STOCK STRAIN POLE NOTES


2. Perform all welding in accordance with the American Welding Society Structural Welding Code (Steel AWS/D1.1, current edition). No Field welding is permitted on any part of the pole.

3. See Standard Index No. 17727 for grounding and span wire details.

4. Foundation Materials:
   a. Reinforcing Steel: ASTM A615 Grade 60
   b. Concrete/Class II, Expanded Shale 4,500 psi (413 kPa) minimum Compressive Strength at 28-days for all environmental classifications.
   c. Anchor Bolts: ASTM F813 Grade 55 with ASTM A563 Grade A heavy hex nuts and ASTM F436 Type 1 washers (galvanized in accordance with ASTM F2329).

5. Strain Pole Specifications:
   a. Poles: ASTM A412 Grade 50, 55, 60 or 65 (less than 6"), or ASTM A572 Grade 50, 55, 60, or 65 (1/4" and over) or ASTM A586 Grade A, 55 ksi yield or Grade B, 60 ksi yield.
   b. Steel Plates: ASTM A36.
   c. Weld Joint: ETUX.
   d. Bolts: A325, Type 1, Grade A, Diameter Bolt diameter plus 1/8".
   e. Base Plate: Pole Diameter anchor bolt diameter plus 1/8".
   f. Handhole frames: ASTM A709 Grade 36 or ASTM A432. Covers: ASTM A411 Grade 50, 55, 60 or 65.
   g. Aluminum Caps and Covers: ASTM B-209 (S-198)
   h. Stainless Steel: A-20 Type J6.
   i. Galvanization: All other bolts and washers: ASTM F2329. All other steel: ASTM A323.

6. Pole Notes:
   a. See the Signalization Plans for clamp spacing, cable sizes and forces, signal and sign mounting locations and details.
   b. Tapered with the diameter changing at a rate of 0.14 inch per foot.
   c. Transverse welds are allowed only at the base.
   d. Poles constructed out of two or more sections with overlapping splices are not permitted.
   e. Locate the handhole 180 degrees from 2-inch wire entrance point.
   f. Furnish each pole with a 2 x 4" max aluminum identification tag. Submit details for approval.
   g. Secure to pole with 0.020" stainless steel rivets or screws. Locate Identification Tag on the inside of pole and visible from handhole. Include the following information: Manufacturer's Name & Certification number and GPL number.

7. Use hundred percent of full-penetration groove welds and a random 25 percent of partial-penetration groove welds. All welds shall be inspected. Full-penetration groove weld inspection shall be performed by nondestructive methods of radiography or ultrasonics.

8. Manufacturers seeking approval of a steel strain pole assembly for inclusion on the Qualified Products List must submit a GPL Product Evaluation Application along with drawings showing the product meets all specified requirements of this Standard.

9. Verify CSL access tubes without interference with anchor bolt installation before excavating the shaft.
   When CSL access tube locations conflict with anchor bolt locations, move the CSL access tube location two 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.
POLE TOP CUT-AWAY (Option ‘a’)

1/4" x 2" Lifting bar with 3/8" Ø hole and 3/8" Nut tack welded to underside of bar.

1/2" Ø Bolt with Nut, Lock Nut and Flat Washers (Typ.)

1/2" Bolt Plate with Hole and Slot for 1/2" Ø Bolt

NOTE: A properly sized Service Head (Weather Head), shall be installed and fastened securely on to the standard pipe for each pole location. At locations other than service entrance, the service head face is to be left closed to outside atmosphere. Service entrance installation per Index No. 17727.

WIRE ENTRANCE DETAILS

2" NPS, Sch. 40 Pipe

POLE TOP CUT-AWAY (Option ‘b’)

4" x 3/8" Hand Hole Frame made continuous with a Full Penetration Weld.

NOTE: Clamps have been sized for Design Cable Loads shown in the Table, and a Minimum Pole Diameter at the Clamp location of 3-1/2".

Catenary and Messenger Wire Clamps

2-3/4" Ø Holes for 3/8" x 3" Steel Passivated Cotter Pins

Clevis, 1/4" thick
ASTM 4709 Grade 50

Steel Clamp, ASTM 4709
Grade 50, see Table for Thickness

11 Gage Hand Hole Cover

VIEW E-E

ATTACHMENT DETAILS

2010 FDOT Design Standards

STEEL STRAIN POLE

Sheet No. 3 of 3

Last Revised 01/01/09