

## Chapter H 65

## SUBDIVISIONS NOT SERVED BY PUBLIC SEWERS

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**H 65.01 Applicability.** These regulations governing lot size and lot elevation shall be applicable to any subdivision, as defined in section 236.02 (7), Wis. Stats., not served by a public sewer, where provision for such service has not been made. Provision for such service shall be considered to have been made only if the subdivision will be served by a public sewer at the time of occupancy of the first 2 buildings constructed therein, or the municipality, town or town sanitary district has by resolution or other official action provided that public sewers will be extended to buildings within the subdivision as they are occupied.

**History:** 1-2-56; Am. Register, July, 1956, No. 7. Eff. Aug. 1, 1956.

**H 65.02 Definitions.** For the purposes of these regulations the following terms mean:

- (1) BOARD, the state board of health.
- (2) MINIMUM LOT AREA, the area established in section H 65.03 as the minimum area for a given situation.
- (3) PRIMARY PLAT APPROVING AUTHORITY, the plat approving authority of the municipality or town in which the plat is located.
- (4) PUBLIC SEWERS, sewers, and treatment facilities used in connection therewith, which are maintained and operated by a municipality, town, or town sanitary district.
- (5) PUBLIC WATER SUPPLY SYSTEMS, a water system serving 10 or more premises of mixed ownership when such system is maintained and operated by a municipality, town, town sanitary district, privately owned utility, or duly constituted cooperative association.
- (6) SUBDIVISION PLAN, a map showing the numbers and the boundary lines of all lots and blocks. Such map may be a copy of the plat.

**History:** 1-2-56; Am. Register, July, 1956, No. 7. Eff. Aug. 1, 1956.

**H 65.03 Lot area.** (1) The area of any lot shall be sufficient to permit the use of a sewage absorption system of a shallow or deep type and be based upon the results of soil percolation tests conducted in accordance with the procedure given in section H 65.06. Shallow absorption systems shall be construed as those located within a depth of 36 inches while deep absorption systems shall be those developed at depths of more than 36 inches below the surface of the ground. To be considered for area reduction, plans of a public water supply system to serve a subdivision shall be approved by the board.

Register, July, 1956, No. 7.

(2) The minimum lot areas shall be as follows:

Class	Minutes required for water to fall one inch		Minimum Lot Area—Sq. Ft.	
	Shallow absorption system	Deep absorption system	Private water supply system	Public water supply system
1	Under 3	Under 2	10,000	9,000
2	3 to 15	2 to 10	14,400	12,000
3	15 to 60	15 to 30	18,000	14,400
4	60 to 90	30 to 60	36,000	28,800
5	over 90	over 60	60,000	60,000

(3) The minimum lot areas specified in classes 1, 2 and 3 may be decreased by 20% when the feasibility of maintaining adequate separation of wells and sewage system units on lots of such smaller size throughout the subdivision has been demonstrated on a subdivision plan by means of one-foot contour lines and pre-planned locations for wells and sewage system units, and provided building and occupancy ordinances of the primary plat approving authority make it possible to require adherence to the location of wells and sewage system units shown on the plan. Pending installation of public sewers, the minimum lot areas shown in the table may also be provided through use of 2 or more lots, if suitable combinations are designated on a subdivision plan and the primary plat approving authority has an ordinance which will permit it to control the erection of buildings on such combination of lots. Two copies of any subdivision plan concerning aforesaid pre-planning arrangements or lot combinations shall be supplied to the board, one copy of which, appropriately marked, shall be returned to the primary plat approving authority if the plan is acceptable to the board.

**History:** 1-2-56; Am. Register, July, 1956, No. 7. Eff. Aug. 1, 1956.

**H 65.04 Lot width and length.** Where not inconsistent with section 236.16 (1), Wis. Stats., lots of class 1, 2 or 3 shall have a minimum width in feet at the building site of not less than the number obtained by dividing the minimum lot area by 200. Lots of class 4 or 5 shall have a minimum width of 100 feet.

**History:** 1-2-56; Am. Register, July, 1956, No. 7. Eff. Aug. 1, 1956.

**H 65.05 Elevation.** (1) **FLOOD WATER.** Ninety per cent of the minimum lot area shall be at least 2 feet above the approximate high water elevation of any lake or stream affecting the plat. Where this is a factor, the plat shall show a contour line 2 feet above the high water level.

(2) **GROUND WATER.** Eighty per cent of the minimum lot area shall be at least 3 feet above the highest ground water level as estimated by the subdivider or his agent from soil boring test data. Estimates shall be subject to verification by a plat approving authority and the board. Any part of a lot having an elevation less than 24 inches above such highest ground water level shall not be considered in determining minimum lot areas.

**History:** 1-2-56; Am. Register, July, 1956, No. 7. Eff. Aug. 1, 1956.

Register, July, 1956, No. 7

**H 65.06 Soil tests.** (1) **SUPERVISION.** Soil boring and percolation tests shall be made or be supervised by an engineer, architect or surveyor registered in Wisconsin, by a public health engineer or sanitarian employed by an authority approving the plat or by a county sanitarian. The person supervising the tests shall certify as to correctness of procedure and results. Blank forms for reporting results and providing certification shall be supplied by the board.

(2) **SOIL BORING TESTS.** Sufficient borings shall be made in each subdivision to portray adequately the character of the soil and the ground water level. The location of the borings shall be distributed as uniformly as possible and shall be shown on a subdivision plan. When borings show marked variation in soil or water level at least one per each acre of area shall be made. All borings shall extend to a depth of 8 feet, or to bed rock if it is at lesser depth.

(3) **PERCOLATION TESTS.** Sufficient percolation tests shall be made in each subdivision having lots less than 60,000 square feet in area to determine adequately the ability of the soil to absorb sewage effluent. At least one test per acre shall be made initially unless uniformity of soil and absorption capacity is demonstrated with fewer tests, the borings for which are uniformly spaced over the area to be platted. All percolation tests shall be made at the depth at which the facilities for effluent disposal are to be installed. The finished topography of the subdivision shall control the test depth. For shallow absorption systems the depth of the test holes shall not exceed that corresponding to a depth of 36 inches on the basis of finished topography. When soil borings disclose soils better suited for effluent disposal at a greater depth than 36 inches, percolation tests to determine the feasibility of disposal of effluent by seepage pits may be made. The location of all percolation tests shall be shown on a subdivision plan. The depth of hole, nature of material encountered, and percolation test results shall be reported on blank forms supplied by the board. No percolation tests need be made in subdivisions where the lot size is more than 60,000 square feet.

(4) **PERCOLATION TEST PROCEDURE.** (a) *Type of hole.* The hole shall be dug or bored. It shall have vertical sides and have a horizontal dimension of 4 to 12 inches. A four-inch or larger auger may be used.

(b) *Preparation of hole.* The bottom and sides of the hole shall be carefully scratched with a sharp pointed instrument to expose the natural soil interface. All loose material shall be removed from the bottom of the hole which shall then be covered with 2 inches of coarse sand or gravel when necessary to prevent scouring.

(c) *Saturation and swelling of the soil.* The hole shall be carefully filled with clear water to a minimum depth of 12 inches over the gravel. By refilling if necessary, or by supplying a surplus reservoir of water, such as an automatic siphon, the test hole shall be filled with water for at least 4 hours and preferably overnight. The soil shall be allowed to swell overnight so that it will approach the conditions that will exist during the wettest season of the year. In sandy soils, containing little or no clay, the swelling procedure is not essential and the test may proceed, as hereafter described, if the water from a second filling of the hole seeps away in 10 minutes or less.

(d) *Percolation rate measurement.* With the exception of sandy soils, percolation rate measurements shall be made on the day following the procedure described in subsection (c) above. If water remains in the test hole after the overnight swelling period, the depth shall be adjusted to a level of 6 inches over the gravel. Thereupon, from a fixed reference point, the drop in water level shall be measured over a 30-minute or longer period. This drop shall be used to calculate the percolation rate. If no water remains in the hole after the overnight swelling period, there shall be added clear water to bring the depth of the water in the hole to a level which is 6 inches over the gravel. Thereupon from a fixed reference point, the drop in water level shall be measured at 30-minute intervals until 2 successive readings do not vary by more than 5 per cent or for a period of 4 hours, refilling the hole whenever it becomes nearly empty with clear water to a level which is 6 inches above the gravel. The drop that occurs during the final 30-minute period shall be used to calculate the percolation rate. In sandy soils (or other soils in which the first 6 inches of water seeps away in less than 30 minutes after the overnight swelling period) the time interval between measurements shall be taken as 10 minutes and the test run for 1 hour. The drop that occurs during the final 10 minutes shall be used to calculate the percolation rate. Percolation rates may also be determined by the volume of water displaced from a reservoir when the cross sectional area of the hole can be accurately determined and the water feeding device is such as to maintain a constant water level in the hole.

(5) **INTERPRETATION.** In interpreting percolation test results emphasis shall be given to the lowest percolation rates for the same type of soil.

**History:** 1-2-56; Am. Register, July, 1956, No. 7. Eff. Aug. 1, 1956.