

**GENERAL NOTES:**

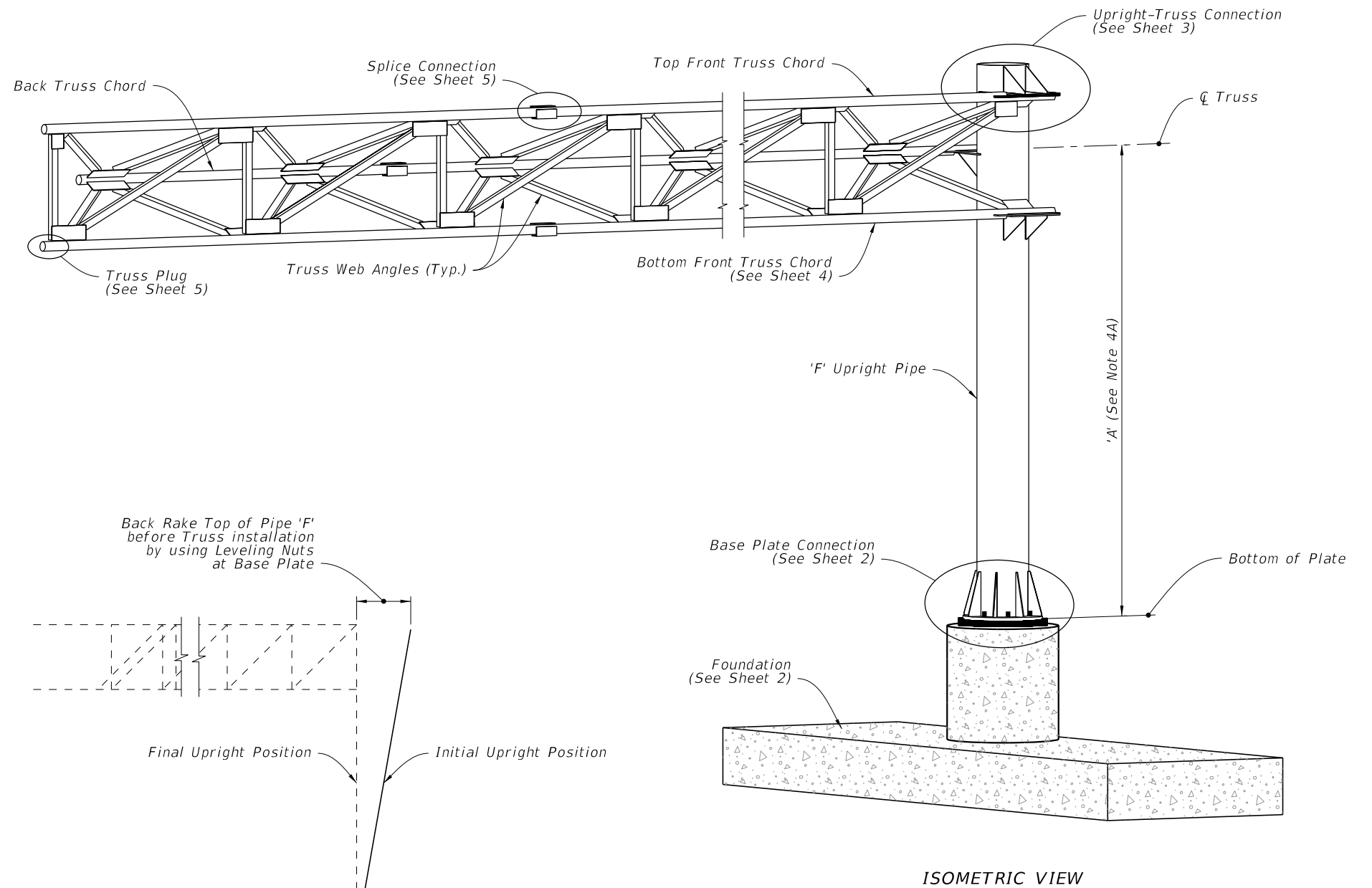
1. Meet the requirements of Specification 700.
2. Work this Index in conjunction with CANTILEVER SIGN STRUCTURE DATA TABLES in the Plans and Index 700-030.
3. Handholes are required at pole base for DMS Structures. Refer to Index 700-090 for Handhole Details.
4. Shop Drawings are required.

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)

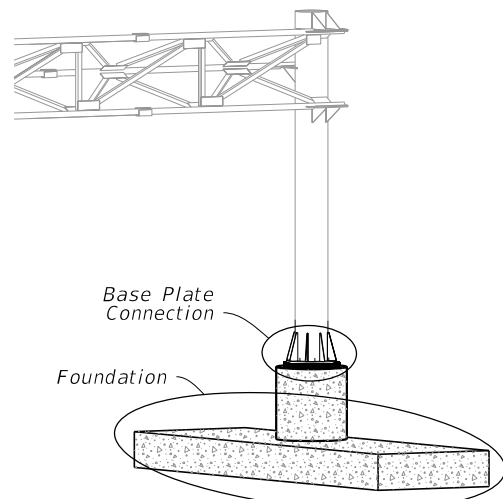


CAMBER DIAGRAM

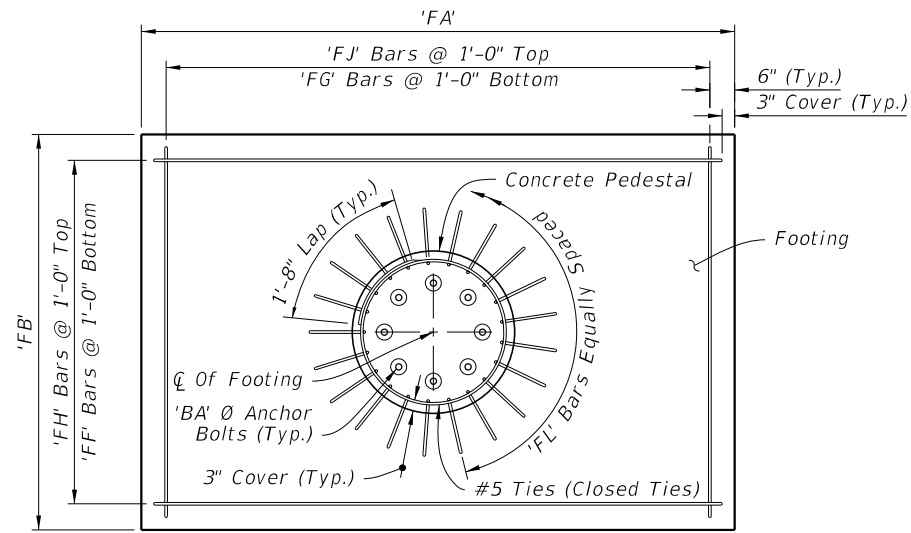
CANTILEVER SIGN ASSEMBLY

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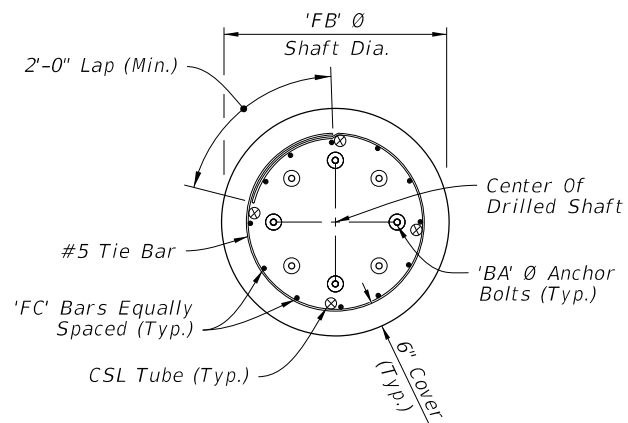
LAST REVISION 11/01/22	REVISION	DESCRIPTION:	 FY 2023-24 STANDARD PLANS	CANTILEVER SIGN STRUCTURE	INDEX 700-040	SHEET 1 of 5
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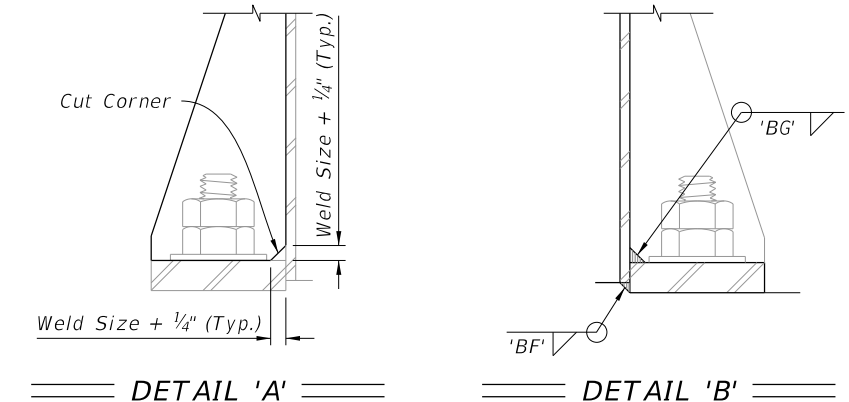
CANTILEVER ASSEMBLY



PLAN

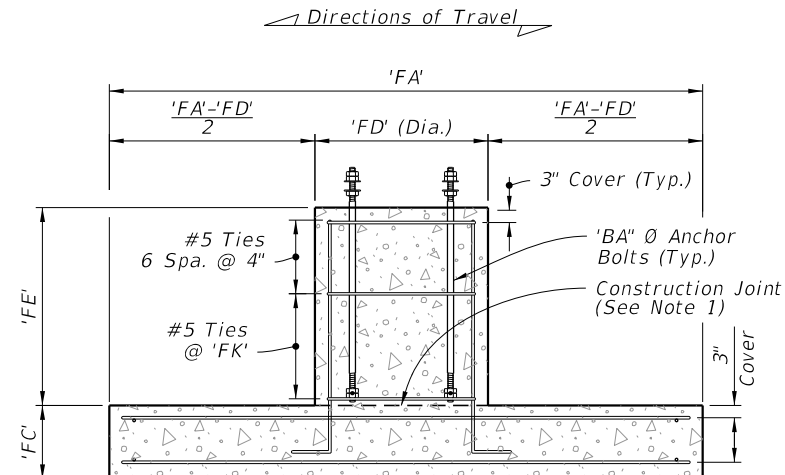


PLAN

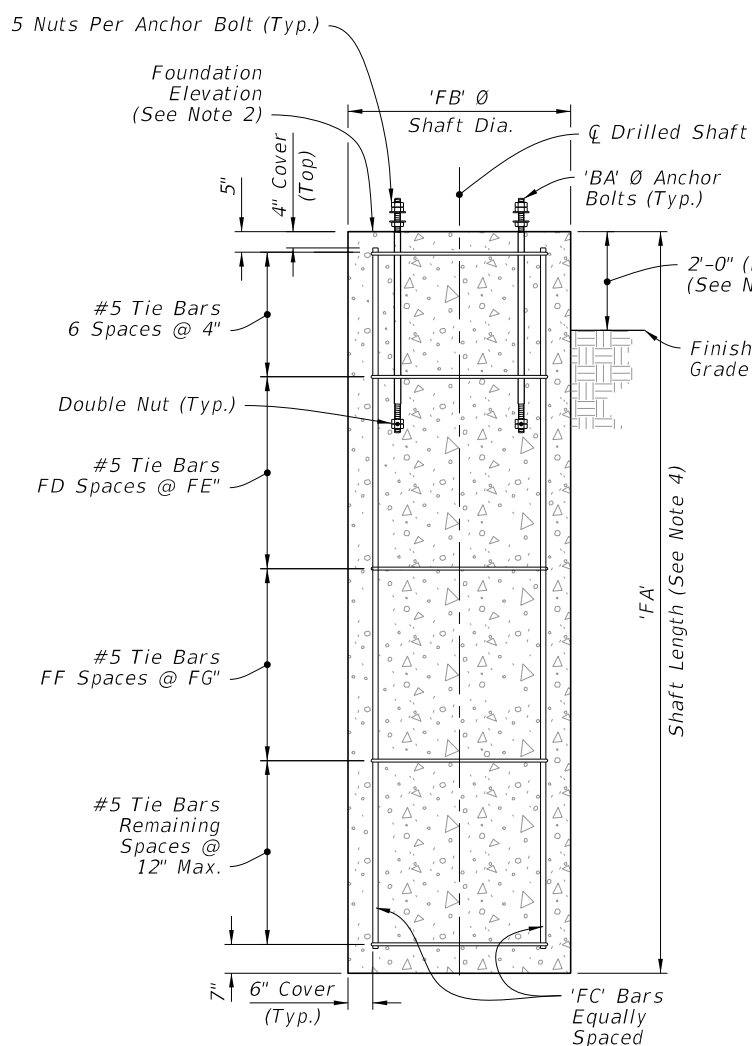


DETAIL 'A'

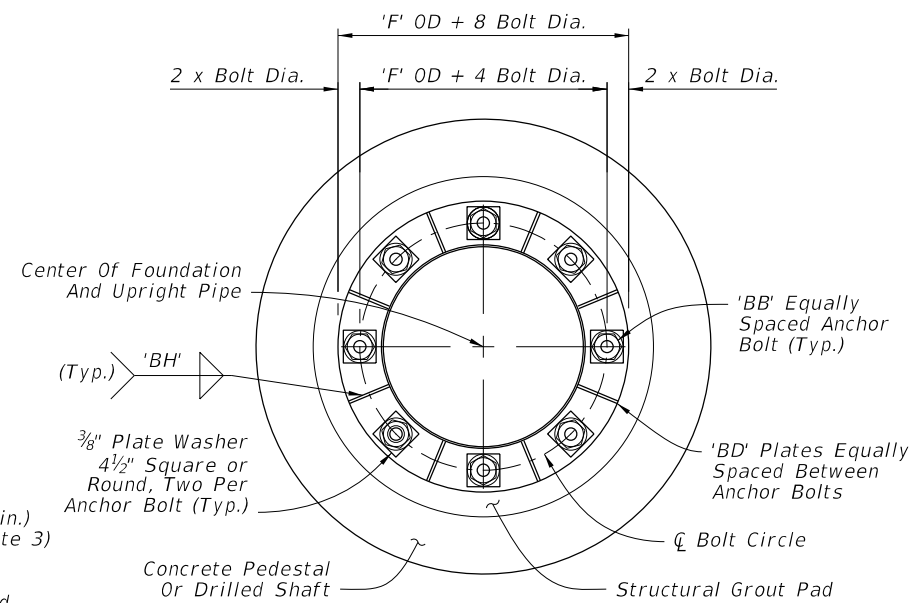
DETAIL 'B'



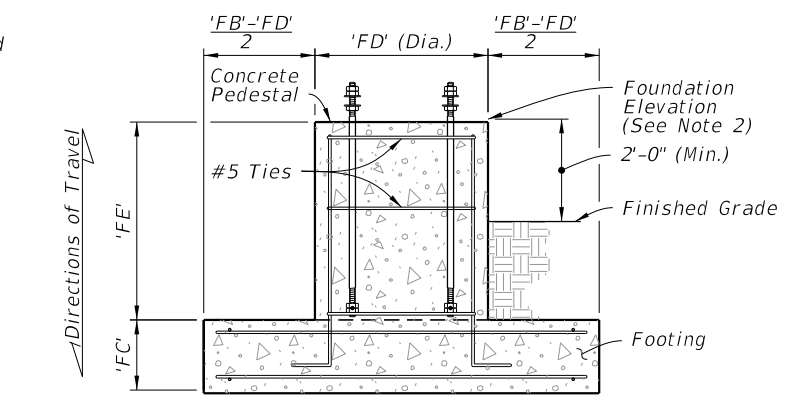
SIDE ELEVATION



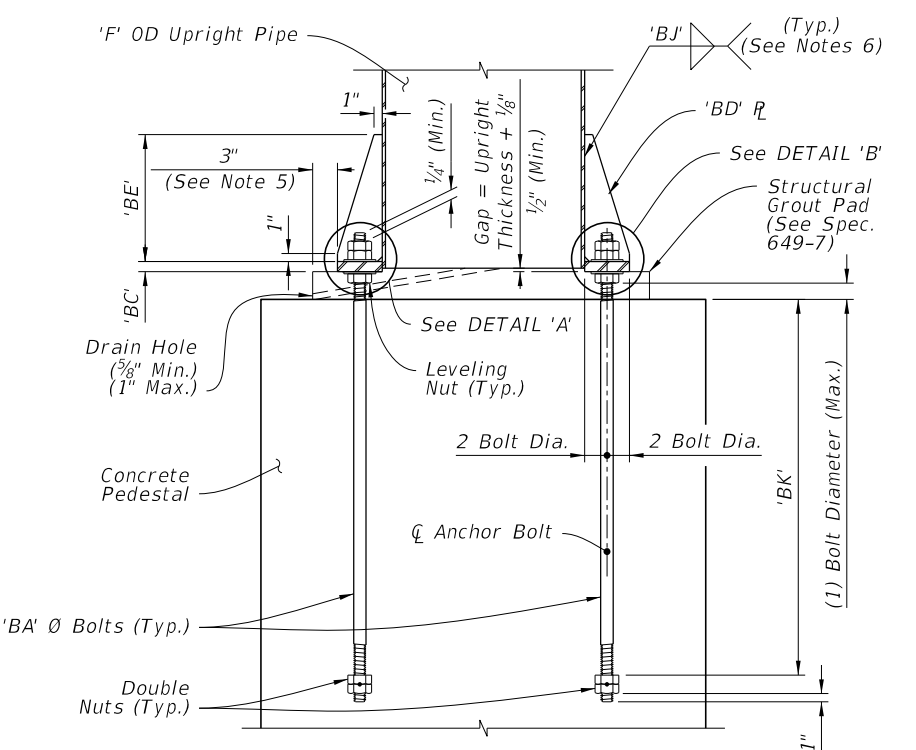
ELEVATION



PLAN



FRONT ELEVATION  
FOOTING AND PEDESTAL



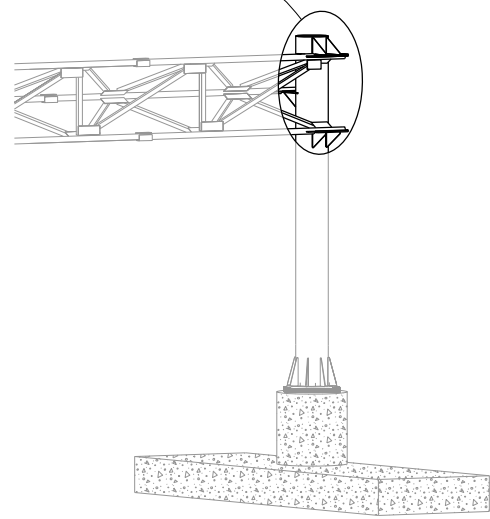
ELEVATION

FOUNDATION

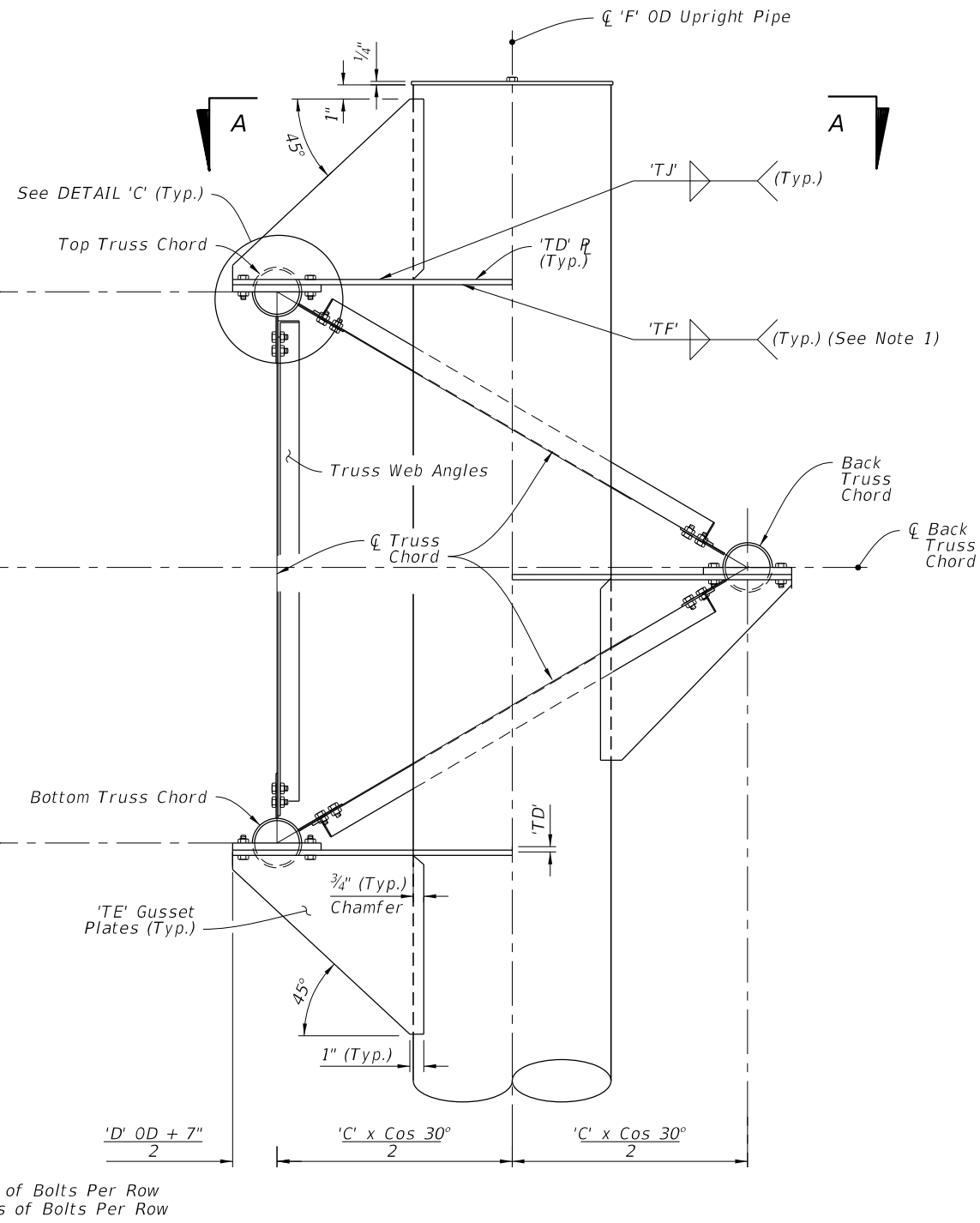
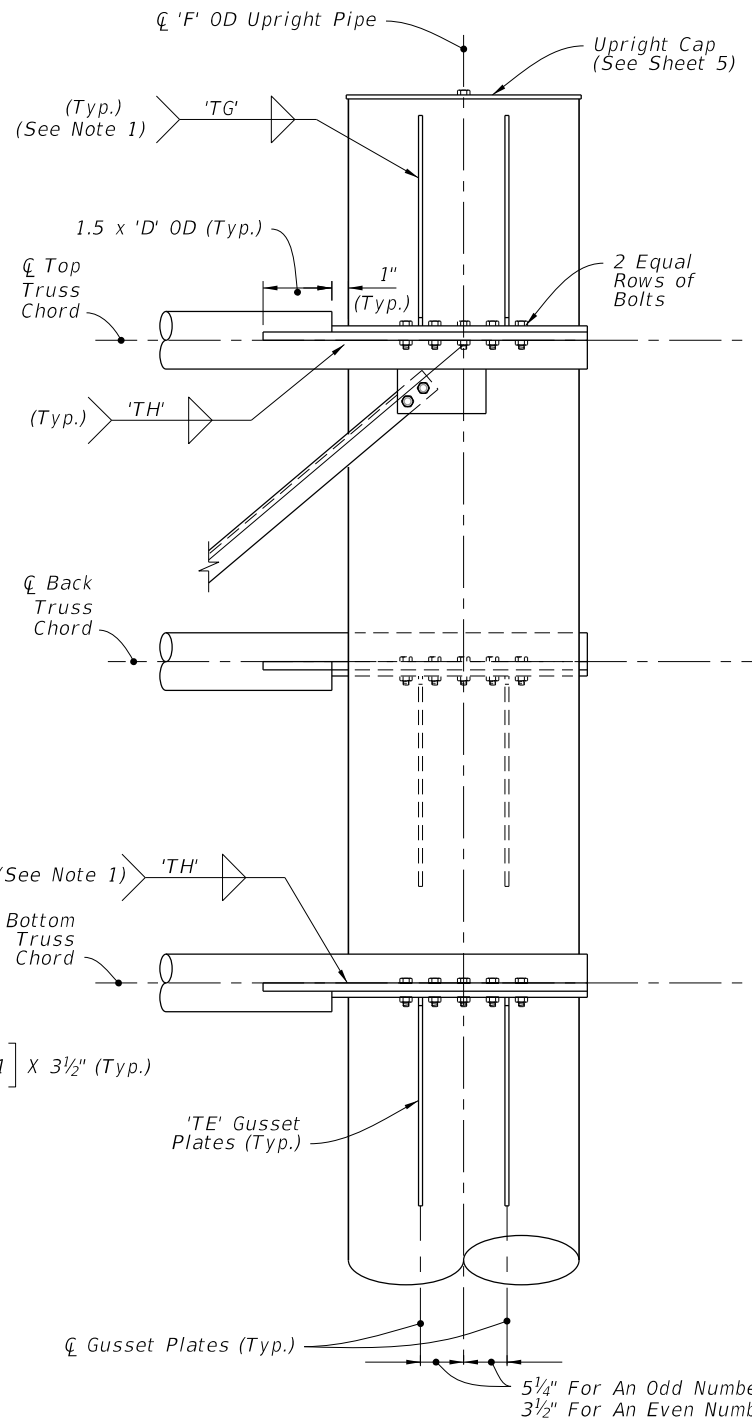
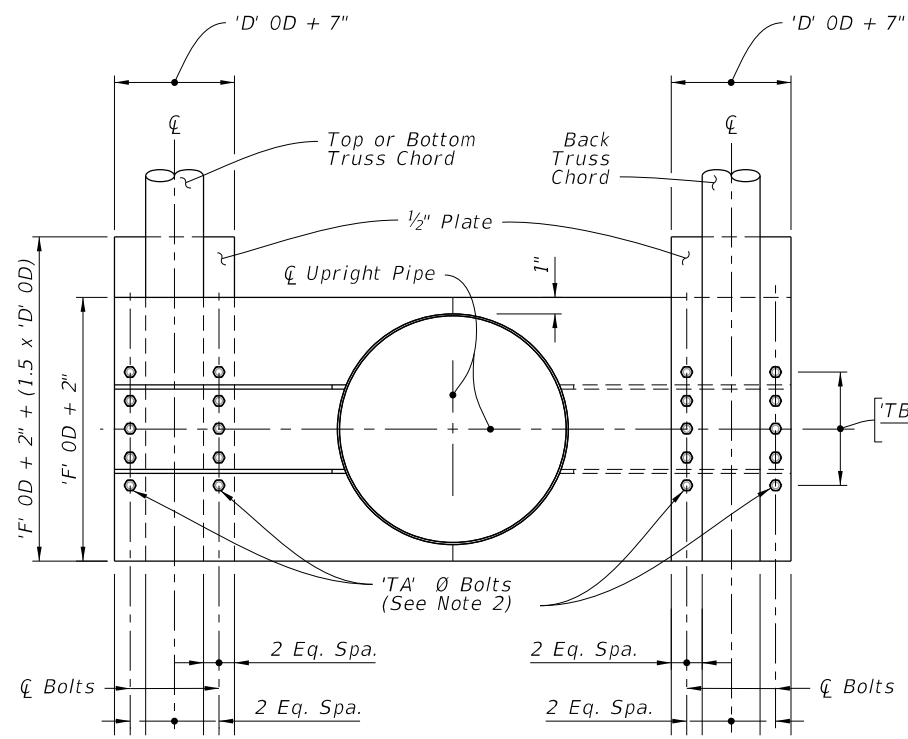
BASE PLATE CONNECTION

- 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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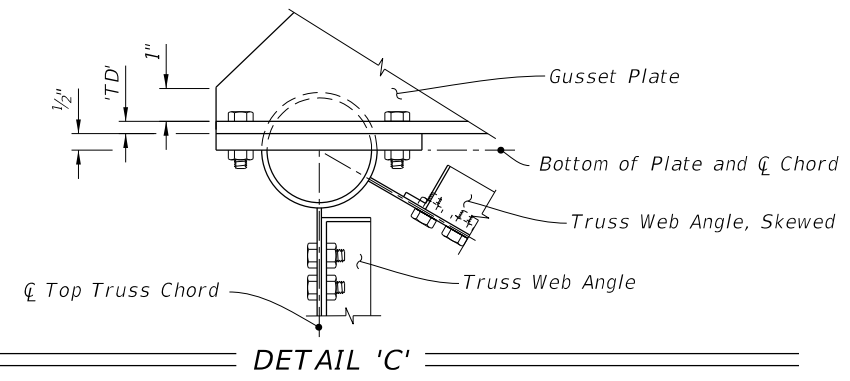


**CANTILEVER ASSEMBLY**



**SECTION A-A**  
(With Gusset Plates And Web Angles Omitted For Clarity)

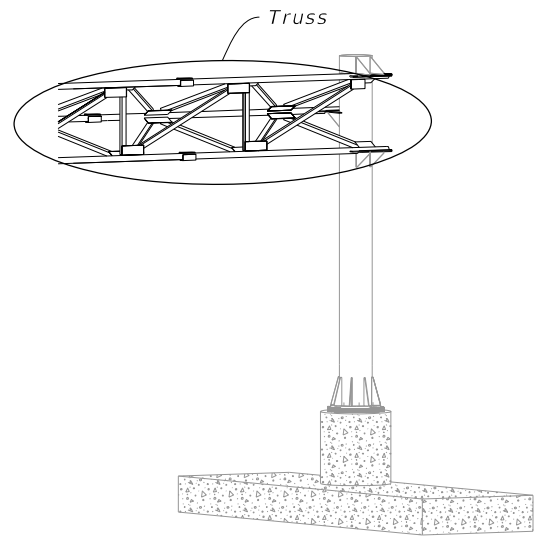
**UPRIGHT-TRUSS CONNECTION DETAIL**  
(Web Members From Back Truss Chord Omitted For Clarity)



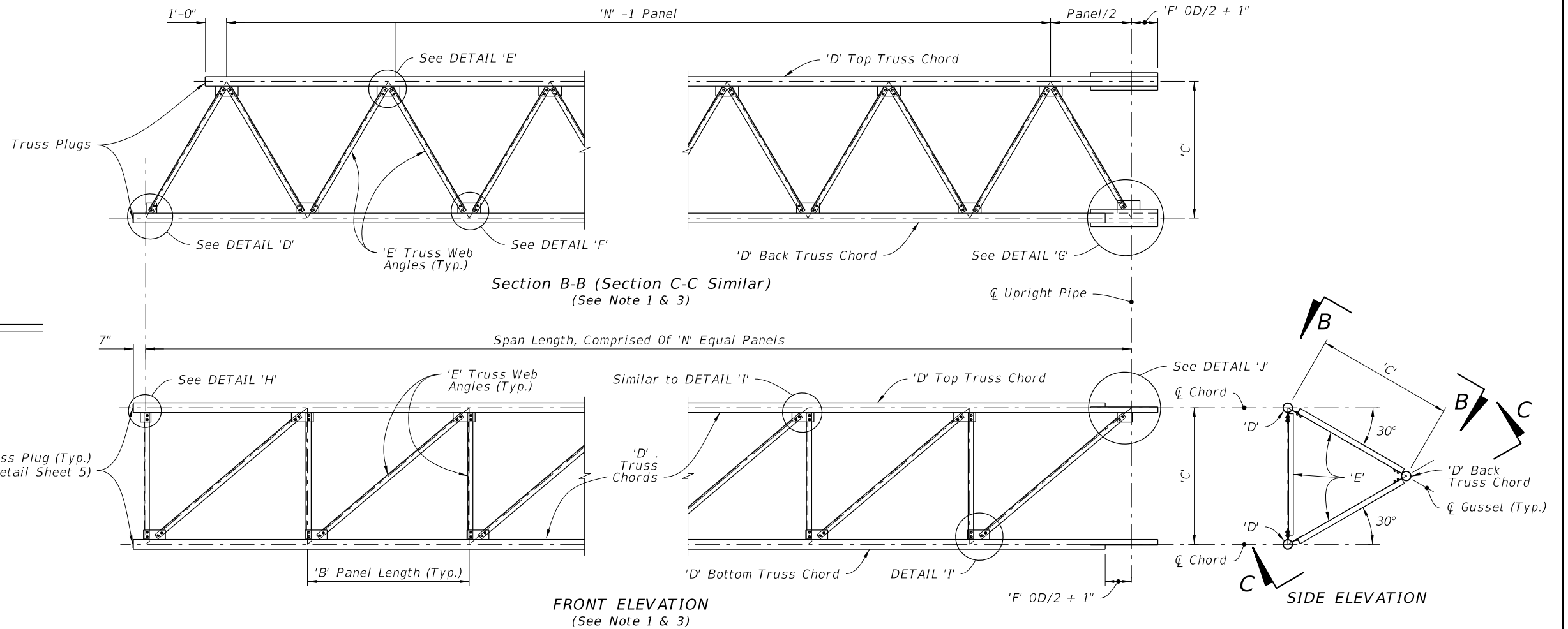
- NOTES:**
1. Wrap fillet weld around the stiffener termination on the tube wall.
  2. Truss Chord Bolts:
    - A. Top and Bottom: Install 'TC' hex head bolts.
    - B. Back: Install 'TB' hex head bolts.

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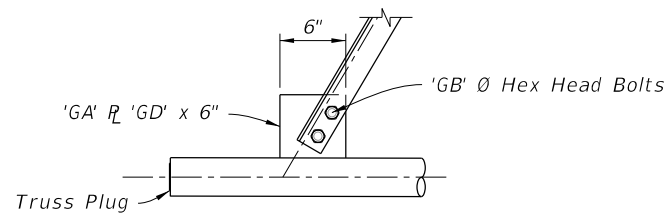
**CANTILEVER ASSEMBLY**



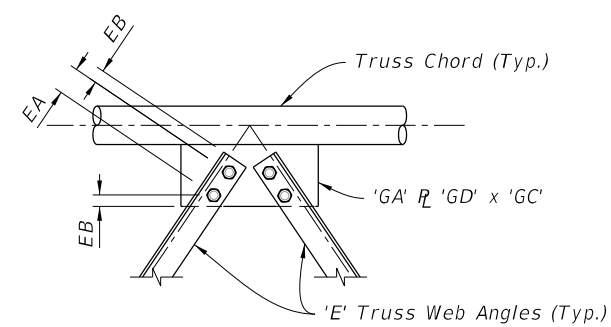
**TRUSS NOTES:**

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.

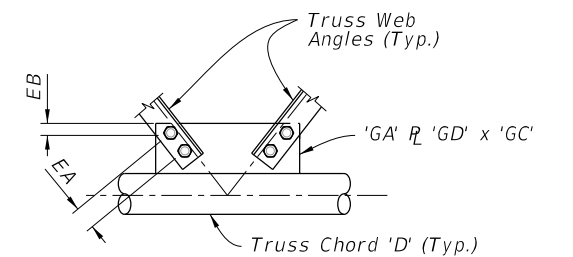
Bolt Size	Distance	
	EA	EB
1 1/4" Ø	4 3/8"	2 1/4"
1" Ø	3 1/2"	1 3/4"
7/8" Ø	3"	1 1/2"
3/4" Ø	2 1/2"	1 1/4"
5/8" Ø	2 1/4"	1 1/8"



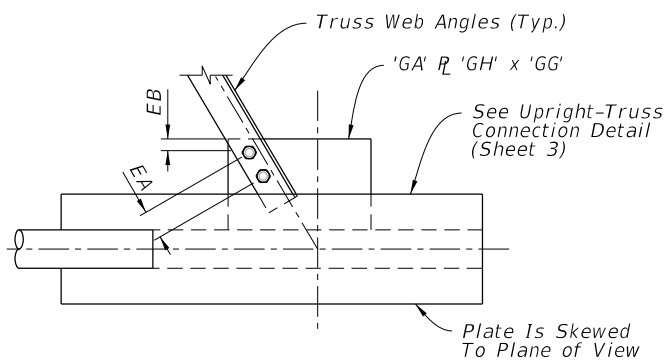
**DETAIL 'D'**



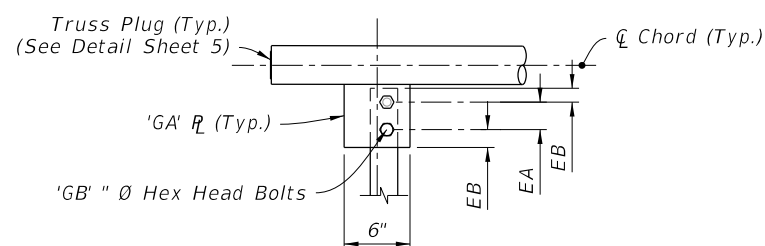
**DETAIL 'E'**



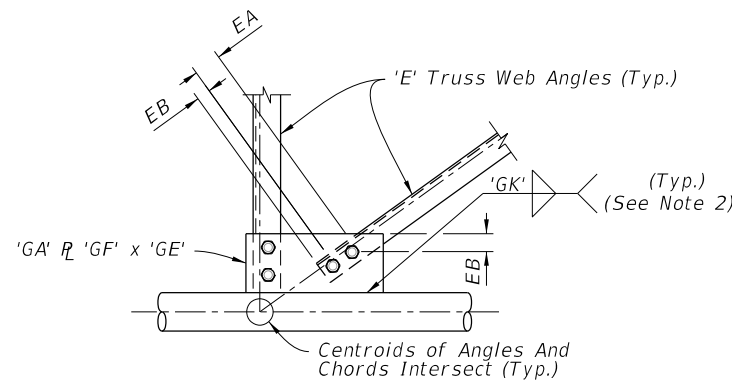
**DETAIL 'F'**



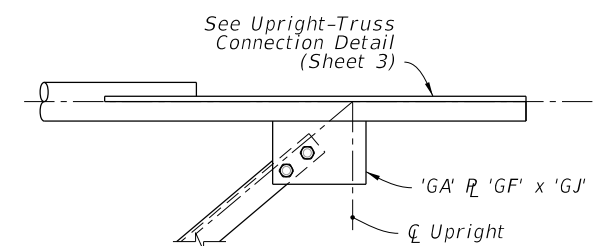
**DETAIL 'G'**



**DETAIL 'H'**



**DETAIL 'I'**



**DETAIL 'J'**

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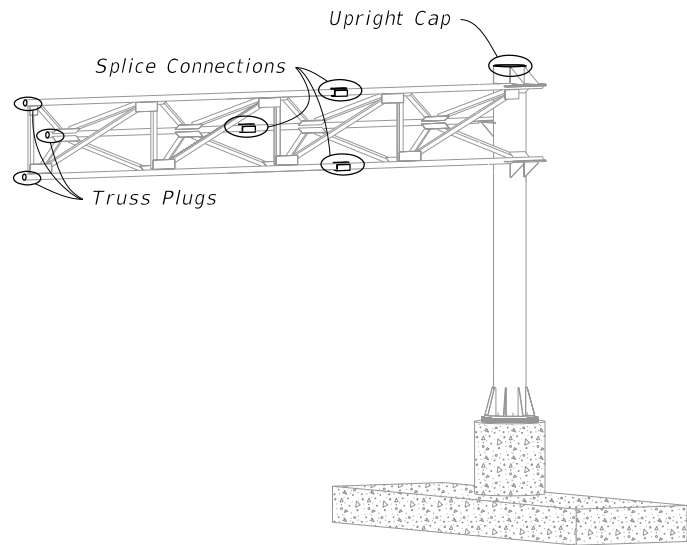
LAST REVISION	DESCRIPTION:
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STANDARD PLANS

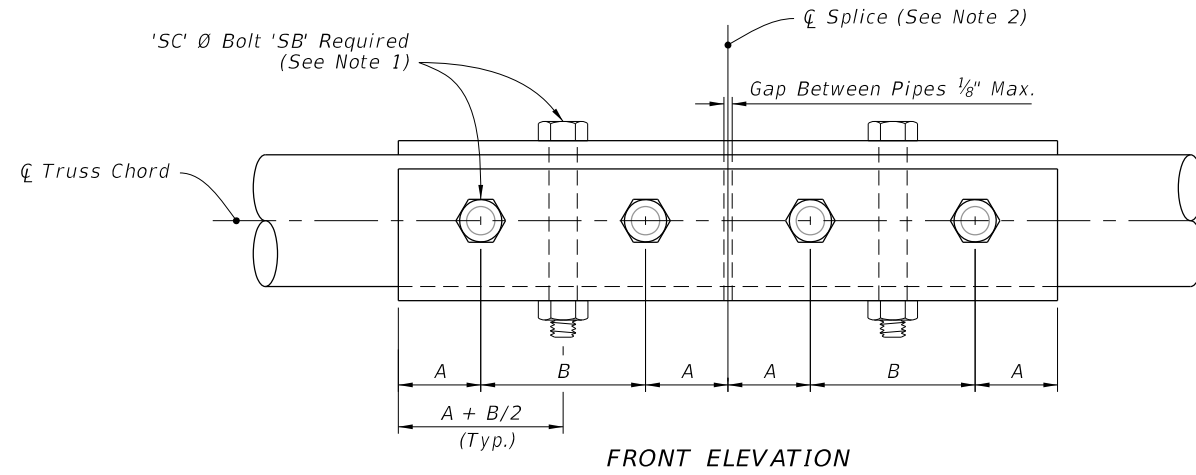
**CANTILEVER SIGN STRUCTURE**

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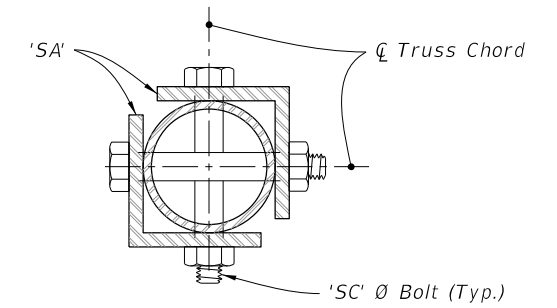


CANTILEVER ASSEMBLY

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"



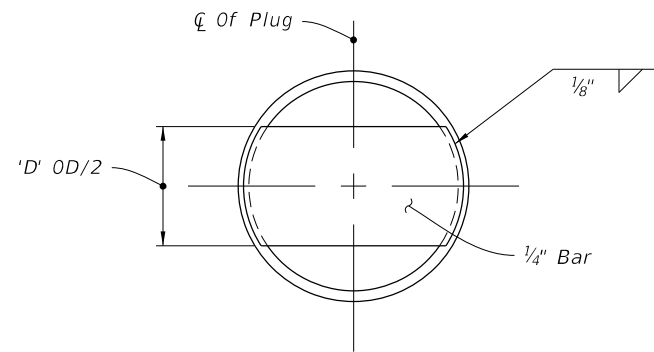
SPLICE CONNECTION DETAIL



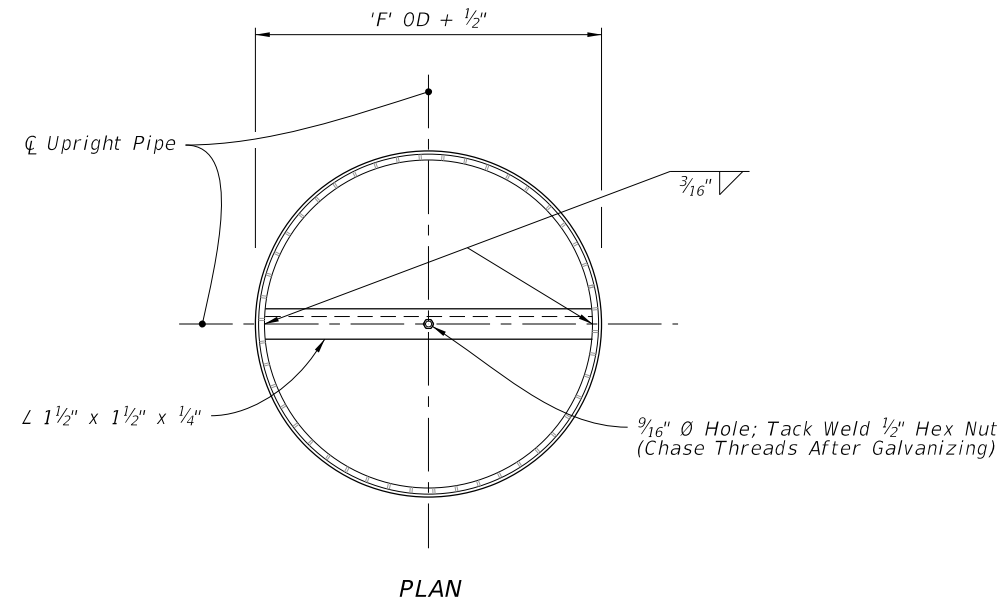
SIDE ELEVATION

**SPLICE CONNECTION NOTES:**

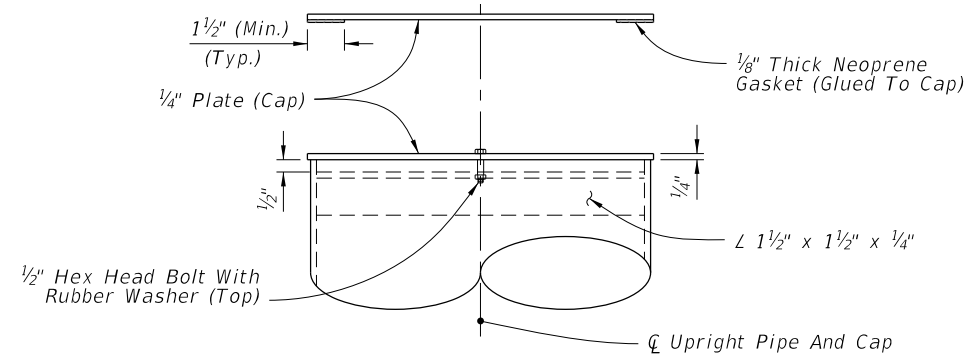
1. Only 6 bolts are shown in detail for clarity. (One Half Each Side Of Splice)
2. Splices are not permitted for trusses less than or equal to 40', Splice optional for trusses greater than 40'.
3. Chord Splices: "SD" Panel from upright is the closest panel in which a chord splice may be used. See Plans 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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FY 2023-24  
STANDARD PLANS

CANTILEVER SIGN STRUCTURE

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700-040

SHEET  
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