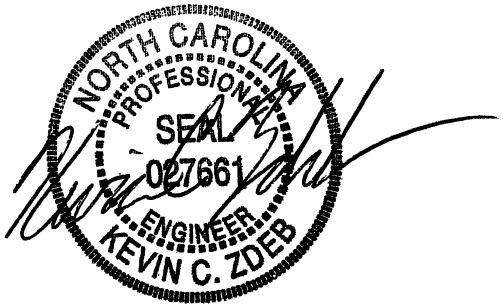

2011-07-13

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 July 2006.

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 is one sewer force main on this project that belongs to Moore County Schools. The contact person for Moore County Schools Maintenance is Mr. Phillip Boles, and he can be reached by phone at 910-947-2258. The rest of the water and sewer lines on this project belong to Moore County Public Works. 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 lines, especially operation of water valves, must be coordinated through the Engineer and the Utility Owner before beginning.*

Page 15-3, Paragraph 3 of Section 1500-7
Provide As-Built plans of the installed utility. The plans shall include notations of the size and type 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 15-3, 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 15-7, Paragraph 3 of Section 1510-2
Use *#14* AWG solid-copper wire with blue insulation for the utility locator wires.

Page 15-10, Insert New Paragraph After Paragraph 1 of Subsection A of Section 1515-4

Gate valves of the resilient wedge type shall be installed on water lines 12-inches and smaller. Butterfly valves shall be installed on water lines 16-inches and larger.

Page 15-11, Paragraph 1 of Subsection F of Section 1515-4

Install air release valves at the high point of pressurized pipelines. *Combination air valves shall be provided at high points on all 12-inch and larger water lines where the change in vertical grade from crest to sag is 15 feet or greater.* Place a precast manhole around air release valves.

Page 15-13, Paragraph 4 of Section 1520-2

Use *#14* AWG solid-copper wire with green insulation for the utility locator wires.

Page 15-17, 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.*

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 cementious 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.

Division 10 of the Standard Specifications is revised as follows:

Page 10-78, Paragraph 1 of Subsection A of Section 1034-2

Use PVC plastic pipe that conforms to the requirements of ASTM D3034 with a minimum SDR of 35. Use pipe with push-on type joints having bells made as an integral part of the pipe conforming to ASTM D3212 *with a rubber gasket conforming to ASTM F-477. The pipe shall be furnished in standard laying lengths of 13 feet and 20 feet. Pipe and fittings shall be of PVC material having a cell classification of 12454-B, as defined in ASTM D-1784.*

Page 10-78, Paragraph 1 of Subsection A of Section 1034-4
Use ductile iron pipe that conforms to ANSI/AWWA C151/A21.51. *Manufacture ductile iron pipe with a cement mortar lining and a seal coat in accordance with ANSI/AWWA C104/A21.4. Pipe 12-inches and smaller shall be Pressure Class 350. Pipe larger than 12-inches shall be Pressure Class 250.*

Page 10-78, Paragraph 1 of Subsection B of Section 1034-4
Use ductile iron pipe that conforms to ANSI/AWWA C151/A21.51. *Manufacture ductile iron pipe with a cement mortar lining and a seal coat in accordance with ANSI/AWWA C104/A21.4. Pipe 12-inches and smaller shall be Pressure Class 350. Pipe larger than 12-inches shall be Pressure Class 250.*

Page 10-80, 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 10-80, Paragraph 1 of Section 1036-5
Use ductile iron pipe that conforms to ANSI/AWWA C151/A21.51. *Pipe 12-inches and smaller shall be Pressure Class 350. Pipe larger than 12-inches shall be Pressure Class 250.*

Page 10-80, First sentence of Subsection A of Section 1036-7
Use iron body gate valves which conform to ANSI/AWWA *C509-1* for resilient seat type valves.
Add the following sentence to end of the paragraph:
Extension stems shall be furnished when the depth of bury places the operating nut in excess of four (4) feet below finished grade.

Page 10-81, Add Subsection D to Section 1036-7
(D) Butterfly Valves
Use butterfly valves which conform to ANSI/AWWA C504 Class 150-B for disc seat type valves. Iron valve bodies shall conform to ASTM A-126. Valve disc shall be cast bronze or cast iron with bronze or stainless steel seating surfaces. The disc shall have adjustable stops preset by the factory and the seals shall be natural rubber. Butterfly valves shall be furnished with buried service actuators with 2" square operating nuts and open by turning counter clockwise. Extension stems shall be furnished when the depth of bury places the operating nut in excess of four (4) feet below finished grade. Butterfly valves shall have mechanical joint ends conforming to ANSI/AWWA C111/A21.11. Butterfly valves shall have a design working water pressure of 150 psi and be hydrostatically tested to 300 psi.

Moore County Public Works Department will provide new fire hydrants as replacements for "Relocated Fire Hydrant(s)" shown on the Utility Construction plans. The Contractor shall notify the owner when new fire hydrants are require and where they are to be delivered. Once the existing fire hydrant has been removed the Contractor shall make arrangements with the owner to take possession of the old fire hydrant. No additional compensation shall be made for this work except as required as "Relocate Fire Hydrant."

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.

MOORE COUNTY PUBLIC WORKS PREFERRED PRODUCT LIST

WATER

1. Ductile Iron Pipe: GRIFFIN; U.S. PIPE; AMERICAN; or CLOW
2. 2-inch Air Release Valve: APCO, Model 200; CRISPIN; or VAL-MATIC
3. 2-inch Corporation Stop: MUELLER, Model H-9968; FORD, Model F400 or F500
4. 2-inch Gate Valve: MUELLER, Model Oriseal II
5. 4 to 12-inch Gate Valve: American, Kennedy, or Mueller
6. Restrained Retainer Gland: MEGA-LUG
7. Hydrant: CLOW - Medallion; MUELLER - Super Centurion; KENNEDY - K-810
8. Tapping Saddle (2-inches & smaller): FORD Model S-90; MUELLER, Model BR2B
9. Tapping Sleeve (larger than 2-inches): FORD Model S-70; MUELLER, Model H-134; JCM, Model 403
10. Meter Box with Lid: CENTURY, Model 1015; NDS, Model D1200
11. Meter Yoke: MUELLER, Model H-1404-2; FORD, Model VH-72-7W
12. Meter Check Valve: FORD - 3/4-inch Model HHS 31-323; 1-inch Model HHS 31-344
13. Water Meter: BADGER - 3/4-inch Model M-35 or 1-inch Model M-70
14. 1-inch Ball Valve by 3/4-inch Meter Nut: FORD, Model B63-342
15. 1-inch Ball Valve by 1-inch Meter Nut: FORD, Model B63-344
16. 1-inch Corporation Stop: FORD, Model 1001-4

SEWER

1. 2-inch Air Vacuum / Pressure Release Valve: CRISPIN

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. Clean-Out Cover for Outside Drop Manholes: VULCAN, Model V-8515; US FOUNDRY, Model 7610
4. 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
5. Manhole Butyl Resin Joint Sealant: CONSEAL or RAMNECK
6. Interior Manhole Coating: DEGUSSA, Model - Sewer Guard HBS 100; SHERMAN WILLIAMS, Model - Seal Coat 66; or SIKA, Model Sikagard 62
7. Exterior Manhole Coating: THOROSEAL
8. Flexible Casing Seal: T.D. WILLIAMSON

County: Moore
Project: R-2812
Date: 5/20/2011

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) Progress Energy – Power (Distribution)
B) Centurylink – Telephone
C) AT&T - Telephone
D) Time Warner – CATV
E) 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)
Contact Info: Mr. Alan Dasen, (910) 944-5274

1) See Utilities by Others Plans.
2) Progress Energy will be complete with all relocations of their power distribution facilities by date of availability.

B) Centurylink – Telephone
Contact Info: Mr. Kevin Godwin, (910) 366-2142
Mr. Gary Norrod, (919) 799-1680

1) See Utilities by Others Plans.
2) Centurylink will be complete with all relocations of their telephone facilities by date of availability.

C) AT&T – Telephone
Contact Info: Mr. Lance Laliberte, (910) 620-3901

1) See Utilities by Others Plans.
2) AT&T will be complete with all relocations of their telephone facilities by date of availability.

D) Time Warner – CATV
Contact Info: Mr. Tony Mlynski, (910) 303-2266

1) See Utilities by Others Plans.
2) All aerial CATV lines will be in joint use with Progress Energy. All relocations of their CATV lines will be completed by date of availability.

E) Piedmont Natural Gas – Gas
Contact Info: Mr. Randy Webb, (910) 419-7215

1) See Utilities by Others Plans.
2) Piedmont Natural Gas will be complete with all relocations of their gas facilities by date of availability.

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