CANTILEVER SIGN STRUCTURE NOTES

1) Design according to FDOT Structures Manual. Alternate Designs are not allowed.
2) Submit shop drawings for all work. Include:
   a. Field verification of upright heights.
   b. Foundation elevations necessary to insure minimum vertical clearances as per traffic plans.
   c. Anchor bolt orientation with respect to centerline of truss and the direction of traffic.
   d. Show chord splice at a minimum distance of 2 truss panel lengths apart. “SD” Panel from upright is the closest panel in which a chord splice may be used. See plans for Cantilever Sign Structure Data Table. Upright splices are not allowed.
3) Shop Fabrication, Assembly, Handling and Shipping:
   a. Do not begin fabrication before receiving shop drawing approval.
   c. Shop assemble the entire structure after galvanizing and prior to shipment.
   d. If necessary, disassemble and reassemble components for shipment.
4) Sign Structure Materials:
   a. Upright and Chords (Steel Pipe): API-5L-X42 (42 ksi yield) or ASTM A500, Grade B.
   b. Steel Angles: ASTM A 709, Grade 36.
   c. Steel Plates: ASTM A 709, Grade 36.
   e. Bolts: ASTM A325 Type 1, (install per Specification Section 700) with single, self-locking nuts.
   f. Anchor Bolts: ASTM F1554, Grade 55 with ASTM A563 Grade A heavy-hex double nuts.
   g. Install all nuts per manufacturer's instructions.
   h. Bolt hole diameters: equal to the bolt diameter plus 0.015".
   i. Anchor bolt hole diameters: equal to the bolt diameter plus 0.020".
6) Sign Panels: Aluminum. See Elevation drawing for sizes and locations.
7) Foundation Materials:
   a. Reinforcing Steel: ASTM A615, Grade 60.
   b. Concrete: Class IV, minimum 5.5 ksi compressive strength at 28-days for all environmental classifications for Spread Footing.
   c. Steel Plates:  ASTM A 709, Grade 36.
   d. Steel Angles: ASTM A 709, Grade 36.
   e. Weld Metal: E70XX.
   f. Anchor Bolts: ASTM A325 Type 1, (install per Specification Section 700) with single, self-locking nuts.
   g. Bolts:  ASTM A325 Type 1, (install per Specification Section 700) with single, self-locking nuts.
8) Construction:
   a. Do not begin fabrication before receiving shop drawing approval.
   c. Shop assemble the entire structure after galvanizing and prior to shipment.
9) Prior to erection, record the as-built anchor locations and provide to the Engineer.
10) After placement of the upright and prior to installation of the truss, adjust the leveling nuts beneath the base plate to achieve the back rake shown on the Camber Diagram.
11) Place back/rake above the footing prior to installation of the sign panels. Do not remove or reduce in height without prior approval of the Engineer.
12) Install sign panels as shown on the Elevation drawing.
13) Verify CSL access tubes will not interfere with anchor bolt installation before excavating the shaft. When CSL access tube locations conflict with anchor bolt locations, move the CSL access tube location 2 inches along the inner circumference of the reinforcing cage. Notify the Engineer before excavating the shaft if the CSL access tube locations cannot be moved out of conflict with anchor bolt locations.

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

NOTE: See Plans for Cantilever Sign Structure Data Table.
NOTE: Only 6 Bolts Shown for Clarity

Maximum Gap Between Pipes is 1.5" (~ Half Each Side of Splice)

"SC" Bolts "SB" Required

1-1/8" for 1" Ø Bolts
1-5/8" for 3/4" Ø Bolts
1-1/2" for 1/2" Ø Bolts

SPLICE CONNECTION DETAIL

Upright-Truss Connection Detail

SEAL WELD Top Edge of Gusset Plate. (Typ.)
Do Not Provide Returns On Fillet Welds.

SECTION D-D

SPICE CONNECTION DETAIL

SECTION F-F, SECTION G-G Similar

(With Gusset Plate & Angles omitted for clarity)

NOTE: Abbreviation OD ~ Outside Diameter