



## SIMPLIFIED PIT INFILTRATION TEST PROCEDURE

Refer to Ch. 430 of the Clayton Municipal Code for full regulations and requirements. Per Section 430.090.D.i.e, an infiltration test is required for drywells and infiltration BMPs. The required test must be signed and sealed, unless this requirement is waived by the Director of Planning & Development Services for a smaller scope project. The following procedure may be completed by a person who does not have a professional credential, when permitted by the Department of Planning & Development Services. The following procedure is in general accordance with Appendix D.1 of the Maryland Stormwater Design Manual, as adopted/referenced by the St. Louis Metropolitan Sewer District (MSD).

### Test instructions:

1. Conduct the test in and/or near the location of the proposed infiltration facility.
2. Excavate a 2 ft by 2 ft pit. For facilities that will be less than 2 ft deep, excavate the pit to 2 ft below grade. For facilities that will be more than 2 ft deep, excavate the pit to 3 ft below grade.
3. Check for standing water or hardpan soil preventing excavation. If either is present, document conditions on this form and do not proceed with the test.
4. Fill the pit with at least 12 inches of water and record the initial water depth and the time when the test starts. Check the water depth at regular intervals until all of the water has been absorbed or for 1 hour, whichever occurs first. Record the time and final water depth at the end of the test.
5. Repeat the process two more times for a total of three rounds. Conduct the tests in succession to accurately characterize the soil's infiltration rates at different levels of saturation. The third test provides the best measure of the infiltration rate when saturated.
6. Record infiltration test data in the table below and certify the results. Uncertified test results will not be accepted. Provide a survey or site plan showing the location and dimensions of the test pit.

<b>REQUIRED INFILTRATION TESTING</b>			
TEST PERFORMED BY:			
DATE OF TEST:	DEPTH OF EXCAVATION (feet):	DEPTH OF PROPOSED FACILITY (feet):	
		TEST 1	TEST 2
TIME			TEST 3
DURATION (minutes, 1 hour max)			
INITIAL WATER DEPTH (inches)			
FINAL WATER DEPTH (inches)			
INFILTRATION RATE (inches/hour)			
<i>Infiltration rate = (initial depth – final depth) / duration of test</i>			
Do slopes exceed 25% anywhere within the project area?			YES NO
Are there springs, seeps, or a high groundwater table within the project area?			YES NO