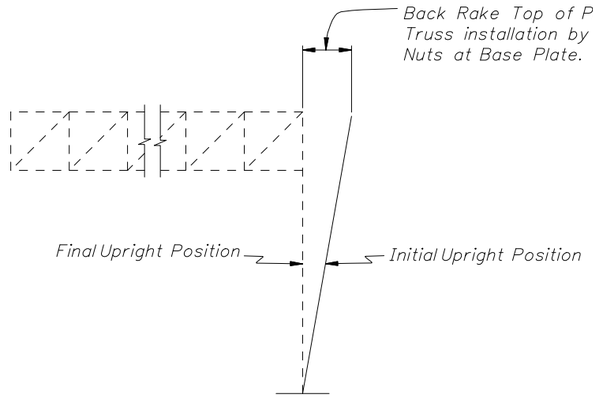
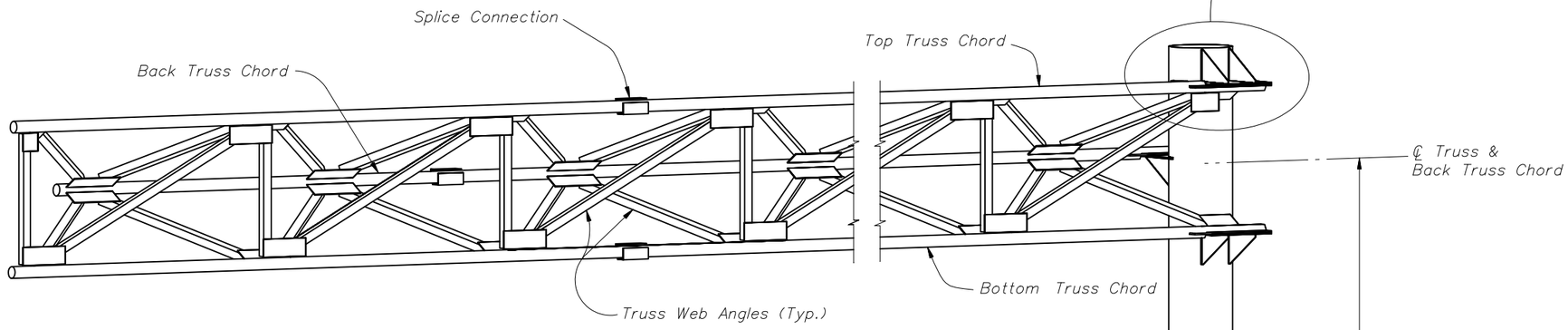


CAMBER DIAGRAM



CANTILEVER SIGN STRUCTURE NOTES

1) Sign Structure Materials shall be as follows:

Upright & Chords (Steel Pipe)	-> API-5L-X42 (42 ksi yield) or ASTM A500 Grade B
Webs and Splices (Steel Angles)	-> ASTM A709 Grade 36
Steel Plates	-> ASTM A709 Grade 36
Weld Metal	-> E70XX
Bolts (except Anchor Bolts)	-> ASTM A307 or ASTM A325 Type 1 (snug tight) as specified in Plans
Anchor Bolts	-> ASTM F1554 Grade 55
Nuts for Anchor Bolts	-> ASTM A563 Grade A Heavy Hex

Note - All Bolts (except Anchor Bolts) shall have Single Self-Locking Nuts or, in lieu thereof, regular nuts with a galvanized 'Palnut' locking nut manufactured TRW, installed in accordance with the manufacturer's recommendations. Anchor Bolts shall have Double nuts.

2) Reinforcing Steel shall be ASTM A615, Grade 60.

3) Concrete shall be Class IV with a minimum 28-day compressive strength of 5.5 ksi for all environmental classifications.

4) Grout shall have a minimum 28-day compressive strength of 5.0 ksi and shall meet the requirements of Specification Section 934 using the procedures detailed in Section 649-6.

5) All welding shall conform to American Welding Society Structural Welding Code (Steel) ANSI/AWS D1.1 (current edition)

6) All Steel items shall be galvanized as follows:

All Nuts, Bolts and Washers	-> ASTM A153 Class C or D depending on size
All other steel items	-> ASTM A123

7) The Structure must be assembled after galvanizing and prior to shipment to the site to assure fit up. It may be disassembled for shipping.

8) Design according to FDOT Structures Manual (current edition).

9) Alternate Designs for this Structure are not allowed.

10) Shop Drawings for this Structure are required and fabrication shall not begin until these Shop Drawings are approved. Shop Drawings shall include the Contractor's field verification of all Upright heights and foundation elevations necessary to insure minimum vertical clearances as per traffic plans. Shop Drawings shall also include anchor bolt orientation with respect to ℄ Truss and the direction of traffic.

11) The foundation for the Sign Structure shall be constructed in accordance with Section 455 of the Specifications except that no payment for the foundation shall be made under Section 455. The cost of providing the foundation shall be included in the pay item for providing the complete Sign Structure. Payment for any incidental items incurred in furnishing and installing this Sign Structure shall be included in the pay item for providing the complete Sign Structure. The back fill above the footing must be in place prior to the installation of the Sign Panels and may not be removed or reduced in height without prior approval of the Engineer.

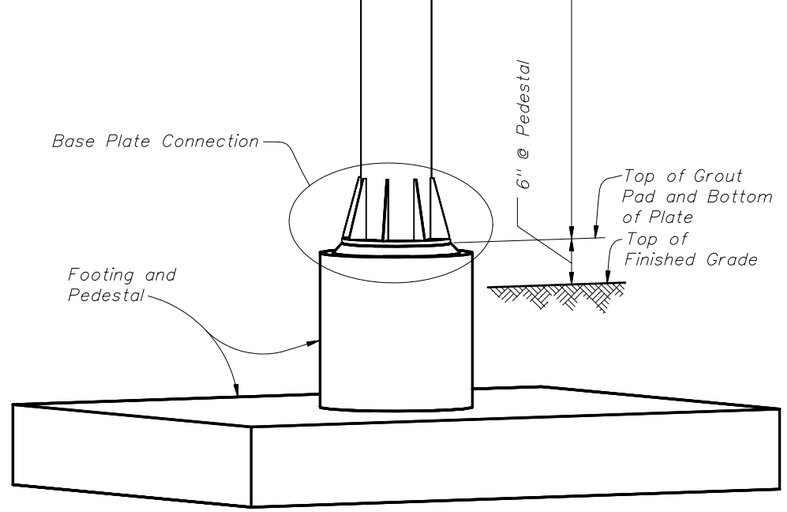
12) Except for Anchor Bolts, all bolt hole diameters shall be equal to the bolt diameter plus 1/16", prior to galvanizing. Hole diameters for Anchor Bolts shall not exceed the bolt diameter plus 1/2".

13) See Elevation Drawing for size and location of Sign Panel. Sign Panels shall be aluminum.

14) Provide the back rake as indicated on the Camber Diagram by adjusting the leveling nuts beneath the base plate after placement of the Upright and prior to installation of the Truss.

15) Chord splices shall be located a minimum distance of 2 Truss Panel lengths apart. 'SD' Panel from Upright is the closest Panel in which a chord splice is allowed, see "Tables of Cantilever Sign Structure Variables". Upright splices are not allowed.

16) If a grout pad is not installed, vertically place a wire cloth screen between the baseplate and the top of the foundation. Wrap horizontally around the baseplate with a 3" min. lap. The wire cloth shall be galvanized steel standard grade plain weave 2x2 mesh 0.063" dia. wire. The screen shall be attached to the baseplate with stainless steel self-tapping 1/4" screws with stainless steel washers spaced at 9" centers.



ISOMETRIC VIEW

*NOTE: Contractor shall verify these Dimensions prior to Fabrication of Upright.

NOTE: See Plans for Tables of Cantilever Sign Structure Variables.

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
12/04/06	CBH	AASHTO 2001 LTS-4 Specifications updates.			

2006 Interim Design Standard

CANTILEVER SIGN STRUCTURE

Interim Date 01/01/07

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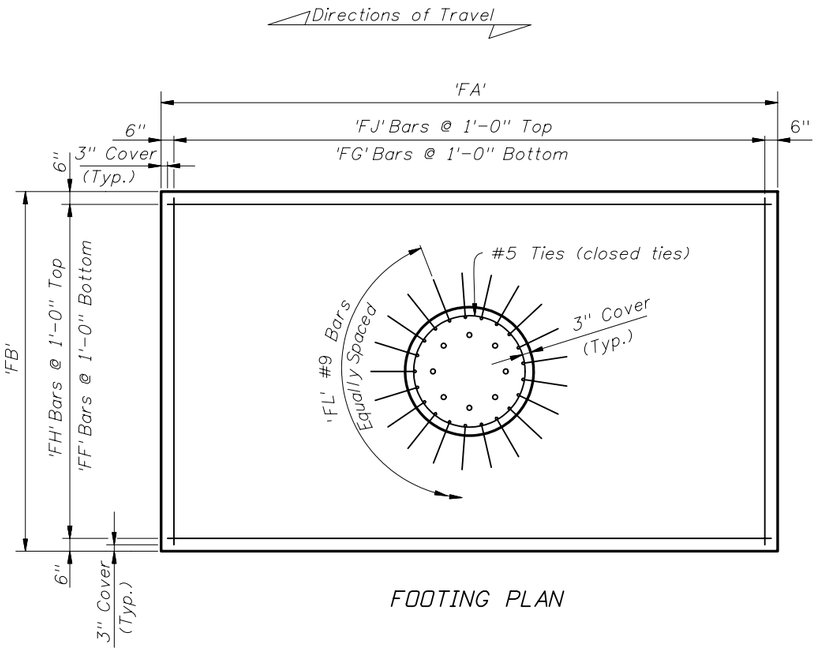
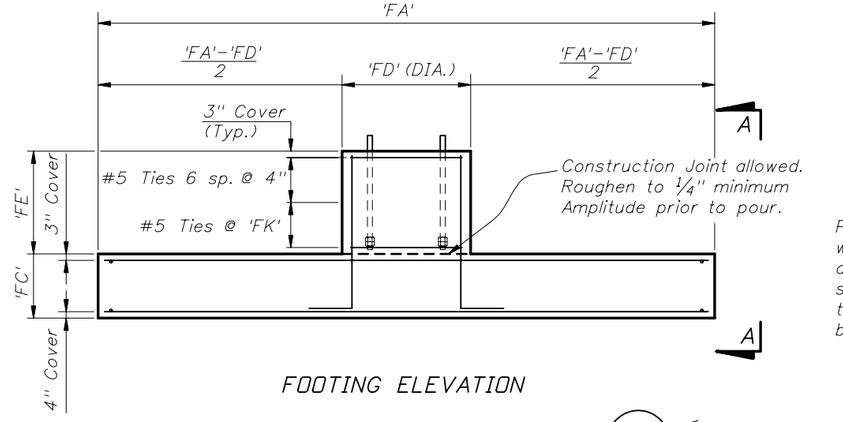
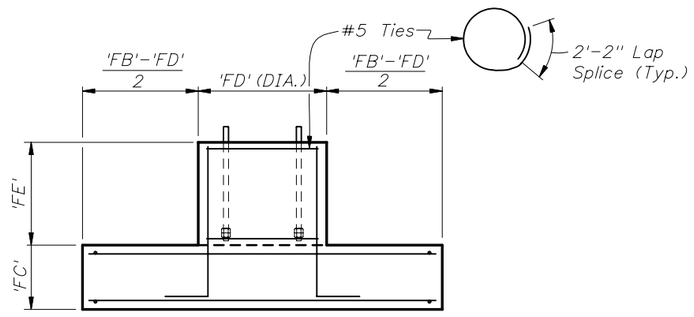


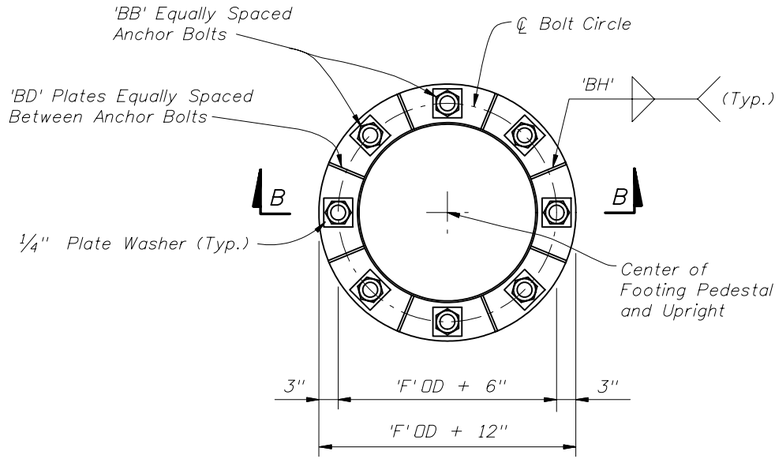
FOOTING PLAN



FOOTING ELEVATION

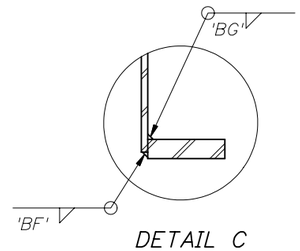


VIEW A-A

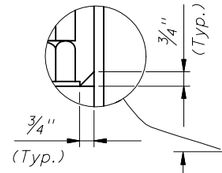


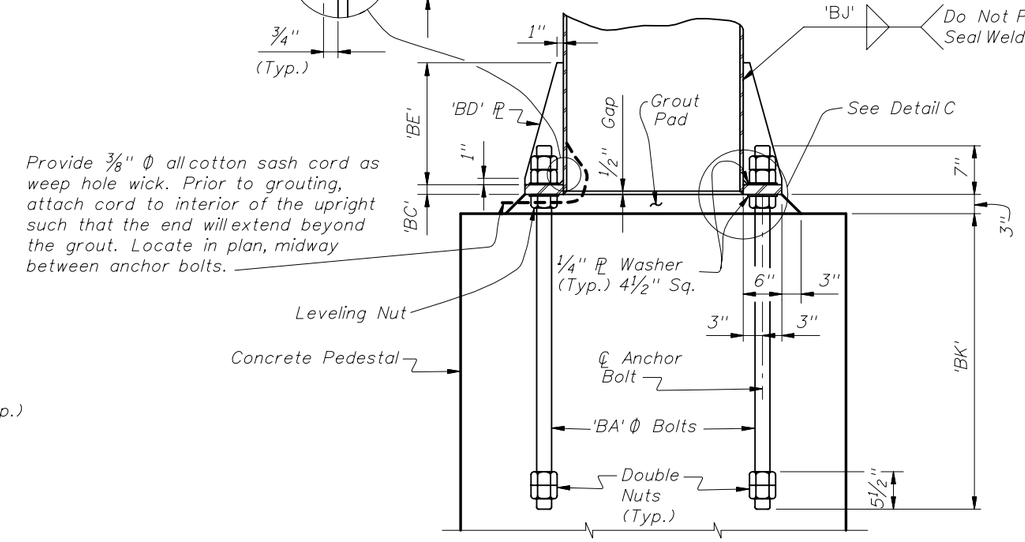
PLAN VIEW

(Base Plate)



DETAIL C





SECTION B-B

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
12/04/06	CBH	AASHTO 2001 LTS-4 Specifications updates.			

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

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CANTILEVER SIGN STRUCTURE

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