



PROJECT SPECIAL PROVISIONS
Utility Construction

All proposed utility construction shall meet the applicable requirements of the NC Department of Transportation's "Standard Specifications for Roads and Structures" dated January 2012.

Provide access for Department personnel and the owner's representatives to all phases of construction. Notify Department personnel and the utility owner two weeks prior to commencement of any work and one week prior to service interruption. Keep utility owner's representatives informed of work progress and provide opportunity for inspection of construction and testing. *The water and sewer lines on this project belong to Fayetteville PWC. The contact person for Fayetteville PWC is Mr. Joe Glass, PE and he can be reached by phone at (910) 223-4740. Any work on these lines must be coordinated through the Engineer and the utility owner before beginning.*

Water pipe shall be ductile iron, PC 350 and shall meet the requirements of ANSI A21.51/AWWA C151. Pipe shall be either mechanical joint or push-on-joint and installed with rubber gaskets in accordance with ANSI A21.11 (AWWA C111). All water pipe shall be provided and installed in accordance with Articles 1036 and 1510 of the Standard Specifications. All water pipe on this project shall be ductile iron unless otherwise specified on the utility construction plans.

Ductile iron sewer pipe shall meet the requirements of ANSI A21.51/AWWA C151. Joints shall be mechanical joint or rubber ring gasket slip joint, each conforming to ANSI A21.11/AWWA C-111. The pipe and fittings shall have an asphaltic exterior coating as specified in AWWA C151. Interior of the pipe joints shall be coated with ceramic epoxy to produce a minimum dry film thickness of 40 mils. Calcium aluminate mortar lining of the ductile iron pipe shall also be acceptable.

The Contractor's attention is directed to traffic control plan sheets TMP-27 and TMP-28 which depict the proposed sewer line installation between Station 230+00 -L- and Station 253+20 -L-. Installation of the sewer line and sewer laterals to the left will be accomplished while traffic is active on -L- right per the traffic control plan. Sewer laterals on the right can only be installed after the traffic pattern is switched to -L- left. Sewer laterals cannot be completely installed on both sides of -L- while traffic is in the temporary pattern shown on the above referenced sheets of the traffic control plan.

THRUST RESTRAINT:

DI restrained joint pipe shall be installed in accordance as shown on the utility plans and/or as directed by the Engineer. Concrete thrust blocking will not be allowed and the pipe shall be restrained joint pipe (12" diameter or larger) or installed with retainer glands.

Ductile Iron Restrained Joint Water Pipe shall be of the thickness class or pressure rating shown on the utility plans and shall conform to ANSI A21.51 (AWWA C151). All joints for such pipe shall be in accordance with ANSI A21.11 (AWWA C111). Pipe thickness shall be in accordance with ANSI A21.50 (AWWA C150) and based on laying conditions and internal pressures stated on the plans.

Design and construction of the restrained section of the pressurized line shall be the Contractor's responsibility in accordance with Section 1505-3(E) of the Standard Specifications and conform to the requirements shown in the following table:

Minimum length of restraint in each direction of thrust in linear feet

Size of Pipe (Inches)	Valves, Tees & Dead Ends	45° Bends	22½° Bends
8	80 Feet	20 Feet	20 Feet
12	120 Feet	40 Feet	20 Feet
24	220 Feet	60 Feet	80 Feet

COMPENSATION:

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.

RELOCATE WATER METER AND VAULT:

Existing 4" water meters that are to be permanently relocated shall be relocated as shown on the utility construction plans or as directed by the Engineer.

Relocation of existing 4" water meter shall consist of removing the existing water meter and associated piping, to include the existing vault or meter box/vault, and reinstalling the water meter at the new location shown on the Utility Construction Plans. The

relocated 4" water meter shall be installed in a new precast concrete box/vault, and connected to new piping from the water main. The new piping shall include necessary fittings, corporation stop/valve (if required), and associated service piping, all of which will be paid for elsewhere in the contract. The new box/vault shall be rated for HS-20 loading and shall be approved by the Engineer.

The quantity of 4" water meters relocated and accepted will be measured and paid for at the contract unit price each for "Relocate 4" Water Meter and Vault". Such price and payment will be full compensation for all labor and materials, new box/vault, excavation, removal and relocation of the assembly, removal and disposal of the existing box/vault, backfilling, and incidentals necessary to complete the work as required.

DUCTILE IRON RESTRAINED JOINT WATER PIPE

Ductile Iron Restrained Joint Water Pipe shall be installed in accordance with the applicable utility provisions herein, as shown on the utility plans and/or as directed by the Engineer.

Ductile Iron Restrained Joint Water Pipe shall be PC 350 shown on the utility plans and shall conform to ANSI A21.51 (AWWA C151). All joints for such pipe shall be in accordance with ANSI A21.11 (AWWA C111). Pipe thickness shall be in accordance with ANSI A21.50 (AWWA C150) and based on laying conditions and internal pressures stated on the plans.

Cement mortar lining and seal coating for pipe shall be in accordance with ANSI A21.4 (AWWA C104). Bituminous outside coating shall be in accordance with ANSI A21.51 (AWWA C151).

Ductile Iron Restrained Joint Water Pipe, installed in accordance with the plans and provisions herein and accepted, will be measured along the pipe from end to end, with no deductions for fittings and valves, and paid for at the contract unit price per linear foot for, "___" DI Restrained Joint Water Line". Such prices and payments will be full compensation for all materials, including pipe accessories, excavation, labor, pressure testing, sterilization, backfilling, and incidentals necessary to complete the work as required.

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) Fayetteville PWC – Power (Distribution)
- B) Progress Energy Carolinas – Power (Distribution)
- C) CenturyLink – Telephone
- D) AT&T – Telephone (FO)
- E) Time Warner Cable - CATV
- F) Piedmont Natural Gas

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) Fayetteville PWC - Power (Distribution)
Contact Information: Mr. David Willis (910) 223-4518
 - 1) See Utilities by Others Plans.
 - 2) Fayetteville PWC will be completed with the relocations of their power distribution facilities by December 31, 2012.

- B) Progress Energy Carolinas - Power (Distribution)
Contact Information: Mr. J.B. Jones (910) 206-1966
 - 1) See Utilities by Others Plans.
 - 2) Progress Energy Carolinas will be completed with the relocations of their power distribution facilities by December 31, 2012.

C) CenturyLink – Telephone

Contact Information: Mr. Kevin Godwin (910) 366-2142

- 1) See Utilities by Others Plans.
- 2) CenturyLink will be completed with the relocation of their buried telephone facilities by December 31, 2012.

D) AT&T – Telephone (FO)

Contact Information: Mr. Wayne Carter (843) 365-1529

- 1) See Utilities by Others Plans.
- 2) AT&T will be completed with the relocation of their buried Fiber Optic telephone facilities by December 31, 2012.

E) Time Warner Cable – CATV

Contact Information: Mr. Jack Crabb (910) 401-5034

- 1) See Utilities by Others Plans.
- 2) All aerial CATV lines will be in joint use with Fayetteville PWC and Progress Energy Carolinas. The contractor shall allow Time Warner two months after Fayetteville PWC and Progress Energy Carolinas has completed their power line relocations to install their proposed aerial CATV lines.

F) Piedmont Natural Gas

Contact Information: Mr. Paul Johnson (910) 483-1501 (ext. 2914)

- 1) See Utilities by Others Plans.
- 2) All of Piedmont's gas lines throughout project will remain in place to be adjusted as necessary. The contractor shall give Piedmont Natural Gas two weeks notice and allow them two weeks to make the necessary adjustments at each conflict location.

NOTE: All other utilities will remain in place and will be adjusted as necessary.