

REVISIONS		
REV. NO.	DESCRIPTION	DATE
Various		09/05/2018

General Notes:

1. Dimensional limits are given to show acceptable variation in design. All of a fabricator's production of a particular arm length shall have the same dimensions within specified tolerances.
2. Each pole arm plate shall be supplied with bolts and lock washers of the size specified. The bolts and lock washers shall be secured to the pole with the other hardware items called for in the plans.
3. Proposed deviations in arm connector dimensions or materials must be submitted to the department for approval.
4. The cover shall be one piece formed from ABS plastic, shall be a pearl gray color, and shall be suitable for exposure to harsh sunlight and extreme weather. Cover shall latch with two screw latches and shall fit tightly to the enclosure ring to create a rainproof seal. Latch screws shall be 1/4"-20 stainless flat socket head screws with tamper proof feature. Galvanized steel cover acceptable as option.
5. The pole manufacturer shall provide with each pole a separate kit consisting of: one cover with two latching assemblies, two terminal strips (Marathon #985GP12CU or approved equal), four #8-32 x 1 1/4" self tapping type "F" stainless steel pan head screws, and one ground connector (Blackburn TTC, Burndy KC22J12T13, or Ilisco S55-5). The traffic signal contractor shall install the kit items in the field.
6. The screw hole spacing on the enclosure back plate shall be for two Marathon #985GP12 terminal strips, one Marathon #985GP06CU terminal strip, and one Bussmann #BM6032B Fuse block.
7. Install one Bussmann #BM6032B, Littelfuse #L60030M-2C, or Ferraz-Shawmut #30352 fuse block for poles where luminaires are to be installed.
8. Handhole mounting height may be increased if a decorative pole base cover is installed and exceeds a height of 36" or creates an obstruction to removing the handhole cover.
9. Various terminal block designs exist. Provide terminal block consisting of a minimum of 12 circuits 600 volt compression type HD modules meeting the wiring requirements identified in the plans within the handhole area shown. Provide four (4) #8-32 x 1 1/4" self tapping type "F" stainless steel pan head screws or equivalent. Terminal strips and provisions for grounding shall be supplied with hardware kit.

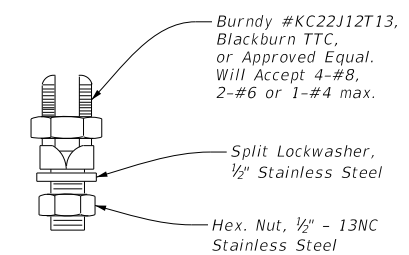
Material Data		
Component	ASTM Designation	Min. Yield (Ksi)
Pole Shaft (0.14"/Ft. Taper)	A570 GR. 50, A572 GR. 55, A595 GR. A, A1011 HSLAS GR. 50 CL 2, ② or A1008 HSLAS GR 50 CL 2	50
Base Plate and Handhole Frame	A572 GR. 50	50
Mast Arm Connecting Bolts and Nuts	A449 for bolts 1 1/8" up to 1 1/2" A449	80 58
Luminaire Arm Connection Bolts	ASTM A325	92
Anchor Bolts	F1554 GR 55, A193-B7 or A321	55 105
Anchor Bolt Templates	A36	36
Heavy Hex (H.H.) Nuts	A194 GR 2H, or A563 GR DH	
Flat Washers	F436	

- ① Lubricate in the field if necessary in lieu of the requirements in ASTM A325.
- ② A1011 SS GR 50 may be used in lieu of HSLAS, provided the material meets the elongation requirements For HSLAS

Materials Table

Pole Assembly Fabrication Tolerances Table	
Dimension	Tolerance
Length / Height	± 3"
Rise	± 3/4" in 10 Ft
Diameter	+ 3/16"
Overall Length or Width	+ 1/4"
Thickness	+ 1/4", -1/16"
Deviation From Flat	1/8" in 12"
Spacing Between Holes	+ 3/32"
Bolt Hole Size	± 1/16"
Strut Location in Truss Arms	± 1 1/2"

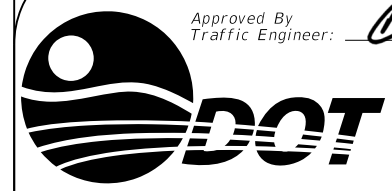
Tolerance Table



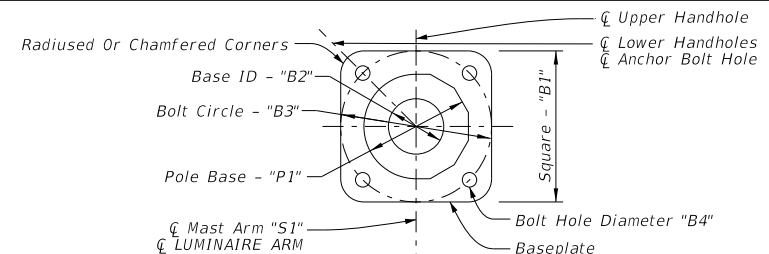
Copper Ground Connector

Approved By Bridge Engineer: *Stan Lee* Date: **9-14-18**

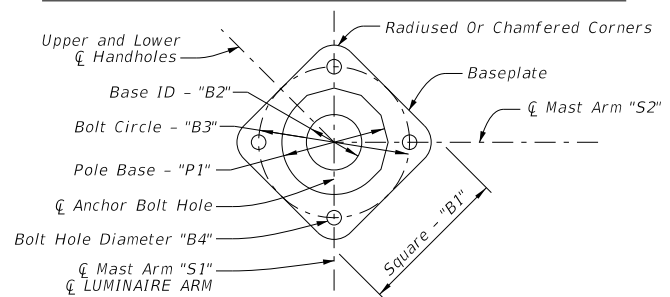
Approved By Traffic Engineer: *Bye* Date: **9/28/18**



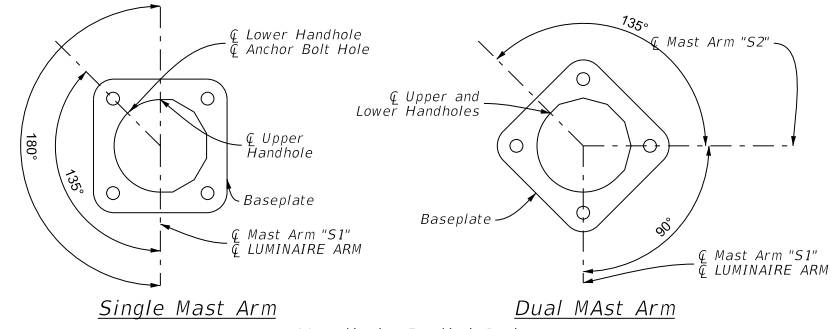
Traffic Standard
Traffic Signal Support Structures
Signal Pole and Base Plate Details



Single Mast Arm - Shoe Base Baseplate Detail



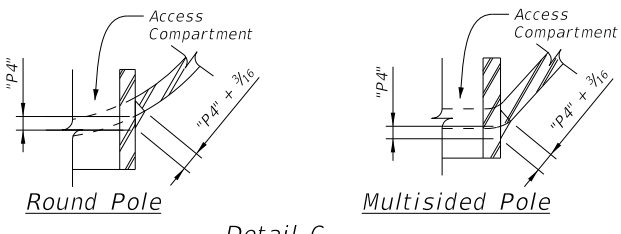
Dual Mast Arm - Shoe Base Baseplate Detail



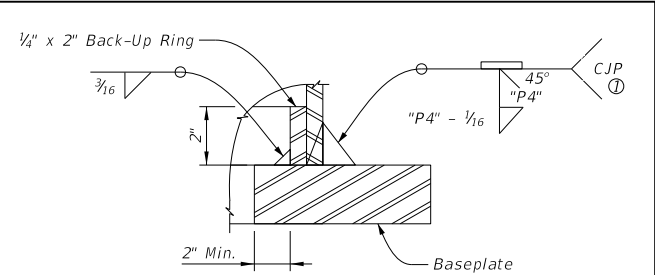
Handhole Radial Index

TABLE 6: BASE HANDHOLE DATA

Vertical Length I.D. (in)	Horizontal Length I.D. (in)	Wall Thk. (in)	Handhole Depth (in)	Handhole Radius (in)	Projected Length from Wall (in)	Mounting Height (FT)
"H1"	"H2"	"H3"	"H4"	"H5"	"H6"	"H7"
26.25	4.50	0.75	4.25	2.25	1.00	3.00
Dual Mast Arm Handhole Data for 45 to 55						
26.25	4.50	1.00	4.25	2.25	1.00	3.00

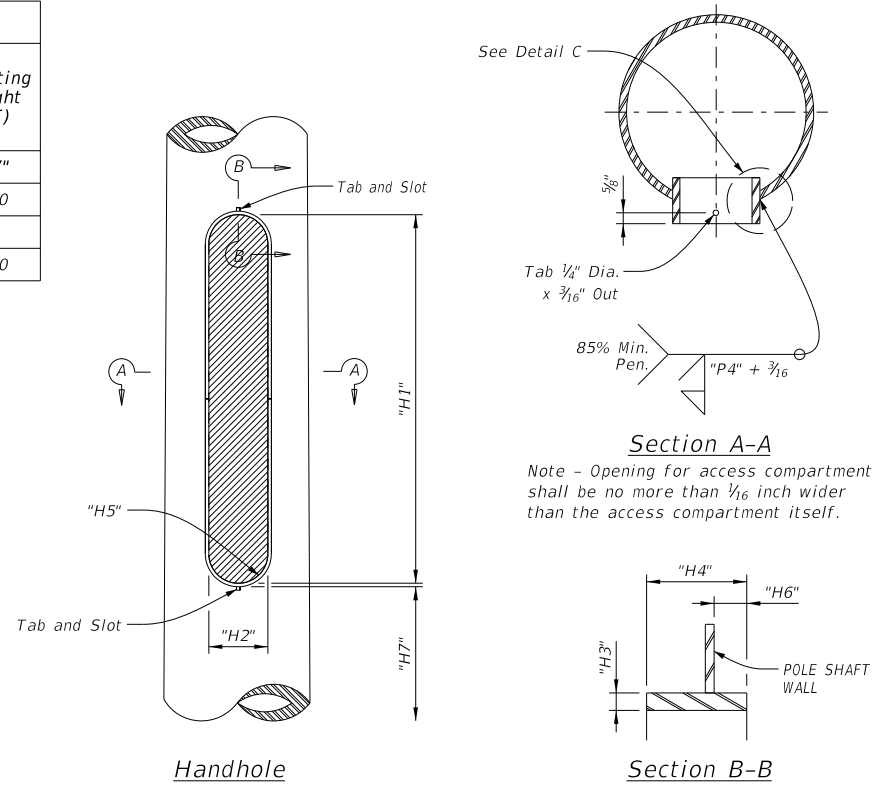


Detail C

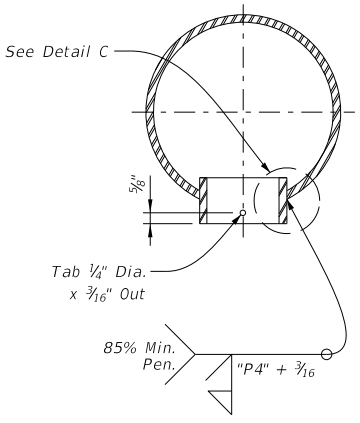


Detail A

① Per AWS D1.1 Structural Welding Code



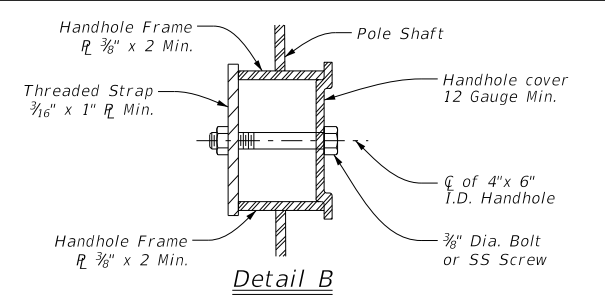
Pole Base Access Compartment



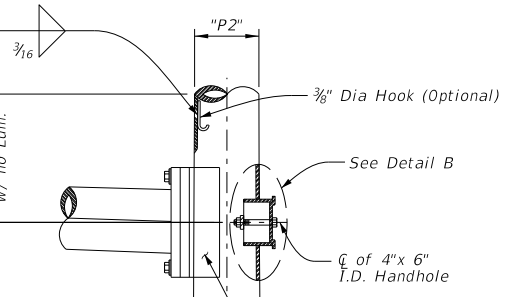
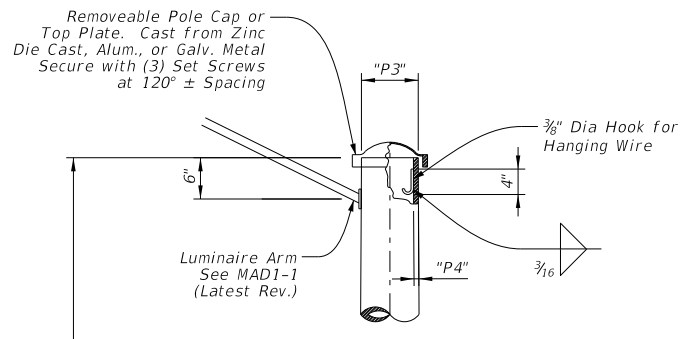
Section A-A

Note - Opening for access compartment shall be no more than 1/16 inch wider than the access compartment itself.

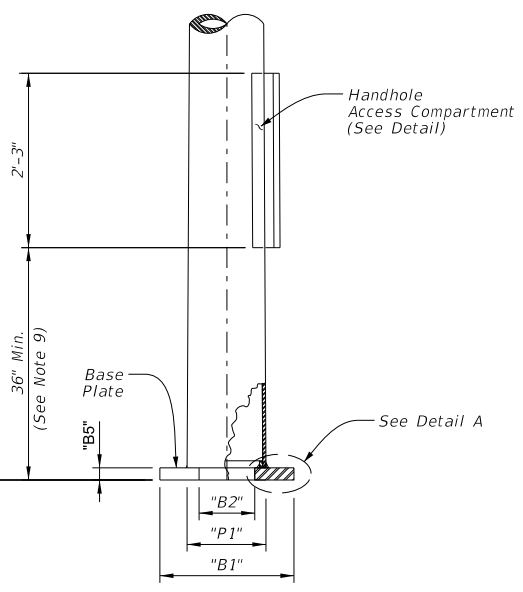
Section B-B



Detail B



Fixed Mount Arm for Single Mast Arm Assemblies or First Arm on Dual Mast Arm Assemblies See MAD1-1 (Latest Rev.)



Pole Elevation

(For 30' Pole with Luminaire)

30'-0" (Pole Tube Length)

20'-0" ± 1" - "P5"

1'-6"

6"

4"

2'-3"

36" Min. (See Note 9)

"B5"

"B2"

"P1"

"B1"

"P4"

"P5"

"P4" + 3/16"

"P4" - 1/16"

2" Min.