Conducting a Soil Percolation Test – for information

The soil percolation test results are indicative of the ability of a soil to absorb partially treated sewage effluent.

◊ Refer to procedure for the preparation of soil percolation test holes sheet for digging the holes. Most sites and sewage systems in Schoharie County will require these holes. In rare circumstances other holes will be required at different depths for design purposes.

The procedure noted below should be followed in performing a soil percolation test for a sewage system in Schoharie County (make sure proper safety practices are followed):

a) Presoak the test hole by periodically filling the hole with water and allowing the water to seep away. This procedure should be performed for at least four hours and should begin one day before the test except for clean course sand and gravel.

b) Place a measuring stick in the hole. Pour clean water into the hole to a depth of six inches with as little splashing as possible. You will not have to make measuring sticks for the County inspector.

c) Observe and record the time in minutes required for the water to drop from six inches to five inches.

d) Repeat the test (a minimum of three times) until the time for the water to drop one inch for two successive tests is approximately equal. The last test will then be taken as the stabilized rate of percolation and will be the design basis for determining the absorption area required for a subsurface absorption system. For example, assume the following rates were obtained in running a test:

RUN NUMBER	TIME (minutes)
1	24
2	26
3	30
4	30

The stabilized rate of percolation is taken as 30 minutes per inch and the test was completed.

If the times continue to increase each trial then the test has not been completed. The test must be repeated until the times are equal or greater than 60 minutes per inch. Basically, less than 60 minutes per inch is one criterion for a conventional sewage system. Greater than 60 minutes per inch rate will require a raised system (sandy loam imported to the site) or another type of alternative sewage system that requires sandy fill. Holding tanks are not permitted.

*Figure 3: on the reverse side