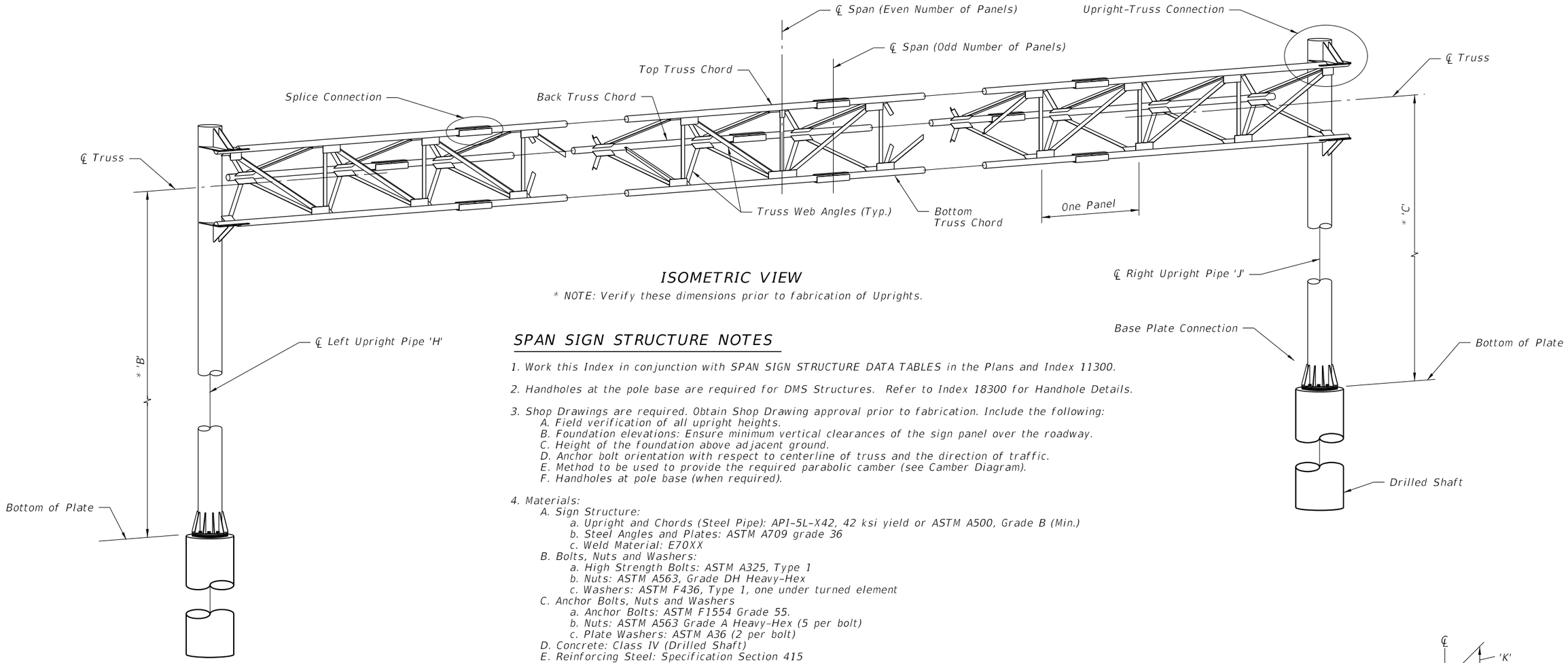


ISOMETRIC VIEW

* NOTE: Verify these dimensions prior to fabrication of Uprights.

SPAN SIGN STRUCTURE NOTES

1. Work this Index in conjunction with SPAN SIGN STRUCTURE DATA TABLES in the Plans and Index 11300.

2. Handholes at the pole base are required for DMS Structures. Refer to Index 18300 for Handhole Details.

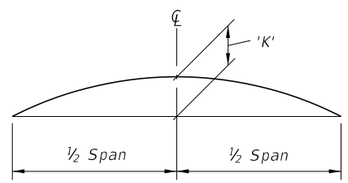
3. Shop Drawings are required. Obtain Shop Drawing approval prior to fabrication. Include the following:
   - A. Field verification of all upright heights.
   - B. Foundation elevations: Ensure minimum vertical clearances of the sign panel over the roadway.
   - C. Height of the foundation above adjacent ground.
   - D. Anchor bolt orientation with respect to centerline of truss and the direction of traffic.
   - E. Method to be used to provide the required parabolic camber (see Camber Diagram).
   - F. Handholes at pole base (when required).

4. Materials:
   - A. Sign Structure:
     - a. Upright and Chords (Steel Pipe): API-5L-X42, 42 ksi yield or ASTM A500, Grade B (Min.)
     - b. Steel Angles and Plates: ASTM A709 grade 36
     - c. Weld Material: E70XX
   - B. Bolts, Nuts and Washers:
     - a. High Strength Bolts: ASTM 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)
   - D. Concrete: Class IV (Drilled Shaft)
   - E. Reinforcing Steel: Specification Section 415

5. Fabrication:
   - A. Welding: Specification Section 460-6.4
   - B. Chord Splices: Minimum splice spacing is three truss panel lengths apart and three truss panel lengths from the uprights. Chord Splices may be either the Standard Splice or the Alternate Splice but not both on the same structure.
   - C. Upright splice: Not allowed
   - D. Structural bolt hole diameters: Bolt diameter plus $\frac{1}{16}$".
   - E. Anchor bolt hole diameters: Bolt diameter plus $\frac{1}{2}$".
   - F. Hot Dip Galvanize after fabrication.
   - G. Shop assemble the entire structure after galvanizing to validate/document alignment and clearance for bolted connections as well as contact between connecting plates. Take remedial action, if necessary, prior to shipment.
   - H. Disassemble as necessary and secure components for shipment.

6. Coatings:
   - A. Bolts, Nuts and Washers: ASTM F2329
   - B. All other steel, including Plate Washers, hot dip galvanize: ASTM A123

7. Construction:
   - A. Construct foundation in accordance with Specification Section 455 Drilled Shaft, except payment is included in the cost of the structure.
   - B. Prior to erection, record the as-built anchor locations and submit to the Engineer.
   - C. Provide a parabolic camber with the maximum upward deflection as shown on the Camber Diagram.
   - D. Tighten nuts and bolts in accordance with Specification Section 700. Split-Lock Washers are not permitted.
   - E. Install Aluminum Sign Panels as shown on the Elevation drawing.
   - F. After installation, place wire screen between top of foundation and bottom of baseplate in accordance with Specification Section 649-6.



CAMBER DIAGRAM

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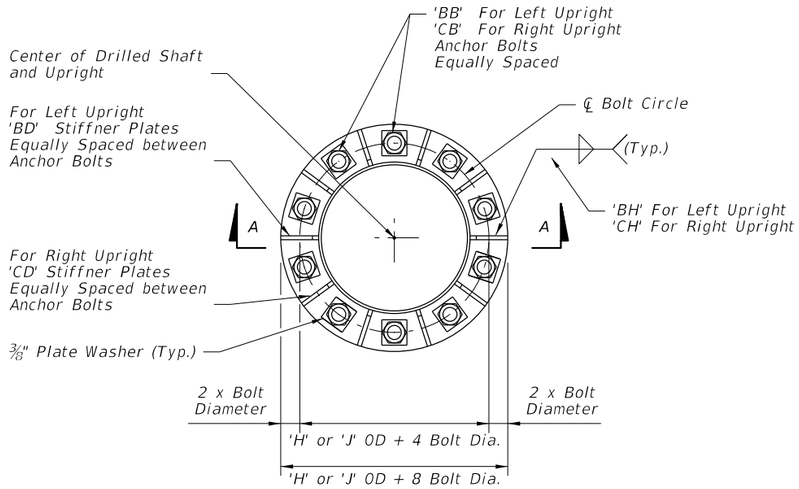
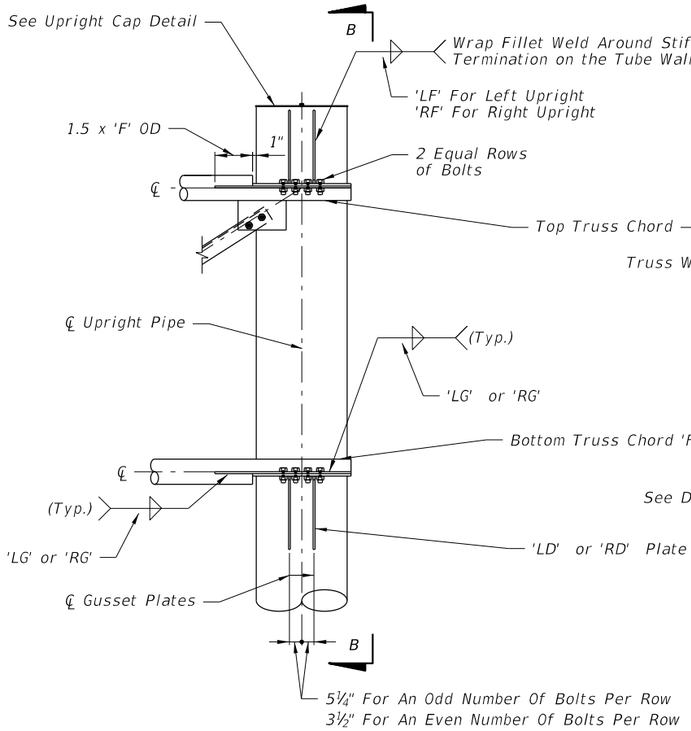
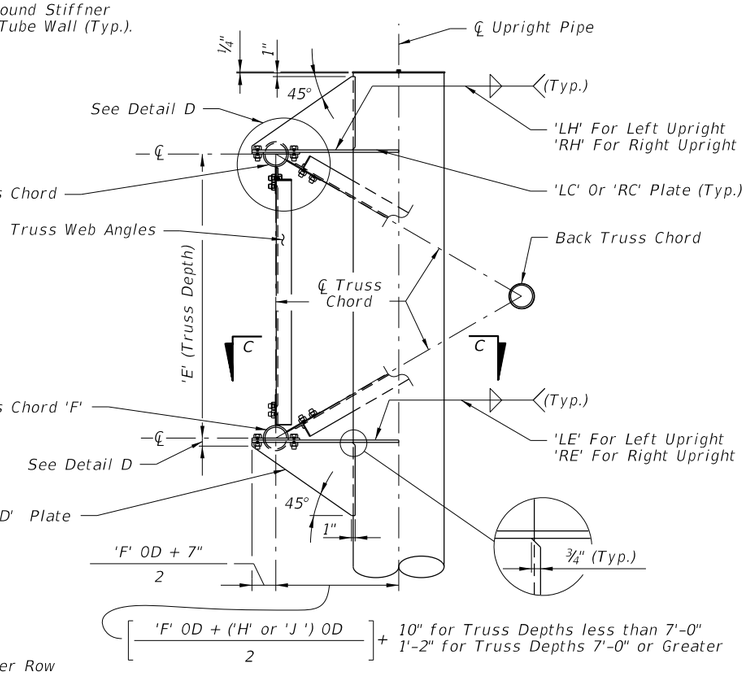


PLAN VIEW
BASE PLATE

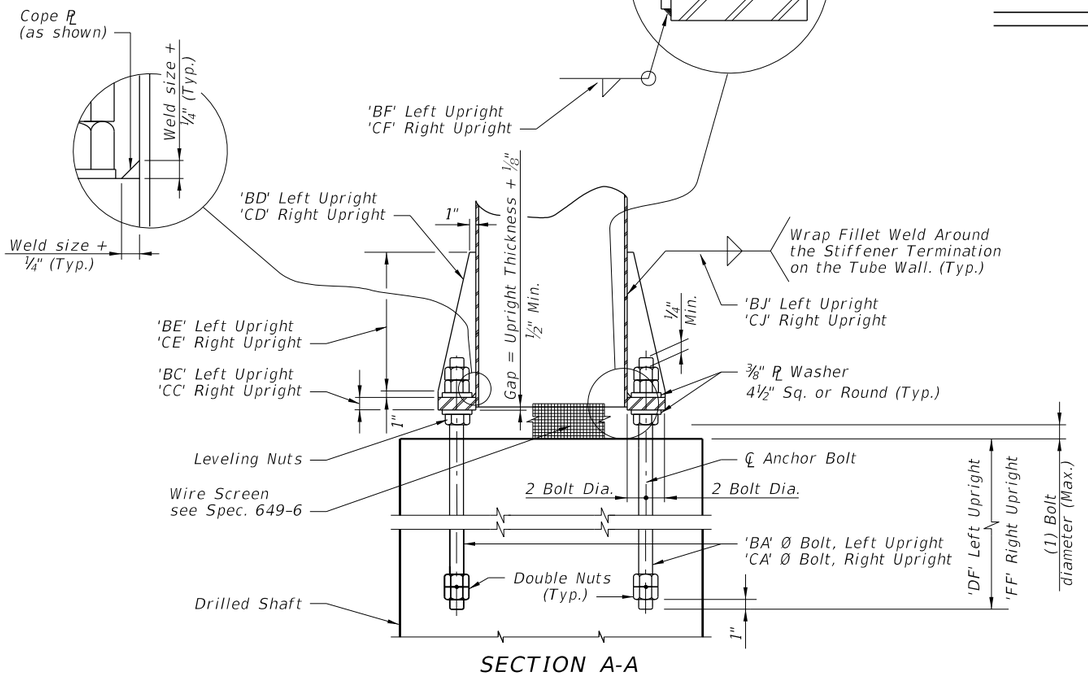




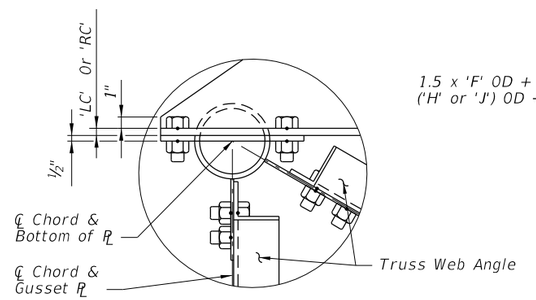
VIEW B-B

Web Members From Back Truss
Chord Omitted For Clarity

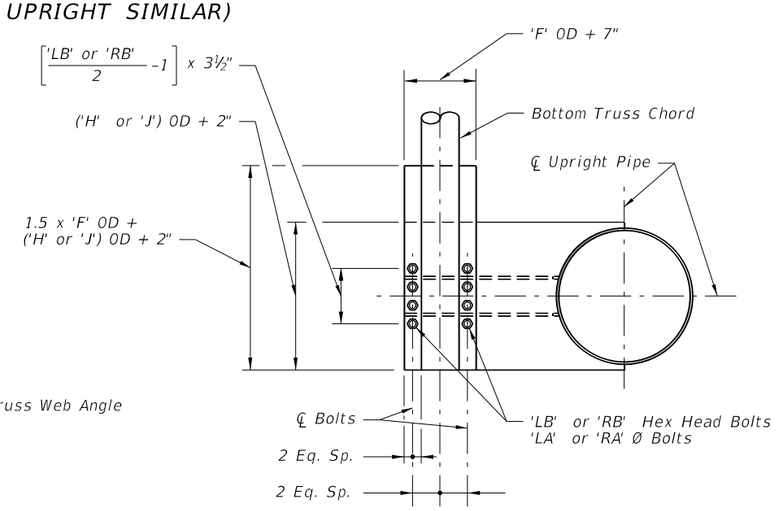
UPRIGHT-TRUSS CONNECTION DETAIL
RIGHT UPRIGHT SHOWN
(LEFT UPRIGHT SIMILAR)



SECTION A-A



DETAIL D



SECTION C-C
(With Gusset Plate and
Angles omitted for clarity)

NOTE:
Abbreviation
OD ~ Outside Diameter

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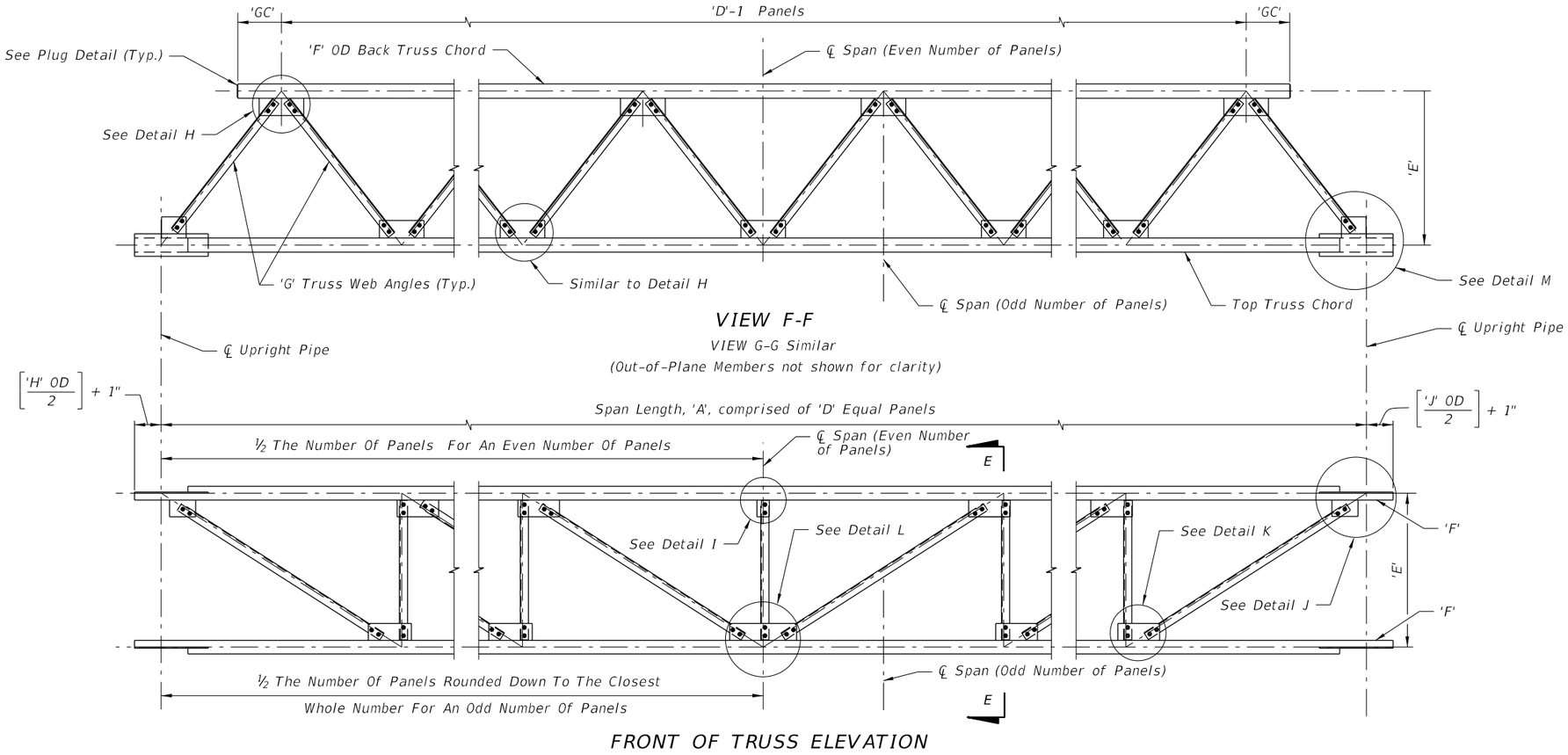
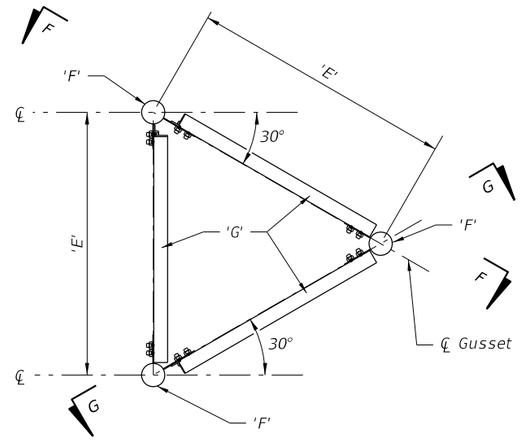


VIEW F-F

VIEW G-G Similar

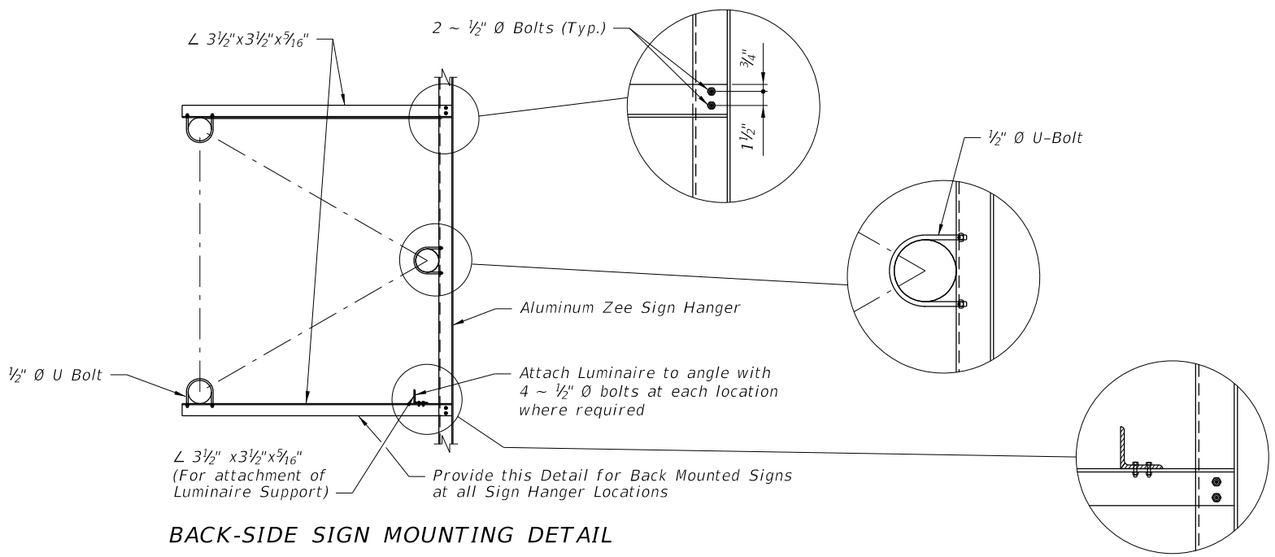
(Out-of-Plane Members not shown for clarity)

FRONT OF TRUSS ELEVATION



SECTION E-E

(Back Truss Chord and attached Angles not shown for clarity)



BACK-SIDE SIGN MOUNTING DETAIL

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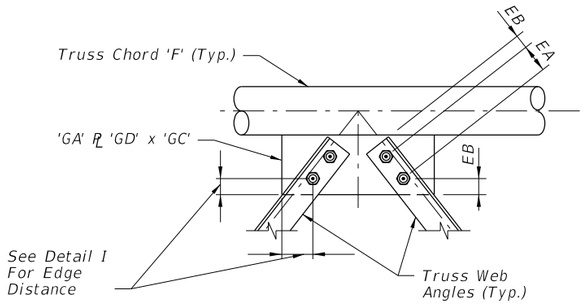
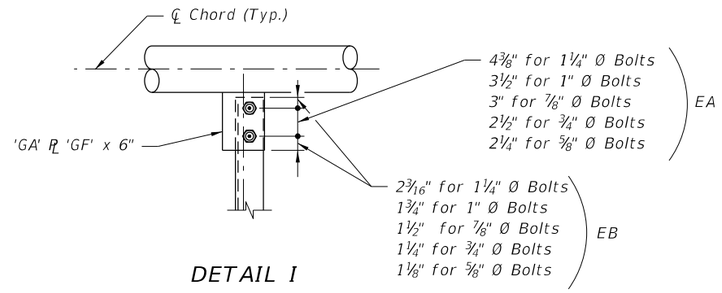
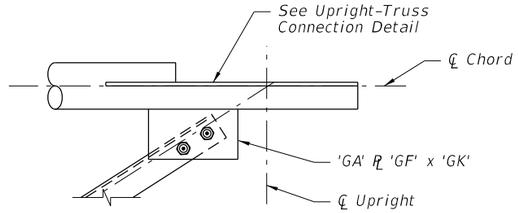


DETAIL H



DETAIL I



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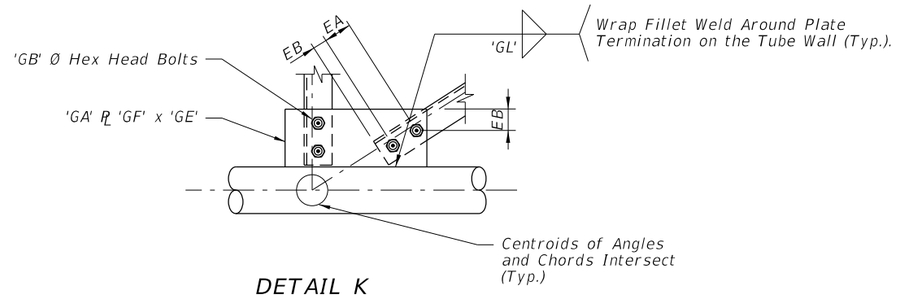
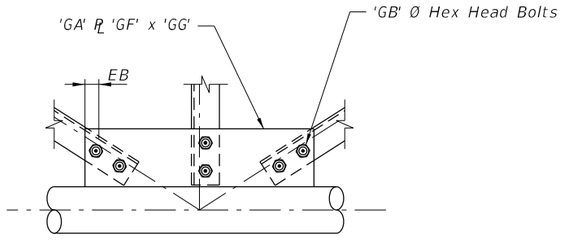
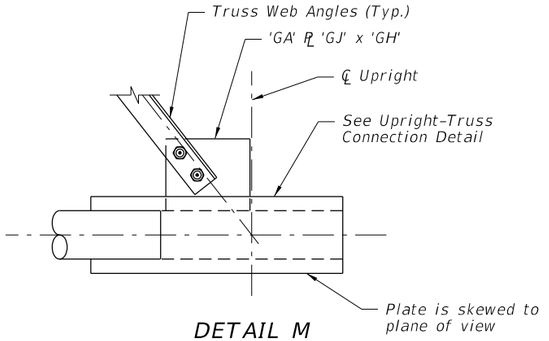


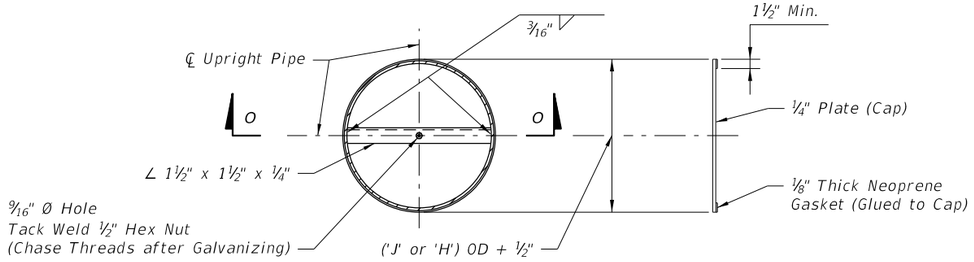
DETAIL K



DETAIL L

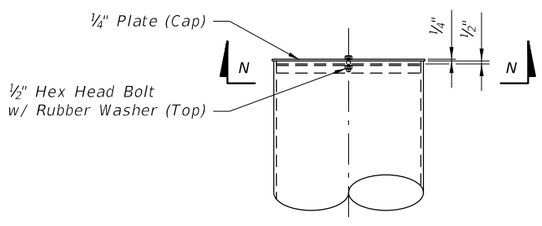


DETAIL M

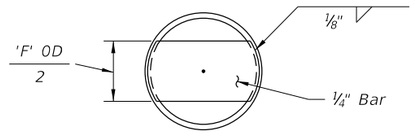


SECTION N-N

SECTION O-O
(Showing Cap plate only)



UPRIGHT CAP DETAIL



PLUG DETAIL
(Each end of Back Truss Chord)

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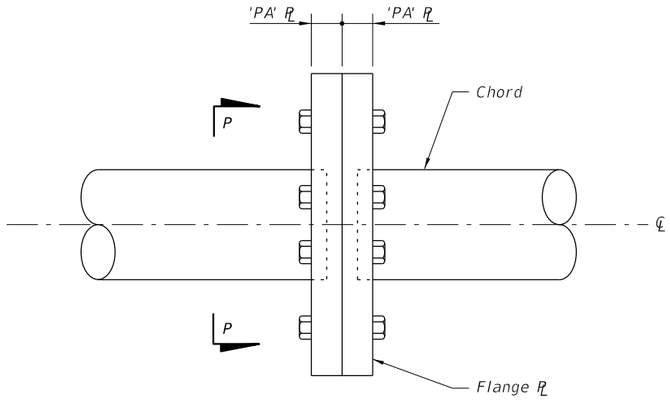
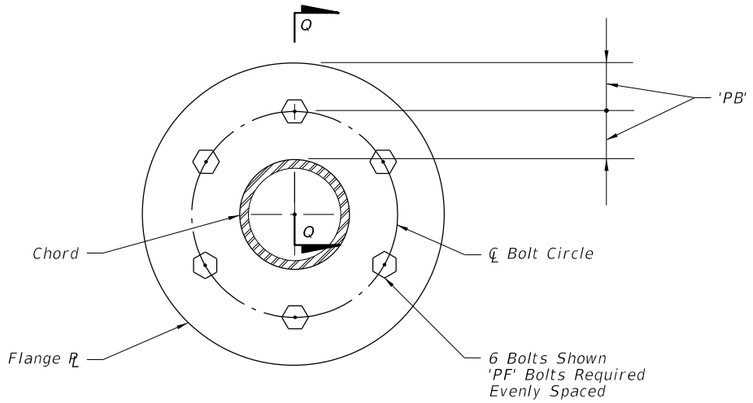
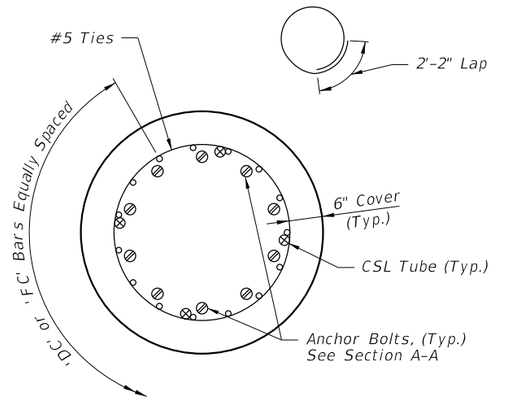


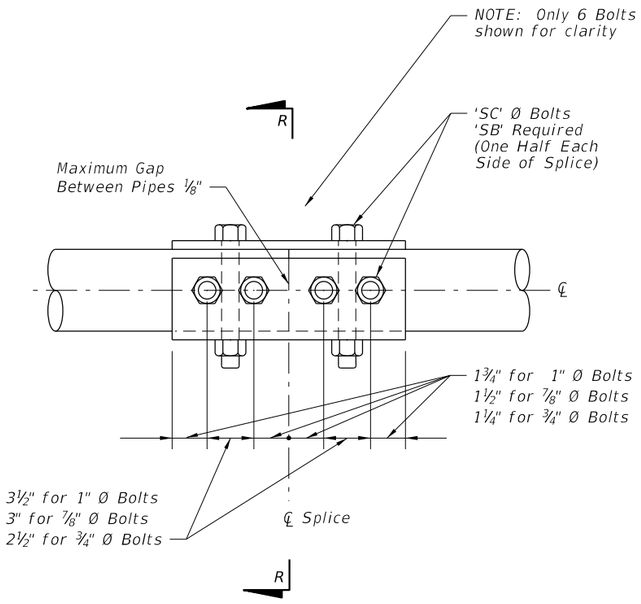
ELEVATION
ALTERNATE SPLICE CONNECTION



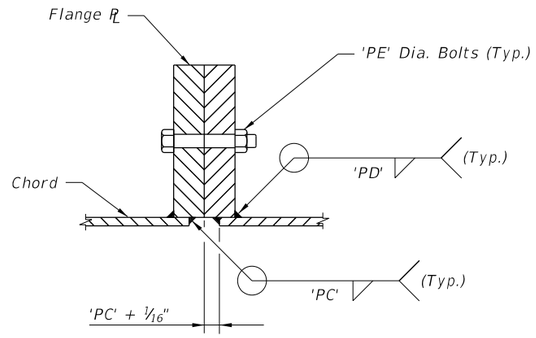
SECTION P-P



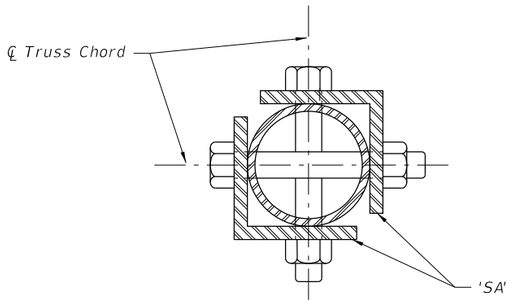
PLAN VIEW
DRILLED SHAFT



ELEVATION
SPLICE CONNECTION



SECTION Q-Q



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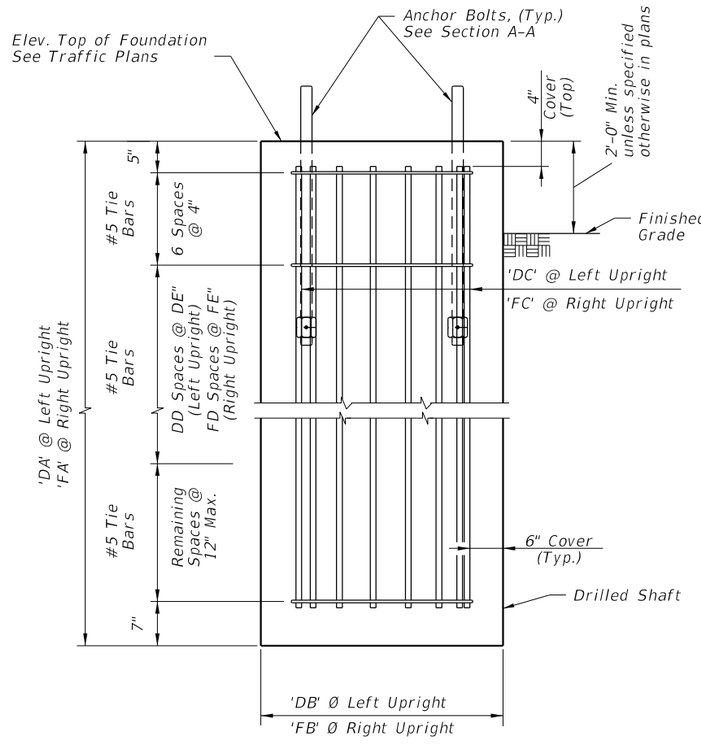

ELEVATION
DRILLED SHAFT

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LAST REVISION	REVISION	DESCRIPTION:				
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