

PROJECT SPECIAL PROVISIONS
Utility Construction



I. GENERAL CONSTRUCTION REQUIREMENTS:

Specifications:

The proposed utility construction shall meet the applicable requirements of the NC Department of Transportation's "Standard Specifications for Roads and Structures" dated July 2006, and the following provisions.

The existing utilities belong to the City of Concord. The Contractor shall provide access for the owner's representatives to all phases of construction. Notify the owner two weeks before commencement of any work and one week before service interruption.

No direct payment will be made for utility construction work required by the preceding provisions, which are general requirements applying to utility construction, and all of the requirements stated will be considered incidental work, paid for at the contract unit prices of the various utility items included in the contract.

1. STEEL PILE PIERS:

Steel pile piers shall be furnished and installed as shown on the plan, as described in the provisions herein, and in the contract and/or as directed by the Engineer.

Pier locations as shown on the plan shall be considered a guide only, with the final determination made at the time of construction by the Engineer. Pier spacing center to center will be as shown on the plan; but all pier locations may be adjusted by the Engineer due to field conditions.

Piers will be placed parallel to the flow of the creek unless otherwise directed by the Engineer.

1. The work covered by this section consists of furnishing and driving piles, as indicated on the plan, the standard details, and as approved by the Engineer, in conformity with the specifications and to the bearing and penetration required.
 - a. Installation: General - The W 8x36 pilings shall be driven to obtain an allowable bearing capacity of 3 tons based on the Standard Specifications.
 - b. Piles Lengths: Full length piles shall be used where practicable and not more than 2 pieces (1 splice) of steel pile will be permitted in making up one full length pile unless approved by the Engineer. Splices, where necessary and approved by the Engineer, shall be made as to maintain the true alignment and position of the pile sections. Both pieces of a spliced pile shall be the same shape (W 8x36).

Splices should develop not less than 100 percent of the bending strength of the pile and not less than 100 percent of the axial load strength of the pile. All welded splices will be of butt weld type with back-up plates welded to the flanges and web of the steel piles. All welding of structural steel in the shop or in the field shall meet the requirements of the AWS and be done by qualified welders. Certification of welders and welds will be required by the Engineer in accordance with the AWS Code.

- c. Galvanized Steel Piers: Unless otherwise directed, all steel in the piers shall be galvanized as per NCDOT Standard Specifications, Section 1076.
- d. Testing and Inspection: The Engineer will provide inspection and will determine bearing capacity of the driven piles. The Contractor shall submit the required hammer information as specified in the Standard Specifications to the Engineer.
- e. Test piles which are not to be incorporated in the completed structure shall be removed to at least 2 feet below the surface of the ground or the stream bed, and the remaining hole backfilled with earth or other suitable material.

Pipe cradle shall be fabricated as indicated on the plan. All welds shall be in conformance with the applicable AWS Bridge Welding Code.

All steel components and hardware shall be galvanized as per NCDOT Standard Specifications, Section 1076. Straps shall be a 3" wide and ½" thick. Radius shall be ½ outside diameter of pipe, plus ½ inch.

The proposed 8" sewer pipe to be strapped as shown on general notes on sheet UC-6.

Holes shall be drilled in strap, and shall be 1/8" larger than bolt diameter. Bolts shall be sized as indicated on the plan, with adequate length to fully engage the nut, and with flat washers top and bottom. All steel shall be ASTM A36 steel.

Removal of existing piers for existing sewer mains shall be done in accordance with Section 402 of Standard Specifications for Roads and Structures and shall be incidental to the construction of the proposed sewer line. The existing piers for sewer pipe shall not be removed until the proposed sewer pipe is in service, as directed by the utility construction plans and the engineer.

Pipe cradles, straps, bolts, nuts and washers shall be considered incidental to W 8x36 steel pile piers.

Steel pile piers furnished and installed as required and accepted will be measured and paid for at the contract unit price per each for "Steel Pile Piers" Such price and payments will be compensation in full for all materials, labor, equipment and incidentals necessary to complete the work.

07/30/2008

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) DUKE ENERGY - POWER
- B) WINDSTREAM COMMUNICATION- TELEPHONE
- C) TIME WARNER CABLE – TV CABLE
- D) CITY OF CONCORD - POWER

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) DUKE ENERGY
They will relocate the poles and reconnect the aerial power line by 11/15/2008.
See Utilities By others plans for details.
- B) WINDSTREAM COMMUNICATION
They will complete relocation of aerial telephone line using Duke utility poles (distribution) by 12/20/2008.
See Utilities by others plans for details.
- C) TIME WARNER CABLE
They will complete relocation of aerial TV cable line using Duke utility poles (distribution) by 11/30/2008.
See Utilities By others plans for details.
- D) CITY OF CONCORD
They will complete the reconnect the aerial lines by 12/20/2008.