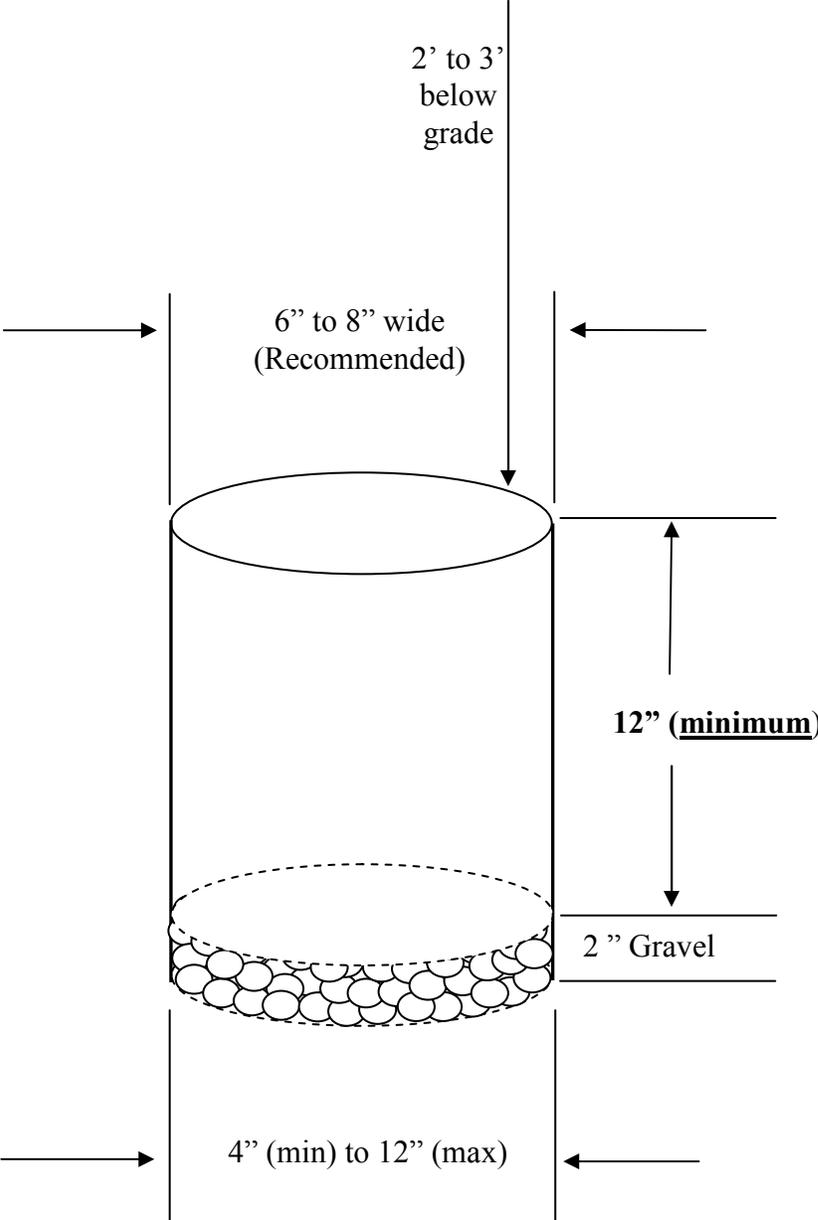


# Percolation Tests

A minimum of two holes for the percolation tests is required, at the depth of the proposed trenches.

Water used for percolation tests is clear, clean water.



## Determination of appropriate percolation test procedure

1. Fill the percolation hole with water to a depth of at least 12 inches over the gravel. Determine the time needed for the water to seep away completely.
2. Fill the percolation hole with water again to a depth of at least 12 inches over the gravel. Determine if the water seeps away in 10 minutes or less.
3. **IF** water remains in the percolation hole after 10 minutes, proceed with the PRESOAKING PROCEDURE (A), followed by the SLOW PERCOLATION TEST PROCEDURES (B). *SEE BELOW*
4. **IF** water has completely seeped away after 10 minutes, proceed with the FAST PERCOLATION TEST PROCEDURE (C). *SEE NEXT PAGE*

### A. Slow Percolation Procedure

1. Fill the percolation hole with water to a minimum depth of 12 inches over the gravel.
2. Maintain at least 12 inches of water over the gravel in the hole for 4 hours.
3. At the end of the 4-hour period allow any water in the hole to seep away. Do not remove the water.
4. Let the hole sit for not less than 16 hours or more than 30 hours. Swelling of the soil will occur during this period. The SLOW PERCOLATION TEST PROCEDURE must begin no sooner than 16 hours and no later than 30 hours after the end of the 4-hour soaking period.

16 to 30 hours later . . .

5. Fill percolation hole with water to a maximum of 6" over gravel.
6. Measure the drop in the level of the water at 30-minute intervals, for a total of 4 hours. If the first 6 inches of water seeps away in less than 30 minutes, the interval between measurements must be reduced to 10 minutes and the length of the test must be reduced to 1 hour.
7. Fill the hole to a maximum depth of 6 inches over the gravel as often as necessary to prevent the hole from becoming empty.
8. The amount of the drop in the level of the water during the last interval must be used to determine the percolation rate, except that if two successive measurements do not vary more than 1/16<sup>th</sup> of an inch, the test may be stopped and the percolation rate may be determined.

## **C. Fast Percolation Test Procedure**

1. Fill the percolation hole with water to a level that is no more than 6 inches over the gravel.
2. Measure at 10-minute intervals, how much the water drops over the next 60 minutes. If 6 inches of water seeps away in less than 10 minutes, a shorter interval between measurements must be used.
3. Refill the hole as necessary to prevent all water from seeping away. The level of the water must never exceed 6 inches in depth over the gravel.
4. The amount of the drop in the level of the water recorded for the final 10-minute period must be used to determine the percolation rate.

## Percolation Test # 1

Performed by \_\_\_\_\_

Time	Time Interval in Minutes	Measurement in inches	Drop in water level in inches	Percolation rate minutes per inch

Percolation rate = \_\_\_\_\_ minutes per inch.  
(Divided time interval in minutes by the drop in inches)

## Percolation Test # 2

Performed by \_\_\_\_\_

Time	Time Interval in Minutes	Measurement in inches	Drop in water level in inches	Percolation rate minutes per inch

Percolation rate = \_\_\_\_\_ minutes per inch.  
(Divided time interval in minutes by the drop in inches)