
Index 641-020 Concrete CCTV Pole

ORIGINATION

Date: March 24, 2023

Name: Joshua Turley

Phone: (850) 414-4475

Email: Joshua.Turley@dot.state.fl.us

COMMENTARY

Sheet 2: Fabricators asked if could position the cabinets at other locations radially. We added a note to allow this. Note 6 was added to explain when to use the new strand pattern on Sheet 3.

Sheet 3: A fabricator of 12 sided poles had an approved strand pattern in their QC plan which differed from the Standard. The difference allowed the fabricator to mount the hand hole on the flat of the pole and maintain reinforcement cover. We have adopted this in the Standard to provide consistency between the QC plan and the Standard.

COMMENTS AND RESPONSES

BLACK = Industry Review Comments **BLUE** = Standard Plans Response **GREEN** = Change Made to Index

Name: Keith Krieger

Date: 6/19/2023

COMMENT: Under the Commentary/Background for sheet 2, we indicate "position the cabinets" instead of "position the couplers".

Also, does the new Note 5 also apply to the coupler near the top of the pole? If so, should we add "See Note 5" for that location also?

RESPONSE: It is assumed position of the cabinet is in-line with the position of the couplers, so the cabinet will be installed wherever the coupler holes are.

CHANGE MADE TO INDEX: No.

Response Date: 6/19/2023

Name: David Bancroft

Date: 6/19/2023

COMMENT: The strand pattern numbers in the design tables should be updated to accommodate the new strand pattern that was added.

RESPONSE: Good catch! We will update the tables to reflect the new strand pattern.

CHANGE MADE TO INDEX: Yes, the tables were updated and a note was added to explain when Strand Pattern 1 should be used. The OrgForm and RedLine was also updated.

Response Date: 6/27/23

Name: Ronald Meyer

Date: 7/13/2023

COMMENT: There is a concern with the addition of the new note 5 allowing for the couplings to be placed at different radial locations. We would like to prevent the introduction of inadvertent conflicts between placement of the cabinet, handhole access, lowering device operation, etc. Allowing for variable connection angles, has the potential to create problems if the cabinet isn't at 90°. The Index should continue to depict the predominant mounting position (which is still hanging the cabinet at 90°, opposite the travel lanes).

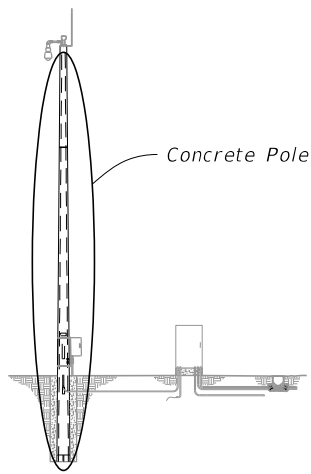
RESPONSE: Yes we agree that this could open up for safety concerns. We will revise the Index and not include the new note.

CHANGE MADE TO INDEX: Yes, removed new note about couplings.

Response Date: 7/13/23

NOTES:

1. Diameter of 12-sided poles are measured flat to flat.
2. Total Taper applies to pole, strands and reinforcing.
3. For 12-Sided Pole and Round Roles Option 2, Stress prestressed strand to 70% of Ultimate before transfer. For Round Pole Option 1, stress prestressed strand to 60% of Ultimate before transfer.
4. Pole Design Tables, Burial Depth is based on level ground (flatter than 1:5). Increase the burial depth in accordance with the Additional Burial Depth Due To Ground Slope table for foundations with slopes 1:5 and steeper. Use the higher value for slope or diameter values that fall between those shown on the table.
5. Strand Pattern 1 may be used in lieu of Strand Pattern 2 where required by fabrication to facilitate Handhole construction.

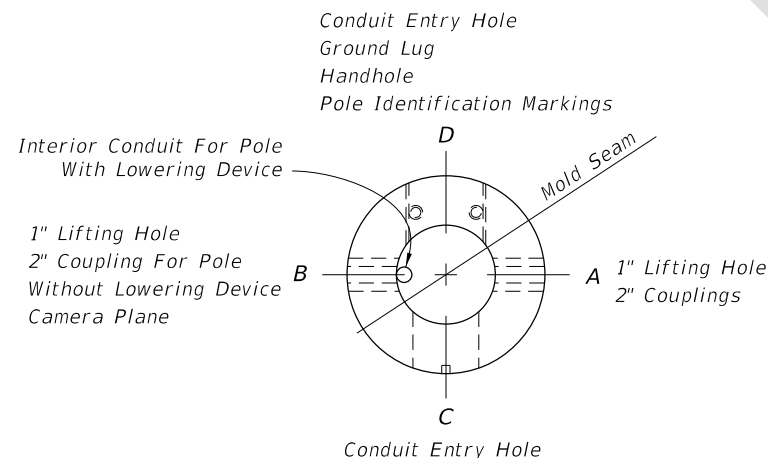


ASSEMBLY

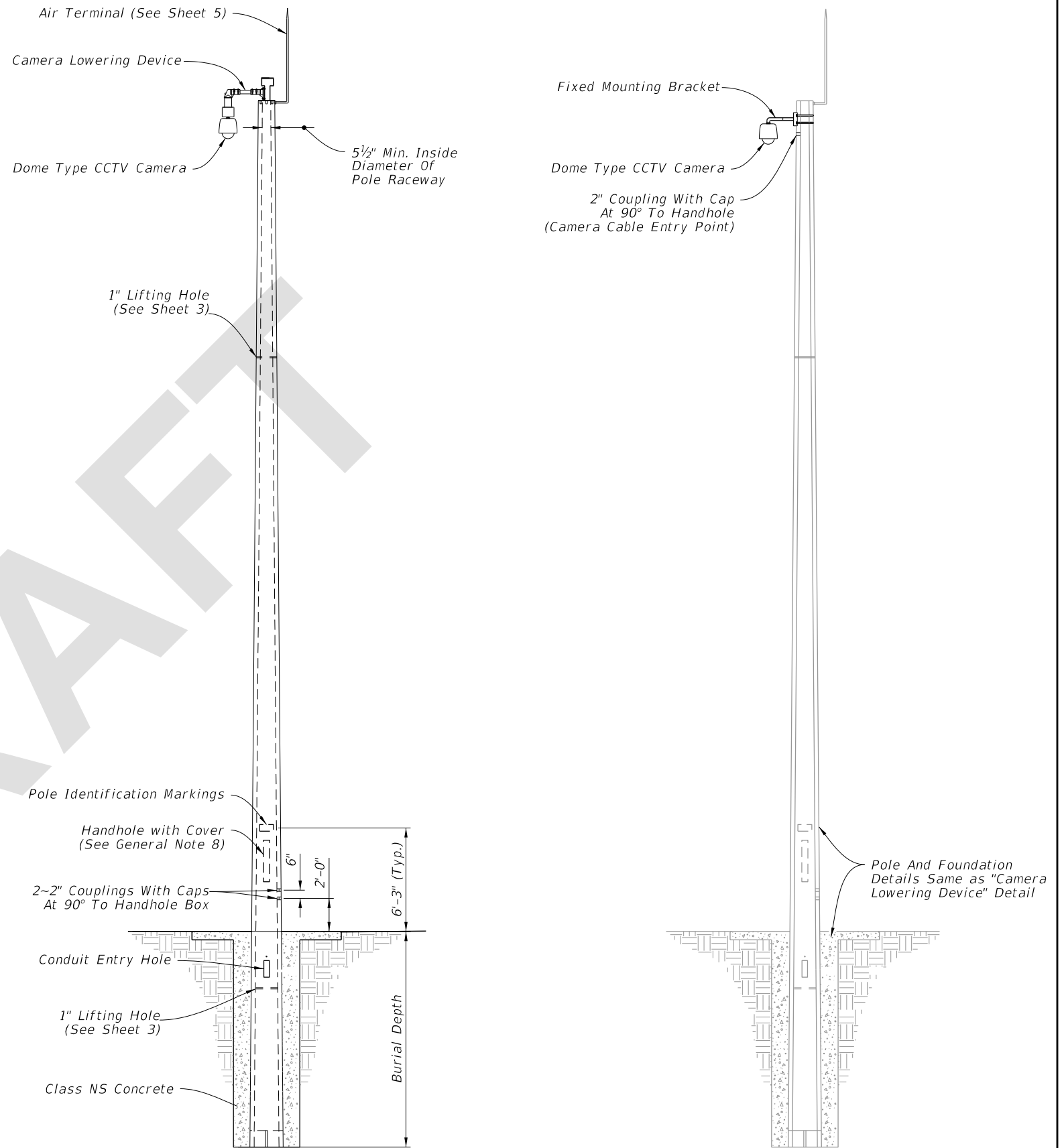
ADDITIONAL BURIAL DEPTH DUE TO GROUND SLOPE	
Ground Slope	Additional Burial Depth (feet)
1:5	3
1:4	4
1:3	5
1:2	7

12-SIDED POLE DESIGN TABLE (See Note 1, 5)										
Pole Length (ft)	Pole Height (ft)	Burial Depth (ft)	Total Taper (in/ft) (See Note 2)	Void Taper (in/ft)	Min. Wall Thickness Tip (in)	Min. Wall Thickness Butt (in)	Tip Diameter (in)	Butt Diameter (in)	Strand Pattern	Strand Diameter
63	50	13	0.18	0.18	3	3	12	23.34	2	0.6"
69	55	14	0.18	0.18	3	3	12	24.42	2	0.6"
75	60	15	0.18	0.18	3	3	12	25.50	3	0.6"
80	65	15	0.18	0.18	3	3	12	26.40	3	0.6"
86	70	16	0.18	0.18	3	3	12	27.48	3	0.6"

ROUND POLE DESIGN TABLE											
Pole Length (ft)	Pole Height (ft)	Burial Depth (ft)	Design Option	Total Taper (in/ft) (See Note 2)	Void Taper (in/ft)	Min. Wall Thickness Tip (in)	Min. Wall Thickness Butt (in)	Tip Diameter (in)	Butt Diameter (in)	Strand Pattern	Strand Diameter
63	50	13	Option 1	0.216	0.192	3	3.76	12.15	25.76	4	0.5"
			Option 2	0.180	0.172	3	3.50	12.00	23.34	5	0.5"
69	55	14	Option 1	0.216	0.192	3	3.83	12.15	27.05	4	0.5"
			Option 2	0.180	0.173	3	3.50	12.00	24.42	5	0.5"
75	60	15	Option 1	0.216	0.192	3	3.90	12.15	28.35	4	0.5"
			Option 2	0.180	0.173	3	3.50	12.00	25.50	5	0.5"
80	65	15	Option 1	0.216	0.192	3	3.96	12.15	29.43	4	0.5"
			Option 2	0.180	0.174	3	3.50	12.00	26.40	5	0.5"
86	70	16	Option 1	0.216	0.192	3	4.03	12.15	30.73	4	0.5"
			Option 2	0.180	0.174	3	3.50	13.00	28.48	5	0.5"



PLAN VIEW



CAMERA LOWERING DEVICE

FIXED MOUNTING BRACKET

ELEVATION

7/13/2023 12:51:01 PM

LAST REVISION	DESCRIPTION:
11/01/23	



FY 2024-25
STANDARD PLANS

CONCRETE CCTV POLE

INDEX
641-020

SHEET
2 of 5