



2012-07-02

PROJECT SPECIAL PROVISIONS
Utility Construction

All proposed utility construction shall meet the applicable requirements (including, but not limited to: Division 15; Section 1034; and Section 1036) of the NC Department of Transportation's "Standard Specifications for Roads and Structures" dated January 2012.

Division 15 of the Standard Specifications is revised as follows:

Page 15-1, Paragraph 2 of Section 1500-2

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. *There are multiple water and sewer lines on this project that belong to multiple utility owners. There is an 18-inch water line within the limits of this project that belongs to the Town of Southern Pines, but no work is proposed on it. The contact person for the Town of Southern Pines is Mr. Larry Bridges, and he can be reached by phone at 910-692-1983 when any proposed work is to be conducted around said water line. The contact person for the Town of Aberdeen is Mr. Rickie Monroe, and he can be reached by phone at 910-944-4525. The contact person for Moore County Public Works is Mr. Lex Kelly, PE, and he can be reached by phone at 910-947-6315. Any work on these utility lines, especially operation of water valves, must be coordinated through the Engineer and the Utility Owner before beginning.*

Page 15-2, Paragraph 3 of Section 1500-7

Provide As-Built plans of the installed utility. The plans shall include notations of the size and type of material installed, coordinates of utility controls, and horizontal and vertical locations of the piping. Provide 2 copies to the Utility Owner and 2 copies to the Engineer. *Provide each Utility Owner with 2 copies of surveyed As-Builts of their water and/or sewer systems constructed.*

Page 15-2, Insert New Paragraph After Paragraph 1 of Section 1500-9

Contractor shall notify the Utility Owner 7 business days in advance of performing any tie-in work. Contractor shall notify all affected customers 24 hours in advance of service interruptions. Contractor shall notify all affected critical facilities (i.e. hospital, schools, medical facilities, etc.) 72 hours or more in advance of service interruption.

Page 15-13, Paragraph 1 of Section 1525-2

Use precast manholes with monolithic bottoms which conform to ASTM C478, AASHTO M199, and are as shown on the plans or in Roadway Standard *Drawing 840.52*. Use

ASTM C-443 gaskets or AASHTO M198 flexible sealants for joints between precast manhole sections. Use resilient connectors for piping conforming to ASTM C923. Use ASTM A48 Class 35 cast iron or Grade 60 steel reinforcement steps with polypropylene plastic coating as per Roadway Standard Drawing 840.66. Moore County Public Works manholes shall be constructed WITHOUT steps.

Manholes receiving a force main discharge shall be coated at a thickness of 40 - 60 mils with a hydrogen sulfide resistant material. Manholes downstream of the receiving manhole (for a distance of not less than 1,000 linear feet) must also receive an interior coating of the hydrogen sulfide resistant material.

Exposed manholes in non-paved areas shall receive an exterior coating of a gray cementitious coating or epoxy paint on all exposed concrete surfaces.

Where a series of watertight manhole covers are used on a main line sewer for a distance of 1,000 feet or more, vent pipes are required.

Sewer Diversion Box:

The Contractor shall provide the engineering design and fabrication for each structure as depicted on the plans. The structure shall be engineered to counteract any buoyancy conditions present in the soil. The structure shall be of concrete construction utilizing either cast in place or pre-cast concrete units meeting the materials requirements of Division 10. The structure shall consist of a concrete bottom slab, concrete walls, concrete top slab with access opening, precast concrete riser section(s), and manhole frame and cover.

Installation of these structures is recommended to be done at a low flow state in the gravity sewer line and the timing of the operations shall be coordinated with Moore County Public Works. It is recommended that the downstream Sewer Diversion Box and proposed gravity sewer pipe be installed prior to commencing the construction of the upstream Sewer Diversion Box. This will facilitate the manner in which the low sewer flow can be diverted into the new gravity sewer pipe while the existing pipe is removed and the invert coving inside the box is grouted in place.

The quantity of Sewer Diversion Boxes to be constructed will be measured and paid for at the contract unit price each for "Sewer Diversion Box". No additional payment will be made for adjusting risers to finished grade. Such price and payments will be full compensation for all engineering design, fabrication, installation, sewer flow diversion, labor, equipment, excavation, dewatering, foundation conditioning, backfill, structure coatings, seals, and incidentals necessary to complete the work as required.

Pay Item
Sewer Diversion Box

Pay Unit
Each

Division 10 of the Standard Specifications is revised as follows:

Page 10-57, Paragraph 1 of Subsection A of Section 1034-2

Use 48-inch PVC pipe that conforms to the requirements of AWWA C905 with a DR of 32.5 or a DR of 25. Use pipe with push-on type joints having bells made as an integral part of the pipe conforming to ASTM D-3139 *with a rubber gasket conforming to ASTM F-477. The pipe shall be furnished in standard laying lengths of 20 feet. Pipe shall be of PVC material having a cell classification of 12454, as defined in ASTM D-1784.*

Page 10-58, Article 1036-3-A-2 under Pressure Class Pipe

For trenchless installations, use fusible PVC pipe that is extruded with plain ends conforming to cell classification 12454 per ASTM D 1784 with a minimum DR of 18 and a minimum pressure rating of 235 psi. Fusible PVC pipe lengths shall be assembled in the field with butt-fused joints. The ends of the fusible PVC pipe shall be square to the pipe and free of any bevel or chamfer. There shall be no bell or gasket of any kind incorporated into the fusible PVC pipe.

Page 10-58, Paragraph 1 of Subsection B of Section 1036-4

Use steel pipe meeting *ASTM A252-98 consisting of grade "B" steel* with the minimum yield strength of 35,000 psi. Use pipe that is circular in shape and straight in length. *The pipe shall be welded or seamless and the ends shall be beveled and prepared for field welding of circumferential joints. The pipe shall be furnished with a bituminous coating on the outside.*

Page 10-59, Add the following sentence to the end of Subsection A of Section 1036-7

Extension stems shall be furnished when the depth of bury places the operating nut in excess of four (4) feet below finished grade.

MOORE COUNTY PUBLIC WORKS PREFERRED PRODUCT LIST

MISCELLANEOUS STRUCTURES

1. Manhole Frame and Cover (Standard): VULCAN, Model V-1384; US FOUNDRY, Model 669-KL; or SOUTHERN FOUNDRY, Model SF-101
2. Manhole Frame and Cover (Watertight): VULCAN, Model V-2384; US FOUNDRY, Model 361-CJ-BWT; or SOUTHERN FOUNDRY, Model SF-138
3. Flexible Sealing System for Joining Pipes to Pre-Cast Manholes:
Sleeve: INTERPACE CORPORATION, Model - Flexible Manhole Sleeve
Gasket: PRESS SEAL GASKET CORPORATION, Model - PSX System
4. Manhole Butyl Resin Joint Sealant: CONSEAL or RAMNECK
5. Interior Manhole Coating: DEGUSSA, Model - Sewer Guard HBS 100; SHERMAN WILLIAMS, Model - Seal Coat 66; or SIKA, Model Sikagard 62
6. Exterior Manhole Coating: THOROSEAL
7. Flexible Casing Seal: T.D. WILLIAMSON

PROJECT SPECIAL PROVISIONS
UtilityUTILITIES BY OTHERS

General:

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

- A) Progress Energy – Power (Distribution)
- B) Windstream – Telephone
- C) Time Warner Cable – Cable TV
- D) Piedmont Natural Gas – 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) Progress Energy - Power (Distribution)
 - 1) See Utilities by Others Plans.
 - 2) Contact person is Mr. Alan Dasen (910-690-3170).
- B) Windstream – Telephone
 - 1) See Utilities by Others Plans.
 - 2) Contact person is Mr. James Soles (910-944-7344)
- C) Time Warner Cable – Cable TV
 - 1) See Utilities by Others Plans.
 - 2) Contact person is Mr. Jack Crab (910-410-5034)
- D) Piedmont Natural Gas – Gas
 - 1) See Utilities by Others Plans.
 - 2) Contact person is Mr. Chad Clark (910-419-7206).

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