

*Onslow Water & Sewer Authority*

**REQUIREMENTS FOR SITE PLAN SUBMITTALS THAT DO NOT INCLUDE  
EXTENSIONS OF WATER/SEWER MAINS  
BY OWNERS/DEVELOPERS/CONTRACTORS**

**February 28, 2017 (Revised)**

**Required Items for Submittal:**

- One (1) set of project plans, including all water, sewer, storm water, and grading sheets (paper copies only).
- One (1) set of project specifications
- One water and/or sewer (if applicable) allocation request for new construction or when a change in use increases anticipated water demand and/or sewer flow
- ONWASA will supply flow test data for the hydrant closest to the proposed project if required for the design of fire suppression systems. The Owner/Developer must pay a \$75.00 fire flow test at the time that the hydrant flow test data is requested. Please be advised that hydrant flow test data is only valid for twelve months. In the event the plans are not submitted within the twelve month period immediately preceding the flow test, the tests will need to be repeated and new test fees will be due.
- The fee for site plan review is \$50.00 and checks shall be made payable to Onslow Water and Sewer Authority (ONWASA).
- Hydrant flow test and site plan review payments are non-refundable.

**Requirements for Submitted Plans:**

- When applicable, plans must go through the appropriate (Town of Swansboro, City of Jacksonville or Onslow County) Technical Review Committee (TRC) before being submitted to the ONWASA Technical Staff for review.
- Design and specification shall be in full accordance with the latest North Carolina Administrative Code, NC DENR policies and the most recent edition of ONWASA's Utility Ordinance and Manual of Standards, Specifications, and Details (MSSD).
- Plans must include all landscaping (if applicable), grading, stormwater, water, and sewer features. All existing utilities in the project vicinity shall be shown and labeled. Existing invert elevations shall be provided if applicable.
- Plans shall be signed and sealed by the appropriate Professional Engineer Licensed to Practice in North Carolina, and shall include the Engineer's address, e-mail address, and phone number as well as that of the Owner's/Developer's name, address, and phone number. If the developer is a corporation, partnership, etc. then the name, address and telephone number of the project manager or the representative responsible for the project shall be included.
- Proposed locations of the sewer and water services shall be shown on the plan.
- Proposed locations of the backflow prevention assemblies and grease traps shall be shown on the plan.
- Projects that encroach upon existing water and sewer mains shall ensure the

minimum depths of the existing utilities are maintained, all required separation between pipes is provided on plans, and any potential environmental impacts to the infrastructure are addressed. **The depths of existing water and sewer mains shall be confirmed prior to submittal as the replacement of this infrastructure may be required (i.e. replacement of existing polyvinyl chloride (PVC) mains with ductile iron piping where necessary to meet NCDENR requirements). If lowering or realignment is necessary, permit(s) from NCDEQ PWS and/or DWQ will be required and the ONWASA Requirements for Plan Submittals that Include Extensions of Water/Sewer Mains by Developers/Contractors shall apply.**

- Detail sheets shall include all applicable details and must be from the latest revision of the ONWASA MSSD. The MSSD is available at [www.onwasa.com](http://www.onwasa.com) on the Engineering Department web page.
- An accurate legend defining all the symbols used, and a vicinity map indicating the site location shall be provided on the front sheet of the plans.
- Property lines, existing and proposed right-of-ways and construction easements, addresses and basic tax information shall be included on all plan views.
- Show all existing houses, buildings, fences and other structures.
- Benchmark references are required on all plans. Elevations must be tied to mean sea level reference datum.
- A north arrow is required on all plan/profile sheets, as well as all site plans.
- Horizontal and vertical scales are clearly indicated on each sheet.
- Plan sheets should be 24-inch by 36-inch in size.

#### **Submittal Process:**

- The ONWASA Technical Staff Review will be a continuous approval process.
- Plans should be submitted to:  
Wynne M. Ray  
Technical Operations Supervisor  
ONWASA  
228 Georgetown Road  
Jacksonville, NC 28540
- Time required for review will depend on total number of projects submitted, size of project, and complexity of project.
- ONWASA staff will provide a list of comments to the Engineer after review.
- The Engineer shall make the requested corrections to the plans.
- **Once the plans are found to fully comply with ONWASA requirements, the Engineer shall be notified of that fact, and the Engineer shall then provide ONWASA with a second set of plans.**

*Onslow Water & Sewer Authority*

**REQUIREMENTS FOR PLAN SUBMITTALS THAT INCLUDE EXTENSIONS  
OF WATER/SEWER MAINS  
BY DEVELOPERS/CONTRACTORS**

**August 10, 2015  
(Revised)**

**Required Items for Submittal:**

- One (1) set of project plans, including all water, sewer, storm water, grading, and landscaping (if applicable) sheets.
- One (1) set of project specifications
- One (1) completed and signed copy of the Onslow Water and Sewer Authority's (ONWASA's) Application for Water and / or Sewer Allocation form. Electronic copies of these forms are available at [www.onwasa.com](http://www.onwasa.com) on the Forms and Applications page.
- One (1) copy of the Engineering Report for project.
- One (1) copy of the Hydraulic Analysis for the project water distribution system including all components outlined in the most recent edition of the ONWASA Manual of Standards, Specifications and Details (MSSD) available at [www.onwasa.com](http://www.onwasa.com) on the Engineering Department page.
- One (1) copy of the Hydraulic Model for the sewer force main, if applicable.
- Appropriate number of copies of completed NC DENR water/sewer permits applications. The application for approval shall be made out in the name of Onslow Water & Sewer Authority. All State permit applications shall be signed by the Engineering Manager. The ONWASA mailing address is 228 Georgetown Road, Jacksonville, NC 28540.
- Appropriate number of copies of completed NCDOT Three-Party Encroachment Agreement applications, if applicable. All NCDOT Encroachment Agreement applications shall be signed by the Engineering Manager.
- ONWASA will supply flow test data for the hydrant closest to the proposed development for the required hydraulic analysis and at any other hydrant site necessary for the water distribution system design. The Developer must pay a \$75.00 fire flow test fee per test at the time that the hydrant flow test data is requested. Please be advised that hydrant flow test data is only valid for twelve months. In the event the plans are not submitted within the twelve month period immediately preceding the flow test, the tests will need to be repeated, new test fees will be due, and the hydraulic analysis updated as necessary.
- The fee for plan review is \$100.00 and must be submitted with the plan review package.
- All checks shall be made payable to the Onslow Water and Sewer Authority. Hydrant flow test and plan review payments are non-refundable.

**Requirements for Submitted Plans:**

- Applicants are required to ensure that all plans go through the appropriate (City of Jacksonville or Onslow County) Technical Review Committee (TRC) before

being submitted to the ONWASA Technical Staff for review. *Projects located within the jurisdiction of the Town of Swansboro must submit plans for review a minimum of two weeks prior to the Swansboro TRC so all comments are available at the time of the meeting.*

- Design and specification shall be in full accordance with the latest North Carolina Administrative Code, NC DENR policies and the most recent edition of ONWASA's MSSD.
- All existing utilities in the project vicinity shall be shown and labeled on all plan sheets. Existing invert elevations shall be provided if applicable.
- Plans, specifications and engineering reports shall be signed and sealed by the appropriate Professional Engineer licensed to practice in North Carolina. The Engineer's name or firm, address, e-mail address, and phone number, shall be included on the Plans, Specifications, and Engineer's Report. The Developer's name, address, and phone number shall be included on the Plans and Engineer's Report. If the developer is a corporation, partnership, etc. then the name, address and telephone number of the project manager or the representative responsible for the project shall be included.
- Plan and profile views are required for all plans and must include all storm drain, water and sewer line crossings.
- Plan and profile views shall be shown on the same sheet.
- Proposed locations of the sewer and water services shall be shown on the plan and profile views.
- Detail sheets shall include all applicable details and must be from the latest revision of the ONWASA MSSD. ONWASA details may be provided in AutoCAD format upon request.
- An accurate legend defining all the symbols used, and a vicinity map indicating the site location shall be provided on the front sheet of the plans. A graphical sheet index map shall be provided for plans with 8 or more plan-profile sheets.
- All horizontal (plan) scales shall be one inch equals forty (40) feet or one inch equals fifty (50) feet.
- Vertical (profile) scales shall be one inch equals four (4) feet if a plan scale of one inch equals forty (40) feet is used or one inch equals (5) feet if a plan scale of one inch equals fifty (50) feet is used.
- The front sheet of the plans shall include a summary of the project to include number of lots served, linear footage (by diameter) of gravity sewer, force main and water distribution line, number of hydrants, backflow devices, number of manholes and pump stations for the project.
- Match lines shall be provided on each plan and profile sheet.
- Property lines, existing and proposed right-of-ways and construction easements, addresses and basic tax information shall be included on all plan views.
- Show all existing houses, buildings, fences and other structures.
- All manholes shall be labeled with a number and its stationing.
- Stationing shall be marked at a minimum of every fifty feet and labeled every one hundred feet.
- Benchmark references are required on all plans. Elevations must be tied to mean sea level reference datum.
- A north arrow is required on all plan/profile sheets, as well as all site plans.
- Horizontal and vertical scales are clearly indicated on each sheet.
- Plan sheets should be 24-inch by 36-inch in size.

- A SCADA system that conforms to the requirements outlined in the standard specifications is included for each pump station (if applicable).
- A generator that conforms to the requirements outlined in the standard specifications is included for each pump station (if applicable).

**Submittal Process:**

- The ONWASA Technical Staff Review will be continuous approval process.
- Plans should be submitted to:  
Wynne M. Ray  
Technical Operations Supervisor  
ONWASA  
228 Georgetown Road  
Jacksonville, NC 28540
- Time required for review will depend upon the total number of projects currently under review, the size of project submitted, and the complexity of project.
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- If, during the course of plan review, five (5) errors or omissions are identified by ONWASA staff, the review shall be suspended and the Engineer advised to revise the plans and resubmit.
- The Engineer shall make the requested corrections to the plans. If review has been suspended, it shall be re-initiated upon receipt of the revised plans. If the plans are again found to contain five errors or omissions, the review will again be suspended.
- Upon notification of approval by ONWASA, the Engineer must submit one (1) signed and sealed copy of final plans with corrections as necessary. Once final plans are received and corrections verified, NC DENR permit applications and NCDOT Encroachment Agreement applications (if applicable) will be signed by ONWASA and returned to the Engineer.