#### Article IX — Utilities

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# **Article IX — Utilities**

## § 22-901 Water Supply and Distribution Systems.

- (a) Connection to Public System. The developer shall connect to the public municipal water supply and provide a distribution system to service the proposed subdivision or land development tract.
- **(b) Standards and Specifications.** Water supply and distribution systems shall be installed in accordance with the design standards and specifications of the Borough of Alburtis Water Authority.
- **(c) Curb Stops and Boxes.** Curb stops and boxes shall be installed on all laterals and in accordance with Chapter 32 (relating to Plumbing).
- (d) Fire Hydrants. Fire hydrants shall be three-way of the compression type having a five and one-quarter inch (5.25") main valve opening, six inch (6.0") mechanical joint inlet connection, two (2) two and one-half inch (2.5") hose nozzles, one (1) four and one-half inch (4.5")

pumper nozzle, all opening to the left, and seven and one-half (7 1/2) threads per inch, National Standard.

#### § 22-902 Sanitary Sewage Disposal.

- (a) Connection to Public System. The developer of any subdivision or land development shall connect to the public municipal sewer system in accordance with the requirements of the Borough of Alburtis Sewer Authority.
- **(b) Specifications.** Sanitary sewers shall be installed in accordance with the Borough of Alburtis Sewer Authority specifications.

### § 22-903 Storm Drainage System.

- (a) In General. Storm drainage systems shall be provided in order to:
- (1) Permit unimpeded flow of natural watercourses, except as may be modified by stormwater detention pond requirements in subsection (d).
  - (2) Ensure adequate drainage of all low points along the line of streets.
- (3) Intercept stormwater runoff along streets at intervals related to the extent and grade of the area drained.
- (4) Take surface water from the bottom of vertical grades, lead water from springs, and avoid excessive use of cross-gutters at street intersections and elsewhere.
- **(b) Drainage Plan.** A site drainage plan for the proposed subdivision or land development tract shall be prepared.
- (c) Calculation of Storm Runoff. Storm runoff shall be calculated by the rational method as described in Manual No. 37 of the American Society of Civil Engineers, using storm design frequency of ten (10) to fifty (50) years as determined by the Planning Commission. Complete detailed calculations shall be submitted to the Borough Engineer.
- (d) Permanent Ponds and Detention Ponds. Where permanent ponds are used as part of the site development or detention ponds or recreation areas are included as part of the stormwater and drainage plans, they shall be designed using specifications of the United States Soil Conservation Service Engineering Field Manual or other specifications acceptable to the Borough Engineer.
- (e) Inlets and Catch Basins. Inlets or catch basins shall be placed at points of abrupt changes in the horizontal or vertical directions of storm sewers, at points where the flow in gutters exceeds three (3) inches and at a maximum distance of six hundred (600) feet apart. In streets, inlets shall normally be located along the curbline and at or beyond the curb radius points. For the purpose of inlet locations at corners, the depth of flow shall he considered for each gutter. At intersections, the depth of flow across through streets shall not exceed one (1) inch. Pennsylvania Department of Transportation two by four foot (2' x 4') and two by six foot (2' x 6') spacial inlets or equivalents should be used and can be considered to have capacities of

four and zero-tenths (4.0) cubic feet per second and six and zero-tenths (6.0) cubic feet per second, respectively. Inlets shall be depressed two (2) inches below the grade of the gutter or ground surface. Manholes may be substituted for inlets at locations where inlets are not required to handle surface runoff.

- **(f) Headwalls.** Headwalls shall be used where storm runoff enters the storm sewer horizontally from a natural or man-made channel. The capacity of such storm sewers shall be calculated for both steady flow and culvert design. The lower values of the two shall be used to determine the capacity of the storm sewer.
- **(g) Open Channels.** Open channels shall be designed to handle, without overflowing, the calculated runoff from a storm of ten-year frequency, or as specified by the Planning Commission.

#### (h) Materials and Construction Requirements.

- (1) In General. Materials and construction requirements shall be as specified by the Borough and shall conform to Pennsylvania Department of Transportation specifications where applicable.
- (2) Storm Sewers. Storm sewers shall have a minimum diameter of fifteen (15) inches and shall be made of reinforced concrete or corrugated metal. Sewers shall be installed on sufficient slopes to provide a minimum velocity of three (3) feet per second when flowing full.

### § 22-904 Underground Utility Installation.

All electric utility distribution lines shall be installed underground in subdivisions or land developments of five (5) or more dwelling units. In addition, the following design standards shall be observed:

- (a) Whenever practicable, telephone and cable television utilities shall also be installed underground.
- **(b)** Whenever practicable, trenches through utility easements may be occupied jointly by electric, water, sewer, and communication utilities.
- **(c)** A plan for providing utility service to the proposed subdivision or land development shall be prepared by the developer in cooperation with the appropriate public utility companies and governmental agencies.
- (d) Unless sufficient reasons are provided by the developer, all utility lines serving commercial and industrial developments shall be installed underground.

### § 22-905 Utility Easements.

(a) In General. Utility easements shall be provided for wires, conduits, storm and sanitary sewers, gas, water, and heat mains and/or other utility lines intended to service the abutting

lots. No structures shall be placed within such easements. Local utility companies shall be consulted by the developer when locating utility easements.

- **(b)** Location. Utility easements shall be located either:
- (1) Abutting the street right-of-way, in which case a minimum easement width of ten (10) feet shall be required; or
- (2) Along rear or side lot lines, in which case a minimum easement width of twenty (20) feet, ten (10) feet on each side of the lot line, shall be provided. Where the lot line coincides with the subdivision or land development boundary, a minimum easement width of ten (10) feet is required.