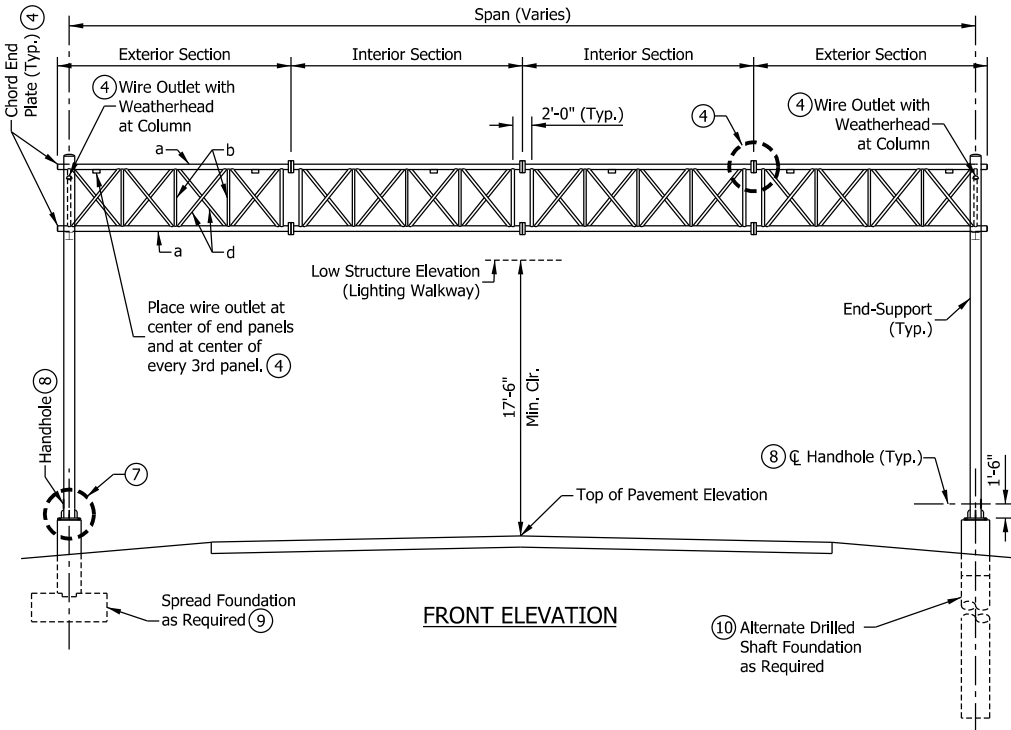
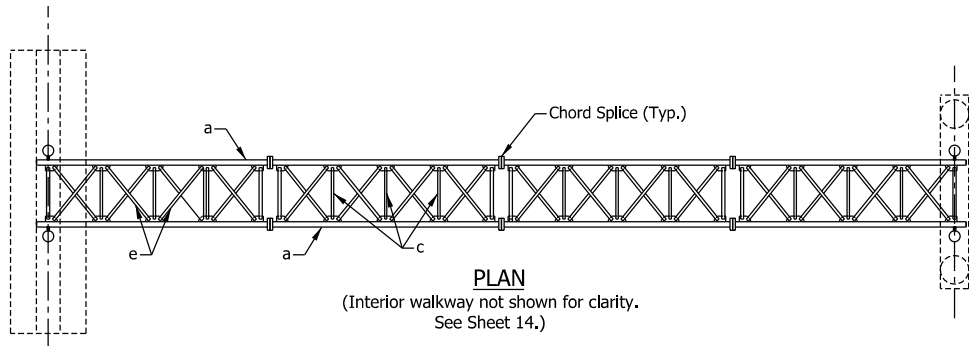


INDEX

SHEET NO.	SUBJECT
1	Index
2	Plan & Elevation
3	Truss Sections, Table with Member Sizes
4	Table of Dimensions, Spans 34' thru 81'
5	Table of Dimensions, Spans 82' thru 130' and Camber
6	Chord Connections and Weld Details
7	Flange, Chord End Plate, and Wire Outlet Details
8	Upper Chord Connection Details
9	Lower Chord Connection Details
10	End Support Lower Chord Connections, Alternate HSS Beam Details
11	End Support Base Plate and I.D. Tag Details
12	End Support Top Cap, Handhole, and J-Hook Details
13	End Support Anchor Bolt and Metal Skirt Details
14	Interior Walkway Grating Details
15	Interior Walkway Grating Details
16	Lighting Walkway
17	Lighting Walkway
18	Lighting Walkway Profile
19	Lighting Walkway and Handrail Assembly
20	Lighting Walkway, Handrail Hinge, and Grating Details
21	Lighting Walkway Fixture Mount Details
22	Spread Foundation at 33" Concrete Barrier Wall
23	Spread Foundation at 45" Concrete Barrier Wall
24	Spread Foundation for Median or Shoulder, 36" Height
25	Spread Foundations Quantities
26	Alternate Drilled Shaft Foundation at 33" Concrete Barrier Wall
27	Alternate Drilled Shaft Foundation at 45" Concrete Barrier Wall
28	Alternate Drilled Shaft Foundation for Median or Shoulder, 36" Height
29	Alternate Drilled Shaft Foundations Quantities

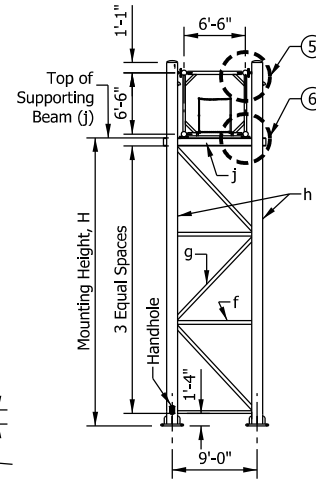
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SIGN BOX TRUSS STRUCTURE  
DRAWING INDEX



**NOTES:**

1. See Sheet 3 for member sizes.
2. Maximum deviation of any chord from a straight line in any section shall be 1/8" for box truss to be a maximum of 3/8" out of a straight line over the entire length of the structure in the vertical plane.
3. All truss members are aluminum. End-support members are steel. Walkways, bearing elements, and wire outlet are aluminum.
- ④ See Sheet 7 for connection flange, chord end plate, and wire outlet details.
- ⑤ See Sheet 8 for upper chord connection details and Sheet 12 for top cap, handhole, and J-hook details.
- ⑥ See Sheet 09 for lower chord connection details. See Sheet 10 for alternate HSS beam and saddle shim detail.
- ⑦ See Sheets 11 for base plate detail and 13 for anchor bolts and skirt details.
- ⑧ See Sheet 12 for handhole detail.
- ⑨ See Sheets 22 through 25 for spread foundations.
- ⑩ See Sheets 26 through 29 for alternate drilled shaft foundations.



**LEGEND**

**TRUSS MEMBERS**

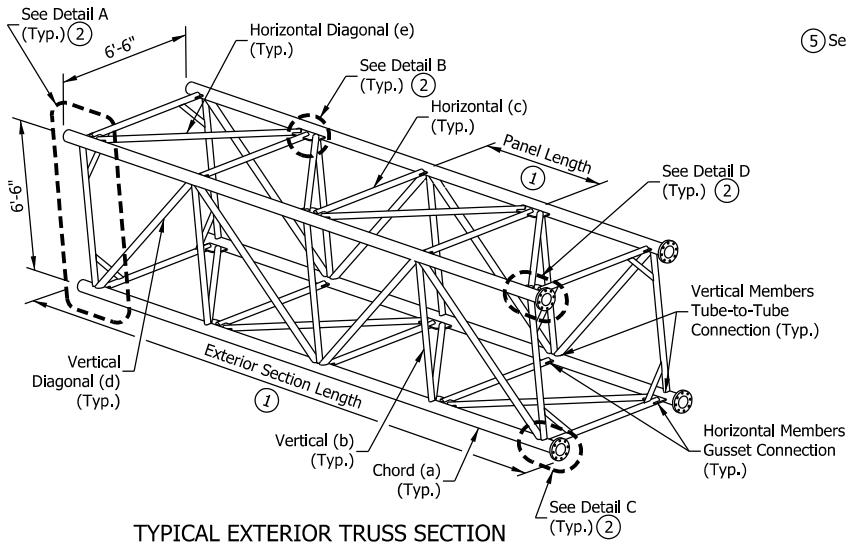
- a - Chords
- b - Verticals
- c - Horizontals
- d - Vertical Diagonals
- e - Horizontal Diagonals

**END-SUPPORT MEMBERS**

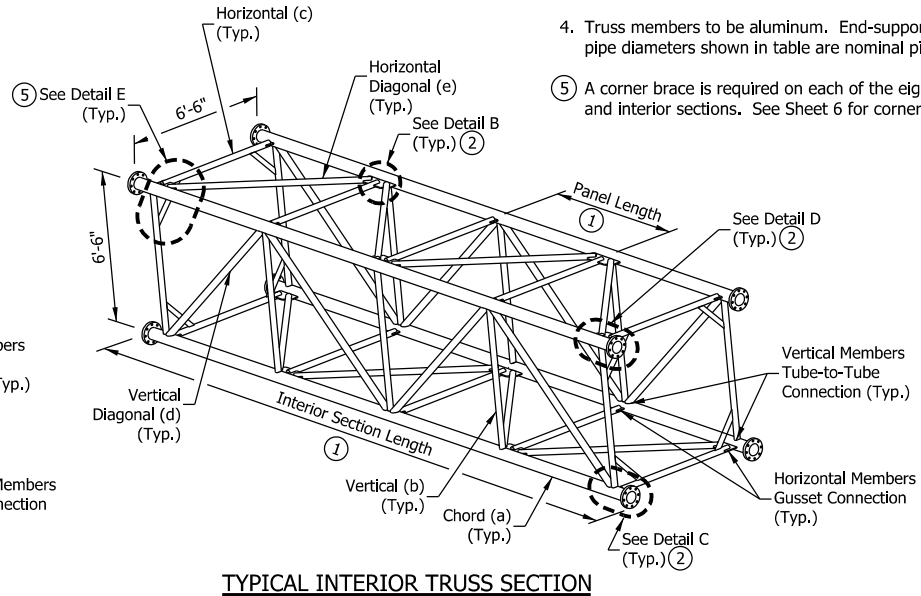
- h - Columns
- f - Horizontals
- g - Diagonals
- j - Supporting Beam

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SIGN BOX TRUSS STRUCTURE  
PLAN & ELEVATION



**TYPICAL EXTERIOR TRUSS SECTION**



**TYPICAL INTERIOR TRUSS SECTION**

**NOTES:**

- ① Number of panels and sections varies. See table on Sheets 4 and 5 for recommended dimensions.
- ② See Sheet 6 for welded connections and Details A through F.
- 3. See Sheet 2 for Legend.
- 4. Truss members to be aluminum. End-support members to be steel. Steel pipe diameters shown in table are nominal pipe size.
- ⑤ A corner brace is required on each of the eight external corners of exterior and interior sections. See Sheet 6 for corner brace Detail E.

TRUSS TYPE	MAX. SIGN AREA	MAX. SPAN	MAX. MOUNTING HEIGHT	TRUSS MEMBERS, ALUMINUM										END-SUPPORT MEMBERS, STEEL						
				CHORD		VERTICAL		HORIZONTAL		VERTICAL DIAGONAL		HORIZONTAL DIAGONAL		HORIZONTAL		DIAGONAL		COLUMN		SUPPORTING BEAM
				a		b		c		d		e		f		g		h		
				DIA.	THK	DIA.	THK	DIA.	THK	DIA.	THK	DIA.	THK	DIA.	THK	DIA.	THK	DIA.	THK	DIA.
SQ. FT.	FT.	FT.	FT.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	
A	500	130	28'-6"	6.00	0.250	2.50	0.250	4.00	0.188	3.00	0.375	4.00	0.375	5.00	0.375	5.00	0.375	14.00	0.500	W 8 x 58 or HSS 8" x 8" x 1/2"
B	700	100	28'-6"	6.50	0.375	3.00	0.375	4.00	0.188	3.00	0.500	4.00	0.375	5.00	0.375	7.00	0.375	14.00	0.500	
C		130	28'-6"	7.00	0.375	3.00	0.375	4.00	0.188	3.00	0.500	4.00	0.500	5.00	0.375	8.00	0.500	14.00	0.593	
D	900	100	28'-6"	7.00	0.375	3.00	0.375	4.00	0.188	3.00	0.500	4.00	0.500	5.00	0.375	8.00	0.500	18.00	0.500	W 10 x 68 or HSS 10" x 10" x 1/2"
E		130	28'-6"	7.00	0.500	3.00	0.375	4.00	0.250	3.00	0.500	4.00	0.500	5.00	0.375	8.00	0.593	18.00	0.562	

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**SIGN BOX TRUSS STRUCTURE  
TRUSS SECTIONS IN ISOMETRIC VIEWS,  
TABLE WITH MEMBER SIZES**

**DIMENSIONS FOR SIGN BOX TRUSSES (34' THRU 81')**

SPAN SPAN-TRUSS LENGTH, (FT)	EXTERIOR SECTIONS					INTERIOR SECTIONS			
	NO. OF EXT. SECTIONS	NO. OF PANELS PER SECTION	VARIABLE END DIMEN.	PANEL LENGTH	SECTION LENGTH	NO. OF INT. SECTIONS	NO. OF PANELS PER SECTION	PANEL LENGTH	SECTION LENGTH
34	1	6	6"	5'-6"	35'-6"	0			
35	1	6	6"	5'-8"	36'-6"	0			
36	2	3	6"	5'-6"	18'-9"	0			
37	2	3	6"	5'-8"	19'-3"	0			
38	2	3	6"	5'-10"	19'-9"	0			
39	2	3	6"	6'-0"	20'-3"	0			
40	2	3	6"	6'-2"	20'-9"	0			
41	2	3	6"	6'-4"	21'-3"	0			
42	2	3	6"	6'-6"	21'-9"	0			
43	2	4	6"	5'-0"	22'-3"	0			
44	2	4	6"	5'-1 1/2"	22'-9"	0			
45	2	4	6"	5'-3"	23'-3"	0			
46	2	4	6"	5'-4 1/2"	23'-9"	0			
47	2	4	6"	5'-6"	24'-3"	0			
48	2	4	6"	5'-7 1/2"	24'-9"	0			
49	2	4	6"	5'-9"	25'-3"	0			
50	2	4	6"	5'-10 1/2"	25'-9"	0			
51	2	4	6"	6'-0"	26'-3"	0			
52	2	4	6"	6'-1 1/2"	26'-9"	0			
53	2	4	6"	6'-3"	27'-3"	0			
54	2	4	6"	6'-4 1/2"	27'-9"	0			
55	2	4	6"	6'-6"	28'-3"	0			
56	2	5	5 1/4"	5'-3 3/4"	28'-9"	0			
57	2	5	6 1/4"	5'-4 3/4"	29'-3"	0			
58	2	5	6"	5'-6"	29'-9"	0			
59	2	5	5 3/4"	5'-7 1/4"	30'-3"	0			
60	2	5	5 1/2"	5'- 8 1/2"	30'-9"	0			
61	2	5	6 1/2"	5'-9 1/2"	31'-3"	0			
62	2	5	6 1/4"	5'-10 3/4"	31'-9"	0			
63	2	5	6"	6'-0"	32'-3"	0			
64	2	5	5 3/4"	6'-1 1/4"	32'-9"	0			
65	2	5	5 1/2"	6'-2 1/2"	33'-3"	0			
66	2	5	5 1/4"	6'-3 3/4"	33'-9"	0			
67	2	5	6 1/4"	6'-4 3/4"	34'-3"	0			
68	2	5	6"	6'-6"	34'-9"	0			
69	2	4	6"	5'-4"	23'-7"	1	4	5'-4"	23'-4"
70	2	4	6"	5'-5"	23'-11"	1	4	5'-5"	23'-8"
71	2	4	6"	5'-6"	24'-3"	1	4	5'-6"	24'-0"
72	2	4	6"	5'-7"	24'-7"	1	4	5'-7"	24'-4"
73	2	4	6"	5'-8"	24'-11"	1	4	5'-8"	24'-8"
74	2	4	6"	5'-9"	25'-3"	1	4	5'-9"	25'-0"
75	2	4	6"	5'-10"	25'-7"	1	4	5'-10"	25'-4"
76	2	4	6"	5'-11"	25'-11"	1	4	5'-11"	25'-8"
77	2	4	6"	6'-0"	26'-3"	1	4	6'-0"	26'-0"
78	2	4	6"	6'-1 "	26'-7"	1	4	6'-1 "	26'-4"
79	2	4	6"	6'-2"	26'-11"	1	4	6'-2"	26'-8"
80	2	4	6"	6'-3"	27'-3"	1	4	6'-3"	27'-0"
81	2	4	6"	6'-4"	27'-7"	1	4	6'-4"	27'-4"

**NOTES:**

1. All panels on a truss shall be the same length. The minimum panel length is 5'-0" and the maximum is 6'-6".
2. A single Interior section In a truss shall have an even number of panels to maintain the pattern of the vertical diagonals.
3. Use minimum number of sections for each box truss structure, while maintaining the maximum section length at 36'-6".
4. See Sheet 5 for required camber.

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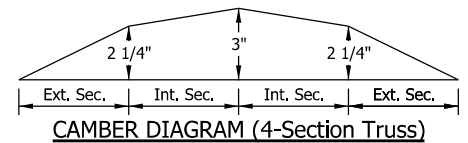
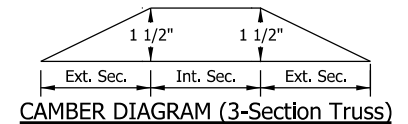
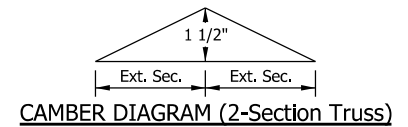
**SIGN BOX TRUSS STRUCTURE  
TABLE OF DIMENSIONS  
SPANS 34' THRU 81'**

**DIMENSIONS FOR SIGN BOX TRUSSES (82' THRU 130')**

SPAN SPAN-TRUSS LENGTH, (FT)	EXTERIOR SECTIONS					INTERIOR SECTIONS			
	NO. OF EXT. SECTIONS	NO. OF PANELS PER SECTION	VARIABLE END DIMEN.	PANEL LENGTH	SECTION LENGTH	NO. OF INT. SECTIONS	NO. OF PANELS PER SECTION	PANEL LENGTH	SECTION LENGTH
82	2	4	6"	6'-5"	27'-11"	1	4	6'-5"	27'-8"
83	2	4	6"	6'-6"	28'-3"	1	4	6'-6"	28'-0"
84	2	5	5 3/4"	5'-7 3/4"	30'-5 1/2"	1	4	5'-7 3/4"	24'-7"
85	2	5	6 1/2"	5'-8 1/2"	30'-10"	1	4	5'-8 1/2"	24'-10"
86	2	5	5 1/2"	5'-9 1/2"	31'-2"	1	4	5'-9 1/2"	25'-2"
87	2	5	6 1/4"	5'-10 1/4"	31'-6 1/2"	1	4	5'-10 1/4"	25'-5"
88	2	5	7"	5'-11"	31'-11"	1	4	5'-11"	25'-8"
89	2	5	6"	6'-0"	32'-3"	1	4	6'-0"	26'-0"
90	2	5	6 3/4"	6'-0 3/4"	32'-7 1/2"	1	4	6'-0 3/4"	26'-3"
91	2	5	5 3/4"	6'-1 3/4"	32'-11 1/2"	1	4	6'-1 3/4"	26'-7"
92	2	5	6 1/2"	6'-2 1/2"	33'-4"	1	4	6'-2 1/2"	26'-10"
93	2	5	5 1/2"	6'-3 1/2"	33'-8"	1	4	6'-3 1/2"	27'-2"
94	2	5	6 1/4"	6'-4 1/4"	34'-1/2"	1	4	6'-4 1/4"	27'-5"
95	2	5	5 1/4"	6'-5 1/4"	34'-4 1/2"	1	4	6'-5 1/4"	27'-9"
96	2	5	6"	6'-6"	34'-9"	1	4	6'-6"	28'-0"
97	2	4	6"	5'-7 1/2"	24'-9"	2	4	5'-7 1/2"	24'-6"
98	2	4	6"	5'-8 1/4"	25'-0"	2	4	5'-8 1/4"	24'-9"
99	2	4	6"	5'-9"	25'-3"	2	4	5'-9"	25'-0"
100	2	4	6"	5'-9 3/4"	25'-6"	2	4	5'-9 3/4"	25'-3"
101	2	4	6"	5'-10 1/2"	25'-9"	2	4	5'-10 1/2"	25'-6"
102	2	4	6"	5'-11 1/4"	26'-0"	2	4	5'-11 1/4"	25'-9"
103	2	4	6"	6'-0"	26'-3"	2	4	6'-0"	26'-0"
104	2	4	6"	6'-0 3/4"	26'-6"	2	4	6'-0 3/4"	26'-3"
105	2	4	6"	6'-1 1/2"	26'-9"	2	4	6'-1 1/2"	26'-6"
106	2	4	6"	6'-2 1/4"	27'-0"	2	4	6'-2 1/4"	26'-9"
107	2	4	6"	6'-3"	27'-3"	2	4	6'-3"	27'-0"
108	2	4	6"	6'-3 3/4"	27'-6"	2	4	6'-3 3/4"	27'-3"
109	2	4	6"	6'-4 1/2"	27'-9"	2	4	6'-4 1/2"	27'-6"
110	2	4	6"	6'-5 1/4"	28'-0"	2	4	6'-5 1/4"	27'-9"
111	2	4	6"	6'-6"	28'-3"	2	4	6'-6"	28'-0"
112	2	5	6"	5'-3"	28'-6"	2	5	5'-3"	28'-3"
113	2	5	7"	5'-3 1/2"	28'-9 1/2"	2	5	5'-3 1/2"	28'-5 1/2"
114	2	5	5 1/2"	5'-4 1/4"	28'-11 3/4"	2	5	5'-4 1/4"	28'-9 1/4"
115	2	5	6 1/2"	5'-4 3/4"	29'-3 1/4"	2	5	5'-4 3/4"	28'-11 3/4"
116	2	5	7 1/2"	5'-5 1/4"	29'-6 3/4"	2	5	5'-5 1/4"	29'-2 1/4"
117	2	5	6"	5'-6"	29'-9"	2	5	5'-6"	29'-6"
118	2	5	7"	5'-6 1/2"	30'-0 1/2"	2	5	5'-6 1/2"	29'-8 1/2"
119	2	5	5 1/2"	5'-7 1/4"	30'-2 3/4"	2	5	5'-7 1/4"	30'-1/4"
120	2	5	6 1/2"	5'-7 3/4"	30'-6 1/4"	2	5	5'-7 3/4"	30'-2 3/4"
121	2	5	7 1/2"	5'-8 1/4"	30'-9 3/4"	2	5	5'-8 1/4"	30'-5 1/4"
122	2	5	6"	5'-9"	31'-0"	2	5	5'-9"	30'-9"
123	2	5	7"	5'-9 1/2"	31'-3 1/2"	2	5	5'-9 1/2"	30'-11 1/2"
124	2	5	5 1/2"	5'-10 1/4"	31'-5 3/4"	2	5	5'-10 1/4"	31'-3 1/4"
125	2	5	6 1/2"	5'-10 3/4"	31'-9 1/4"	2	5	5'-10 3/4"	31'-5 3/4"
126	2	5	7 1/2"	5'-11 1/4"	32'-0 3/4"	2	5	5'-11 1/4"	31'-8 1/4"
127	2	5	6"	6'-0"	32'-3"	2	5	6'-0"	32'-0"
128	2	5	7"	6'-0 1/2"	32'-6 1/2"	2	5	6'-0 1/2"	32'-2 1/2"
129	2	5	5 1/2"	6'-1 1/4"	32'-8 3/4"	2	5	6'-1 1/4"	32'-6 1/4"
130	2	5	6 1/2"	6'-1 3/4"	33'-1/4"	2	5	6'-1 3/4"	32'-8 3/4"

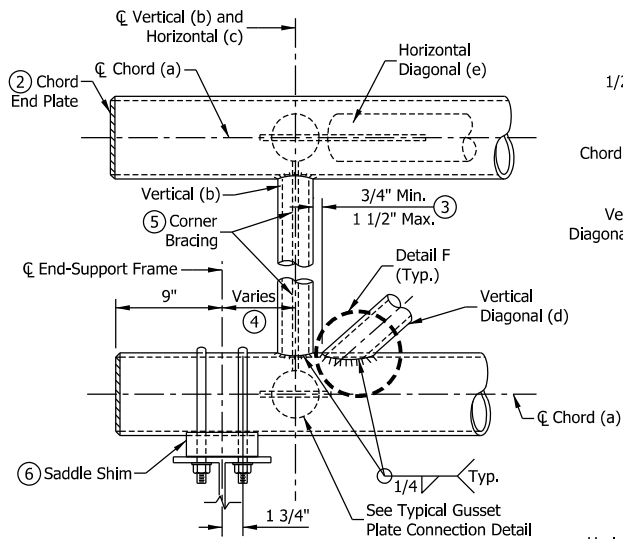
**NOTES:**

1. Camber diagrams for truss structures with 2 to 4 sections are shown. Cambers shown are for fabrication only and are measured with trusses fully supported at no-load conditions. Allowable camber tolerance for truss is 25% of specific camber value.
2. See Sheet 4 for additional notes.

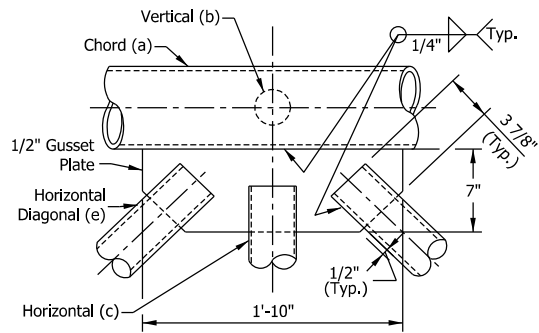


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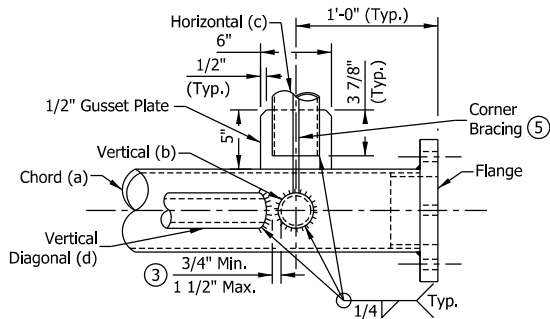
**SIGN BOX TRUSS STRUCTURE  
TABLE OF DIMENSIONS  
SPANS 82' THRU 130' AND CAMBER**



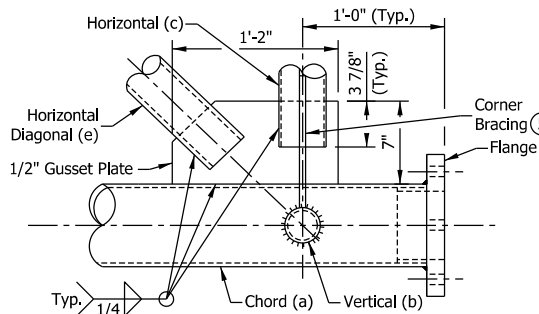
**DETAIL A**  
**EXTERIOR SECTION AT END SUPPORT**



**DETAIL B**  
**TYPICAL PANEL CONNECTION**  
**PLAN VIEW**

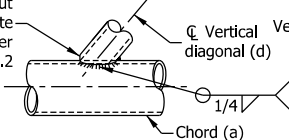


**DETAIL C**  
**CHORD AT FLANGE CONNECTION**  
**PLAN VIEW**

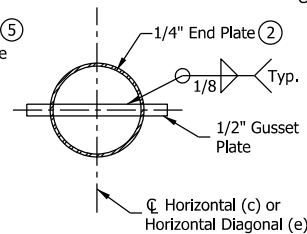


**DETAIL D**  
**CHORD AT FLANGE CONNECTION**  
**PLAN VIEW**

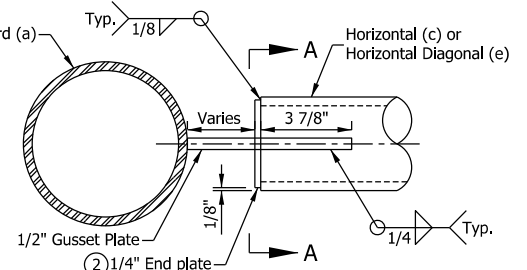
Toe edge of diagonal member shall be cut back to facilitate throat thickness per AWS D1.1, Fig 3.2



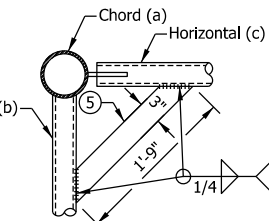
**DETAIL F**



**SECTION A-A**



**TYPICAL GUSSET PLATE CONNECTION DETAIL**  
**ELEVATION VIEW**

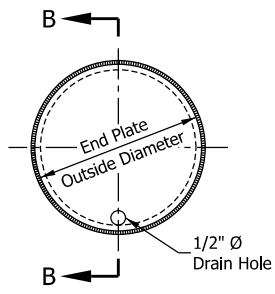


**DETAIL E**  
**TYPICAL CORNER BRACING**

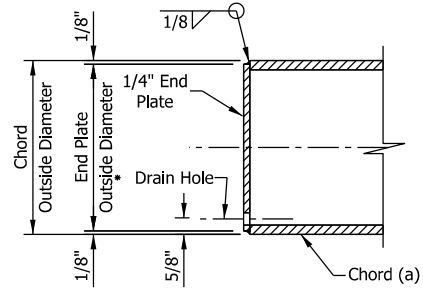
**NOTES:**

1. All bracing members shall be machined to provide a snug fit to the chord along the entire edge of bracing member before welding. See Sheets 2 and 3 for member locations.
2. End plate at horizontal (c) and horizontal diagonal (e) may be welded as one piece and slotted or welded as two pieces after slotting the member. See Sheet 7 for chord end plate details.
3. Vertical and horizontal diagonals shall be fabricated for minimum offset from the panel point offset to provide a 3/4" minimum to 1 1/2" maximum clearance between any diagonal and any horizontal or vertical member.
4. For variable end dimension, see Sheets 4 and 5.
5. See Sheet 3 for corner bracing locations. Each brace member to be 3" x 1'-9" x 1/2" and placed at 45° to vertical.
6. See Sheets 9 or 10 for saddle shim detail.

INDIANA DEPARTMENT OF TRANSPORTATION  
SIGN BOX TRUSS STRUCTURE  
CHORD CONNECTIONS AND WELD DETAILS

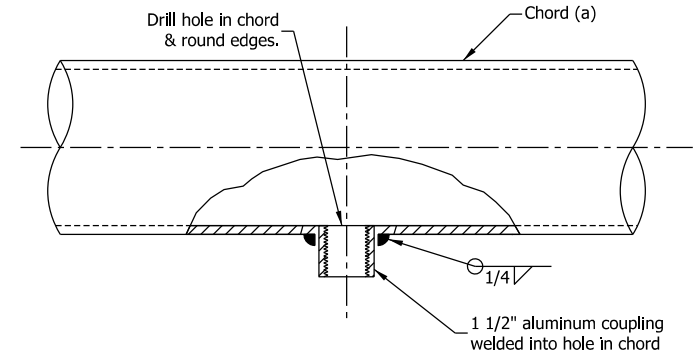


**END VIEW**

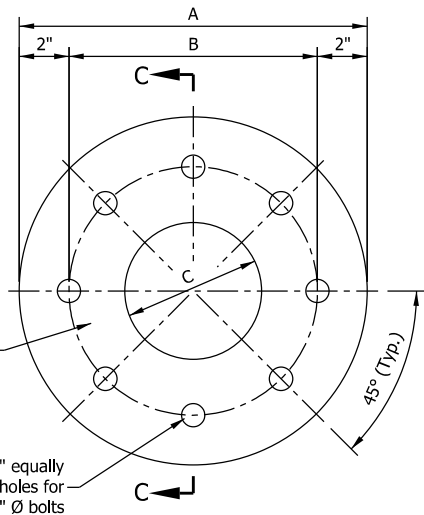


**SECTION B-B**

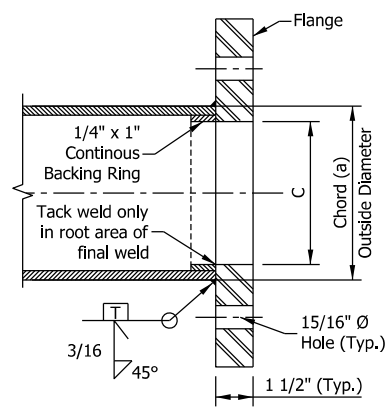
**CHORD END PLATE DETAILS**



**WIRE OUTLET DETAIL**



**END VIEW**

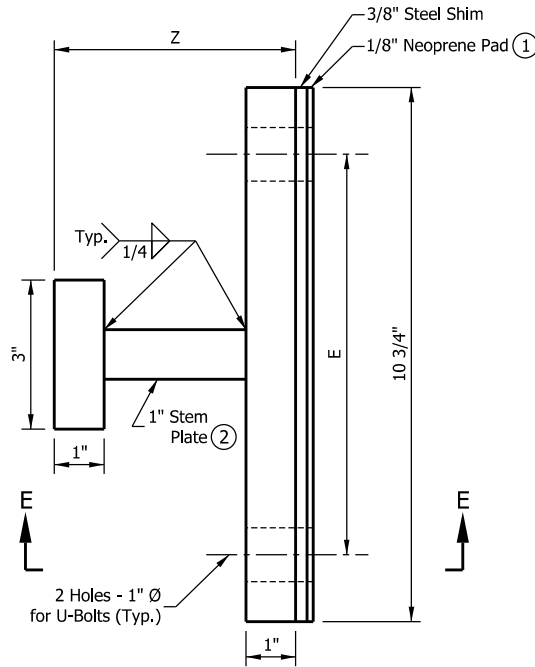
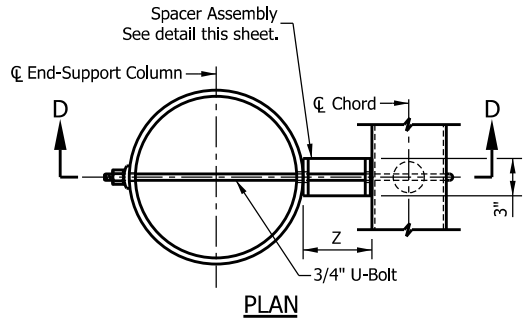


**SECTION C-C**

**FLANGE DETAILS**

TABLE OF FLANGE DIMENSIONS				
TRUSS CHORD O.D. x THK.	BOLT SIZE	DIMENSION		
		A	B	C
6" x 1/4"	7/8"	13"	9"	5"
6 1/2" x 3/8"	7/8"	14"	10"	5 1/4"
7" x 3/8"	7/8"	14"	10"	5 3/4"
7" x 1/2"	7/8"	14"	10"	5 1/2"

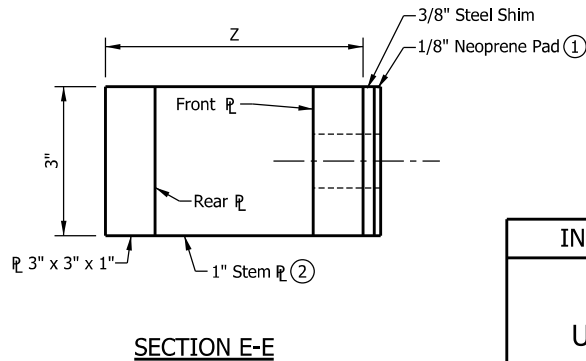
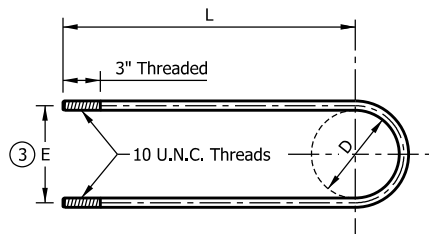
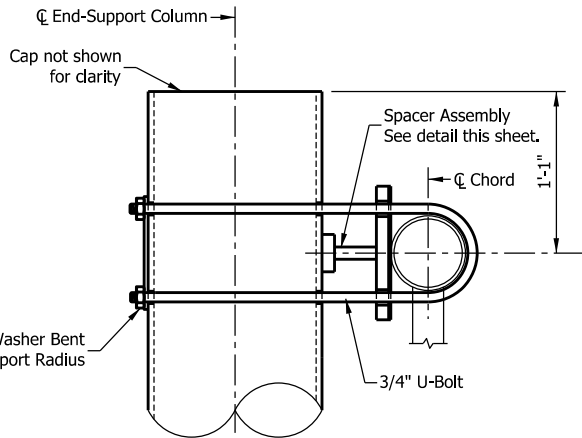
INDIANA DEPARTMENT OF TRANSPORTATION  
SIGN BOX TRUSS STRUCTURE  
FLANGE, CHORD END PLATE, AND WIRE  
OUTLET DETAILS



**NOTES:**

- ① Provide isolation from steel-dissimilar metal as required.
- ② For trusses type D or E, the 1" stem plate is not required. Fillet weld front and rear plates together.
- ③ Dimension E is equal to the diameter of chord (a) plus 1".

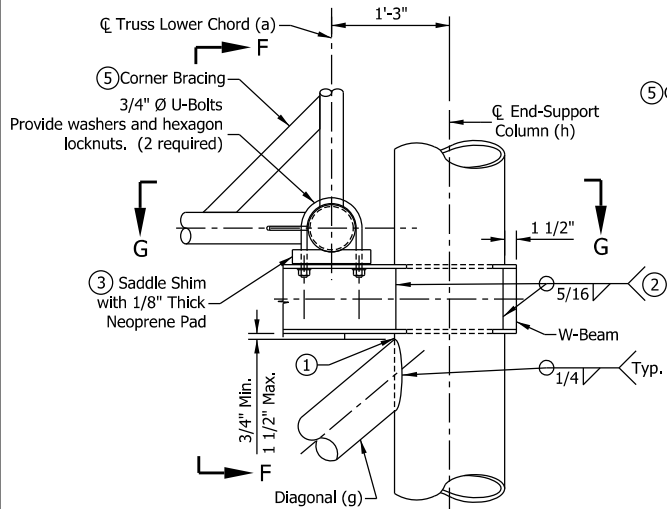
SPACER ASSEMBLY DIMENSIONS						
TRUSS TYPE	END-SUPPORT COLUMN SIZE (h)	CHORD (a)	Ø OF U-BOLT BEND	E	Z	L
	O.D. IN.	O.D. IN.	(D) IN.	IN.	IN.	IN.
A	14	6	6 1/16	7	4 1/2	24
B	14	6 1/2	6 9/16	7 1/2	4 1/4	24
C	14	7	7 1/16	8	4	24
D	18	7	7 1/16	8	2	26
E	18	7	7 1/16	8	2	26



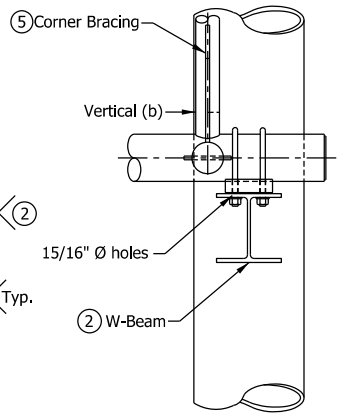
INDIANA DEPARTMENT OF TRANSPORTATION

SIGN BOX TRUSS STRUCTURE  
END-SUPPORT  
UPPER CHORD CONNECTION DETAILS

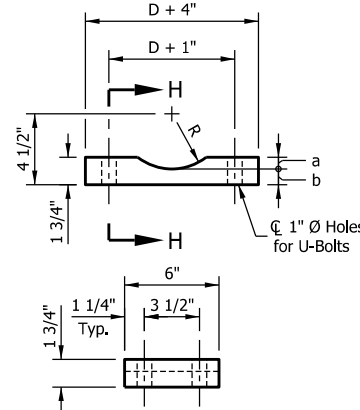




**LOWER CHORD CONNECTION DETAIL**



**SECTION F-F**



**SECTION H-H  
SADDLE SHIM DETAIL**

**NOTES:**

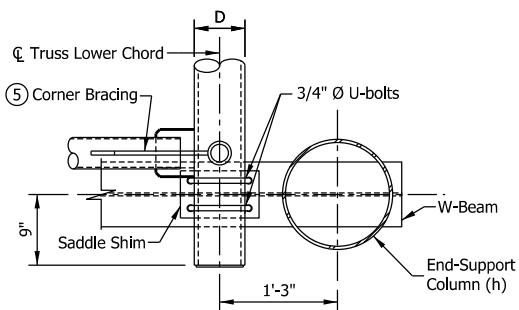
- ① Toe edge of diagonal member shall be cut back to facilitate throat thickness. See Sheet 6 Detail F for toe-edge detail.
- ② Cut holes in end support columns for W-beams to pass through. Holes to have 1/8" maximum clearance to W-beam. Holes in opposite sides of column to be checked for proper alignment prior to cutting.
- ③ Provide neoprene pads at all chord-to-W-beam bearing surfaces.
4. See Sheet 3 for end-support member sizes.
- ⑤ A corner brace is required on each of the eight external corners of exterior and interior sections. Each brace shall be 1'-9" x 3" x 1/2". See Sheet 6 for angle bracing Detail E.
6. See Sheet 10 for HSS square-beam as an alternate to truss supporting W-beam.

D	a	b
6"	9/32"	1 15/32"
6 1/2"	17/32"	1 7/32"
7"	25/32"	31/32"

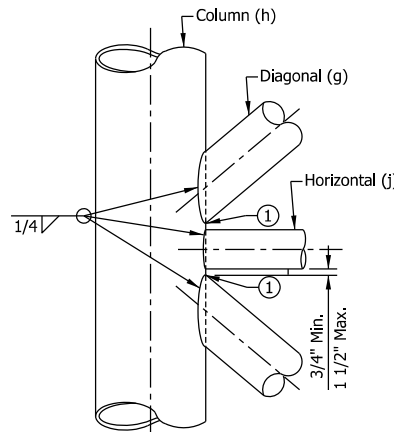
$R = D/2 + 1/32"$

$R + b = 4 1/2"$

D = Outside Diameter of Chord(a).



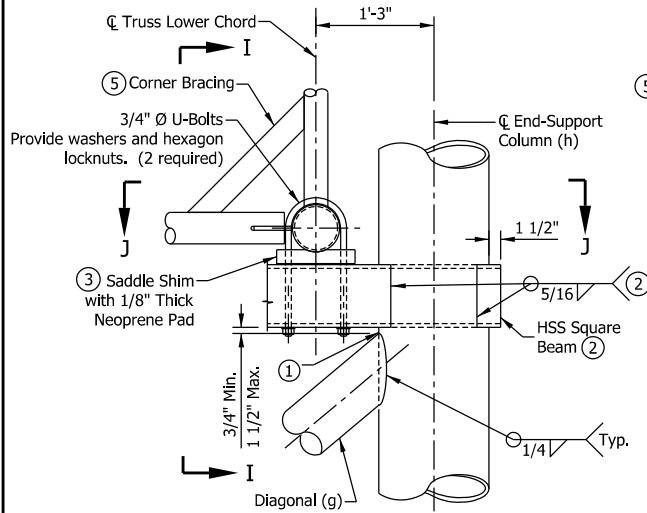
**SECTION G-G**



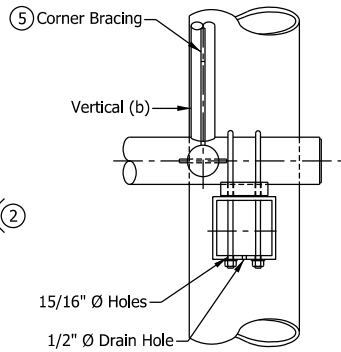
**ELEVATION (END-SUPPORT)  
TYPICAL BRACING MEMBERS CONNECTION**

INDIANA DEPARTMENT OF TRANSPORTATION

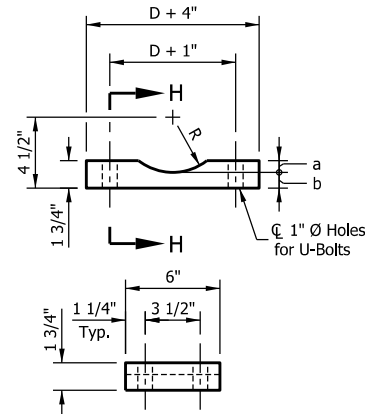
**SIGN BOX TRUSS STRUCTURE  
END-SUPPORT LOWER CHORD  
CONNECTION DETAILS**



**LOWER CHORD CONNECTION DETAIL**



**SECTION I-I**



**SECTION H-H  
SADDLE SHIM DETAIL**

**NOTES:**

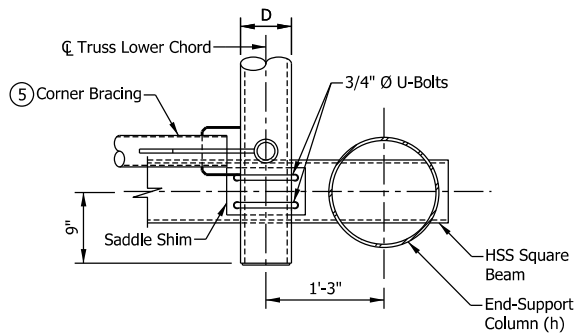
- ① Toe edge of diagonal member shall be cut back to facilitate throat thickness. See Sheet 6 Detail F for toe-edge detail.
- ② Cut holes in end support columns for square beams to pass through. Holes to have 1/8" maximum clearance to square beam. Holes in opposite sides of column to be checked for proper alignment prior to cutting.
- ③ Provide neoprene pads at all chord-to-square-beam bearing surfaces.
4. See Sheet 3 for end support member sizes.
- ⑤ A corner brace is required on each of the eight external corners of exterior and interior sections. Each brace shall be 1'-9" x 3" x 1/2". Sheet 6 for angle bracing Detail E.

D	a	b
6"	9/32"	1 15/32"
6 1/2"	17/32"	1 7/32"
7"	25/32"	31/32"

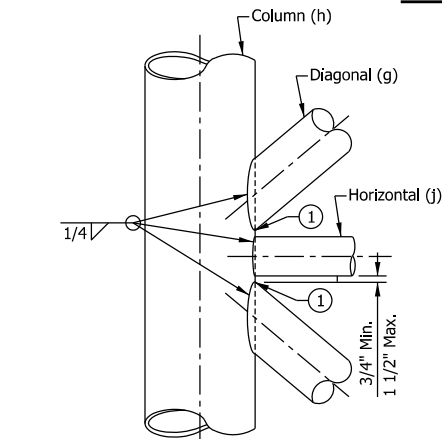
$R = D/2 + 1/32"$

$R + b = 4 1/2"$

D = Outside Diameter of Chord(a).

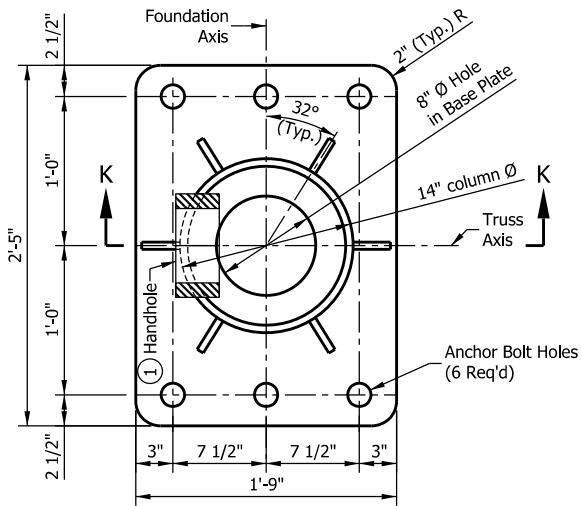


**SECTION J-J**

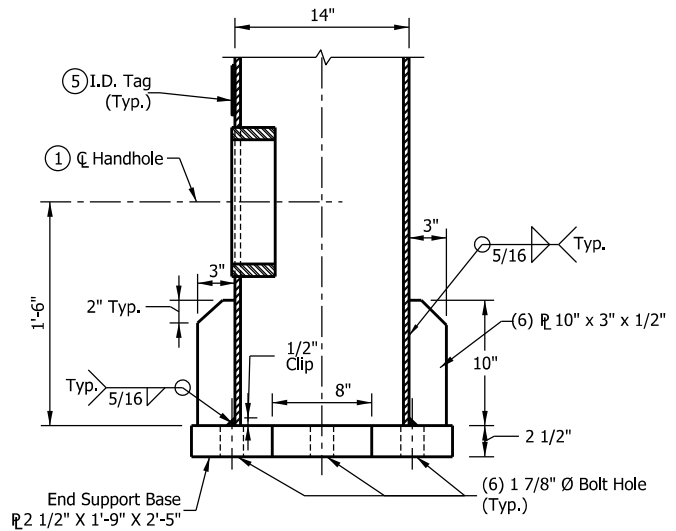


**ELEVATION (END-SUPPORT)  
TYPICAL BRACING MEMBERS CONNECTION**

INDIANA DEPARTMENT OF TRANSPORTATION  
SIGN BOX TRUSS STRUCTURE  
END SUPPORT LOWER CHORD  
CONNECTION DETAILS, ALTERNATE HSS BEAM



TYPE B-14 BASE PLATE

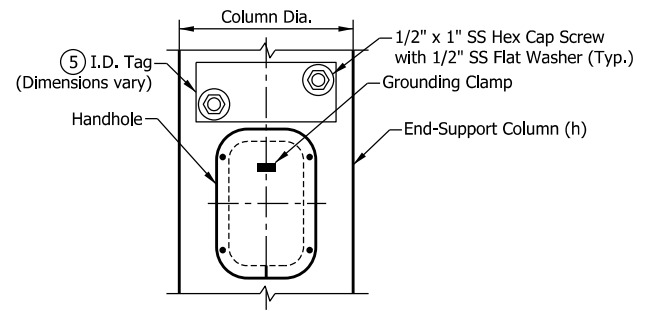


SECTION K-K

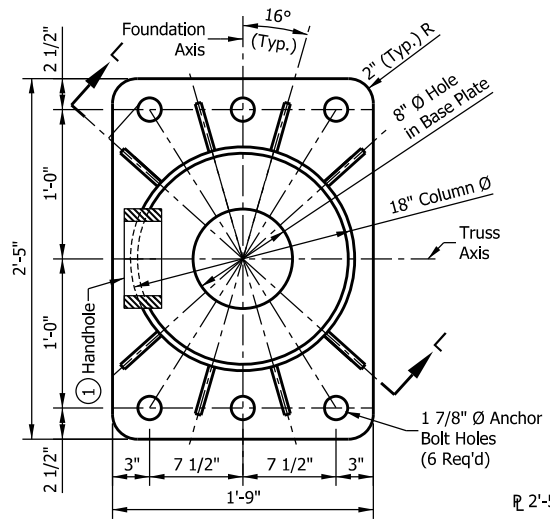
**NOTES:**

- ① See Sheet 12 for handhole details.
- 2. Use Type B-14 base plate for end-support column having diameter of 14". Use Type B-18 base plate for end-support column having diameter of 18".
- 3. See Sheet 13 for anchor bolt and metal skirt details.
- 4. Each end support shall have one handhole at the column base (h). Handhole shall be placed on the column nearest to the sign.
- ⑤ I.D. tag is required on each end-support column. I.D. tag is a 1/8" stainless steel plate with the following information stamped in 1/2" black letters:

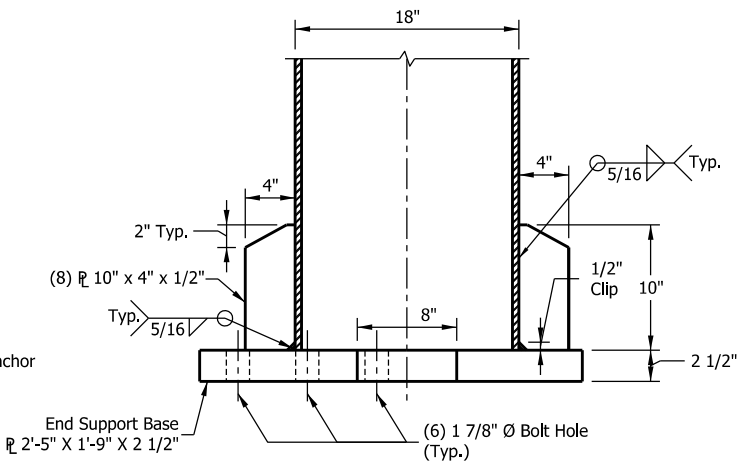
Manufacturer \_\_\_\_\_, Drawing/Order # \_\_\_\_\_  
 Contract # \_\_\_\_\_, Structure Type \_\_\_\_\_  
 Fabrication Date \_\_\_\_\_, Structure Length \_\_\_\_\_  
 End Support Mounting Height \_\_\_\_\_



ELEVATION VIEW FROM HANDHOLE SIDE

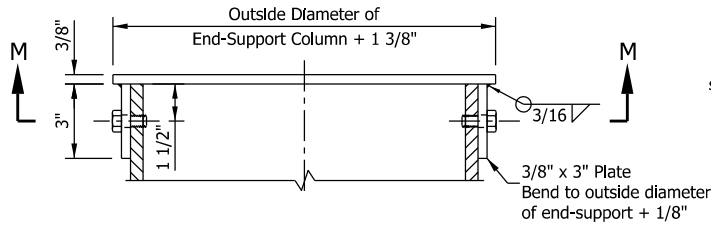


TYPE B-18 BASE PLATE

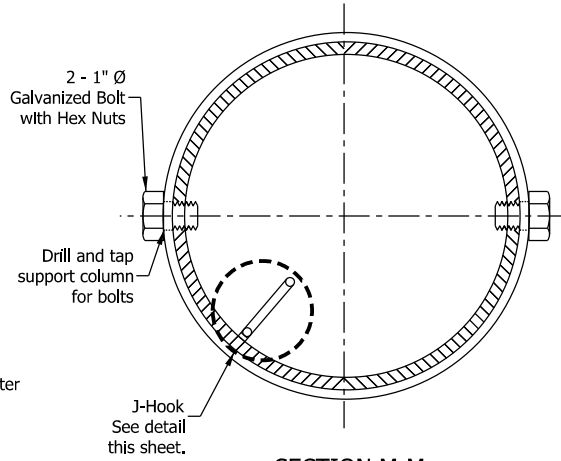


SECTION L-L

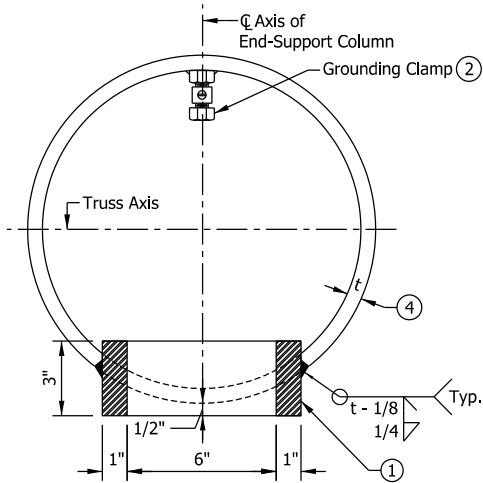
INDIANA DEPARTMENT OF TRANSPORTATION  
 SIGN BOX TRUSS STRUCTURE  
 END SUPPORT  
 BASE PLATE AND I.D. TAG DETAILS



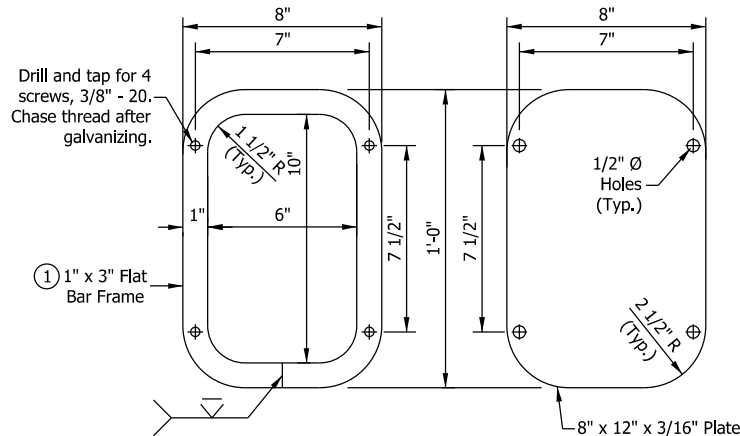
**TOP CAP  
ELEVATION VIEW**



**SECTION M-M**

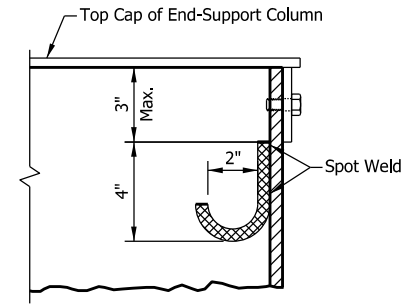


**HANDHOLE  
SECTION ACROSS COLUMN**



**HANDHOLE FRAME DETAIL**

**HANDHOLE COVER**



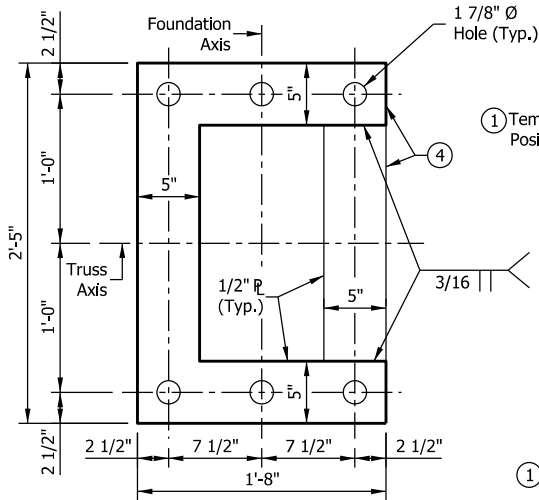
**J-HOOK DETAIL**

**NOTES:**

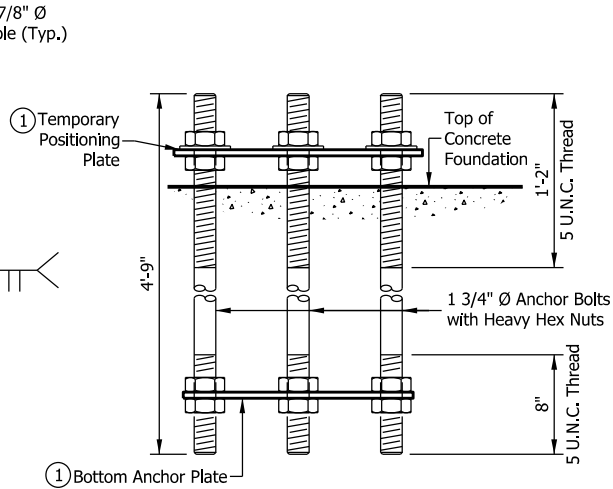
- ① In lieu of fabricated handhole frame as shown, frame may be cut from 3" plate (rolling direction vertical).
- ② See Standard Drawing E 802-SNWR-03 for grounding post details. Grounding post to be placed on far side of support directly opposite center of handhole.
3. See Sheets 2 and 10 for handhole locations.
- ④ See Sheet 3 for thicknesses of end-support columns (h).

INDIANA DEPARTMENT OF TRANSPORTATION

SIGN BOX TRUSS STRUCTURE  
END-SUPPORT  
TOP-CAP, HANDHOLE, AND J-HOOK DETAILS



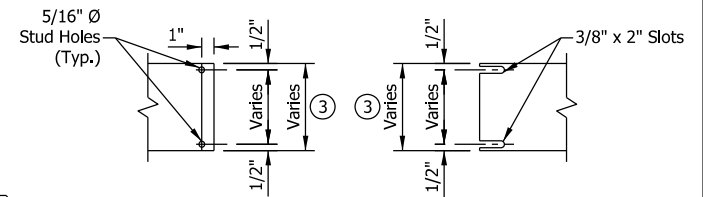
**TEMPORARY POSITIONING PLATE**



**ANCHOR BOLT DETAILS BEFORE CONCRETE PLACEMENT**

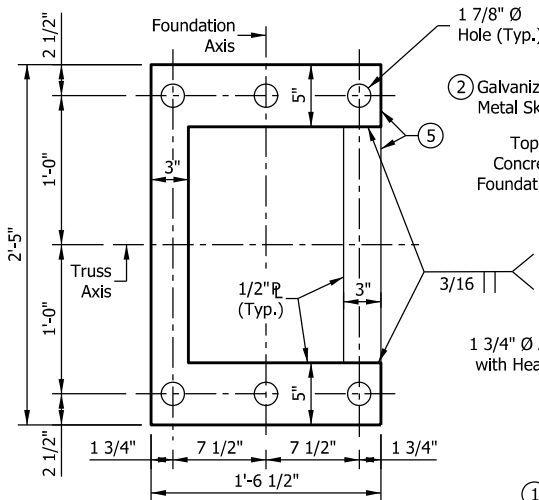
**NOTES:**

- ① Use temporary positioning plate and bottom anchor plate for all foundations. Temporary positioning plate should be removed after placing concrete.
- ② Secure galvanized metal skirt to base plate after erection as shown in skirt detail.
- ③ Minimum base plate gap is 2 1/2" and can be increased up to 5 1/2". Metal skirt width shall be at least 1 1/2" more than the actual gap.
- ④ May use four separate 5" plates welded together to maintain angles and shape as shown.
- ⑤ May use two separate 3" and two separate 5" plates welded together to maintain angles and shape as shown.
- ⑥ See Sheet 11 for end-support base plate details.

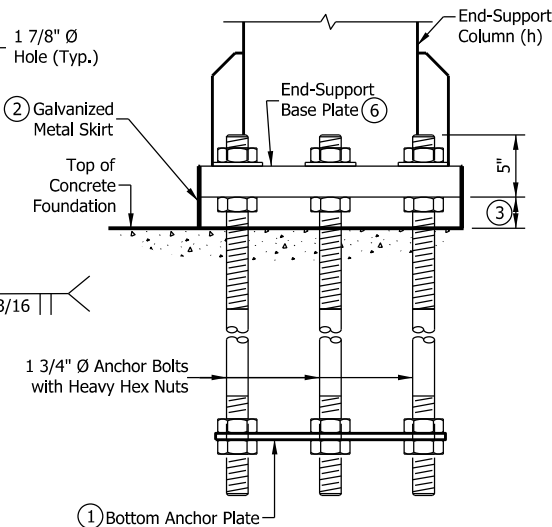


**DETAIL G**

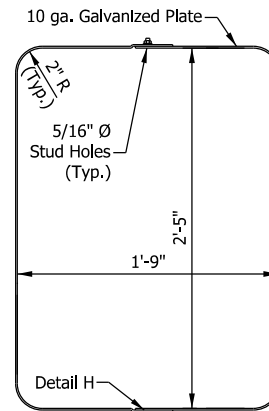
**DETAIL H**



**BOTTOM ANCHOR PLATE**

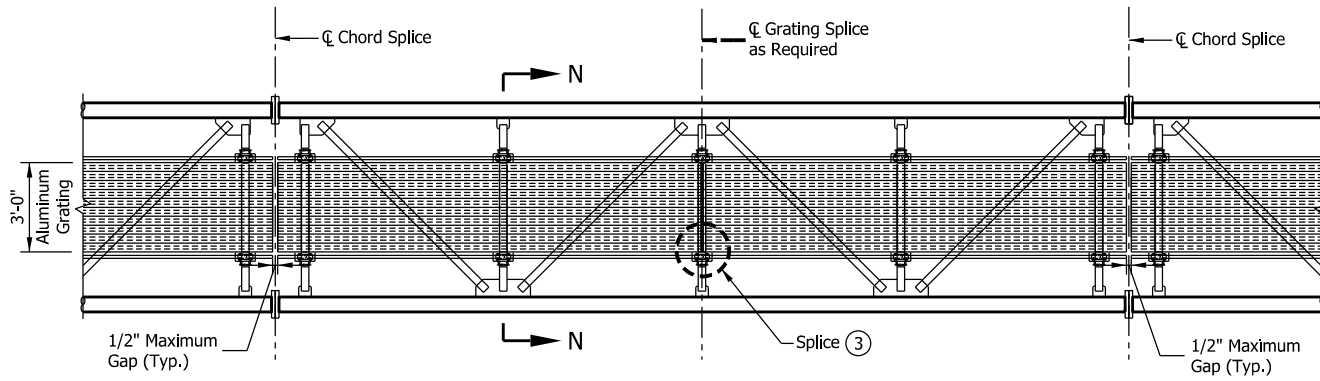


**ANCHOR BOLT DETAILS AFTER CONCRETE PLACEMENT**



**METAL SKIRT DETAIL**

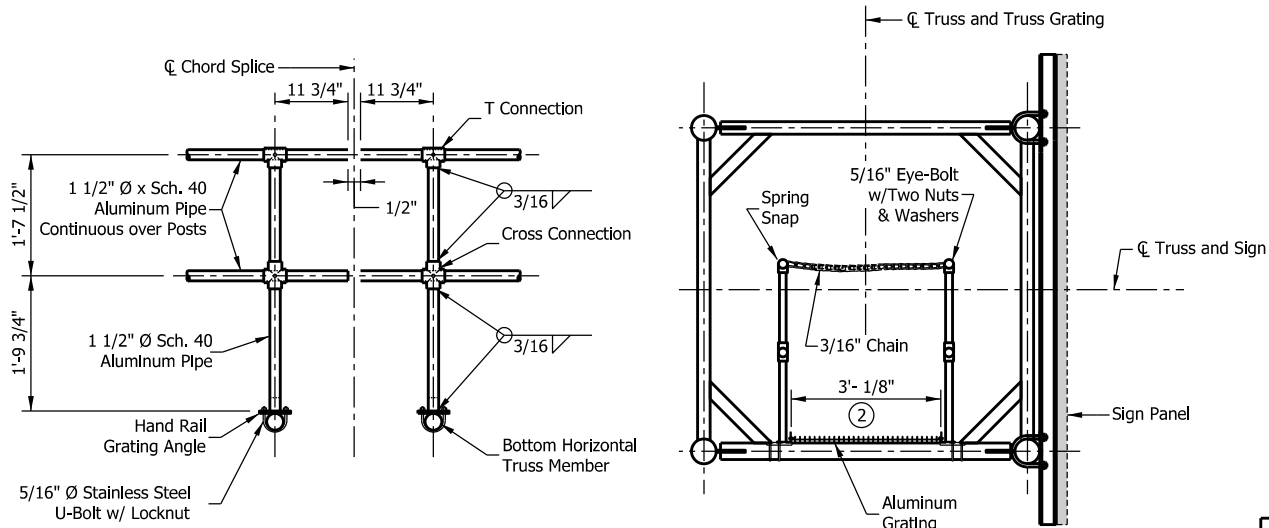
INDIANA DEPARTMENT OF TRANSPORTATION  
SIGN BOX TRUSS STRUCTURE  
END-SUPPORT  
ANCHOR BOLT AND METAL SKIRT DETAILS



**WALKWAY GRATING PLAN**

**NOTES:**

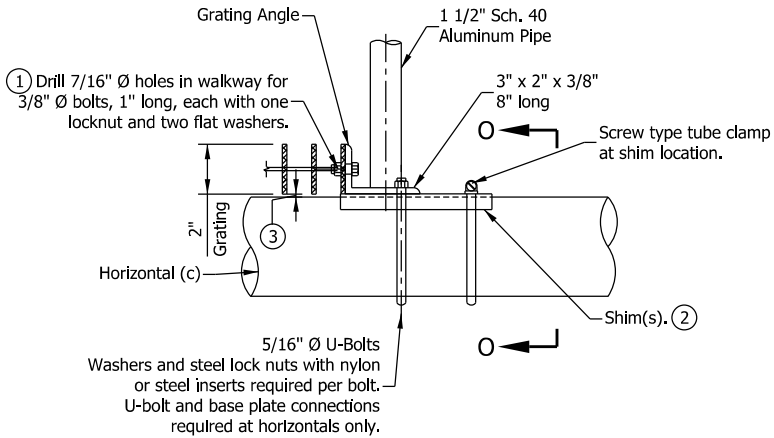
1. Interior walkway gratings shall be extruded I-bars 2" x 1/4" x 1 3/16" center-to-center. Cross bars shall have a maximum gap of 4". Moment of Inertia,  $I_x = 1.382 \text{ in}^4$ . A different grating of equal strength may be used upon approval.
2. Walkway grating width is nominal and may vary  $\pm 1/2"$  based on available standard widths.
3. Interior walkway gratings can be spliced on center of any horizontal truss member as needed. See Sheet 15 for typical interior walkway grating splice detail.
4. Interior walkway grating shall run the full length, center-to-center, of end-support truss members plus 9" at each end.



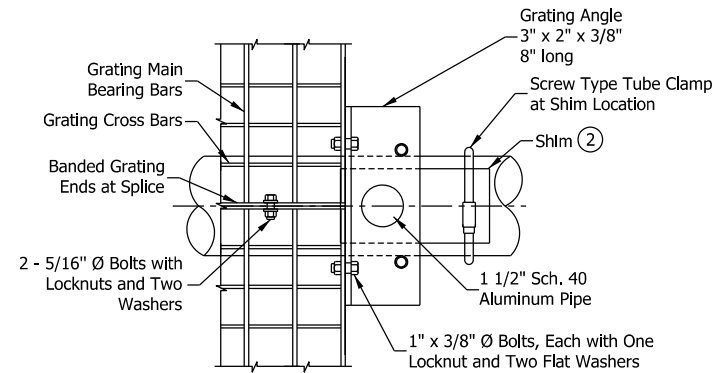
**TYPICAL HANDRAIL DETAIL**

**SECTION N-N**

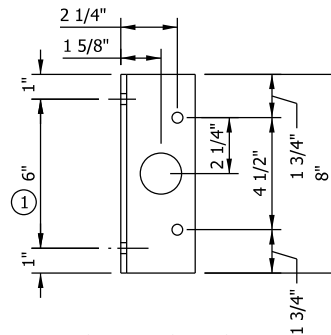
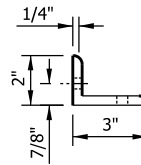
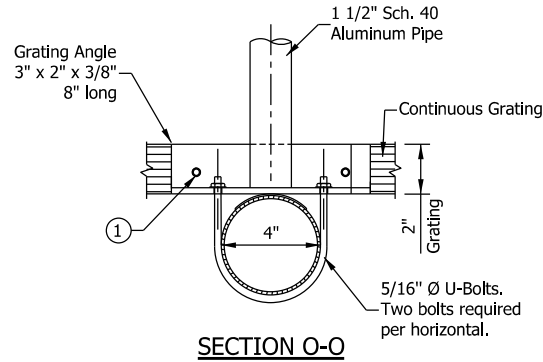
INDIANA DEPARTMENT OF TRANSPORTATION  
SIGN BOX TRUSS STRUCTURE  
INTERIOR WALKWAY GRATING DETAILS



**GRATING SUPPORT DETAIL**



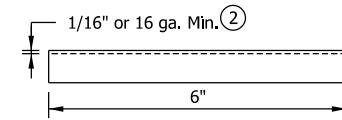
**GRATING SPLICE DETAIL**



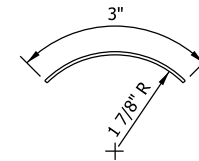
**GRATING ANGLE**

**NOTES:**

- ① Drilling of holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.
- ② Shims may be placed as shown, if needed to compensate for alignment variations between horizontal and diagonal pipes beyond adjustment provided by angles. Thicker shims may be used subject to shims performing properly.
- ③ Tube-to-grating gap may vary from 0 to 1/2" max. to align walkway, allow for camber.

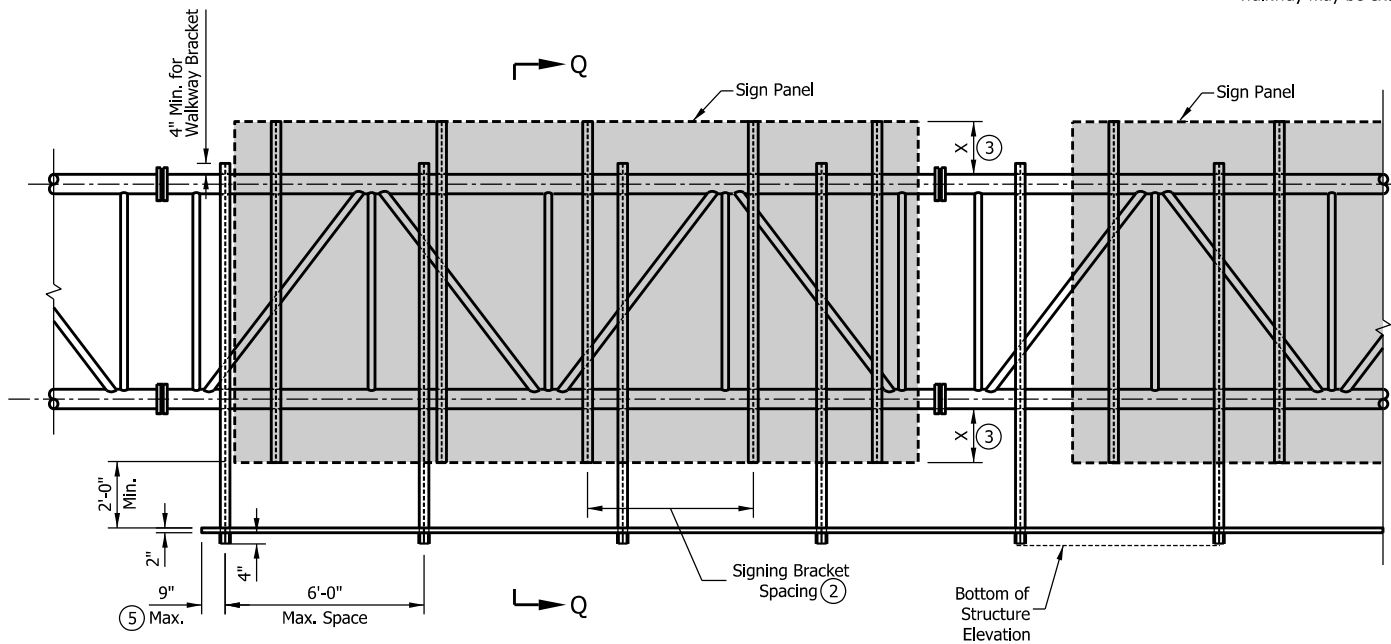


**ELEVATION**



**END VIEW SHIM DETAIL**

INDIANA DEPARTMENT OF TRANSPORTATION  
SIGN BOX TRUSS STRUCTURE  
INTERIOR WALKWAY GRATING DETAILS



**TYPICAL FRONT ELEVATION**  
(Lights & handrail omitted for clarity)

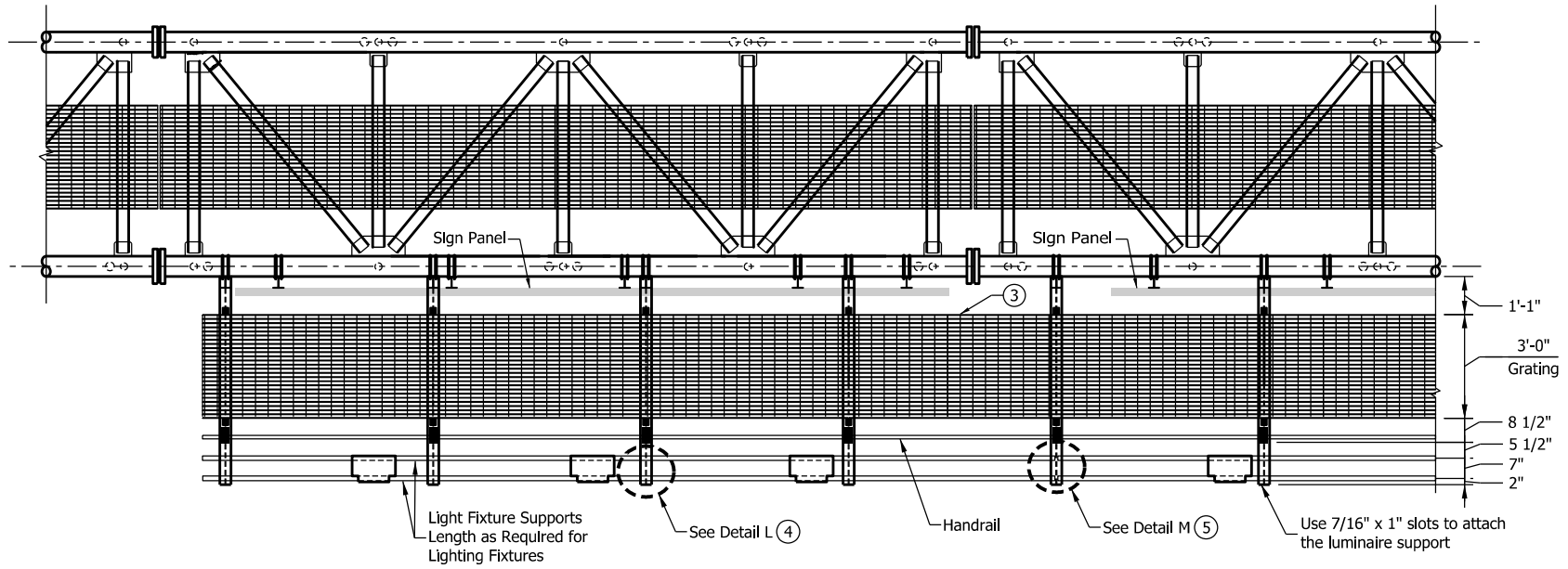
**NOTES:**

1. For location and data for sign panels, see plan details cross section.
- ② Signs > 7' in height, bracket spacing 5' max.  
Signs ≤ 7' in height, bracket spacing 7' max.
- ③ Dimension X depends on the height of the sign. Sign is to be centered vertically on truss.
4. See Sheets 17 for Plan, and 18 for Section Q-Q.
- ⑤ Sign shall be installed on truss with independent brackets WF (A-N) 4 x 3.06. Lighting walkway may be extended to comply with the 9" maximum unsupported grating.

INDIANA DEPARTMENT OF TRANSPORTATION

SIGN BOX TRUSS STRUCTURE  
LIGHTING WALKWAY



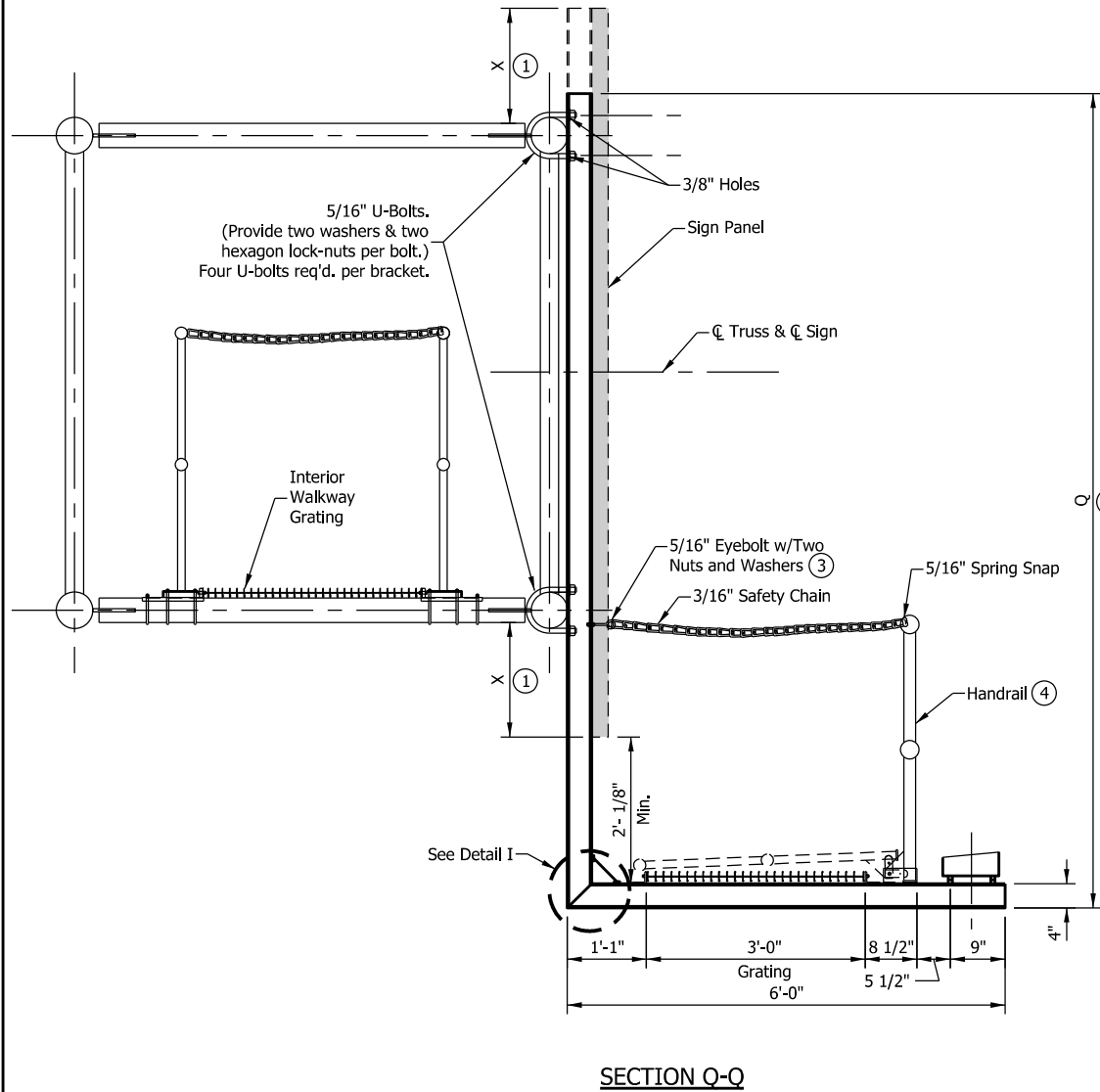


PLAN

**NOTES:**

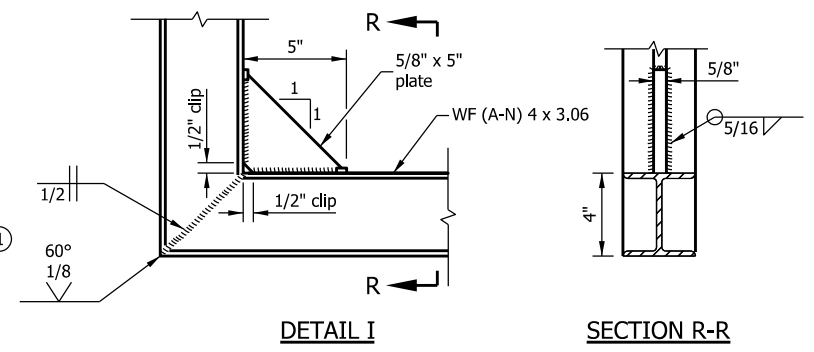
1. Handrail and grating shall span a minimum of 3 brackets.
2. Grating splice located on center of L-bracket only. See Sheet 21, Detail M.
3. Lighting walkway gratings are extruded I-bars 2" x 1/4" spaced at 1 3/16" center-to-center. Cross bars shall have a maximum gap of 4". Moment of Inertia,  $I_x = 1.382 \text{ in}^4$ . A different grating of equal strength may be used upon approval.
4. See Sheet 21, Detail L.
5. See Sheet 21, Detail M.

INDIANA DEPARTMENT OF TRANSPORTATION
SIGN BOX TRUSS STRUCTURE LIGHTING WALKWAY

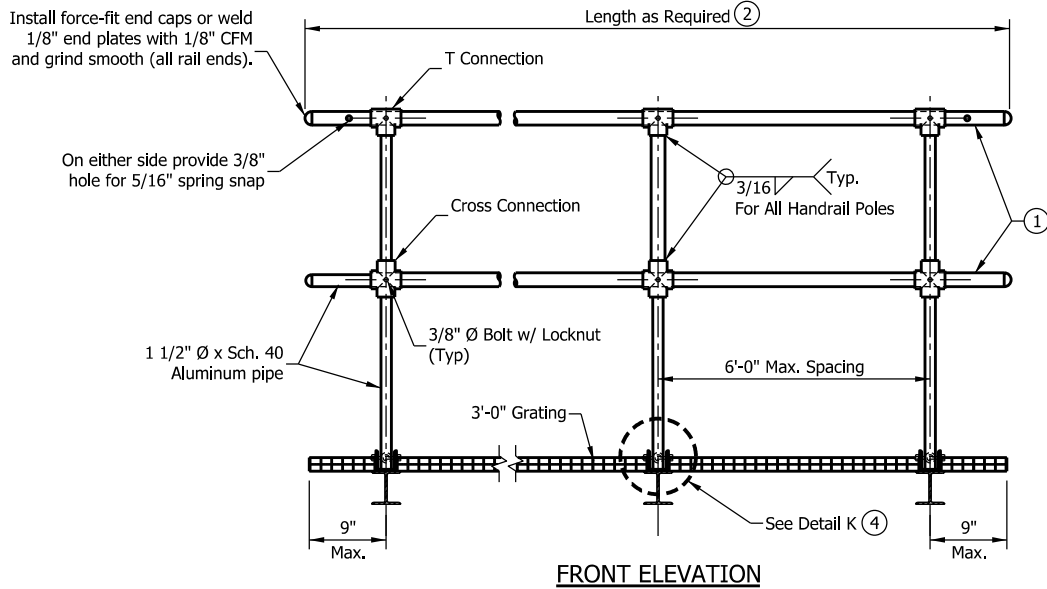


**NOTES:**

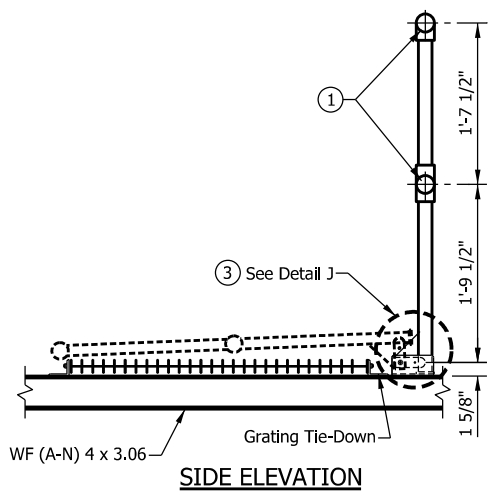
1. Dimensions X and Q to be determined by Contractor to fit signs.
2. Sign panel shall be placed symmetrically about centerline of truss.
- ③ Eyebolt shall be attached to web of bracket at approximate elevation of upper handrail pipe.
- ④ See Sheet 19 for handrail details.



INDIANA DEPARTMENT OF TRANSPORTATION  
 SIGN BOX TRUSS STRUCTURE  
 LIGHTING WALKWAY PROFILE



FRONT ELEVATION

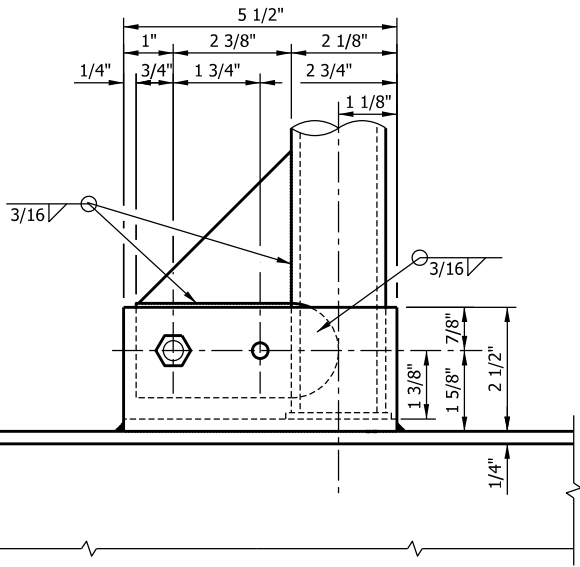


SIDE ELEVATION

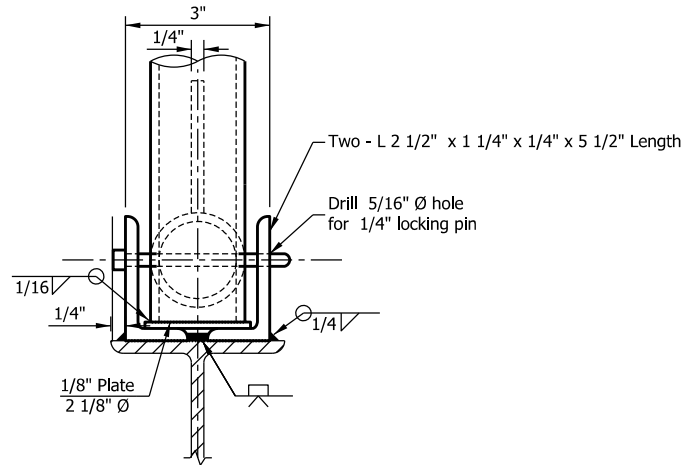
**NOTES:**

- ① Horizontal rail member shall be continuous through fitting. Manufacturer shall provide 7/16" holes for fitting 3/8" bolt. Field drill 7/16" hole in horizontal rail member. Attach handrail with 3/8" bolt, washer, and locknut.
- ② Rail and grating shall span a minimum of three brackets.
- ③ See Sheet 20 for Detail J.
- ④ See Sheet 20 for Detail K.

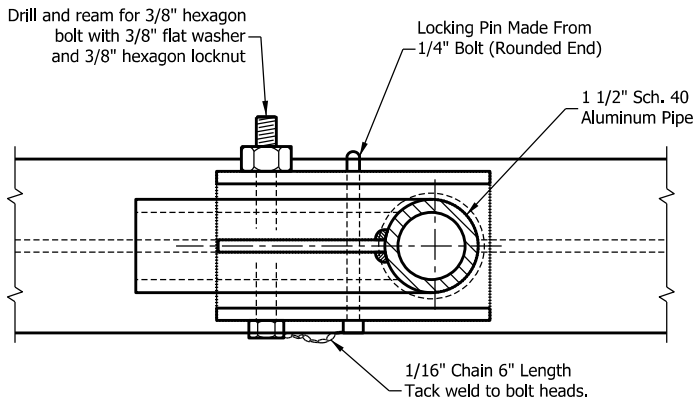
INDIANA DEPARTMENT OF TRANSPORTATION  
 SIGN BOX TRUSS STRUCTURE  
 LIGHTING WALKWAY AND  
 HANDRAIL ASSEMBLY



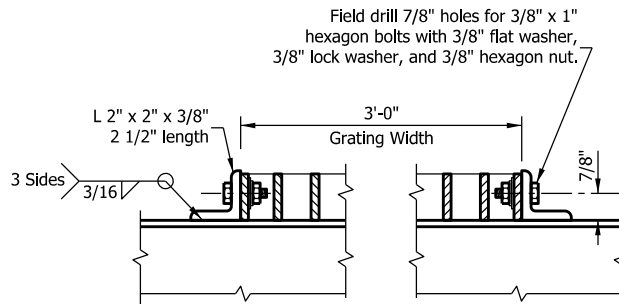
**DETAIL J**  
**SIDE ELEVATION**



**DETAIL K**  
**FRONT ELEVATION**

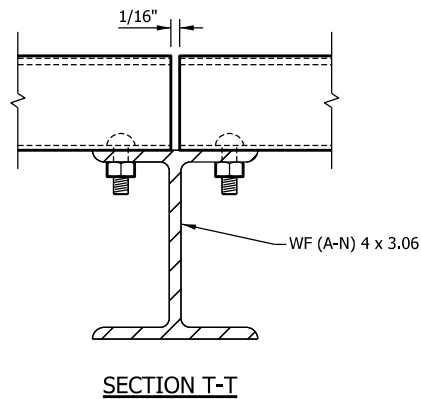
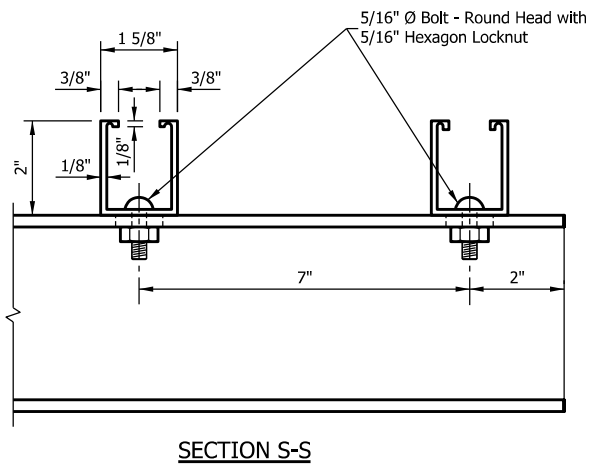
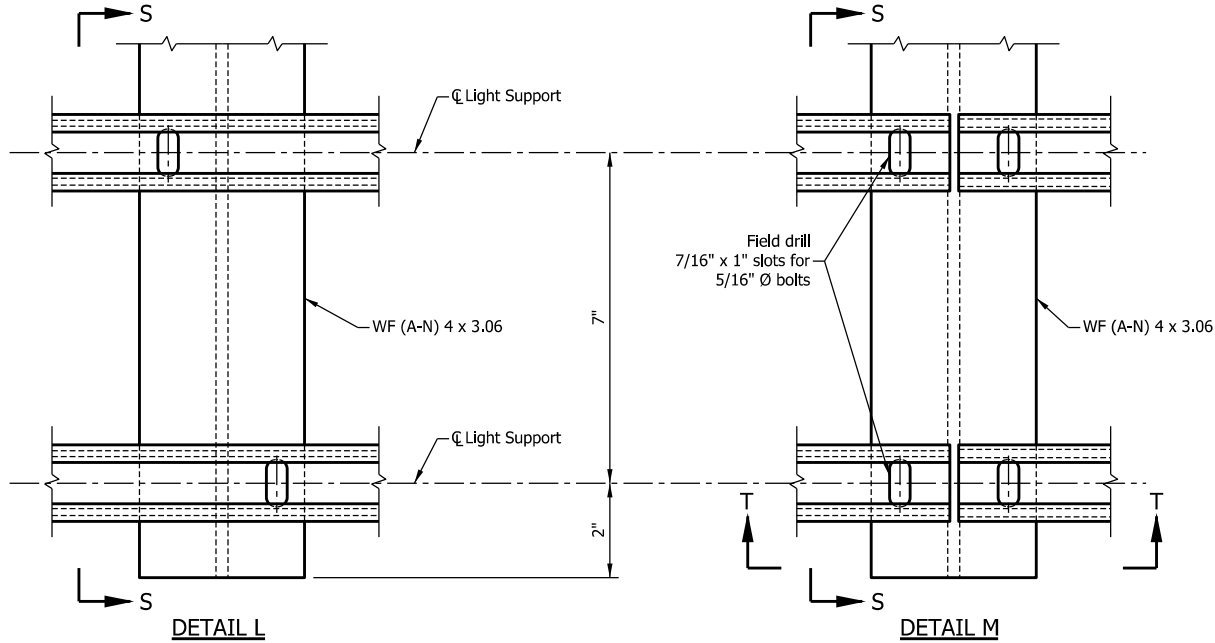


**PLAN**  
**DETAILS OF HANDRAIL HINGE**

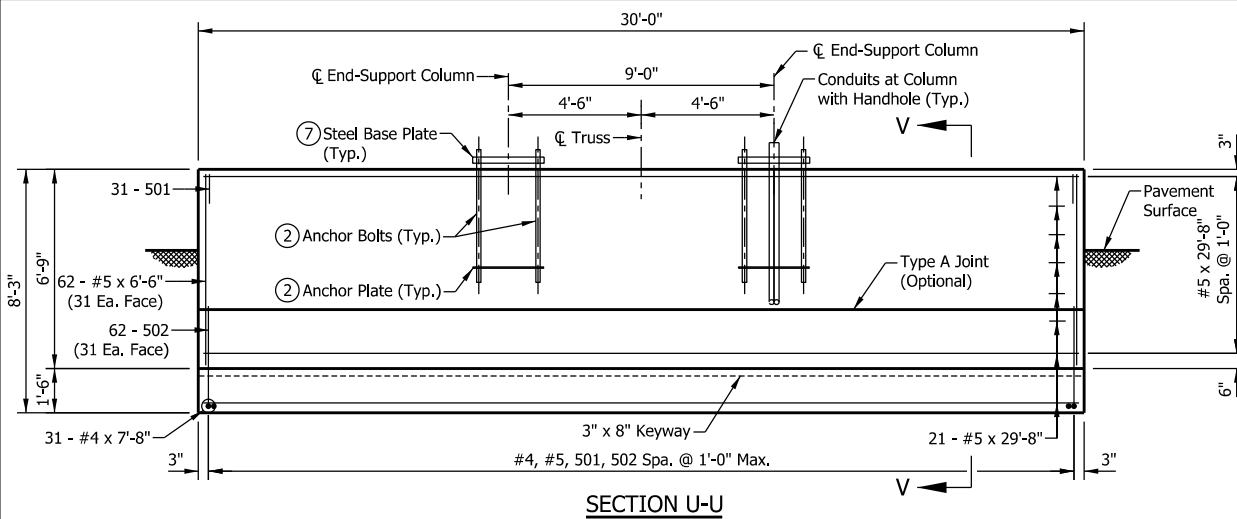


**GRATING TIE DOWN**  
(Two req'd per walkway bracket)

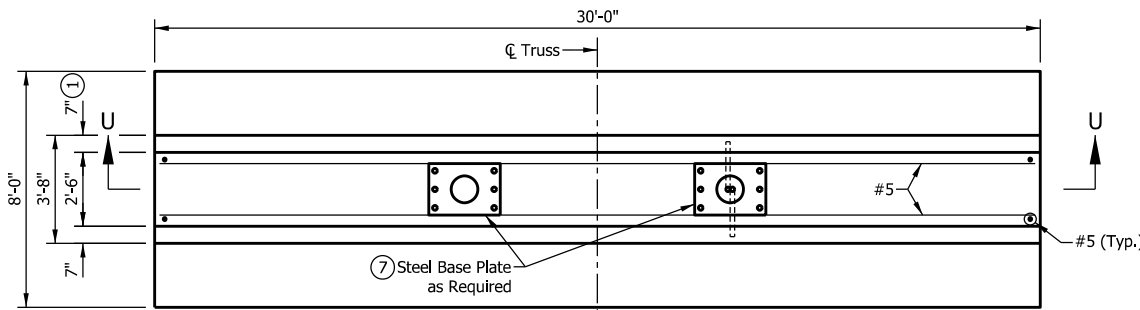
INDIANA DEPARTMENT OF TRANSPORTATION  
SIGN BOX TRUSS STRUCTURE  
LIGHTING WALKWAY, HANDRAIL HINGE, AND  
GRATING DETAILS



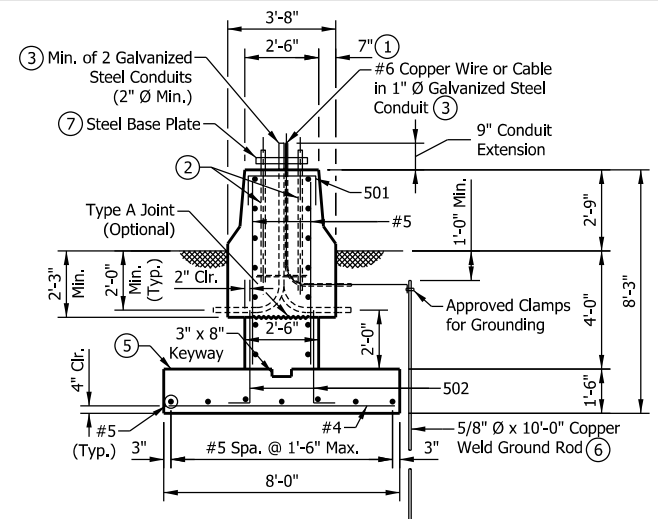
INDIANA DEPARTMENT OF TRANSPORTATION  
SIGN BOX TRUSS STRUCTURE  
LIGHTING WALKWAY  
FIXTURE MOUNT DETAILS



SECTION U-U



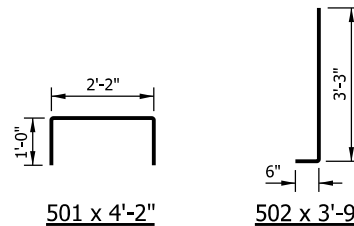
PLAN



SECTION V-V

NOTES:

- ① See Standard Drawing E 602-CCMB-03 for barrier wall width transition.
- ② See Sheet 13 for anchor bolt and anchor plate details.
- ③ Thread and cap both ends of steel conduit.
4. See Sheet 25 for quantities.
- ⑤ Top of the footing shall be a minimum of 4'-0" below the pavement or ground surface.
- ⑥ Only one ground rod per structure is required.
- ⑦ See Sheet 11 for base plate detail.

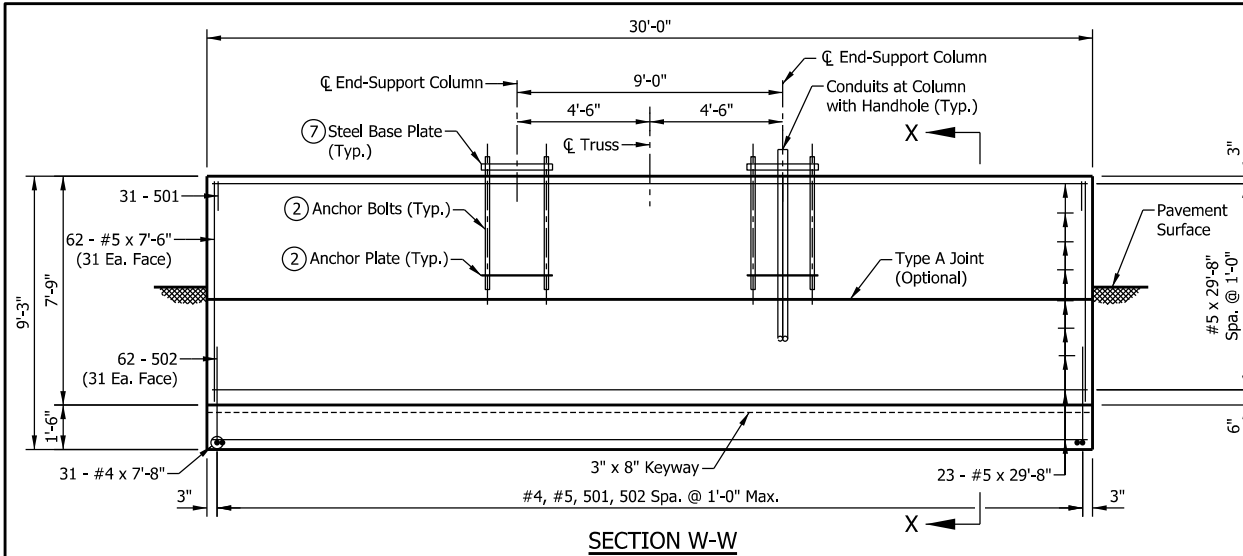


501 x 4'-2"

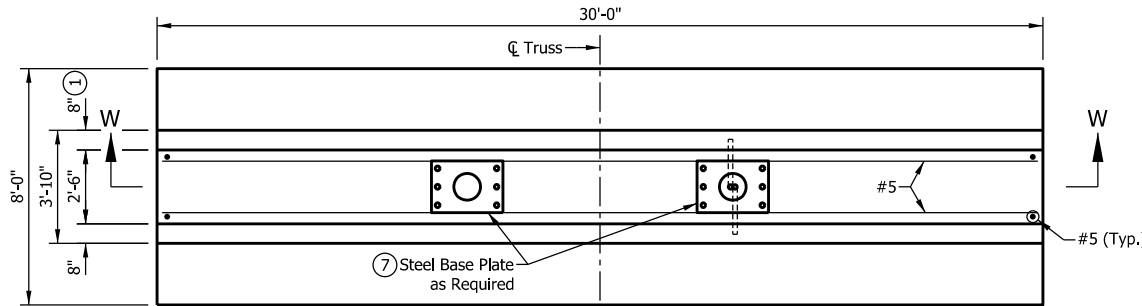
502 x 3'-9"

INDIANA DEPARTMENT OF TRANSPORTATION

SIGN BOX TRUSS STRUCTURE  
SPREAD FOUNDATION  
AT 33" CONCRETE BARRIER WALL



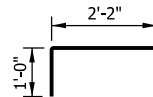
**SECTION W-W**



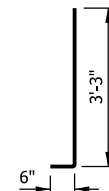
**PLAN**

**NOTES:**

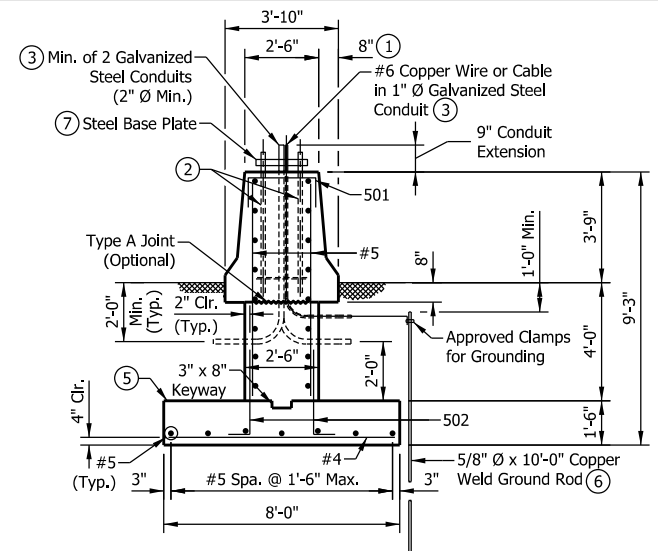
- ① See Standard Drawing E 602-CCMB-03 for barrier wall width transition.
- ② See Sheet 13 for anchor bolt and anchor plate details.
- ③ Thread and cap both ends of steel conduit.
4. See Sheet 25 for quantities.
- ⑤ Top of the footing shall be a minimum of 4'-0" below the pavement or ground surface.
- ⑥ Only one ground rod per structure is required.
- ⑦ See Sheet 11 for base plate details.



**501 x 4'-2"**



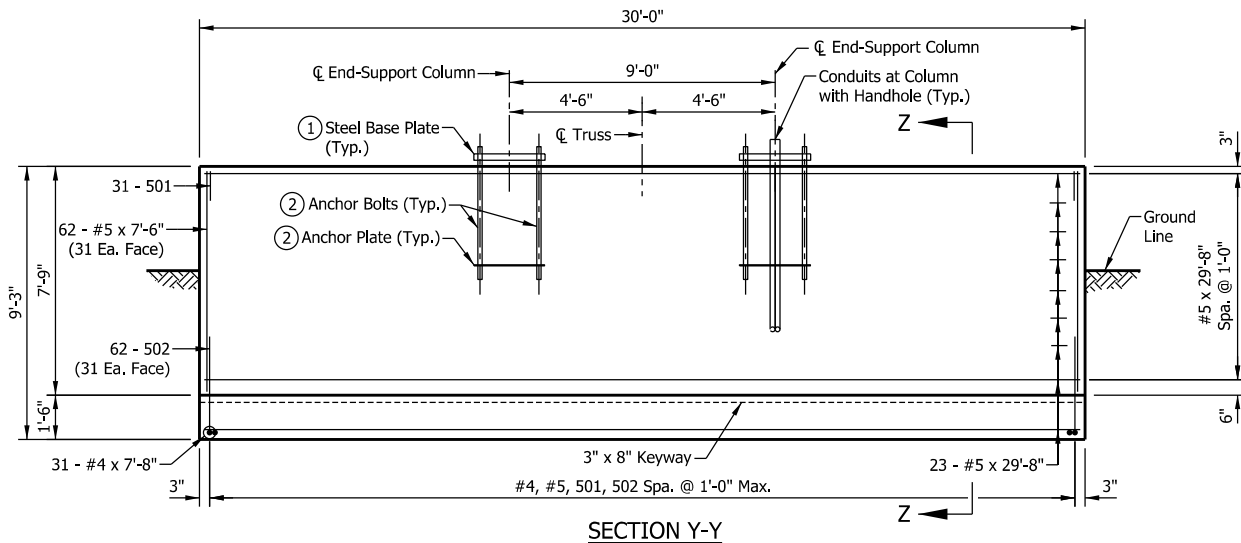
**502 x 3'-9"**



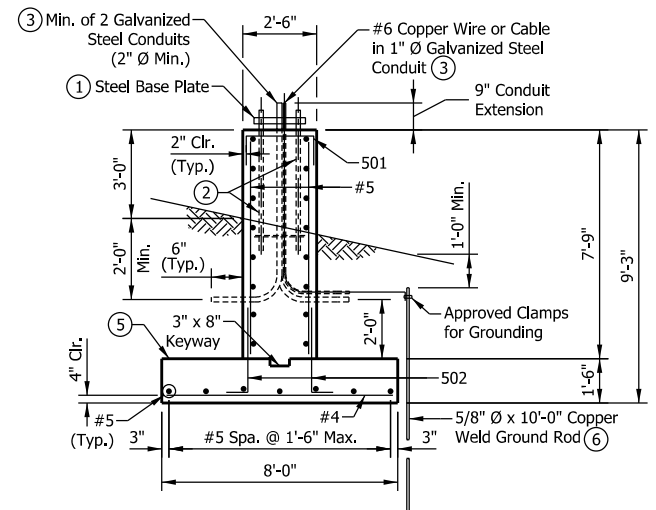
**SECTION X-X**

INDIANA DEPARTMENT OF TRANSPORTATION

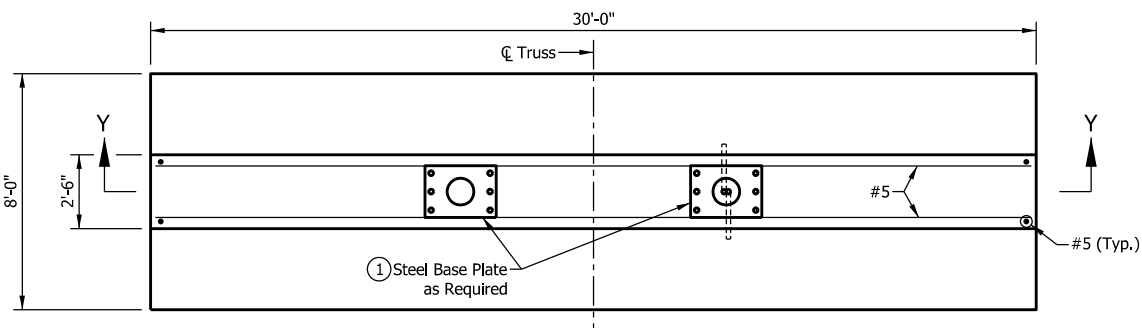
**SIGN BOX TRUSS STRUCTURE  
SPREAD FOUNDATION  
AT 45" CONCRETE BARRIER WALL**



SECTION Y-Y



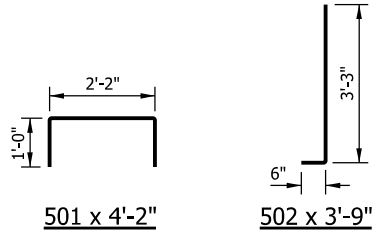
SECTION Z-Z



PLAN

NOTES:

- ① See Sheet 11 for base plate details.
- ② See Sheet 13 for anchor bolt and anchor plate details.
- ③ Thread and cap both ends of steel conduit.
- 4. See Sheet 25 for quantities.
- ⑤ Top of the footing shall be a minimum of 4'-0" below the pavement or ground surface.
- ⑥ Only one ground rod per structure is required.



INDIANA DEPARTMENT OF TRANSPORTATION

**SIGN BOX TRUSS STRUCTURE  
SPREAD FOUNDATION  
FOR MEDIAN OR SHOULDER, 36" HEIGHT**



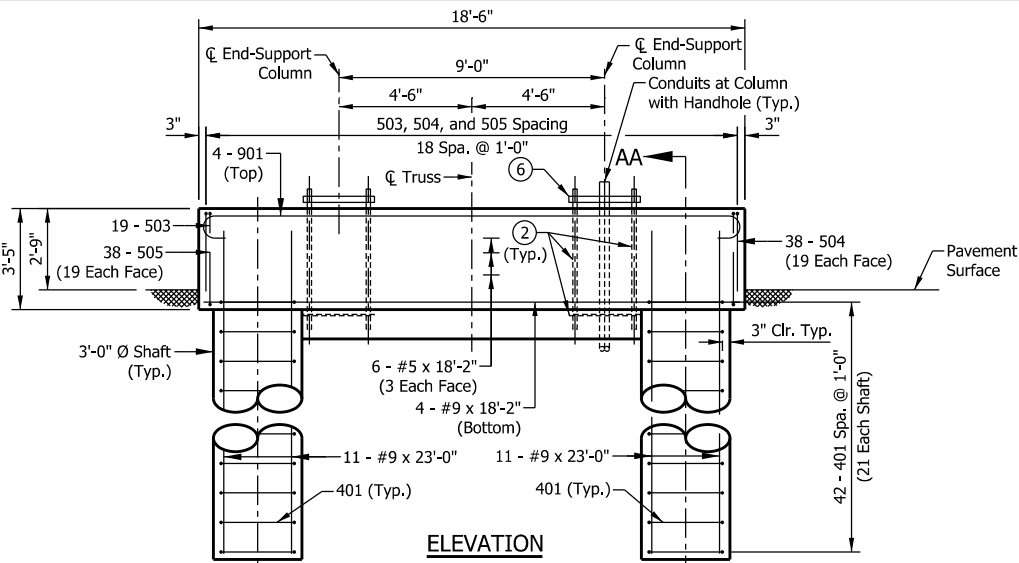
SPREAD FOUNDATION AT 33" CONCRETE BARRIER WALL			
EPOXY-COATED REINFORCING BARS			
MARK OR SIZE	NO. OF BARS	LENGTH	WEIGHT
501	31	4'-2"	
502	62	3'-9"	
#5	62	6'-6"	
#5	21	29'-8"	
Total #5			1447 LBS
#4	31	7'-8"	
Total #4			159 LBS
Total Epoxy-Coated Reinforcing Bars			1606 LBS
CONCRETE, CLASS A			
Total Concrete, Class A			35.8 CYS
MISCELLANEOUS			
Surface Seal			27.6 SYS

SPREAD FOUNDATION AT 45" CONCRETE BARRIER WALL			
EPOXY-COATED REINFORCING BARS			
MARK OR SIZE	NO. OF BARS	LENGTH	WEIGHT
501	31	4'-2"	
502	62	3'-9"	
#5	62	7'-6"	
#5	23	29'-8"	
Total #5			1574 LBS
#4	31	7'-8"	
Total #4			159 LBS
Total Epoxy-Coated Reinforcing Bars			1733 LBS
CONCRETE, CLASS A			
Total Concrete, Class A			37.6 CYS
MISCELLANEOUS			
Surface Seal			34.3 SYS

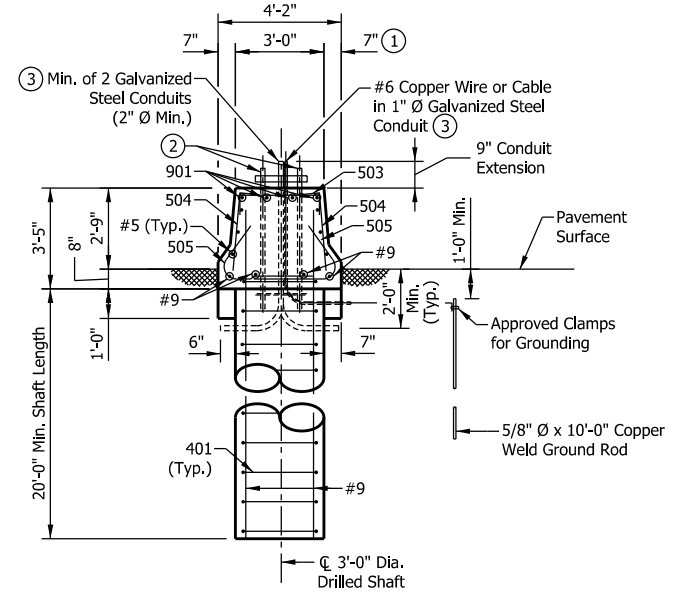
SPREAD FOUNDATION FOR MEDIAN OR SHOULDER, 36" HEIGHT			
EPOXY-COATED REINFORCING BARS			
MARK OR SIZE	NO. OF BARS	LENGTH	WEIGHT
501	31	4'-2"	
502	62	3'-9"	
#5	62	7'-6"	
#5	23	29'-8"	
Total #5			1574 LBS
#4	31	7'-8"	
Total #4			159 LBS
Total Epoxy-Coated Reinforcing Bars			1733 LBS
CONCRETE, CLASS A			
Total Concrete, Class A			34.9 CYS
MISCELLANEOUS			
Surface Seal			28.3 SYS

INDIANA DEPARTMENT OF TRANSPORTATION

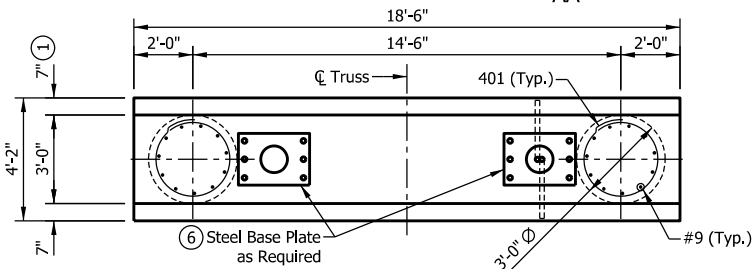
SIGN BOX TRUSS STRUCTURE  
SPREAD FOUNDATIONS  
QUANTITIES



**ELEVATION**



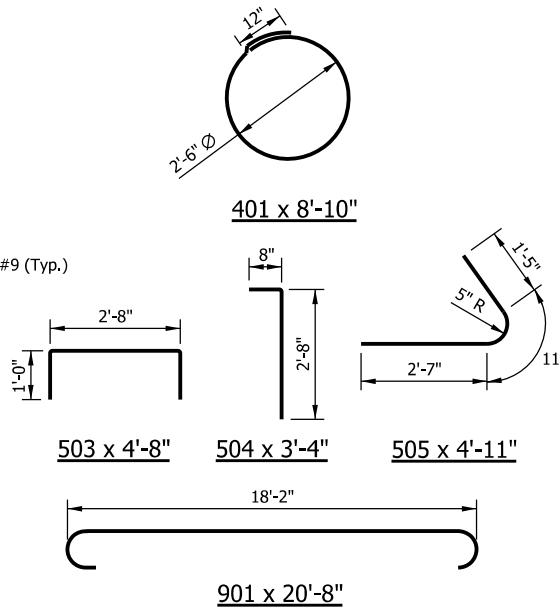
**SECTION AA-AA**



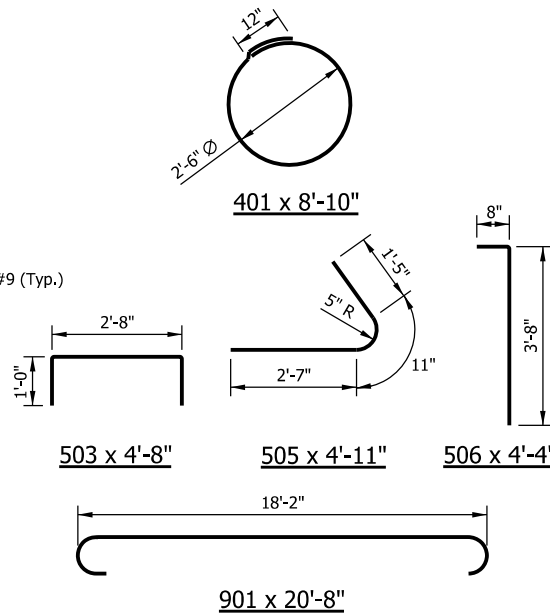
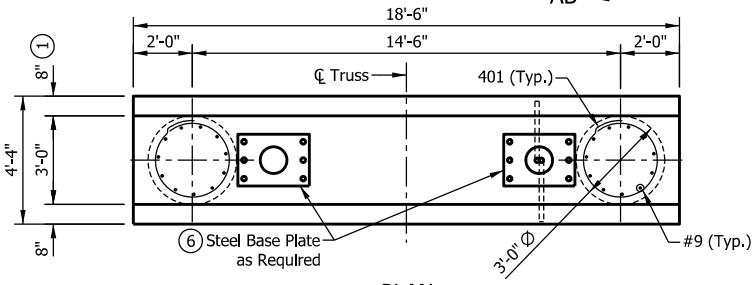
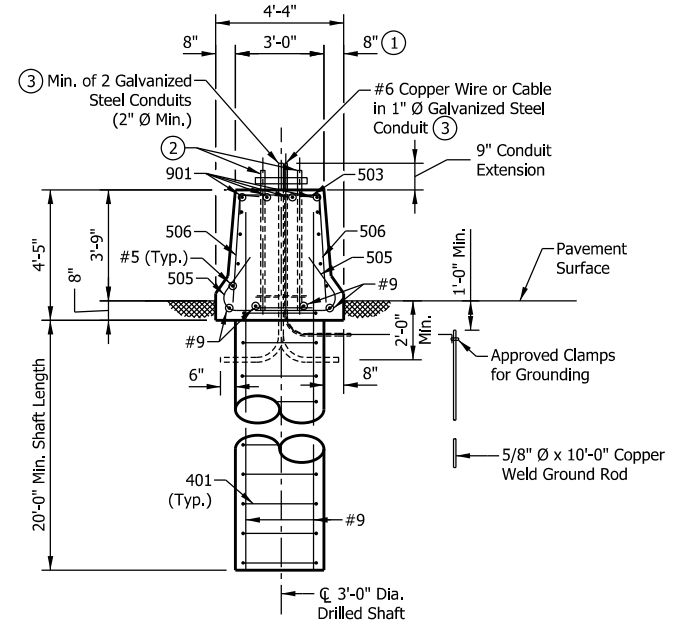
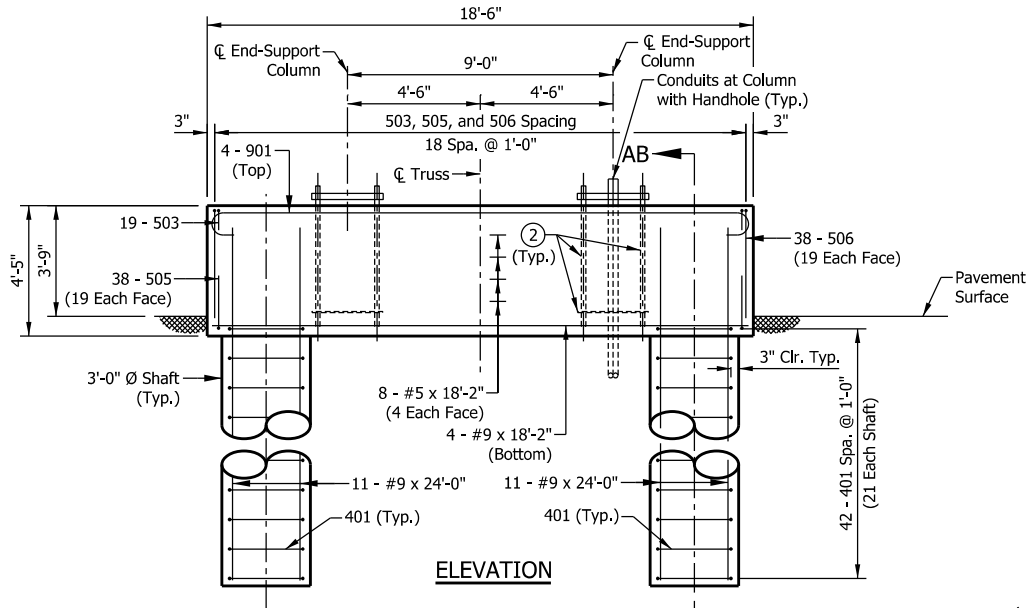
**PLAN**

**NOTES:**

- ① See Standard Drawing E 602-CCMB-03 for barrier wall width transition.
- ② See Sheet 13 for anchor bolt and anchor plate details.
- ③ Thread and cap both ends of steel conduit.
- 4. See Sheet 29 for quantities.
- 5. See Standard Drawing E 703-BRST-01 for reinforcing-bar bending details and notes.
- ⑥ See Sheet 11 for base plate details.



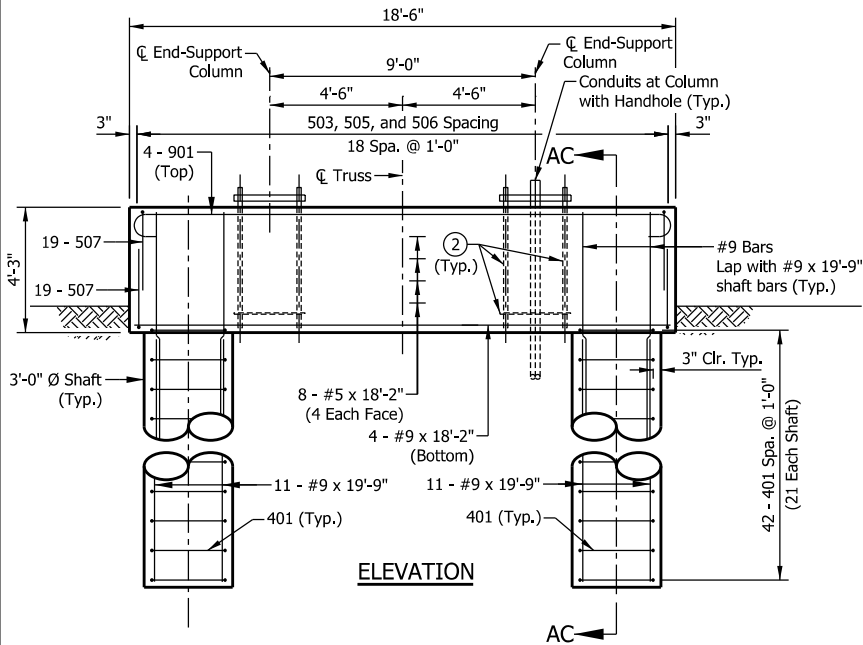
INDIANA DEPARTMENT OF TRANSPORTATION  
**SIGN BOX TRUSS STRUCTURE  
 ALTERNATE DRILLED SHAFT FOUNDATION  
 AT 33" CONCRETE BARRIER WALL**



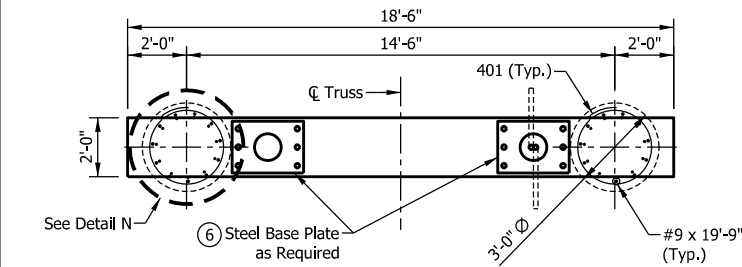
**NOTES:**

- ① See Standard Drawing E 602-CCMB-03 for barrier wall width transition.
- ② See Sheet 13 for anchor bolt and anchor plate details.
- ③ Thread and cap both ends of steel conduit.
4. See Sheet 29 for quantities.
5. See Standard Drawing E 703-BRST-01 for reinforcing-bar bending details and notes.
- ⑥ See Sheet 11 for base plate details.

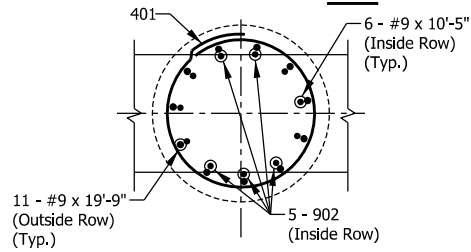
INDIANA DEPARTMENT OF TRANSPORTATION  
**SIGN BOX TRUSS STRUCTURE  
 ALTERNATE DRILLED SHAFT FOUNDATION  
 AT 45" CONCRETE BARRIER WALL**



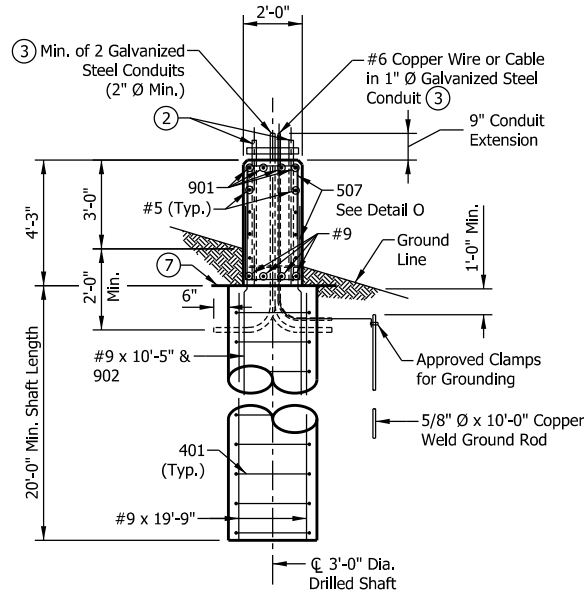
**ELEVATION**



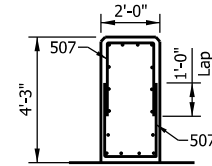
**PLAN**



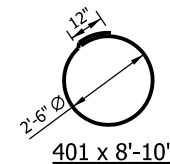
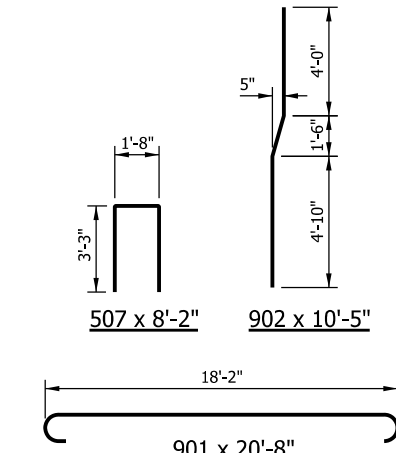
**DETAIL N**



**SECTION AC-AC**



**DETAIL O**



**401 x 8'-10"**

**901 x 20'-8"**

**NOTES:**

- ① See Standard Drawing E 602-CCMB-03 for barrier wall width transition.
- ② See Sheet 13 for anchor bolt and anchor plate details.
- ③ Thread and cap both ends of steel conduit.
4. See Sheet 29 for quantities.
5. See Standard Drawing E 703-BRST-01 for reinforcing-bar bending details and notes.
- ⑥ See Sheet 11 for base plate details.
- ⑦ Top of foundation shall be level.

INDIANA DEPARTMENT OF TRANSPORTATION

**SIGN BOX TRUSS STRUCTURE  
ALTERNATE DRILLED SHAFT FOUNDATION  
FOR MEDIAN OR SHOULDER, 36" HEIGHT**

ALTERNATE DRILLED SHAFT FOUNDATION AT 33" CONCRETE BARRIER WALL			
EPOXY-COATED REINFORCING BARS			
MARK OR SIZE	NO. OF BARS	LENGTH	WEIGHT
901	4	20'-8"	
#9	4	18'-2"	
#9	22	23'-0"	
Total #9			2249 LBS
503	19	4'-8"	
504	38	3'-4"	
505	38	4'-11"	
#5	6	18'-2"	
Total #5			533 LBS
401	42	8'-10"	
Total #4			248 LBS
Total Epoxy-Coated Reinforcing Bars			3030 LBS
CONCRETE, CLASS A			
Total Concrete, Class A			20.0 CYS
MISCELLANEOUS			
Surface Seal			17.6 SYS

ALTERNATE DRILLED SHAFT FOUNDATION AT 45" CONCRETE BARRIER WALL			
EPOXY-COATED REINFORCING BARS			
MARK OR SIZE	NO. OF BARS	LENGTH	WEIGHT
901	4	20'-8"	
#9	4	18'-2"	
#9	22	24'-0"	
Total #9			2323 LBS
503	19	4'-8"	
505	38	4'-11"	
506	38	4'-4"	
#5	8	18'-2"	
Total #5			611 LBS
401	42	8'-10"	
Total #4			248 LBS
Total Epoxy-Coated Reinforcing Bars			3182 LBS
CONCRETE, CLASS A			
Total Concrete, Class A			20.8 CYS
MISCELLANEOUS			
Surface Seal			21.7 SYS

ALTERNATE DRILLED SHAFT FOUNDATION FOR MEDIAN OR SHOULDER, 36" HEIGHT			
EPOXY-COATED REINFORCING BARS			
MARK OR SIZE	NO. OF BARS	LENGTH	WEIGHT
901	4	20'-8"	
902	10	10'-5"	
#9	4	18'-2"	
#9	12	10'-5"	
#9	22	19'-9"	
Total #9			2785 LBS
507	38	8'-2"	
#5	8	18'-2"	
Total #5			475 LBS
401	42	8'-10"	
Total #4			248 LBS
Total Epoxy-Coated Reinforcing Bars			3508 LBS
CONCRETE, CLASS A			
Total Concrete, Class A			16.3 CYS
MISCELLANEOUS			
Surface Seal			21.6 SYS

INDIANA DEPARTMENT OF TRANSPORTATION  
SIGN BOX TRUSS STRUCTURE  
ALTERNATE DRILLED SHAFT FOUNDATIONS  
QUANTITIES