PROJECT ID. NO.	SHEET NO.
U-5942	Sig.M6

Fabrication Details – Strain Pole Attachments

Pole Cap

1″ Half Coupling with Weathertight Plug See Radial Orientation Detail (See Drawing M3)

2″ Weatherhead with Insulator See Radial Orientation Detail (See Drawing M3)

3-Bolt Clamp with "J" Hook

Pole Band

Messenger Cable

Either 0.05″ X 0.30 Aluminum Ribbon or 0.061″ Stainless Steel Lashing Wire

Interconnect Cable on Messenger Cable

Stainless Steel Strap, ¾″ Typ. See Note-1

Deadend Strandvise

Messenger Cable (Span Wire)

Alumimum Wrapping Tape or Stainless Steel Lashing Wire

Electrical Service Cable

1'-0"

1″ Weatherhead with Insulator

Traffic Signal Cable

Burndy Clamp (Typ.)

Attach Ground Wire to Field Installed Ground Lug on Pole (Typ)

#4 or #6 Awg Solid Bare Copper Grounding Conductor (Typ.)

Span Wire Pole Clamp (Typ.)

Attachment of Cable to Intermediate Metal Pole

Strain Pole Attachments

Terminal Compartment

Hand Hole

Ground Lug

#4 or #6 Awg Solid Bare Copper Grounding Conductor

Concrete Foundation

Pole

1″ Min. Nonmetallic Conduit w/elbow

2'-0" Min.

2'-6"

1'-0"

⅝″ Dia Copper Clad Steel Grounding Electrode with an Irreversible Compression Ground Connector. For reference refer to section 1700-3 K and L for electrical grounding and bonding requirements, See Note 4.
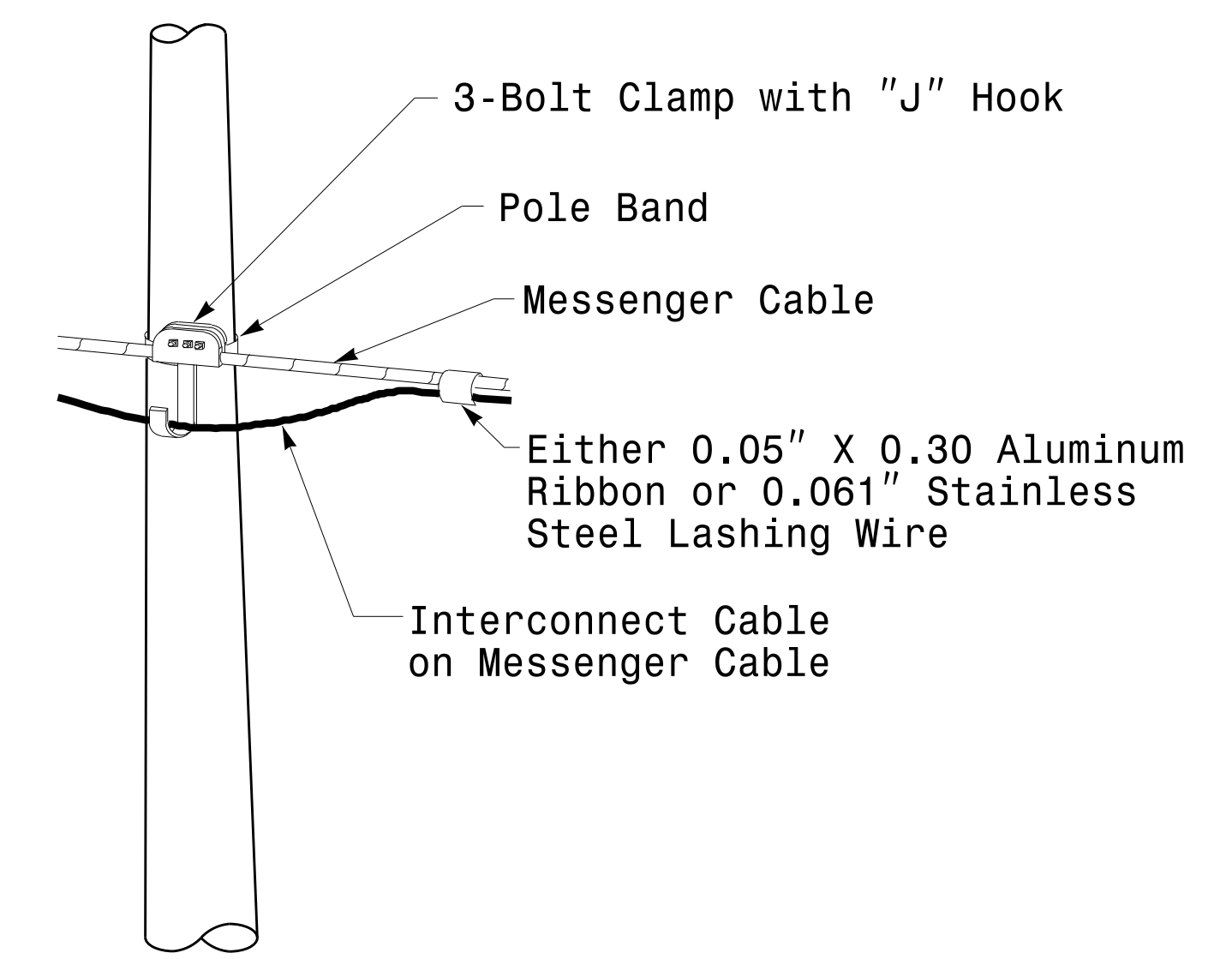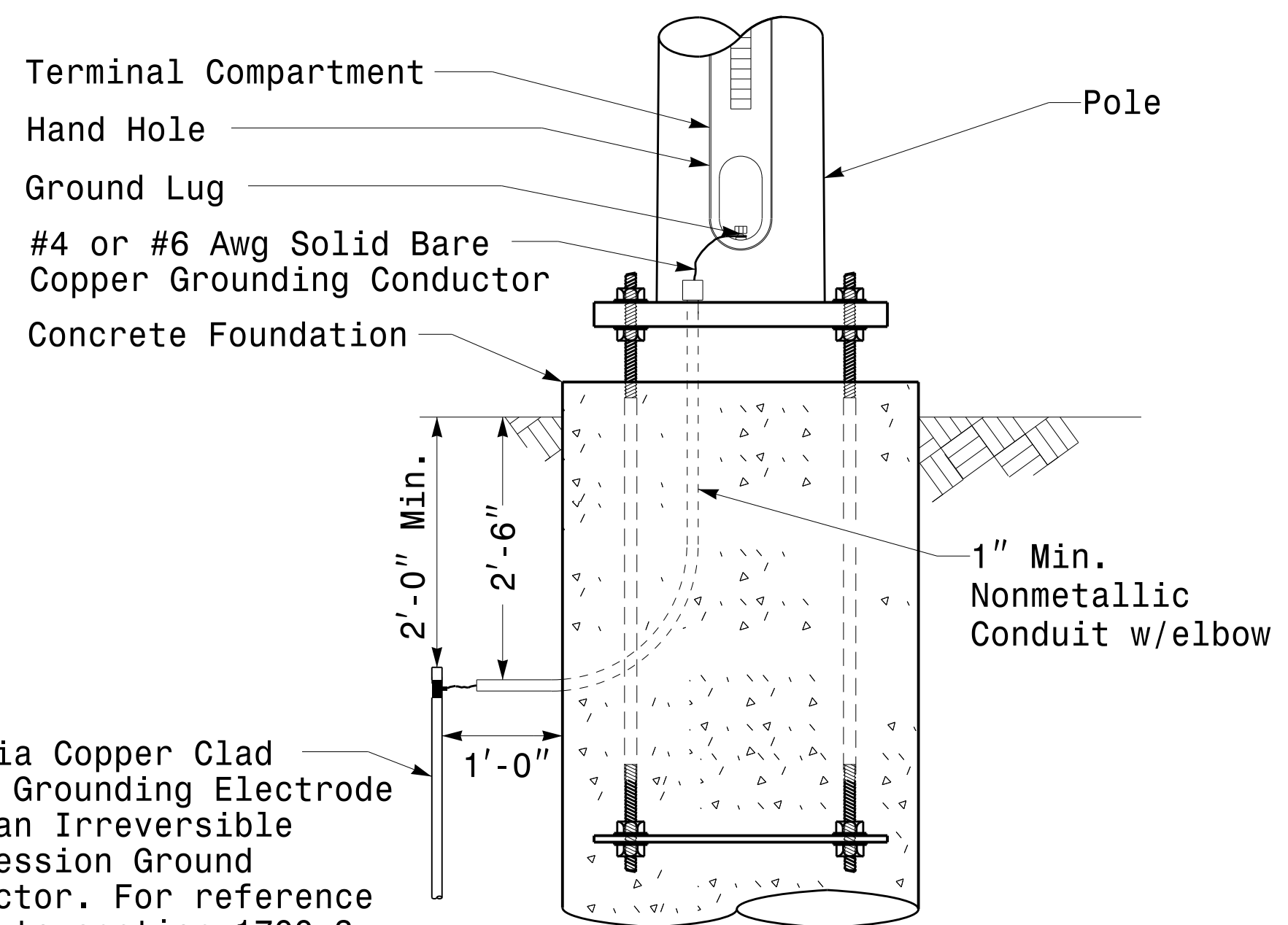
Metal Pole Grounding Detail For Strain Pole and Mast Arm

NOTE:

1. Strap all signal cables to the side of the pole with ¾″ stainless steel straps when the distance between the spanwire attachment clamp and the weatherheads exceeds 3'-0".

2. Provide minimum two spanwire pole clamps per pole.

3. It is prohibited to attach two span wires at one pole clamp.

4. For general requirements refer to NCDOT Standard Specifications for Roadway and Structures, January 2018.

SEAL

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 028094 DEBESH C. SARKAR

DocuSigned by: Debesh C. Sarkar

SIGNATURE

10/11/2017

DATE