4.55 beneath each galvanized angle. (Typ.) Adhesives for shims shall be suitable for materials joined and full exposure conditions.
- Galvanized steel Z51 x 38 x 6.4, 89 mm long with continuous grating 190 mm long at grating splice.
- Details shown are considered equal alternatives to Aluminum Walkway Details and may be substituted by Contractor at no charge in contract cost.
- Perforated or expanded metal grating providing a skid resistant (non-serrated) surface and capable of supporting a 2.22 kN concentrated load with a 1.83 m clear span. Walkway and truss grating dimensions are nominal and may vary (width ± 13 mm, depth ± 13 mm) based on available standard sizes. Cut ends of grating shall be free of burrs or hazardous projections and coated with zinc-rich primer or equivalent.

SIGNING SHEET 78 OF 83

CANTILEVER SIGN STRUCTURES  
ALTERNATE WALKWAY DETAILS

ILLINOIS DEPARTMENT OF TRANSPORTATION  
SIGNING PLAN  
WAR MEMORIAL DR. STA. 39+700, 4C072U150R024.7  
WAR MEMORIAL DR. STA. 40+105, 4C072U150R024.9

PEORIA CO., IL.

DATE: II-04

Structure Number	Station	A (m)	B (m)	C (m)	D (m)
4C072U150R024.7	39+700	0.215	0.307	2.130	2.593
4C072U150R024.9	40+105	0.215	0.231	2.130	2.441

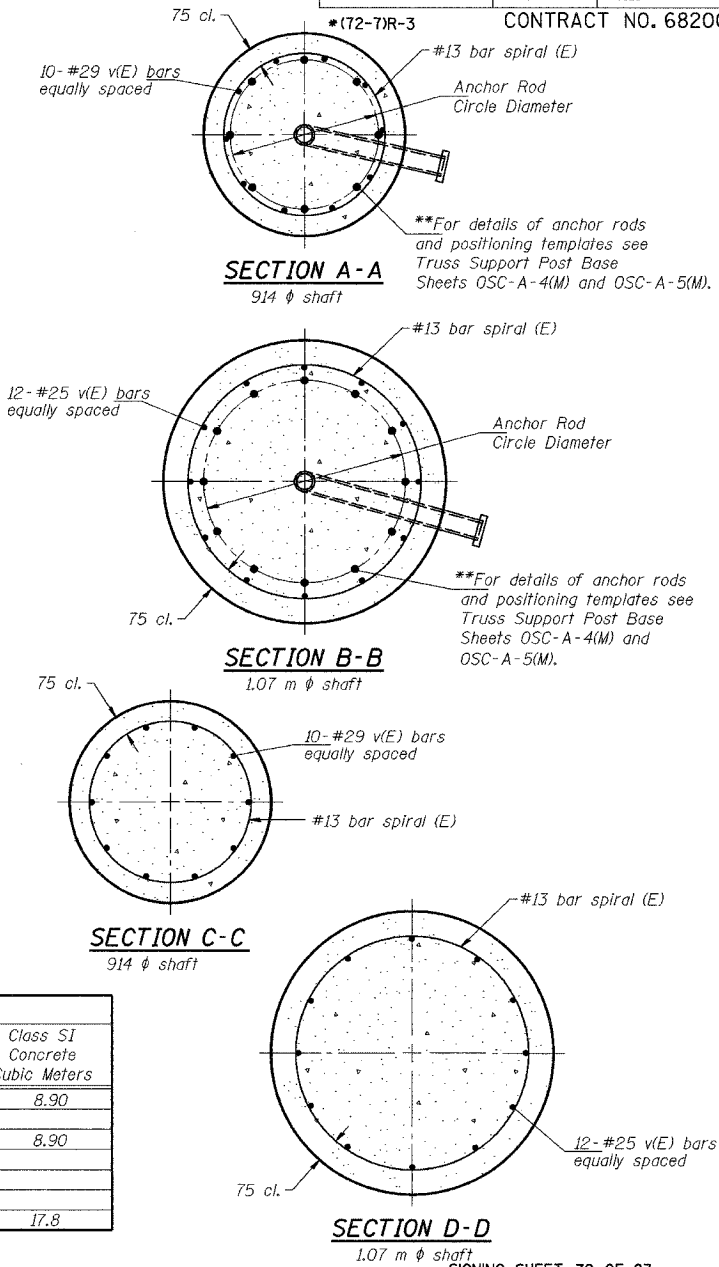
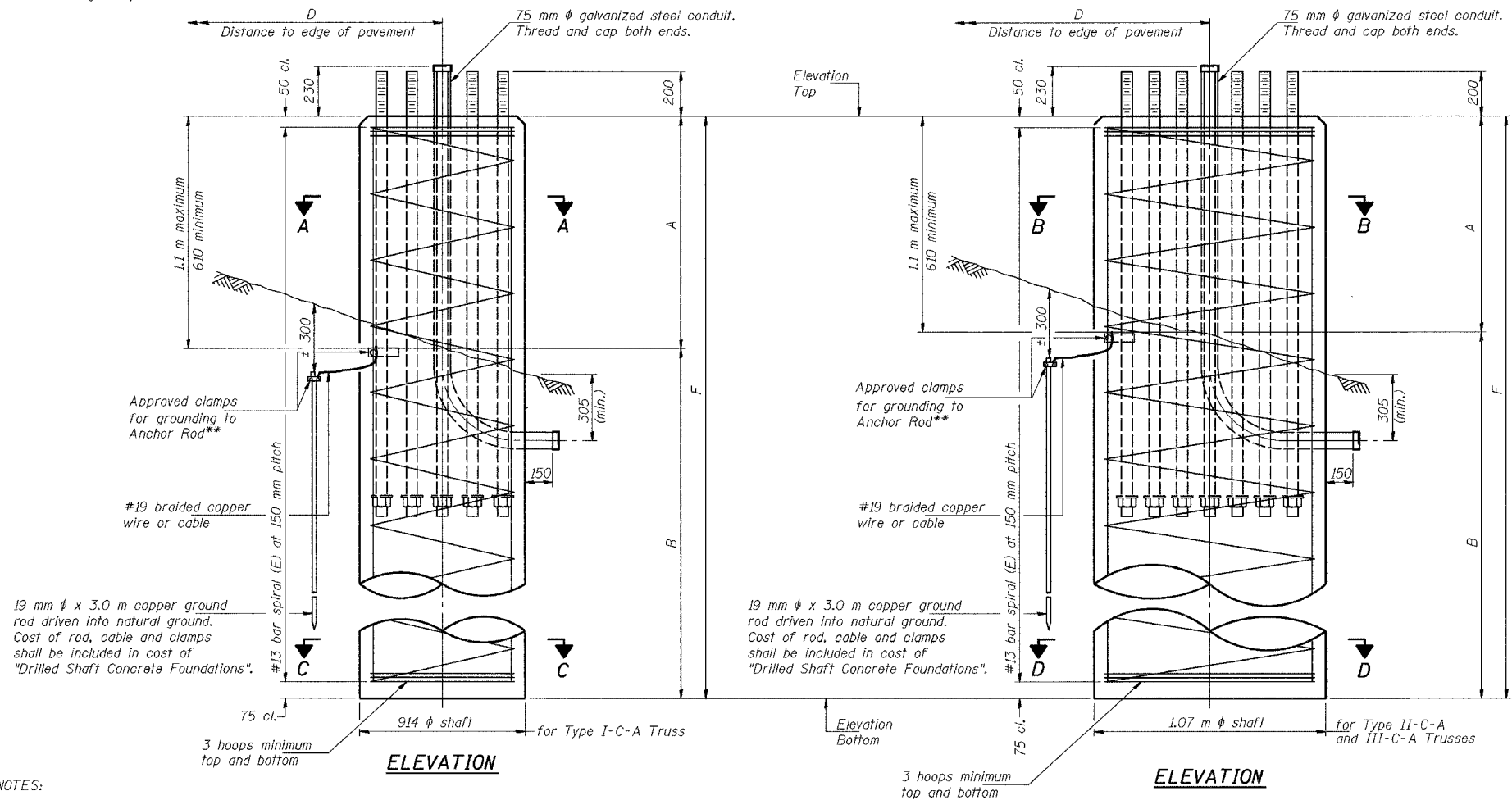
M:\Proj\3573\Sign Structures\Contract 10\sp\003-7Acan-alm.dgn

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE No.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI74	*	PEORIA	1360	1327
STA.	TO STA.			
F.H.W.A. REGION	ILLINOIS	PROJECT		

CONTRACT NO. 68200

\*\*Grind anchor rod to bright finish at ground clamp location before installing clamp.



**NOTES:**  
The foundation dimensions shown are based on the presence of mostly cohesive soils with an average Unconfined compressive Strength (Qu) of at least 120 kPa, which must be determined by previous soil investigations at the jobsite. When other conditions are indicated, the boring data will be included in the plans and the foundation dimensions shown will be the result of site specific designs.  
If the conditions encountered are different than those indicated, the Contractor shall notify the Engineer to determine if the foundation dimensions need to be modified. If dimensions "B" or "F" are revised by more than 300 mm by the contractor, "as-built" plans shall be prepared and submitted to the District Bureau of Operations for future reference.  
No sonotubes or decomposable forms shall be used below the lower conduit entrance. Permanent metal forms or other shielding may not be left in place below that elevation without the Engineers' written permission.  
Concrete shall be placed monolithically, without construction joints.  
Backfill shall be placed per Article 502 of Standard Specifications and prior to erection of support column.  
A normal surface finish followed by a Bridge Seat Sealer application will be required on concrete surfaces above the lowest elevation 150 mm below finished ground line. Cost included in "Drilled Shaft Concrete Foundations".

Structure Number	Station	Truss Type	Shaft Diameter (m)	Elevation Top	Elevation Bottom	A (m)	B (m)	F (m)	Class SI Concrete Cubic Meters
4C072U150R024.7	39+700	III-C-A	1.07	197.254	187.354	0.80	9.10	9.90	8.90
4C072U150R024.9	40+105	III-C-A	1.07	194.898	184.998	0.80	9.10	9.90	8.90
									17.8

Truss Type	Post Base Sheet	Maximum Cantilever Length (m)	Maximum Total Sign Area (sq m)	Shaft Diameter (m)	"B" Depth (m)	Anchor Rods No.	Anchor Rod Diameter (mm)	Anchor Rod Circle Diameter (mm)
I-C-A	OSC-A-4(M)	7.6	15.8	0.92	4.7	8	51	560
II-C-A	OSC-A-5(M)	9.2	15.8	1.07	4.6	12	51	762
II-C-A	OSC-A-5(M)	9.2	31.6	1.07	6.6	12	51	762
III-C-A	OSC-A-5(M)	10.7	15.8	1.07	5.8	12	51	762
III-C-A	OSC-A-5(M)	10.7	23.2	1.07	6.9	12	51	762
III-C-A	OSC-A-5(M)	10.7	37.2	1.07	8.1	12	51	762
III-C-A	OSC-A-5(M)	12.2	37.2	1.07	9.1	12	51	762

DESIGNED	RJW	2004
CHECKED	KJN	EXAMINED
DRAWN	RJW	PASSED
CHECKED	KJN	

ENGINEER OF STRUCTURAL SERVICES  
ENGINEER OF BRIDGES AND STRUCTURES

NUMBER	REVISION	DATE

OSC-A-9(M) 11/1/2002

**CANTILEVER SIGN STRUCTURES  
DRILLED SHAFT  
ALUMINUM TRUSS & STEEL POST**

ILLINOIS DEPARTMENT OF TRANSPORTATION  
SIGNING PLAN

WAR MEMORIAL DR. STA. 39+700, 4C072U150R024.7  
WAR MEMORIAL DR. STA. 40+105, 4C072U150R024.9

PEORIA CO., IL. DATE: 11-04

M:\Proj\3573\Sign Structures\Contract 10\sp\003-7Acan-alm.dgn

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE No.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	*	PEORIA	1360	1398
STA.		TO STA.		
F.H.W.A. REGION		ILLINOIS	PROJECT	
* (72-7)R-3		CONTRACT NO. 68200		

Illinois Department of Transportation  
Division of Highways  
SOIL BORING LOG  
Page 1 of 1  
Date 5/31/02

ROUTE FAI-74 DESCRIPTION Overhead Sign Truss LOGGED BY DBR  
SECTION 72-5.7.8.9-1.80-11.80-12.13.14 LOCATION SEC. TWP. RNG.  
COUNTY Peoria & Tazewell DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. \_\_\_\_\_  
Station \_\_\_\_\_  
BORING NO. SSSB-06R  
Station 143+792  
Offset 36.00m Lt of WB Bl.  
Ground Surface Elev. 185.69 m (m)

DEPTH (m)	B	U	M	Surface Water Elev. (m)	DEPTH (m)	B	U	M
(150 mm)	Qu	T	S	Stream Bed Elev. (m)	(150 mm)	Qu	T	S
				Groundwater Elev.: 180.9 m				
				First Encounter Upon Completion 182.7 m				
				After 24 Hrs. 183.7 m				
No Sample Taken				Light Gray SILT w/ trace of sand (continued)	7	59	17	
					5	S		
Brown SANDY CLAY LOAM	5	182	17		5			
	5	B			7	155	20	
					7	S		
	3				4			
	7	95	14		7	159	20	
	6	P			10	S		
Dark Gray SILTY CLAY	2			Light Gray SILTY SAND	2			
	2	24	25		5			19
	2	P			5			
Gray Fine SAND	2			Light Gray SILTY CLAY	7			
	3		17		11	158	17	
	4				12	S		
Brown / Gray Fine SAND w/ trace of clay & gravel	4			Light Gray CLAY LOAM TILL	6			
	6		17		5	513	10	
	9				13	B		
Light Gray Fine SAND	3			End of Boring	11	474	11	
	8		19		16	S		
Light Gray SILTY SAND	2				174.57			
	5		15					
	3							
	4							

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

Illinois Department of Transportation  
Division of Highways  
SOIL BORING LOG  
Page 1 of 1  
Date 5/31/02

ROUTE FAI-74 DESCRIPTION Overhead Sign Truss LOGGED BY DBR  
SECTION 72-6.7.8.9-1.80-11.80-12.13.14 LOCATION SEC. TWP. RNG.  
COUNTY Peoria & Tazewell DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. \_\_\_\_\_  
Station \_\_\_\_\_  
BORING NO. SSSB-06M  
Station 143+791  
Offset 15.00m Lt of WB Bl.  
Ground Surface Elev. 188.15 m (m)

DEPTH (m)	B	U	M	Surface Water Elev. (m)	DEPTH (m)	B	U	M
(150 mm)	Qu	T	S	Stream Bed Elev. (m)	(150 mm)	Qu	T	S
				Groundwater Elev.: 183.7 m				
				First Encounter Upon Completion 185.7 m				
				After 24 Hrs. Not Taken				
No Sample Taken				Light Gray Fine SAND (continued)	8			20
					10			
Brown Fine SAND w/ some gravel	3			Light Gray SILTY SAND	11			
	7		8		12			16
	9				10			
	8			Light Gray CLAY LOAM TILL	5			
	9		6		7	513	11	
	8				10	B		
Brown CLAY LOAM	2			End of Boring	4			
	8	333	18		8	454	12	
	8	B			8	B		
	2				5			
	3	298	15		7	296	12	
	7	B			8	B		
Light Brown / Brown Fine SAND w/ trace of gravel	3			End of Boring	178.85			
	10		6					
	10							
	4							
	5		18					
	7							
Light Gray Fine SAND	3							
	7		18					
	10							
	5							

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

LEGEND - IDOT TEST BORING LOGS

Silty Clay Loam Textural classification of soil in accordance with IDOT Triangular Chart.

BLOWS/150mm Number of blows required to drive a standard soil sampling device 150 mm as conducted in accordance with AASHTO T 206 standard specification.

Qu, kPa Unconfined compression strength of soil in kilopascals determined in accordance with AASHTO T 208 standard specification.

Moist, % Natural moisture content of soil and bedrock in percent determined in accordance with AASHTO T 265 standard specification and AASHTO T 265/ASTM D 2216 for bedrock.

DESIGNED	RJW	2004
CHECKED	KJN	EXAMINED
DRAWN	RJW	ENGINEER OF STRUCTURAL SERVICES
CHECKED	KJN	PASSED
		ENGINEER OF BRIDGES AND STRUCTURES

SIGNING SHEET 80 OF 83

**SIGN STRUCTURES  
SOIL BORING LOGS**

ILLINOIS DEPARTMENT OF TRANSPORTATION  
SIGNING PLAN  
W.B. I-74 STA. 143+798, S.N. 4S0721074L089.3

PEORIA CO., IL. DATE: 11-11-04

M:\Proj\3573\Sign Structures\Contract 10\sp\004-7A\boring.dgn

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE No.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	*	PEORIA	1360	1329
STA.	TO STA.			
F.H.W.A. REGION	ILLINOIS	PROJECT		
*(72-7R-3			CONTRACT NO. 68200	

**Illinois Department of Transportation SOIL BORING LOG** Page 1 of 1  
Date 5/20/02

ROUTE FAI-74 DESCRIPTION Overhead Sign Truss LOGGED BY DLR ✓  
SECTION 72-6.7, 8, 9-1, 90-11, 20-12, 13, 14 LOCATION SEC. TWP. RNG.  
COUNTY Peoria & Tazewell DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. MAINLINE STATIONING  
Station 144+150  
BORING NO. SSSB-07L  
Station 144+150  
Offset 19.00m Lt of WB CL  
Ground Surface Elev. 123.85 m (m) (mm) (kPa) (%)

DEPTH	SOIL	U	M	Surface Water Elev.	DEPTH	U	M
(m)		Qu	St	(m)	Qu	St	
				Stream Bed Elev.			
				Groundwater Elev.:			
				First Encounter 162.3 m			
				Upon Completion 162.1 m			
				After 24 Hrs. not taken			
	Brown Medium SAND (continued)				6		21
					9		
182.20	Gray SANDY LOAM	2	12				
182.97	Brown Fine Coarse SAND w/trace silt	6	7		2		17
					10		
					2		
					2		
					6		20
					6		
181.88	Brown CLAY LOAM TILL	2	15	clay @ 25.5' (7.77m)			
181.48		7		End of Boring			
	Brown Medium SAND	8	18				
189.92	Brown Coarse SAND w/ some gravel	2	14				
		11					
					2		
					13		12
					16		
179.58	Brown Medium SAND	3	26				
		8					
		8					
		10	26				
		6					
		5					

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

**Illinois Department of Transportation SOIL BORING LOG** Page 1 of 1  
Date 5/21/02

ROUTE FAI-74 DESCRIPTION Overhead Sign Truss LOGGED BY DPS ✓  
SECTION 72-6.7, 8, 9-1, 90-11, 20-12, 13, 14 LOCATION SEC. TWP. RNG.  
COUNTY Peoria & Tazewell DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. MAINLINE STATIONING  
Station 144+500  
BORING NO. SSSB-05R  
Station 144+500  
Offset 6.80m Rt of WB CL  
Ground Surface Elev. 120.76 m (m) (mm) (kPa) (%)

DEPTH	SOIL	U	M	Surface Water Elev.	DEPTH	U	M
(m)		Qu	St	(m)	Qu	St	
				Stream Bed Elev.			
				Groundwater Elev.:			
				First Encounter 177.5 m			
				Upon Completion 173.5 m			
				After 24 Hrs. not taken			
	Gray CLAY LOAM TILL (continued)				5		12
					9		
190.30	Brown CLAY LOAM TILL	4	12				
		12					
					6		12
					9		
179.54	Brown & Gray CLAY LOAM TILL	3	11				
		6					
		6					
176.72	Brown & Gray SANDY CLAY LOAM w/ gravel	2	13				
		1					
		2					
		3	14				
		4					
					5		12
					6		
					8		
					2		
					4		
					7		16
					7		
					2		
					5		14
					7		
					8		
					6		15
					2		
174.87	Gray CLAY LOAM TILL	3	12				

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

LEGEND - IDOT TEST BORING LOGS

Silty Clay Loam Textural classification of soil in accordance with IDOT Triangular Chart.

BLOWS/150mm Number of blows required to drive a standard soil sampling device 150 mm as conducted in accordance with AASHTO T 206 standard specification.

Qu, kPa Unconfined compression strength of soil in kilopascals determined in accordance with AASHTO T 208 standard specification.

Molst. % Natural moisture content of soil and bedrock in percent determined in accordance with AASHTO T 265 standard specification and AASHTO T 265/ASTM D 2216 for bedrock.

DESIGNED	RJW	2004
CHECKED	KJN	EXAMINED
DRAWN	RJW	ENGINEER OF STRUCTURAL SERVICES
CHECKED	KJN	PASSED
		ENGINEER OF BRIDGES AND STRUCTURES

SIGNING SHEET 81 OF 83

SIGN STRUCTURES  
SOIL BORING LOGS

ILLINOIS DEPARTMENT OF TRANSPORTATION

SIGNING PLAN

W.B. I-74 STA. 144+54, S.N. 4S0721074L089.4  
W.B. I-74 STA. 144+540, S.N. 4S0721074L089.7

PEORIA CO., IL.

DATE: 11-11-04

M:\Proj\3573\Sign Structures\Contract 10\sp1004-7Aboring.dgn

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74		PEORIA	1360	1330
STA.		TO STA.		
F.H.W.A. REGION		ILLINOIS	PROJECT	
*(72-7R-3		CONTRACT NO. 68200		

**Illinois Department of Transportation SOIL BORING LOG** Page 1 of 1  
Date 5/23/02

ROUTE FAI-74 DESCRIPTION Overhead Sign Truss LOGGED BY DBR

SECTION 72-6.7,8,9-1,90-11,90-12,13,14 LOCATION SEC. TWP. RNG.

COUNTY Peoria & Tazewell DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. Station	D E P T H H	B L O W S S	U C S Q u T	M O I S T %	Surface Water Elev. m	Stream Bed Elev. m	Groundwater Elev. m	First Encounter Upon Completion After 24 Hrs. not taken	D E P T H H	B L O W S S	U C S Q u T	M O I S T %
No Sample Taken												
Brown SANDY CLAY LOAM		3	48	8								
Brown FINE SAND		4										
Gray CLAY LOAM TILL		3										
Brown SANDY GRAVEL w/ trace of clay		9		11								
Reddish Brown CLAY LOAM TILL		9	415	14								
Gray CLAY LOAM TILL		6	415	15								
Brown FINE SAND		12		18								

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T208) BBS, from 137 (Rev. 8-99)

**Illinois Department of Transportation SOIL BORING LOG** Page 1 of 1  
Date 5/30/02

ROUTE FAI-74 DESCRIPTION Overhead Sign Truss LOGGED BY DBR

SECTION 72-6.7,8,9-1,90-11,90-12,13,14 LOCATION SEC. TWP. RNG.

COUNTY Peoria & Tazewell DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. Station	D E P T H H	B L O W S S	U C S Q u T	M O I S T %	Surface Water Elev. m	Stream Bed Elev. m	Groundwater Elev. m	First Encounter Upon Completion After 24 Hrs. not taken	D E P T H H	B L O W S S	U C S Q u T	M O I S T %
No Sample Taken												
Brown CLAY LOAM		2	318	14								
Gray CLAY LOAM		2	365	13								
Brown / Gray CLAY LOAM w/ trace of sand		9	168	15								
Gray CLAY LOAM w/ trace of sand		4	513	13								
Gray FINE-COARSE SAND		9	217	13								

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T208) BBS, from 137 (Rev. 8-99)

**Illinois Department of Transportation SOIL BORING LOG** Page 1 of 1  
Date 5/30/02

ROUTE FAI-74 DESCRIPTION Overhead Sign Truss LOGGED BY DBR

SECTION 72-6.7,8,9-1,90-11,90-12,13,14 LOCATION SEC. TWP. RNG.

COUNTY Peoria & Tazewell DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. Station	D E P T H H	B L O W S S	U C S Q u T	M O I S T %	Surface Water Elev. m	Stream Bed Elev. m	Groundwater Elev. m	First Encounter Upon Completion After 24 Hrs. not taken	D E P T H H	B L O W S S	U C S Q u T	M O I S T %
No Sample Taken												
Brown CLAY LOAM		4	316	13								
Gray CLAY LOAM		2	257	13								
Gray CLAY LOAM		4	428	13								
Gray CLAY LOAM		7	336	13								
Gray CLAY LOAM		5	395	13								
Gray CLAY LOAM		8	316	14								
Gray CLAY LOAM		5	217	14								

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T208) BBS, from 137 (Rev. 8-99)

LEGEND - IDOT TEST BORING LOGS

Silty Clay Loam Textural classification of soil in accordance with IDOT Triangular Chart.

BLOWS/150mm Number of blows required to drive a standard soil sampling device 150 mm as conducted in accordance with AASHTO T 206 standard specification.

Qu, kPa Unconfined compression strength of soil in kilopascals determined in accordance with AASHTO T 208 standard specification.

Moist, % Natural moisture content of soil and bedrock in percent determined in accordance with AASHTO T 265 standard specification and ASTM D 2216 for bedrock.

DESIGNED	RJW	2004
CHECKED	KJN	EXAMINED
DRAWN	RJW	PASSED
CHECKED	KJN	ENGINEER OF STRUCTURAL SERVICES
		ENGINEER OF BRIDGES AND STRUCTURES

SIGNING SHEET 82 OF 83

**SIGN STRUCTURES  
SOIL BORING LOGS**

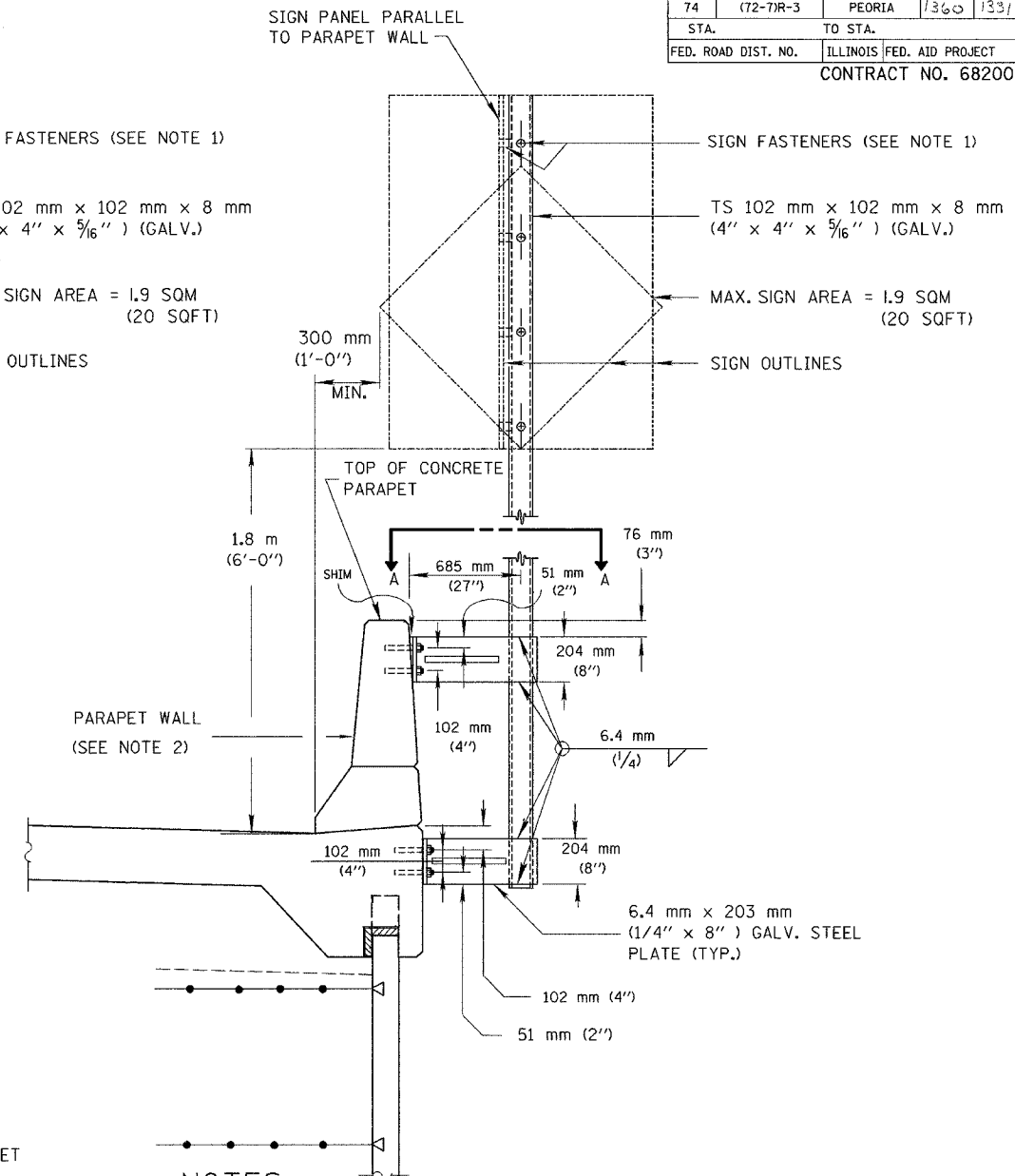
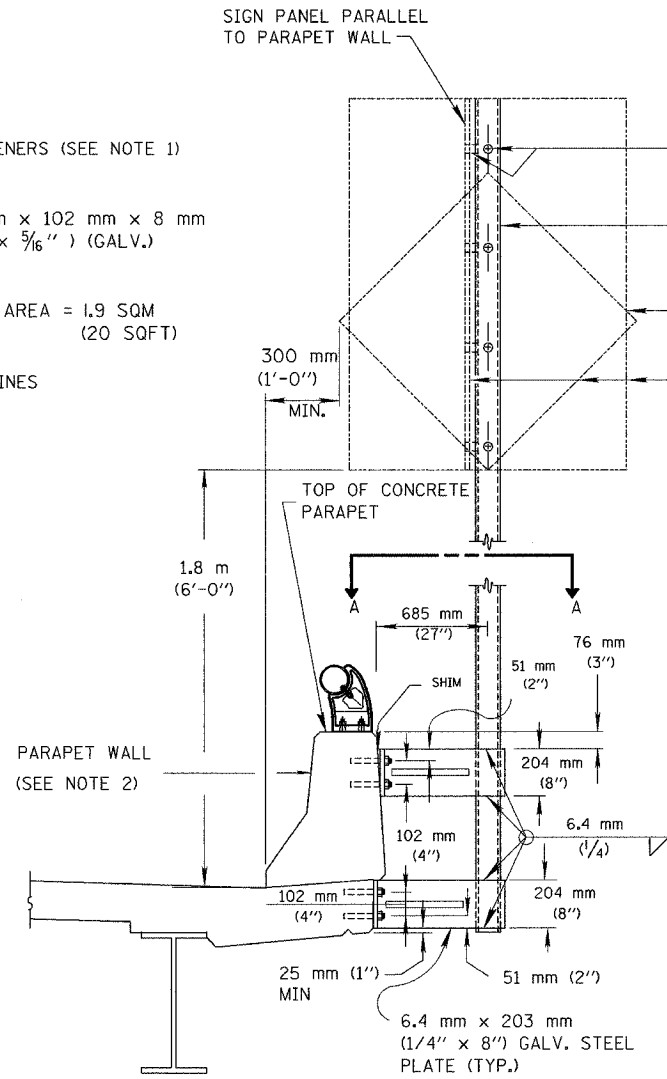
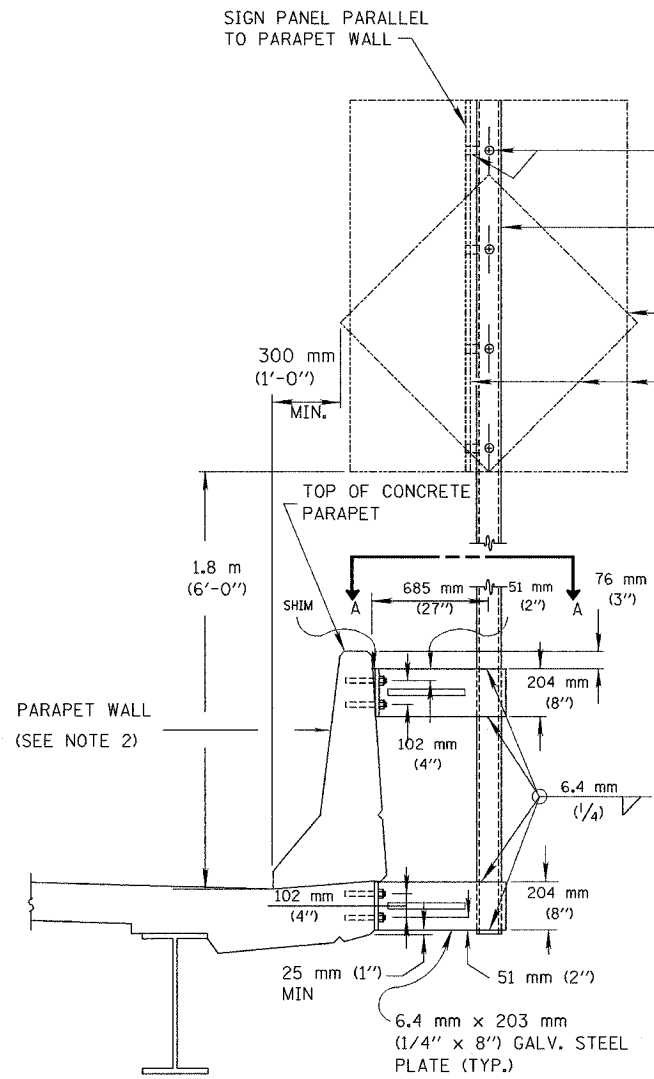
ILLINOIS DEPARTMENT OF TRANSPORTATION  
SIGNING PLAN

W.B. I-74 STA. 143+740, S.N. 4C072I074L089.3  
WAR MEMORIAL DR. STA. 39+700, 4C072U150R024.7  
WAR MEMORIAL DR. STA. 40+105, 4C072U150R024.9

PEORIA CO., IL. DATE: 11-11-04

M:\Proj\3573\Sign Structures\Contract 10\sp\1004-7A\boring.dgn

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-7)R-3	PEORIA	1360	1331
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 68200				

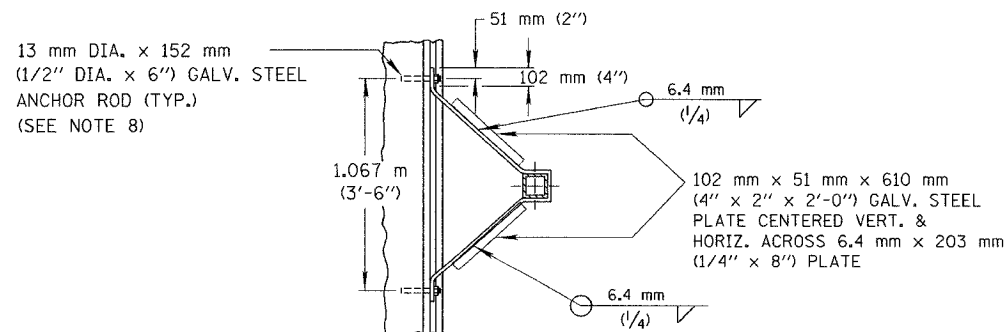


### SIGN SUPPORT, PARAPET MOUNTED, TYPE 1

NOTE: SIGN SUPPORTS MOUNTED TO PARAPETS WITH RAILINGS SHALL BE CENTERED BEHIND A RAILING POST AND ANCHOR RODS SHALL BE SPACED TO MISS REINFORCEMENT BARS. SIGN SUPPORTS MOUNTED TO PARAPETS WITHOUT RAILINGS SHALL BE LOCATED TO ENSURE THAT THE ANCHOR RODS MISS PARAPET JOINTS BY 300 mm (12") MIN. AND REINFORCEMENT BARS.

### NOTES

- SUPPORT CHANNELS SHALL BE REQUIRED FOR SIGN PANELS OVER 900 MM (36 FT) WIDE IN ACCORDANCE WITH SECTION 720 OF THE STANDARD SPECIFICATION AND HIGHWAY STANDARD 720001.
- PARAPET AND RAIL SHAPE MAY VARY.
- 3 MM FABRIC BEARING PAD TO BE PLACED BETWEEN THE GALV. STEEL PLATE AND THE PARAPET.
- SHIM AS REQUIRED TO PLUMB TO ACCOUNT FOR THE SLOPE ON THE BACK OF PARAPET.
- THE CONTRACTOR SHALL FIELD MEASURE THE PARAPET BEFORE FABRICATING SIGN SUPPORT AT EACH LOCATION.
- ALL WELDS TO BE CONTINUOUS UNLESS OTHERWISE SHOWN. ALL WELDING TO BE DONE IN ACCORDANCE WITH CURRENT AWS D1.1 AND D1.2 STRUCTURAL WELDING CODES (STEEL) AND THE STANDARD SPECIFICATIONS.
- ALL STRUCTURAL STEEL PLATES AND SHAPES SHALL CONFORM TO AASHTO M270M GR. 250.
- THREADED ANCHOR RODS SHALL CONFORM TO ASTM A307M WITH ONE PLATE WASHER AND LOCKNUT AND BE HOT DIP GALVANIZED PER AASHTO M232. THEY SHALL BE EITHER CAST INTO THE CONCRETE OR EPOXY GROUTED IN ACCORDANCE WITH SECTION 584 OF THE STANDARD SPECIFICATIONS.
- ALL STEEL PLATES AND SHAPES SHALL BE HOT DIP GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH AASHTO M111. PAINTING IS NOT PERMITTED.
- SIGN FACING DIRECTION SHALL BE AS SHOWN ON SIGNING PLANS.



### SECTION A-A

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION I-74 PROJECT STANDARD 733002-I74 SIGN SUPPORT, PARAPET MOUNTED, TYPE 1
NAME	DATE	
SIGN FACING DIR	9/12/03	DRAWN BY CHECKED BY DATE 1/31/03

M:\Proj\3573\Sign Structures\Contract 10\sp1005-7Aparmt.dgn

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-7)R-3	PEORIA	1360	1332
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
68200				

SHEET NUMBER	TITLE
1-2	INDEX OF SHEETS, COMMITMENTS, GENERAL NOTES, AND UTILITY/AGENCY CONTACTS
3	BILL OF MATERIALS
4	LEGEND
5	SYSTEM COMPONENT LOCATION MAP
6-9	MICROWAVE DETECTOR SUBSYSTEM
6	MDS-I74-02 (STA 143+215) MICROWAVE DETECTOR STATION SITE LAYOUT
7	MICROWAVE DETECTOR MOUNTING DETAILS
8	MICROWAVE DETECTOR STATION INSTALLATION DETAILS
9	NONINTRUSIVE DETECTOR POLE FOUNDATION DETAIL
10-11	FIBER OPTIC COMMUNICATIONS SUBSYSTEM
10	FIBER OPTIC COMMUNICATIONS SYSTEM LAYOUT, I-74 FROM DRIES LANE TO STA 144+250
11	CONDUIT DETAIL
12-13	MISCELLANEOUS DETAILS
12	EQUIPMENT CABINET DETAILS
13	ITS COMPONENT IDENTIFICATION PLAQUE

UTILITY/AGENCY CONTACTS	
<p>MR. DAN URBANIAK I-74 COORDINATOR CENTRAL ILLINOIS LIGHT COMPANY 300 LIBERTY STREET PEORIA, IL 61602 (309) 693-4731</p> <p>MR. CARL ATTEBERRY MCLEOD USA 102 EAST SHAFER STREET FORSYTH, IL 62535 (217) 876-7194</p> <p>MS. PAM MONK AMERITECH TELEPHONE COMPANY ENGINEERING DEPARTMENT, 2ND FLOOR 2315 NORTH KNOXVILLE AVENUE PEORIA, IL 61604 (309) 686-3324</p> <p>MR. CARL DONAHUE AT&amp;T COMMUNICATIONS 866 ROCK CREEK ROAD PLANO, IL 60545 (630) 552-4677</p> <p>MS. JUDITH S. LAKE WILLIAMS COMMUNICATION ONE TECHNOLOGY CENTER P.O. BOX 22064 TC-11A TULSA, OK 74121-2064 (915) 547-9919</p> <p>MR. ERICK ENRIQUEZ CENTRAL ILLINOIS LIGHT COMPANY GAS 300 LIBERTY STREET PEORIA, IL 61602 (309) 693-4882</p> <p>MR. KEVIN HILLEN MANAGER ILLINOIS-AMERICAN WATER COMPANY 123 S.W. WASHINGTON PEORIA, IL 61602 (309) 671-3720</p> <p>MR. THOMAS MEYER DIRECTOR OF ENGINEERING GREATER PEORIA SANITARY DISTRICT 2322 SOUTH DARST STREET PEORIA, IL 61607 (309) 637-3511</p>	<p>MR. DAVE MARSHALL DIRECTOR OF OPERATIONS AND MAINTENANCE CITY OF PEORIA 3505 NORTH DRIES LANE PEORIA, IL 61604 (309) 494-8887</p> <p>MR. RICK JEREMIAH DIRECTOR OF PUBLIC WORKS CITY OF EAST PEORIA 2232 E. WASHINGTON STREET EAST PEORIA, IL 61611 (309) 698-4716</p> <p>MR. JAMES BRUCE VonBRETHORST INSIGHT COMMUNICATIONS 3517 NORTH DRIES LANE PEORIA, IL 61604 (309) 686-2677</p> <p>MR. PAUL WRZESZCZ SPRINT OUTSIDE PLANT ENGINEERING 5600 NORTH RIVER ROAD, SUITE 500 ROSEMONT, IL 60018 (800) 896-3025</p> <p>MR. DAVID TUTTLE MANAGER CITY OF PEORIA EMERGENCY COMMUNICATIONS CENTER 542 SW ADAMS STREET PEORIA, IL 61612-1552 (309) 494-8035</p> <p>MR. DENNIS REINHART DEPUTY CHIEF EAST PEORIA PUBLIC SAFETY BUILDING 201 WEST WASHINGTON STREET EAST PEORIA, IL 61611 (309) 698-4614</p> <p>MR. RANDY LANINGA ITS COORDINATOR ILLINOIS DEPARTMENT OF TRANSPORTATION, DISTRICT 4 401 MAIN STREET PEORIA, IL 61602-1111 (309) 671-4477</p> <p>MR. MICHAEL HOOVER PROJECT MANAGER MASTEC 3705 SW ADAMS STREET PEORIA, IL 61605 (309) 494-9561</p>

STANDARD NUMBER	TITLE
701101	OFF-ROAD OPERATIONS, MULTILANE, LESS THAN 4.5 M (15') AWAY, FOR SPEEDS >= 45 MPH
701106	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 4.5 M (15') AWAY, FOR SPEEDS >= 45 MPH
701400	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY (1-1-05)
701406	LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS > OR = 45 MPH
701411	LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS > OR = 45 MPH
701601	LANE CLOSURE, MULTILANE, 1W OR 2W, WITH NON TRAVERSIBLE MEDIAN, FOR SPEEDS < 45 MPH (REV. 1-1-00)
702001	TRAFFIC CONTROL DEVICES
805001	ELECTRICAL SERVICE INSTALLATION DETAILS
814001	CONCRETE HANDHOLES

ITS SHEET 1 OF 13

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
ITS PLAN

INDEX OF SHEETS, STANDARDS,  
COMMITMENTS, GENERAL NOTES,  
AND UTILITY/AGENCY CONTACTS

SCALE  
DATE 11/02/04

DRAWN BY MJL  
CHECKED BY GFR



PRINTED: #DATE#

FILES



F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	172-71R-3	PEORIA	1360	1333
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
68200				

PROJECT SPECIFIC GENERAL NOTES

THE DEPARTMENT CONTACT PERSON FOR THIS CONTRACT IS RANDY LANINGA, IDOT DISTRICT 4 ITS COORDINATOR, 309-671-4477. THE CONTRACTOR MUST COORDINATE AND COOPERATE WITH THE DEPARTMENT AND THE INVOLVED PARTIES AS DIRECTED BY THE DEPARTMENT.

THE ENGINEERING DESIGN IN THESE PLANS IS BASED UPON FIELD INVESTIGATIONS OF CURRENT CONDITIONS, REVIEW OF EXISTING AS-BUILT DOCUMENTATION, AND INFORMATION OBTAINED FROM PRELIMINARY DESIGN DOCUMENTS FOR THE RECONSTRUCTION PROJECTS. DUE TO THE CHANGING NATURE OF THESE ITEMS, THE ACTUAL CONDITIONS MAY BE DIFFERENT THAN THOSE DEPICTED. THE CONTRACTOR SHALL VERIFY THE EXISTING FIELD CONDITIONS PRIOR TO ANY CONSTRUCTION ACTIVITIES AND CORRELATE THESE CONDITIONS WITH THE PROPOSED CONSTRUCTION ACTIVITIES OF THIS AND OTHER CONTRACTS. THE CONTRACTOR SHALL IDENTIFY TO THE ENGINEER ANY SIGNIFICANT DIFFERENCES BETWEEN THESE PLANS AND THE EXISTING FIELD CONDITIONS OR PROPOSED CONSTRUCTION THAT COULD IMPACT HIS EFFORTS PRIOR TO BEGINNING WORK. CORRECTIVE ACTIONS FOR PROBLEMS ENCOUNTERED AFTER THE CONTRACTOR HAS BEGUN WORK WILL BE INCLUDED IN THE TASK UNLESS PREVIOUSLY IDENTIFIED TO THE ENGINEER.

THE CONTRACTOR SHALL BE REQUIRED TO PAY ANY UTILITY FEES FOR ELECTRICAL SERVICE INCLUDING SET-UP DELIVERY COSTS NECESSARY TO EXTEND THE UTILITY POWER TO THE ITS EQUIPMENT LOCATIONS IN ACCORDANCE WITH ARTICLE 109.05 OF THE STANDARD SPECIFICATIONS.

ALL ELECTRICAL WORK SHALL CONFORM TO THE NATIONAL ELECTRIC CODE (NEC).

THE CONTRACTOR SHALL BE AWARE THAT TEST SOIL BORINGS WERE NOT MADE AT ALL LOCATIONS WHERE INTELLIGENT TRANSPORTATION SYSTEM (ITS) ELEMENTS OR RELATED EQUIPMENT ARE TO BE INSTALLED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXAMINING THE SITE CONDITIONS AT THESE FIELD LOCATIONS BEFORE SUBMITTING BID PROPOSALS.

ALL PROPOSED ITS WORK SHALL BE REVIEWED AND APPROVED BY THE DEPARTMENT IN CONSULTATION WITH THE DESIGN ENGINEER AND THE EQUIPMENT INTEGRATOR. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, CONSTRUCTION METHODOLOGIES, AND PRODUCT MANUFACTURER SPECIFICATIONS BEFORE PROCURING AND INSTALLING ANY ITS EQUIPMENT AS PART OF THIS CONTRACT. THE CONTRACTOR SHALL SUBMIT OWNERS' MANUALS AND USERS' MANUALS WITH DELIVERY OF ANY ITS EQUIPMENT AS PART OF THIS CONTRACT.

WHENEVER CONDUITS (INCLUDING SPARES) ARE INSTALLED FOR FIBER OPTIC OR ELECTRICAL POWER CABLE, A NYLON PULL ROPE WITH DETECTABLE METALLIC CONDUCTOR SHALL BE INSTALLED WITH THE CONDUIT. ALL PULL ROPE-RELATED COSTS ARE TO BE INCLUDED IN THE BID PRICE FOR CONDUIT.

EXACT FIELD LOCATIONS OF ITS EQUIPMENT SHALL BE AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL TAKE CARE NOT TO INSTALL ITS EQUIPMENT IN DRAINAGE AREAS.

STRUCTURAL SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW TO THE FOLLOWING DESIGN CONSULTANT:

EDWARDS AND KELCEY  
ATTN: MATT LETOURNEAU  
ONE NORTH FRANKLIN  
SUITE 500  
CHICAGO, IL 60606

A CONCURRENT COPY OF THE SHOP DRAWINGS (STAMPED FOR INFORMATION ONLY AND NOT FOR CONSTRUCTION) SUBMITTAL SHALL BE SENT FOR INFORMATIONAL PURPOSES TO IDOT'S PROJECT IMPLEMENTATION ENGINEER AT:

401 NORTH MAIN STREET  
PEORIA, IL 61602

PROJECT SPECIFIC GENERAL NOTES

THE DEPARTMENT HAS SELECTED MASTEC AS THE EQUIPMENT INTEGRATOR UNDER A SEPARATE CONTRACT FOR THE ITS WORK INVOLVED IN THE I-74 RECONSTRUCTION PROJECT. THE CONTRACTOR SHALL COOPERATE WITH AND SUPPORT THE EQUIPMENT INTEGRATOR WHO SHALL BE RESPONSIBLE FOR RELOCATING AND REPROGRAMMING (WHERE APPLICABLE) THE TEMPORARY CRASH INVESTIGATION SITE SIGNS AND MOTORIST CALL BOXES, CCTV SURVEILLANCE CAMERAS, PORTABLE TRAFFIC MANAGEMENT SYSTEMS, NONINTRUSIVE DETECTOR STATIONS, AND ALL OF THEIR ASSOCIATED COMMUNICATIONS EQUIPMENT INSTALLATIONS WHENEVER A NEW TRAFFIC PATTERN IS INSTITUTED OR NEW CONSTRUCTION STAGE IS ADVANCED, IN ORDER TO BE ABLE TO USE THEM AS PART OF THE ITS SYSTEM THROUGHOUT THE DURATION OF THE CONTRACT.

NO WORK SHALL BE CONDUCTED BY THE CONTRACTOR ON ANY EXISTING STREET LIGHTING AND TRAFFIC SIGNAL CONDUIT, POLES, OR CONTROLLER CABINETS UNDER JURISDICTION OF THE DEPARTMENT OR THE CITIES OF PEORIA AND EAST PEORIA WITHOUT FIRST NOTIFYING THE DEPARTMENT 72 HOURS BEFORE COMMENCING WORK. ALL STREET LIGHTING/TRAFFIC SIGNAL COORDINATION-RELATED WORK SHALL BE COORDINATED BY THE CONTRACTOR WITH THE DEPARTMENT. THE CONTRACTOR SHALL TAKE PRECAUTIONS TO ENSURE THAT POWER AND COMMUNICATION CABLES WITHIN EXISTING STREET LIGHTING AND TRAFFIC SIGNAL CONDUITS, POLES, AND CONTROLLER CABINETS ARE NOT DAMAGED AS A RESULT OF DRILLING OR INSTALLING THE ITS SUBSYSTEMS IN ACCORDANCE WITH ALL REQUIREMENTS OF THE AFFECTED AGENCY AS WELL AS THE NEC.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING TRAFFIC CONTROL FOR THE INSTALLATION OF ITS RELATED EQUIPMENT WITH OTHER CONTRACTS AND WORK IN THE AREA.

THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN VEHICULAR AND TRAFFIC PATTERNS AS REQUIRED BY THE CONTRACT PLANS. THE CONTRACTOR WILL BE RESPONSIBLE FOR ABIDING BY THE MUTCD AND ALL RULES AND REGULATIONS OF THE DEPARTMENT. THE CONTRACT MOT PLANS FOR CONSTRUCTION OF THE ITEMS IN THIS CONTRACT ARE INCLUDED FOR GENERAL ILLUSTRATION PURPOSES ONLY. THE CONTRACTOR WILL BE REQUIRED TO INSTALL ADDITIONAL SIGNS AND APPURTENANCES TO MAINTAIN SAFE CONDITIONS IN THE WORK ZONE AT ALL TIMES AT NO ADDITIONAL COST TO THE DEPARTMENT.

ANY GROUND AREAS DISTURBED DURING THE INSTALLATION OF ITS FIELD DEVICES SHALL BE REGRADED AND SEEDED TO THE SATISFACTION OF THE ENGINEER. COST FOR THIS WORK IS TO BE INCLUDED IN THE COST OF THE ASSOCIATED ITS EQUIPMENT ITEMS.

ITS SHEET 2 OF 13

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
ITS PLAN  
INDEX OF SHEETS, STANDARDS,  
COMMITMENTS, GENERAL NOTES,  
AND UTILITY/AGENCY CONTACTS  
SCALE  
DATE 11/02/04  
DRAWN BY MJL  
CHECKED BY GFR



F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	172-7DR-3	PEORIA	1360	1334
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
68200				

ITS BILL OF MATERIALS

DESCRIPTION	UNIT	TOTAL QUANTITY	SCHEDULE OF QUANTITIES	
			MDS-174-02	FO LINK
SERVICE INSTALLATION, TYPE B	EACH	1	1	
HEAVY-DUTY HANDHOLE	EACH	3	2	1
CONDUIT IN TRENCH, 50MM DIA., PVC	METER	204.0	56.0	148.0
CONDUIT PUSHED, 50MM DIA., PVC	METER	178.0	100.0	78.0
TRENCH AND BACKFILL FOR ELECTRICAL WORK	METER	120.5	46.5	74.0
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	METER	109.0	109.0	
CONCRETE FOUNDATION, TYPE E 600MM DIAMETER	METER	2.5	2.5	
NONINTRUSIVE DETECTOR POLE 9.1 METER	EACH	1	1	
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	METER	109.0	109.0	
POLE MOUNTED EQUIPMENT CABINET, TYPE B	EACH	1	1	

FOR INFORMATION ONLY

ITS SHEET 3 OF 13

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
ITS PLAN

BILL OF MATERIALS

SCALE  
DATE 11/02/04

DRAWN BY MJL  
CHECKED BY GFR



### ABBREVIATIONS

AOBE	AS ORDERED BY THE ENGINEER
ANT	ANTENNA
ASPH	ASPHALT
AVE	AVENUE
BHD	BULKHEAD
BIT	BITUMINOUS
BLK	BLOCK
BR	BRIDGE
CBW	CONCRETE BLOCK WALL
CC	COMMUNICATIONS CENTER
CCTV	CLOSED CIRCUIT TELEVISION
CIS	CRASH INVESTIGATION SITE
CLF	CHAIN LINK FENCE
CONC	CONCRETE
COND	CONDUIT
CONST	CONSTRUCTION
COPDL	CITY OF PEORIA DRIES LANE FACILITY
CORR	CORRUGATED
CMS	CHANGEABLE MESSAGE SIGN (PORTABLE)
CT	COMMUNICATIONS TOWER
CW	CONCRETE WALL
CIOI	CABINET NUMBER IOI
DIOI	ID NO. OF TRAFFIC LOOP
DWG	DRAWING
E	EAST
EA	EACH
EB	EAST BOUND
ECC	PEORIA EMERGENCY COMMUNICATIONS CENTER
ELEV	ELEVATION
EPPS	EAST PEORIA PUBLIC SAFETY BUILDING
ERQ	EXIT RAMP QUEUE DETECTION SYSTEM
EXCAV	EXCAVATION
FO	FIBER OPTIC
GR	GUARD RAIL
HH	HANDHOLE
HYD	HYDRANT
I	INTERSTATE
IDOT	ILLINOIS DEPARTMENT OF TRANSPORTATION
ILDS	INDUCTIVE LOOP DETECTOR STATION
JB	JUNCTION BOX
LP	LIGHT POLE
L SUM	LUMP SUM
M	METER
MH	MINIHUB
MHS	MANHOLE SEWER
MDS	MICROWAVE DETECTOR STATION
N	NORTH
NB	NORTH BOUND
NIC	NOT IN CONTRACT
NO	NUMBER
NTS	NOT TO SCALE
OH	OVERHEAD
PIN	PROJECT IDENTIFICATION NUMBER
PTMS	PORTABLE TRAFFIC MANAGEMENT SYSTEM
P	PROPERTY LINE
PROP	PROPOSED
RC	REINFORCED CONCRETE
RD	ROAD
ROW	RIGHT OF WAY
RR	RAILROAD
RW	RETAINING WALL
S	SOUTH
SB	SOUTH BOUND
SH	SHEET
SM	SURFACE MOUNTED
ST	STREET
STA	STATION
STD	STANDARD
STL	STEEL
SURF	SURFACE
SW	SIDEWALK
T	TANGENT
TEL	TELEPHONE
TEMP, (T)	TEMPORARY
TMCMS	TRUSS MOUNTED CHANGEABLE MESSAGE SIGN
TS	TRAFFIC SIGNAL
TSQ	TRAFFIC SIGNAL QUEUE DETECTION SYSTEM
UD	UNDERDRAIN
W	WEST
WB	WEST BOUND

### LEGEND

FEATURE	SYMBOL-PROPOSED	SYMBOL-EXISTING
---------	-----------------	-----------------

#### SIGNS

CHANGEABLE MESSAGE SIGN (PORTABLE)		
STATIC SIGN WITH BEACON FLASHERS		
STATIC SIGN WITHOUT BEACON FLASHERS		
TRUSS MOUNTED CHANGEABLE MESSAGE SIGN		
CRASH INVESTIGATION SITE STATIC SIGN		
CRASH INVESTIGATION SITE PERMANENT		
CRASH INVESTIGATION SITE TEMPORARY		
CRASH INVESTIGATION SITE CALL BOX		
PORTABLE TRAFFIC MANAGEMENT SYSTEM		

#### DETECTORS

MICROWAVE DETECTOR PERMANENT		
INDICATES NO COVERAGE      INDICATES COVERAGE		
MICROWAVE DETECTOR TEMPORARY		
INDUCTIVE LOOP DETECTOR		
DETECTOR LOOP		
TRAFFIC SIGNAL QUEUE DETECTION SYSTEM		
EXIT RAMP QUEUE DETECTION SYSTEM		

#### CAMERA

CCTV DOME CAMERA		
------------------	--	--

#### COMMUNICATIONS

MICROWAVE		
SPREAD SPECTRUM		
COMMUNICATIONS TOWER		
COMMUNICATION HUB		
EQUIPMENT CABINET		
FIBER OPTIC CABLE IN CONDUIT		

#### SURVEYING DATA

NORTH ARROW (TRUE)		
CENTERLINE		

#### TREES AND BRUSH

VEGETATION LINE		
TREES, DECIDUOUS		

#### ROADS

AGG SHOULDER		
CURB		

#### GUIDE RAIL OR BARRIER

GUARD RAIL		
TRACKS		
FENCE		
LEVEE OR NOISE BARRIER		

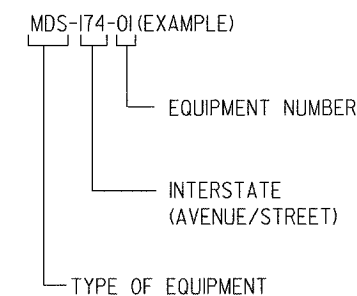
### LEGEND

FEATURE	SYMBOL-PROPOSED	SYMBOL-EXISTING
---------	-----------------	-----------------

#### UTILITY FACILITIES

UTILITY POLE / WOOD POLE		
CAMERA POLE AND FOUNDATION		
FIRE HYDRANT		
FIBER OPTIC CABLE		
UNDERGROUND ELECTRIC CABLE		
UNDERGROUND TELEPHONE CABLE		
BURIED CABLE		
TS UNDGRD CABLE		
TS GALV. STEEL CONDUIT		
WATER PIPE UNDGRD		
GAS		
SANITARY SEWER		
TS HANDHOLE		
UTIL MANHOLE		
LIGHT POLE		
TSC SERVICE INSTALL		
JUNCTION BOX		
FIRE		
COMMUNICATION VAULT		
SOLAR EQUIPMENT		

#### LOCATION IDENTIFICATION NUMBERS:



CIS	CRASH INVESTIGATION SITE
CMS	CHANGEABLE MESSAGE SIGN
ANT	ANTENNA
CCTV	CLOSED CIRCUIT TELEVISION DOME CAMERA
CT	COMMUNICATIONS TOWER
ERQ	EXIT RAMP QUEUE DETECTION AND WARNING SYSTEM
HRI	HIGHWAY-RAIL INFORMATION SYSTEM
HUB	COMMUNICATIONS HUB
ILDS	INDUCTIVE LOOP DETECTOR STATION
MDS	MICROWAVE DETECTOR STATION
PTMS	PORTABLE TRAFFIC MANAGEMENT SYSTEM
TMCMS	TRUSS MOUNTED CHANGEABLE MESSAGE SIGN
TSQ	TRAFFIC SIGNAL QUEUE DETECTION SYSTEM

ITS SHEET 4 OF 13

ILLINOIS DEPARTMENT OF TRANSPORTATION  
ITS PLAN

### LEGEND

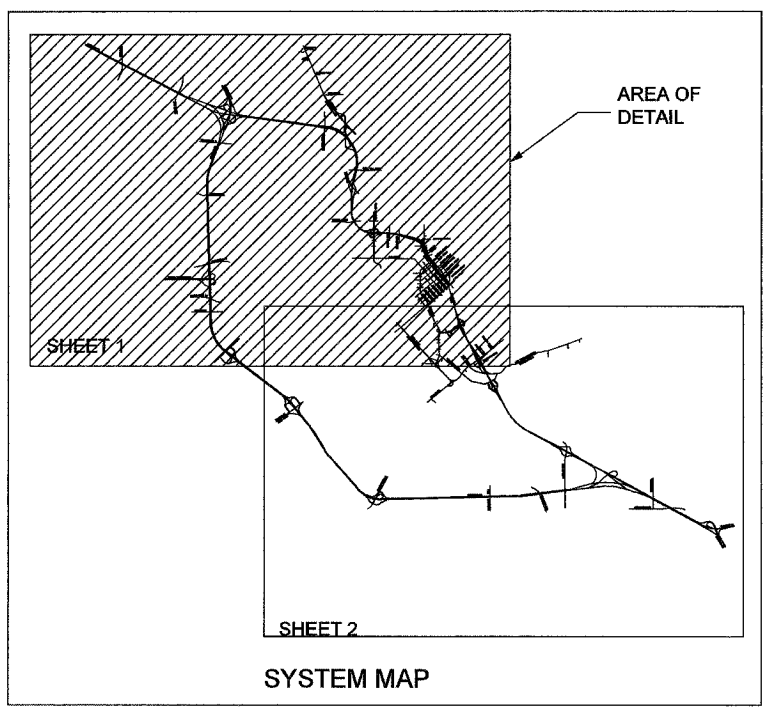
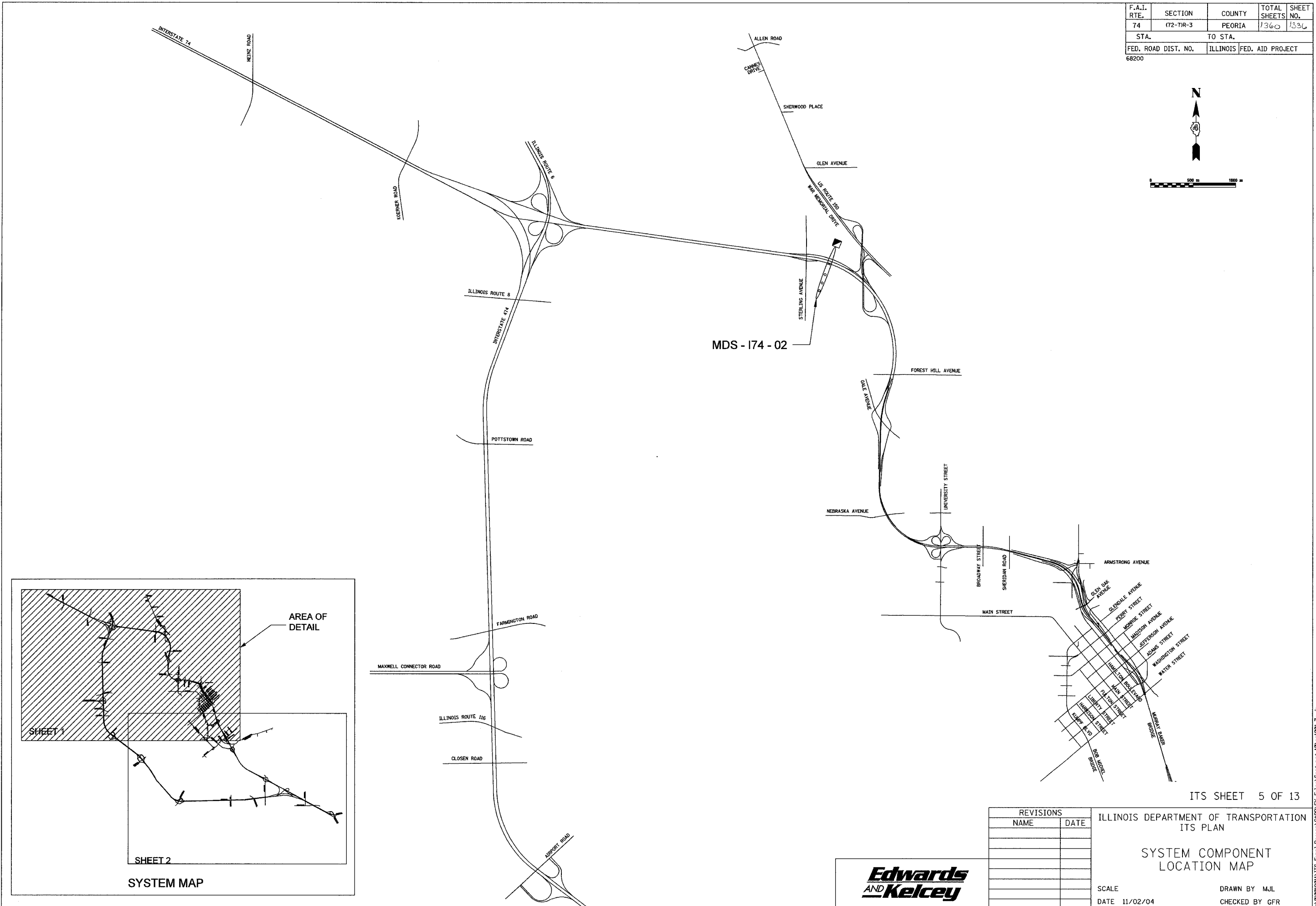
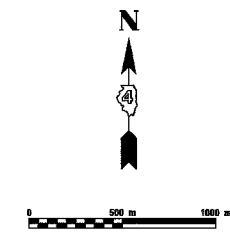
SCALE  
DATE 11/02/04

DRAWN BY TM  
CHECKED BY MJL

**Edwards  
AND Kelcey**

REVISIONS	
NAME	DATE

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	02-7R-3	PEORIA	1360	1336
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
68200				



ITS SHEET 5 OF 13

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
ITS PLAN

SYSTEM COMPONENT  
LOCATION MAP

SCALE  
DATE 11/02/04

DRAWN BY MJL  
CHECKED BY GFR

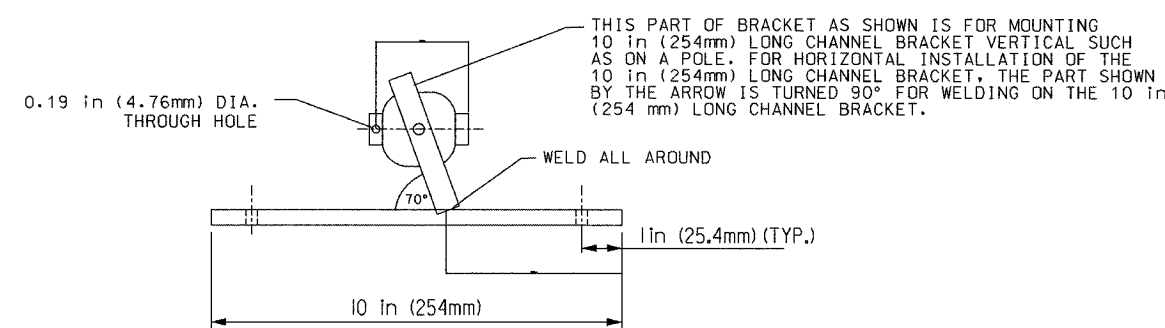
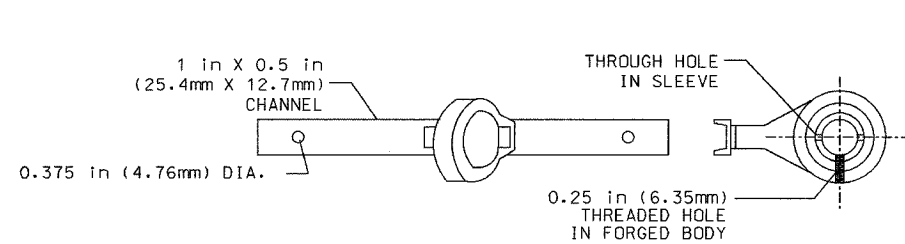


PRINTED: 11/05/2004

P:\01081981\ITS Final Design\CADD\EX Files\Contract 10\01081-7e.dgn

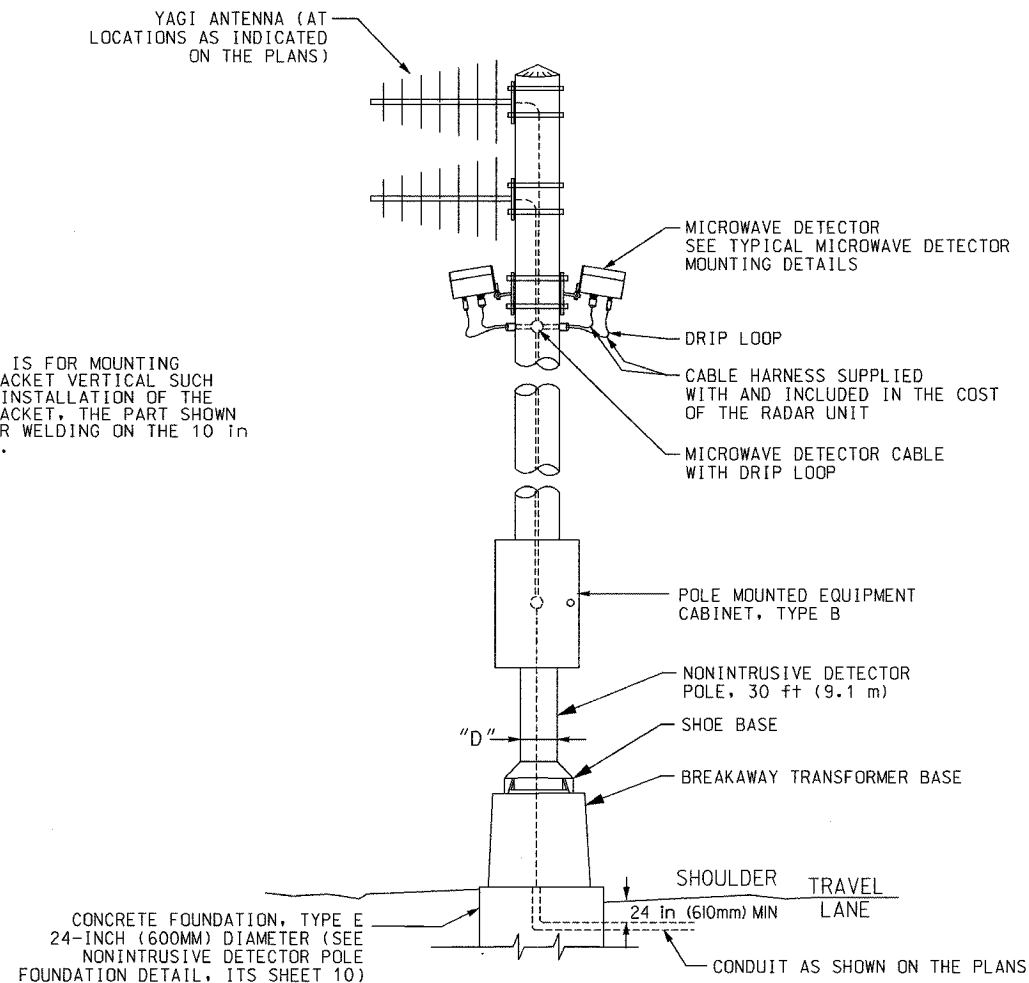


F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-7R-3)	PEORIA	1360	1338
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
68200				

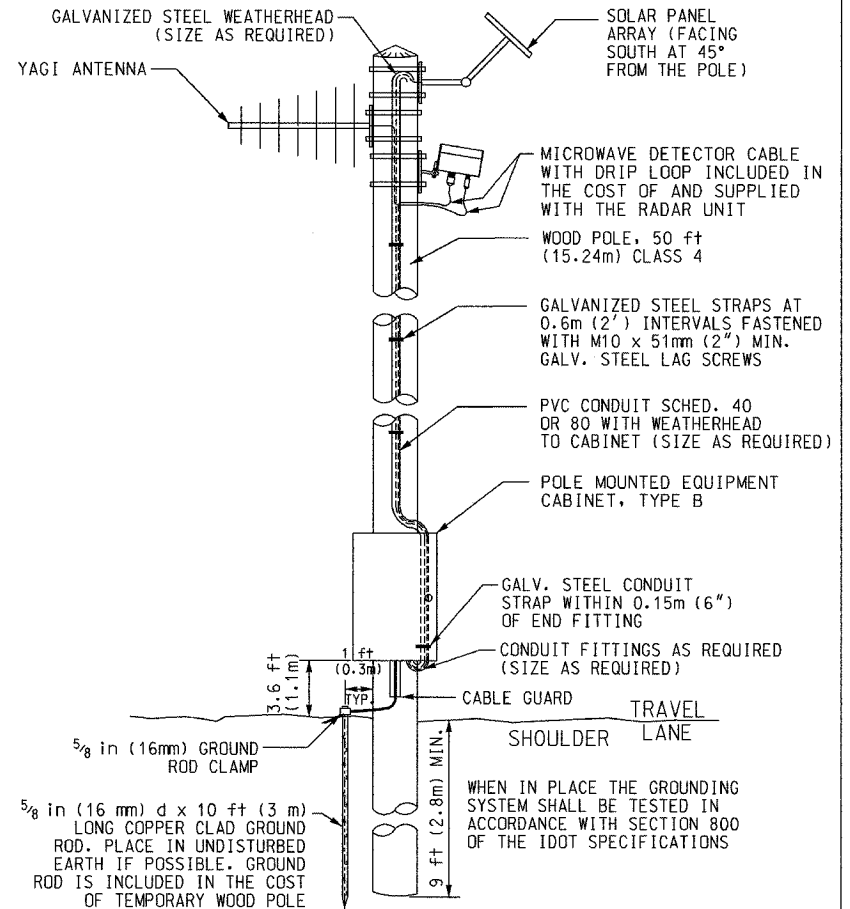


DETECTOR ASSEMBLY (SUPPLIED BY MANUFACTURER)

DETECTOR POLE			
SHAFT LENGTH	SHOE BASE BOLT CIRCLE	TRANS. BASE BOLT CIRCLE	POLE BASE DIA. (D)
28 ft (8.5 m)	11.0 in (280 mm)	15.0 in (380 mm)	8.0 in (203 mm)



PERMANENT POLE



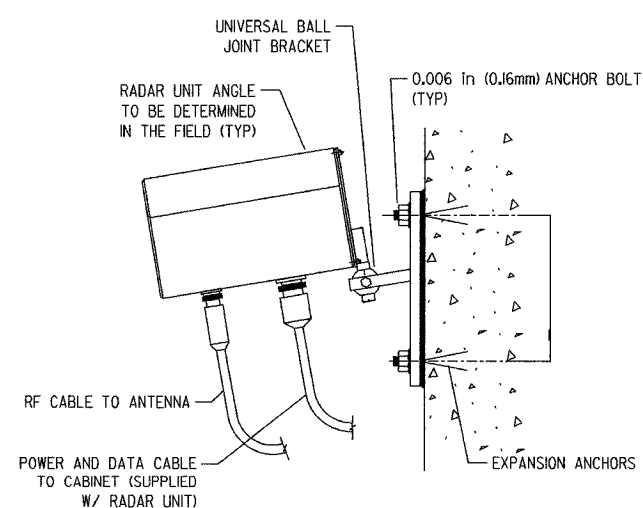
TEMPORARY WOOD POLE

MICROWAVE DETECTOR POLE MOUNTING DETAIL

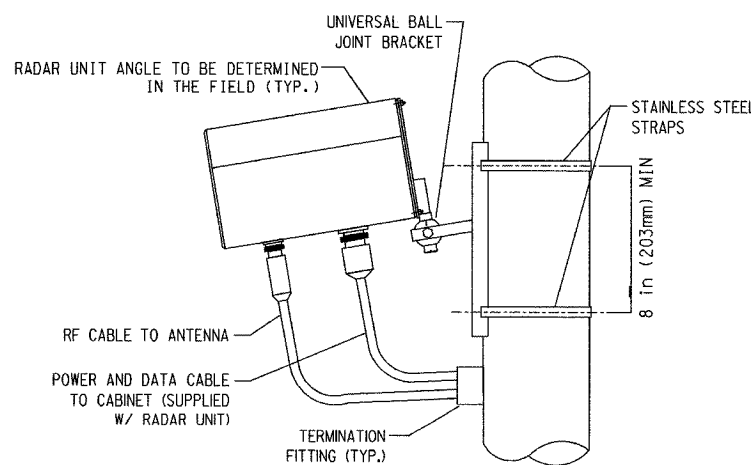
SEE MICROWAVE DETECTOR INSTALLATION DETAILS TABLE FOR POLE OFFSET AND MOUNTING HEIGHT (ITS SHEET 9)

NOTES:

1. ALL CABLES TO BE INSTALLED WITHIN CONDUIT AS NOTED.
2. CABLE/CONDUITS SHALL NOT ENTER TOPS OF ENCLOSURES, CABINETS OR PULL/JUNCTION BOXES.
3. CABLE HARNESS FROM POLE MOUNTED EQUIPMENT IS SUPPLIED WITH ITS ASSOCIATED EQUIPMENT. ALL STAINLESS STEEL STRAPS FOR FASTENING CABLES BRACKETS, ETC. ARE PAID FOR AS PART OF ITS ASSOCIATED EQUIPMENT. PROVIDE DRIP LOOP AT EACH CABLE TERMINATOR.
4. YAGI ANTENNA AND SOLAR PANEL ARRAY SHALL BE MOUNTED AS HIGH AS POSSIBLE ON THE POLE.
5. YAGI ANTENNA SHALL BE AIMED AT NEAREST MICROWAVE COMMUNICATIONS LINK FOR OPTIMUM PERFORMANCE PROVIDED LINE OF SIGHT EXISTS AND INSTALLED PER MANUFACTURER'S SPECIFICATIONS.



MOUNTED TO CONCRETE WALL



MOUNTED TO VERTICAL POLE

MICROWAVE DETECTOR MOUNTING DETAILS

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION ITS PLAN
NAME	DATE	
		<p>MICROWAVE DETECTOR MOUNTING DETAIL</p> <p>SCALE: 11/02/04</p> <p>DRAWN BY TM</p> <p>CHECKED BY MJL</p>



PRINTED: 11/05/2004

P:\01001\9011\its Final design\cadd\ak Files\contract 10\ind004-7a.dgn

TABLE 1 - MICROWAVE DETECTOR LOCATIONS FOR I-74 PEORIA ITS

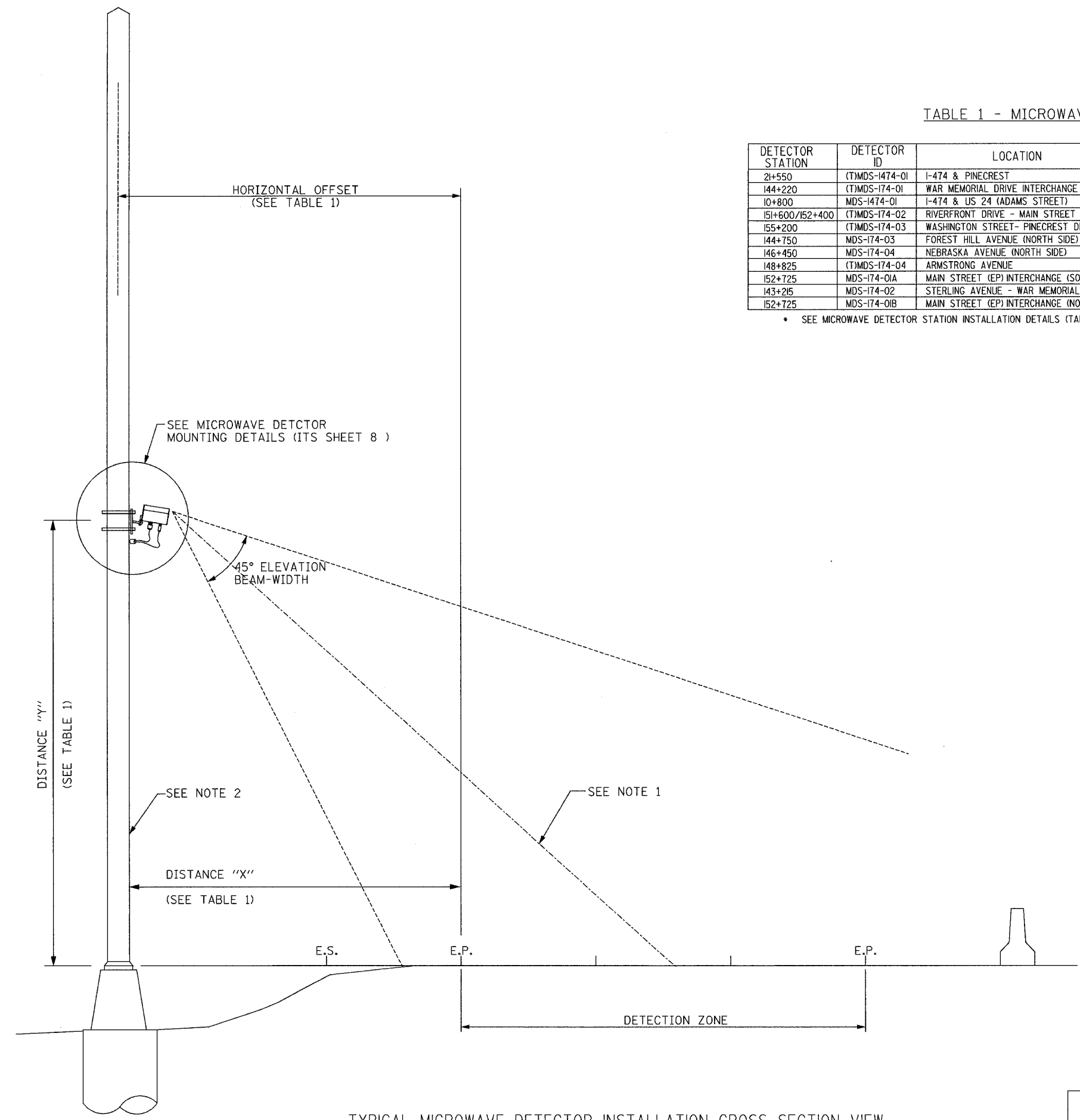
DETECTOR STATION	DETECTOR ID	LOCATION	DETECTOR TYPE	DETECTOR COVERAGE	COMMENTS	No OF LANES	SETBACK* 'X'	HEIGHT* 'Y'
2+550	(T)MDS-1474-01	I-474 & PINECREST	TEMPORARY	MAINLINE	TEMPORARY WOOD POLE	4	50' (15 m)	25' (8 m)
144+220	(T)MDS-174-01	WAR MEMORIAL DRIVE INTERCHANGE (EAST SIDE)	TEMPORARY	MAINLINE	TEMPORARY WOOD POLE	5	20' (6 m)	17' (5 m)
10+800	MDS-1474-01	I-474 & US 24 (ADAMS STREET)	PERMANENT	MAINLINE	COMBINATION RTMS/CCTV POLE	4	20' (6 m)	17' (5 m)
151+600/152+400	(T)MDS-174-02	RIVERFRONT DRIVE - MAIN STREET (EP)	TEMPORARY	MAINLINE	TEMPORARY WOOD POLE	4/6	20' (6 m)	17' (5 m)
155+200	(T)MDS-174-03	WASHINGTON STREET - PINECREST DRIVE	TEMPORARY	MAINLINE	TEMPORARY WOOD POLE	4	20' (6 m)	17' (5 m)
144+750	MDS-174-03	FOREST HILL AVENUE (NORTH SIDE)	PERMANENT	MAINLINE	PERMANENT POLE	6	20' (6 m)	17' (5 m)
146+450	MDS-174-04	NEBRASKA AVENUE (NORTH SIDE)	PERMANENT	MAINLINE	PERMANENT POLE	6	20' (6 m)	17' (5 m)
148+825	(T)MDS-174-04	ARMSTRONG AVENUE	TEMPORARY	MAINLINE	TEMPORARY WOOD POLE	6	20' (6 m)	17' (5 m)
152+725	MDS-174-01A	MAIN STREET (EP) INTERCHANGE (SOUTH SIDE)	PERMANENT	MAINLINE	PERMANENT POLE	6	20' (6 m)	17' (5 m)
143+215	MDS-174-02	STERLING AVENUE - WAR MEMORIAL DRIVE	PERMANENT	MAINLINE	PERMANENT POLE, 2 DETECTORS	6,1	20' (6 m)	17' (5 m)
152+725	MDS-174-01B	MAIN STREET (EP) INTERCHANGE (NORTH SIDE)	PERMANENT	MAINLINE	PERMANENT POLE	6	20' (6 m)	17' (5 m)

\* SEE MICROWAVE DETECTOR STATION INSTALLATION DETAILS (TABLE 2)

TABLE 2 - MICROWAVE DETECTOR INSTALLATION DETAILS

HORIZONTAL OFFSET FT (M)	MOUNTING HEIGHT FT (M)		
	MINIMUM	MAXIMUM	RECOMMENDED
10.0 (3.0)	17.0 (5.2)	20.0 (6.1)	17.0 (5.2)
15.0 (4.6)	17.0 (5.2)	20.0 (6.1)	17.0 (5.2)
20.0 (6.1)	17.0 (5.2)	20.0 (6.1)	17.0 (5.2)
25.0 (7.6)	17.0 (5.2)	25.0 (7.6)	20.0 (6.1)
30.0 (9.1)	23.0 (7.0)	25.0 (7.6)	23.0 (7.0)
35.0 (10.7)	25.0 (7.6)	25.0 (7.6)	25.0 (7.6)
40.0 (12.2)	25.0 (7.6)	25.0 (7.6)	25.0 (7.6)
45.0 (13.7)	25.0 (7.6)	25.0 (7.6)	25.0 (7.6)
50.0 (15.2)	25.0 (7.6)	25.0 (7.6)	25.0 (7.6)

DIMENSIONS REFERENCED FROM THE EDGE OF PAVEMENT.



TYPICAL MICROWAVE DETECTOR INSTALLATION CROSS SECTION VIEW

NOTES:

- DETECTOR UNIT TO BE AIMED AT CENTER OF DETECTION ZONE. WHEN TWO DETECTORS ARE USED IN TANDEM AT A GIVEN LOCATION, DETECTION ZONE SHALL INCLUDE ALL TRAVEL LANES IN A SINGLE DIRECTION NEAREST EACH DETECTOR. WHEN A SINGLE DETECTOR IS USED AT A GIVEN LOCATION, THE DETECTOR ZONE SHALL INCLUDE ALL TRAVEL LANES IN BOTH DIRECTIONS. FINAL SETUP AND CALIBRATION TO BE PERFORMED BY MANUFACTURER'S FIELD REPRESENTATIVE IN CONJUNCTION WITH THE EQUIPMENT INTEGRATOR.
- DETECTOR UNIT MAY BE MOUNTED ON A TEMPORARY WOOD OR PROPOSED STEEL POLE AS INDICATED ON THE PLANS. POLE SHALL BE INSTALLED OUTSIDE OF THE CLEAR ZONE OR SHALL BE PROTECTED FROM TRAFFIC.

REVISIONS	
NAME	DATE

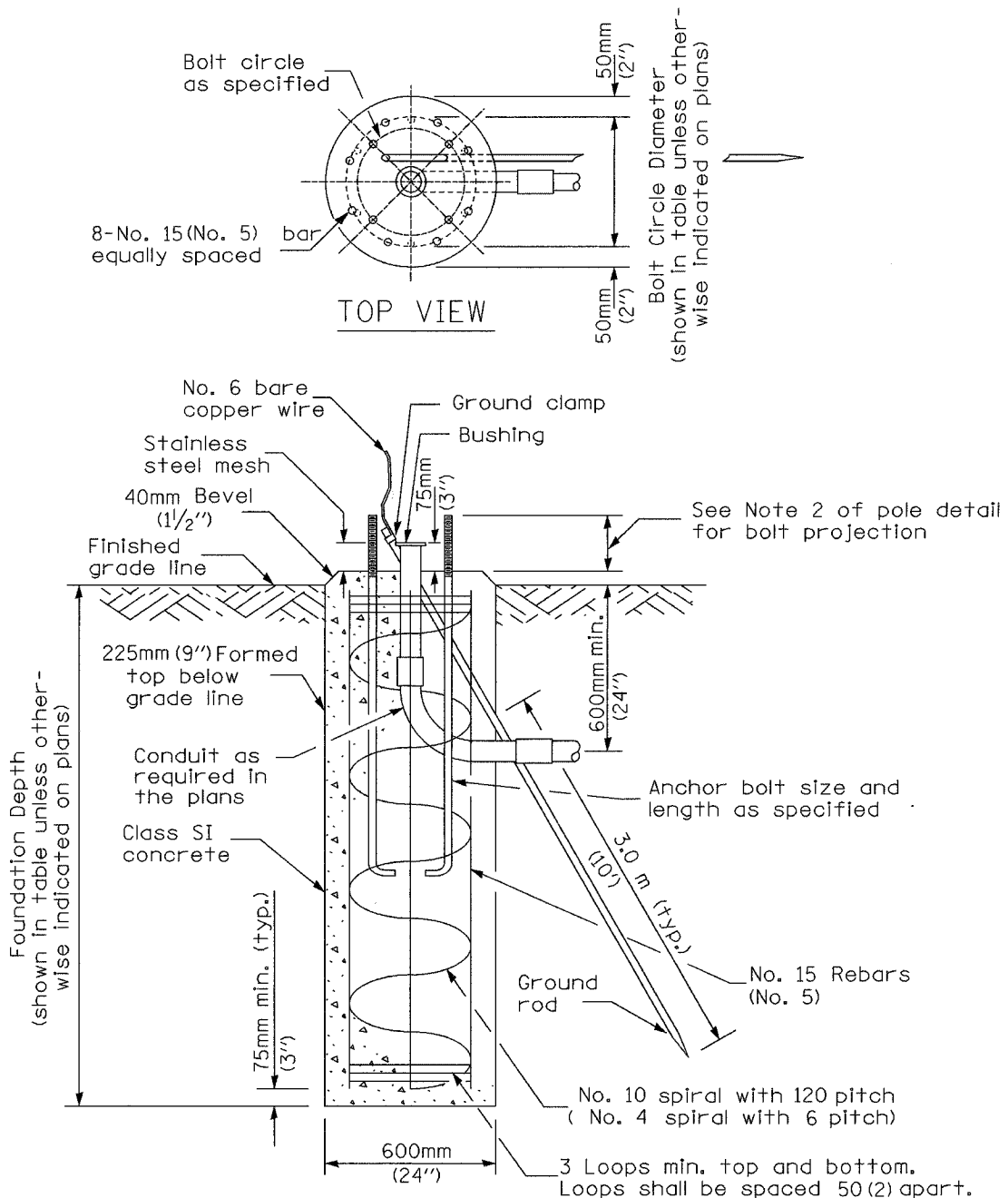
ILLINOIS DEPARTMENT OF TRANSPORTATION  
ITS PLAN

MICROWAVE DETECTOR  
INSTALLATION DETAIL

SCALE  
DATE 11/02/04

DRAWN BY MJL  
CHECKED BY GFR





Pole Height	Bolt Circle Diameter	Foundation depth
9.1m (30')	380mm (15.0')	2.5m (8'-0")

**Notes:**

- The Engineer shall determine the class of soil during excavation. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (Qu) > 100 kPa (1.0 tsf). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & Structures should be contacted for a revised design if other conditions are encountered.
- The anchor bolts and raceways shall be properly secured in place.
- Concrete shall be class "SI" Concrete and the foundation must be cured for ten (10) days before the pole is erected.
- The cable trench shall be backfilled and firmly compacted before the pole is erected.
- For sloping grades, the foundation design depth shall be increased by the corresponding cross slope shaft depth increase factor given by:
  - Cohesive soil - cross slope shaft increase factor  $0.009 \times (\text{slope angle}) + 1.0$
  - Granular soil - cross slope shaft increase factor  $0.00005 \times (\text{slope angle}) + 1.0$
- Install grounding system in accordance with Section 807 of the IDOT Standard Specifications.

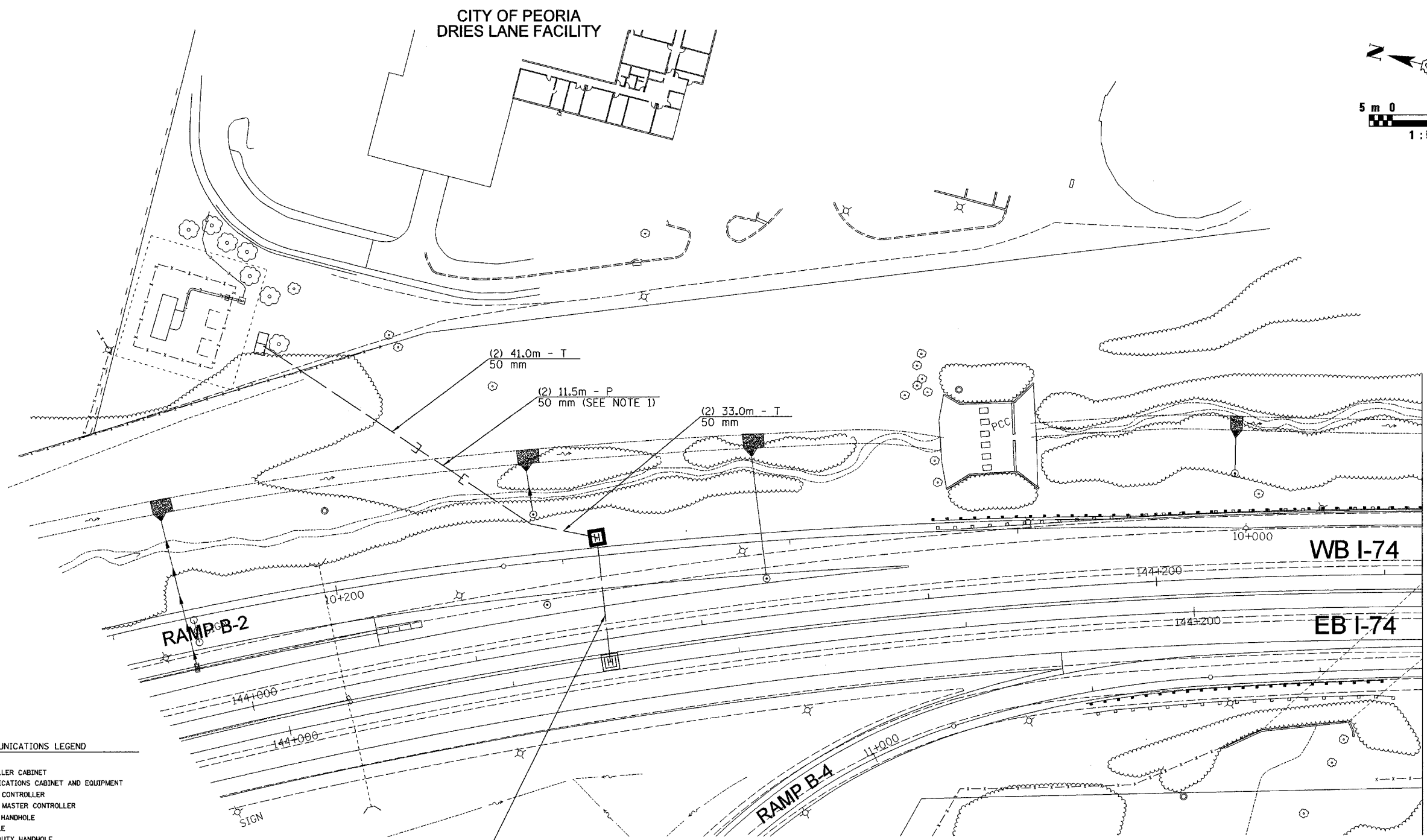
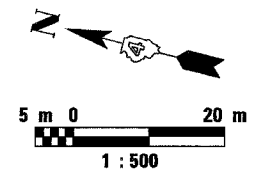
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
ITS PLAN  
**NONINTRUSIVE DETECTOR  
POLE  
FOUNDATION DETAIL**  
SCALE  
DATE 11/02/04  
DRAWN BY CADD  
CHECKED BY MJL





F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-7R-3)	PEORIA	1360	1341
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
68200				



**FIBER OPTIC COMMUNICATIONS LEGEND**

PROPOSED	EXISTING	DESCRIPTION
[Symbol]	[Symbol]	CONTROLLER CABINET
[Symbol]	[Symbol]	COMMUNICATIONS CABINET AND EQUIPMENT
[Symbol]	[Symbol]	MASTER CONTROLLER
[Symbol]	[Symbol]	MASTER MASTER CONTROLLER
[Symbol]	[Symbol]	DOUBLE HANDHOLE
[Symbol]	[Symbol]	HANDHOLE
[Symbol]	[Symbol]	HEAVY DUTY HANDHOLE
[Symbol]	[Symbol]	COMMUNICATIONS VAULT
[Symbol]	[Symbol]	CONDUIT IN TRENCH OR PUSHED
[Symbol]	[Symbol]	INTERSECTION AND SAMPLING (SYSTEM) DETECTORS
[Symbol]	[Symbol]	PROPOSED FIBER OPTIC BACKBONE CABLE (* DENOTES FIBER COUNT)
[Symbol]	[Symbol]	EXISTING INTERCONNECT CABLE NO. 62.5/125 12F FIBER OPTIC CABLE
[Symbol]	[Symbol]	INTERCONNECT CABLE NO. 19 3 PAIR TWISTED, SHIELDED
[Symbol]	[Symbol]	LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED
[Symbol]	[Symbol]	TRACER CABLE NO. 14 1/C
[Symbol]	[Symbol]	SAMPLING (SYSTEM) DETECTORS
[Symbol]	[Symbol]	EXISTING INTERSECTION DETECTORS AND PROPOSED SAMPLING (SYSTEM) DETECTORS
[Symbol]	[Symbol]	EXISTING SAMPLING (SYSTEM) DETECTORS AND PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS
[Symbol]	[Symbol]	TELEPHONE CONNECTION
[Symbol]	[Symbol]	COMMON TRENCH
[Symbol]	[Symbol]	UNIT DUCT
[Symbol]	[Symbol]	INTERSECTION

**BILL OF MATERIALS**

PAY ITEM	UNIT	QUANTITY
HEAVY DUTY HANDHOLE	EACH	1
CONDUIT IN TRENCH, 50MM DIA., PVC	METER	148.0
CONDUIT PUSHED, 50MM DIA., PVC	METER	78.0
TRENCH AND BACKFILL FOR ELECTRICAL WORK	METER	74.0

**NOTE:**

1. CONTRACTOR SHALL CONFIRM FINAL LOCATION OF RELOCATED DRAINAGE CHANNEL BEFORE INSTALLING PUSHED CONDUIT.



**REVISIONS**

NAME	DATE

ITS SHEET 10 OF 13

ILLINOIS DEPARTMENT OF TRANSPORTATION  
ITS PLAN

FIBER OPTIC COMMUNICATIONS  
SYSTEM LAYOUT I-74 FROM  
DRIES LANE TO STA 144+250

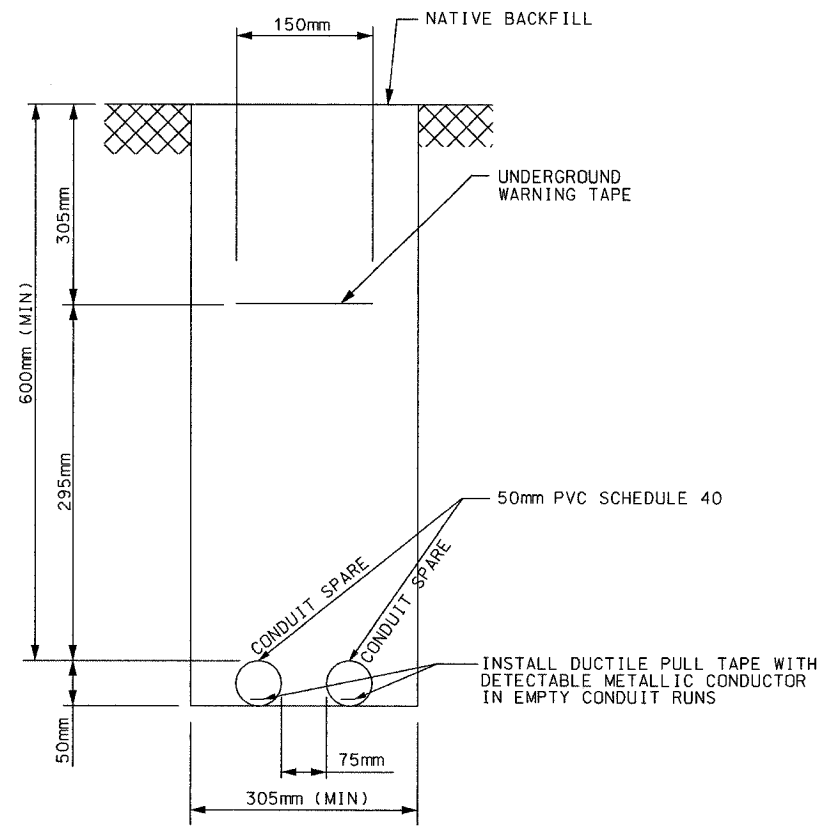
SCALE  
DATE 11/02/04

DRAWN BY MJL  
CHECKED BY JEZ

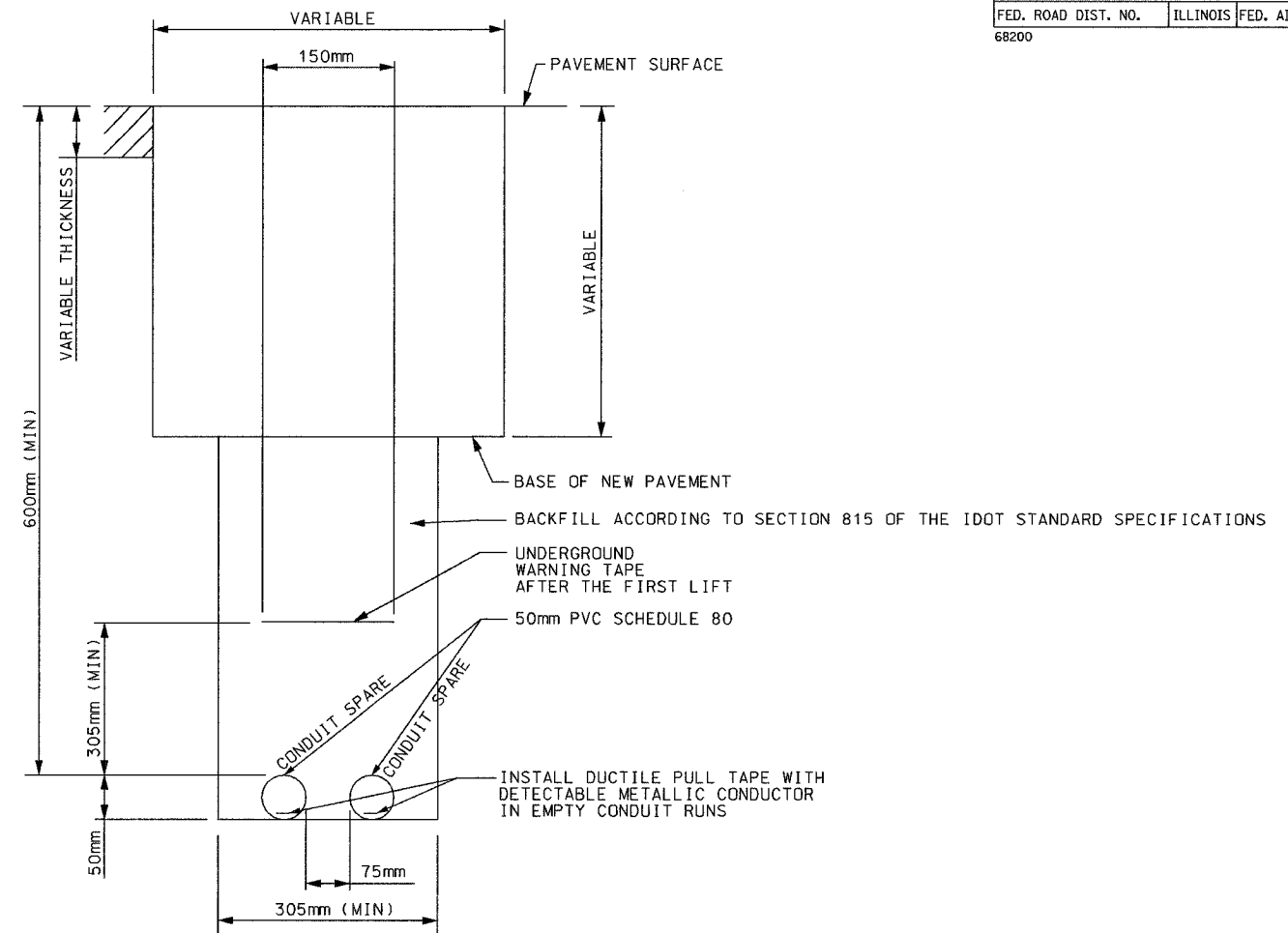
PRINTED: 11/05/2004

c:\01001301\1\its final design\cond\wk files\contract 10\app\004-7.dgn

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	172-7R-3	PEORIA	1360	1342
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
68200				



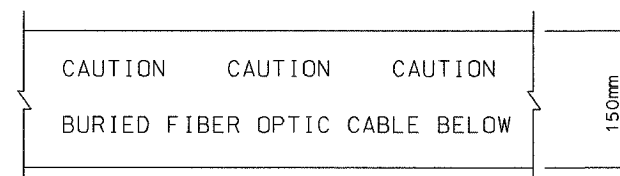
CONDUIT DETAILS,  
TRUNKLINE (BACKBONE),  
TYPICAL IN GRASS AREAS



CONDUIT DETAILS,  
IN RECONSTRUCTED CONCRETE  
OR BITUMINOUS SHOULDER,  
TRAVELED WAY OR RAMP AREA

NOTES:

- PVC CONDUIT SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 810 OF THE IDOT STANDARD SPECIFICATIONS.
- TRENCH AND BACKFILL SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH SECTION 815 OF THE IDOT STANDARD SPECIFICATIONS.
- WARNING TAPE SHALL BE ORANGE, 0.1mm FLEXIBLE POLYETHYLENE FILM WHICH SHALL BE RESISTANT TO ACIDS, BASES, HYDROCARBONS, AND WATER.
- TRENCH BOTTOM SHALL BE PREPARED TO ELIMINATE LUMPS, RIDGES, JAGGED EDGES, AND HOLLOWES UTILIZING BEDDING MATERIALS AS DIRECTED BY THE ENGINEER.



WARNING TAPE DETAIL  
(BLACK LETTERS ON ORANGE BACKGROUND)

ITS SHEET 11 OF 13

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
ITS PLAN

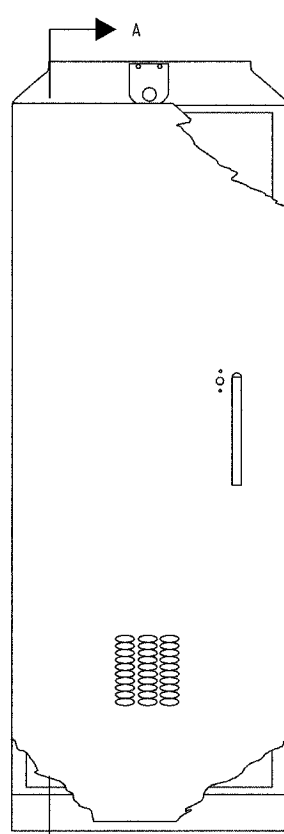
CONDUIT DETAIL

SCALE  
DATE 11/02/04

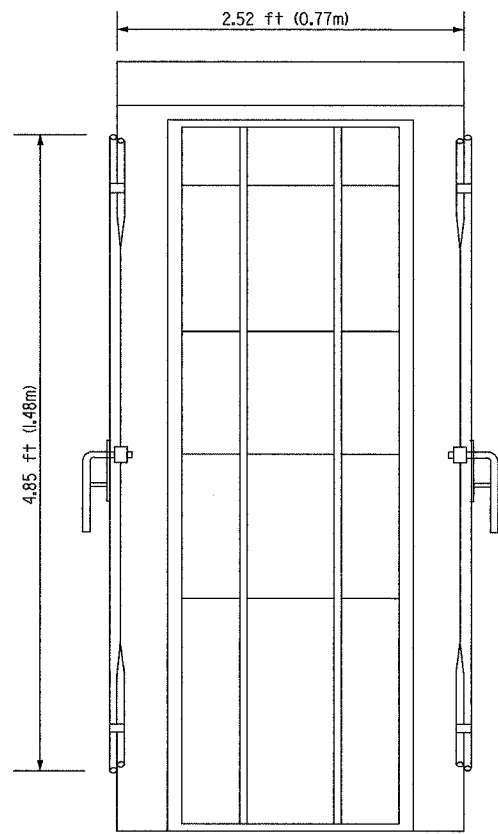
DRAWN BY SD  
CHECKED BY JEZ



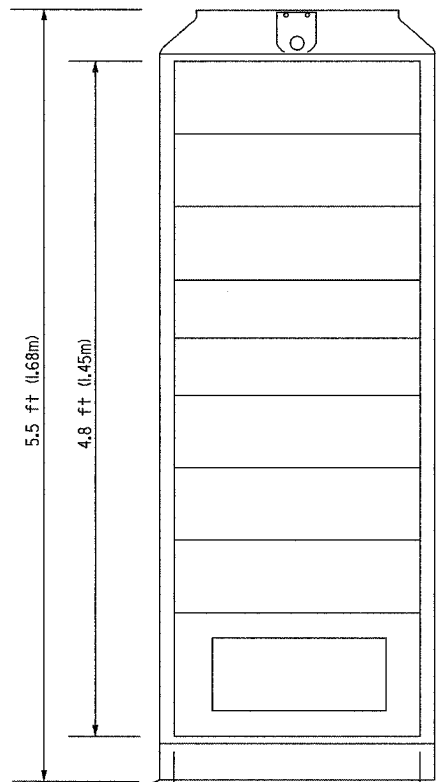
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	72-7R-3	PEORIA	1360	1373
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
68200				



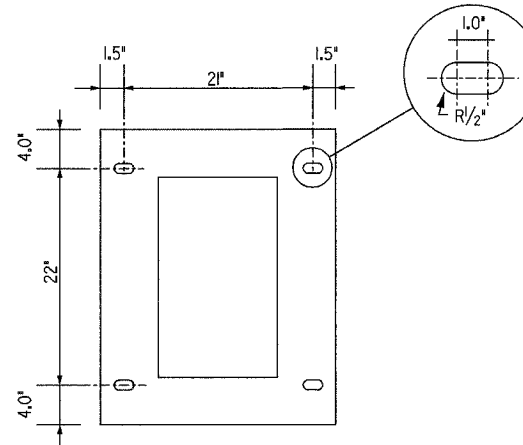
FRONT VIEW  
(DOOR CLOSED)  
(MODEL 334)



SECTION A-A  
FOUNDATION MOUNTED CABINET  
(MODEL 334)



FRONT VIEW  
(DOOR REMOVED)  
(MODEL 334)



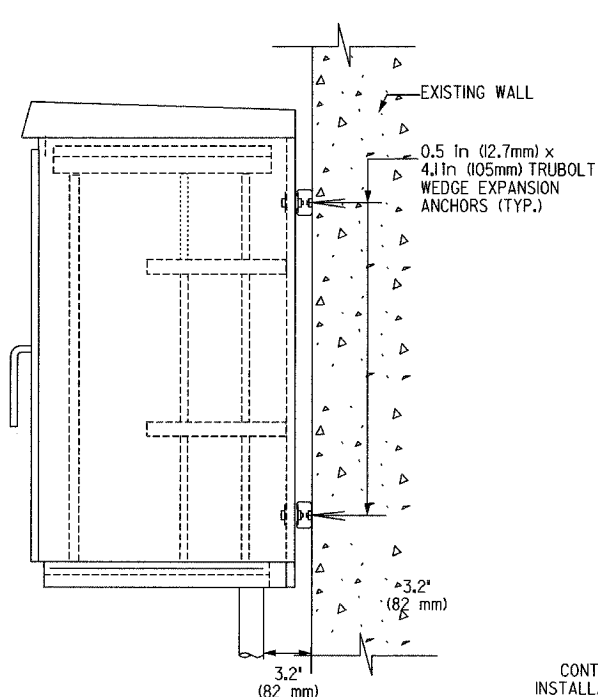
BOTTOM VIEW  
(MODEL 334)

NOTES (TYPE A, B & C CABINET):

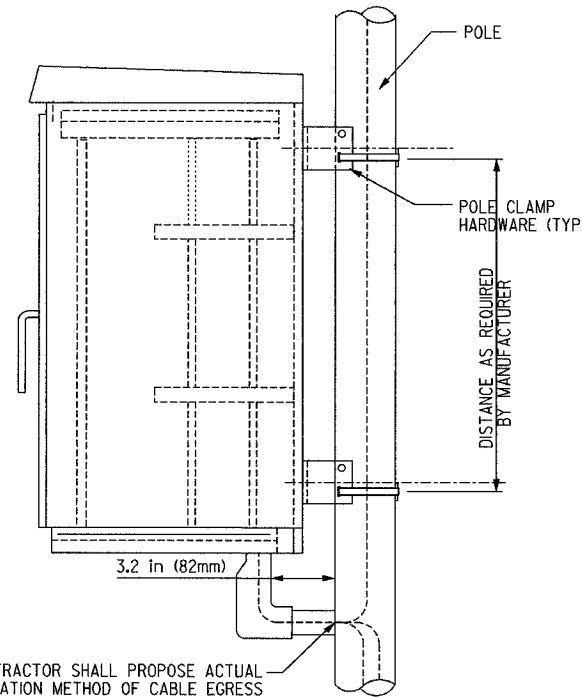
1. ALL DIMENSIONS ARE IN FT (M) UNLESS OTHERWISE NOTED.
2. THE BOTTOM OF THE TYPE A AND B CABINETS SHALL BE 32 TO 44" (0.813 TO 1.118M) HIGH ABOVE FINISHED SURFACE. THE TYPE C CABINET SHALL BE MOUNTED NEAR THE TOP OF THE POLE (OR AS APPROVED BY THE ENGINEER).
3. ALL MATERIALS AND LABOR SHALL BE PAID UNDER ITEM FOR EQUIPMENT CABINET OF THE MOUNTING AND TYPE SHOWN UNLESS OTHERWISE NOTED.
4. THE CONTRACTOR SHALL PROVIDE A MANUFACTURER'S FURCATION KIT CONSISTING OF PROTECTIVE TUBING WITH INTERNAL STRENGTH MEMBERS, A FAN-OUT INSERT AND OUTER HOUSING. THIS KIT SHALL PROVIDE NECESSARY PHYSICAL PROTECTION TO THE FIBERS THAT ARE DIRECTLY CONNECTED TO THE EQUIPMENT. THE CONTRACTOR SHALL FURNISH AND INSTALL TYPE ST CONNECTORS ON ALL FIBERS AND CONNECT THEM TO THE TERMINAL EQUIPMENT. THE CONTRACTOR SHALL PLACE A PROTECTIVE POUCH AROUND THE CONNECTORS NOT TERMINATED ON EQUIPMENT.

NOTES (MODEL 334 CABINET):

1. REFER TO SPECIAL PROVISIONS FOR CABINET DETAILS AND ADDITIONAL REQUIREMENTS.
2. CABINET ENTRIES INCLUDE VERTICAL ARRANGEMENT FOR MAJOR EQUIPMENT ITEMS ONLY.
3. THERE WILL BE ADDITIONAL ITEMS INSTALLED IN THE CABINET ON SIDE AND BACK PANELS AS PER THE SPECIAL PROVISIONS.
4. THE CONTRACTOR SHALL INSTALL INSULATED BUSHINGS AND DUCT SEALANT AT ALL CONDUIT BEND TERMINATIONS IN FOUNDATIONS.
5. CONCRETE BASE TO BE FORMED AT LEAST 6.0 IN (150MM) ABOVE THE GROUND SURFACE.
6. CONCRETE BASE MUST BE CAST IN PLACE.
7. ALL WORK INDICATED SHALL BE PAID FOR UNDER ITEM CABINET, MODEL 334 EXCLUSIVE OF THE CONCRETE FOUNDATION.

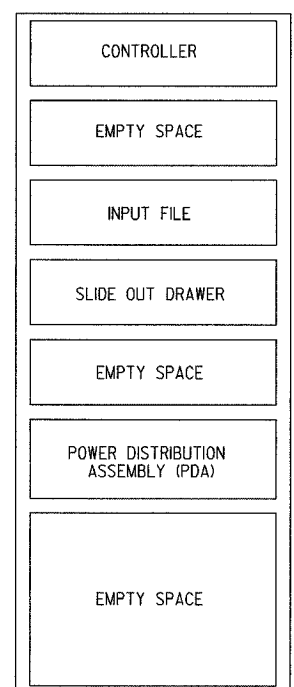


WALL MOUNTED CABINET  
TYPE A, B & C

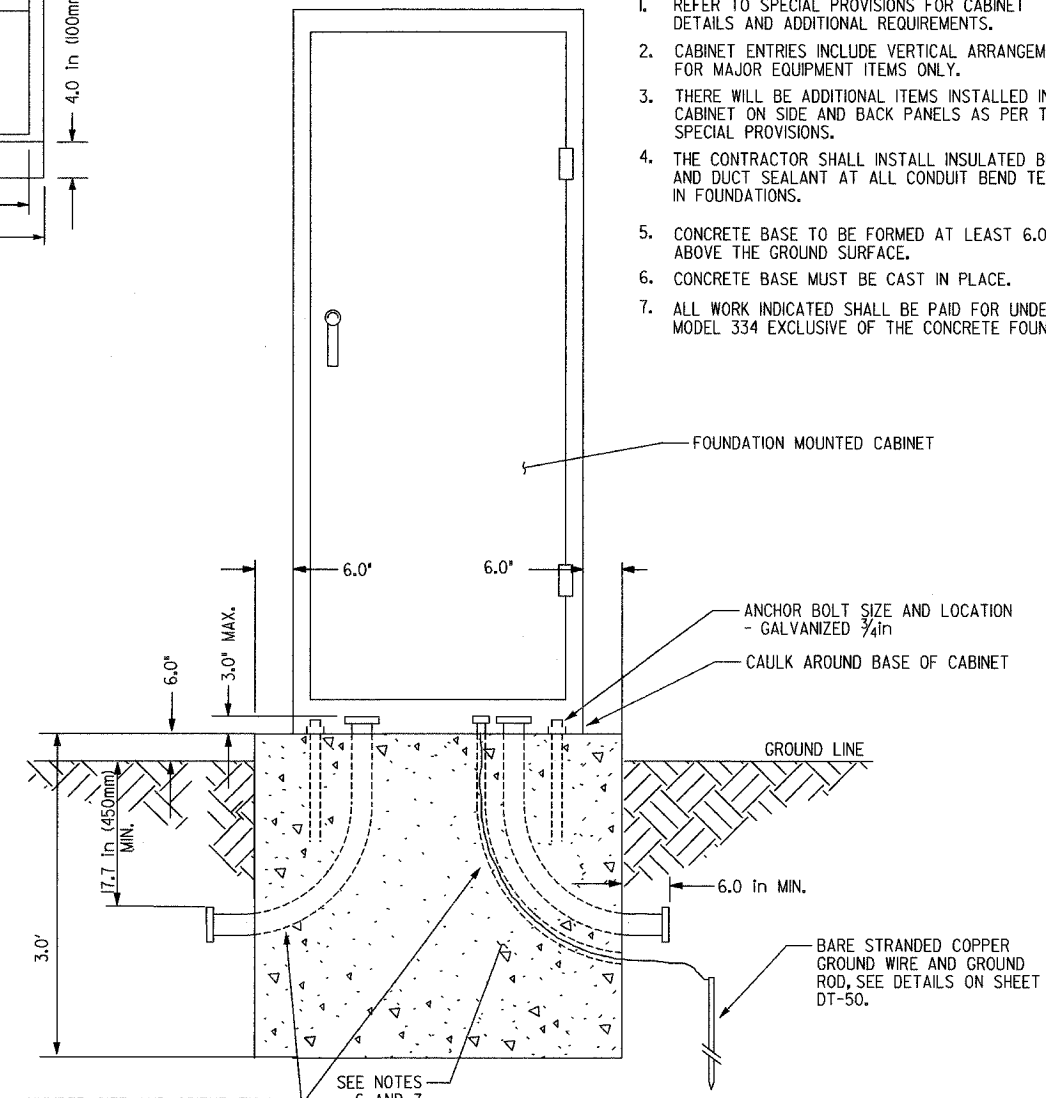


EQUIPMENT CABINET

POLE MOUNTED CABINET  
TYPE A, B & C



CONTROL CABINET  
LAYOUT (TYPICAL)  
(MODEL 334)



CABINET DETAIL  
CONCRETE BASE MOUNTED  
(MODEL 334)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
ITS PLAN

EQUIPMENT CABINET  
DETAIL

SCALE  
DATE 11/02/04

DRAWN BY TM  
CHECKED BY MJL

ITS SHEET 12 OF 13



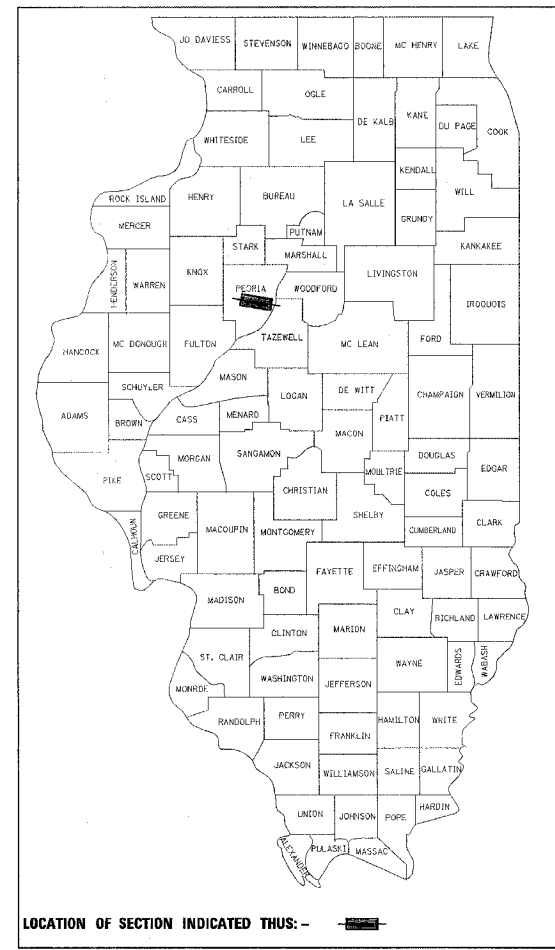
PROJECT ENGINEER: RICH DOTSON Ph 671-3455

LIAISON ENGINEER: CHRISTOPHER MAUSHARD Ph 671-3464

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-7)R-3	PEORIA	1360	1345

68200 1

D-94-009-02



LOCATION OF SECTION INDICATED THIS: - [black bar] -

- QC/QA BITUMINOUS
- BITUMINOUS SUPERPAVE

PLAN SET #4

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**PROPOSED  
 HIGHWAY PLANS**

FAI ROUTE 74 (I-74)  
 SECTION (72-7)R-3  
 PROJECT  
 PEORIA COUNTY

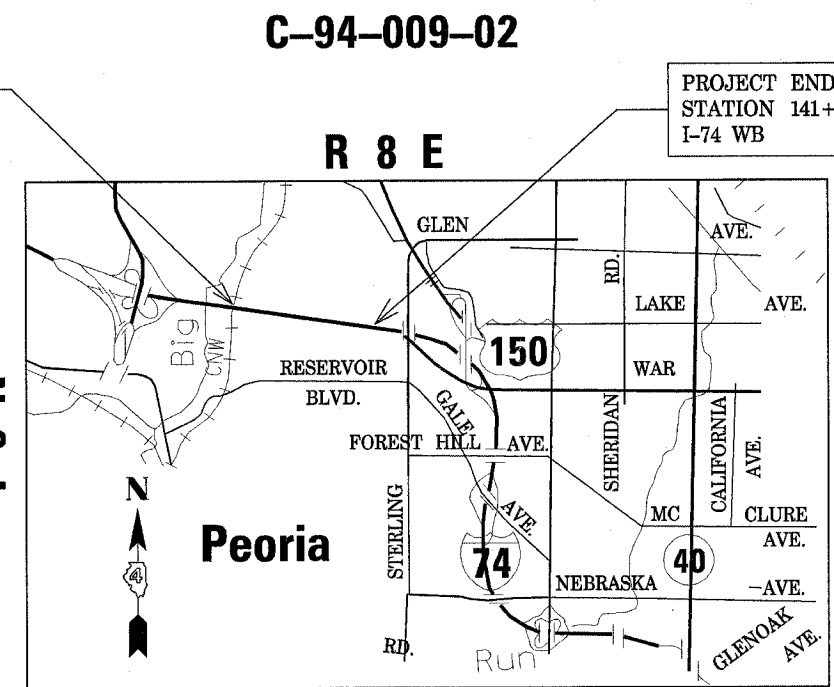
- INDEX OF SHEETS**
- 1345 1. COVER SHEET
  - 1346 2. LISTING OF STANDARDS
  - 1347 3. BILL OF MATERIALS
  - 1348-1349 4.-5. TYPICAL SECTIONS
  - 1350-1351 6.-7. SCHEDULE OF QUANTITIES
  - 1352 8. MAINTENANCE OF TRAFFIC
  - 1353-1355 9.-11. ROADWAY PLANS
  - 1356 12. BUTT JOINT (SPECIAL) DETAIL
  - 1357-1360 13.-16. DISTRICT CADD STANDARDS

**DESIGN DESIGNATION**

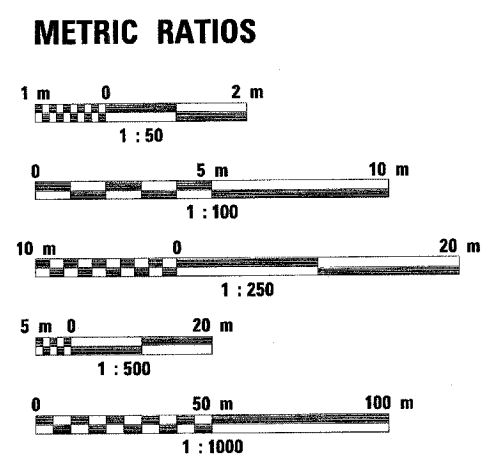
FAI ROUTE 74 - 7625 (25) INTERSTATE 38.28

PROJECT BEGINS STATION 140+902.744 I-74 WB

PROJECT ENDS STATION 141+900.000 I-74 WB



LOCATION MAP



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

**GROSS LENGTH OF IMPROVEMENT: 1.000 km (0.621 MILES)**  
**NET LENGTH OF IMPROVEMENT: 1.000 km (0.621 MILES)**

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

CONTRACT NO. 68200 CATALOG NO. 031087-17D

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-7)R-3	PEORIA	1360	1346
STA.		TO STA.		
FED. ROAD DIST. NO. 4		ILLINOIS	FED. AID PROJECT	

68200 2

HIGHWAY STANDARDS

- 442101 CLASS B PATCHES
- 630001 STEEL PLATE BEAM GUARDRAIL
- 630301 SHOULDER WIDENING FOR TYPE I (SPECIAL) GUARDRAIL TREATMENTS
- 635006 REFLECTOR AND TERMINAL MARKER PLACEMENT
- 701101 OFF ROAD OPERATIONS, MULTILANE LESS THAN 4.5 m AWAYFOR SPEEDS >= 45 MPH
- 701400 APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
- 701401 LANE CLOSURE FREEWAY/EXPRESSWAY
- 701406 LANE CLOSURE, FREEWAY/EXPRESSWAY, DAY OPERATIONS ONLY
- 701426 LANE CLOSURE, MULTILANE INTERMITTENT OR MOVING OPERATIONS FOR SPEEDS >= 45 MPH
- 702001 TRAFFIC CONTROL DEVICES
- 780001 TYPICAL PAVEMENT MARKINGS
- 781001 TYPICAL APPLICATIONS OF RAISED REFLECTIVE PAVEMENT MARKERS

DISTRICT CADD STANDARDS

- 406101 - D4 BUTT JOINTS
- 440001 - D4 BITUMINOUS SURFACE REMOVAL (COLD MILLING)
- 836002 - D4 DETAIL FOR TRAFFIC COUNTERS USING TERMINAL FACILITY

I-74 PROJECT STANDARDS

- 642001 - I-74 I-74 SHOULDER RUMBLE STRIPS

GENERAL NOTES

SEE MASTER GENERAL NOTES FOR APPLICABLE GENERAL NOTES FOR THIS PLAN SET

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		<p style="text-align: center;">STANDARDS GENERAL NOTES</p> <p style="text-align: right;">DRAWN BY CEM CHECKED BY CEM</p>
DATE 08/10/04		

68200 3

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-7)R-3	PEORIA	1360	1347
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

BILL OF MATERIALS FOR PLAN SET #4  
FOR INFORMATION ONLY

URBAN / IM

90% FED  
10% STATE

90% FED  
5% STATE 5% CITY

90% FED  
10% CITY

CONSTRUCTION TYPE CODE

CODE NO.	PAY ITEM	UNIT	TOTAL QUANTITY	ROADWAY 1000-2A	ROADWAY J000-2A	BRIDGE (1) X271-2A	BRIDGE (2) X281-2A	BRIDGE (3) X781-2A	BRIDGE (4) X028-2A	MINOR STRUCTURES (5) Y00T	OVERHEAD SIGNS Y002-1C	LIGHTING Y030-1E	ITS Y035	TRAFFIC SIGNAL INTERCONNECT (6) Y031-1F	TRAFFIC SIGNALS (6) Y031-1F	TRAFFIC SIGNAL INTERCONNECT (7) Y031-1F	TRAFFIC SIGNALS (7) Y031-1F	TRAFFIC SIGNAL INTERCONNECT (8) Y031-1F	TRAFFIC SIGNALS (8) Y031-1F
63100167	TRAFFIC BARRIER TERMINAL, TYPE I SPECIAL (TANGENT)	EACH	2	2															
78100100	RAISED REFLECTIVE PAVEMENT MARKERS	EACH	82	82															
78201000	TERMINAL MARKER DIRECT APPLIED	EACH	2	2															
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	82	82															
86301000	TERMINAL FACILITY	EACH	1	1															
M4060200	BITUMINOUS MATERIALS (PRIME COAT)	MTON	8.7	8.7															
M4060300	AGGREGATE (PRIME COAT)	MTON	47	47															
M4060980	BITUMINOUS SURFACE REMOVAL - BUTT JOINT	SQ.M	417	417															
M4060990	TEMPORARY RAMP	SQ.M	47	47															
M4400040	BITUMINOUS SURFACE REMOVAL 40 MM	SQ.M	13,970	13,970															
M4426245	CLASS B PATCHES TYPE II 350 MM	SQ.M	601	601															
M4429400	SAW CUTS	METER	1283	1283															
M4812000	AGGREGATE SHOULDERS, TYPE B	MTON	516	516															
M4820000	BITUMINOUS SHOULDERS	MTON	1212	1212															
M6320030	GUARDRAIL REMOVAL	METER	23	23															
M6330610	REMOVE AND RE-ERECT STEEL PLATE BEAM GUARDRAIL	METER	556	556															
M7030100	SHORT TERM PAVEMENT MARKING	METER	987	987															
M7030220	TEMPORARY PAVEMENT MARKING - LINE 100 MM	METER	3995	3995															
M7030240	TEMPORARY PAVEMENT MARKING - LINE 150 MM	METER	500	500															
M7031000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ.M	30	30															
M7802010	POLYUREA PAVEMENT MARKING TYPE 1 - LINE 100 MM	METER	3995	3995															
M7802015	POLYUREA PAVEMENT MARKING TYPE 1 - LINE 150 MM	METER	500	500															
M8100240	CONDUIT IN TRENCH, 30 MM DIA., PVC	METER	39	39															
M8150205	TRENCH AND BACKFILL FOR ELECTRICAL WORK (SPECIAL)	METER	10	10															
M8731510	ELECTRIC CABLE IN CONDUIT, LEAD IN, NO. 18 3 PAIR	METER	45	45															
M8150200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	METER	33	33															
M8860400	DETECTOR LOOP, SPECIAL	METER	46	46															
MX032083	GUARDRAIL AGGREGATE EROSION CONTROL	MTON	111	111															
MX406066	POLYMERIZED BIT CONC SURFACE COURSE, SUPERPAVE, MIX E, N90, 38MM	MTON	1328	1328															
MX406248	POLYMERIZED BIT CONC BINDER COURSE, SUPERPAVE, IL 19.0, N90, 57MM	MTON	1992	1992															
MZ017205	DOWEL BARS 38 MM	EACH	1740	1740															
*4001603	BITUMINOUS SURFACE REMOVAL - BUTT JOINT (SPECIAL)	SQ.M	611	611															
*5000554	PARTIAL DEPTH PATCHING (SPECIAL)	SQ.M	211	211															

- \* SPECIALTY ITEMS
- + FUND CODE SFTY-3N
- ++ FUND CODE Y080
- +++ FUND CODE SFTY-3C
- Δ NON PARTICIPATING

- (1) RAMP A-3 OVER RAMP B-5, SN 072-0172
- (2) RAMPS B-3 & B-5 OVER US 150 & RAMP B-6, SN 072-0190
- (3) RAMPS B-1 & B-4 OVER RAMPS A-3, B-3 & I-74, SN 072-0183
- (4) SN 072-2005, 072-2030 & 072-2032
- (5) SN 072-8618 & SN 072-8619
- (6) WAR MEMORIAL DRIVE / STERLING / GLEN
- (7) WAR MEMORIAL DRIVE / SCENIC DRIVE
- (8) SCENIC DRIVE / MALL ENTRANCE

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

BILL OF MATERIALS  
FAI ROUTE 74 (I-74)

DATE 9/29/04

DRAWN BY CEM  
CHECKED BY CEM

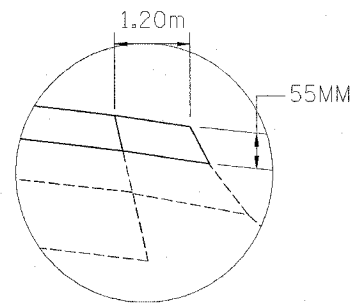
c:\p\projects\174mb-cl0-800.dgn

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	172-7B-3	DECOIA	1360	1348
STA. 68200		TO STA. 4		
FED. ROAD DIST. NO. 4 ILLINOIS FED. AID PROJECT				

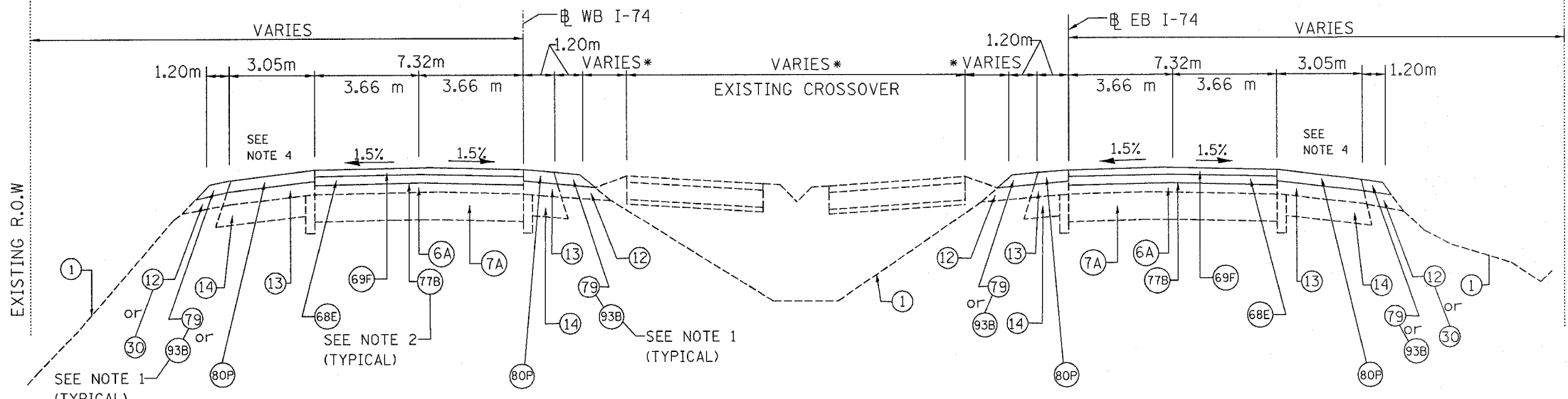
68200 4

LEGEND:

- 1 EX GROUND
- 6A EX BITUMINOUS RESURFACING
- 7A EX PCC PAVEMENT, 250
- 12 EX AGGREGATE SHOULDER
- 13 EX BITUMINOUS SHOULDER
- 14 EX PCC SHOULDER
- 30 EX GUARDRAIL AGGREGATE EROSION CONTROL
- 68E PR POLYMERIZED BIT CONCRETE BINDER CSE, SUPERPAVE 57MM
- 69F PR POLYMERIZED BIT CONCRETE SURFACE CSE, SUPERPAVE 38MM
- 77B PR BITUMINOUS SURFACE REMOVAL, 40MM
- 79 PR AGGREGATE SHOULDERS, TY B
- 80P PR BITUMINOUS SHOULDERS
- 93B PR GUARDRAIL AGGREGATE EROSION CONTROL



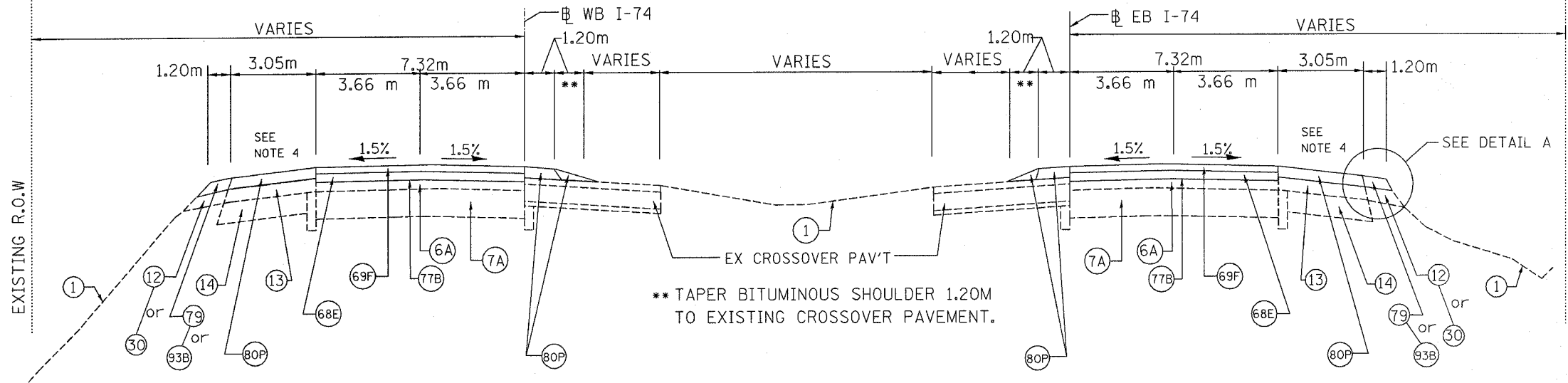
DETAIL A  
TYPICAL FOR AGGREGATE SHOULDER OR GUARDRAIL AGGREGATE EROSION CONTROL



STA. 140+902.744 TO STA. 141+449.994 (WB)  
\* STA. 141+512.133 TO STA. 141+626.400 (WB)

TYPICAL SECTION-1  
FAI ROUTE 74 (I-74)

STA. 140+900.055 TO STA. 141+449.994 (EB)  
\* STA. 141+514.115 TO STA. 141+628.748 (EB)  
STA. 141+693.403 TO STA. 141+900.000 (EB)



STA. 141+449.994 TO STA. 141+512.133 (WB)  
STA. 141+626.400 TO STA. 141+693.400 (WB)

TYPICAL SECTION-2  
FAI ROUTE 74 (I-74)

STA. 141+449.994 TO STA. 141+514.115 (EB)  
STA. 141+628.748 TO STA. 141+693.403 (EB)

NOTES

1. USE GUARDRAIL AGGREGATE EROSION CONTROL AT THE FOLLOWING STATIONS:  
EB STATION 141+262.435 RT TO STATION 141+423.000 RT  
EB STATION 141+593.770 RT TO STATION 141+635.150 RT  
WB STATION 140+902.744 LT TO STATION 141+029.760 LT  
WB STATION 140+902.744 RT TO STATION 140+928.500 RT  
WB STATION 141+500.000 LT TO STATION 141+746.575 LT
2. BITUMINOUS SURFACE REMOVAL SHALL INCLUDE REMOVAL OF EXISTING AREA CRACK CONTROL AT THE BASE OF THE EXISTING SURFACE COURSE
3. PARTIAL DEPTH PATCHING (SPECIAL) WILL BE REQUIRED ON THE EASTBOUND I-74 OUTSIDE SHOULDER PRIOR TO BITUMINOUS OVERLAY. SEE SCHEDULE OF QUANTITIES FOR APPROXIMATE LOCATIONS AND QUANTITIES.
4. MATCH EXISTING BITUMINOUS AND AGGREGATE SHOULDER SLOPES ON INSIDE AND OUTSIDE SHOULDERS UNLESS NOTED OTHERWISE

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

I-74 RESURFACING  
TYPICAL SECTIONS

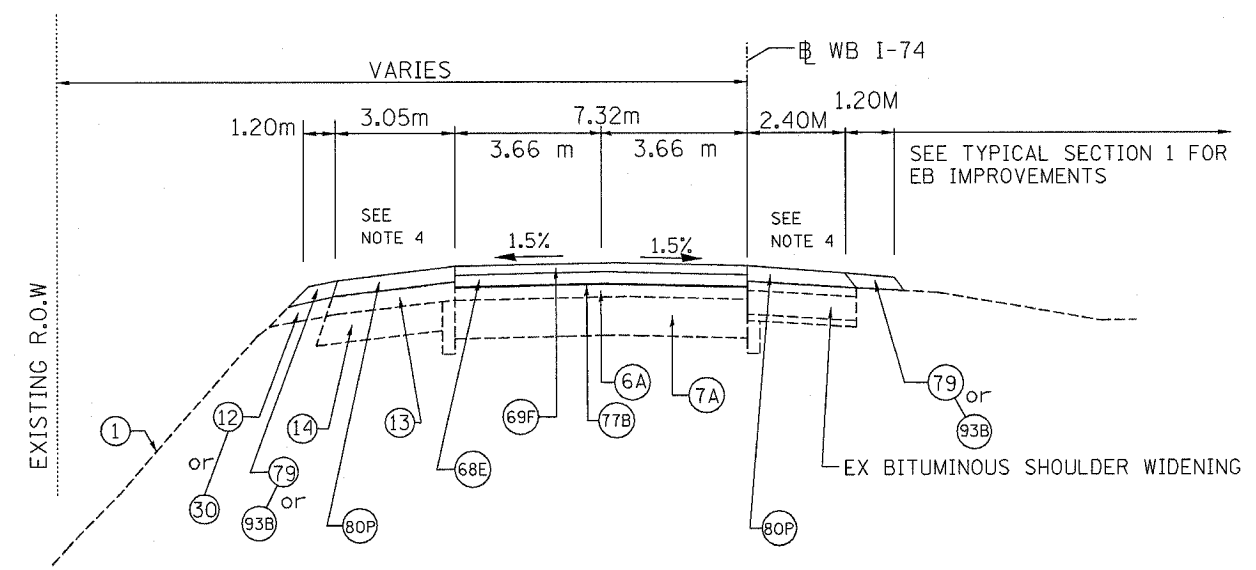
DATE 6/18/04  
DRAWN BY CEM  
CHECKED BY CEM

c:\projects\74wb-stertypss.dgn



F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	12-IH-3	DEOBIA	1300	1277
STA. 141+693.400		TO STA. 141+900.000		
FED. ROAD DIST. NO. 4		ILLINOIS FED. AID PROJECT		

68200 5

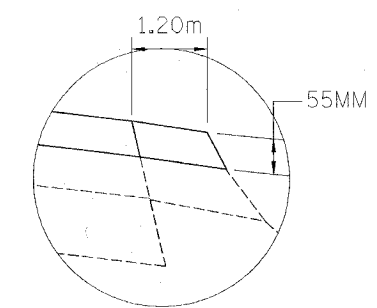


STA. 141+693.400 TO STA. 141+900.000 (WB)

TYPICAL SECTION-3  
FAI ROUTE 74 (I-74)

LEGEND:

- 1 EX GROUND
- 6A EX BITUMINOUS RESURFACING
- 7A EX PCC PAVEMENT, 250
- 12 EX AGGREGATE SHOULDER
- 13 EX BITUMINOUS SHOULDER
- 14 EX PCC SHOULDER
- 30 EX GUARDRAIL AGGREGATE EROSION CONTROL
- 68E PR POLYMERIZED BIT CONCRETE BINDER CSE, SUPERPAVE 57MM
- 69F PR POLYMERIZED BIT CONCRETE SURFACE CSE, SUPERPAVE 38MM
- 77B PR BITUMINOUS SURFACE REMOVAL, 40MM
- 79 PR AGGREGATE SHOULDERS, TY B
- 80P PR BITUMINOUS SHOULDERS
- 93B PR GUARDRAIL AGGREGATE EROSION CONTROL



DETAIL A  
TYPICAL FOR AGGREGATE SHOULDER OR GUARDRAIL AGGREGATE EROSION CONTROL

NOTES

1. USE GUARDRAIL AGGREGATE EROSION CONTROL AT THE FOLLOWING STATIONS:  
EB STATION 141+262.435 RT TO STATION 141+423.000 RT  
EB STATION 141+593.770 RT TO STATION 141+635.150 RT  
WB STATION 140+902.744 LT TO STATION 141+029.760 LT  
WB STATION 140+902.744 RT TO STATION 140+928.500 RT  
WB STATION 141+500.000 LT TO STATION 141+746.575 LT
2. BITUMINOUS SURFACE REMOVAL SHALL INCLUDE REMOVAL OF EXISTING AREA CRACK CONTROL AT THE BASE OF THE EXISTING SURFACE COURSE
3. PARTIAL DEPTH PATCHING (SPECIAL) WILL BE REQUIRED ON THE EASTBOUND I-74 OUTSIDE SHOULDER PRIOR TO BITUMINOUS OVERLAY. SEE SCHEDULE OF QUANTITIES FOR APPROXIMATE LOCATIONS AND QUANTITIES.
4. MATCH EXISTING BITUMINOUS AND AGGREGATE SHOULDER SLOPES ON INSIDE AND OUTSIDE SHOULDERS UNLESS NOTED OTHERWISE

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		I-74 RESURFACING TYPICAL SECTIONS
DATE 6/18/04		DRAWN BY CEM CHECKED BY CEM

c:\projects\I74wb-stf-tyr\typs.dgn

### TABULATION OF RESURFACING QUANTITIES

LOCATION	TOTAL ROADWAY WIDTH	LENGTH	AREA	BITUMINOUS SURFACE REMOVAL 40MM	BITUMINOUS MATERIALS PRIME COAT	AGGREGATE MATERIALS PRIME COAT	BIT CONC BINDER CSE SUPERPAVE 57MM	BIT CONC SURF CSE SUPERPAVE 38MM	BITUMINOUS SHOULDERS		**AGGREGATE SHOULDERS TYPE B		
									INSIDE	OUTSIDE	INSIDE	OUTSIDE	
									M TON	M TON	M TON	M TON	
<b>EASTBOUND I-74</b>													
STA. 140 + 900.055 TO 141 + 449.994	7.32	549.94	4025.55	3893.79	2.35	12.72	548.40	365.60	89.90	228.50	93.54	66.22	
STA. 141 + 449.994 TO 141 + 514.115	7.32	64.12	469.37	469.37	0.29	1.64	63.94	42.63	15.72	26.64	0.00	10.90	
STA. 141 + 514.115 TO 141 + 628.748	7.32	114.63	839.09	839.09	0.49	2.66	114.31	76.21	18.74	47.62	19.50	12.46	
STA. 141 + 628.748 TO 141 + 693.403	7.32	64.66	473.27	473.27	0.29	1.65	64.47	42.98	15.85	26.86	0.00	11.00	
STA. 141 + 693.403 TO 141 + 900.000	7.32	206.60	1512.29	1319.04	0.89	4.78	206.62	137.35	33.77	85.84	35.14	35.14	
<b>WESTBOUND I-74</b>													
STA. 140 + 902.744 TO 141 + 449.994	7.32	547.25	4005.87	3874.11	2.34	12.66	545.72	363.81	89.46	227.38	85.42	68.83	
STA. 141 + 449.994 TO 141 + 512.133	7.32	62.14	454.86	454.86	0.28	1.59	61.97	41.31	15.24	25.82	0.00	0.00	
STA. 141 + 512.133 TO 141 + 626.400	7.32	114.27	836.43	836.43	0.49	2.64	113.95	75.96	18.68	47.48	18.72	0.00	
STA. 141 + 626.400 TO 141 + 693.400	7.32	67.00	490.44	490.44	0.28	1.55	66.81	44.54	16.43	27.84	0.00	0.00	
STA. 141 + 693.400 TO 141 + 900.000	7.32	206.60	1512.31	1319.06	0.95	5.43	206.02	137.35	67.55	85.84	33.84	25.13	
<b>GRAND TOTAL</b>													
				13,970	8.7	47	1,992	1,328	381	830	286	230	

\*\* Guardrail Aggregate Erosion Control will be used at locations of existing guardrail and proposed Traffic Barrier Terminal, Type 1 Special (Tangent). See Guardrail Aggregate Erosion Control Schedule for locations.

PRIME COAT CONVERSION FACTORS		
SURFACE TYPE	BIT PR COAT (L/M <sup>2</sup> )	AGG PR COAT (KG/M <sup>2</sup> )
COLD MILLED SURFACES	0.5	2
EXISTING PAVEMENT	0.2	2
NEW BITUMINOUS COURSES	0.1	1

1L = 0.00095 METRIC TON

BITUMINOUS & AGGREGATE CONVERSION FACTORS	
SURFACE TYPE	
BIT. SURF. COURSES	2.39 kg / mm <sup>2</sup> m
ALL OTHER BITUMINOUS	2.39 kg / mm <sup>2</sup> m
AGGREGATE SHOULDERS	2.43 m ton / m <sup>2</sup>

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		SCHEDULE OF QUANTITIES RESURFACING QUANTITIES

DRAWN BY CEM  
CHECKED BY CEM  
DATE 08/05/04

c:\projects\174wb-schedwest.dgn

68200

F.A.L. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	72-718-3	PEORIA	1360	1357
STA.		TO STA.		
FED. ROAD DIST. NO. 4		ILLINOIS	FED. AID PROJECT	

7

BITUMINOUS SURFACE REMOVAL - BUTT JOINT	
Location	SQ. M
Eastbound I-74 140+900.055 to 140+918.055	208.3
Westbound I-74 140+902.744 to 141+920.744	208.3
TOTAL	416.6
SAY	417

REMOVE AND RE-ERECT STEEL PLATE BEAM GUARDRAIL	
Location	Meter
Eastbound I-74 141+280.635 RT to 141+422.456 RT 141+611.970 RT to 141+634.892 RT	142 23
Westbound I-74 140+902.744 LT to 141+011.560 LT 140+902.744 RT to 140+952.768 RT 141+500.000 LT to 141+728.375 LT	109 54 228
TOTAL	556

GUARDRAIL AGGREGATE EROSION CONTROL	
Location	M Ton
Eastbound I-74 141+262.435 to 141+423.000 RT 141+593.770 to 141+635.150 RT	27.3 7.1
Westbound I-74 140+902.744 to 141+029.760 LT 140+902.744 to 140+928.500 RT 141+449.994 to 141+746.575 LT	21.6 4.4 50.5
TOTAL	110.9
SAY	111

SHORT TERM PAVEMENT MARKING			
Location	Skip Dash (m)	Diagonals (M)	Meter
Eastbound I-74 140+900.055 to 141+900.000	403.2	82	485.2
Westbound I-74 140+902.744 to 141+900.000	403.2	99	502.2
TOTAL			987.2
SAY			987

\*Assume 4 applications total for skip dash  
Assume 2 applications for diagonals on outside shoulders both EB and WB  
Assume inside shoulder on WB pavement from sta. 141+693.400 to sta. 141+900.000 require 2 applications of diagonals

BIT SURFACE REMOVAL-BUTT JOINT (SPECIAL)	
Location	SQ. M
Eastbound I-74 141+873.600 TO 141+900.000	305.5
Westbound I-74 141+873.600 TO 141+900.000	305.5
TOTAL	611

TRAFFIC BARRIER TERMINAL, TY 1 SPL (Tangent)	
Location	Each
Eastbound I-74 141+265.435 to 141+280.635 RT	1
Westbound I-74 141+011.560 to 141+026.760 LT	1
TOTAL	2

RAISED REFLECTIVE PAVEMENT MARKERS	
Location	Each
Eastbound I-74 140+900.055 to 141+900.000	41
Westbound I-74 140+902.744 to 141+900.000	41
TOTAL	82

TEMPORARY PAVEMENT MARKING QUANTITIES			
Location	Line 100 mm		Line 150 mm
	Yellow	White	Skip Dash
Eastbound I-74 140+900.055 to 141+900.000	999.9	999.9	250
Westbound I-74 140+902.744 to 141+900.000	997.3	997.3	250
TOTALS	1997.2	1997.2	500
SAY	3995		500

TEMPORARY RAMPS	
Location	SQ. M
Eastbound I-74 140+900.055 to 140+901.655 141+898.400 to 141+900.000	11.7 11.7
Westbound I-74 140+902.744 to 141+904.344 141+898.400 to 141+900.000	11.7 11.7
TOTAL	46.8
SAY	47

TERMINAL MARKER DIRECT APPLIED	
Location	Each
Eastbound I-74 141+265.435	1
Westbound I-74 141+026.760	1
TOTAL	2

RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	
Location	Each
Eastbound I-74 140+900.055 to 141+900.000	41
Westbound I-74 140+902.744 to 141+900.000	41
TOTAL	82

POLYUREA PAVEMENT MARKING QUANTITIES			
Location	Line 100 mm		Line 150 mm
	Yellow	White	Skip Dash
Eastbound I-74 140+900.055 to 141+900.000	999.9	999.9	250
Westbound I-74 140+902.744 to 141+900.000	997.3	997.3	250
TOTALS	1997.2	1997.2	500
SAY	3995		500

PARTIAL DEPTH PATCHING (SPECIAL)			
Location	L(M)	W(M)	Each
Eastbound I-74		OS Shldr	
140+957.000 to 140+960.000	3	1.2	3.6
141+053.000 to 141+057.500	4.5	1.2	5.4
141+060.500 to 141+063.500	3	1.2	3.6
141+083.000 to 141+089.000	6	0.6	3.6
141+175.000 to 141+190.250	15.3	0.6	9.2
141+413.500 to 141+416.500	3	1.2	3.6
141+427.500 to 141+436.500	9	0.6	5.4
141+478.250 to 141+493.200	15	3	45
141+463.000 to 141+472.000	9	1.2	10.8
141+575.000 to 141+580.000	5	1.2	6
141+583.500 to 141+618.550	35.1	1.2	42.1
141+683.000 to 141+689.000	6	1.8	10.8
141+742.250 to 141+787.95	45.7	0.6	27.4
141+777.500 to 141+783.500	6	1.2	7.2
141+821.500 to 141+867.300	45.8	0.6	27.5
TOTAL			211.2
SAY			211

GUARDRAIL REMOVAL	
Location	Meter
Eastbound I-74 141+269.235 to 141+280.635 RT	11.4
Westbound I-74 141+011.560 to 141+022.960 LT	11.4
TOTAL	22.8
SAY	23

WORK ZONE PAVEMENT MARKING REMOVAL			
Location	L (M)	W (M)	SQ. M
Eastbound I-74 140+900.055 to 141+900.000	142	0.1	14.2
Westbound I-74 140+902.744 to 141+900.000	151	0.1	15.1
TOTAL			29.3
SAY			30

Location	No. Of Patches	L(M)	W(M)	Total SQ.M	SAW CUTS Total Meter	DOWEL BARS	
						38MM Each	
Eastbound I-74 140+900.055 to 141+900.000	34	1.83	3.66	227.73	497.76	680	
140+900.055 to 141+900.000	2	2.44	3.66	17.86	31.72	40	
Westbound I-74 140+902.744 to 141+900.000	49	1.83	3.66	328.19	717.36	980	
140+902.744 to 141+900.000	2	3.65	3.66	26.72	36.56	40	
TOTAL				600.50	1283.4	1740	
SAY				601	1283	1740	

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		SCHEDULE OF QUANTITIES

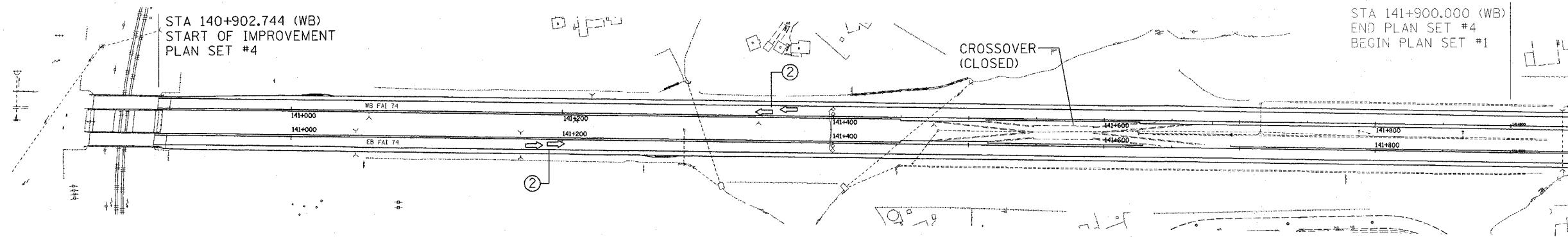
DRAWN BY CEM  
CHECKED BY CEM  
DATE 08/06/04

NOTE: SEE DETAIL FOR TRAFFIC COUNTERS USING TERMINAL FACILITY FOR SCHEDULE OF PAY ITEMS FOR TRAFFIC COUNTER LOOPS

c:\projects\74wb-schedwest.dgn

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	172-718-3	EEQB18	1340	1352
STA.		TO STA.		
FED. ROAD DIST. NO. 4		ILLINOIS FED. AID PROJECT		

68200 8



STAGE 3-4  
CONSTRUCTION

1. BITUMINOUS SURFACE REMOVAL OF EB, WB MAINLINE ROADWAY, PAVEMENT PATCHING, BITUMINOUS OVERLAY OF MAINLINE PAVEMENT AND SHOULDERS, AGGREGATE SHOULDERS TY B, RAISED REFLECTIVE PAVEMENT MARKERS, POLYUREA PAVEMENT MARKING, GUARDRAIL ADJUSTMENT.

STAGE 3-4  
MAINTENANCE OF TRAFFIC

ALL LANES ON EB WB I-74 ARE OPEN TO TRAFFIC ALONG THIS SECTION. INTERMITTENT LANE AND SHOULDER CLOSINGS ARE REQUIRED TO COMPLETE THE CONSTRUCTION. SEE WORKING RESTRICTIONS SPECIAL PROVISION FOR LANE AND SHOULDER CLOSING RESTRICTIONS.

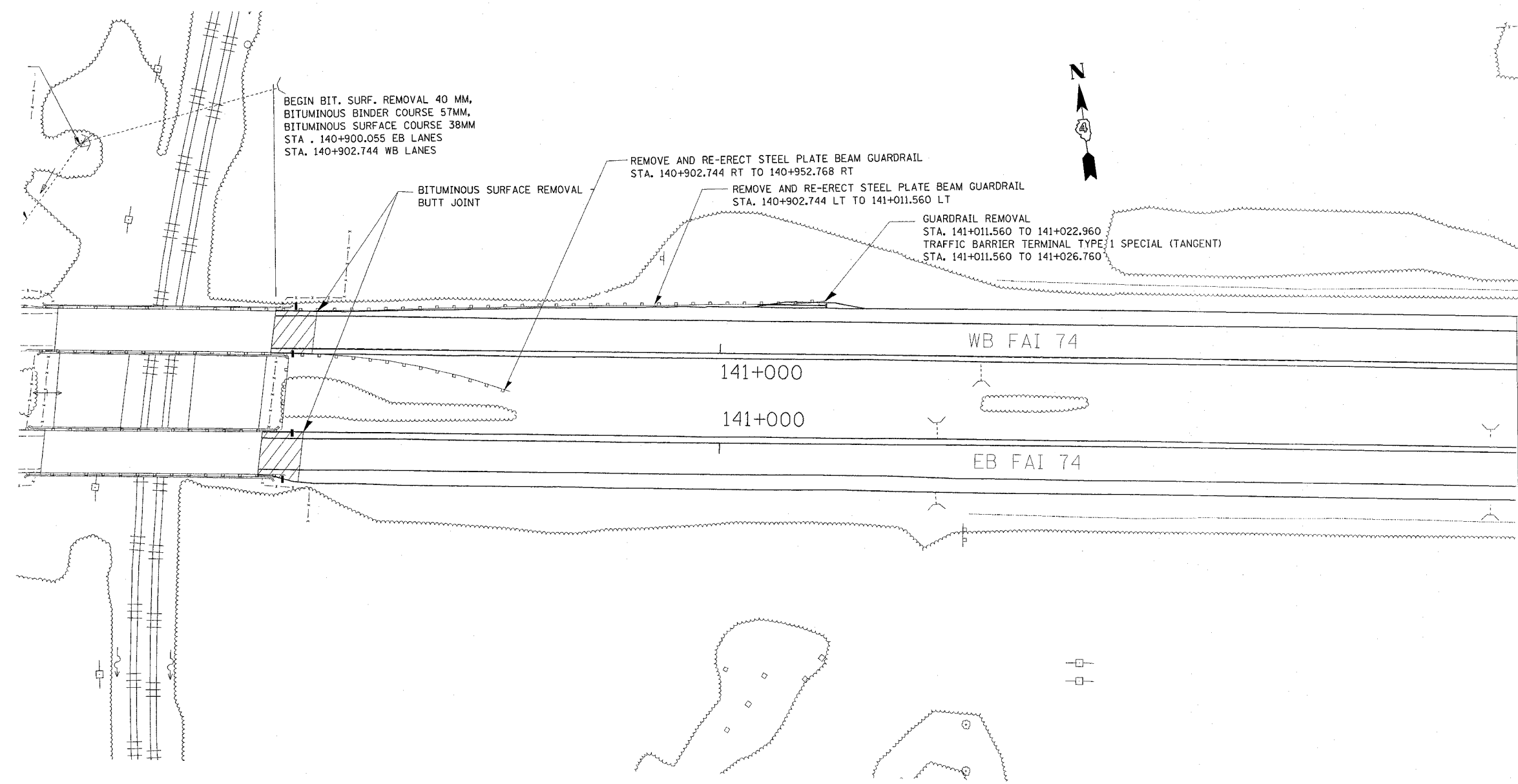
1. MAINTENANCE OF TRAFFIC FOR CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH THE APPLICABLE IDOT HIGHWAY STANDARDS 701101, 701400, 701401, 701406, 701426, AND 702001. ALL TRAFFIC CONTROL ITEMS WILL BE PAID FOR AS TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS). SEE SPECIAL PROVISION.
2. FOR TEMPORARY INFORMATIONAL SIGNING DURING CONSTRUCTION SEE THE CONCEPTUAL TEMPORARY SIGNING PLAN FOR STAGE 3-4 IN PLAN SET #1

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION MAINTENANCE OF TRAFFIC FAI ROUTE 74 SCHEMATIC STAGE 3-4
NAME	DATE	
		DRAWN BY CEM CHECKED BY CEM DATE 08/03/04

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	172-7B-3	PEORIA	1360	1353
STA. 140+900.05		TO STA. 141+175.00		
FED. ROAD DIST. NO. 4		ILLINOIS FED. AID PROJECT		

68200

9



cr:projects-174wb-plan.w.dgn

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

PROPOSED ROADWAY PLAN

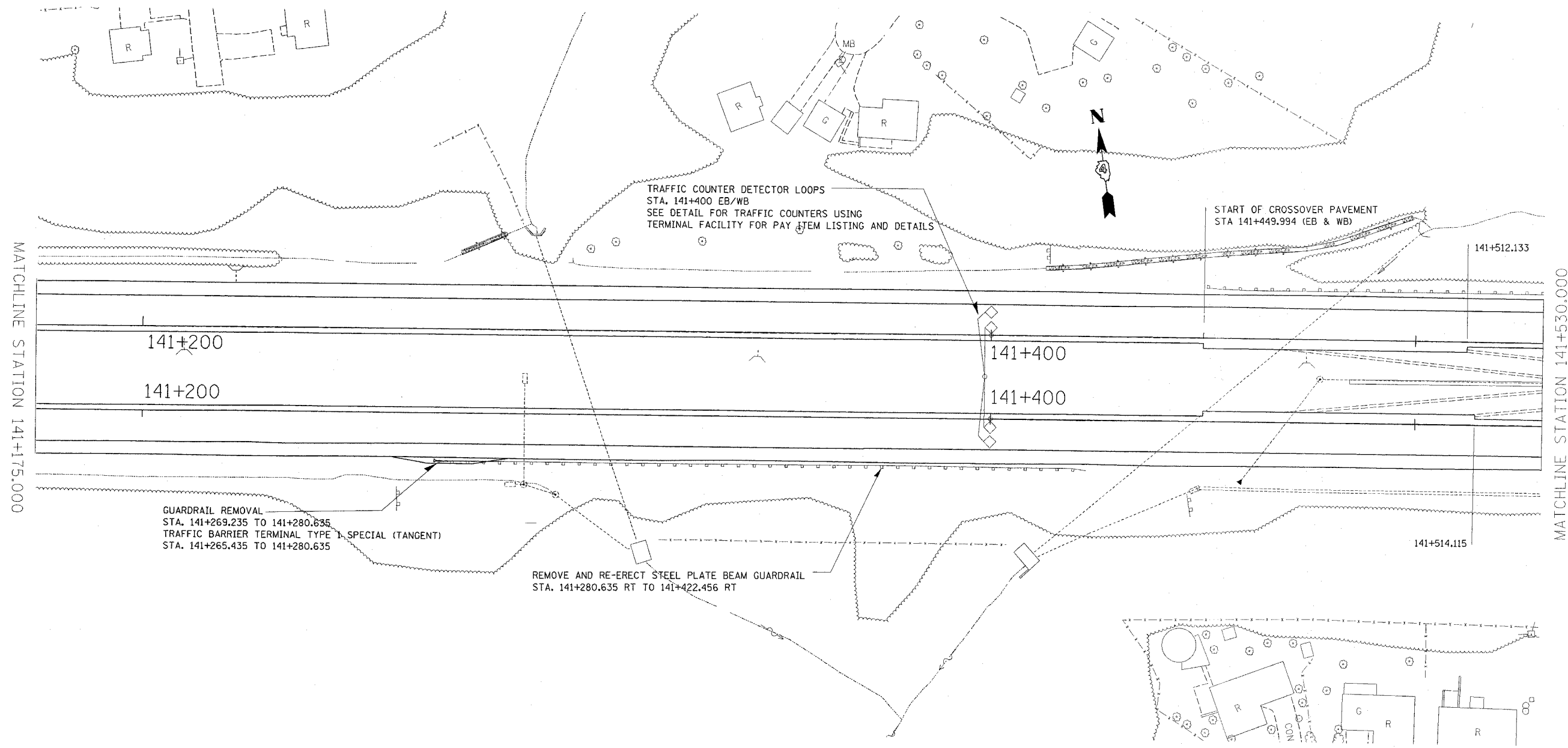
DATE 6/21/04

DRAWN BY CEM  
CHECKED BY CEM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	172-21B-3	PEORIA	136	135
STA. 141+175.00		TO STA. 141+530.00		
FED. ROAD DIST. NO. 4		ILLINOIS FED. AID PROJECT		

68200

10



141+200  
141+200

141+400  
141+400

141+512.133

141+514.115

GUARDRAIL REMOVAL  
STA. 141+269.235 TO 141+280.635  
TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)  
STA. 141+265.435 TO 141+280.635

REMOVE AND RE-ERECT STEEL PLATE BEAM GUARDRAIL  
STA. 141+280.635 RT TO 141+422.456 RT

TRAFFIC COUNTER DETECTOR LOOPS  
STA. 141+400 EB/WB  
SEE DETAIL FOR TRAFFIC COUNTERS USING  
TERMINAL FACILITY FOR PAY ITEM LISTING AND DETAILS

START OF CROSSOVER PAVEMENT  
STA 141+449.994 (EB & WB)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

PROPOSED ROADWAY PLAN

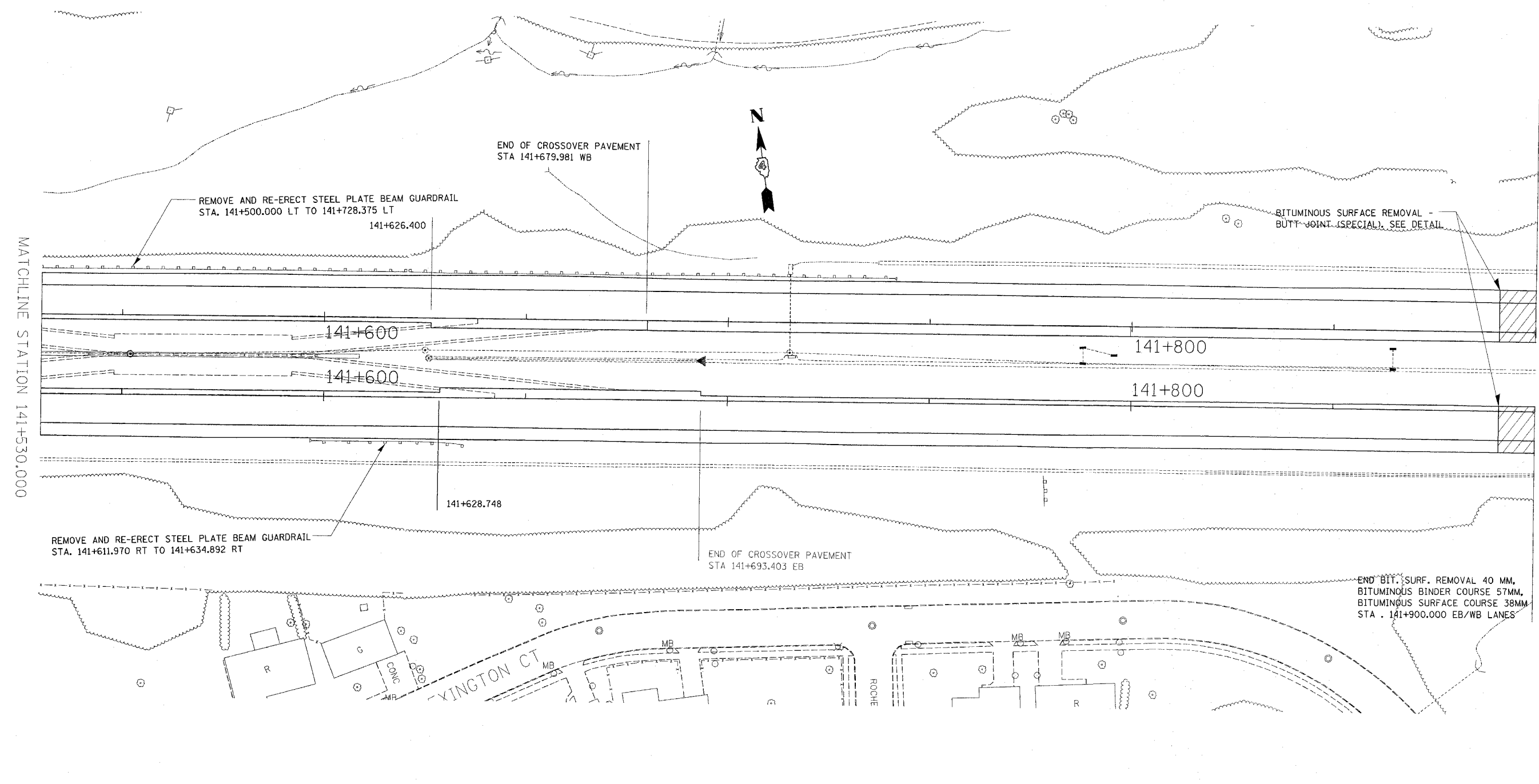
DATE 6/21/04

DRAWN BY CEM  
CHECKED BY CEM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
14	172-7/8-3	PEORIA	1360	1355
STA. 141+530.00		TO STA. 141+900.00		
FED. ROAD DIST. NO. 4		ILLINOIS FED. AID PROJECT		

68200

11



MATCHLINE STATION 141+530.000

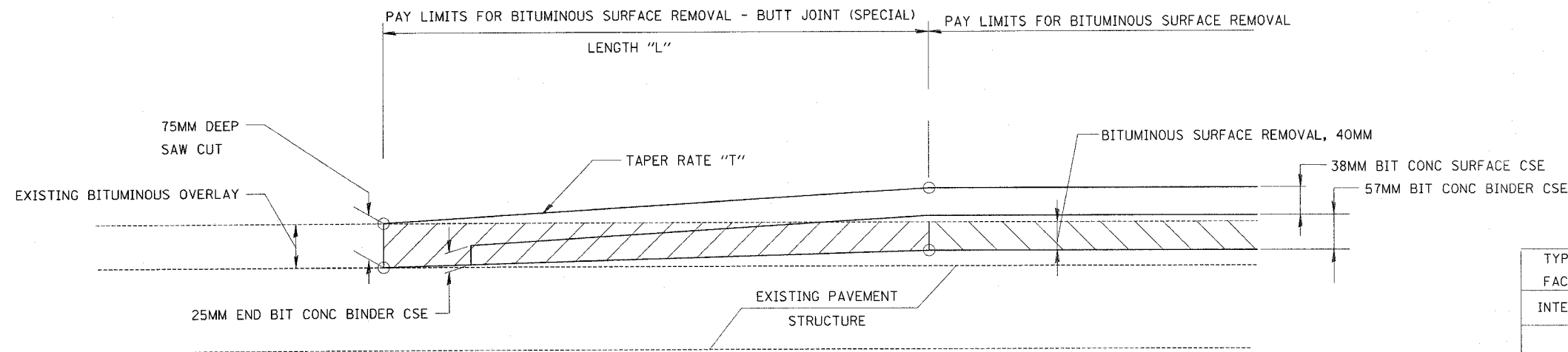
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		<p>PROPOSED ROADWAY PLAN</p> <p>DRAWN BY CEM</p> <p>CHECKED BY CEM</p> <p>DATE 6/21/04</p>

c:\projects\174wb-planw.dgn

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-74-	172-IB-3	DECOIA	1360	1356
STA.		TO STA.		
FED. ROAD DIST. NO. 4		ILLINOIS FED. AID PROJECT		

68200

12



BITUMINOUS TAPER/BUTT JOINT DETAIL

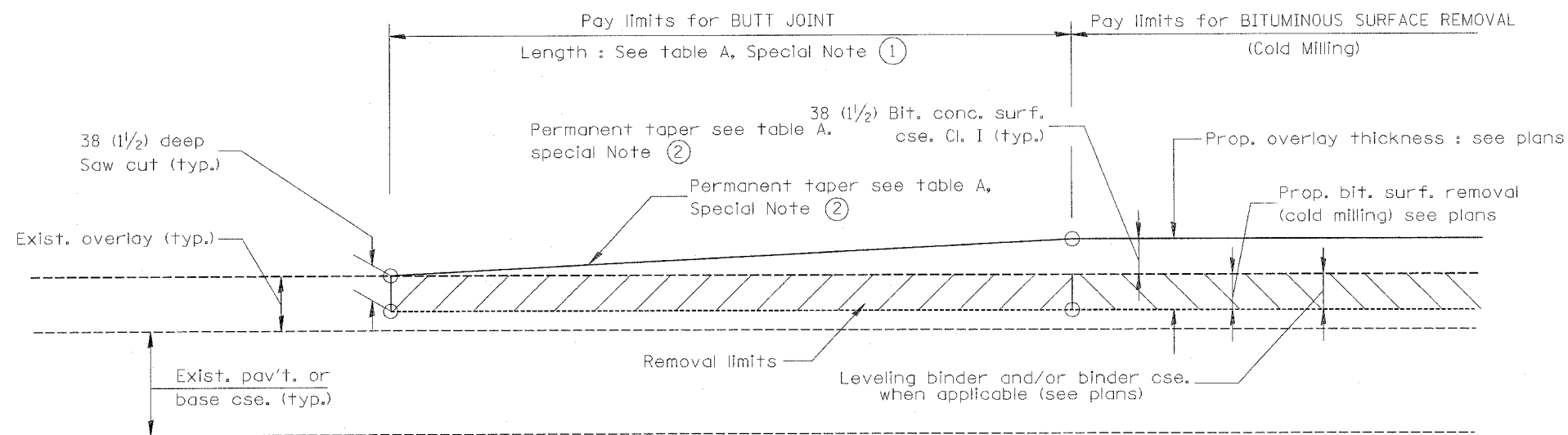
TYPE OF FACILITY	TAPER RATE "T" V:H	LENGTH "L" METERS
INTERSTATE	1:480	26.4

GENERAL NOTES

1. The work shall be done in accordance with Article 406.18 and the Special Provision for Butt Joints.
2. The pavement surface to be removed may be either bituminous or P.C. concrete. The work shall be performed in accordance with Article 440.03.
3. The saw cut joints shall be primed just prior to the placing of bituminous material. The work will be in accordance with the applicable portions of Article 406.06.

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION BITUMINOUS SURFACE REMOVAL - BUTT JOINT (SPECIAL) DETAIL
NAME	DATE	
		DATE 6/22/04 DRAWN BY CEM CHECKED BY CEM





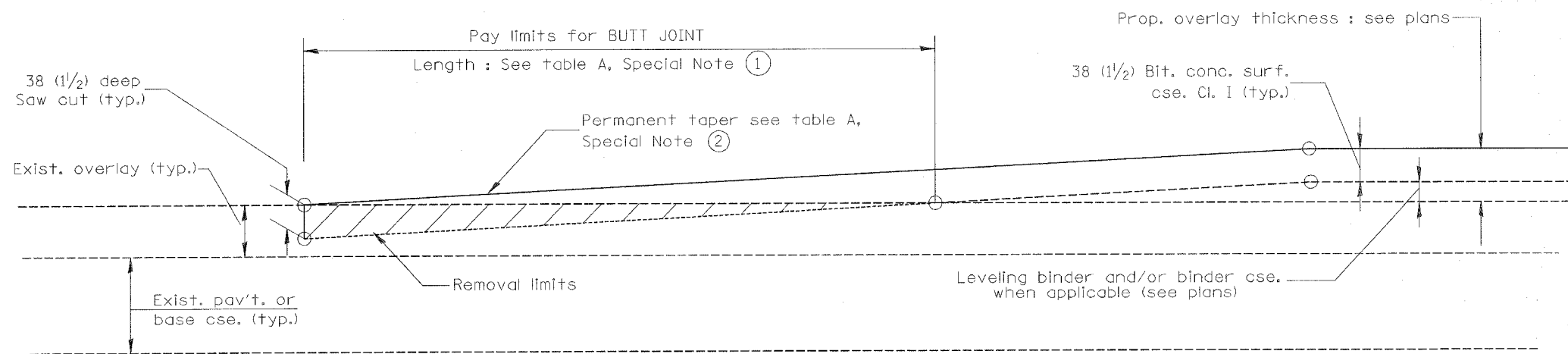
**CASE 1 : WITH BITUMINOUS SURFACE REMOVAL (COLD MILLING)**

**TABLE A**  
(LENGTHS AND TAPER RATES)

SPECIAL NOTE NUMBER	ELEMENT	MAINLINE INTERSTATES & 4-LANE EXPRESSWAYS	ALL OTHERS
①	LENGTH OF BUTT JOINT	18.0 m(60')	9.0 m(30')
②	PERMANENT TAPER RATE	1:480	1:240
③	TEMPORARY RAMP TAPER RATE	1:80	1:40
④	TEMPORARY RAMP LENGTH	3.0 m(10')	1.5 m(5')

**GENERAL NOTES**

1. The work shall be done in accordance with Article 406.18 and the Special Provision for Butt Joints.
2. The pavement surface to be removed may be either bituminous or P.C. concrete. The work shall be performed in accordance with Article 440.03 and the Special Provisions for Butt Joints.
3. The saw cut joints shall be primed just prior to the placing of bituminous material. The work will be in accordance with the applicable portions of Article 406.06.



**CASE 2 : NO BITUMINOUS SURFACE REMOVAL (COLD MILLING)**

All dimensions are in millimeters (Inches) unless otherwise noted.

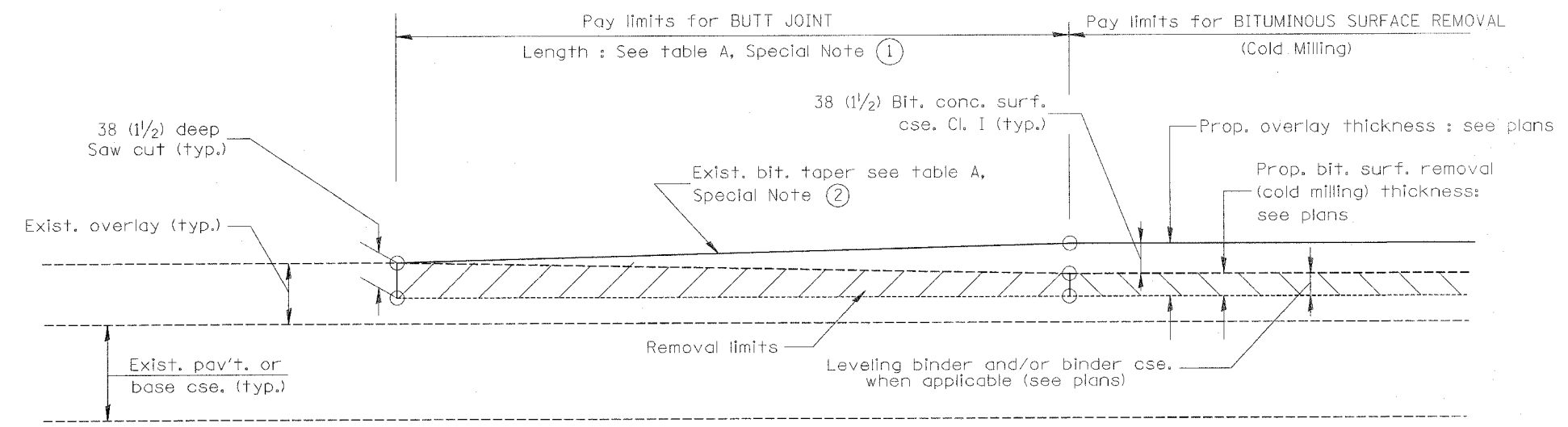
ILLINOIS DEPARTMENT OF TRANSPORTATION  
DISTRICT CADD STANDARD

DATE	REVISIONS	BY
1-1-97	RENUM. C-23.01, NEW REVISION BOX	T.P.
4-1-97	CORRECTION TO DEPTH	J.A.

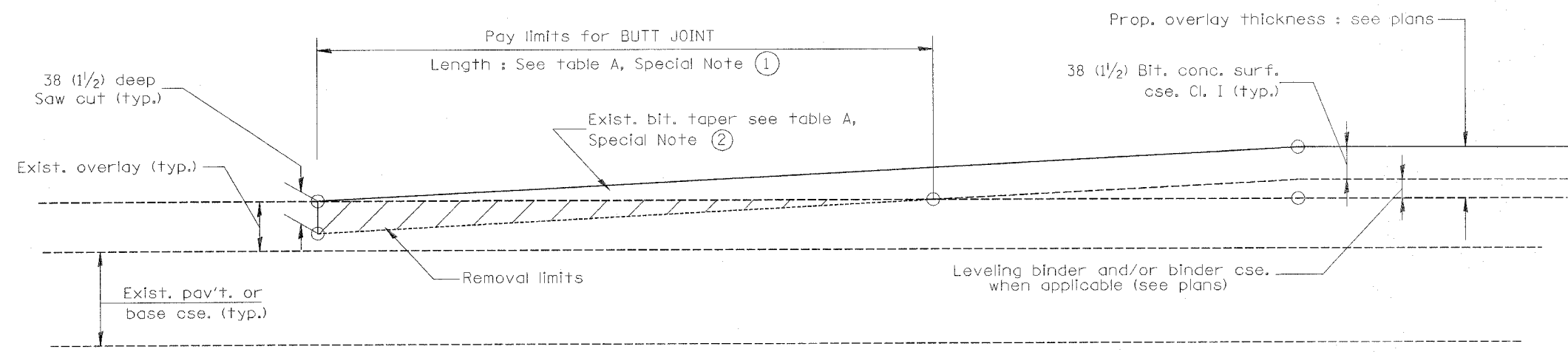
**BUTT JOINTS**  
CADD STD NO. 406101-D4 SHEET 1 OF 2  
SCALE: NOT DRAWN TO SCALE DRAWN BY CADD  
DATE 11/4/2004 CHECKED BY

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			1360	1358
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

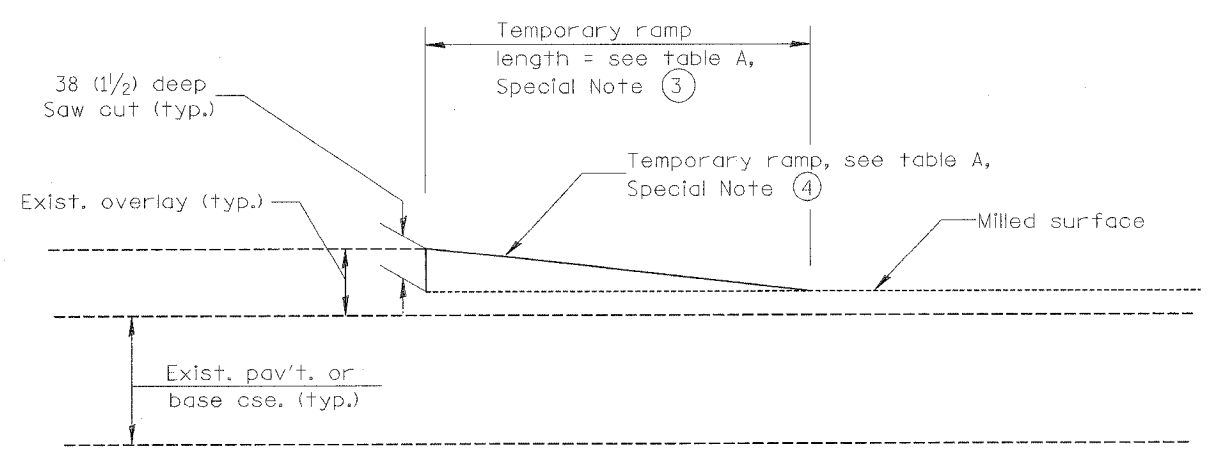
68200 14



**CASE 3 : WITH BITUMINOUS SURFACE REMOVAL (COLD MILLING)  
TIE-IN TO EXISTING BITUMINOUS TAPER**



**CASE 4 : NO BITUMINOUS SURFACE REMOVAL (COLD MILLING)  
TIE-IN TO EXISTING BITUMINOUS TAPER**



**DETAIL TEMPORARY RAMP**

All dimensions are in millimeters (Inches) unless otherwise noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION	
DISTRICT CADD STANDARD	
BUTT JOINTS	
CADD STD NO. 406101-D4	SHEET 2 OF 2
SCALE: NOT DRAWN TO SCALE	DRAWN BY CADD
	CHECKED BY

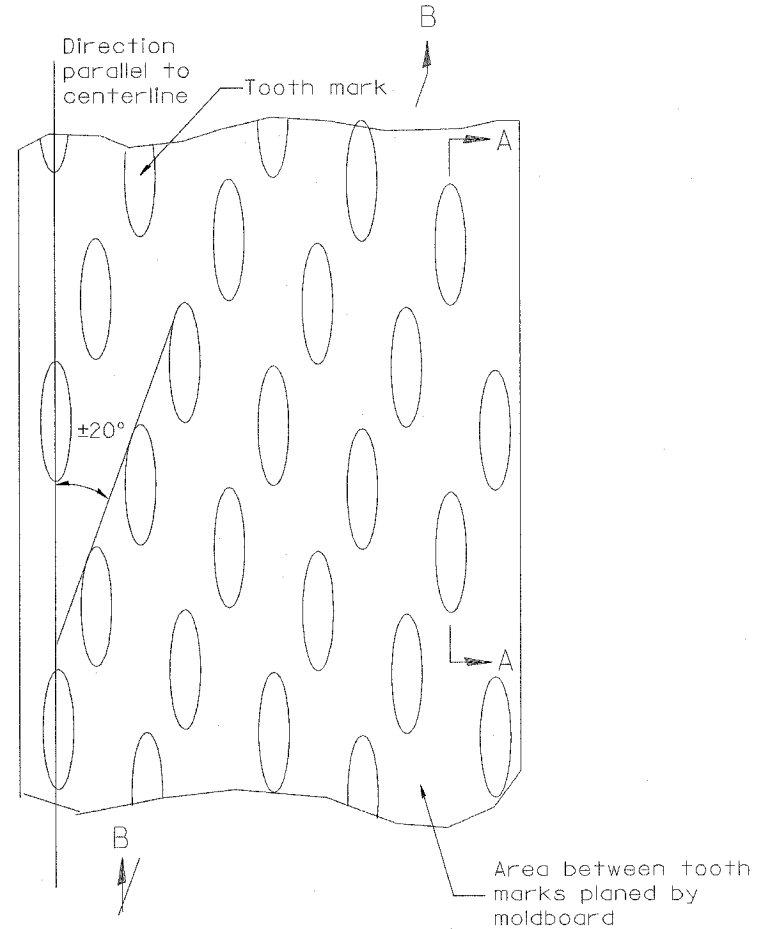
406101-D4 (2)

cr-projects-174wb-ster1typs.dgn

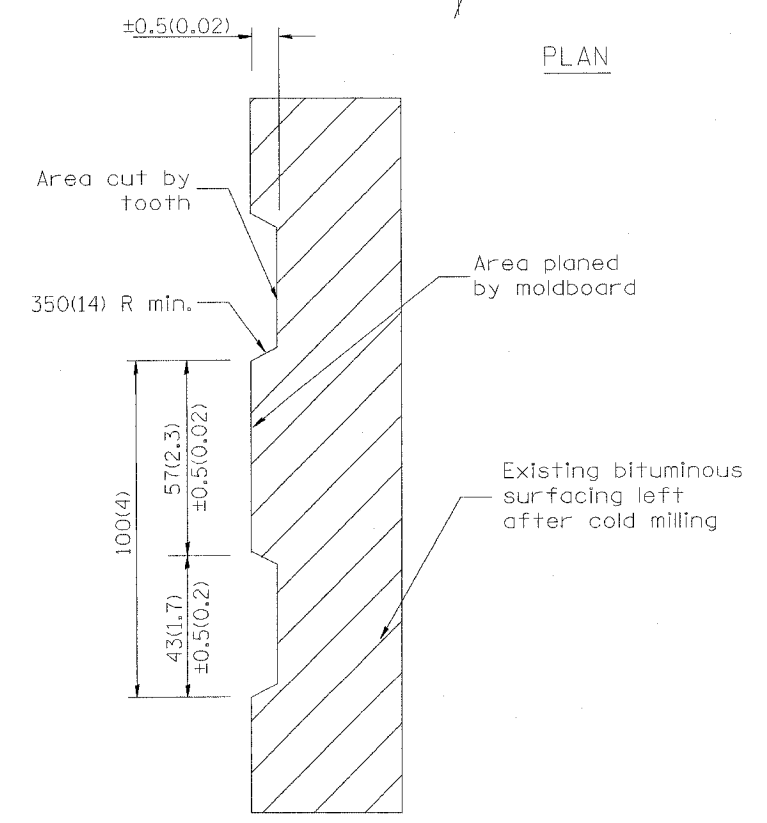
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
172-748-3	EEQBIA		1360	1359
STA.		TO STA.		
FED. ROAD DIST. NO. 4		ILLINOIS FED. AID PROJECT		

68200

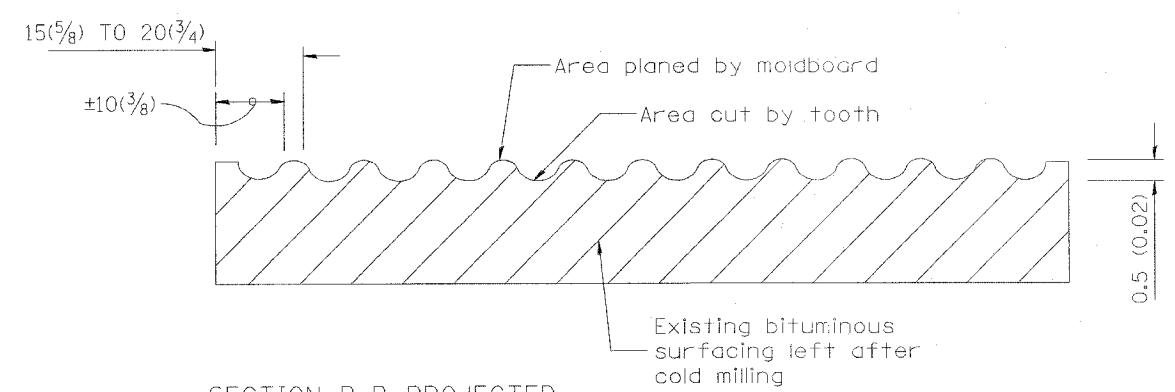
15



PLAN



SECTION A-A



SECTION B-B PROJECTED PERPENDICULAR TO CENTERLINE

General notes:

1. Coldmilling shall consist of two processes: Cutting with carbide teeth mounted on a rotating drum, and planing with a moldboard mounted immediately behind the cutting drum.
2. Other similar patterns will be acceptable if they consist of a smooth, flat, planed surface interspersed with a pattern of discontinuous longitudinal striations.

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

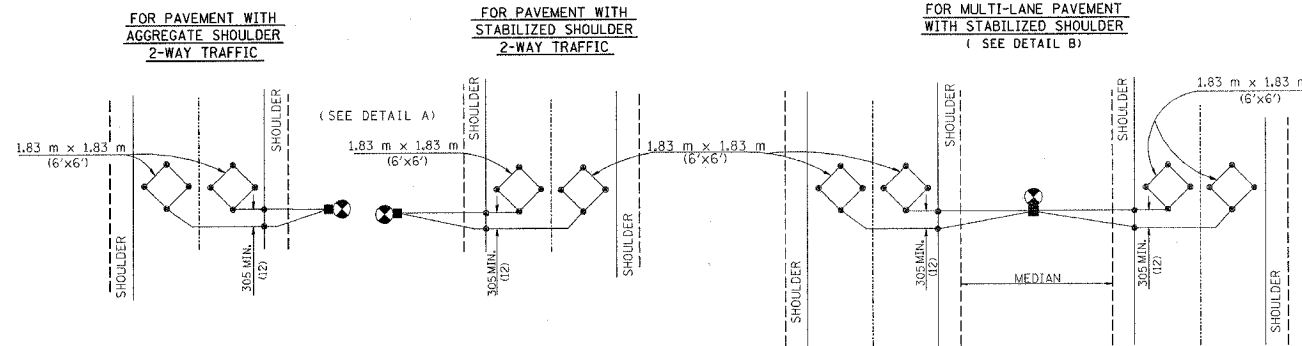
DATE	REVISIONS	BY
1-1-97	RENUM. C-104.01, NEW REVISION BOX	T. P.
4-20-98	REMOVED MILLING DETAIL FROM STD.	J. A.
9-08-98	CORRECT NOTE LEADER PLACEMENT	R. W.

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 DISTRICT CADD STANDARD  
 BITUMINOUS SURFACE REMOVAL  
 (COLD MILLING)

CADD STD NO. 440001-D4  
 SCALE: NOT DRAWN TO SCALE DRAWN BY CADD

cr-projects-14wb-stertyps.dgn

TYPICAL APPLICATIONS FOR TRAFFIC COUNTER USING TERMINAL FACILITY



LEGEND

- 102 x 102 (4 x 4) TREATED WOOD POST
- TERMINAL FACILITY
- INDICATES 38 (1 1/2) HOLE DRILLED AT DETECTOR LOOP CORNER

STATION 141+400

SCHEDULE OF QUANTITIES

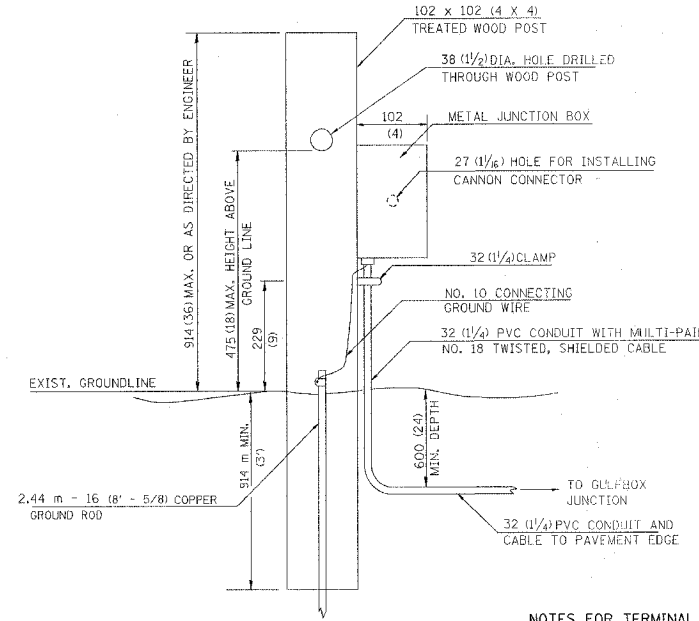
ITEM	QUANTITY	UNIT
DETECTOR LOOP, SPECIAL	46	METER
CONDUIT IN TRENCH, 30 mm DIA., PVC	39	METER
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO.18 3 PAIR	45	METER
TRENCH AND BACKFILL FOR ELECTRICAL WORK	33	METER
TRENCH AND BACKFILL FOR ELECTRICAL WORK (SPECIAL)	10	METER
TERMINAL FACILITY	1	EACH
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO.18 6 PAIR		METER

GENERAL NOTES

- EACH DETECTOR LOOP USED SHALL BE WIRED INDEPENDENTLY TO THE TERMINAL.
- DIAMOND SHAPED LOOPS SHALL BE CENTERED IN THE PAVEMENT LANES.
- EACH 1.83 M X 1.83 M (6' X 6') DETECTOR LOOP SHALL HAVE A MINIMUM OF 4 OR 5 TURNS OF CABLE OR AS DIRECTED BY THE ENGINEER.
- DETECTOR LOOPS MAY BE LOCATED AS DIAMONDS IN THE PAVEMENT AS DIRECTED BY THE ENGINEER. ALL LOOPS SHALL BE ORIENTED THE SAME DIRECTION.
- THE RESIDENT ENGINEER AND OR CONTRACTOR SHALL NOTIFY THE TRAFFIC STUDIES TECHNICIAN IN PROGRAM DEVELOPMENT AT LEAST ONE WEEK PRIOR TO THE INSTALLATION TO DETERMINE EXACT LOCATION. CONTACT RON HEGWOOD PH # 309-693-5165

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	172-71B-3	PEORIA	1360	1360
STA.	TO STA.			
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		

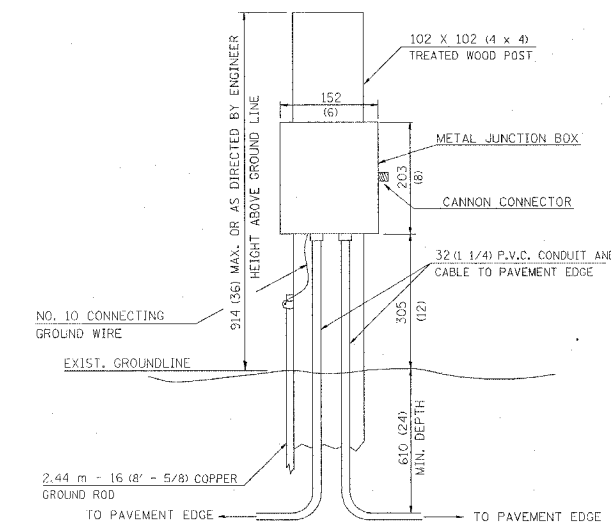
DETAIL A  
TERMINAL FACILITY DETAIL



NOTES FOR TERMINAL FACILITY

- GROUND ROD SHALL BE CONNECTED TO THE JUNCTION BOX WITH NO. 10 AWG COPPER WIRE AS SHOWN IN THE JUNCTION BOX DETAIL.
- POST FOR TERMINAL FACILITY SHALL BE A MINIMUM DISTANCE OF \_\_\_\_\_ FROM EDGE OF \_\_\_\_\_.

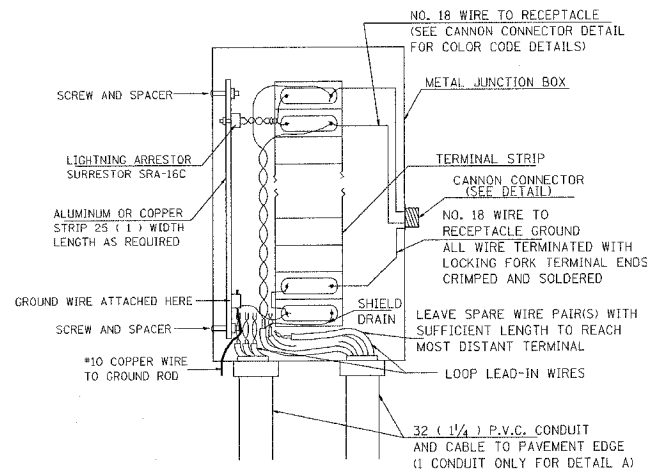
DETAIL B  
TERMINAL FACILITY DETAIL 68200 16



LOCATIONS

\*600 MM MINIMUM DEPTH

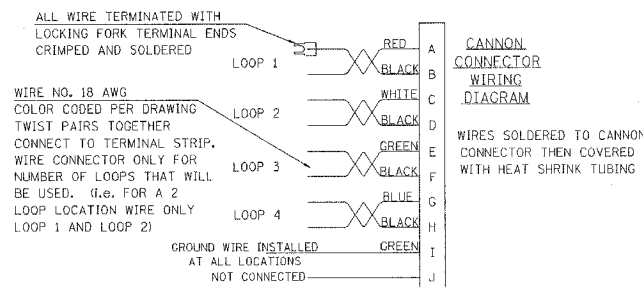
JUNCTION BOX DETAIL FOR DETAIL A AND B



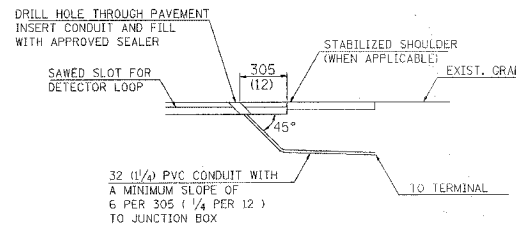
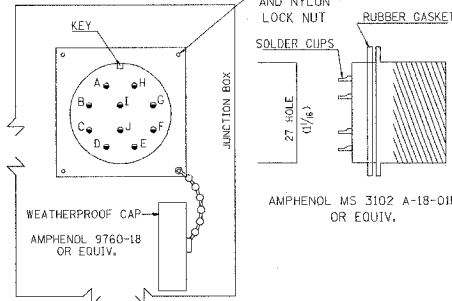
NOTES FOR JUNCTION BOX

- ONE LIGHTNING ARRESTOR FOR EACH LOOP.
- NUMBER OF TERMINALS ON TERMINAL STRIP TO BE DETERMINED BY NUMBER OF LOOPS. TERMINAL STRIP SHALL BE CINCH BARRIER TYPE 140 OR EQUIVALENT.
- JUNCTION BOX SHALL BE WEATHER PROOF WITH SIZE DETERMINED BY NUMBER OF COMPONENTS. JUNCTION BOX SHALL BE A MINIMUM 102x152x203 (4x6x8) METAL HOFFMAN BOX WITH KEY ENTRY OR EQUIVALENT.
- TERMINAL WITH MORE THAN 4 LOOPS WILL REQUIRE THE USE OF 2 CANNON CONNECTORS WITH LOOPS GROUPED BY DIRECTION OR AS DIRECTED BY THE ENGINEER.
- THE COST OF INSTALLING THE TERMINAL FACILITY INCLUDES ALL VERTICAL WIRING, BOXES, CONNECTORS, VERTICAL CONDUIT, POST, GROUND ROD, SURRESTORS, AND LABOR, AND SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR TERMINAL FACILITY.
- THE METAL MOISTURE-PROOF MOUNTING BOX SHALL BE HINGED AND HAVE A KEYED ENTRY.

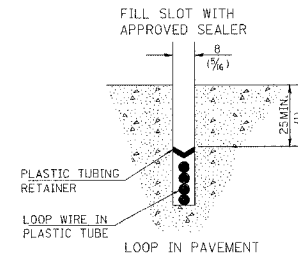
CANNON CONNECTOR DETAIL



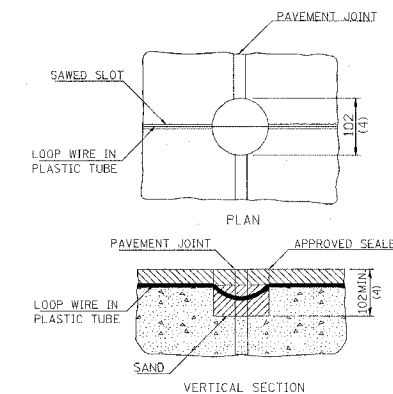
CONNECTOR VIEWED FROM REAR



DETECTOR LOOP LEAD-IN DETAIL



DETECTOR LOOP INSTALLATION



DETECTOR LOOP DETAIL AT PAVEMENT JOINT OR PAVEMENT CRACK

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

DATE	REVISIONS	BY
3-1-97	NEW DETAIL	J.A.
3-21-97	CORRECT REF. TO SI CONC.	J.A.
9-10-97	ADD REF. TO METAL BOX	E.T.
7-31-98	CORRECT LEGEND & DIM.	R.H.
6-17-99	ADD TO GENERAL NOTES	R.H.
6-09-00	REMOVE GULFBOX	R.H.

ILLINOIS DEPARTMENT OF TRANSPORTATION	
SPECIAL DETAIL SHEET	
DETAIL FOR TRAFFIC COUNTERS USING TERMINAL FACILITY	
CADD STD. NO. 836002-D4	SCALE: NOT DRAWN TO SCALE
DATE: AUGUST 19, 1992	DRAWN BY CADD CHECKED BY R. TAYLOR

836002-D4