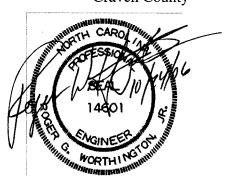
Project: B-2532 Craven County

# PROJECT SPECIAL PROVISIONS UTILITY CONSTRUCTION FOR SEWER AND WATER LINE ATTACHMENT



#### 1. SCOPE OF WORK

Furnish and install a 4-inch PVC sewer line and 1 ½-inch PVC water line from Station 32+21.74 (tying into the Bascule Control House plumbing) to five (5) feet beyond the structure approach slab (-L- Station 36+12.08).

#### 2. MATERIALS

### Concrete Inserts

Use iron or steel concrete inserts rated for a minimum working load tension capacity of 2500 lbs. for 4-inch sewer line and 1130 lbs. for 1 ½-inch water line and shall be hot dip galvanized with threads to match the galvanized threaded rods. The inserts shall be secured to the deck forms to avoid movement while concrete is being poured.

# Hardware

Bolts, nuts, and washers shall be high strength and galvanized in accordance with Article 1072-7 of the Standard Specifications.

#### Hanger Rods

The ¾-inch and ½-inch hanger rods shall be of the galvanized type, threaded on both ends or threaded continuously and conforming to ASTM A36 or A575. The hanger rods shall be of a proper length so as to place the lines at the vertical location shown on the plans.

#### Pipe Hangers

The pipe hangers shall be a clevis type pipe hanger capable of supporting the PVC pipes and accepting the hanger rod. The entire hanger assembly is to be galvanized in accordance with Section 1076 of the Standard Specifications.

#### 4-inch PVC Sewer Pipe

The PVC sewer pipe and fittings shall be new pipe conforming to ASTM D 3034, SDR 35.

# 1 ½-inch PVC Water Pipe

The PVC water pipe shall be new pipe conforming to ASTM D 2241.

Project: B-2532 Craven County

#### Clean-Out Access Hole

Use a cast iron box with either a bronze or cast iron bolt down lid sized to surround the sewer clean-out without contact. The lids shall be load rated for 300 pounds per square foot and are only allowed within the sidewalk.

## Hole Seal

Seals shall be modular mechanical types consisting of interlocking synthetic or rubber links shaped to continuously fill the annular space between the hole and carrier pipe. Links shall be loosely assembled with bolts to form a continuous rubber belt around the pipe with a pressure plate under each bolt head and nut.

# 3. CONSTRUCTION REQUIREMENTS

Concrete inserts shall be installed in strict compliance with the recommendations specified by the manufacturer.

Install seals to fill the annular space between the carrier pipe and the holes in the end bents. Recess the seal a minimum of 2 inches from the fill face of the end walls. After the seal assembly is positioned in the hole, tighten the bolts to expand the rubber sealing elements and provide a watertight seal between the hole and the carrier pipe.

After the seal has been placed in the hole, the remaining space shall be filled with a mastic or plastic caulking compound that conforms to the existing concrete and finished smooth with the face of the end wall.

### Pressure Test, Leakage Test and Sterilization

The pressure test, leakage test and sterilization of the water line shall be performed as provided for in the Standard Specifications. This testing shall be performed on the entire waterline (the bridge attachment and the underground installation).

The leakage test for the gravity sewer shall be performed as follows. The lower end of the line shall be plugged at the tie in to existing facilities. Water will be introduced at the highest clean-out until it reaches the top of the clean-out. After a period of two hours it will be checked for a drop in elevation, thereby indicating leakage. There must be no leakage in order to pass inspection.

#### 4. MEASUREMENT AND PAYMENT

The sanitary sewer attachment and the water line attachment will be measured and paid for as a lump sum bid price.

Payment will be made under:

4" Sewer Line Bridge Attachment ...... Lump Sum
1-1/2" Water Line Bridge Attachment ..... Lump Sum

County: Craven Project: B-2532

# PROJECT SPECIAL PROVISIONS Utility

# **UTILITIES BY OTHERS:**

#### General:

The following utility companies have facilities that will be in conflict with the construction of this project.

- A) City of New Bern
- B) Sprint-Telephone

The conflicting facilities of these concerns will be adjusted prior to the date of availability, unless otherwise noted and are therefore listed in these special provisions for the benefit of the Contractor. All utility work listed herein will be done by the utility owner. All utilities are shown on the plans from the best available information.

The Contractor's attention is directed to Article 105.8 of the Standard Specifications.

Utilities Requiring Adjustment:

# A) City of New Bern

City will require 60 days to install a new transformer at the location shown on the plans at proper stage of construction.

- 1) See Utilities by Others Plans.
- B) Sprint

Will no longer be attached to the new bridge and will relocate outside of the limit of the project.

# C) City of New Bern

Electrical equipment approximately 35' right of -L- at Sta. 36+25.

The City of New Bern will relocate the electrical equipment Right of Sta. 36+25 by April 1, 2007