

Aluminum Identification Tag Not To Exceed 2" x 4". Secure To Pole By 0.125" Stainless Steel Rivets Or Screws. Fabricators To Provide Details For Approval. Identification Tag Located On Inside Of Pole Visible From Handhole, Or On Outside Of Pole Inside Terminal Compartment. Tag To Be Stamped With The Following Information :

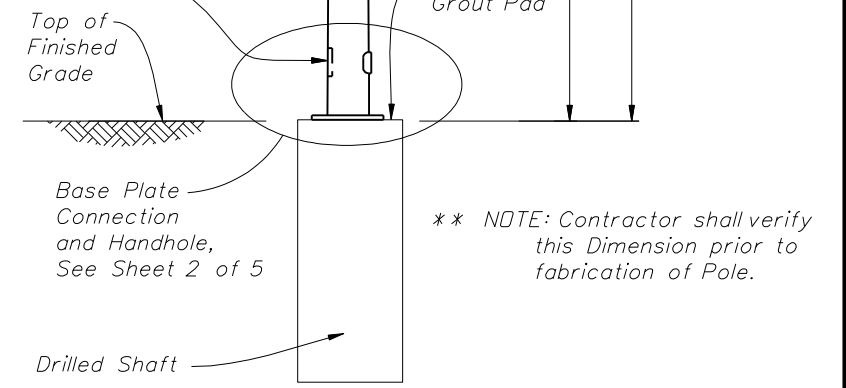
Standard Design	Special Design
Financial Project ID	Financial Project ID
Pole Type	Pole Base Diameter (in.)
Arm Type	Pole Wall Thickness (in.)
Manufacturer's Name	Arm Diameter at Pole (in.)
Certification No.	Arm Wall Thickness (in.)
QPL No.	Manufacturer's Name

**MAST ARM ASSEMBLIES GENERAL NOTES**

1) Signal Structure Materials shall be as follows:

- Poles & Mast Arms -> ASTM A1011 Grade 50, 55, 60 or 65 (less than 1/4" ) or ASTM A572 Grade 50, 55, 60 or 65 (1/4" and over) or ASTM A595 Grade A (55 ksi yield) or Grade B (60 ksi yield)
- Steel Plates -> ASTM A36
- Weld Metal -> E70XX
- Bolts (except Anchor Bolts) -> ASTM A325 Type 1
- Anchor Bolts -> ASTM F1554 Grade 55 ksi
- Nuts for Anchor Bolts -> ASTM A563 Grade A Heavy Hex
- Washers for Anchor Bolts -> ASTM F436 Type 1
- Handhole Frame -> ASTM A709 Grade 36 ksi or ASTM A36
- Handhole Cover -> ASTM A1011 Grade 50, 55, 60 or 65 ksi
- Caps -> ASTM A1011 Grade 50, 55, 60 or 65 ksi or ASTM B209
- Nut Covers -> ASTM B26 (319-F)
- Stainless Steel Screws -> AISI Type 316
- Threaded Bars/Studs -> ASTM A36 or ASTM A307

- 9) Sign Panels and Signals attached to the Mast Arm shall be centered in elevation on the arm. Sign Panels shall be aluminum. Wire access holes shall not exceed 1 1/2" in diameter.
- 10) Mast Arms and Poles shall be tapered with the diameter changing at a rate of 0.14 inch per foot.
- 11) The Pole shall be installed vertically. Camber shall be accounted for in the Mast Arm connection as detailed.
- 12) If a Mast Arm damping device is required by the Engineer, it shall be installed within eight feet of the Mast Arm tip.
- 13) Design according to FDDT Structures Manual (current edition). Alternate Designs for Special Mast Arm Assemblies are not allowed.
- 14) Provide "J", "S" or "C"-Hook at top of pole for signal cable support.
- 15) First and Second Arm Camber Angle = 2°.
- 16) Details for the Ground Rod, Signal and Sign Locations, Signal Head attachment, Sign Attachment, Pedestrian Head Attachment, and Foundation Conduit are not shown for clarity.
- 17) One hundred percent of full-penetration groove welds and a random 25 percent of partial penetration groove welds shall be inspected. Full-penetration groove weld inspection shall be performed by nondestructive methods of radiography or ultrasonics.
- 18) Manufacturers seeking approval of a steel mast arm assembly for inclusion on the Qualified Products List must submit a QPL Product Evaluation Application along with design documentation and drawings showing the product meets all specified requirements of this Index and Index 17743.
- 19) If a grout pad is not installed, vertically place a wire cloth screen between the baseplate and the top of the foundation, wrap horizontally around the baseplate with a 3" min. lap. The wire cloth shall be galvanized steel standard grade plain weave 1/2" x 1/2" mesh 0.063" dia. wire. The screen shall be attached to the baseplate with stainless steel self-tapping 1/4" screws with stainless steel washers spaced at 9" centers.

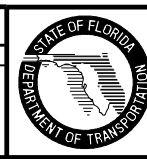


**ELEVATION VIEW**

(Single Arm Shown, Double Arm Similar)  
(Luminaire Arm Not Shown)

**TYPICAL ELEVATION AND NOTES**

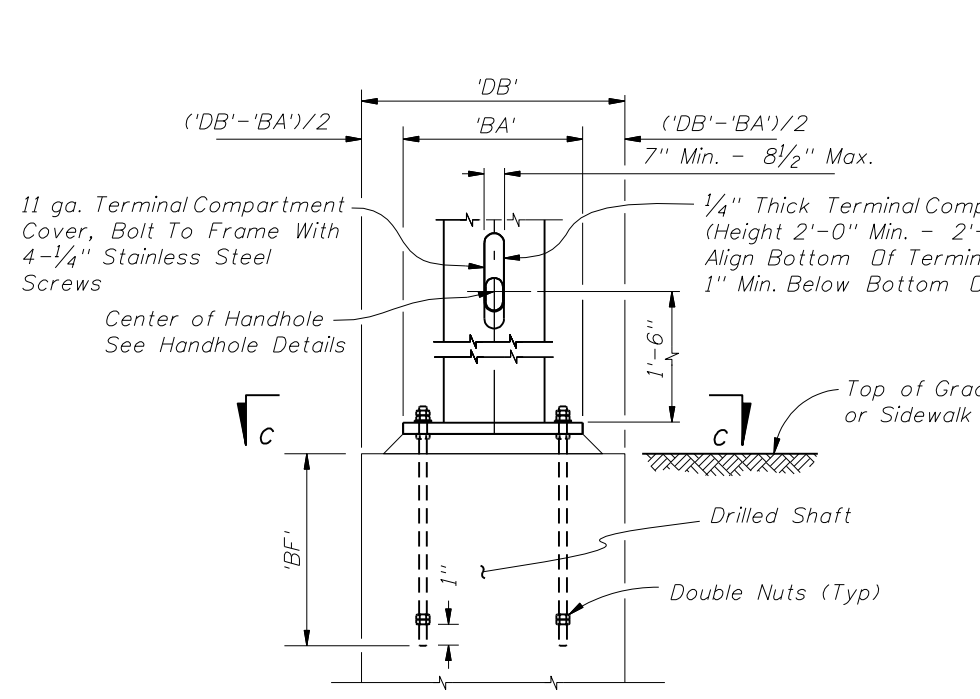
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
11/21/07	L.W.	QPL added to Standard Design List. Note 14 and 19 revised. New Note 17 added. Notes renumbered.			
6/2/08	C.H.	Revise Note 17.			



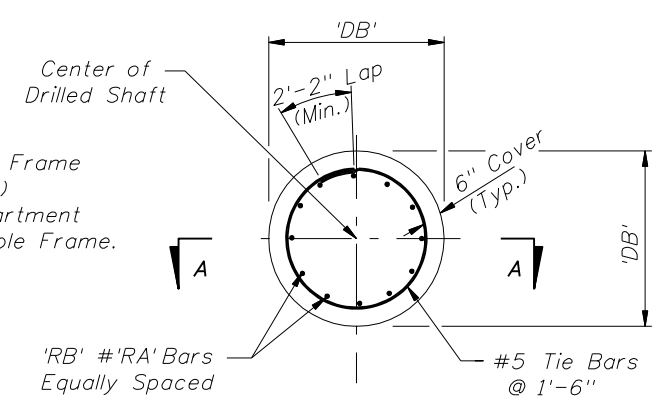
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**MAST ARM ASSEMBLIES**

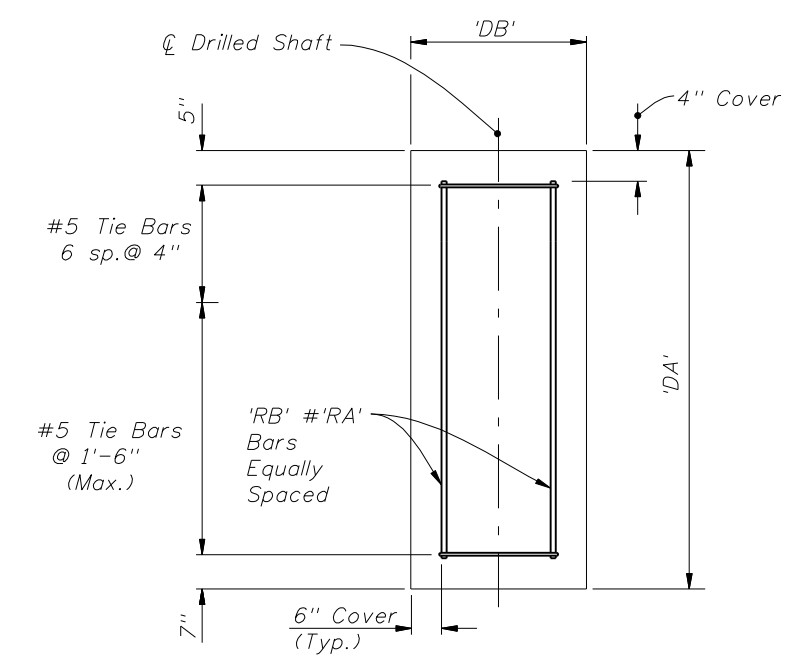
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<b>17745</b>	



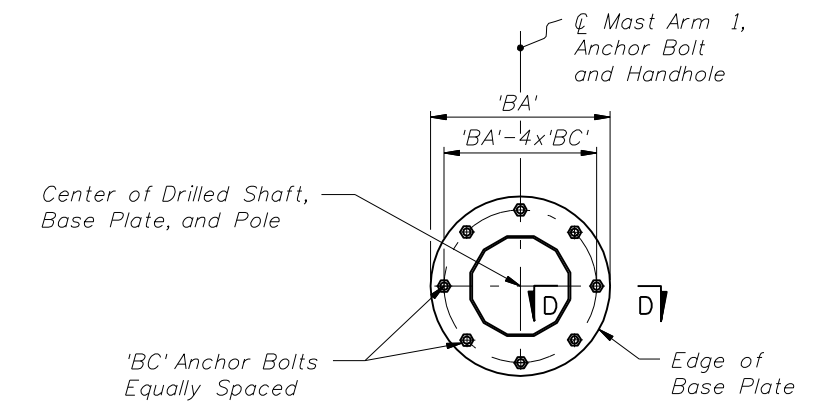
**BASE PLATE AND ANCHORAGE ELEVATION**  
(Reinforcement Not Shown)



**FOUNDATION PLAN**  
Note: 6" min. cover on Shaft Reinforcement

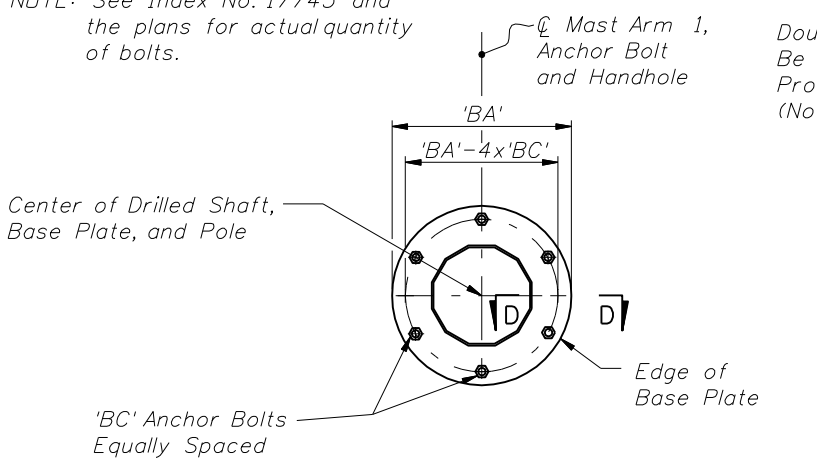


**SECTION A-A**

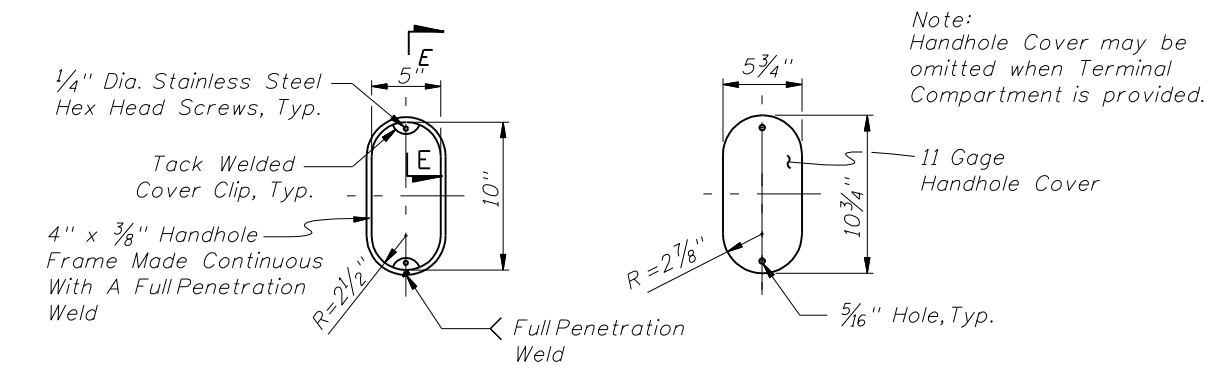


**SECTION C-C**  
Alternate Detail  
(8 Anchor Bolts)

NOTE: See Index No. 17743 and the plans for actual quantity of bolts.

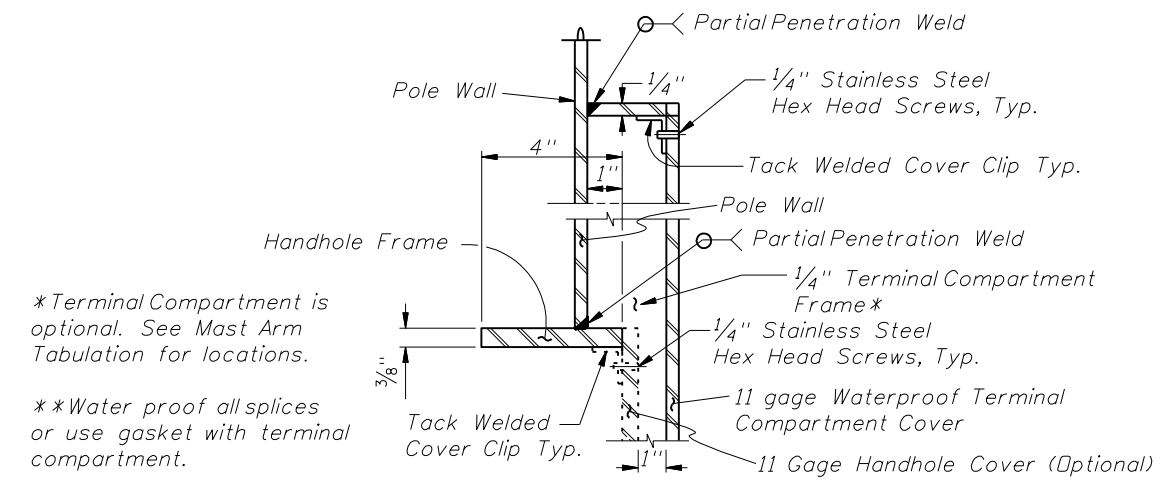


**SECTION C-C**  
(6 Anchor Bolts)

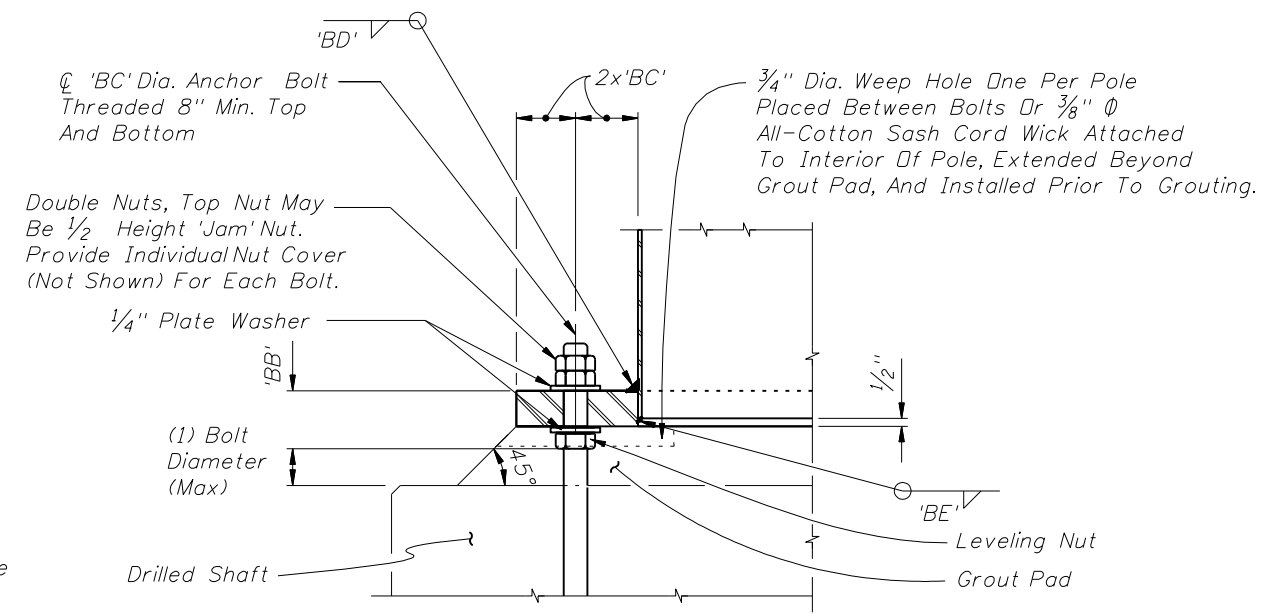


**HANDHOLE FRAME**  
(w/ Terminal Compartment Omitted)

**HANDHOLE COVER**



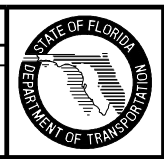
**SECTION E-E**  
(Thru Handhole & Terminal Compartment)



**SECTION D-D**

**TYPICAL FOUNDATION AND BASE PLATE DETAILS**

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
11/21/07	L.W.	Section A-A detail 3" dimension changed to 4". BASE PLATE AND ANCHORAGE ELEVATION DETAIL DIMENSION 3bc CHANGED TO 1". Note added to detail SECTION E-E.	6/2/08	C.H.	Changed foundation Offset. Changed Drill Shaft Detail.



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**MAST ARM ASSEMBLIES**

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