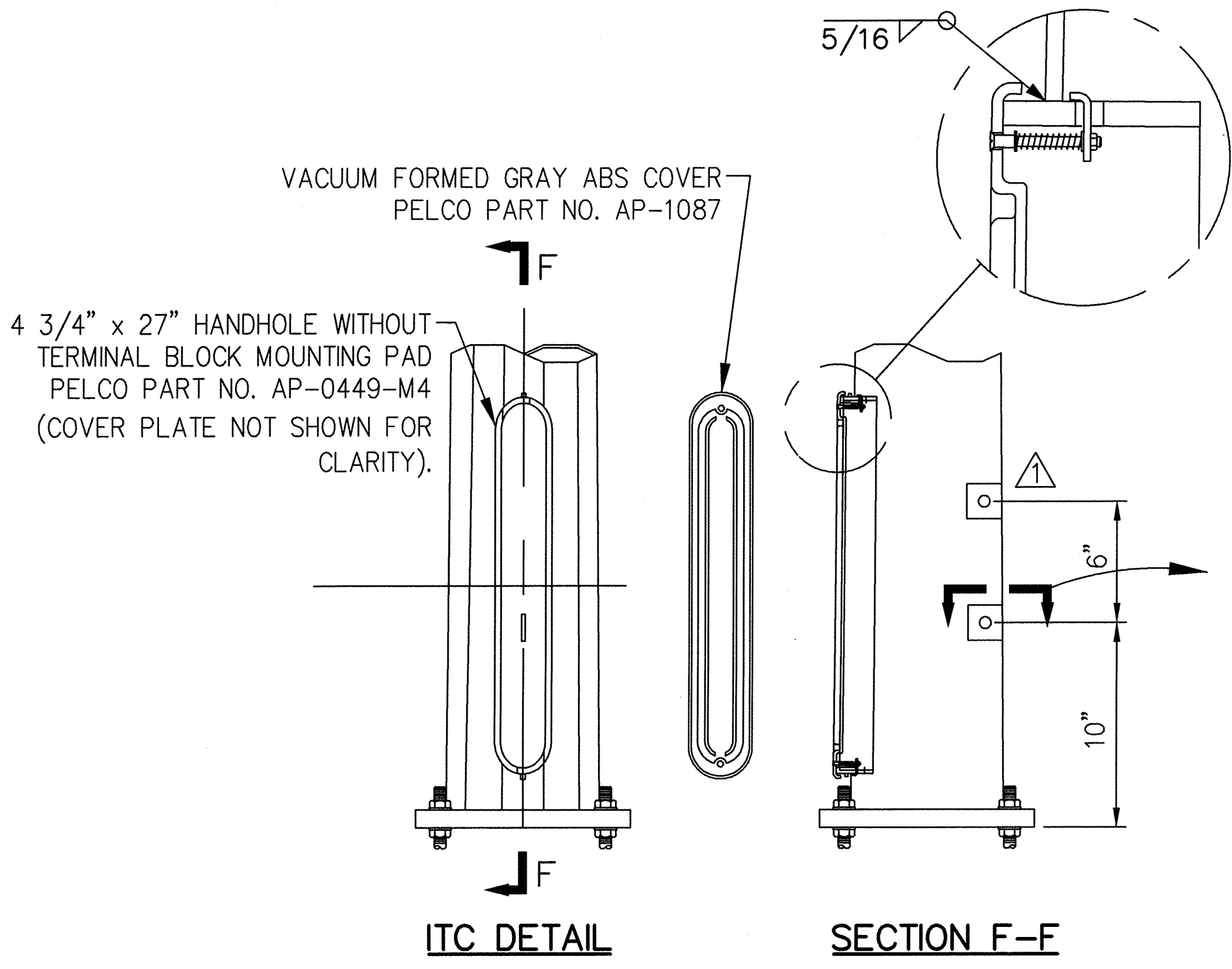
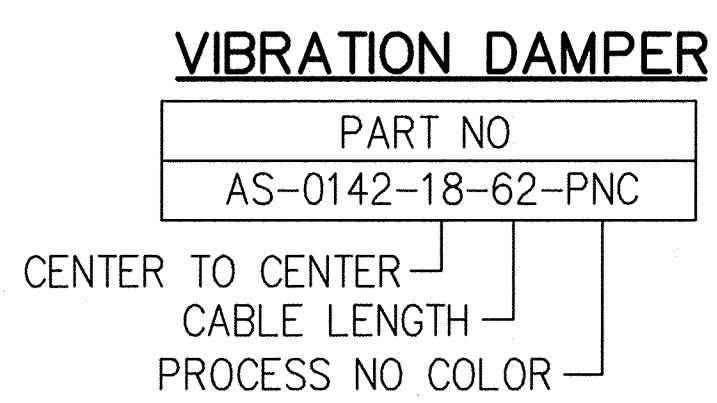
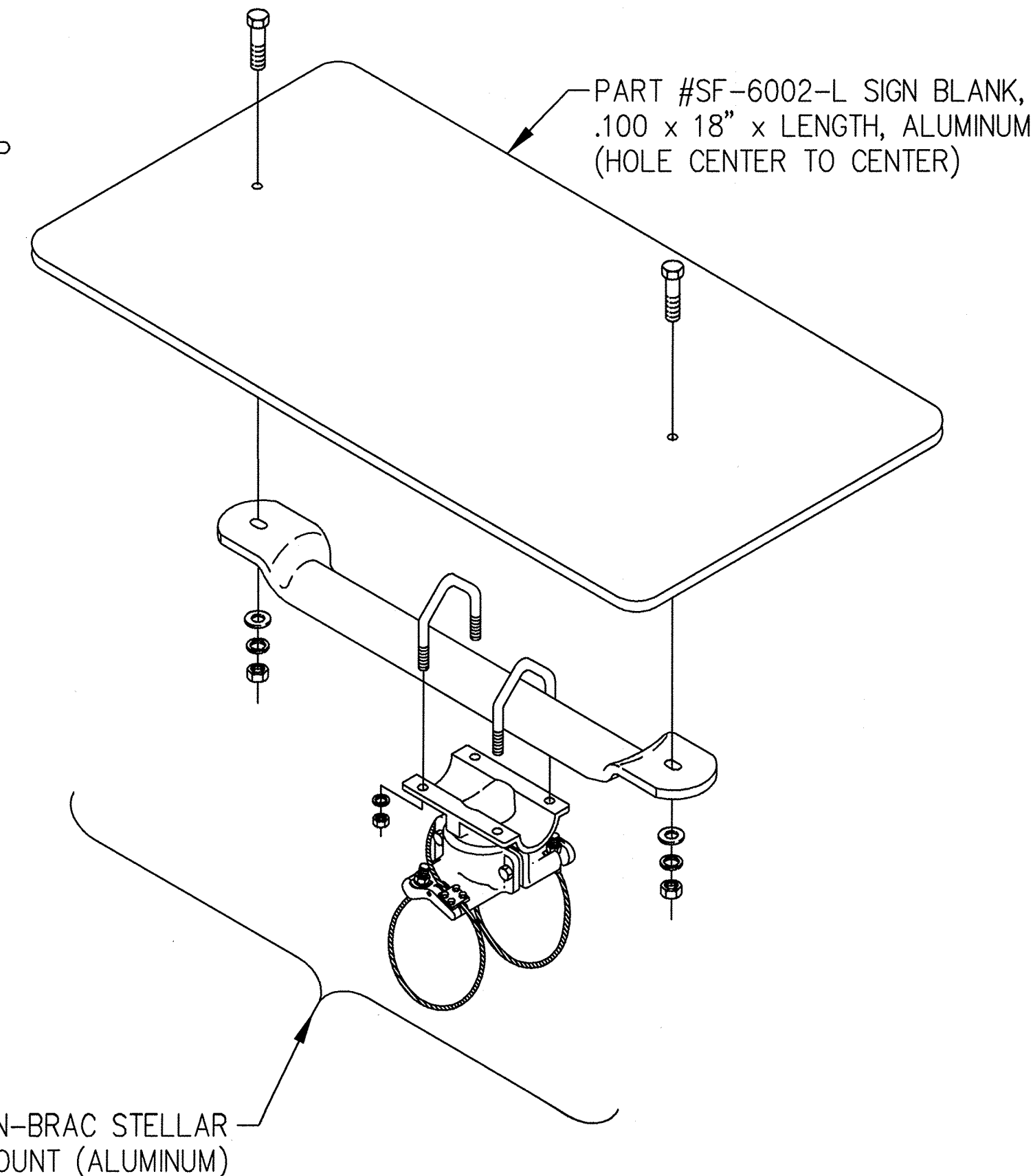
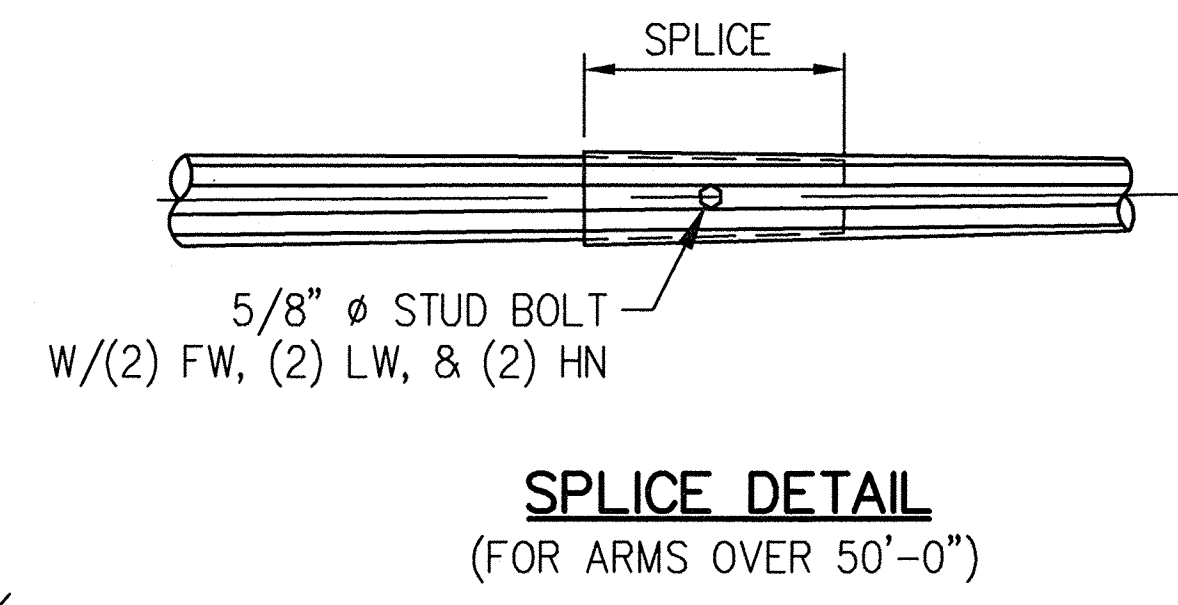
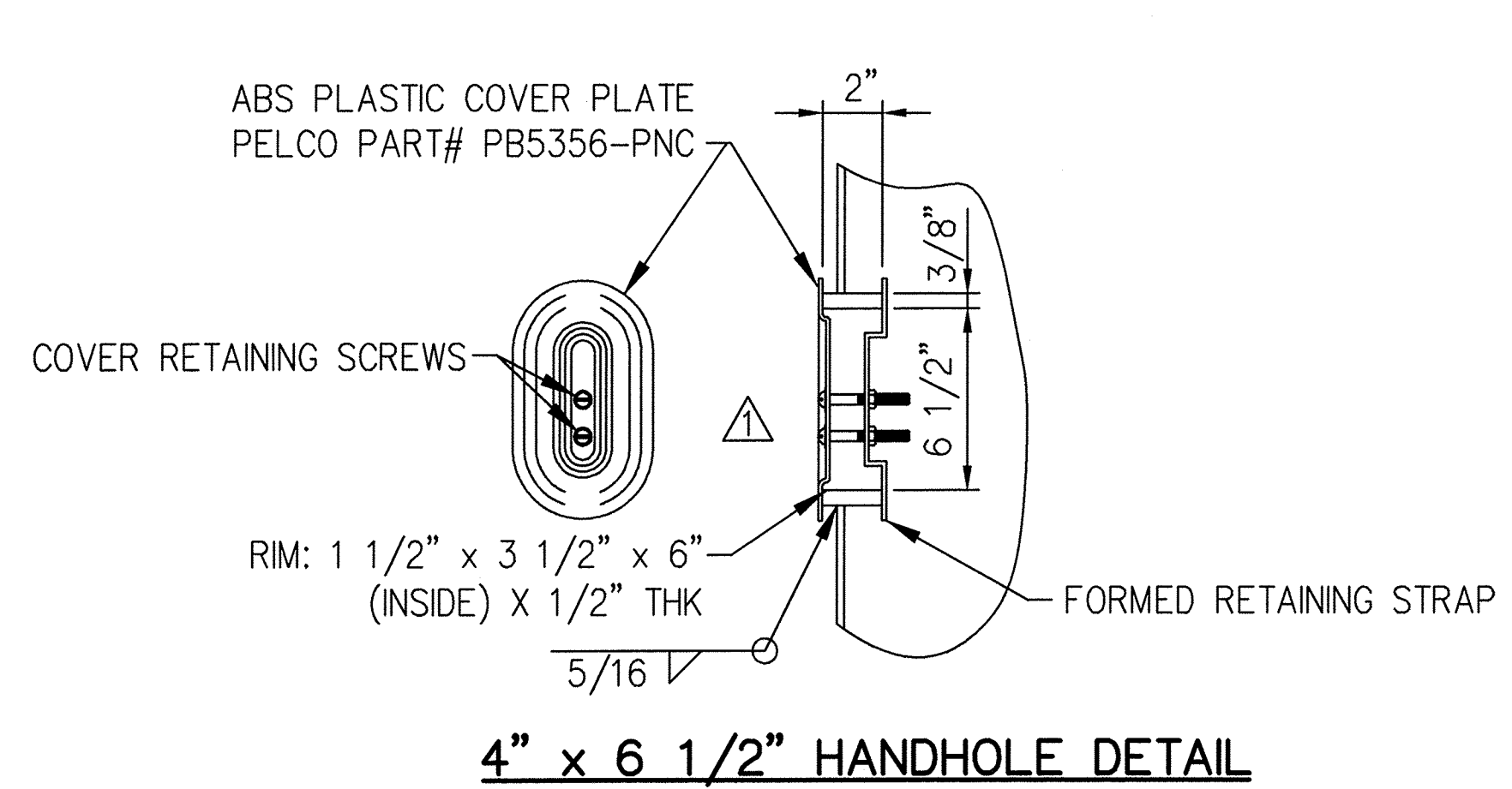


# POLE SCHEDULE

| POLE NUMBER | QTY. | SINGLE MAST ARM |         |        |        |              |        |        |            |        |       |            |         |        |        |        |              |            |         |                |        |        |         |         |         |         |        |      |        |        |         |  |
|-------------|------|-----------------|---------|--------|--------|--------------|--------|--------|------------|--------|-------|------------|---------|--------|--------|--------|--------------|------------|---------|----------------|--------|--------|---------|---------|---------|---------|--------|------|--------|--------|---------|--|
|             |      | SHAFT           |         |        |        | ANCHOR BOLTS |        |        | BASE PLATE |        |       | ARM SHAFT  |         |        |        |        | FLANGE BOLTS |            |         | ARM ATTACHMENT |        |        |         |         |         |         |        |      |        |        |         |  |
|             |      | BOT OD          | TOP OD  | THK.   | LENGTH | QTY.         | DIA.   | LENGTH | THK.       | PL SQ. | BC    | ARM NUMBER | BOT OD  | TOP OD | THK.   | LENGTH | SPLICE       | ANG. (DEG) | RISE    | QTY.           | DIA.   | LENGTH | "A"     | "B"     | "C"     | "D"     | "E"    | "F"  | "G"    | "H"    |         |  |
| 1R          | -    | 12.000"         | 8.208"  | .2500" | 22'-9" | 4            | 1 1/2" | 54"+6" | 1 1/2"     | 17"    | 16.5" | 1R10       | 7.500"  | 5.000" | .1875" | 18'-0" | -            | 1.75       | 6 1/2"  | 4              | 1 1/4" | 4 1/2" | 17.000" | 13.500" | 12.000" | 8.500"  | 1 1/4" | 3/8" | 1 1/4" | 1 1/4" |         |  |
| 2B          | -    | 14.000"         | 9.640"  | .2500" | 22'-9" | 4            | 1 1/2" | 54"+6" | 1 1/2"     | 19"    | 18.5" | 1R18       | 8.250"  | 5.000" | .1875" | 24'-0" | -            | 2.00       | 8 3/4"  | 4              | 1 1/4" | 5"     | 18.000" | 14.500" | 15.000" | 11.500" | 1 1/4" | 1/2" | 1 1/2" | 1 1/2" |         |  |
|             |      |                 |         |        |        |              |        |        |            |        |       | 2B30       | 10.000" | 5.000" | .1875" | 30'-0" |              |            | 12 1/2" |                |        |        |         |         |         |         |        |      |        |        |         |  |
| 3G          | -    | 15.500"         | 11.708" | .3125" | 22'-9" | 4            | 1 3/4" | 84"+6" | 1 3/4"     | 21"    | 20.5" | 2B36       | 11.500" | 5.000" | .1875" | 36'-0" | -            | 2.25       | 15"     | 4              | 1 1/2" | 5 1/4" | 24.000" | 20.000" | 19.000" | 15.000" | 1 1/2" | 3/4" | 1 1/2" | 1 1/2" |         |  |
|             |      |                 |         |        |        |              |        |        |            |        |       | 3G42       | 13.250" | 5.000" | .1875" | 42'-0" |              |            | 20"     |                |        |        |         |         |         |         |        |      |        |        |         |  |
|             |      |                 |         |        |        |              |        |        |            |        |       | 3G46       | 14.000" | 5.000" | .1875" | 46'-0" |              |            | 21 3/4" |                |        |        |         |         |         |         |        |      |        |        |         |  |
| 4Y          | -    | 17.250"         | 13.269" | .3125" | 22'-9" | 4            | 1 3/4" | 84"+6" | 1 3/4"     | 23"    | 22.5" | 3G50       | 15.000" | 5.000" | .1875" | 50'-0" | -            | 2.50       | 23 1/2" | 4              | 1 1/2" | 5 3/4" | 24.000" | 20.000" | 19.000" | 15.000" | 1 1/2" | 7/8" | 1 3/4" | 1 3/4" |         |  |
|             |      |                 |         |        |        |              |        |        |            |        |       | 4Y54       | 12.750" | 8.154" | .3125" | 30'-1" |              |            | 1'-1"   |                |        |        |         |         |         |         |        |      |        |        | 28 1/4" |  |
|             |      |                 |         |        |        |              |        |        |            |        |       | 4Y58       | 13.500" | 8.211" | .3125" | 34'-1" |              |            | 1'-1"   |                |        |        |         |         |         |         |        |      |        |        | 30 1/2" |  |
| 5W          | -    | 19.750"         | 15.958" | .3125" | 22'-9" | 4            | 2"     | 90"+6" | 2"         | 27"    | 26"   | 4Y54       | 14.250" | 9.794" | .3125" | 28'-4" | -            | 2.75       | 35 3/4" | 4              | 1 1/2" | 5 3/4" | 25.000" | 21.000" | 20.000" | 16.000" | 1 1/2" | 1"   | 1 3/4" | 1 3/4" |         |  |
|             |      |                 |         |        |        |              |        |        |            |        |       | 5W62       | 10.504" | 5.000" | .1875" | 35'-0" |              |            | 1'-4"   |                |        |        |         |         |         |         |        |      |        |        | 38"     |  |
|             |      |                 |         |        |        |              |        |        |            |        |       | 5W66       | 15.000" | 9.856" | .3125" | 32'-4" |              |            | 1'-4"   |                |        |        |         |         |         |         |        |      |        |        | 40 1/2" |  |
|             |      |                 |         |        |        |              |        |        |            |        |       | 5W70       | 10.568" | 5.000" | .1875" | 35'-0" |              |            | 1'-4"   |                |        |        |         |         |         |         |        |      |        |        |         |  |
|             |      |                 |         |        |        |              |        |        |            |        |       |            |         |        |        |        |              |            |         |                |        |        |         |         |         |         |        |      |        |        |         |  |

| LUMINAIRE EXTENSION |          |      |         |         |        |        |
|---------------------|----------|------|---------|---------|--------|--------|
| EXT. NO.            | POLE NO. | QTY. | SHAFT   |         |        |        |
|                     |          |      | BOT OD  | TOP OD  | THK.   | LENGTH |
| 1RE                 | 1R       | -    | 8.958"  | 7.500"  | .1875" | 8'-9"  |
| 2BE                 | 2B       | -    | 10.427" | 8.750"  | .1875" | 8'-9"  |
| 3GE                 | 3G       | -    | 12.458" | 11.000" | .1875" | 8'-9"  |
| 4YE                 | 4Y       | -    | 14.031" | 12.500" | .1875" | 8'-9"  |
| 5WE                 | 5W       | -    | 16.708" | 15.250" | .1875" | 8'-9"  |



**GENERAL NOTES**

THE ASSEMBLIES SHALL BE MULTI-SIDED, TAPERED STEEL MONOTUBE TRAFFIC SIGNAL MAST ARMS AND POLES.

MAST ARM POLES SHALL BE DESIGNED TO SUPPORT SIGNALS AND/OR SIGNS OF THE WEIGHT AND AREA AS INDICATED ON THE PLANS. MAST ARMS AND POLES SHALL BE DESIGNED FOR A MINIMUM OF 90 MPH WIND VELOCITY AND SHALL MEET ALL OTHER DESIGN REQUIREMENTS OF AASHTO 'STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS' 2009. FATIGUE CATEGORY II. GALLOPING NOT CONSIDERED.

ALL MAST ARMS SHALL BE PERMANENTLY MARKED WITH THE LENGTH OF THE ARM ON THE FLANGE PLATE. POLES ARE TO BE PERMANENTLY MARKED WITH THE ARM LENGTH RANGE ON THE TOP SIDE OF THE BASE PLATE. ALL PARTS (TOP, END CAPS, HAND HOLE COVERS AND ATTACHMENT HARDWARE) WITH THE EXCEPTION OF THE ANCHOR BOLTS, ARE TO BE PACKED ON A PER POLE BASIS AND IDENTIFIED FOR THE MAST ARM ASSEMBLY THAT CORRESPONDS WITH THE PARTS. PRIOR TO INSTALLATION, ALL MATERIALS SHALL BE INSPECTED BY AN AUTHORIZED AGENT OF THE CITY TO INSURE COMPLIANCE WITH THE SPECIFICATIONS ALL MATERIAL AND WORKMANSHIP FOR THESE PRODUCTS MUST BE UNITED STATES ORIGIN. ALL WELDING MUST BE PERFORMED AT THE MANUFACTURER'S PLACE OF BUSINESS BY AWS CERTIFIED WELDERS. ALL WELDS SHALL CONFORM TO THE LATEST AWS D1.1 REQUIREMENTS.

SEE CITY OF TULSA SPECIFICATION FOR GALVANIZED STEEL MAST ARM ASSEMBLIES FOR FURTHER DETAILS OF MATERIALS, DESIGN AND WORKMANSHIP.

| REVISION | BY | DATE |
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|          |    |      |
|          |    |      |
|          |    |      |

CITY ENGINEER

**CITY OF TULSA, OKLAHOMA**  
**ENGINEERING SERVICES DEPARTMENT**

**SIGNAL POLES AND MAST ARMS**

DATE: OCTOBER 2013

CITY TRAFFIC ENGINEER

PATH NAME: /E1/PARTS/STD/DGN\_SIDS/617A-Signal-Poles-and-Mast-Arms.dgn SBW 10/26/2012