

Chapter 17.24

UTILITIES

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ARTICLE I. WATER SYSTEM

17.24.010 **Mains -- Standards.** Water mains shall be PVC or ductile iron pipe, manufactured in accordance with the applicable standards of the APWA/WSDOT Standard Specifications for Road, Bridge and Municipal Construction and the current amendments thereto. Pipe shall be Class 150 where normal working pressures are one hundred P.S.I. or less. Class 200 will be required where working pressures range between one hundred and one hundred seventy-five P.S.I. (Ord. 698, 2000; Ord. 398 S1 (part), 1981.)

17.24.020 **Mains -- Grid construction.** Where a grid can be installed, water mains shall be constructed to form a grid. New developments shall be required to close one end of the grid, so as to avoid dead ends wherever possible. (Ord. 398 S1 (part), 1981.)

- 17.24.030** **Mains -- Specifications.** The minimum size water main permitted shall be eight-inch diameter where an adequate grid shall be defined as a piping system that measures no more than six hundred feet on one side and the sum of two sides shall not exceed nine hundred feet. Necessary fire flows as recommended by the Washington Survey and Rating Bureau shall be considered and piping shall be provided to satisfy those requirements. Hydraulic calculations shall be submitted where required to substantiate designs by involving two or more pressure zones, a booster pump, or a reservoir as required by the engineer. Where a grid is not established, pipe size shall be eight-inch diameter or larger as required to transport daily peak demand plus fire flow. (Ord. 698, 2000; Ord. 398 S1 (part), 1981.)
- 17.24.040** **Fittings.** All fittings used shall be short bodied ductile iron, Class D, complying with applicable APWA Specifications. (Ord. 698, 2000; Ord. 398 S1 (part), 1981.)
- 17.24.050** **Fire hydrants.** Fire hydrants shall conform with the city standards and shall be approved by the City Engineer. Installation shall be in conformance with the APWA specifications except isolation valves shall be on the tee. Isolation valves shall be six-inch diameter gate valve, hub by flange end. (Ord. 698, 2000; Ord. 398 S1 (part), 1981.)
- 17.24.060** **Valves - Twelve inches or larger.** All valves twelve inches diameter and larger shall be butterfly valves, hub end. Butterfly valves shall meet APWA specifications. (Ord. 398 S1 (part), 1981; Ord. 698, 2000).
- 17.24.070** **Valves - Less than twelve inches.** Valves smaller than twelve inch diameter shall be gate valves in conformance to APWA specifications. Valve boxes shall be in conformance with APWA specifications. (Ord. 698, 2000; Ord. 398 S1 (part),1981.)
- 17.24.080** **Valves -- Location.** Valve locations shall meet the engineer's approval and be sufficient to isolate any section (block) of piping. (Ord. 398 S1 (part), 1981.)
- 17.24.090** **Installation and testing.** Installation and testing shall be -in conformance with APWA specifications, Division IV. The city will take necessary samples for bacteriological tests. The system shall not be placed into service until the city provides written permission. (Ord. 398 S1 (part),1981.)

ARTICLE II. SEWER SYSTEM

- 17.24.100** **Sanitary sewers.** Sanitary sewers shall be concrete, asbestos-cement ductile iron pipe, or PVC pipe, all conforming to APWA specifications.

Installation, flushing, and testing shall meet the requirements of the APWA/WSDOT Standard Specifications for Road, Bridge and Municipal Construction. (Ord. 698, 2000; Ord. 398 S1 (part), 1981.)

17.24.110 **Manholes.** Manholes shall meet WSDOT Standard Plan B-23a for a Type 1 manhole. Manhole rings and covers shall be to city standards. (Ord 698, 2000; Ord. 398 S1 (part), 1981.)

17.24.120 **Placement into service.** The system shall not be placed into service until the city provides written notice. (Ord. 398 S1 (part), 1981.)

17.24.130 **Complete system--Required.** Complete sewer system design will be required even if septic tank disposal systems have been approved. (Ord. 398 S1 (part), 1981.)

ARTICLE III. STREET LIGHTS AND TRANSMISSION LINES

17.24.140 **Installation requirements--Exceptions.** Street lights shall be installed by the developer to the approval of Benton City and the Benton County P.U.D. or R.E.A. Street lights will be required at all street intersections, the end of cul-de-sacs, and with a maximum pole spacing of 300 feet. In every subdivision approved after the effective date of the Ordinance in this Chapter, any new electrical, telephone and cable T.V. lines within the areas to be subdivided shall be placed underground except for the following:

- A. Electrical utility substations, pad mounted transformers and switching facilities, and electric service pedestals.
- B. Electrical transmission systems of a voltage of fifty-five kilovolt or more.
- C. CATV pedestals, active and passive devices, including amplifiers and cable warning signs.
- D. Telephone pedestals, cross-connect terminals, repeaters, and cable warning signs.
- E. Street lighting standards.
- F. Traffic control devices.
- G. Temporary services for construction.
- H. Existing overhead electrical and communication lines which are not in substantial conflict with the final approved design of the plats such that the existing overhead line or a portion thereof would render lots and/or street unusable, as determined by the city after review with the appropriate utility company. Where existing main feeder lines are to be relocated, lines need not be placed underground, in accordance with this title. (Ord. 756, March 2003; Ord. 398 S1 (part), 1981.)