

Origination Form

Proposed Revisions to a Standard Plans Index

Originator:	Turley, Joshua	Index Number:	649-010
Date:	2/6/2024	Sheet Number(s):	2 and 3
E-mail:	Joshua.Turley@dot.state.fl.us	Index Title:	Steel Strain Pole

Summary of the changes:

Sheet 2: Section A-A - Revised the label order of the anchor bolt nuts. DETAIL "A" - removed welding hatches, Modified wall thickness from text to symbol. Removed "Pole Wall Thickness + 7/16" dimension from Joint Weld Detail. Added welding callout to Joint Weld Detail.

Sheet 3: Removed welding hatches on HANDHOLE details. Added "Handhole" to frame detail label.

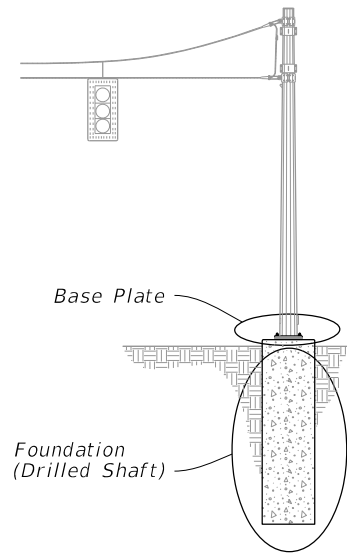
Commentary/Background:

There is an associated Spec change being drafted for Section 649 that pertains to process for tightening the anchor bolts. These changes make it so that the language aligns between the Spec and the Standard. Removed weld hatches to make consistent with the rest of the Standards and also industry convention.

Other Affected Documents/Offices	Person Contacted	Affected (Yes/No)
Other Standard Plans		No
FDOT Design Manual		No
Standard Specifications	Daniel Strickland	Yes
Basis of Estimates Manual		No
Approved Product List		No
Construction Office		No
Maintenance Office		No

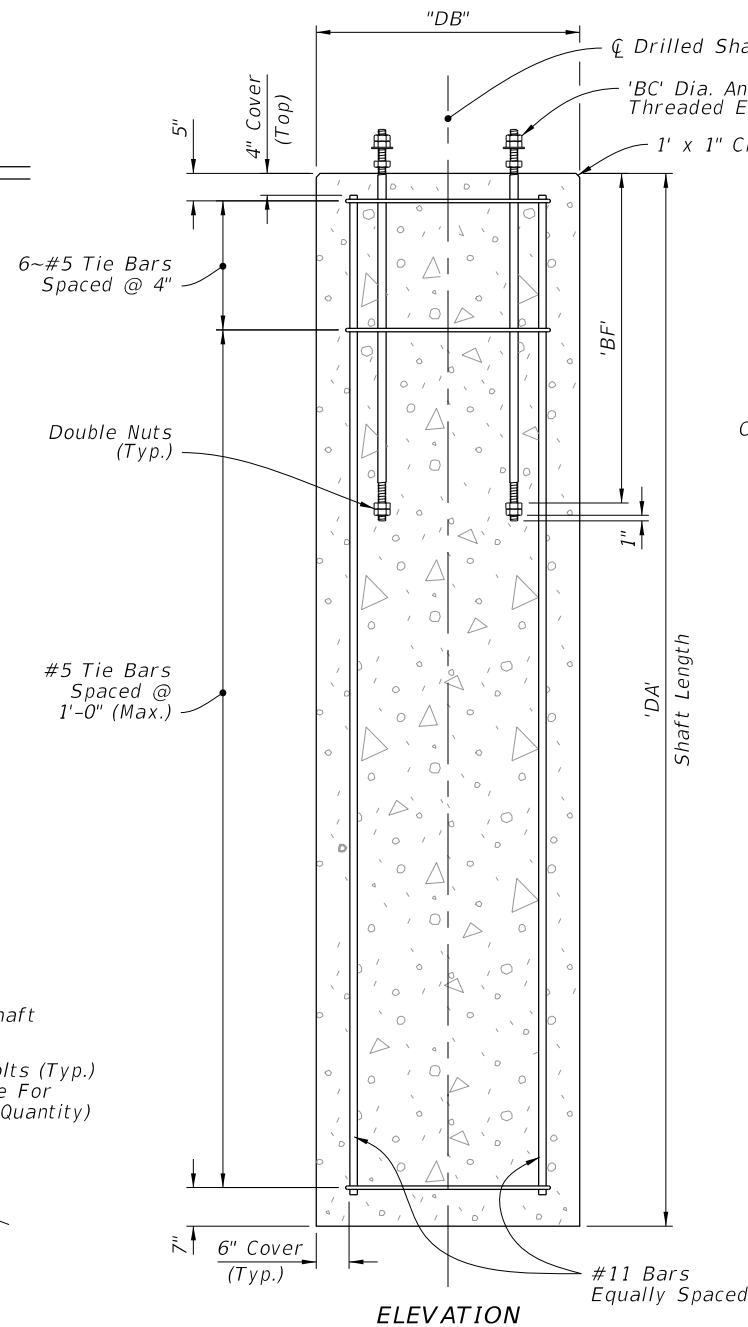
Implementation

["FY-Standard Plans (Next Release)"]



POLE ASSEMBLY

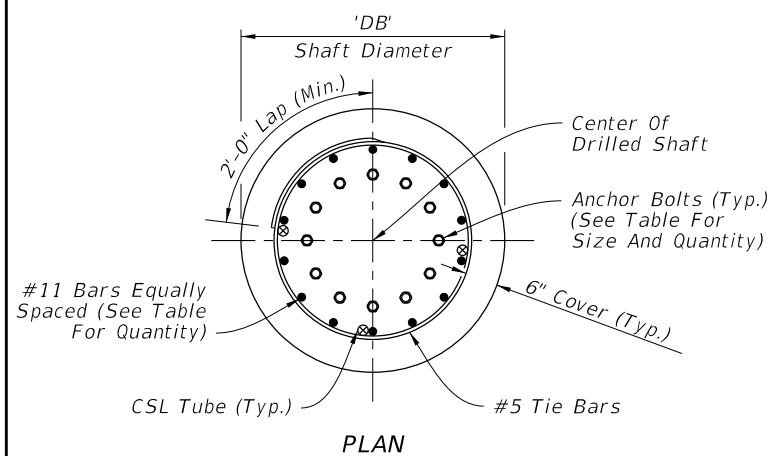
POLE TYPE	POLE		BASE CONNECTION				SHAFT			
	J (in)	K (in)	No. of Bolts	BA (in)	BB (in)	BC (in)	BF (in)	DA (FT)	DB (FT)	No. of #11 Bars
PS-IV	0.250	14	8	25	2.50	1 3/8	60	14	4	14
PS-V	0.313	16	10	28	2.50	1 1/2	60	15	4	14
PS-VI	0.313	18	12	30	2.50	1 1/2	60	16	4	14
PS-VII	0.313	21	14	33	2.50	1 1/2	60	16	4.5	16
PS-VIII	0.313	23	16	35	2.50	1 1/2	60	17	4.5	16
PS-IX	0.313	25	12	39	3.00	1 3/4	60	17	5	18
PS-X	0.313	27	14	41	3.00	1 3/4	60	18	5	18



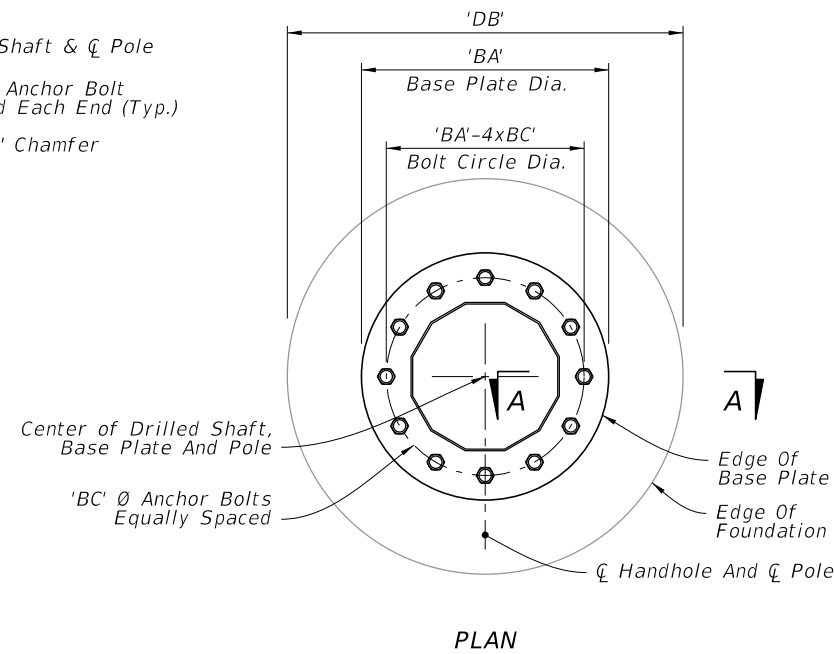
FOUNDATION

NOTE:

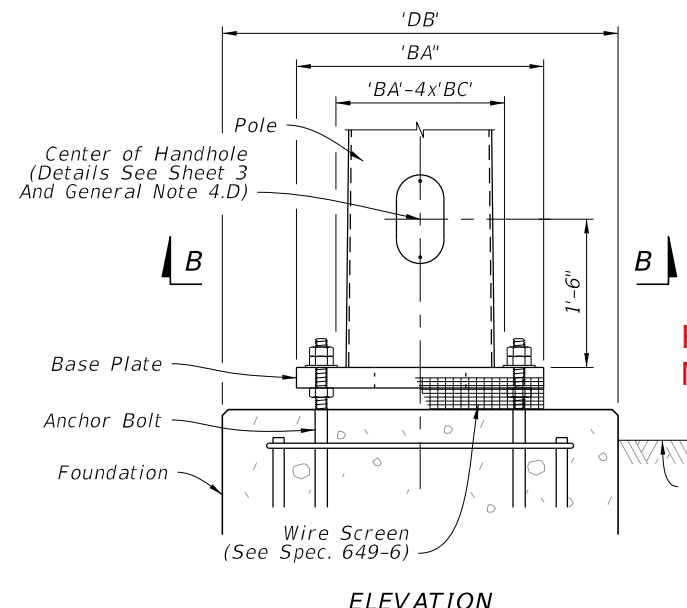
1. Retainer nut may be half-height. Provide individual nut covers (not shown) for each bolt.



PLAN

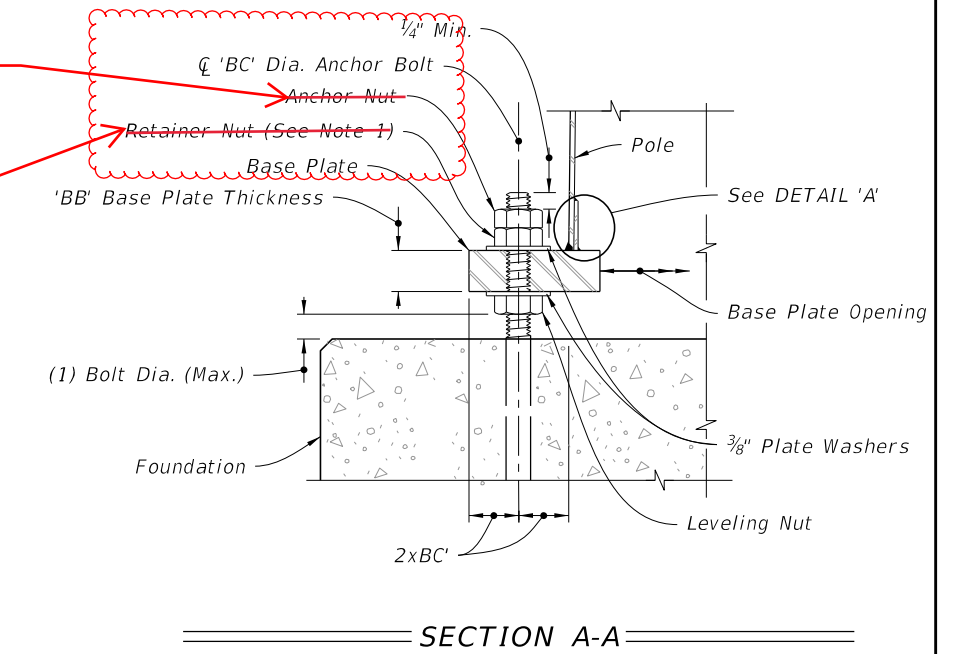


PLAN

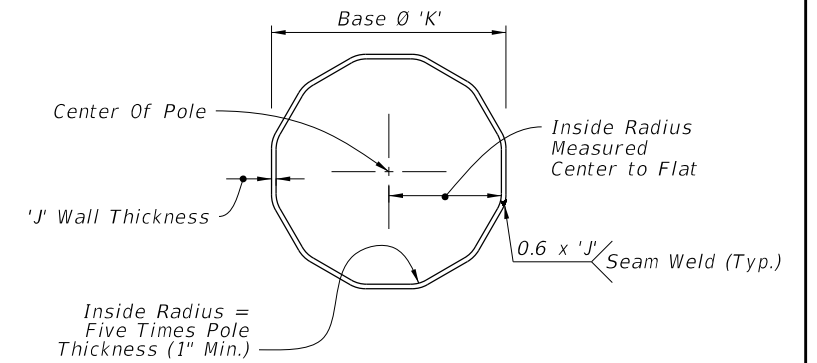


ELEVATION

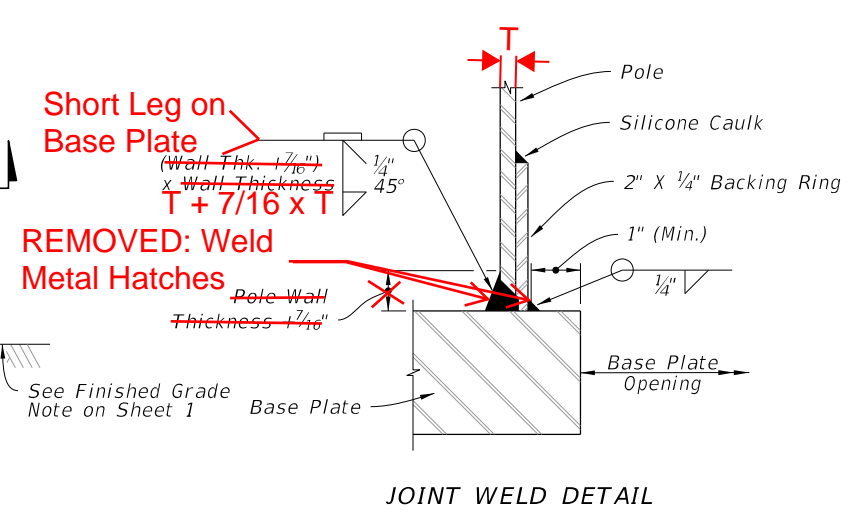
BASE PLATE



SECTION A-A



SECTION B-B



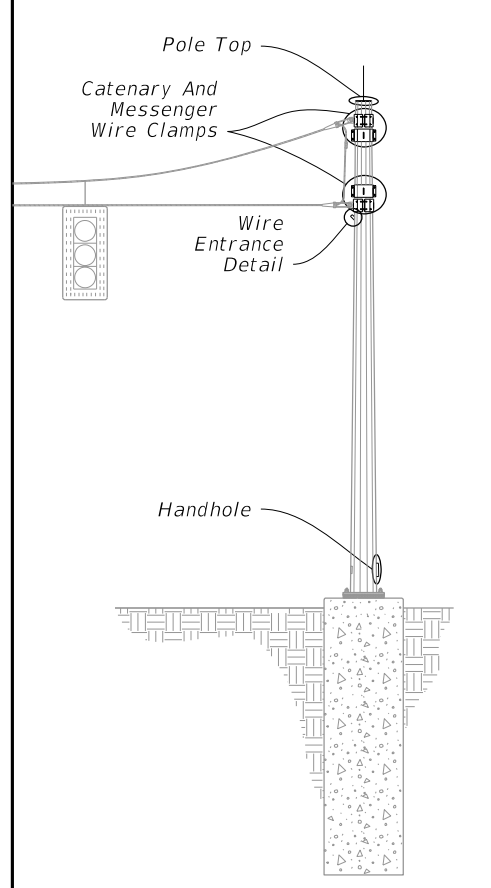
JOINT WELD DETAIL

DETAIL 'A'

10/4/2023 2:38:21 PM

11/01/24

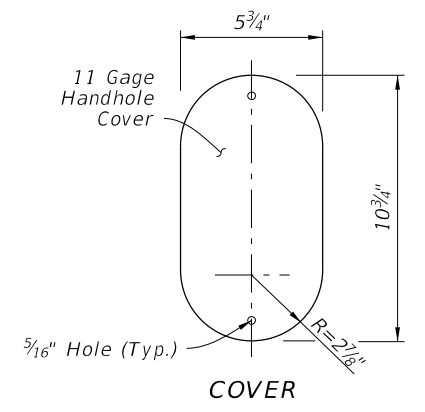
LAST REVISION	REVISION	DESCRIPTION:
11/01/23		



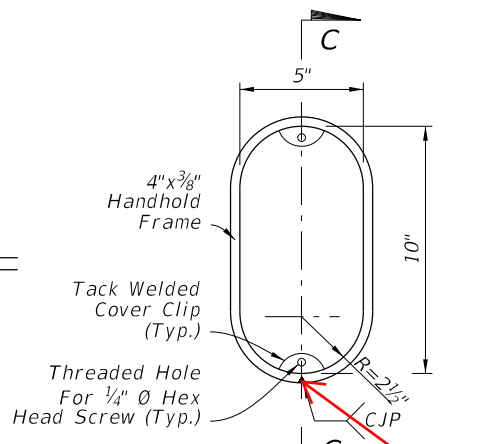
POLE ASSEMBLY

- NOTES:**
1. Clamps have been sized for Design Cable Loads shown in the Clamp Thickness Table, and a Maximum Pole Diameter at the Clamp location of 2'-1". Use one clamp per cable.
 2. Install a properly sized Weather Head, fastened securely to the standard pipe for each pole location. At locations other than the wire entrance, the Weather Head face is to be left closed to outside atmosphere. Wire entrance installed per Index 634-001.
 3. Any combination of Option 'a' or 'b' may be used provided both lifting and wiring is accommodated.

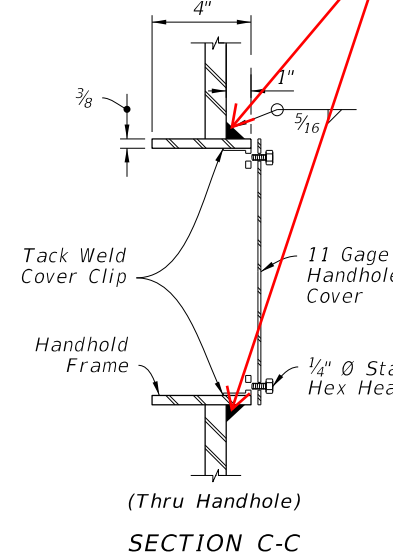
CLAMP THICKNESS TABLE		
Cable Diameter (in.)	Minimum Breaking Strength (kip)	Plate Thickness (in.)
1/2	25	1
7/16	18	7/8
3/8	11.5	3/4
1/4	3.15	3/8



COVER

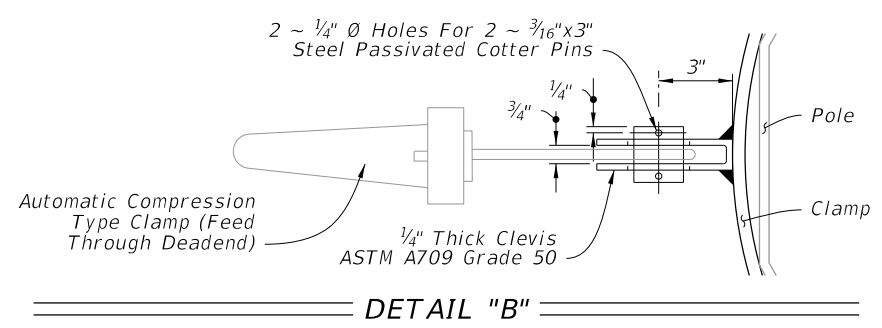


HANDHOLE FRAME

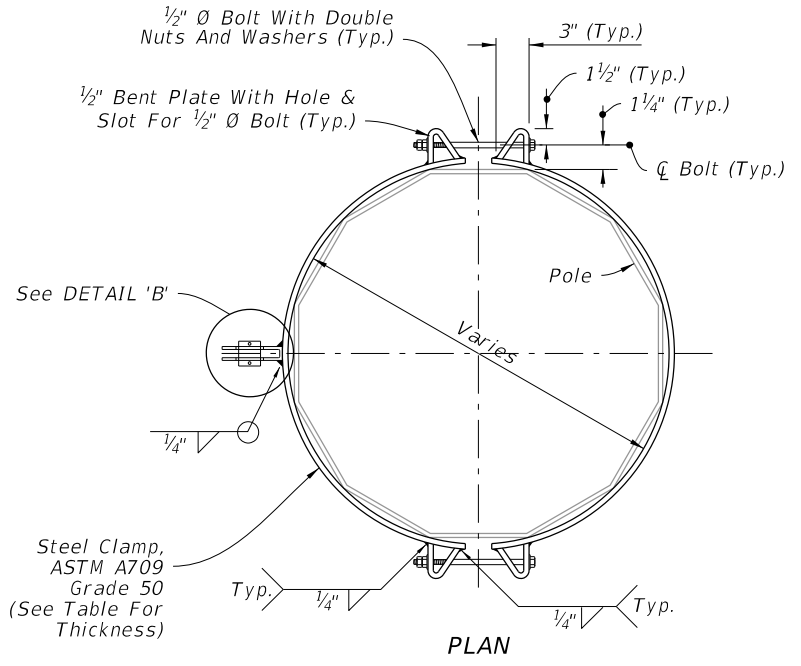


SECTION C-C

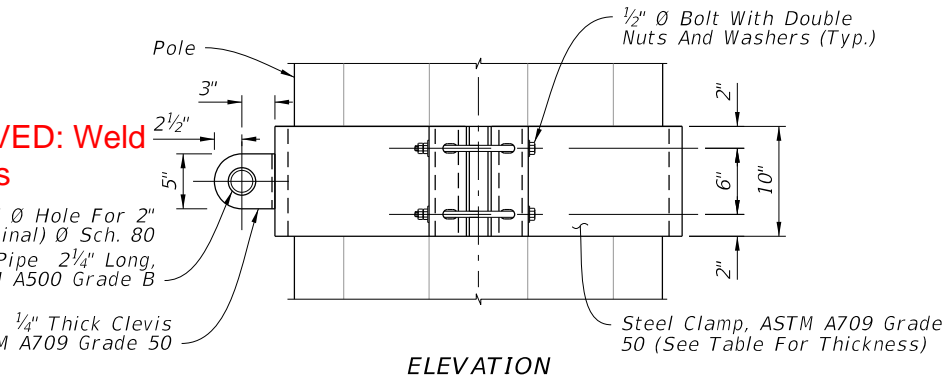
HANDHOLE



DETAIL "B"

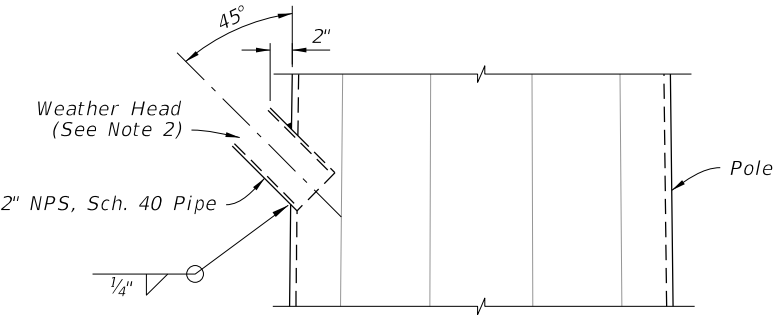


PLAN

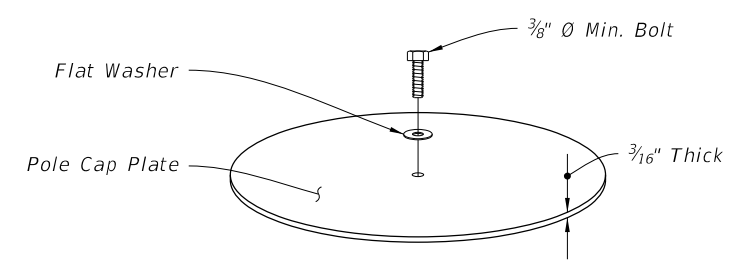


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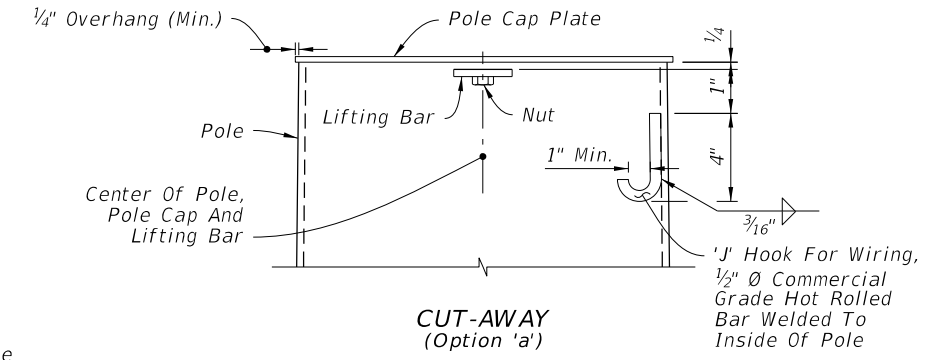
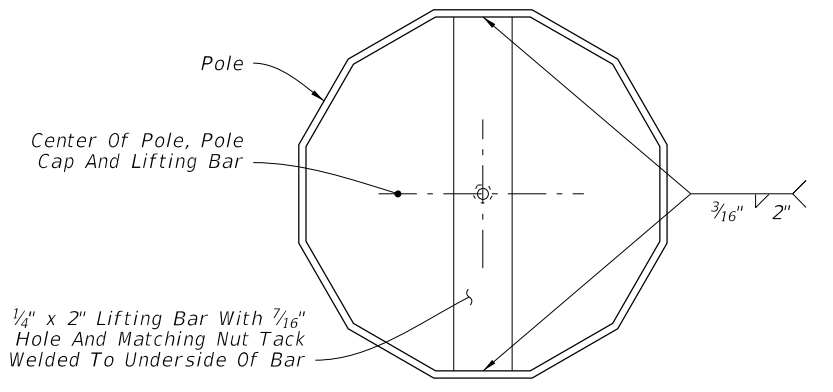
CATENARY AND MESSENGER WIRE CLAMPS



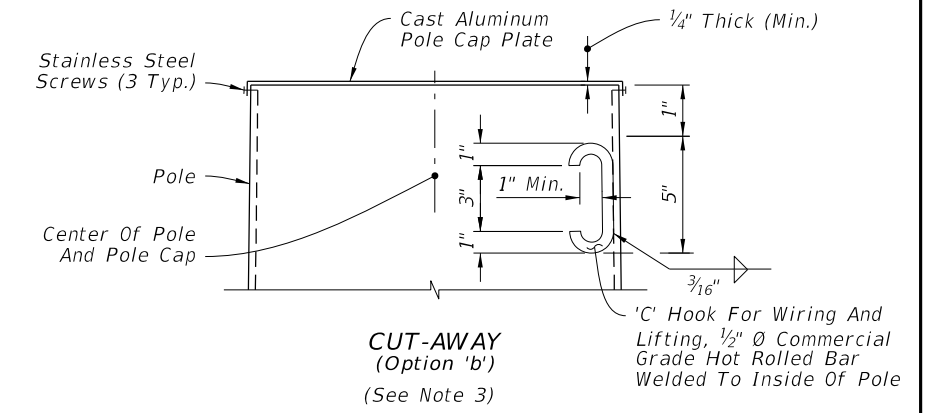
WIRE ENTRANCE DETAIL



TOP VIEW



CUT-AWAY (Option 'a')



CUT-AWAY (Option 'b') (See Note 3)

POLE TOP

ATTACHMENT DETAILS

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LAST REVISION	DESCRIPTION:
11/01/23	
11/01/24	



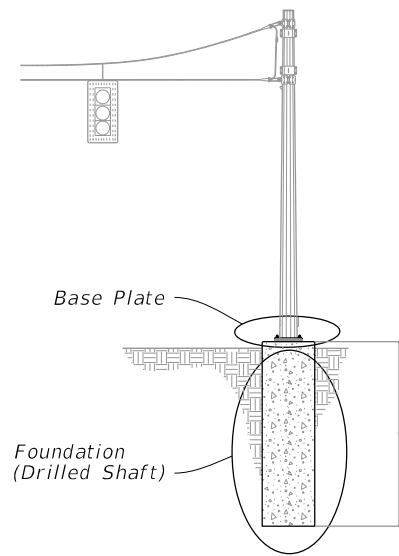
FY 2024-25
STANDARD PLANS

STEEL STRAIN POLE

INDEX
649-010

SHEET
3 of 3

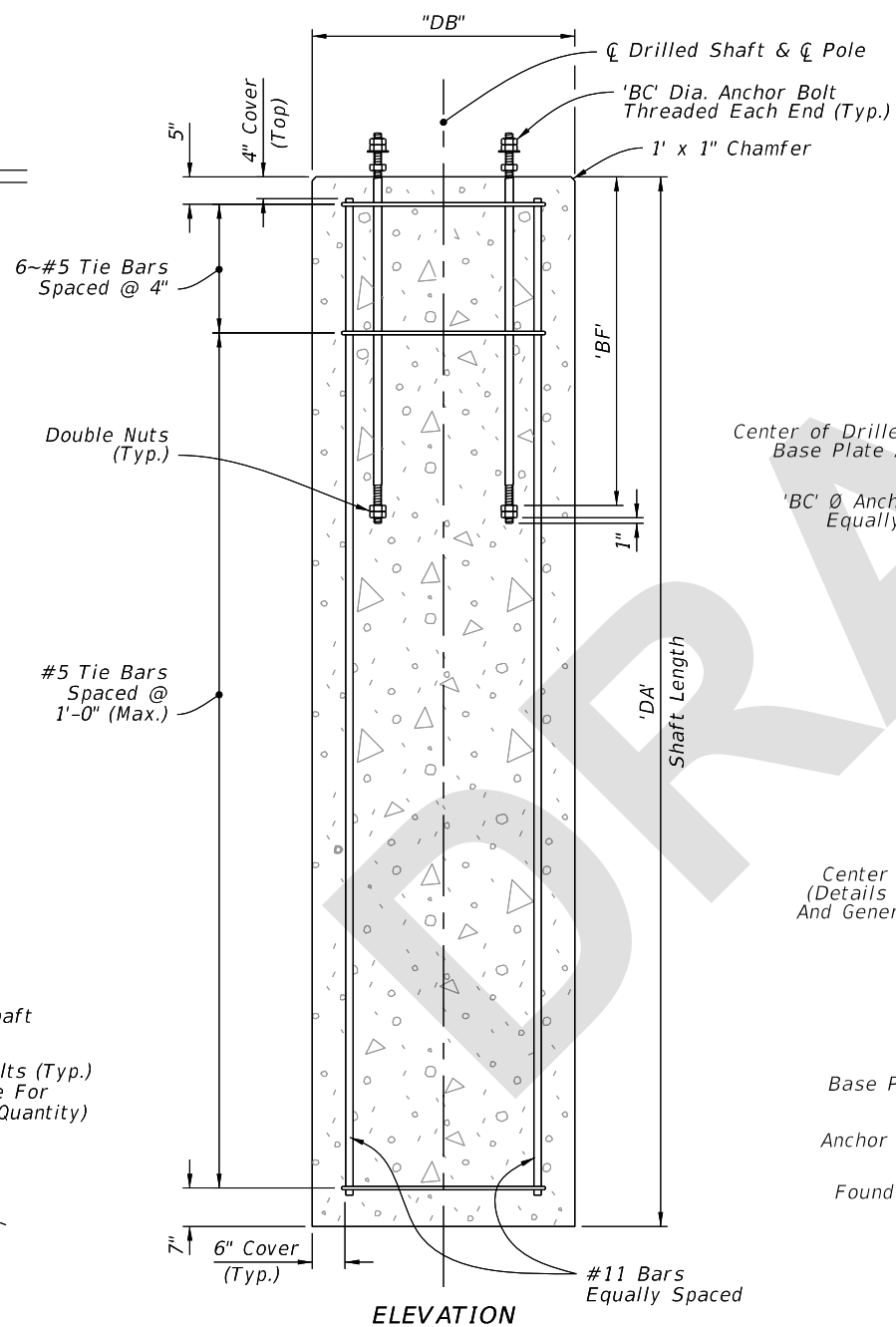
POLE TYPE	STEEL STRAIN POLE DATA TABLE									
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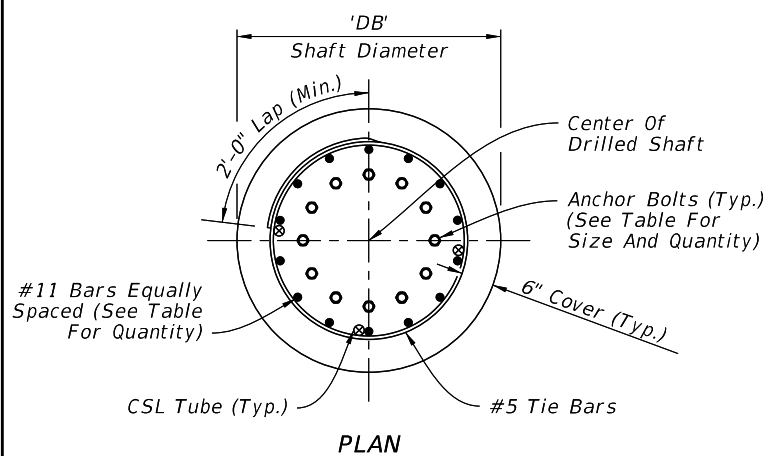
POLE ASSEMBLY

NOTE:

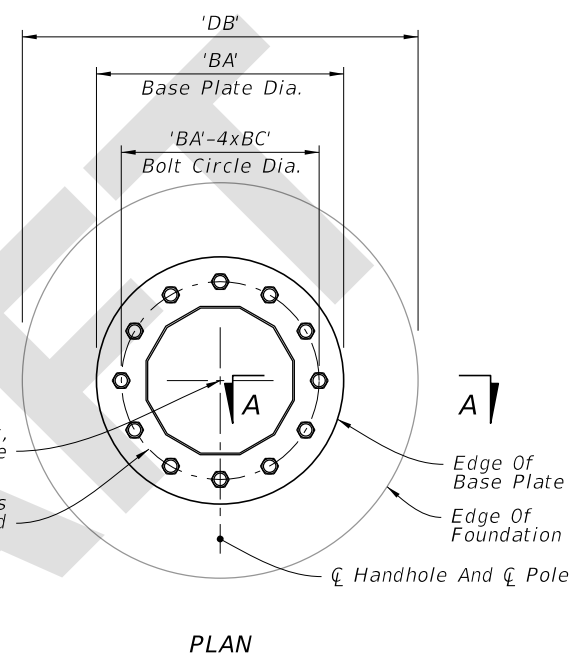
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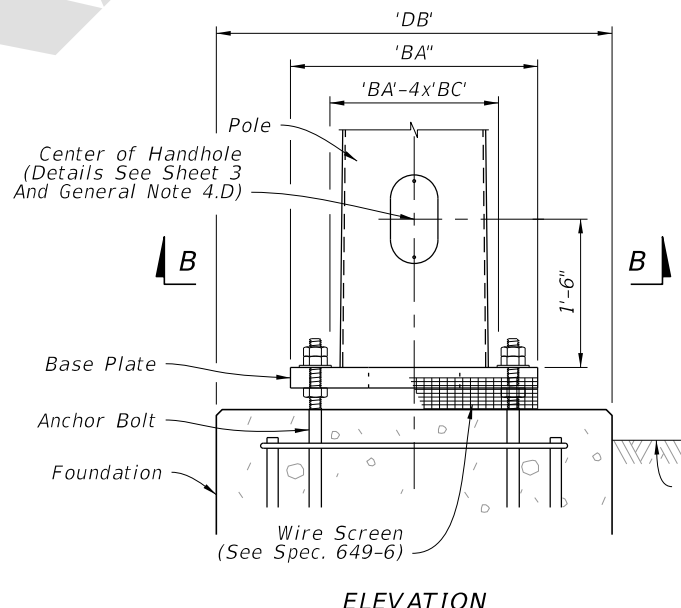
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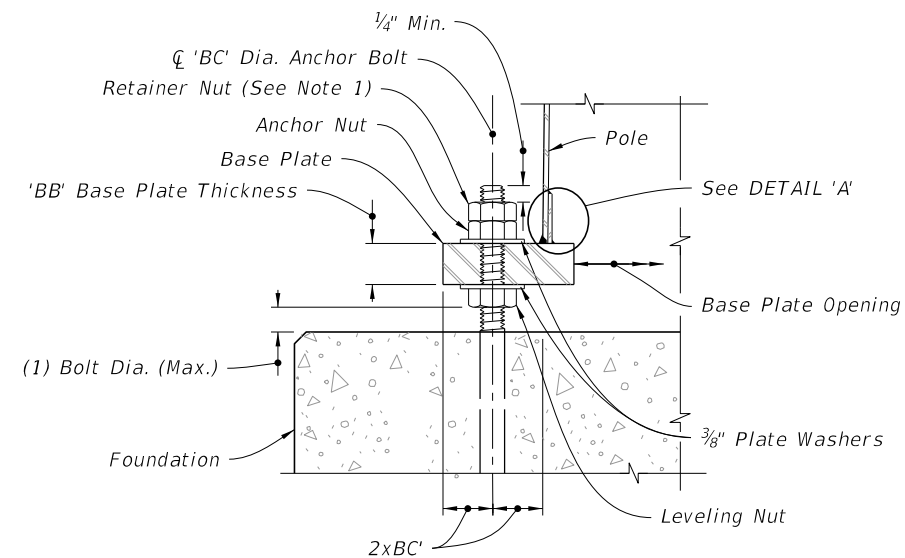
FOUNDATION PLAN



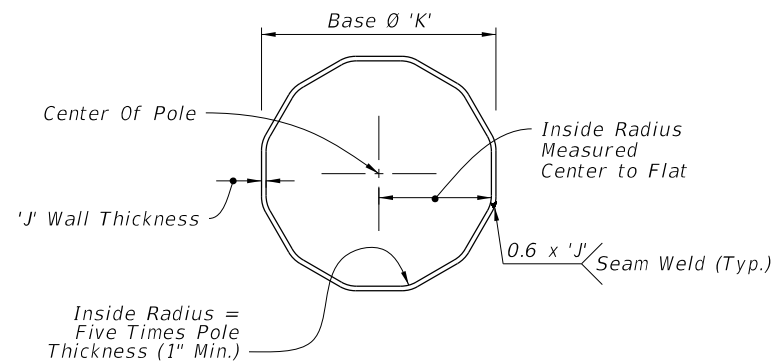
PLAN



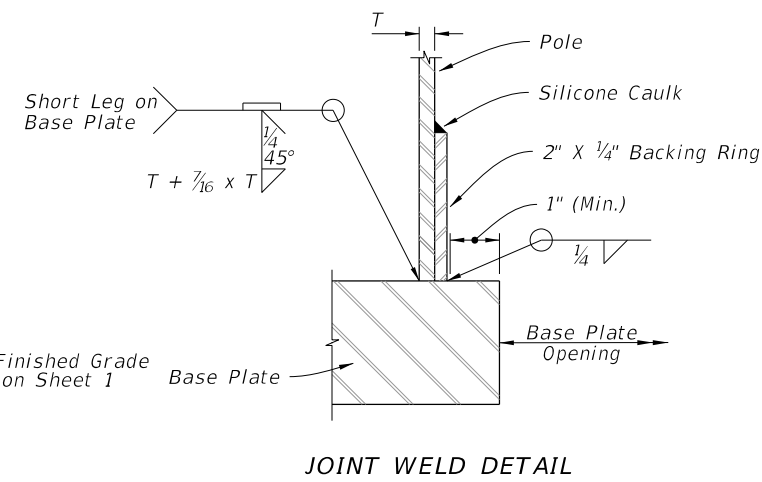
ELEVATION



SECTION A-A



SECTION B-B



JOINT WELD DETAIL

FOUNDATION

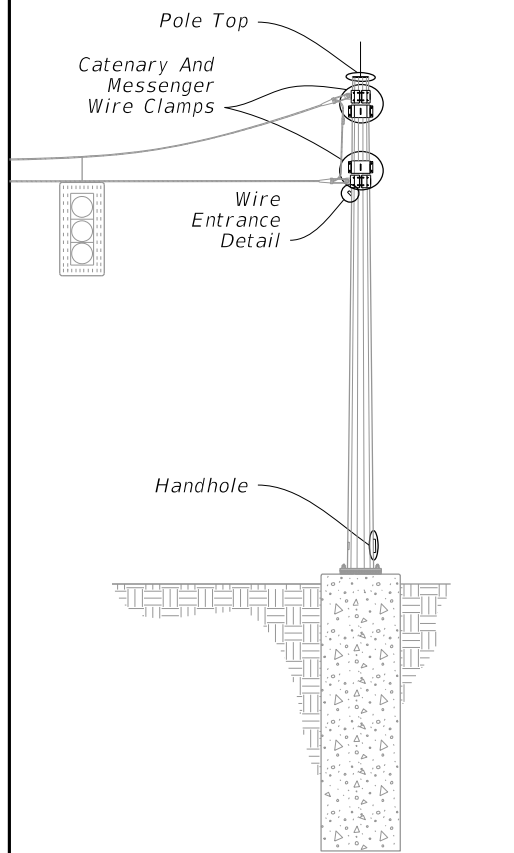
BASE PLATE

DETAIL 'A'

FOUNDATION AND BASE DETAILS

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LAST REVISION	DESCRIPTION:
11/01/24	

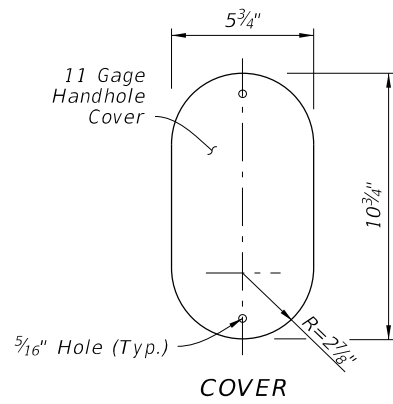


POLE ASSEMBLY

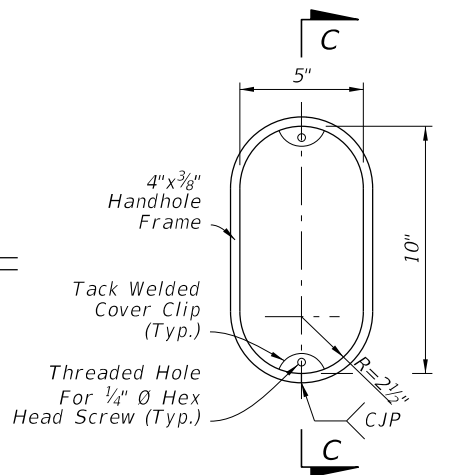
NOTES:

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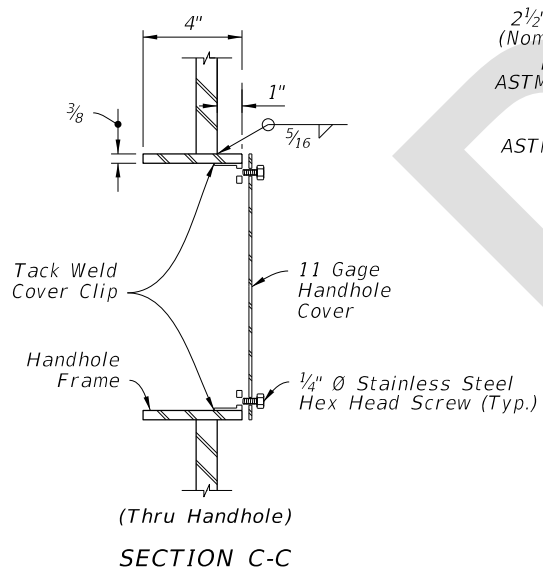
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COVER

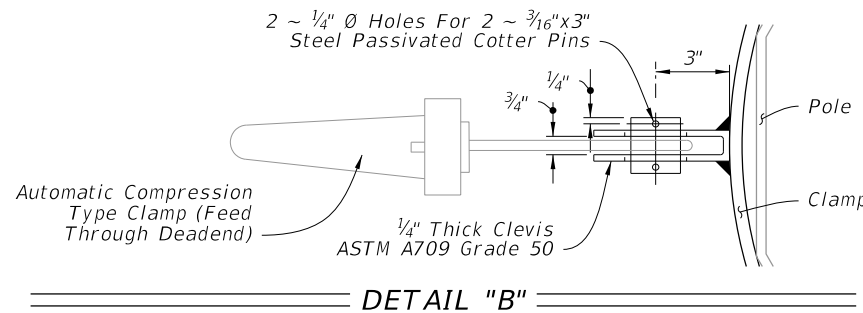


HANDHOLE FRAME

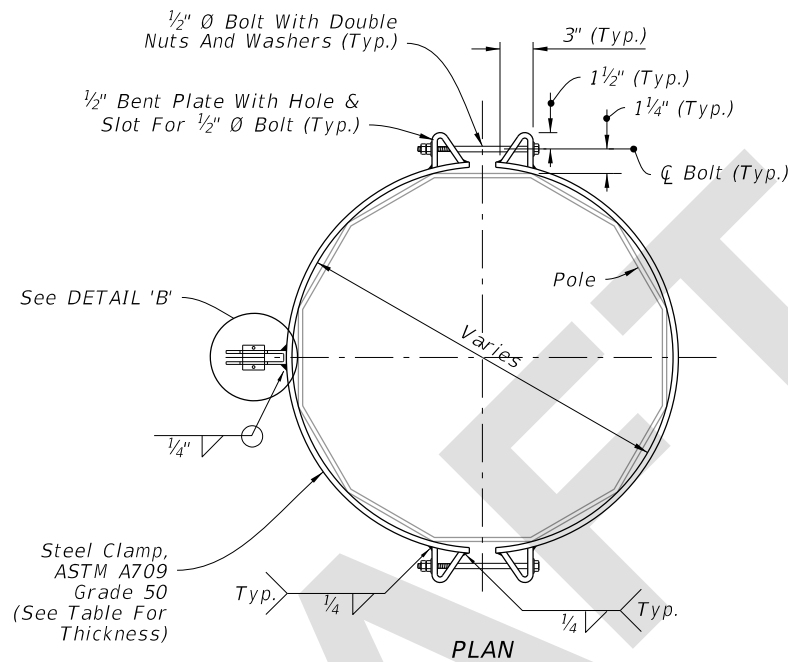


SECTION C-C

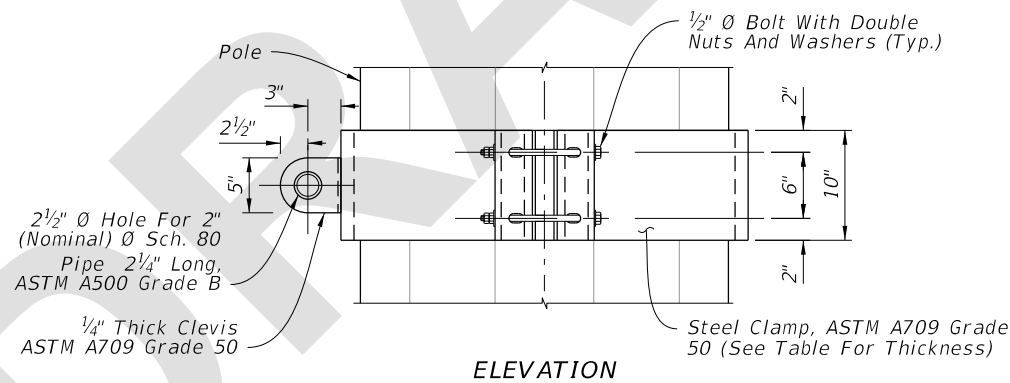
HANDHOLE



DETAIL "B"

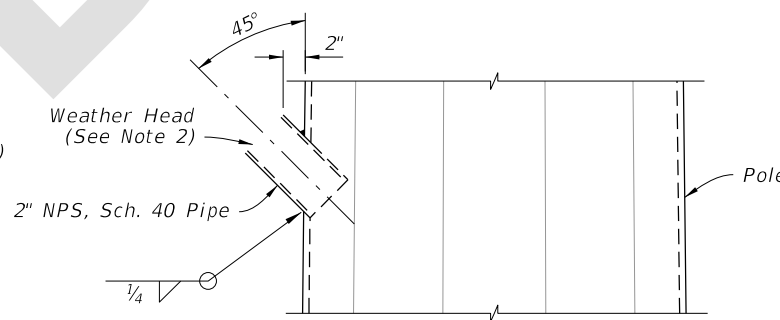


PLAN

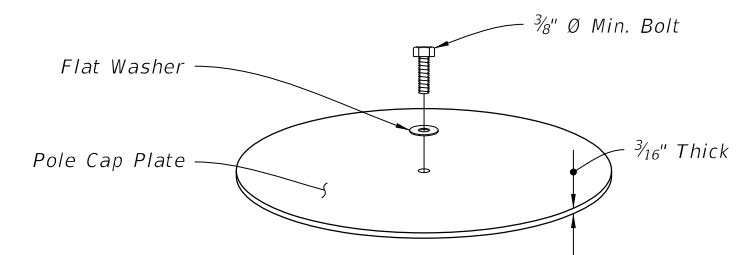


ELEVATION

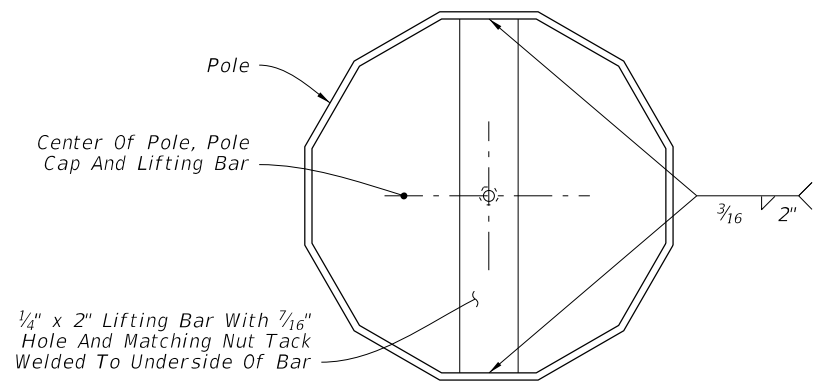
CATENARY AND MESSENGER WIRE CLAMPS



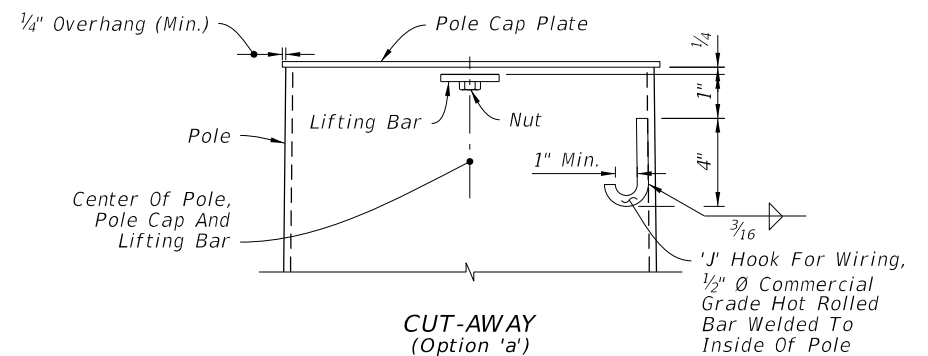
WIRE ENTRANCE DETAIL



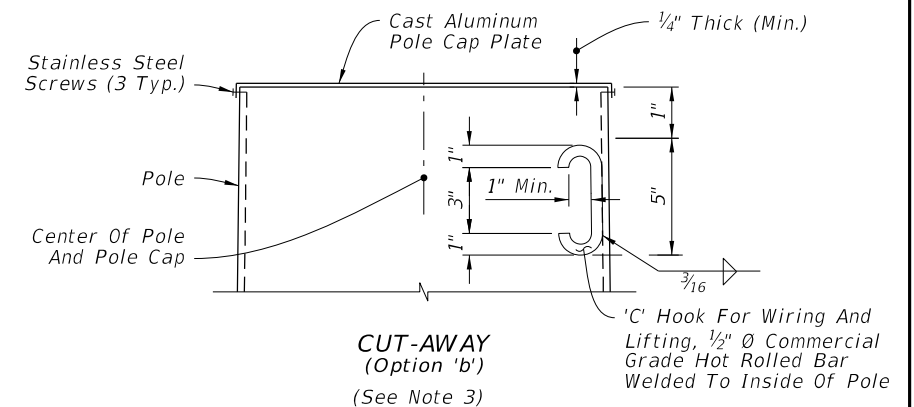
TOP VIEW



1/4" x 2" Lifting Bar With 7/16" Hole And Matching Nut Tack Welded To Underside Of Bar



CUT-AWAY (Option 'a')



CUT-AWAY (Option 'b') (See Note 3)

POLE TOP

ATTACHMENT DETAILS

7/31/2024 8:32:59 AM

LAST REVISION	DESCRIPTION:
11/01/24	