LOWERING DEVICE INSTALLATION NOTES:

1. Place the lowering cable that moves within the pole in an internal 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.
2. 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.
3. Coordinate all lowering device hardware requirements (including Tenon, Tenon mounting plates, parking stand, etc.) with lowering device manufacturers.

POLE NOTES:

1. Pole Material Specifications:
   a. Pole: The Class VI Concrete with 6 ksi minimum strength at transfer.
   c. Reinforcing Steel: ASTM A615 Grade 60.
   d. Spiral Reinforcing: ASTM A1064 Cold-Drawn.
   e. Bolts: ASTM F1554, Grade 55.
   f. Washers: ASTM A563, Grade A Heavy Hex.
   g. Galvanization: e.

2. All other steel: ASTM A123.
6. Place the lowering cable that moves within the pole in an internal 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.
7. 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.
8. Coordinate all lowering device hardware requirements (including Tenon, Tenon mounting plates, parking stand, etc.) with lowering device manufacturers.
9. 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 Producer Quality Control Program:
   a. Logo
   b. Financial Project ID
   c. Pole Manufacturer
   d. Pole Length
   e. Pole Material Specifications:
      a. Pole: The Class VI Concrete with 6 ksi minimum strength at transfer.
      c. Reinforcing Steel: ASTM A615 Grade 60.
      d. Spiral Reinforcing: ASTM A1064 Cold-Drawn.
      e. Bolts: ASTM F1554, Grade 55.
      f. Washers: ASTM A563, Grade A Heavy Hex.
      g. Galvanization: e.

10. Cut the tip end of the prestressed strand first or simultaneously with the butt end.
11. The pole shall be round or 12-sided.
12. Cut the tip end of the prestressed strand first or simultaneously with the butt end.
13. For reinforcement, one turn is required for spiral splices and two turns are required at the top and bottom of poles.
14. For reinforcing steel, lap splice to consist of a 3'-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.
15. Provide a 1" minimum cover.
16. 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.
17. 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 Producer Quality Control Program:
   a. Logo
   b. Financial Project ID
   c. Pole Manufacturer
   d. Pole Length
   e. Pole Material Specifications:
      a. Pole: The Class VI Concrete with 6 ksi minimum strength at transfer.
      c. Reinforcing Steel: ASTM A615 Grade 60.
      d. Spiral Reinforcing: ASTM A1064 Cold-Drawn.
      e. Bolts: ASTM F1554, Grade 55.
      f. Washers: ASTM A563, Grade A Heavy Hex.
      g. Galvanization: e.

18. Tie ground wires to the interior of reinforcing steel as necessary to prevent displacement during concreting operations.
19. This Design Standard is considered fully detailed, and no shop drawings are necessary. Submit Shop Drawings for minor modifications not detailed in the plans.
20. Storage, handling and erection locations shown may vary within ± 3'.
Air Terminal (See Index 18102)
Coordinate Mounting Method
Pole Tenon

Camera (See Index 18110 For Mounting Details)
5½" Min. Inside Diameter of Pole Raceway

1" Lifting Hole

POLE DESIGN TABLES

<table>
<thead>
<tr>
<th>Pole Length (ft)</th>
<th>Pole Height (ft)</th>
<th>Burial Depth (ft)</th>
<th>Total Taper**</th>
<th>Void Taper</th>
<th>Min. Wall Thickness Tip</th>
<th>Min. Wall Thickness But End</th>
<th>Tip Diameter (in)</th>
<th>Butt Diameter (in)</th>
<th>Strand Pattern</th>
<th>Strand Diameter***</th>
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</table>

* Diameter Measured Flat to Flat
** Total taper applies to pole, strands, and reinforcing.
*** For 12-Sided Pole and Round Pole 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.
**Spiral Reinforcing Elevation**

(Strands, Holes, and Fixtures Not Shown)

- Spiral wire may be wrapped in two directions given that an equivalent area of spiral wire is provided to that shown in this standard and the cover requirements are met.

**Pole Elevation**

(Strands and Reinforcing Not Shown)

- Strands and Rebar shown are continuous from Tip End to Butt End.

**Strand Legend**

- (6) #5 Rebar (Shown) or (4) #4 Rebar
- Prestressed Strand

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**Section A-A**

**Strand Pattern 1**
(12- sided)

**Strand Pattern 2**
(12- sided)

**Strand Pattern 3**
(Round - Option 1)

**Strand Pattern 4**
(Round - Option 2)
CONCRETE CCTV POLE

SECTION B-B

TENON COVER

TOP OF POLE DETAIL WITHOUT LOWERING DEVICE

HANDHOLE DETAIL

SECTION D-D - PARK STAND DETAIL

Notes:
1. Install all handhole and opening covers prior to shipping.
2. Install ½" Ø x 5' long stud with hex nut in insert before shipment.
3. As an alternate, embed (4) ½" Ø x 1½" SCH. 40 Pipe, each side of handhole (See Note 3 for alternate connector).
4. Handhole frame may be Cast Aluminum 356.2.