

## PD 19-02: Bonding of Water and Sewer Utilities

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Effective Date: March 27, 2019

Policy Document 19-02: Bonding of Water and Sewer Utilities

This policy outlines work complete that can be claimed in the engineer's cost estimate for the Water and Sanitary Sewer System sections of all subdivision and infrastructure bonds submitted to Spotsylvania County.

In order to claim credit for installed water and sanitary sewer infrastructure all materials must be installed per the approved site plan and the following field testing must be completed:

### **Required Field Testing**

#### **Water**

1. Submission of Compaction Results – DSM Section 3.2.3.8
2. Pressure Testing - DSM Section 3.4.3.2

#### **Sanitary Sewer**

1. Submission of Compaction Results - DSM Section 3.2.3.8
2. Manhole Vacuum Testing - DSM Section 3.3.3.2
3. Non-Pressure Sewer Line Testing - DSM Section 3.3.3.2
4. Pressure Force Main Testing - DSM Section 3.3.3.4

A line-item for Testing, As-Builts and Acceptance must be included in the engineer's cost estimate for both the Water and Sanitary Sewer Systems. If the total credit given for work completed is less than 90% of the total value of the Water and Sanitary Sewer Systems, the line item may be omitted from the engineer's cost estimate.

Once an engineer's cost estimate is submitted where the total credit for work completed exceeds 90% of the total value of the Water and Sanitary Sewer Systems, the estimated cost of the Testing, As-Builts and Acceptance line-item should be included in the estimate. The Testing, As-Builts and Acceptance line-item must total 10% of the entire estimated costs of the Water and/or Sanitary Sewer Systems.

The Testing, As-Builts and Acceptance line-item should not be included in the determination if the total credit for work completed exceeds 90% of the total value of the Water and Sanitary Sewer Systems.

An engineer's cost estimate can be submitted for an incremental amount of work as long as all materials are installed per the approved site plan and all field testing has been completed. For example, a site plan required 100' of water main to be constructed. If 50' of the water main has been constructed and all field testing been completed, 50 % credit for work completed can be included in the engineer's cost estimate.

A separate line-item should be maintained for the Water System and Sanitary Sewer System.

	ITEM	QUANTITY	UNITS	UNIT COST	ESTIMATED COST	% COMPLETE	COST TO COMPLETE
<b>UTILITIES</b>							
	<b>Water:</b>						
	Testing, As-Built and Acceptance	1	Lump Sum	10% of All Water Unit Costs	10% of All Water Unit Costs	0%	Entire Unit Cost
	<b>Subtotal:</b>				10% of All Water Unit Costs		
	<b>Sanitary Sewer:</b>						
	Testing, As-Built and Acceptance	1	Lump Sum	10% of All Sewer Unit Costs	10% of All Sewer Unit Costs	0%	Entire Unit Cost
	<b>Subtotal:</b>				10% of All Sewer Unit Costs		

Figure 1: Example Table Showing the Testing, As-Built and Acceptance Line Item at 0% Complete

The percent work complete for the Testing, As-Built and Acceptance line-item shall be 0% until all of the requirements listed below have been met. Once all requirements have been met, the line-item for Testing, As-Built and Acceptance can be changed to 100% complete.

1. A Request for First Acceptance has been submitted - DSM Appendix F and G
2. As-built drawings have been submitted and approved - DSM Section 1.12
3. Two water samples taken by the County at least sixteen (16) hours apart that report negative for E. Coli and Total Coliform. DSM Section 3.4.3.3
4. Land Record Numbers for all Public Utility Easements are shown on as-built plans. DSM Section 1.12
5. A CCTV Inspection of the Sanitary Sewer Video Inspection has been completed. DSM Section 3.3.3.3
6. Copies of all state and local approvals have been submitted to the County.
  - a. Copy of the DEQ certificate to operate (CTO) if required.
  - b. Copy of VDH approvals as required.
7. Copies of all third party testing required has been submitted to the County.
8. Verification that all conditions of any contracts between the Applicant and the County are complete.
9. Submission and approval of a breakdown of costs for all public water and sewer installed on request form. DSM Section Appendix F and G

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<b>UTILITIES</b>							
	<b>Water:</b>						
	Testing, As-Built and Acceptance	1	Lump Sum	10% of All Water Unit Costs	10% of All Water Unit Costs	100%	Entire Unit Cost
	<b>Subtotal:</b>				0% of All Water Unit Costs		
	<b>Sanitary Sewer:</b>						
	Testing, As-Built and Acceptance	1	Lump Sum	10% of All Sewer Unit Costs	10% of All Sewer Unit Costs	100%	Entire Unit Cost
	<b>Subtotal:</b>				0% of All Sewer Unit Costs		

Figure 2: Example Table Showing the Testing, As-Built and Acceptance Line Item at 100% Complete

If there are any questions regarding this policy, PD 19-02 please contact the Utilities Department at 540-507-7300.



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3/27/2019

Date