

CITY OF BELLEVUE, WASHINGTON

ORDINANCE NO. 1877

AN ORDINANCE relating to the installation of fire hydrants and mains supplying water for fire protection, adding new sections to the Bellevue City Code, together to be designated as Chapter 6.08 of the Bellevue City Code.

THE CITY COUNCIL OF THE CITY OF BELLEVUE, WASHINGTON, DOES ORDAIN AS FOLLOWS:

Section 1. There are hereby added to Title 6 of the Bellevue City Code new sections, together to be designated as Chapter 6.08, and to provide as follows:

6.08.010 Title. This chapter shall be known and may be cited as the "Bellevue fire hydrant ordinance."

6.08.020 Definitions. For the purposes of this chapter, the following words, terms, phrases, and their derivations shall have the meaning given herein, unless the context otherwise indicates. When not inconsistent with the context, words used in the present tense include the future, words in the plural number include the singular number, and words in the singular number include the plural number. The word "shall" is always mandatory.

A. "Approving authority" is the director of the Bellevue Department of Emergency and Safety Services, or his appointee.

B. "Fire Department" is the Bellevue Fire Control Division of the Department of Emergency and Safety Services.

C. "Water authority" is the Bellevue Department of Utilities, or any other municipal or quasi-municipal entity distributing water to fire hydrants within the City of Bellevue.

D. "A.W.W.A." is the American Water Works Association.

E. "U.L." is Underwriters' Laboratories, Inc.

F. "U.B.C." is the Uniform Building Code as adopted, including amendments, by the City of Bellevue.

G. "Public hydrant" is a fire hydrant situated and maintained to provide water for fire fighting purposes without restriction as to use for that purpose. The location is such that it is accessible for immediate use of the fire authority at all times.

H. "Private hydrant" is a fire hydrant situated and maintained to provide water for fire fighting purposes with restrictions as to use. The location may be such that it is not readily accessible for immediate use by the fire authority for other than certain private property.

I. "Flush type hydrant" is a hydrant installed entirely below grade.

J. "Fire flow" is the measure of the sustained flow of available water for fire fighting at a specific building or within a specific area at 10 pounds per square inch residual pressure.

K. "Fire Marshal" is the City of Bellevue Fire Marshal or his appointee.

L. "Municipality or quasi-municipality" is any county, city, town, water district, sewer district, public utility district, or other governmental subdivision or agency of the State of Washington.

6.08.030 Fire hydrants required. All buildings constructed within the City of Bellevue shall be served by fire hydrants installed in accordance with the requirements of this chapter. In addition, presently existing fire hydrants which do not conform with the requirements and standards of this ordinance when replaced, shall be replaced with hydrants which do conform to the standards and requirements of this chapter. All fire hydrants shall be served by a municipal or quasi-municipal water system, or as otherwise approved by the Fire Marshal. All hydrants shall be subject to testing, inspection and approval by the Fire Control Division.

6.08.040 Prohibited installation. The installation of flush type hydrants is prohibited unless approved by the Fire Marshal.

6.08.050 Buildings open to the public. Public buildings, buildings available for public use, or buildings open to the public by invitation or otherwise, including, but not limited to, schools, and buildings classified under the U.B.C. within occupancy groups A, B, C, or D shall conform to the requirements and standards contained in this chapter for buildings or structures in commercial, industrial, and apartment use district zones.

6.08.060 Installation requirements. The installation of all fire hydrants shall be in accordance with sound engineering practices. In addition, the following requirements shall apply to all building construction projects:

1. Two copies of detailed plans or drawings, accurately indicating the location of all valves and fire hydrants to be installed shall be submitted to the Fire Marshal prior to the commencement of any construction.

2. All fire hydrants must be approved by the appropriate water authority prior to installation.

3. All construction of the fire hydrant installation and its attendant water system connection shall conform to the design standards and specifications promulgated by the appropriate water authority.

4. Fire hydrant installations shall be adequately protected against vehicular damage, in accordance with standards and specifications promulgated by the appropriate water authority.

5. An auxiliary gate valve shall be installed at the main line tee to permit the repair and replacement of the hydrant without disruption of water service.

6. All hydrants shall stand plumb, be set to the finished grade with the lowest outlet of the hydrant no less than 18 inches above the grade and have no less than 36 inches in diameter of clear area about the hydrant for the clearance of hydrant wrenches on both outlets and on the control valve.

7. The pumper port shall face the street. Where the street cannot be clearly defined or recognized, the port shall face the most likely route of approach and location of the fire truck while pumping, all as determined by the Fire Marshal.

8. The lead from the service main to the hydrant shall be no less than six inches in diameter. Any hydrant leads over 50 feet in length from water main in hydrant shall be no less than eight inches in diameter.

9. All hydrants newly installed in single family residential areas shall be supplied by not less than eight-inch mains and shall be capable of delivering 1,000 g.p.m. fire flow over and above average maximum demands at the farthest point of the installation. Hydrant leads up to 50 feet long may be six inches in diameter.

10. All hydrants shall have at least five-inch minimum valve opening, "O" ring stem seal, two 2 1/2 inch national standard thread hose nozzles, one four inch steamer nozzle with City of Seattle standard threads, and six inch mechanical joint shoe connection. In addition, all hydrants shall meet A.W.W.A. standards for public hydrants.

11. All pipe shall meet relevant A.W.W.A. standards.

12. The maximum distance between fire hydrants in single family use district zones shall be 700 feet.

13. The maximum distance between fire hydrants in commercial, industrial, and apartment (including duplex) use district zones shall be 400 feet.

14. Lateral spacing of fire hydrants shall be approved by the Fire Marshal, and predicated on hydrants being located at street intersections.

15. The appropriate water authority and the Fire Department shall be notified in writing of the date the fire hydrant installation and its attendant water connection system will be available for use.

16. The Fire Marshal shall be notified when all newly installed hydrants or mains are placed in service.

6.08.070 Special requirements. The requirements of this section apply to all building construction projects in which buildings are located or are to be located such that any portion is more than 200 feet in vehicular travel from a street property line, except detached single family dwellings:

A. Buildings having required fire flows of less than 2,500 g.p.m., may have fire hydrants on one side of the building only.

B. When the required fire flow is over 2,500 g.p.m., the fire hydrants shall be served by a main which loops around the building or complex of buildings and reconnects back into a distribution supply main.

C. The number of fire hydrants shall be determined on an average spacing of 330 feet computed on an imaginary line parallel to and not less than 50 feet from the structure. All hydrants are to be accessible to Fire Department pumpers over roads capable of supporting such fire apparatus. The Fire Marshal shall determine the location of the hydrants based upon a determination of utility, topography and building location. Hydrants shall be a minimum of 50 feet away from the building or structure; minor deviations may be granted by Fire Department approval of written requests.

6.08.080 Hydrant accessibility. Hydrants shall not be obstructed by any structure or vegetation, or have the hydrant visibility impaired

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within a distance of 150 feet in any direction of vehicular approach to the hydrant.

6.08.090 Dead end mains prohibited. Provisions shall be made wherever appropriate in any project for looping all dead end or temporarily dead end mains. A minimum 10-foot easement shall be required. Construction plans must be approved by the appropriate water authority prior to the commencement of construction.

6.08.100 The fire flow requirement applied by the Fire Marshal under the provisions of this chapter shall be based upon criteria established in the "Guide for Determination of Required Fire Flow" as published by the Insurance Services Office of the Municipal Survey Service, 160 Water Street, New York, New York 10038. The "Guide for Determination of Required Fire Flow," and the standards of the American Water Works Association, all as amended, added to, or excepted herein are adopted by the City of Bellevue. A copy of each such adopted collection of standards, rules, or criteria, in the form in which it was adopted and suitably marked to indicate amendments, additions, deletions and exceptions as provided herein, shall be authenticated and filed by the City Clerk in the records of her office, suitably referenced and indexed to the ordinance codified herein. Three copies of each such collection, in the form in which it was adopted and suitably marked to indicate amendments, additions, deletions and exceptions as provided herein, shall be filed in the City Clerk's office and be available for use and examination by the public.

6.08.110 Issuance of building permits. No building permit shall be issued until plans required under this chapter have been submitted and approved in accordance with the provisions contained in this chapter. No building shall be occupied until hydrants and mains are placed in service.

6.08.120 If any provision, section, or subsection of this chapter or its application to any person or circumstance is held invalid, the remainder of the provision, section, or subsection of this chapter and the remainder of this chapter, or the application thereof to other persons or circumstances is not affected.

6.08.130 Penalty. A violation of any section or provision of this chapter is a misdemeanor punishable by a fine of not more than \$250 for each offense. Each day upon which a violation occurs or continues constitutes a separate offense.

Section 2. This ordinance shall take effect and be in force five days after its passage, approval and legal publication.

PASSED by the City Council this 12 day of December, 1972, and signed in authentication of its passage this 12 day of December, 1972.

(SEAL)

Approved as to form:

Joyce M. Thomas
City Attorney

Published: December 21, 1972

[Signature]
Mayor

Attest:
[Signature]
City Clerk