

Fire Hydrant and Fire Protection Distribution Systems

Sec. 6-98. - Fire protection.

- (a) *General provisions.* The fire marshal will review all plans and specifications of all proposed developments and will ensure adequate fire protection is provided.

If, in the opinion of the fire marshal, adequate fire protection requires additional fire hydrants and water lines to serve proposed developments, he will direct the owner of the property, in writing, to locate at pre-designated positions on the property a fire hydrant or hydrants and adequate water lines to provide adequate fire protection at the owner's own expense. The location and number of fire hydrants and water lines shall be situated as to afford adequate fire protection to all buildings located or proposed to be located on the property. Such installation to be completed in such reasonable period of time as the fire marshal may direct.

- (b) *Fire hydrant specifications and coverage requirements.*

(1) *Commercial or industrial areas.*

- a. Fire hydrants shall be located as per appendix C of the currently adopted International Fire Code.
- b. Fire hydrants located on the opposite side of a street, designated as four-lane or larger on the current city thoroughfare plan, shall not be considered acceptable for meeting hydrant coverage requirements.
- c. Fire hydrants shall be positioned to allow trucklays to follow normal traffic flow patterns to the site either by street or fire lane.

(2) *Residential areas.*

- a. Fire hydrants shall be located as per appendix B and C of the currently adopted International Fire Code.
- b. Fire hydrants located on the opposite side of a street, designated as four-lane or larger on the current City Thoroughfare Plan, shall not be considered acceptable for meeting hydrant coverage requirements.
- c. Fire hydrants shall be positioned to allow trucklays to follow normal traffic access to the site.

- (c) *Fire hydrant specifications.* All fire hydrants must meet required city standard fire hydrant specifications.

- (1) All fire hydrants shall have one 4.5-inch pumper nozzle and two 2.5-inch hose nozzles with the city's standard threads; shall have a main barrel valve opening of not less than 5.25 inches; and shall be placed on mains of not

less than six inches in diameter. Six-inch gate valves shall be placed on all fire hydrant leads. All fire hydrants shall have a valve at the main with flange to flange fittings.

- (2) All fire hydrants shall be of a "break-away" design in accordance with city standard fire hydrant specifications.
- (3) Each hydrant shall have a minimum of two primer coats. The final coat of paint on the body of all publically owned and maintained hydrants shall be a silver color of approved aluminum paint. For privately owned and maintained hydrants, the final coat of paint shall be reflective white.

(d) *Fire protection distribution systems.* Water distribution systems shall be of sufficient size to provide adequate water for fire protection to the development and shall conform to the city's water distribution system master plan. Maintenance of private water lines and fire hydrants is the responsibility of the property owner.

(1) *Residential areas.*

- a. *Sizes and allowable dead end lengths.* In residential areas the minimum water line size shall be eight inches. Dead end lines over 600 feet in length will not be allowed. Dead end lines shall terminate at a fire hydrant which shall be installed for maintenance purposes and may not necessarily be considered for fire hydrant density as required. Flush hydrants may be installed in lieu of hydrants at terminating points of dead end lines for maintenance purposes only.
- b. *Valves.* Additional isolation valves may be required to be installed depending upon the configuration of the system as determined by the city.
- c. *Construction standards.* All water line construction shall conform to construction standards located elsewhere in this [chapter].

(2) *Commercial areas.*

- a. *Sizes and allowable dead end lengths.* In commercial areas the minimum water line size shall be eight inches. Dead end lines over 300 feet and up to 600 feet in length shall be 12 inches minimum. Dead end lines over 600 feet in length will not be allowed. Dead end lines shall terminate at a fire hydrant which shall be installed for maintenance purposes and may not necessarily be considered for fire hydrant density as required. Flush hydrants may be installed in lieu of

hydrants at terminating points of dead end lines for maintenance purposes only.

- b. *Water line requirements for fire protection.* The owner developer shall choose from a six option menu to provide either a public or private water line distribution system for fire protection. The menu is located at the end of this section.

Perpendicular crossings of underground public water lines may be allowed under driveways and sidewalks to provide protection/domestic service to the site. All crossings shall meet construction standards applicable with all provisions of this [chapter].

- c. *Valves.* Additional isolation valves may be required to be installed depending upon the configuration of the system as determined by the city.
- d. *Construction standards.* All water line construction shall conform to construction standards located elsewhere in this [chapter].

(Ord. No. 2936-05-2003, § 1, 5-19-03; Ord. No. 3779-06-2010, § 3, 6-7-10)