

SECTION 603

CULVERTS AND STORM DRAINS

Special Provisions

603-1.01 DESCRIPTION. Add the following: This work shall also consist of installing culvert marker posts, and wrapping joints with a geotextile fabric.

603-2.01 MATERIALS. Add the following:

Geotextile Fabric	Subsection 729-2.01 use fabric meeting the requirements for Separation
Arctic Insulated Corrugated Steel Pipe	Subsection 707-2.01

Culvert marker posts shall meet the requirements of Subsection 730-2.05 Flexible Delineator Posts. The color shall be blue with no other markings. The 2.5-inch by 6-foot post shall be rectangular in cross-section with reinforcing ribs capable of a minimum bending radius of 9 inches. (08/27/03)R42USC

603-3.03 JOINING PIPE. Add the following to the first paragraph under item 2. Metal Pipe.: Wrap CSP pipe joints with geotextile fabric extending three feet on both sides of the coupling bands.

Add the following subitem:

4. Arctic Insulated Corrugated Steel Pipe. Join inner core of arctic pipe firmly according to the requirements for joining metal pipe. Complete the joint using half shell insulation inserts and coupling band around the outer jacket. Installation of all components shall be accomplished using the manufacture's recommendations. Insulation and outer jacket shall be cut back to allow installation of half shell insulation inserts at the joints. Half shell insulation shall be installed at all joints and jacketed with heat shrink sleeves. Field joints shall not have a gap between the adjacent insulation edges exceeding one-eighth (1/8)-inch. If a gap does exist, fill with a neoprene gasket or spray urethane foam. The heat shrink must fill the valleys of the outer jacket to prevent water intrusion. If the heat shrink material is unable to conform adequately to the corrugated shape, then the valleys shall be prefilled with mastic. A coupling band shall be installed around the joint to protect the heat shrink sleeve.

Unless the Contractor's personnel are certified in the installation of arctic pipe, the pipe suppliers shall provide pipe personnel to instruct the Contractor in the handling, installation, and testing of their products. The Contractor shall provide for the on-site services of one supplier's representative at the start of

construction. Additional technical representative services, if necessary, will also be at the Contractor's expense.

Random tests of field joints will be made by the Engineer, as necessary, as a quality control measure. The Contractor shall be responsible for removal or repair of unsatisfactory joints.

Add the following Subsection:

603-3.06 CULVERT MARKER POSTS. Culvert marker posts shall be installed on the approach side of storm drain outfalls 30 inches and smaller, field inlets not in paved parking lots, all end sections to cross culverts, or as directed by the Engineer. Forty-two (42) inches of post shall remain above the ground after driving.

603-4.01 METHOD OF MEASUREMENT. Add the following: Culvert marker posts and geotextile fabric will not be measured for payment.

603-5.01 BASIS OF PAYMENT. Add the following: Culvert marker posts and geotextile fabric will not be paid for directly, but will be subsidiary to pipe items. (08/27/03)R42USC

Payment will be made under:

Pay Item	Pay Unit
603(26-) Inch Arctic Corrugated Insulated Steel Pipe	Linear Foot

(05/15/06)R&M