



PROJECT SPECIAL PROVISIONS
Utility Construction

All proposed utility construction shall meet the applicable requirements (i.e. material specifications, standard details, testing, policies, etc.) of the NCDOT's "Standard Specifications for Roads and Structures", dated January 2012.

Measurement and payment for the work shall be in accordance with NCDOT's "Standard Specifications for Roads and Structures", dated January, 2012.

Revise the 2012 Standard Specifications as follows:

Utility Owners' Contact Information:

Onslow Water and Sewer Authority (ONWASA)
Matthew Hypes, P.E., Interim Engineering Director
228 Georgetown Road
P.O. Box 1415
Jacksonville, NC 28540
(910) 937-7525 (Phone)
(910) 455-5607 (Fax)

City of Jacksonville
Michael Moore Construction Specialist
804 New Bridge St.
Jacksonville NC 28540
(910) 938-5332

Onslow County Schools
Steve Myers
200 Broadhurst Road
Jacksonville NC 28540
(910) 455-2211 ext 20501

Utilities Inc.
Eddie Baldwin
(910) 376-4175

Page 15-1, General Utility Requirements Subarticle 1500-1 Description, add the following paragraph to the end of the section:

Pre-Construction Video-Inspection

Contractor shall video-inspect the entire utility construction corridor prior to construction. Particular care shall be taken to document the condition of existing pavement, culverts, headwalls, etc. A copy of the pre-construction video-inspection shall be provided to ONWASA prior to commencing Work. Payment for any Work

associated with the sewer system installation shall be withheld pending delivery of a copy of the video-inspection to the ONWASA. The cost of the required video-inspection shall be considered incidental to the Contract.

Page 15-1, General Utility Requirements Subarticle 1500-2 Cooperation with the Utility Owner, paragraph 2, add the following sentences:

Ownership and Access

All proposed sewer lines in the utility construction plans will belong to ONWASA upon completion. After completion, utilities north of Station 134+50 (as shown on utility plans) will belong to the City of Jacksonville, and all utilities south of Station 134+50 will belong to ONWASA.

The Contractor shall provide access for the utility owner's representatives to all phases of construction and keep all valves and meters accessible during construction. A preconstruction meeting shall be held with the City of Jacksonville, ONWASA, Onslow County Schools, Utilities Inc., the Utility Contractor, and D.O.T. prior to any work beginning. The Contractor shall notify the utility owners two weeks before commencement of any work.

Measurement and payment for the work shall be in accordance with NCDOT's "Standard Specifications for Roads and Structures"

Twelve Month Guarantee

See Twelve Month Guarantee – Project Special Provisions – (General).

Page 15-1, General Utility Requirements Subarticle 1500-4 Weekend, Night and Holiday Work, add the following paragraph to the end of the section:

After Hours Work – Sanitary Sewer

The Contractor shall be responsible for coordinating with business owners along the Project corridor to ensure that all Work associated with the sewer system installation does not interfere with safe access and egress to and from businesses within the Project corridor during their hours of operation. Compliance with this requirement will necessitate night-time or weekend work in some cases. The cost of coordinating the work shall be considered incidental to the Contract.

Below are known locations where the need for coordination is known along with the type of coordination that is needed. The list is provided only as a convenience to the Contractor. The contractor shall be responsible for determining and coordinating with those businesses and residents who will and could be affected by the work.

| <i>Street Address</i> | <i>Utility Plan Station No.</i> | <i>Coordination Need</i> |
|---|---------------------------------|--|
| 1505 Piney Green Road (Property #113) | 181+00± | Convenience Store – Maintain at least one means of ingress/egress at all times. |
| 301 Yaupon Drive (Corner of Yaupon Drive & Piney Green Road <SR 1406>) (Property #112) | 183+00± | Children’s Daycare - Conduct work weeknights between hours of 6:30 pm and 5:00 am and or weekends from 6:30 pm Friday to 5:00 am Monday. |
| Yaupon Drive | 184+75± | Street is only means of access for multiple businesses and residences – Maintain 2-way access at all times. |
| Piney Green Road (Property #231) | 38+00 to 42+00 | Jones-Onslow EMC stipulates that access to be available at all times. |
| 1906/1920 Piney Green Road (Property #212) | 60+00 to 64+00 | Webb Apartments – maintain at least one means of ingress/egress at all times. |
| All Commercial tracts Charles Road to Poplar Branch | 115+00 to 134+50 | Maintain at least one means of ingress/egress at all times |

Page 15-1, General Utility Requirements Subarticle 1500-7, Submittals and Records.
Add the following paragraphs at to the end of the section:

Material Specifications

Materials supplied on the project that are not specifically identified on the drawings shall meet the standard specifications of the utility owners.

Request for Information (RFI) Procedures – Sanitary Sewer Construction

The Engineer may at his discretion consult with Onslow Water and Sewer Authority (ONWASA) when formulating responses to RFIs pertaining to sanitary sewer construction. Depending upon informational request, ONWASA may consult with the City of Jacksonville before advising the Engineer.

As-Built Plans

The contractor shall locate all valves, manholes and stub-outs by coordinates or offsets in addition to the requirements for as-built plans shown in the NCDOT's Standard Specifications for Roads and Structures. The contractor shall also provide the red line and electronic as-built plans to the owner's engineer. The utility owners shall determine the electronic format for the as-built plans. The as-built plans provided to ONWASA shall also be sent to The Wooten Company.

Page 15-2, General Utility Requirements Subarticle 1500-9, Placing Pipelines into Service, Modify the first sentence of the last paragraph to read:

Schedule and notify owners and customers at least 48 hours in advance of any interruptions of utility services in writing (preferably e-mail).

Page 15-3, Excavation, Trenching, Pipe Laying and Backfilling Subarticle 1505-3 (C) Bedding:

Note: Select material to be used for bedding utilities shall be as noted in plan detail.

Page 15-4, Excavation, Trenching, Pipe Laying and Backfilling Subarticle 1505-3 (C) Bedding, Subarticle 1505-3 (E) Thrust Restraint:

Note: Thrust restraints shall be installed as shown on drawings or if not shown engineer the thrust restraint system with a factor of safety of 1.25 for the test pressure specified and for the actual field conditions.

Page 15-7, Subarticle 1515-2 Utility Controls Materials:

Note that only screw type valve boxes are acceptable to be used on utility work.

Page 15-10, Subarticle 1520-2, Sanitary Sewer Materials:

Note that **6-inch** wide plastic marking tape is to be used on utility work.

The DI force main sewer pipes shown on the plans to have ceramic epoxy coating applied to the interior of the pipe, this also includes the DI fittings.

Page 15-10 and 15-11, Subarticle 1520-3 Sanitary Sewer Construction Methods, (A) Gravity Sewer:

- (1) Pipe Installation - Note service wyes are to be used to connect service lines to the sewer main as shown on plan detail.
- (2) Testing – Note only option (c) Air Test is to be used on utility work.

Page 15-13 to 15-14, Subarticle 1525-3 Utility Manholes, Construction Methods:

Modify 3rd paragraph to read:

Provide an inside drop assembly on manholes where sewer pipes enter more than 2.5 feet above the manhole invert.

Manhole Steps – Note that manhole steps are not to be used on utility work as shown on plan detail.

Delete paragraph 3 on page 15-14 which reads “On deep manholes, a transition type manhole...cone.” Transition manholes are not allowed.

(B) Installation of Precast Units – modify paragraph to read “Assemble precast manhole units in accordance with the manufacturer’s instructions and seal **exterior** joints using 6-inch minimum width mastic tape with adhesives and seal joints between sections using butyl rope to form a sound structural unit. Interior joints shall be sealed with non-shrink grout. Fill all lifting holes with non-shrink grout. Where it is necessary to use cast-in-place, brick masonry or block masonry construction as part of the structure, apply Subarticle 1525-3(A) to such construction.”

(C) Fittings and Connections – modify last sentence to read “Set metal frames for covers in full mortar beds and seal **using butyl rope** between the frame and manhole top.”

1. Check Valve and Manhole:

Check valve and precast manhole shall be installed in accordance with the applicable utility provisions herein, as shown on the utility plans, and/or as directed by the Engineer.

Check valve shall be ductile iron body with flanged ends manufactured in accordance with AWWA C508. Check valve shall be resilient material to metal seat construction. Check valve shall provide “full flow,” clear passageway for nominal diameter of pipe when fully open. Valves shall have adjustable external lever and weight. Working parts of valve shall be fully removable through top cover. Valves shall be rated for one hundred and seventy-five (175) psi minimum working pressure (three hundred (300) psi test pressure). Valve body shall be coated with fusion-bonded epoxy in compliance with ANSI/AWWA C550.

The 8” check valve shall be housed in a 5’ inside diameter flat top precast concrete manhole conforming to ASTM C478. The access hatch shall be single leaf construction with auto lock T-316 stainless steel hold open arm with release handle, T-316 stainless steel hinges and attaching hardware, T-316 stainless steel recessed pad lock box, T-316 stainless steel compression spring assist and extruded aluminum channel frame with ¼” thick diamond pattern aluminum cover plate / recessed lifting handle. The access door shall be rated for H20 loading.

The 2" and 4" check valves shall be housed in a 5' inside diameter precast concrete manhole, conforming to ASTM C478.

Acceptable manufacturers are American Flow Company, Mueller, Clow or "approved equal."

The 8" check valve shown on sheet UC-17 will initially include a spool piece in place of the check valve to allow sewage from Highland Crossings to be temporarily pumped to the City of Jacksonville during construction. Once the proposed 8-inch force main is constructed, tested and approved, the contractor shall coordinate with ONWASA to remove the spool piece and install the check valve. The spool piece shall be given to ONWASA when removed. This work will be considered incidental to the 8" check valve and manhole contract unit price.

The check valve and precast manhole, installed in accordance with the plans and provisions herein and accepted, will be measured, and paid for at the contract unit price per each for "___" Check Valve and Manhole ". Such prices and payments will be full compensation for furnishing all labor, equipment, material, couplings and fittings, excavation, enclosures, backfilling, and incidentals necessary to complete the work as required.

PROJECT SPECIAL PROVISIONS
Utilities by Others

General:

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

- A. Power (Jones-Onslow EMC)
- B. Power (Progress Energy)
- C. Telephone (Century Link)
- D. Potable Water and New Sewer Lines (ONWASA)
- E. Raw Water Main and Gravity Sewer Line (City of Jacksonville)
- F. CATV (Time Warner)
- G. Potable Water and Sanitary Sewer (Intracoastal Engineering)
- H. New Water and Sewer Lines added during the contract not shown in the UBO and UC Plans.

The conflicting facilities of these concerns will be adjusted prior to the date of availability unless noted otherwise 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 owners. 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. Jones-Onslow EMC (Power)
 - Power line relocation work will be completed by January 31, 2013
 - See "Utilities by Others Plans" for details
 - Contact person: Thomas Pritchard (910-577-6318)
- B. Progress Energy (Power)
 - See "Utilities by Others Plans" for details
 - Contact person: Eddie Watkins (919-518-5284)
- C. Century Link (Telephone)
 - Telephone line relocation work will be completed by March 31, 2013
 - See "Utilities by Others Plans" for details
 - Contact person: Steve Haas (850-496-7727)
 - Contact person: Jeff Shepard (910-527-9357)

- D. ONWASA (Potable Water and New Sewer Lines)
See “Utilities by Others Plans” for details
Contact person: Matthew Hypes (910-937-7525)

ONWASA will need to coordinate the connection of the proposed sewer lines entering the proposed pump station Right of Line –L- at Sta. 163+00 with the contractor.

ONWASA will need to coordinate the connection of proposed 24” gravity sewer line to the proposed manhole No. 8 Right of Line-L- at Sta. 273+50 with the contractor.

- E. City of Jacksonville (Raw Water and Gravity Sewer Line)
See “Utilities by Others Plans” for details
Contact person: Michael Moore (910-938-5332)

- F. Time Warner (CATV)
Cable television line relocation work will be completed by March 31, 2013
See “Utilities by Others Plans” for details
Contact person: Vincent Brayboy (252-241-4378)

- G. Intracoastal Engineering (Potable Water and Sanitary Sewer Lines)
See “Utilities by Others Plans” for details
Contact person: Charles Cazier (910-409-3567)

- H. ONWASA or the City of Jacksonville may add new water or sewer lines within the project limits as new customers or developers request service during the construction of Piney Green Road.

The installation of new water/sewer lines or services for new customers not shown in the UBO and UC plans could be made by ONWASA or the City of Jacksonville anytime during the contract. The locations of the new water/sewer lines or services will be determined by ONWASA or City of Jacksonville after the project is let. ONWASA and the City of Jacksonville shall give the contractor three weeks notices before each new water/sewer line or service is installed within the project limits.