



*Florida Department of Transportation*

RICK SCOTT  
GOVERNOR

605 Suwannee Street  
Tallahassee, FL 32399-0450

JIM BOXOLD  
SECRETARY

**TRAFFIC ENGINEERING AND OPERATIONS BULLETIN 17-01**  
**ROADWAY DESIGN BULLETIN 17-01**  
**(FHWA Approved: January 6, 2017)**

DATE: January 6, 2017

TO: District Directors of Transportation Operations, District Directors of Transportation Development, District Design Engineers, District Structures Design Engineers, District Roadway Design Engineers, District Traffic Operations Engineers, District Program Management Engineers/Administrators

FROM: Trey Tillander, Director, Traffic Engineering and Operations Office  
Tim Lattner, Director, Office of Design *[Signature]*

COPIES: Brian Blanchard, Courtney Drummond, David Sadler, Rudy Powell, Mark Wilson, Gregory Schiess, Michael Shepard, Nick Finch (FHWA), Khoa Nguyen (FHWA), Frank Corrado (FHWA), Bob Burleson (FTBA) *[Signature]*

SUBJECT: Design Standards Index 17727 – Span Wire Traffic Signal Hangers

**REQUIREMENTS**

The following two **Design Standards Revisions (DSR)** are released:  
Revised FY 2016-17 Index 17727, (Signal Cable & Span Wire Installation Details); and  
Revised FY 2017-18 Index 17727, (Signal Cable & Span Wire Installation Details).

**BACKGROUND**

This Bulletin follows up on and supersedes TRAFFIC ENGINEERING & OPERATIONS BULLETIN 12-15 / ROADWAY DESIGN BULLETIN 15-14 / DCE MEMORANDUM NO. 24-15.

The Department is changing the Design Standard for span wire traffic signal hangers to allow any Adjustable Signal Hanger listed on the Department's Approved Product List (APL). Currently, the adjustable signal hangers on the APL are the Tri-Stud Adjustable Hanger Assembly and the Pivotal Adjustable Hanger Assembly (PAHA). **Design Standards**, Index 17727 (Signal Cable & Span Wire Installation Details) has been reissued as a **DSR**.

Department funded research is currently underway at the Florida International University Wall of Wind facility in Miami to assess the dynamic performance of span wire traffic signal assemblies in high winds. Long duration wind tests of signal assemblies attached to the span wires with Tri-Stud Adjustable Hangers and PAHAs were recently conducted.

Hurricane Hermine made landfall in the Tallahassee area on September 2 and was the first hurricane to make landfall in Florida since Hurricane Wilma in 2005. Hurricane Matthew approached within 11 miles of the Central and Northeast Florida coast on October 6 and was the strongest hurricane to impact northeast Florida since 1898.

This bulletin is issued based on early observations of the tests pending completion of the research, as well as observations from the two recent hurricane events.

### **IMPLEMENTATION**

The use of the FY 2016-17 **DSR** for Index 17727 is required for all projects with lettings from April 1, 2017 to June 30, 2017. The use of the FY 2017-18 **DSR** for Index 17727 is required for all projects with lettings on or after July 1, 2017. Include the **DSR** for Index 17727 in the back of the component plan set in accordance with the **Plans Preparation Manual, Volume 2, Chapter 3**.

### **CONTACT**

Elizabeth Birriel  
Deputy State Traffic Operations Engineer  
Phone (850) 921-7361  
[elizabeth.birriel@dot.state.fl.us](mailto:elizabeth.birriel@dot.state.fl.us)

TT/TL/tt/ss



*Florida Department of Transportation*

**RICK SCOTT  
GOVERNOR**

605 Suwannee Street  
Tallahassee, FL 32399-0450

**JIM BOXOLD  
SECRETARY**

**MEMORANDUM**

**DATE:** August 1, 2016

**TO:** Fred H. Heery, Sr., Alan El-Urfali, Elizabeth Birriel, Jeffrey Frost

**FROM:** Trey Tillander, Director, State Traffic Engineering and Operations Office *Trey Tillander*

**COPY:** Brian Blanchard, Rachel Cone, Tom Byron, Phillip Gainer

**SUBJECT:** Delegation of Signature Authority

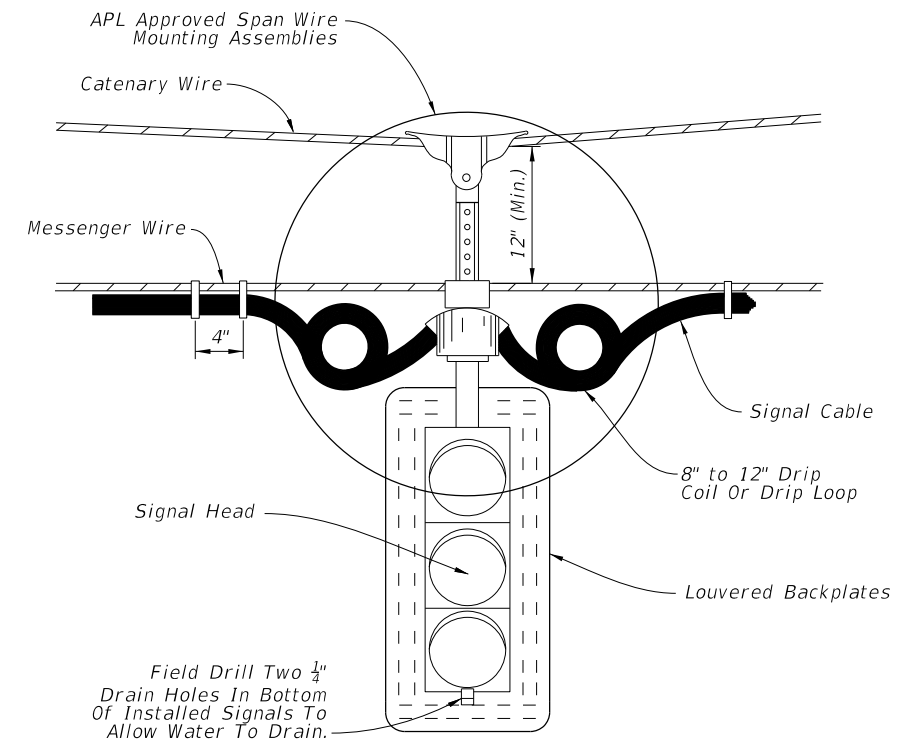
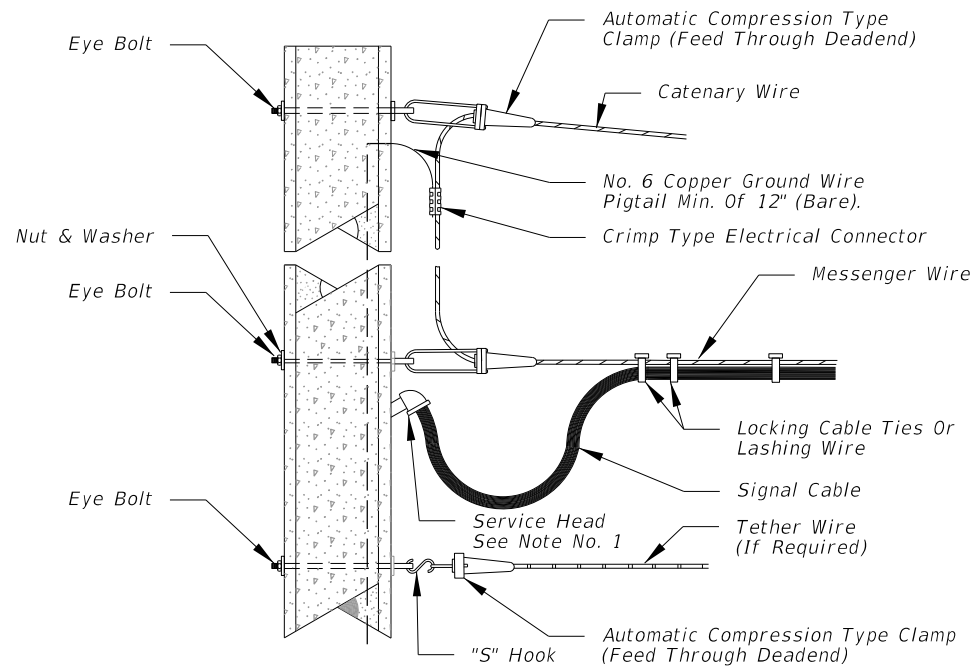
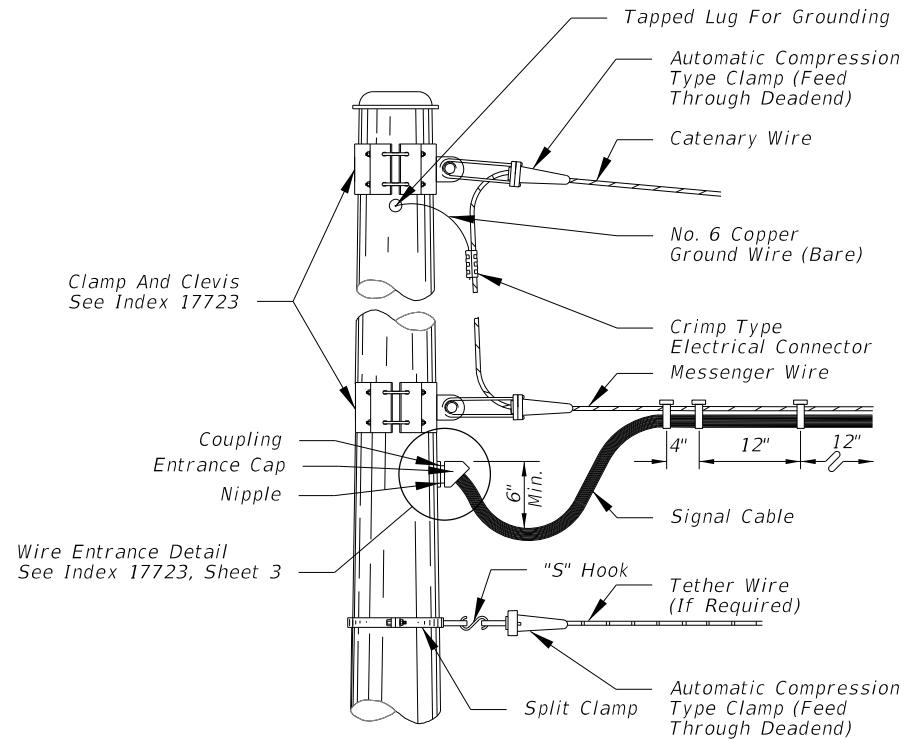
This authorization includes all documents requiring the signature of the Director of State Traffic Engineering and Operations Office with the exception of personnel actions and out of state travel.

The following list establishes signature authority during my absence from the office.

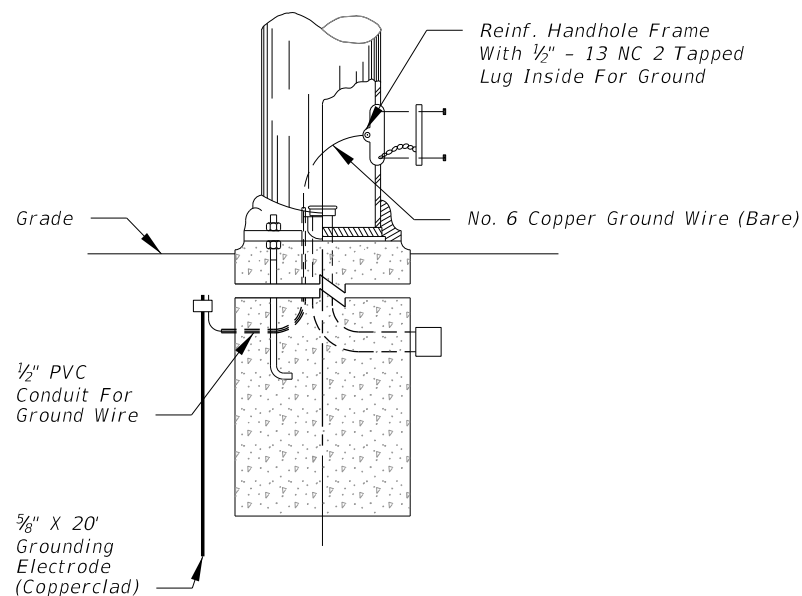
1. Fred H. Heery, Sr., State TSM&O Program Engineer
2. Alan El-Urfali, State Traffic Services Program Engineer
3. Elizabeth Birriel, Traffic Engineering Research Lab Manager
4. Jeffrey Frost, Incident Management / CVO Program Manager

This memo supersedes any previous authorization and shall remain in effect until rescinded by me.

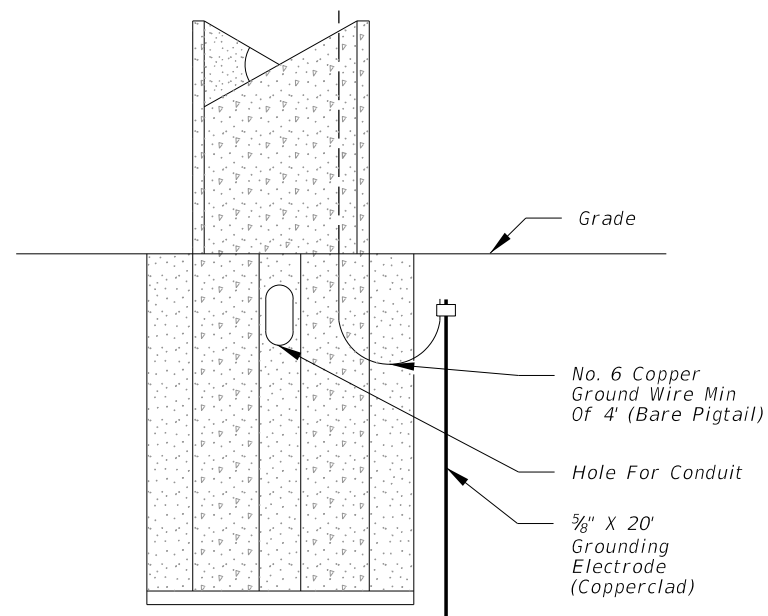
TT/ss



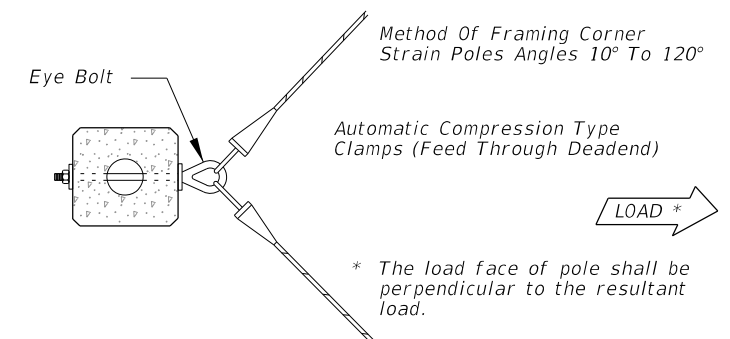
ELEVATION  
SIGNAL ATTACHMENT



ELEVATION  
STEEL POLE



ELEVATION  
PRESTRESSED CONCRETE POLE




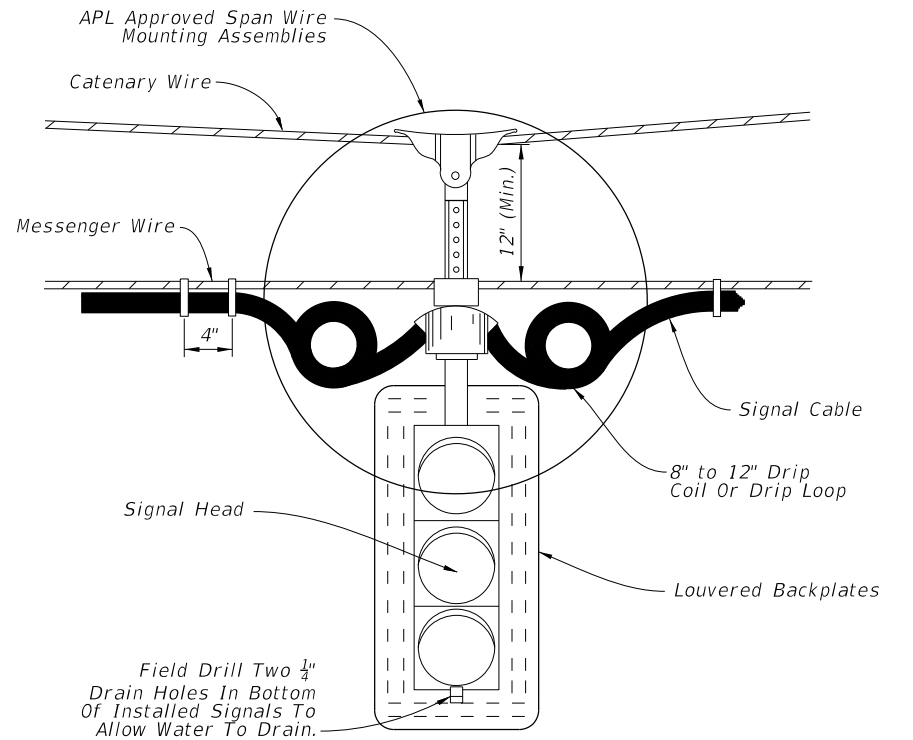
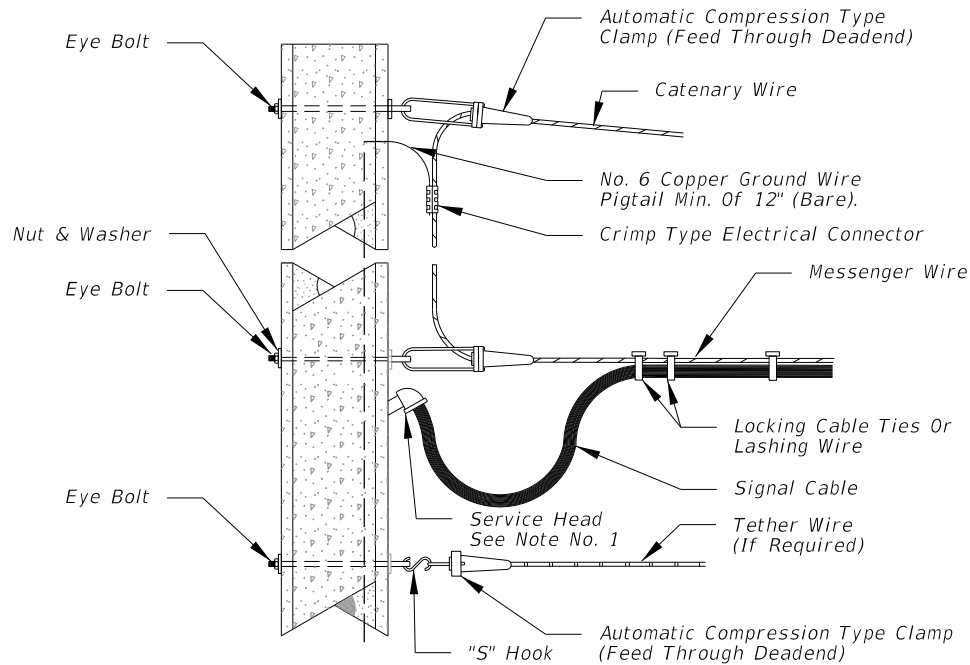
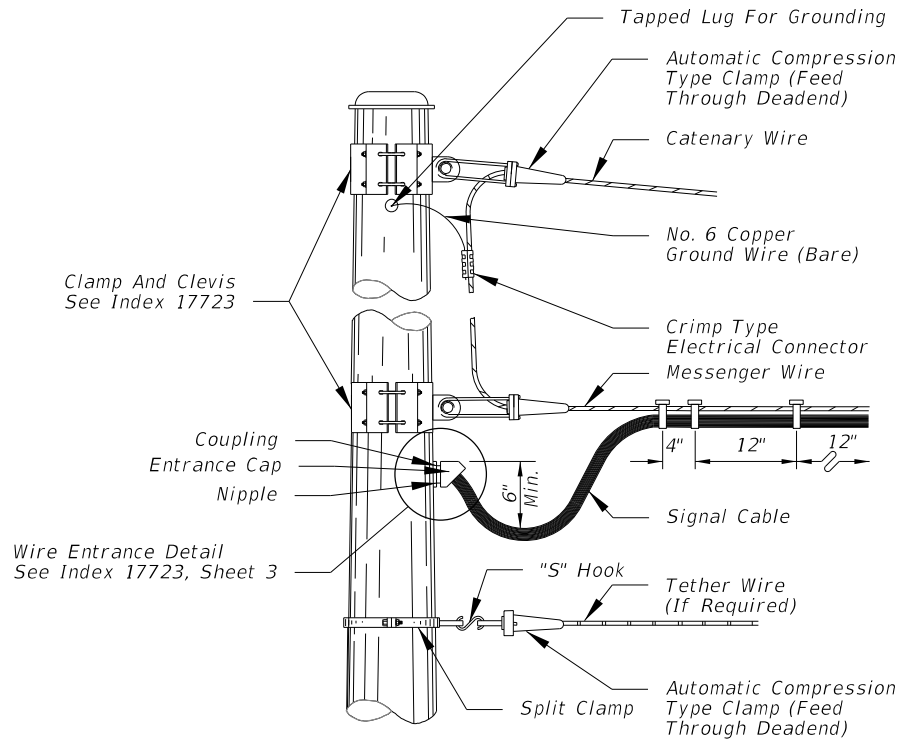
PLAN  
PRESTRESSED CONCRETE POLE

**NOTES:**

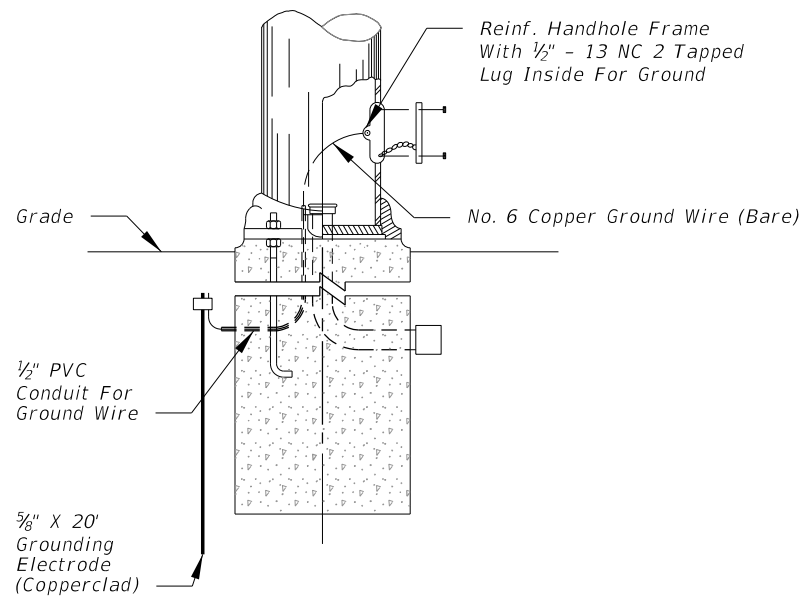
1. Use only span wire mounting assemblies listed on the APL. For specific details and requirements, see the vender drawings on the APL.
2. With the approval of the resident engineer, the service head hole for joint use poles may be drilled by the utility company at an angle of 90° but not less than 45° to the face of the pole.
3. Lashing wire should normally be used for distances of 12' or greater.
4. All hardware for signal attachment shall be stainless steel.
5. Hole for eye bolt will require field reaming for 1" & 1 1/4" eye bolts.
6. Meet all grounding requirements of Specification 620.

SDATES \$TIMES

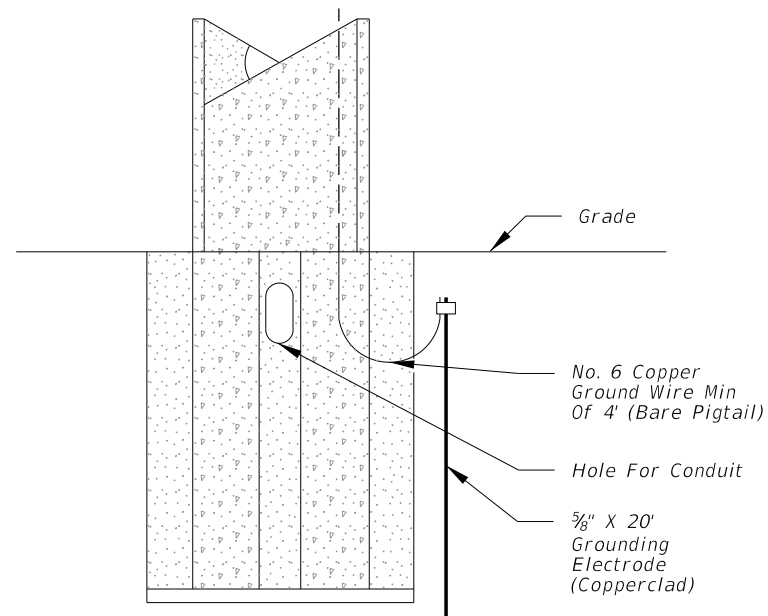
LAST REVISION 01/05/17	REVISION	DESCRIPTION: Sheet 1: Added Note #1; Moved SIGNAL ATTACHMENT details from Sheet 2. Sheet 2: Deleted Sheet.	 <b>FY 2016-17 DESIGN STANDARDS</b>	<b>SIGNAL CABLE &amp; SPAN WIRE INSTALLATION DETAILS</b>	INDEX NO. <b>17727</b>	SHEET NO. <b>1 of 1</b>
------------------------------	----------	--	--	--	------------------------------	-------------------------------



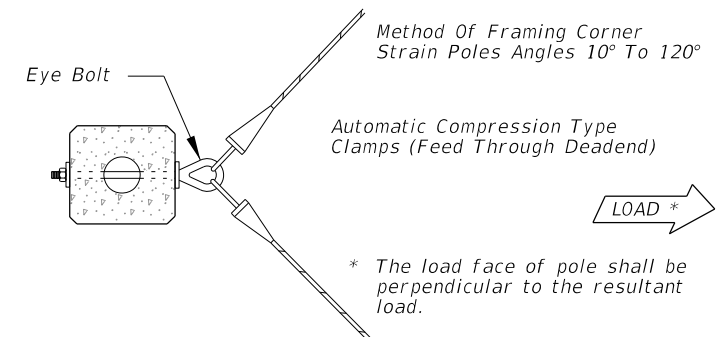
ELEVATION  
SIGNAL ATTACHMENT



ELEVATION  
STEEL POLE



ELEVATION  
PRESTRESSED CONCRETE POLE




PLAN  
PRESTRESSED CONCRETE POLE

**NOTES:**

1. Use only span wire mounting assemblies listed on the APL. For specific details and requirements, see the vender drawings on the APL.
2. With the approval of the resident engineer, the service head hole for joint use poles may be drilled by the utility company at an angle of 90° but not less than 45° to the face of the pole.
3. Lashing wire should normally be used for distances of 12' or greater.
4. All hardware for signal attachment shall be stainless steel.
5. Hole for eye bolt will require field reaming for 1" & 1 1/4" eye bolts.
6. Meet all grounding requirements of Specification 620.

SDATES \$TIMES

LAST REVISION 01/05/17	REVISION	DESCRIPTION: Sheet 1: Added Note #1; Moved SIGNAL ATTACHMENT details from Sheet 2. Sheet 2: Deleted Sheet.	 <b>FY 2017-18 DESIGN STANDARDS</b>	<b>SIGNAL CABLE &amp; SPAN WIRE INSTALLATION DETAILS</b>	INDEX NO. <b>17727</b>	SHEET NO. <b>1 of 1</b>
------------------------------	----------	--	--	--	------------------------------	-------------------------------