street sewer or to the structural features or the arrangement of a building or structure, to obtain a slope of  $\frac{1}{4}$  inch per foot (20.8 mm/m), such pipe or piping 4 inches (100 mm) through 6 inches (150 mm) shall be permitted to have a slope of not less than  $\frac{1}{5}$  inch per foot (10.4 mm/m) and such piping 8 inches (200 mm) and larger shall be permitted to have a slope of not less than  $\frac{1}{6}$  inch per foot (5.2 mm/m).

**718.2 Support.** Building sewer piping shall be laid on a firm bed throughout its entire length, and such piping laid in made or filled-in ground shall be laid on a bed of approved materials and shall be properly supported as required by the Authority Having Jurisdiction.

**718.3 Protection from Damage.** No building sewer or other drainage piping or part thereof, which is constructed of materials other than those approved for use under or within a building, shall be installed wlder or within 2 feet (6l 0 mm) of a building or structure, or part thereof, nor less than 1 foot (305 mm) below the surface of the ground. The provisions of this subsection include structures such as porches and steps, whether covered or uncovered; breezeways; roofed porte cochere; roofed patios; carports; covered walks; covered driveways; and similar structures or appurtenances.

## 719.0 Cleanouts.

**719.1 Locations.** Cleanouts shall be placed inside the building near the connection between the building drain and the building sewer or installed outside the building at the lower end of the building drain and extended to grade.

Additional building sewer cleanouts shall be installed at intervals not to exceed 100 feet (30 480 mm) in straight runs and for each aggregate horizontal change in direction exceeding 135 degrees (2.36 rad).

**719.2 No Additional Cleanouts.** Where a building sewer or a branch thereof does not exceed 10 feet (3048 mm) in length and is a straight-line projection from a building drain that is provided with a cleanout, no cleanout will be required at its point of connection to the building drain.

**719.3 Building Sewer Cleanouts.** Required building sewer cleanouts shall be extended to grade and shall be in accordance with the appropriate sections of cleanouts, Section 707.0, for sizing, construction, and materials. Where building sewers are located under buildings, the cleanout requirements of Section 707.0 shall apply.

**719.4 Cleaning.** Each cleanout shall be installed so that it opens to allow cleaning in the direction of flow of the soil or waste or at right angles thereto and, except in the case of wye branch and end-of-line cleanouts, shall be installed vertically above the flow line of the pipe.

**719.5 Access.** Cleanouts installed under concrete or asphalt paving shall be made accessible by yard boxes or by extending flush with paving with approved materials and shall be adequately protected.

**719.6 Manholes.** Approved manholes shall be permitted to be installed in lieu of cleanouts, where first approved by the Authority Having Jurisdiction. The maximum distance between manholes shall not exceed 300 feet (91 440 mm).

The inlet and outlet connections shall be made by the use of a flexible compression joint not less than 12 inches (305 mm) and not exceeding 3 feet (914 mm) from the manhole. No flexible compression joints shall be embedded in the manhole base.

## 720.0 Sewer and Water Pipes.

**720.1 General.** Building sewers or drainage piping of clay or materials that are not approved for use within a building shall not be run or laid in the same trench as the water pipes unless the following requirements are met:

- (1) The bottom of the water pipe, at points, shall be not less than 12 inches (305 mm) above the top of the sewer or drain line.
- (2) The water pipe shall be placed on a solid shelf excavated at one side of the common trench with a clear horizontal distance of not less than 12 inches (305 mm) from the sewer or drain line.
- (3) Water pipes crossing sewer or drainage piping constructed of clay or materials that are not approved for use within a building shall be laid not less than 12 inches (305 mm) above the sewer or drain pipe.

For the purpose of this section, "within a building" shall mean within the fixed limits of the building foundation.

## 721.0 Location.

**721.1 Building Sewer.** Except as provided in Section 721.2, no building sewer shall be located in a lot other than the lot that is the site of the building or structure served by such sewer nor shall a building sewer be located at a point having less than the minimum distances referenced in Table 721.1.

TABLE 721.1 MINIMUM HORIZONTAL DISTANCE REQUIRED (FROM BUILDING SEWER (feet))

Buildings or structures <sup>1</sup>	2
Property line adjoining private property	Clear2
Water supply wells	50 <sup>3</sup>
Streams	50
On-site domestic water service line	14
Public water main	105, <sup>6</sup>
For SI units: I foot= 304.8 mm	
Notes:	
1 Including porches and steps, whether covered or u roofed porte-cochere; roofed patios; carports; cc driveways; and similar structures or appurtenance:	overed walks; covered
<sup>2</sup> See also Section 312.3	
<sup>3</sup> Drainage piping shall clear domestic water supply	wells by not less than
50 feet (15 240 mm). This distance shall be permitted	ted to be reduced to not
less than 25 feet (7620 mm) where the drainage p	iping is constructed of
materials approved for use within a building.	

<sup>4</sup> See Section 720.0.

For parallel construction.

<sup>6</sup> For crossings, approval by the Health Department or the Authority Having Jurisdiction shall be required.