

METHOD OF MAKING PERCOLATION TESTS

1.—NUMBER AND LOCATION OF TESTS. A sufficient number of tests as determined from Section 122 (G) shall be made in separate test holes spaced uniformly over the proposed subsurface absorption area.

2.—TYPE OF TEST HOLE. Dig or bore a hole, with horizontal dimensions of from 4 to 12 inches and vertical sides to the depth of the proposed absorption trench. In order to save time, labor, and volume of water required per test, the holes can be bored with a 4-inch auger.

3.—PREPARATION OF TEST HOLE. Carefully scratch the bottom and sides of the hole with a knife blade or sharp-pointed instrument, in order to remove any smeared soil surfaces and to provide a natural soil interface into which water may percolate. Remove all loose material from the hole. Add 2 inches of coarse sand or fine gravel to protect the bottom from scouring and sediment.

4.—SATURATION AND SWELLING OF THE SOIL. It is important to distinguish between saturation and swelling. Saturation means that the void spaces between soil particles are full of water. This can be accomplished in a short period of time. Swelling is caused by intrusion of water into the individual soil particle. This is a slow process, especially in clay-type soil, and is the reason for requiring a prolonged soaking period.

In the conduct of the test, carefully fill the hole with clear water to a minimum depth of 12 inches over the gravel. In most soils, it is necessary to refill the hole by supplying a surplus reservoir of water, possibly by means of an automatic syphon, to keep water in the hole for at least overnight. Determine the percolation rate 24 hours after water is first added to the hole. This procedure is to insure that the soil is given ample opportunity to swell and to approach the condition it will be in during the wettest season of the year. Thus, the test will give comparable results in the same soil, whether made in a dry or in a wet season.

5.—PERCOLATION, RATE MEASUREMENT. With the exception of sandy soils, percolation-rate measurements shall be made on the day following the procedure described under item 4, above.

A. If water remains in the test hole after the overnight swelling period, adjust the depth to approximately 6 inches over the gravel. From a fixed reference point (a stick across the hole), carefully measure the time it takes for the water to drop four (4) inches.

B. If no water remains in the hole after the overnight swelling period add clear water to bring the depth of water in the hole to approximately 6 inches over the gravel. From a fixed reference point (a stick across the hole) carefully measure the time it takes for the water to drop four (4) inches.

6.—Find the percolation rate in minutes required for the water to drop one inch.

SAMPLE CALCULATION:

It takes 40 minutes for the water to drop 4 inches, so the PERCOLATION RATE is 40 minutes divided by 4 inches equals 10 minutes per inch.

THE PERCOLATION RATE IS

$$\frac{10 \text{ minutes/inch}}{4 \text{ inches } 40 \text{ minutes}}$$

APPLICATION AND AGREEMENT

TO WAIVE CERTAIN PROVISIONS OF THE PLUMBING CODE

I, Lawrence Kenneth Sousa, (owner) hereby apply to the Maine State Department of Health and Welfare for permission authorizing the responsible Plumbing Inspector to waive certain provisions of the Plumbing Code for an installation in connection with a dwelling or building at Wade Road, Augusta Me (street) (city or town)

A brief description follows. This may include materials, methods, dimensions or conditions not specifically approved by the Plumbing Code. A sketch must also be attached.

Installation of an mop absorption tank
leaking septum, 2 holes at 20' x 5' 5" each with
a discharge pipe to a lagoon in the field which
is sealed, total area covered approximately 15 sq ft.
(If additional space is needed, attach a list.)

In all other respects, the installation will comply with the Code. The installation will be made in accordance with the attached plan. A permit is to be issued by the Plumbing Inspector if he is in agreement. The undersigned stipulates that he is the owner and occupant of the building involved and that the building is not for sale in the foreseeable future. The installation will be made by: _____, License No. _____.

If any defects or inadequacies appear, I will promptly notify the State Department of Health and Welfare and subsequently make such corrections as the Department shall find necessary

Owner's signature Lawrence Kenneth Sousa

Winter address Wade Rd. Augusta Me

Summer address _____

Telephone _____ Date Sept. 21, 1973

THE FOLLOWING TO BE FILLED IN BY THE PLUMBING INSPECTOR

I am (Local), (Alternate) Plumbing Inspector for the town of Augusta. I have examined the plans for the installation described above and I find the building to be in my jurisdiction.

I (do), (do not) recommend the issuance of a special permit for the installation as described above.

Signed George J. Smith
Date Sept. 23, '73

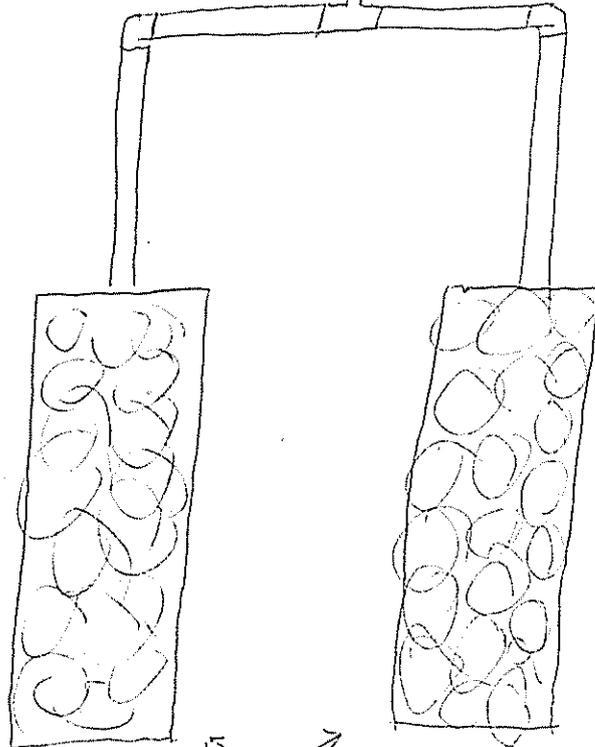
Circle with scribbled text

DRIVEWAY

FRONT

HOSE
~~XXXXXXXXXX~~
TANK

SERVE
TANK



← 20 →

← 30 →

← 20 →