ITEM 680.560400OD - EMERGENCY PRE-EMPTION SYSTEM - DETECTOR CABLE

DESCRIPTION - This work shall consist of furnishing and installing a detector cable for an emergency pre-emption system, in accordance with the plans, specifications, standard sheets, manufacturer’s instructions or directions of the Engineer and/or Owner.

MATERIALS - The specific component used shall be an Opticom Priority Control System - Model No. 138, Detector Cable, manufactured by Global Traffic Technologies (formerly 3M Traffic Control Systems).

CONSTRUCTION DETAILS - The cable shall be installed to form a continuous circuit between the proper equipment terminals.

All terminal connections shall be made with approved solderless lugs of the proper size using a crimping tool that is self-releasing when proper compression has been applied. Only connectors that provide continuity and physical contact around the circumference of the connector and conductor shall be used.

During installation of the cable, the Contractor shall take care not to damage conductors, insulation, or outer covering. The length of cable installed shall not cause excessive stress on the conductors or any part of the cable.

An insert lubricant approved by the Engineer shall be used in placing the cable in conduit. Cable shall be pulled into conduit by hand and the use of winches or other power actuated pulling equipment will not be permitted.

At least 1.0 meter but not more than 1.5 meters of slack shall be left for each cable at each pullbox or junction box. Cable in pullboxes or junction boxes shall not cross over any other cables already in place nor block any conduit. All cable shall be identified as to function in each pullbox, junction box or cabinet by the use of aluminum or brass cable markers. If a wire numbering system is used for identification, the key to the system shall be placed along with the wiring diagram in the controller cabinet.

Splices in the cable shall not be allowed between the equipment terminals. Where cable is installed on span wire, it shall be supported at intervals not greater than 38 centimeters by messenger rings, stainless steel cable straps or other non-corrosive metal lashing approved by the Engineer. Taping and plastic cable ties will not be permitted.

The Contractor shall install the equipment in accordance with Manufacturer’s instructions, plans, standard sheets and in accordance with the special notes provided.

The Contractor shall assist in the performance of all tests, necessary to confirm acceptable operation, in the presence of the Engineer and/or the City of Syracuse Fire Department Representative.

METHOD OF MEASUREMENT - The measurement for payment is the number of meters actually installed in accordance with the contract documents or as directed by the Engineer.
**BASIS OF PAYMENT** - The unit price bid shall include furnishing all labor, materials, tools, equipment, attachments, fittings and safety requirements as determined by U.S. Department of Labor’s Occupational Safety and Health Standards, and incidentals as necessary to complete the work of installing and performing all necessary tests to ensure the desired performance of the device.