

ORDINANCE NO. 58-7

AN ORDINANCE TO ADOPT A CODE FOR SANITARY SUBSURFACE SEWAGE DISPOSAL SYSTEMS (HEREINAFTER CALLED "SANITARY CODE"); TO PROVIDE FOR THE APPLICATION AND ENFORCEMENT THEREOF; TO RESTRICT THE ISSUANCE OF BUILDING PERMITS FOR NEW CONSTRUCTION OR REMODELLING OR ADDITION TO EXISTING STRUCTURES; TO REQUIRE THE APPLICATION OF THE SANITARY CODE BY THE MUNICIPAL PLANNING COMMISSION AND BOARD OF ZONING APPEALS, AND TO AMEND THE PROVISIONS OF ORDINANCES NO. 55-4, AND 58-4, INSOFAR AS SAME MAY BE IN CONFLICT WITH THE PROVISIONS OF SAID SANITARY CODE; AND PROVIDING PENALTIES FOR VIOLATION OF SAME.

BE IT ORDAINED BY THE CITY OF BELLE MEADE AS FOLLOWS:

SECTION 1. The following is adopted, and shall be known as "The Code for Sanitary Subsurface Sewage Disposal Systems in the City of Belle Meade" and shall hereinafter be called "Sanitary Code".

CODE FOR SUBSURFACE SEWAGE DISPOSAL SYSTEMS

(Known as the SANITARY CODE)

The following objectives, provisions and requirements shall govern subsurface sewage disposal systems, their planning and installation.

A. OBJECTIVES

1. The objectives to be attained in the proper planning and installation of a subsurface sewage disposal system are:
 - a. Prevention of contamination of well water.
 - b. Avoidance of objectionable conditions such as offensive odors and unsightly appearance.
 - c. Prevention of contamination of areas and surface waters accessible to children and others.
 - d. Prevention of contamination of streams.

B. DATA REQUIRED

In considering the suitability of any proposed or existing subsurface sewage disposal system, all of the following data are essential, namely:

1. Location and plan of property.
2. Type of building to be served.
3. Number of occupants or number of bedrooms, if residence.
4. Location of building or buildings on lot and of adjacent buildings.
5. Topography of lot and neighborhood.
6. Location of wells, if any, and of watercourses towards

which property drains.

- 7. Household equipment, such as automatic washers, producing wastes discharged through the house sewer.
- 8. Detail plan of proposed sewage disposal facilities.
- 9. Character of soil as determined by borings or test pits.
- 10. Elevation of groundwater at different seasons of year, very important.
- 11. Permeability of subsoil as disclosed by percolation tests.

C. GROUND AND SURFACE WATER

- 1. Soil saturated with water at any time of the year shall not be used for subsurface disposal of septic matter, otherwise overflow upon the surface occurs with resulting unhealthful conditions.
- 2. Submersion of the absorption system, including septic tanks, may result in the death of the essential purifying organisms, and all installation should be so located as to prevent this.
- 3. The entire purpose of a subsurface disposal system is to prevent any discharge or overflow upon the surface of the ground or into any water course. Any condition which precludes this objective renders a proposed site or installation unacceptable.
- 4. Ground chosen for subsurface systems shall be in areas not subject to overflow of surface water due to natural slopes or from drains discharging thereon.
- 5. Roof and cellar drains shall not be permitted to discharge into subsurface disposal systems used for disposal of septic waste.

D. PERCOLATION TESTS

- 1. Three or more percolation tests shall be made at uniformly spaced locations at the site of the proposed disposal system.
- 2. Test holes should be dug or bored to the depth of the proposed system, in any case at least 24".
- 3. Holes shall be 4" or 12" in diameter with vertical sides. Sides and bottoms of holes will be scraped and scratched to provide natural surface. Loose material will be removed from the holes and 2" of coarse sand or fine gravel added to cover the bottom of test holes. "The four-inch holes may be dug with an auger, but it should be used only within the test area if remote from a water source."
- 4. In conducting a test, holes will be filled with clean water to a level at least 12" above the gravel. If possible, water should be kept in the holes for 24 hours, and in any event a minimum of 4 hours. Percolation rate tests will be carried out 24 hours

after the water was first added to the holes. (Saturating the soil before observing the percolation rate will simulate conditions during the wet season of the year.)

5. 6" of water should be present in the holes when observations on rate of percolation are begun. The tester will measure the distance below a fixed reference point of water level at the beginning and end of each 30-minute period for four hours after the test commences.
6. The percolation rate is defined as the measure of the drop in water level during the last 30-minute interval referred to in (5.) above. The earlier drops will be considered as a possible indication that shorter periods of measurement should be adopted in a particular case, as might be the case in readily permeable soils.
7. In any event, methods of carrying out percolation tests shall not be less thorough than those recommended from time to time by the Tennessee Department of Public Health.
8. If the percolation test rate, made as above described, shows percolation rate less than 1" drop per hour, the soil is unsuitable for absorption trench disposal. If the rate is as much as 1" drop per hour, or more, the following table gives the absorption areas required according to various percolation rates.

TABLE 1. Absorption Area per Bedroom

Percolation rate Minutes per inch drop	Length of Trench, ft.	Absorption Area * square feet
1	35	70
2	43	85
3	50	100
4	58	115
5	63	125
10	83	165
15	95	190
30	125	250
45	150	300
60	165	330

These allowances provide for automatic washers.

* Trenches 2 feet wide.

9. Subsurface sewage disposal systems should be so located as to cause no contamination of any source of water supply.
10. Such systems should be located sufficiently far from buildings as to preclude infiltration into any basement.
11. Sites for disposal systems should be where suitable soil of a permeable character exists, where an adequate area is available,

- and where ground contours and elevations are proper.
12. Areas over absorption trenches should be as free as possible from shrubs, trees, or other vegetation whose roots might interfere with the proper functioning of the disposal facilities.
 13. Bedrock or other impervious strata shall be at least two feet (2') and preferably more below the ground surface at the site.
 14. Absorption trenches or other leaching areas shall not be located where impervious strata or ground water levels are closer than two feet from the surface.
 15. In all cases where bedrock and/or other impervious strata occur within two feet of ground surface, no absorption trench shall be located unless it is determined that the slope of the bedrock or impervious strata is such that the liquid in the disposal field may percolate along the surface of the same and be disposed of without violating any of the requirements contained in this Code.
 16. If subsoil conditions, as determined by percolation tests, are unsuitable, no subsurface disposal of sewage will be permitted. Where conditions are suitable, absorption trenches constructed in accordance with this Code may be installed.

E. SEPTIC TANKS

1. All discharge of septic waste shall be effected into one or more septic tanks constructed and installed in accordance with this Code, unless an approved sanitary sewer connection is available.
2. In addition to specific requirements of this Code, recommendations of the Tennessee Department of Public Health shall be followed, as contained in two pamphlets, namely "Recommended Construction of Septic Tanks and Disposal Fields for Residential Uses" (1958), and "Recommended Construction of Large Septic Tank Disposal Systems for Schools, Factories and Institutions" (1958), or any revision or reissue thereof. In case of conflict between such recommendations and specific provisions of this Code, the provisions of this Code shall be followed.
3. Septic tanks may be prefabricated or constructed on the site, and shall be made of concrete.
4. Minimum capacity of a septic tank for a residence will be computed upon the basis of the number of bedrooms intended to be

constructed in accordance with the following table:

Table 2. Liquid Capacity of Septic Tanks

No. of Bedrooms	Capacity (gal.) *
2 or less	750
3	900
Over 3, per bedroom add maximum of 10 bedrooms	200 up to

* Provides for use of automatic washers.

- 6. Septic tanks will be so located as to provide for gravity discharge of overflow to subsurface percolation trenches.
- 7. In order to allow for accumulations of sludge and scum, septic tanks shall have a liquid depth capacity of not less than four feet below overflow level.
- 8. Inlets and outlets shall be Tees with the longer leg turned down.
- 9. Tanks exceeding 750 gallon capacity shall be divided into two compartments, each with manhole cover. They shall be of a design as recommended by the Tennessee Department of Public Health for large septic tank disposal systems.

F. ABSORPTION TRENCHES

- 1. Soil is unsuitable for absorption trenches if percolation rate is less than 1" drop per hour.
- 2. Absorption areas required according to various percolation rates will be determined from Table 1.
- 3. Subsurface absorption trenches will be of a minimum depth of 18" with width of 24" or more. Distributing tile will be laid on six inches of gravel or crushed stone and covered to a depth of 3". Distributing tile will consist of 4" agricultural tile of 12" lengths laid with 1/8" open joints covered halfway round the top of the pipe with asphalt impregnated building paper, weighing not less than 45 pounds per one hundred square feet. The surrounding backfill of gravel will be covered with earth. Vitrified clay sewer pipe or perforated tile may be substituted for agricultural tile.
- 4. Where more than 60' of trench is required, additional trenches will be laid from a common junction or distribution box constructed in accordance with the recommendations of the Tennessee Department of Public Health.

5. Trenches will be laid out along the contours of the land so as to provide a slope of not to exceed 6" per 100', nor less than 2" per 100'.
6. Where more than one line of trench is required, trenches shall be laid out so as to be not less than 6" center to center.
7. In computing absorption areas of trenches, the bottom area covered with gravel or rock backfill shall govern.
8. Media for the disposal fields should consist of crushed rock, gravel or slag, varying in size from 3/4 to 2-1/2 inches. The material should be free from dust, sand, clay or excessive fines. At least 95 per cent of the material should pass a 2-1/2 inch screen and not more than 3 per cent should pass a 3/4 inch screen. The distribution tile should be supported by not less than 6 inches of the media and the total depth of the media should be at least 12 inches. After all of the media has been placed in the trenches, the media should be covered with untarred building paper to prevent dirt from mixing with the media during initial settling of the soil overburden.
9. No part of any absorption system will be located within 10' of any building or property line, nor less than 50' from any watercourse in which water flows at any period of the year.
10. Except as otherwise specifically provided in this Code, the recommendations of the Tennessee Department of Public Health shall be followed, as included in its two pamphlets, "Recommended Construction of Septic Tanks and Disposal Fields for Residential Uses" (1958), and "Recommended Construction of Large Septic Tank Disposal Systems for Schools, Factories and Institutions" (1958), or any revision or reissue thereof.

SECTION 2. From and after the passage hereof, no building permit shall be issued for the construction of any new structure, or for the addition to or remodelling of any existing structure, unless it shall be made to appear to the satisfaction of the City Building Inspector that same will comply with all provisions of the Sanitary Code.

SECTION 3. No certificate of occupancy based upon a permit issued after the passage hereof shall be issued, nor shall any new structure, or addition to or remodelling of any existing structure be occupied, until it shall appear to the satisfaction of the City Building Inspector

that the construction and installation of an adequate septic tank and disposal field for same has been completed in accordance with the requirements of the Sanitary Code.

SECTION 4. The Board of Zoning Appeals shall hear and determine cases wherein persons adversely affected by a decision or ruling of the City Building Inspector as to the application of the provisions of the Sanitary Code shall request such hearing, in writing. Any such appeal shall be heard after at least five (5) days written notice to all adjoining property owners, and in compliance with such other reasonable rules and regulations governing such hearings as shall be adopted by the said Board of Zoning Appeals. After such hearing the said Board may, by resolution, waive or vary the application of the Sanitary Code so as to avoid injustices, or unnecessary hardship in individual cases.

SECTION 5. The Municipal Planning Commission shall not consider any proposed plan of subdivision for approval unless and until each proposed lot, or building site, in such proposed subdivision shall have been tested for percolation qualities and rate, and a suitable area shall have been found to exist on such lot or site for the location of an adequate disposal field, in accordance with the provisions of the Sanitary Code. The Municipal Planning Commission is directed to adopt such reasonable rules and regulations as may be required to give effect to this provision of this ordinance.

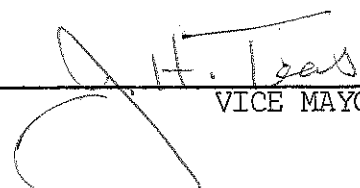
SECTION 6. The provisions of Section, of Ordinance No. 55-4, insofar as such provisions restricted the discharge of liquid effluent from a sewage system to 1,000 gallons per day on any lot within the City of Belle Meade, are hereby amended so as to permit a discharge of effluent in excess thereof when permitted by the Sanitary Code.

SECTION 7. Any other provision of ordinances heretofore adopted in conflict herewith are hereby repealed, it being the purpose and intent of this ordinance to supersede and repeal all ordinances or parts thereof in conflict herewith.

SECTION 8. Any person, firm or corporation who violates, disobeys, omits, neglects or refuses to comply with, or resists the enforcement of any of the provisions of this ordinance shall be fined not less than \$5.00 nor more than \$50.00 for such offense; each day of such violation, or failure to comply after notification thereof, shall constitute a separate offense.

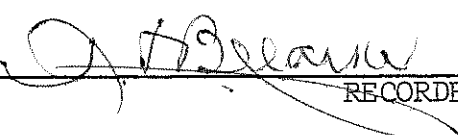


MAYOR



VICE MAYOR

COMMISSIONER



RECORDER

Passed on First Reading
November 15, 1958.

Passed on Second Reading
November 22, 1958.

Passed on Third Reading
and Adopted
December 8, 1958.