ITEM 680.5196--25 - CONCRETE FIBER OPTIC PULL BOX

1. DESCRIPTION:

1.01 Under this item, a concrete fiber optic pull box shall be furnished and installed in accordance with this specification, as shown on the plans, and as directed by the Engineer.

1.02 The fiber optic pull box shall include the following work items:

A. Stakeout
B. Excavation
C. Concrete Pull Box
D. Lid and Frame
E. Backfill Materials and Site Restoration.

2. MATERIALS:

2.01 In addition to the requirements shown on the plans, the pull box, frame and cover shall be in accordance with the minimum requirements specified in Subsection 680-2.20 and .05 of the Standard Specifications.

2.02 The minimum internal dimensions of the pull box shall be as shown in the plans. Pull box dimensions shall permit the installation of the fiber optic cables and splice enclosures without exceeding the minimum bending radius of the fiber optic cable.

2.03 The pull box, frame, and cover shall have sufficient mechanical strength to [redacted]

2.04 The cover of the pull box should have "NYSTA" embossed on it. The contract may require additional embossing on the cover of the pull box as shown on the plans and as directed by the Engineer.

2.05 Pull boxes with removable bases shall be provided at locations shown in the plans where a pull box is to be installed and tied into an existing duct bank. The split pull box shall be installed without cutting or causing damage to the existing duct and its contents.

2.06 [redacted]

2.07 The pull box shall include a grounding rod and fiber optic cable hangers as shown in the plans.

2.08 Pull boxes shall have weep-holes in the bottom to allow water to drain out.

2.09 Shop drawings shall be submitted which detail the pull box, frame, lid and hangers.

3. CONSTRUCTION DETAILS:

3.01 The pull box shall be installed in accordance with the details shown on the plans.

3.02 Subsections 680-3.01, .04, .06, .09, .12, .13 and .14 of the Standard Specifications shall apply to the work of this item.

3.03 The Contractor shall stake-out the pull box locations for approval by the Engineer prior to any prefabrication or related construction. The pull box locations shown on the Contract Plans shall be field checked for any condition that may affect their placement. Where changes are necessary, the exact location shall be approved by the Engineer.

3. CONSTRUCTION DETAILS: (cont'd)

3.04 The pull box lid and [redacted] be cleaned and coated with an anti-seize compound.

3.05 Soil in the vicinity of the pull box shall be vibrated and thoroughly compacted around the entire pull box up to grade.

3.06 The top of the cover shall be set at grade. A concrete lock-in feature shall be provided around the top of the pull box.

3.07 The Contractor shall verify that the interior of the pull box is free of silt or other contaminants. Cleaning of pull boxes, and any necessary resetting shall be done prior to the installation of innerduct and other conduits.

3.08 Any holes for conduit and cable entry shall be carefully drilled or punched into the side of the pull box. After insertion of conduits or cables, holes shall be tightly and thoroughly sealed with grout to the satisfaction of the Engineer. A copper clad ground rod, ground wire and fittings shall be installed as shown on the Plans, Standard Sheets, or as directed by the Engineer. The ground system shall be electrically connected to the trace wire.

4. METHOD OF MEASUREMENT:

4.01 The item will be measured for payment as the number of each unit furnished and installed in accordance with the Contract Documents or as directed by the Engineer.

5. BASIS OF PAYMENT:

5.01 The unit price bid for the concrete fiber optic pull box shall include the cost of furnishing all equipment, materials, incidentals, labor, tools and documentation required to complete the work. All concrete, frames, covers, reinforcing steel, crushed stone or gravel, extensions, saw cutting, excavation, backfill and restoration of adjacent surfaces shall be included in the cost of this item.