

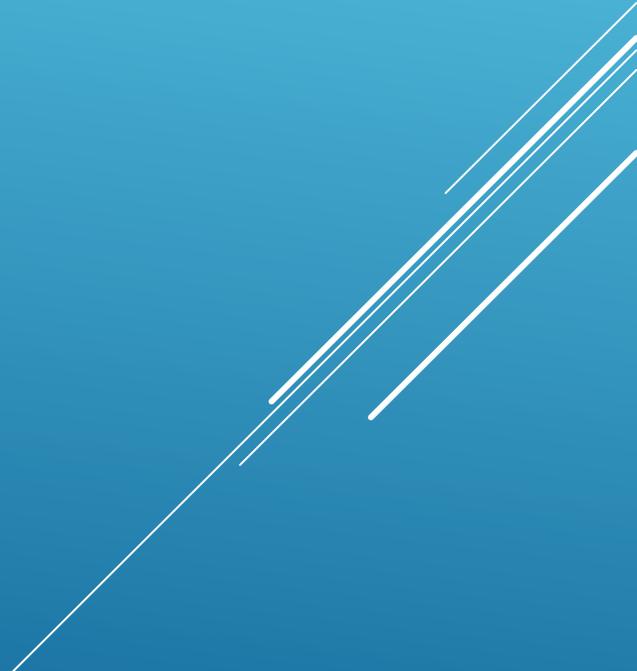
SPAN WIRE EYEBOLTS

Material Issues



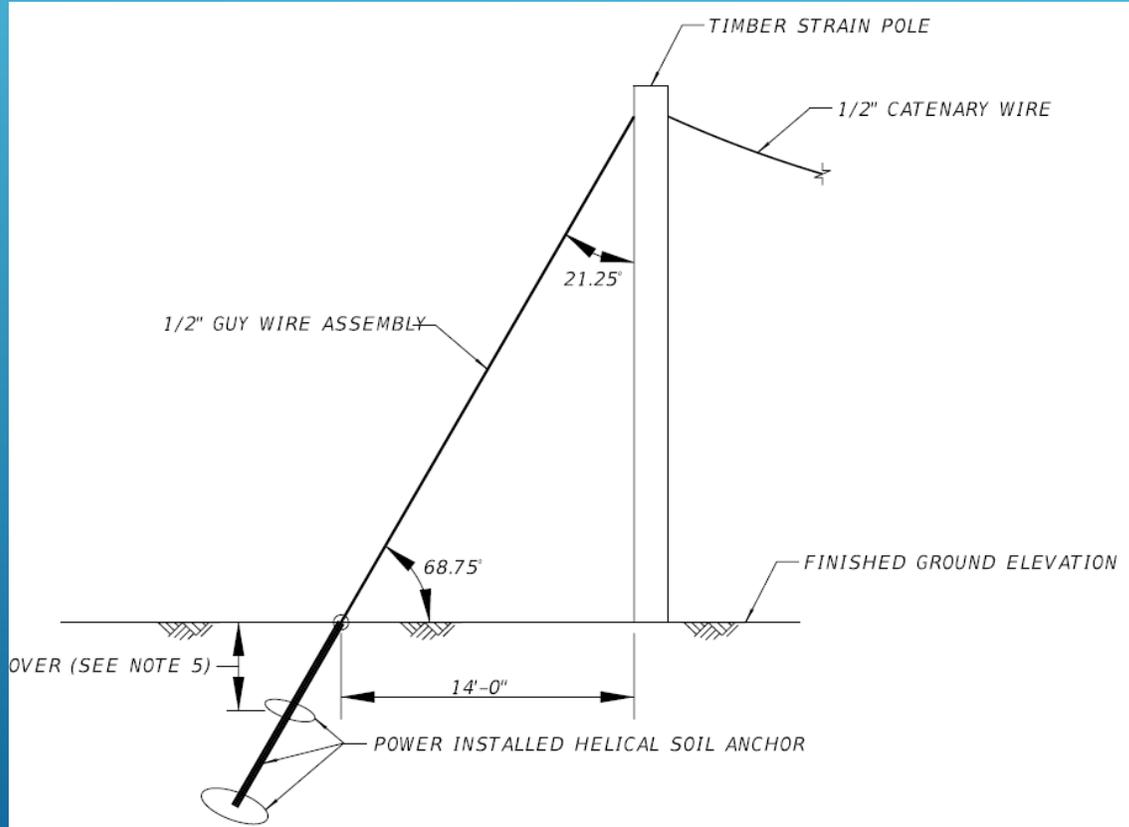
SPAN WIRE EYEBOLTS

Project Information

- ▶ District 7
 - ▶ FLORIDA SAFETY CONTRACTORS, INC
 - ▶ Contract E7H41
 - ▶ Project 254677-1-52-31
 - ▶ Design-Build Push-Button
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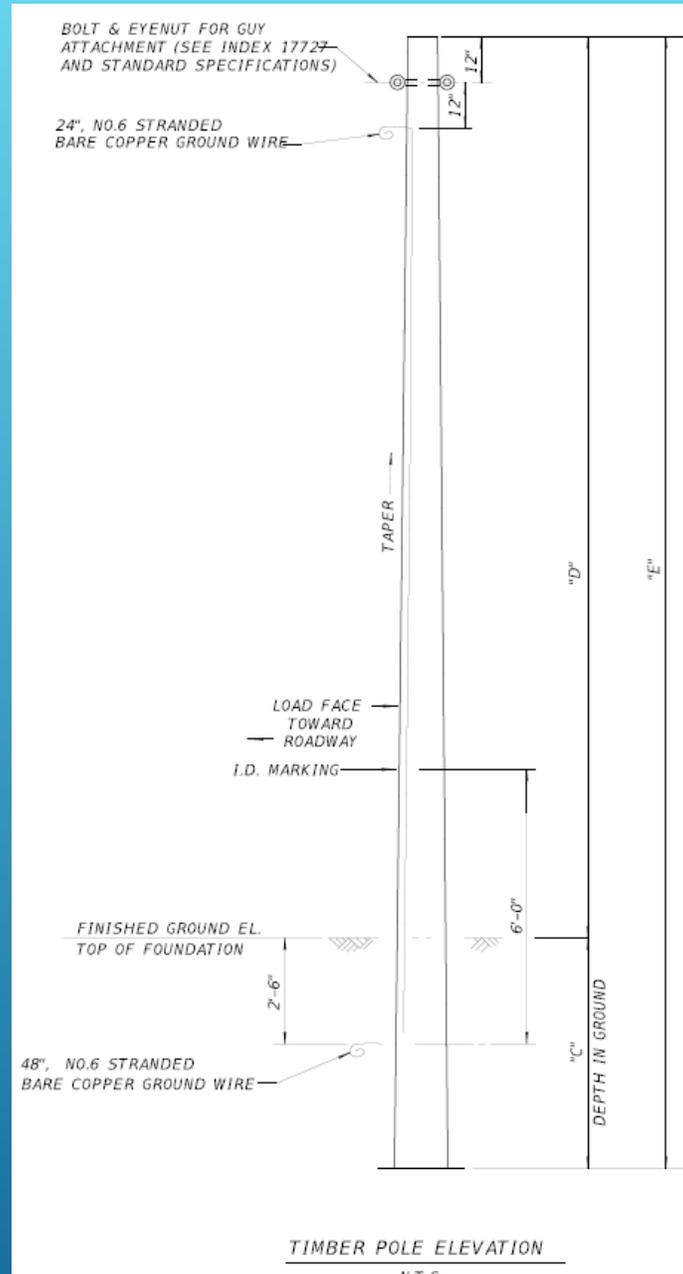
SPAN WIRE EYEBOLTS

Contract Requirements



GUY WIRE TYPICAL ASSEMBLY ELEVATION (VIEW A-A)

N.T.S.



TIMBER POLE ELEVATION

N.T.S.

SPAN WIRE EYEBOLTS

Photographs



SPAN WIRE EYEBOLTS

Contract Requirements

SECTION 634 SPAN WIRE ASSEMBLY

634-2.3 Hardware and Fittings: For Utility or Siemens-Martin Grade wires, use the connection hardware as specified herein. For installations that use other grades of wire, provide the hardware and fittings indicated in the Plans. Provide only hardware and fittings made of galvanized steel or non-corrosive metal unless the fiberglass insulators specified in 634-2.4 are also required. Provide hardware and fittings of sufficient strength to resist the breaking strength of the wire with which they are used.

Use an **alloy steel eyebolt (ASTM F541, Type 2)** and a matching heavy hex nut (ASTM A563, Grade C or D), both zinc coated in accordance with ASTM A153, Class C, to connect the automatic compression dead-end clamp of the catenary wire or messenger wire to the wood or concrete strain poles. Sizes of eyebolts, supplied with nuts and washers, are as following: Use a 3/4 inch diameter bolt for maximum of one 7/16 inch diameter catenary (or messenger) wire, or maximum of two 3/8 inch diameter catenary (or messenger) wires. Use a

SPAN WIRE EYEBOLTS

State Materials Office



Conclusion

According to XRF results, sample is not in compliance with ASTM F541 requirements for %Mo and %Ni. Additional test using ICP is recommended to confirm %Mo and %Ni results. Sample meets ASTM A489 requirements.

SPAN WIRE EYEBOLTS

Tale of the Tape

	ASTM F541	ASTM A489
Fabrication	Forged, Quenched & Tempered	Forged
Minimum Yield Strength	70,000psi	30,000psi
Charpy V-notch Impact Strength	35 ft-lb at -40°F	35 ft-lb at +32°F
Availability	Few Domestic Suppliers	Multiple Domestic Suppliers
Cost (1" x 24" Bolt)	\$200	\$20
Surface Marks	Mfg. Mark & Letter "A"	Mfg. Mark

