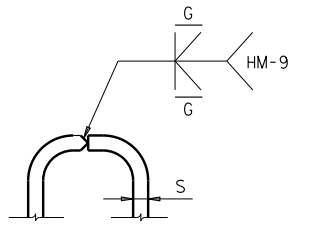
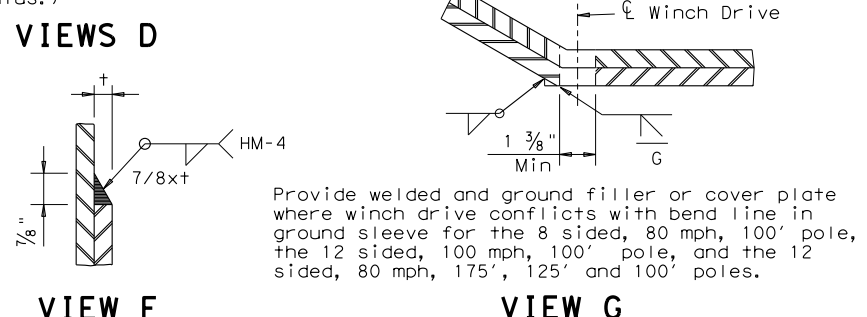
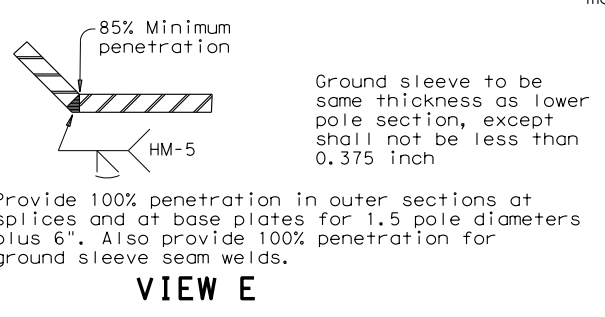
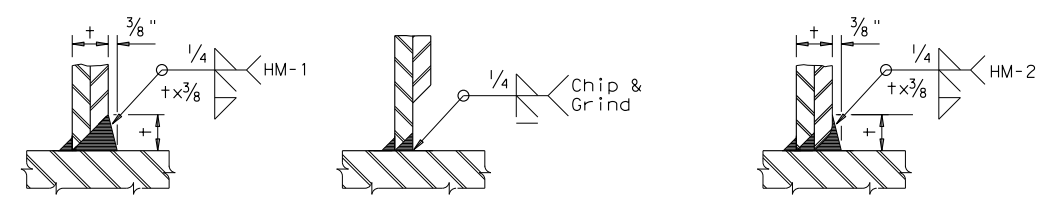
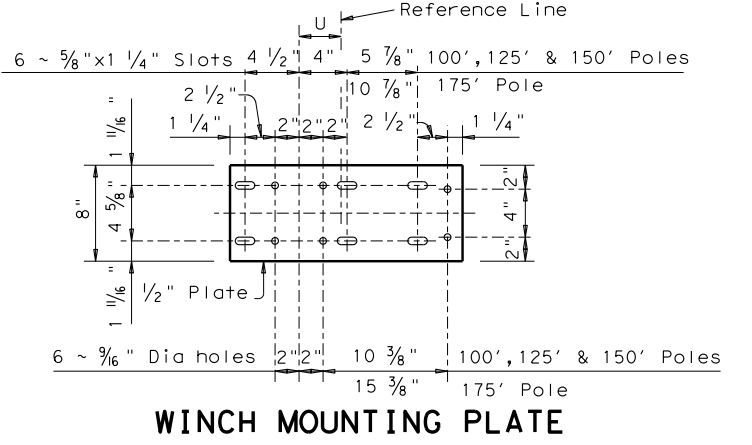
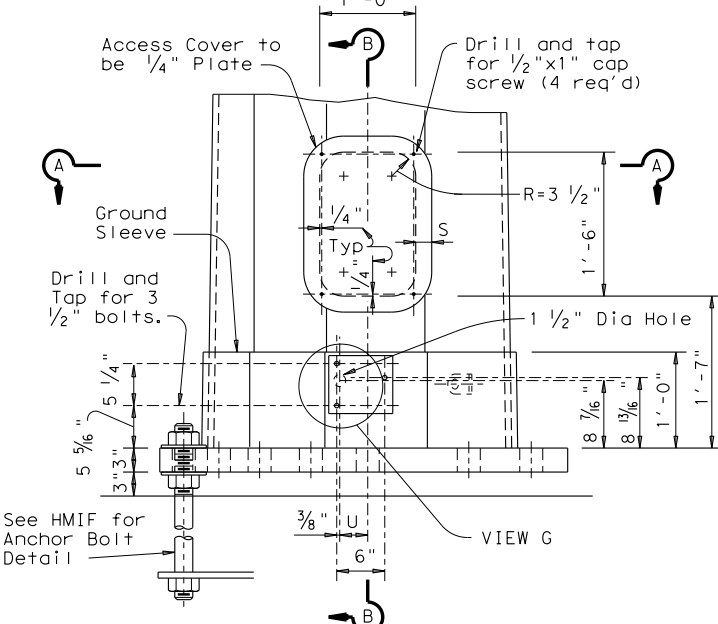
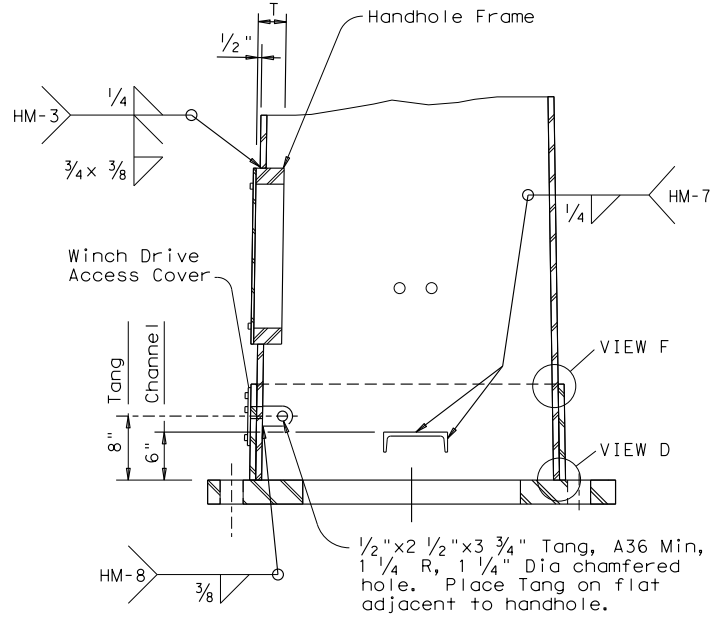
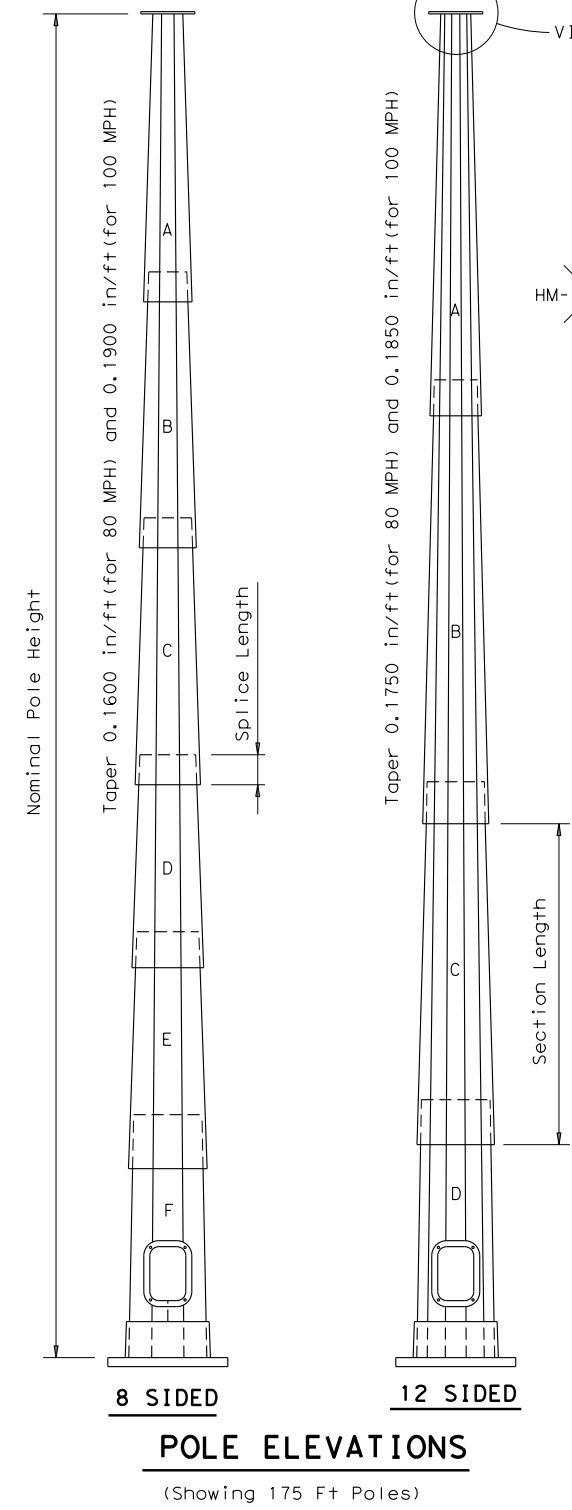
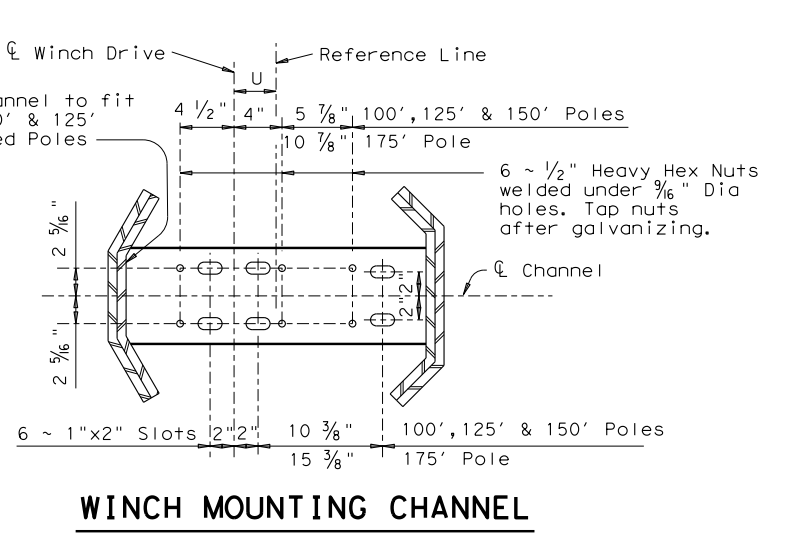
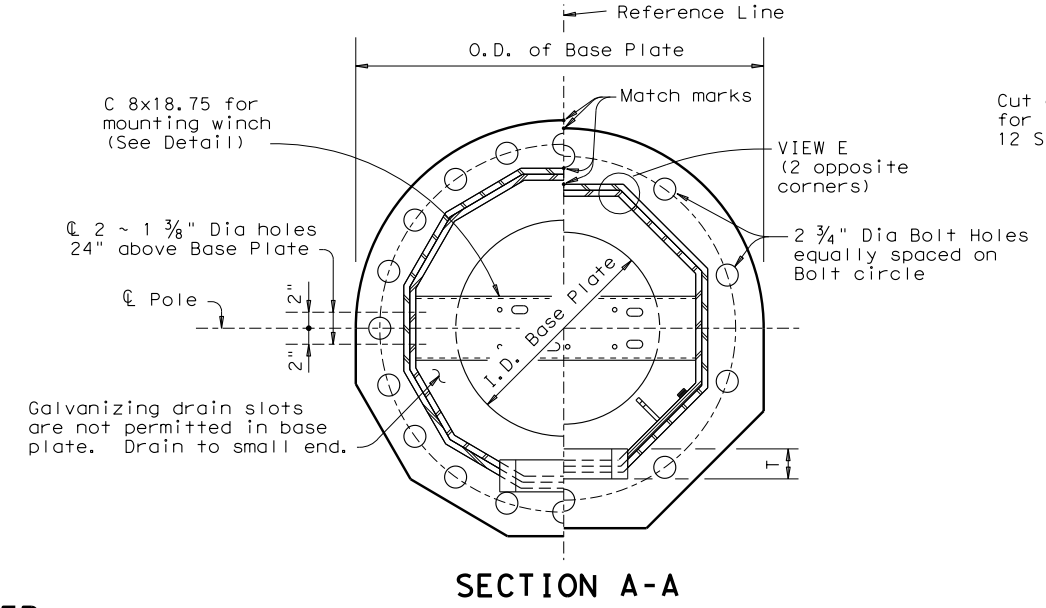
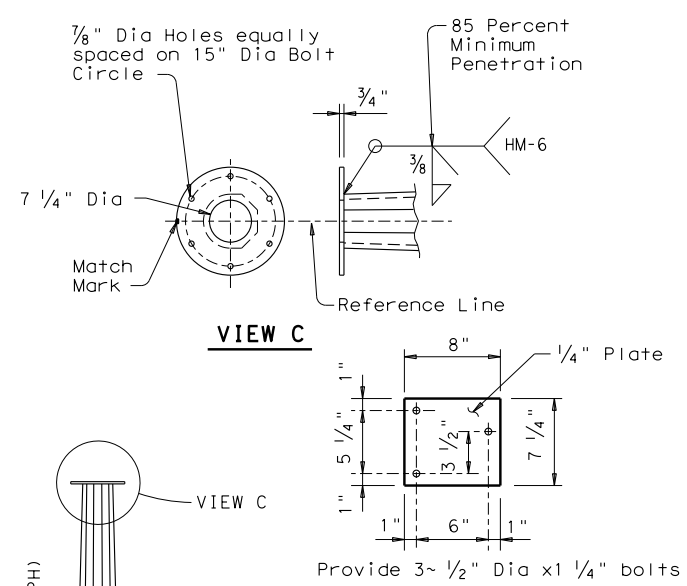
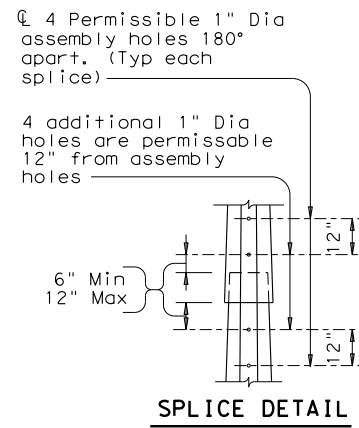


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A bent and welded handhole frame is permissible. Heating, bending, and finish grinding must be approved with the HM-9 weld procedure.

OPTIONAL HANDHOLE FRAME

| | | | |
|--|-------|---|-----------|
| | | Traffic Operations Division Standard | |
| <h2>HIGH MAST ILLUMINATION POLES</h2> <h3>100' - 125' - 150' - 175'</h3> <h2>HMIP(1)-16</h2> | | | |
| FILE: hmip-16.dgn | DN: | CK: | DW: |
| © TxDOT August 1995 | CON: | SECT: | JOB: |
| REVISIONS | | | |
| 5-98 | | | |
| 8-16 | | | |
| | DIST: | COUNTY: | SHEET NO. |

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| TABLE OF VARIABLE POLE DIMENSIONS | | | | | | | | | | | |
|-----------------------------------|---------|-------------------|--------|--------------------|---------------|-----------------|-------------------|--------|--------------------|---------------|-----------------|
| Ht (ft) | Section | 8 SIDED POLE | | | | | 12 SIDED POLE | | | | |
| | | Diameter (Inches) | | Thickness (inches) | Length (feet) | Splice (inches) | Diameter (Inches) | | Thickness (inches) | Length (feet) | Splice (inches) |
| | | Bottom | Top | | | | Bottom | Top | | | |
| 175 | A | 13.083 | 7.750 | .250 | 33.33 | 19 | 16.792 | 7.750 | .250 | 51.67 | 24 |
| | B | 17.792 | 12.205 | .375 | 34.92 | 25 | 24.858 | 15.817 | .313 | 51.67 | 36 |
| | C | 22.250 | 16.583 | .375 | 35.42 | 32 | 32.625 | 23.583 | .313 | 51.67 | 48 |
| | D | 25.375 | 20.948 | .438 | 27.67 | 36 | 36.250 | 31.175 | .375 | 29.00 | ~ |
| | E | 28.375 | 23.895 | .500 | 28.00 | 41 | | | | | |
| | F | 31.250 | 26.703 | .500 | 28.42 | ~ | | | | | |
| 150 | A | 13.083 | 7.750 | .250 | 33.33 | 19 | 16.792 | 7.750 | .250 | 51.67 | 24 |
| | B | 17.792 | 12.205 | .375 | 34.92 | 25 | 24.858 | 15.817 | .313 | 51.67 | 36 |
| | C | 22.250 | 16.583 | .375 | 35.42 | 32 | 32.625 | 23.583 | .313 | 51.67 | ~ |
| | D | 25.375 | 20.948 | .438 | 27.67 | 36 | | | | | |
| | E | 28.375 | 23.895 | .500 | 28.00 | ~ | | | | | |
| 125 | A | 13.083 | 7.750 | .250 | 33.33 | 19 | 16.792 | 7.750 | .250 | 51.67 | 24 |
| | B | 17.792 | 12.205 | .375 | 34.92 | 25 | 24.858 | 15.817 | .313 | 51.67 | 36 |
| | C | 22.250 | 16.583 | .375 | 35.67 | 32 | 28.250 | 23.583 | .313 | 26.67 | ~ |
| | D | 25.375 | 20.948 | .438 | 27.67 | ~ | | | | | |
| 100 | A | 13.083 | 7.750 | .250 | 33.33 | 19 | 16.792 | 7.750 | .250 | 51.67 | 24 |
| | B | 17.792 | 12.205 | .375 | 34.67 | 25 | 24.625 | 15.817 | .313 | 50.33 | ~ |
| | C | 22.250 | 16.583 | .375 | 35.67 | ~ | | | | | |
| 175 | A | 14.208 | 7.875 | .313 | 33.33 | 20 | 17.433 | 7.875 | .375 | 51.67 | 25 |
| | B | 19.792 | 13.142 | .375 | 35.00 | 28 | 25.747 | 16.173 | .438 | 51.75 | 37 |
| | C | 25.250 | 18.473 | .438 | 35.67 | 36 | 33.750 | 24.176 | .438 | 51.75 | 49 |
| | D | 29.000 | 23.680 | .500 | 28.00 | 42 | 37.375 | 31.995 | .500 | 29.08 | ~ |
| | E | 32.625 | 27.210 | .563 | 28.50 | 47 | | | | | |
| | F | 36.125 | 30.631 | .563 | 28.92 | ~ | | | | | |
| 150 | A | 14.208 | 7.875 | .313 | 33.33 | 20 | 17.433 | 7.875 | .375 | 51.67 | 25 |
| | B | 19.792 | 13.142 | .375 | 35.00 | 28 | 25.747 | 16.173 | .438 | 51.75 | 37 |
| | C | 25.250 | 18.473 | .438 | 35.67 | 36 | 33.750 | 24.176 | .438 | 51.75 | ~ |
| | D | 29.00 | 23.680 | .500 | 28.00 | 42 | | | | | |
| | E | 32.625 | 27.210 | .563 | 28.50 | ~ | | | | | |
| 125 | A | 14.208 | 7.875 | .313 | 33.33 | 20 | 17.433 | 7.875 | .375 | 51.67 | 25 |
| | B | 19.792 | 13.142 | .375 | 35.00 | 28 | 25.747 | 16.173 | .438 | 51.75 | 37 |
| | C | 25.250 | 18.473 | .438 | 35.67 | 36 | 29.125 | 24.176 | .438 | 26.75 | ~ |
| | D | 29.00 | 23.680 | .500 | 28.00 | ~ | | | | | |
| 100 | A | 14.208 | 7.875 | .313 | 33.33 | 20 | 17.433 | 7.875 | .375 | 51.67 | 25 |
| | B | 19.792 | 13.142 | .375 | 35.00 | 28 | 25.500 | 16.173 | .375 | 50.42 | ~ |
| | C | 25.250 | 18.473 | .438 | 35.67 | ~ | | | | | |

Diameters are measured across the flats.

| MATERIALS | |
|------------------------------------|---|
| Polygonal Shafts Ground Sleeves | ASTM A709 Grade 50 A572 Grade 50 ①② |
| Base Plate and Handhole Frame | ASTM A709 Grade 50 A572 Grade 50 ① A633 Grade C ① |
| Miscellaneous Steel | ASTM A36 or equal |

- ① ASTM A572 and A633 may have higher yield strength but shall not have less elongation than the grade indicated.
- ② The silicon content of all steel shall be controlled to ensure high quality galvanizing and to avoid discoloration.

| TABLE OF VARIABLE BASE DIMENSIONS | | | | | | | |
|-----------------------------------|---------------|---------------|-------------------|-----------|------------|------------|------------|
| Ht (ft) | O.D. (inches) | I.D. (inches) | Bolt Cir (inches) | No. Bolts | S (inches) | T (inches) | U (inches) |
| 80 MPH DESIGNS | | | | | | | |
| 8 SIDED POLE | | | | | | | |
| 175' | 47 | 22 | 41 | 16 | 2.00 | 3.75 | 4.50 |
| 150' | 44 | 18 | 38 | 12 | 2.00 | 4.00 | 3.50 |
| 125' | 41 | 16 | 35 | 8 | 2.00 | 4.50 | 3.50 |
| 100' | 37 | 14 | 31 | 6 | 2.00 | 5.00 | 3.50 |
| 12 SIDED POLE | | | | | | | |
| 175' | 50 | 24 | 44 | 12 | 1.75 | 3.50 | 3.50 |
| 150' | 47 | 22 | 41 | 10 | 1.75 | 3.50 | 2.50 |
| 125' | 42 | 18 | 36 | 8 | 1.75 | 3.75 | 2.50 |
| 100' | 38 | 13 | 32 | 6 | 1.75 | 4.00 | 2.50 |
| 100 MPH DESIGNS | | | | | | | |
| 8 SIDED POLE | | | | | | | |
| 175' | 52 | 27 | 46 | 20 | 1.75 | 3.50 | 4.50 |
| 150' | 49 | 23 | 43 | 16 | 1.75 | 4.00 | 3.50 |
| 125' | 45 | 21 | 39 | 12 | 1.75 | 4.50 | 3.50 |
| 100' | 40 | 17 | 34 | 10 | 1.75 | 4.50 | 3.50 |
| 12 SIDED POLE | | | | | | | |
| 175' | 52 | 27 | 46 | 16 | 1.75 | 3.25 | 3.50 |
| 150' | 50 | 25 | 44 | 12 | 1.75 | 3.50 | 2.50 |
| 125' | 46 | 22 | 40 | 10 | 1.75 | 3.75 | 2.50 |
| 100' | 42 | 19 | 36 | 6 | 1.75 | 4.00 | 2.50 |

NOTE: Base Plate may be round or with 8 or 12 equal segments matching the pole.

GENERAL NOTES:

- Design conforms to AASHTO 1994 Standard Specifications for Structural Supports for Highway Signs, Luminaries, and Traffic Signals and Interim Revisions thereto. The Design Wind Speed is 80 mph or 100 mph.
- The required design height and wind speed shall be as shown elsewhere in the plans.
- Each pole section, top flange plate and base plate shall be permanently marked on the reference line. The required mark locations are shown on the baseplate, top plate, and foundation plan details. These marks shall be used in pole assembly and erection alignment. The reference line and anchor bolt orientation shall be parallel to roadway centerline unless otherwise shown on Lighting Layouts.



**HIGH MAST
ILLUMINATION POLES
100' - 125' - 150' - 175'**

HMIP (2) - 16

| | | | | |
|---------------------|------|--------|-----------|---------|
| FILE: hmip-16.dgn | DN: | CK: | DW: | CK: |
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