

GENERAL NOTES:

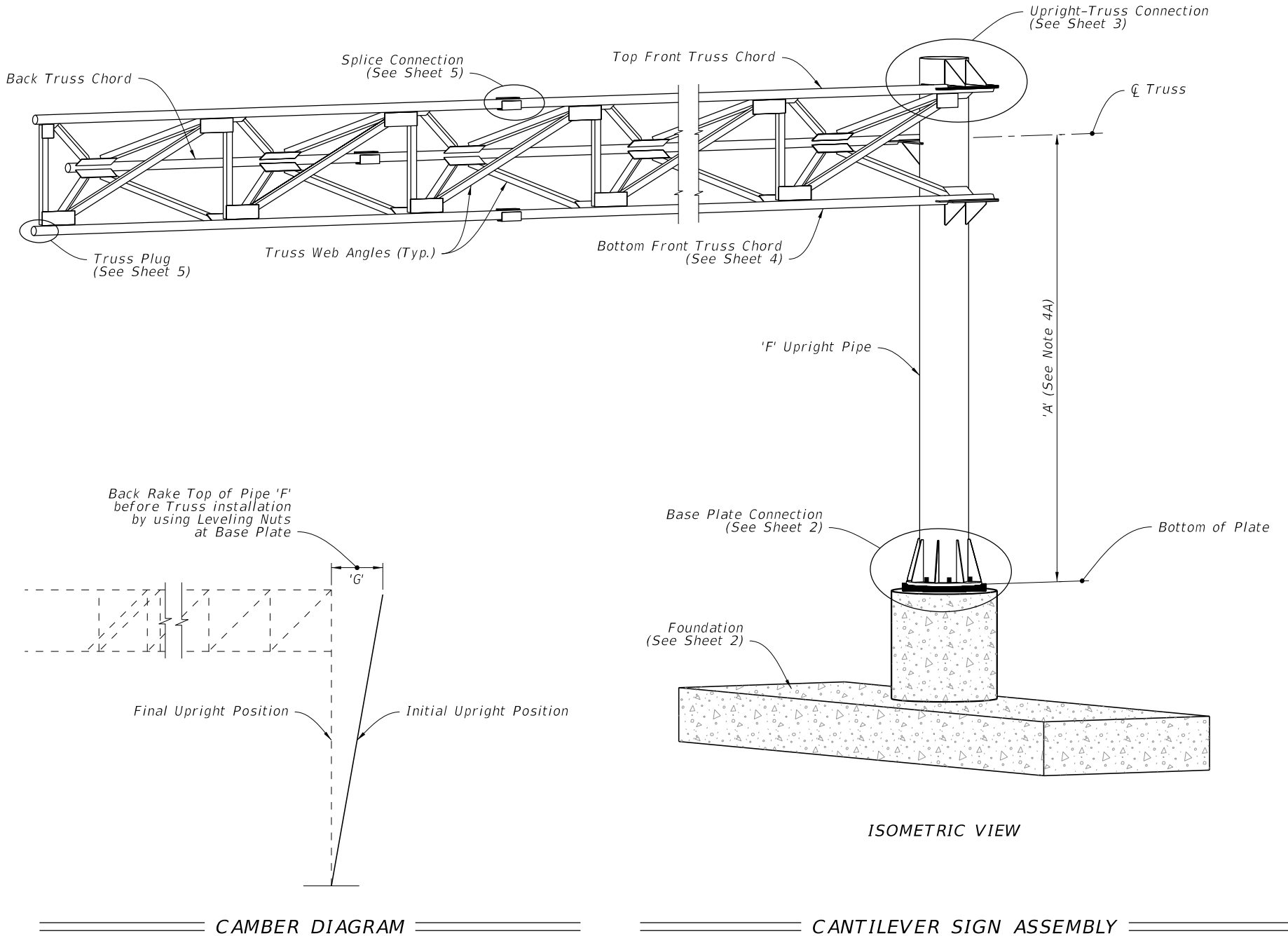
- 1. Meet the requirements of Specification 700.
- 2. Work this Index in conjunction with CANTILEVER SIGN STRUCTURE DATA TABLES in the Plans and Index 700-030.
- 3. Handholes are required at pole base for DMS Structures. Refer to Index 700-090 for Handhole Details.
- 4. Shop Drawings are required.

Obtain Shop Drawing approval prior to fabrication. Include the following:

- A. Upright Pipe height ('A') and Foundation elevations: Verify dimension in the field prior to submittal to ensure minimum vertical clearances of the sign panel over the roadway.
- B. Height of the foundation above adjacent ground.
- C. Anchor bolt orientation with respect to centerline of truss and the direction of traffic.
- D. Chord Splices
- E. Handholes at pole base (when required).

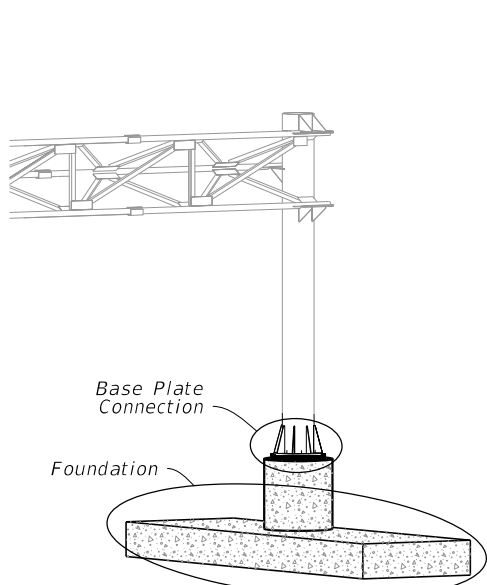
5. Materials:

- A. Sign Structure:
 - a. Upright and Chords (Steel Pipe): API 5L X42 PSL2, 42 ksi yield or ASTM A500, Grade B (Min.)
 - b. Steel Angles and Structural Plates and Bars: ASTM A709 Grade 36
- B. Bolts, Nuts and Washers:
 - a. High Strength Bolts: ASTM F3125, Grade A325 Type 1
 - b. Nuts: ASTM A563 Grade DH Heavy-Hex
 - c. Washers: ASTM F436 Type 1, one under turned element
- C. Anchor Bolts, Nuts and Washers
 - a. Anchor Bolts: ASTM F1554 Grade 55
 - b. Nuts: ASTM A563 Grade A Heavy-Hex (5 per bolt)
 - c. Plate Washers: ASTM A36 (2 per bolt)

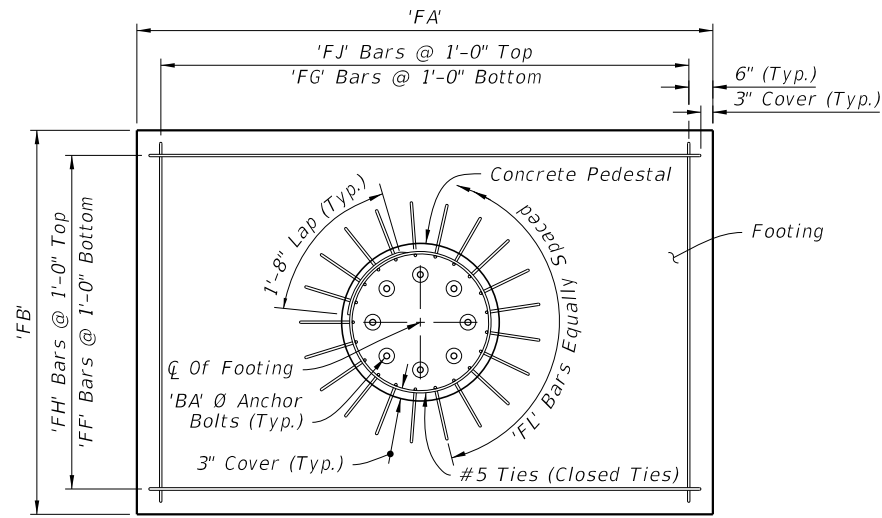


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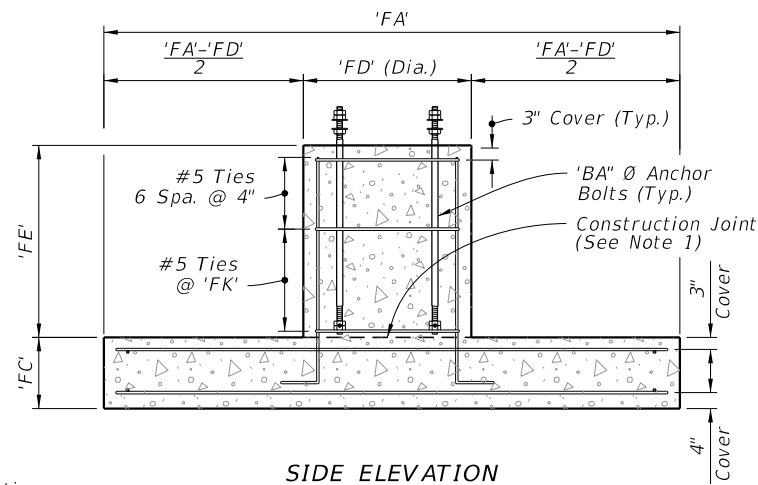
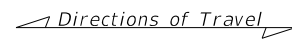
LAST REVISION	DESCRIPTION:	FY 2027-28 STANDARD PLANS	CANTILEVER SIGN STRUCTURE	INDEX	SHEET
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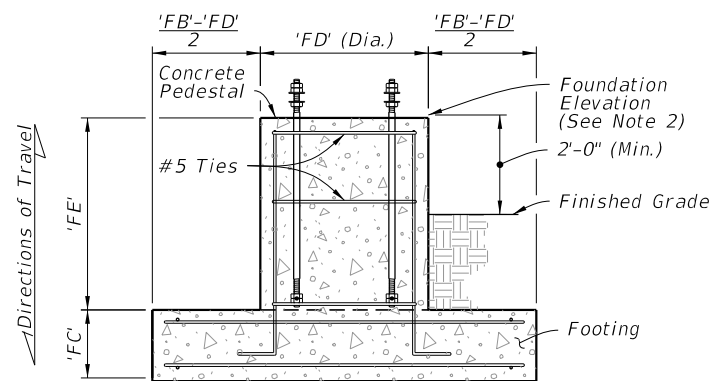
CANTILEVER ASSEMBLY



PLAN

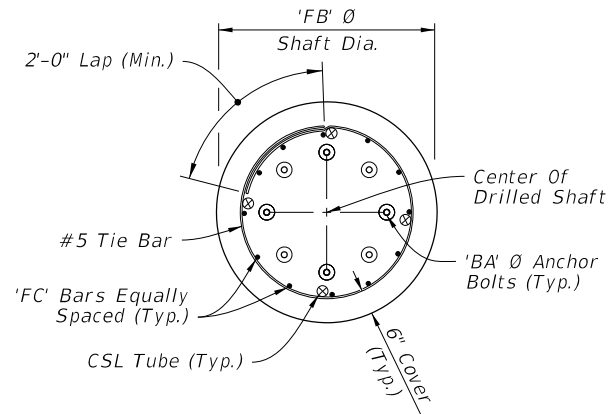


SIDE ELEVATION

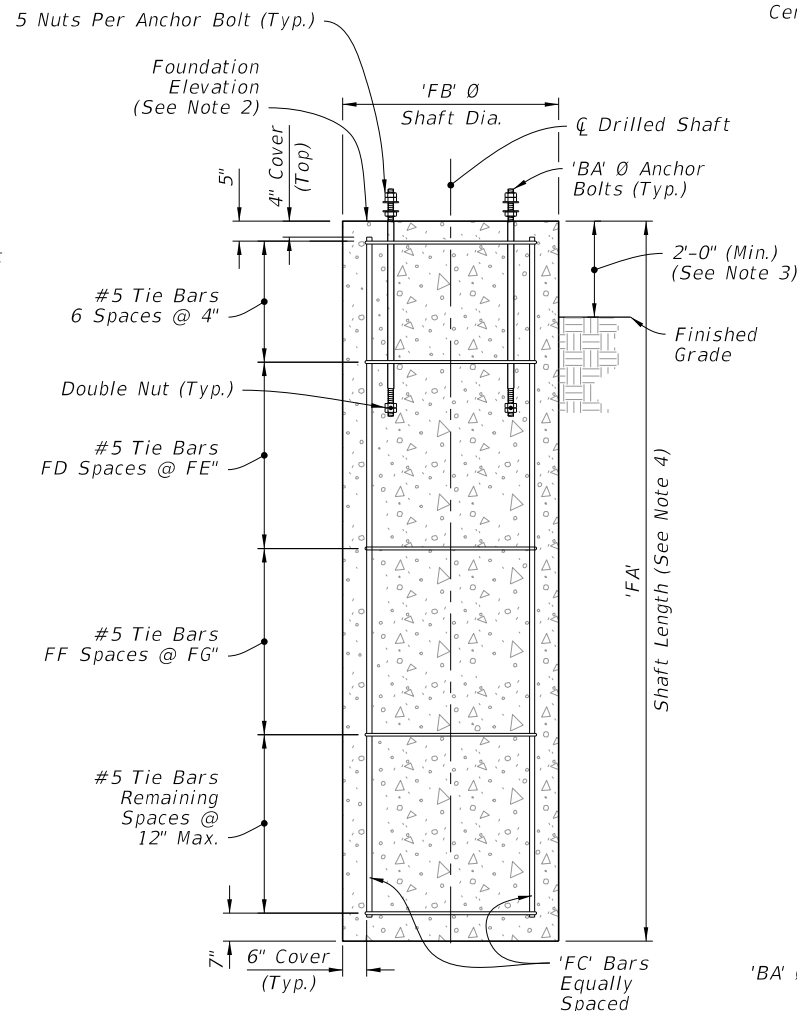


FRONT ELEVATION

FOOTING AND PEDESTAL

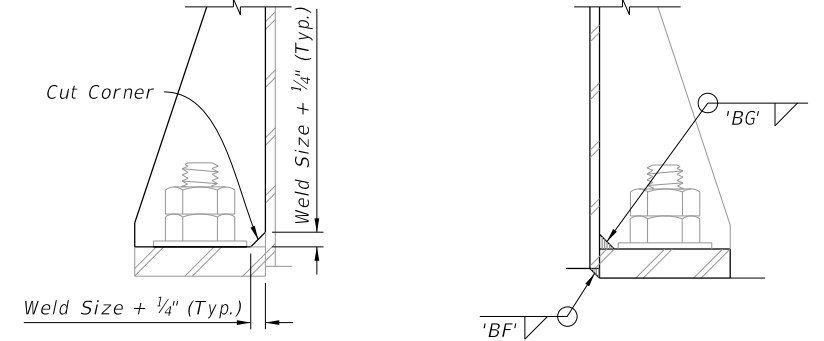


PLAN



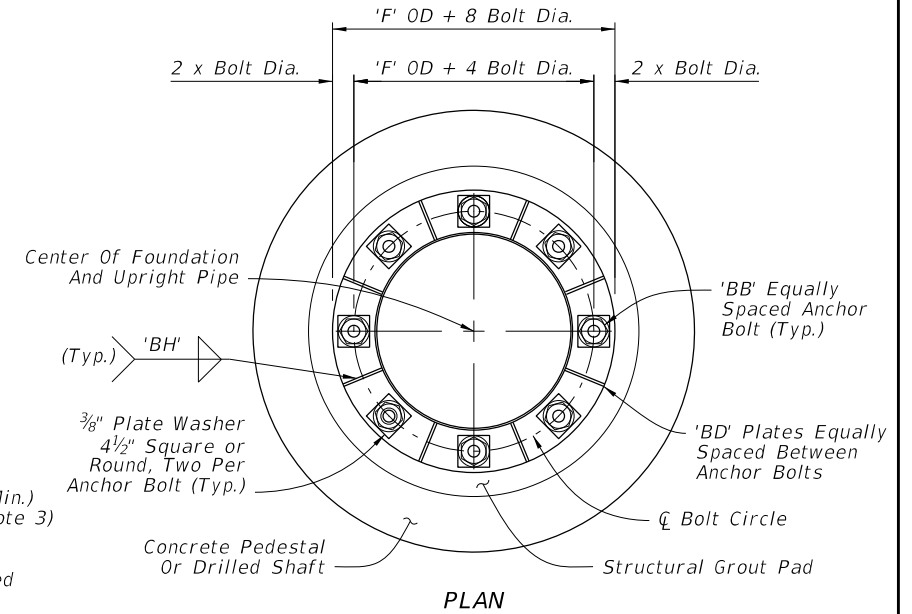
ELEVATION

DRILLED SHAFT
(Alternate Foundation)

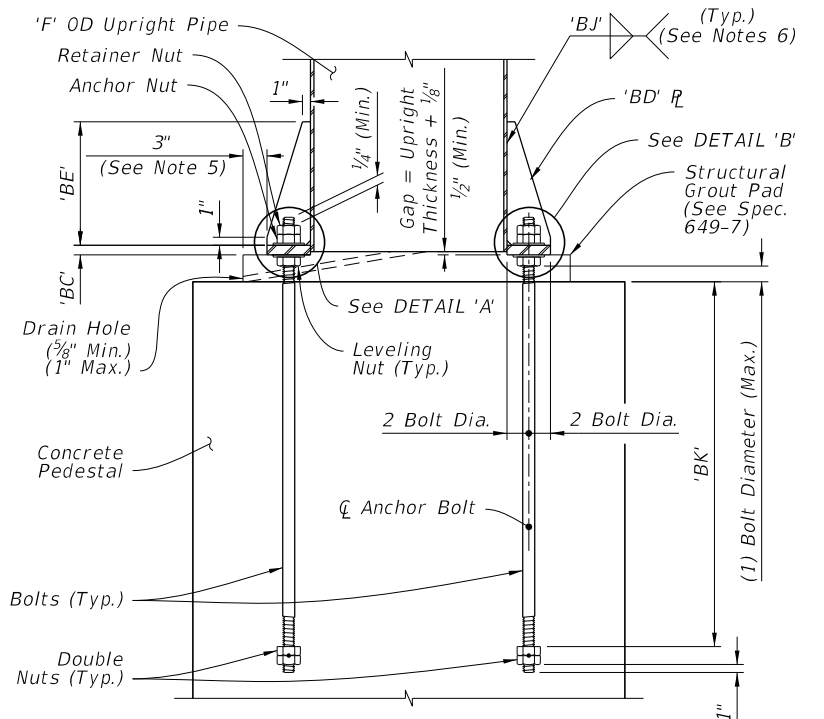


DETAIL 'A'

DETAIL 'B'



PLAN



ELEVATION

BASE PLATE CONNECTION

NOTES:

1. Construction joint allowed, roughen surface to 1/4" minimum amplitude prior to pour.
2. See Traffic Plans for elevation at top of Foundation.
3. Install Drilled Shaft with a 2'-0" minimum from top elevation of the drilled shaft to the finished grade, unless specified otherwise in the plans.
4. The shaft length is based on 2'-0" height above finished grade.
5. Structural Grout Pad dimension may be modified to be less than 3" where the footprint of the Structural Grout Pad does not provide adequate clearance for accessibility considerations.
6. Wrap fillet weld around the stiffener termination on the tube wall.
7. Weld plates 'BD' in a star pattern. A star pattern is one in which the plates on opposite and near opposite sides of the pole circle are successively welded in a pattern resembling a star. For an 8 plate circle with plates sequentially numbered 1 to 8, weld the plates in the following order: (1, 5, 7, 3, 8, 4, 6, 2).



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STANDARD PLANS

CANTILEVER SIGN STRUCTURE

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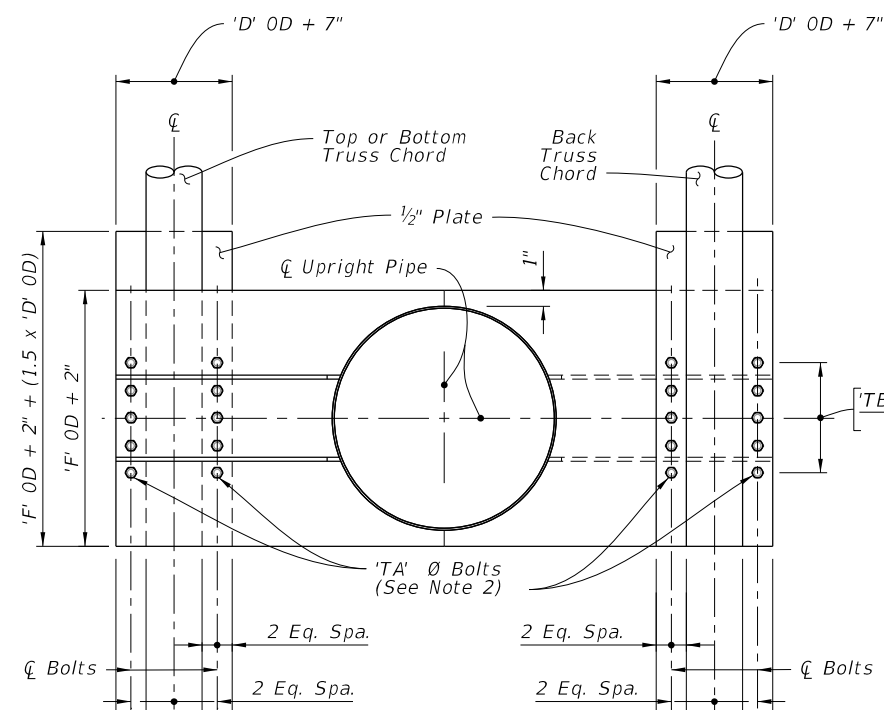


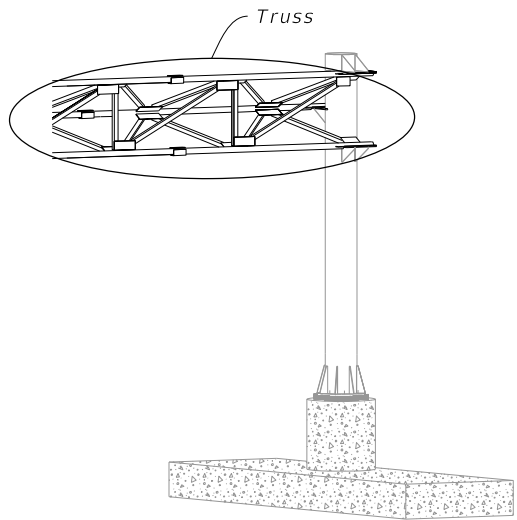
Diagram illustrating the connection of a truss joint using a gusset plate. The diagram shows the following components and dimensions:

- Gusset Plate**: The central plate connecting the members.
- Bottom of Plate and Chord**: The connection point for the bottom chord.
- Truss Web Angle, Skewed**: The angle connecting the bottom chord to the gusset plate.
- Truss Web Angle**: The angle connecting the top chord to the gusset plate.
- Top Truss Chord**: The upper member of the truss.
- Dimensions**:
 - $\frac{1}{2}$ " (Half inch)
 - 1" (One inch)
 - TD' (Truss Depth)

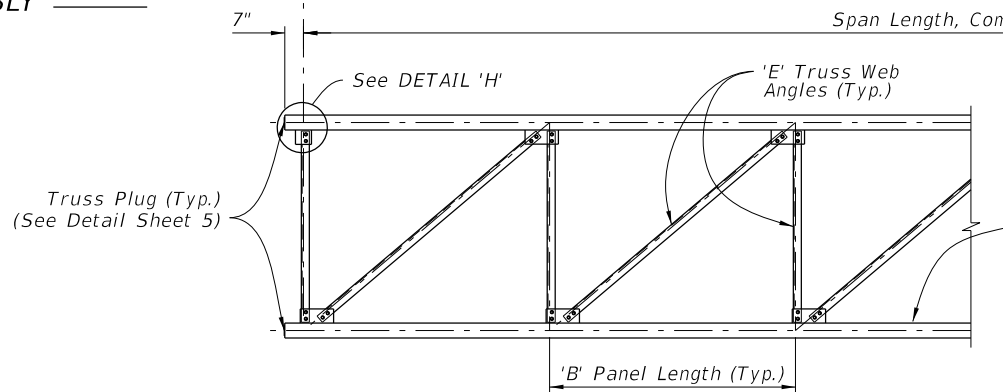
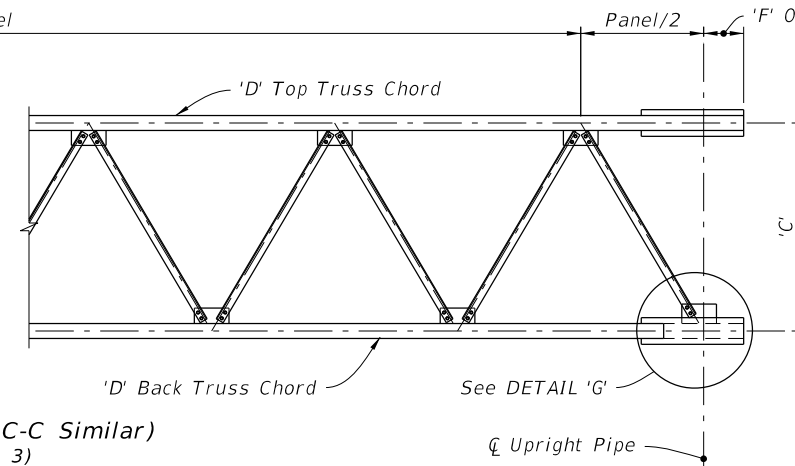
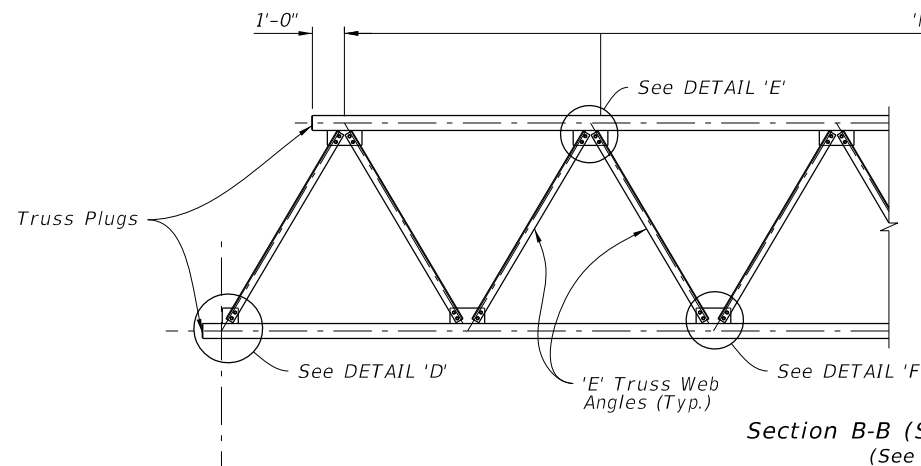
This diagram shows the elevation of a vertical pipe assembly. At the top, an 'Upright Cap' is shown with a '1" (Typ.)' dimension. The pipe is labeled 'F' OD Upright Pipe'. Two vertical truss chords are shown, labeled 'Top Truss Chord' and 'Back Truss Chord'. The top chord is dimensioned '1.5 x 'D' OD (Typ.)'. The bottom chord is dimensioned '1' x 3 1/2" (Typ.)'. The assembly is supported by 'Bottom Truss Chord' and 'Bottom Truss Chord' (labeled twice). The bottom chord is connected to the pipe by 'TE' Gusset Plates (Typ.)'. The gusset plates are dimensioned '5 1/4" For An Odd Number' and '3 1/2" For An Even Number'. The bottom chord is also connected to the pipe by 'Bottom Truss Chord' (labeled twice). The bottom chord is dimensioned '1' x 3 1/2" (Typ.)'. The bottom chord is connected to the pipe by 'Bottom Truss Chord' (labeled twice). The bottom chord is dimensioned '1' x 3 1/2" (Typ.)'.

UPRIGHT-TRUSS CONNECTION DETAIL :
(Web Members From Back Truss Chord Omitted For Clarity)

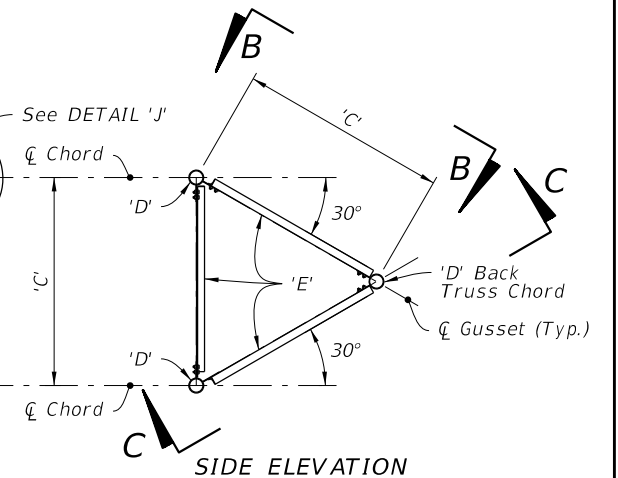
1. *Wrap fillet weld around the stiffener termination on the tube wall.*
2. *Truss Chord Bolts:*
 - A. *Top and Bottom: Install 'TC' hex head bolts.*
 - B. *Back: Install 'TB' hex head bolts.*



CANTILEVER ASSEMBLY



FRONT ELEVATION
(See Note 1 & 3)

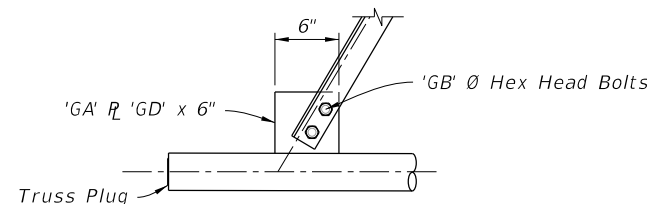


TRUSS NOTES:

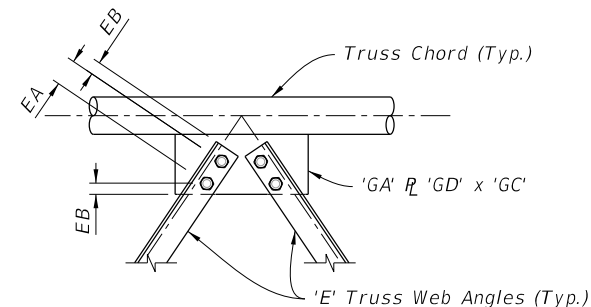
1. Out-of-plane members are not shown for clarity.
2. Wrap fillet weld around plate termination on the tube wall.
3. Chord Splices not shown.

TRUSS

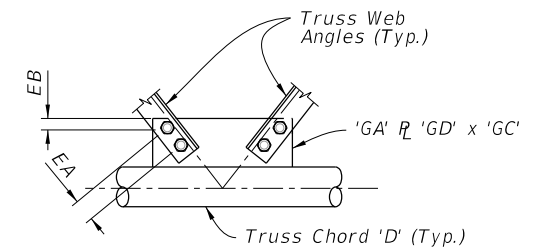
Bolt Size	Distance	
	EA	EB
1 1/4" Ø	4 3/8"	2 1/4"
1" Ø	3 1/2"	1 3/4"
7/8" Ø	3"	1 1/2"
3/4" Ø	2 1/2"	1 1/4"
5/8" Ø	2 1/4"	1 1/8"



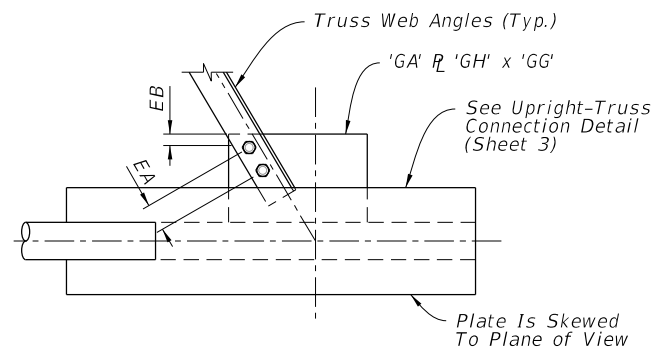
DETAIL 'D'



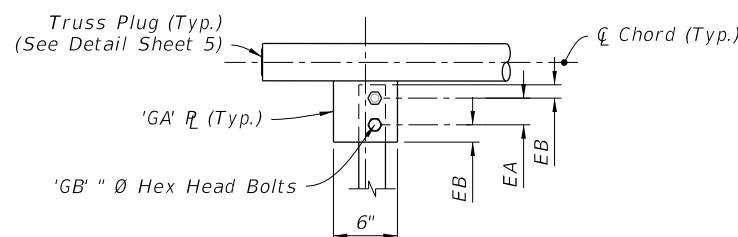
DETAIL 'E'



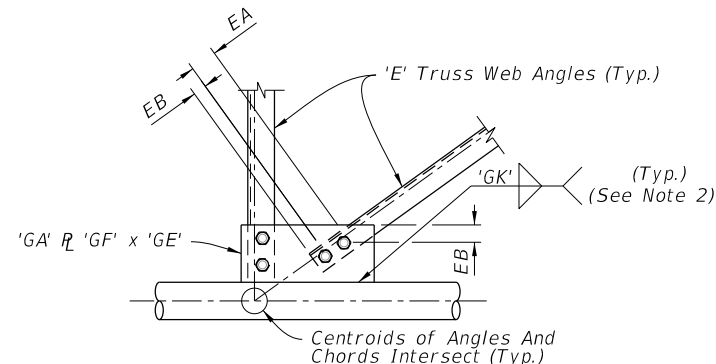
DETAIL 'F'



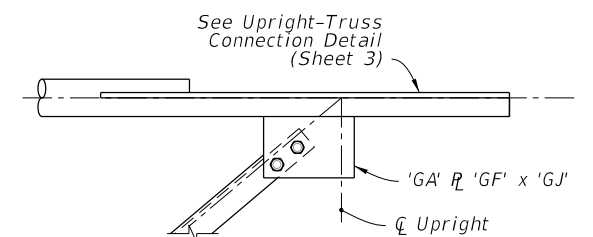
DETAIL 'G'



DETAIL 'H'

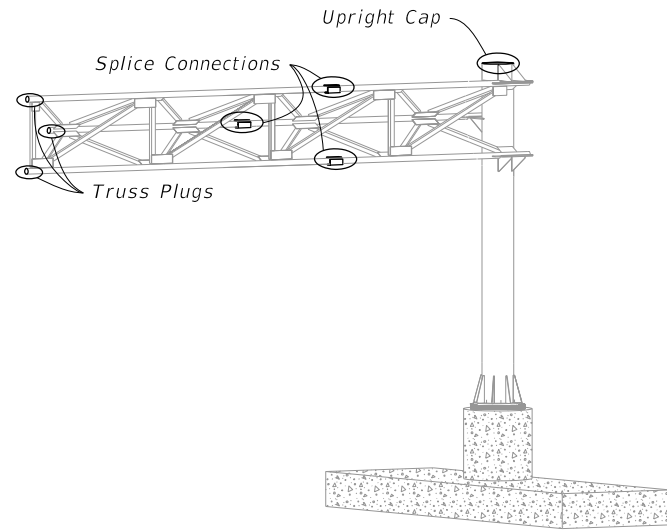


DETAIL 'I'



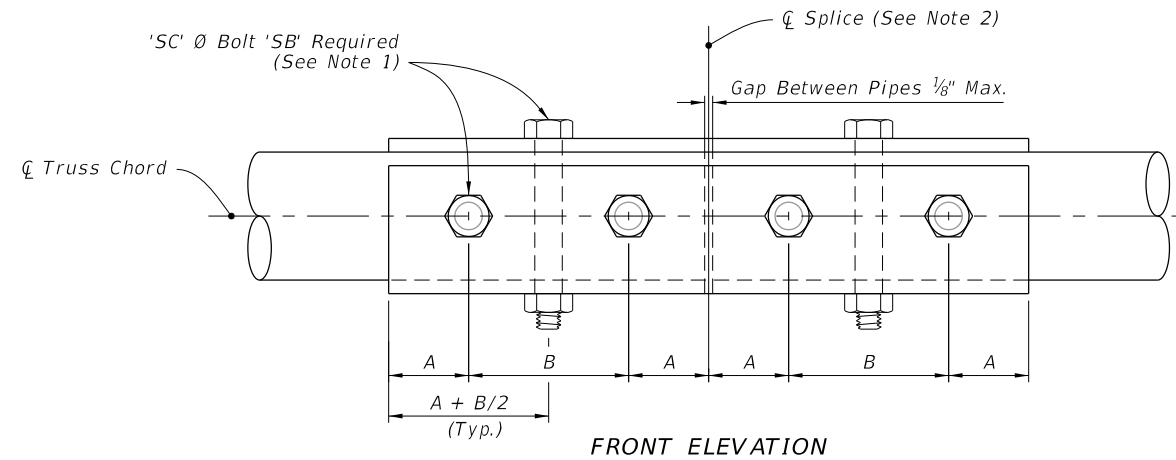
DETAIL 'J'

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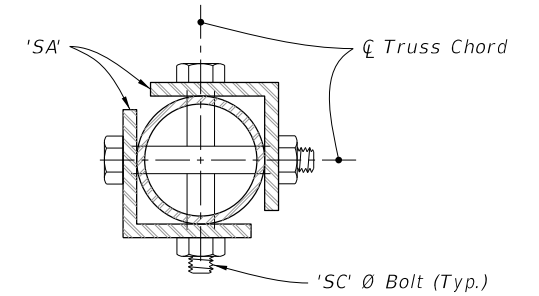


CANTILEVER ASSEMBLY

Bolt Size	Distance	
	A	B
1" Ø	1 3/4"	3 1/2"
7/8" Ø	1 1/2"	3"
3/4" Ø	1 1/4"	2 1/2"



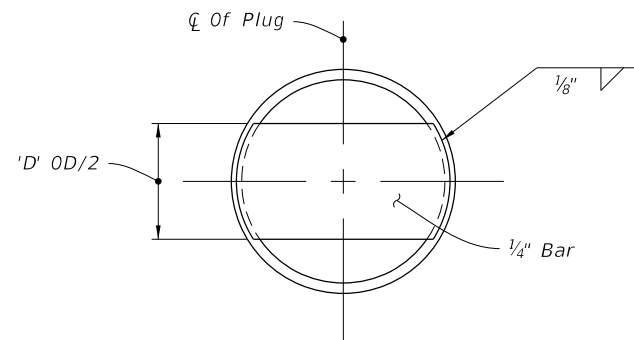
SPLICE CONNECTION DETAIL



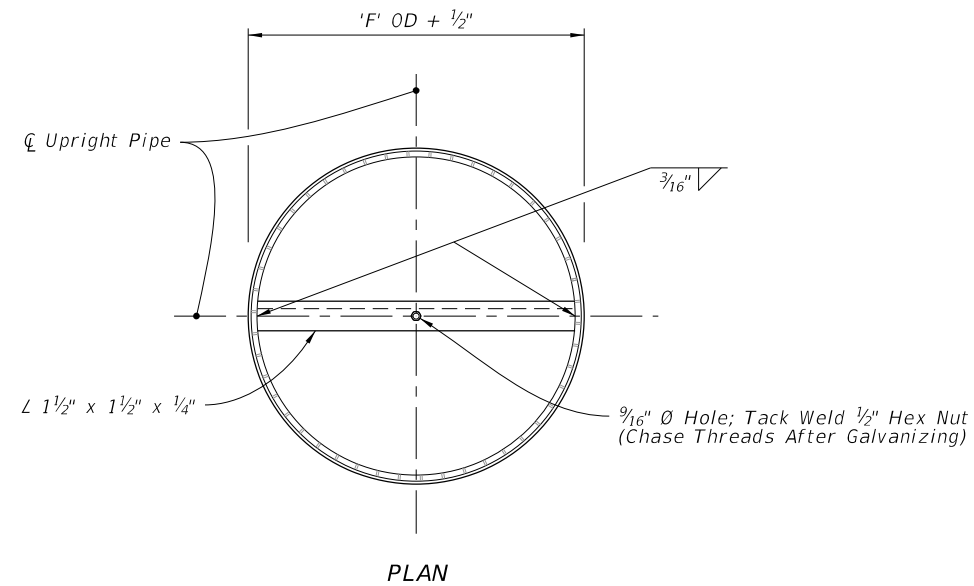
SIDE ELEVATION

SPLICE CONNECTION NOTES:

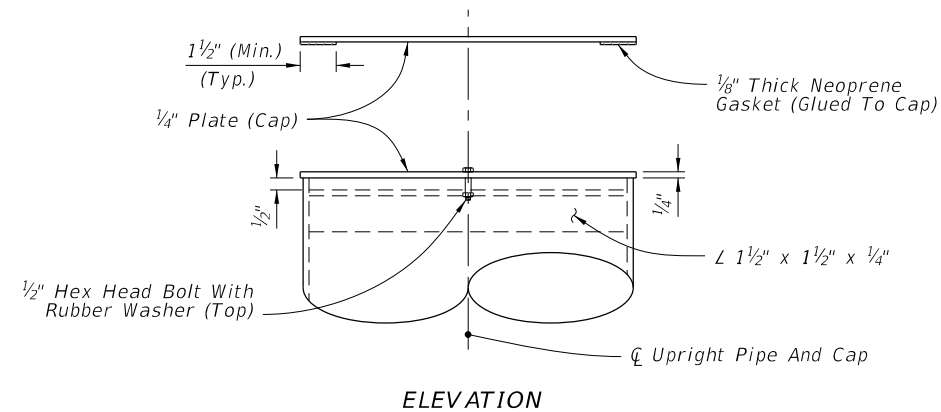
- Only 6 bolts are shown in detail for clarity. (One Half Each Side Of Splice)
- Splices are not permitted for trusses less than or equal to 40'. Splice optional for trusses greater than 40'.
- Chord Splices: "SD" Panel from upright is the closest panel in which a chord splice may be used. See Plans for CANTILEVER SIGN STRUCTURE DATA TABLE. Minimum splice spacing is two truss panel lengths apart.



TRUSS PLUG DETAIL



PLAN



ELEVATION

UPRIGHT CAP DETAIL



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STANDARD PLANS

CANTILEVER SIGN STRUCTURE

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