Index 641-020
Concrete CCTV Pole

ORIGINATION
Date: 1-13-21
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COMMENTARY
The location of the couplings shown on the CCTV Pole Assembly on sheets 1 and 2 do not correlate with the location of the couplings shown on the Pole Elevation and Handhole Detail shown on sheets 3 and 4. The handhole should be located downstream of the traffic so all details and notes will be updated for the proper representation.

COMMENTS AND RESPONSES
BLACK = Internal Review Comments  RED = Standard Plans Response  GREEN = Change Made to Index

Name: Jeff Cicerello
Date: 5-18-21
COMMENT: Sheet 1: Callout on Sheet 1 in reference to General Note 7.G should be 6.G.

RESPONSE: Agree
Change made to Index: Callout will be updated.
Date: 5-19-21
GENERAL NOTES:

1. Work this Index with Specification 641.

2. This Index is considered fully detailed and no shop drawings are necessary. Submit Shop Drawings for minor modifications not detailed in the Plans.

3. Provide either round or 12-sided Poles.

4. See Index 635-001 for additional details for Pull Boxes.

5. Materials:
   - A. Pole: Use Class VI concrete with 6 ksi minimum strength at transfer.
   - B. Prestressing Strands: ASTM A416, Grade 270 low relaxation.
   - C. Reinforcing Steel: ASTM A615, Grade 60
   - D. Spiral Reinforcing: ASTM A1064 Cold Drawn
   - E. Bolts: ASTM F1554, Grade 55
   - Nuts: ASTM F1554, Grade 55
   - Washers: ASTM F366
   - F. Pole Cap: ASTM A552 or ASTM A709, Grade 50
   - G. Galvanization: Bolts, nuts and washers: ASTM F2320
   - All other steel: ASTM A522

6. Fabrication:
   - A. Cut the tip end of the prestressed strand first or simultaneously with the butt end.
   - B. For spiral reinforcing, one turn is required for spiral splices and two turns are required at the top and bottom of poles.
   - C. For Reinforcing Steel lap splice to consist of a 9'-0" lap length at each splice. No more than two opposing rebar to be spliced at the same cross section. Stagger lap splices as needed.
   - D. Provided a Class 3 surface finish in accordance with Specification 400
   - E. Provide a 3" minimum cover.
   - F. Provide handhole and coupler cover plates made of non-corrosive materials. Attach cover plates to poles using lead anchors or threaded inserts embedded in the poles in conjunction with round headed chrome plated screws.
   - G. Provide identification Markings on the poles where indicated on the following sheets. Include the following information using inset numerals with 1' height or as approved in the Producers' Quality Control Program.

Financial Project ID
Pole Manufacturer
Pole Length

H. Tie ground wires to the interior of reinforcing steel as necessary to prevent displacement during concreting operations.

I. Storage, handling and Erection locations shown may vary within ± 3'.

7. Pole Installation:
   - A. Install the Pole plumb.
   - B. Install Pole with the handhole located away from approaching traffic.

8. Cabinet Installation:
   - A. Splice Fiber optic cables in cabinet to preterminated patch panel.
   - B. Furnish and install Surge Protection Devices (SPDs) on all cabling in cabinet.
   - C. Furnish and install secondary SPDs protection on outlets for equipment in cabinet.
   - D. Ensure that all electronic equipment power is protected and conditioned with SPDs.
   - E. Ensure that equipment cabinet is bonded to CCTV pole grounding system.
   - F. Install the pole mounted cabinet with the hinges next to the pole.
   - G. Provide Identification Markings on the poles where indicated on the following sheets. Include the following information using inset numerals with 1' height or as approved in the Producers' Quality Control Program.

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Pole Length

H. Tie ground wires to the interior of reinforcing steel as necessary to prevent displacement during concreting operations.

I. Storage, handling and Erection locations shown may vary within ± 3'.

9. Lowering Device Installation:
   - A. Place the lowering cable that moves within the pole in an interior conduit to prevent it from tangling or interfering with any electrical wire that is in the pole. Ensure that any electrical wire within the pole is routed securely and free from slack.
   - B. Mount lowering arm perpendicular to the roadway or as shown in the plans. Position CCTV pole so that the camera can be safely lowered without requiring lane closures.
   - C. Coordinate lowering device hardware requirements (including Tenon, Tenon mounting plates, parking stand, etc.) with lowering device manufacturer.
   - D. Provided a Class 3 surface finish in accordance with Specification 400.
   - E. Provided a 1" minimum cover.
   - F. Provided identification markings on the poles where indicated on the following sheets. Include the following information using inset numerals with 1' height or as approved in the Producers' Quality Control Program.

Financial Project ID
Pole Manufacturer
Pole Length

H. Tie ground wires to the interior of reinforcing steel as necessary to prevent displacement during concreting operations.

I. Storage, handling and Erection locations shown may vary within ± 3'.

J. Storage, handling and Erection locations shown may vary within ± 3'.

K. Storage, handling and Erection locations shown may vary within ± 3'.

L. Storage, handling and Erection locations shown may vary within ± 3'.

M. Storage, handling and Erection locations shown may vary within ± 3'.
ASSEMBLY

NOTES:
1. Install all handhole and opening covers prior to shipping.
2. Install 3/8" x 3" long stud with hex nut in insert before shipment.
3. As an alternate, embed 4-1/2" x 18" stainless steel threaded rods with a threaded nut. At top of rod, thread a coupling nut to attach plate w/ 4-1/2" x 18" stainless steel bolts.
4. Handhole frame may be Cast Aluminum 356.2.
5. Work these details with Data Tables on Sheet 2.

TENON CAP

1. Install all handhole and opening covers prior to shipping.
2. Install 3/8" x 3" long stud with hex nut in insert before shipment.
3. As an alternate, embed 4-1/2" x 18" stainless steel threaded rods with a threaded nut. At top of rod, thread a coupling nut to attach plate w/ 4-1/2" x 18" stainless steel bolts.
4. Handhole frame may be Cast Aluminum 356.2.
5. Work these details with Data Tables on Sheet 2.

TENON COVER

POLE TOP DETAIL

HANDHOLE DETAIL

ELEVATION

LOWERING DEVICE TENON

ELEVATION

CAP PLATE DETAIL
(Without Lowering Device)

CONCRETE CCTV POLE

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