

Title 9 - WATER, SANITARY SEWERS AND STORM SEWERS

Chapter 9.02 WATER UTILITY\*

and tree growth from around the hydrant for a distance of not less than ten (10) feet. The purpose of this part is to maintain a clear visual area around the hydrant.

- S. Fire Hydrant Use. No water for purposes other than firefighting shall be taken from any city fire hydrant without first obtaining permission from the city water department. Applications for temporary use shall be made to the city clerk in writing. This application to be approved by the water superintendent. The charges of subsection T of this section shall apply at the time the permit is issued.
- T. Sale of Water from Fire Hydrants. The sale of water from fire hydrants shall be through a hydrant meter or by other accurate means of measurement acceptable to the water superintendent. A deposit must be collected before permission will be granted to remove water from any fire hydrant. The amount of the deposit, along with a rental fee, and a price per hundred cubic feet, will be fixed from time to time by resolution of the city council. The sale of water, hydrant deposit and hydrant rental charge to the state, county, or other governmental bodies shall be at the discretion of the water superintendent.
- U. Water lines for fire sprinklers shall be individually tapped and metered. The connection will include a water meter equaling the size of the supply line and shall comply with minimum backflow requirements.

All fire departments and fire districts shall be excluded from the above charges.

(Ord. 1071 § 1 Exh. A (part), 2008; Ord. 903 § 1, 1999; Ord. 343 (part), 1982)

**9.02.040 Water service specifications.**

- A. Responsibility for Costs. Responsibility for costs of bringing water service to applicants whether inside city or outside (rural) of the corporate limits of the city of Duvall.
  - 1. Costs for Labor and Material. All labor and material costs incurred in connecting to the Duvall water system and the water line required to convey water from the city water main to the property of the applicant/applicants, shall be borne by the property owner/owners making application for water. Upon completion of the work, the applicant/applicants shall file with the city clerk the final statement of costs, and copies of receipts for payments made on the installation of the water system, and upon verification of same, and with the signing of a water agreement (recovery contracts, Section 9.02.020(B)(2)). The ownership of the system shall be accepted by the city council on behalf of the city, subject to the terms of said water agreement, after a period of ninety (90) days has elapsed from the completion of the work and subject to there being no liens upon the installation. All water lines shall be put in, in accordance with the city specifications and inspection procedures set forth in this chapter.
  - 2. Pressure-Reducing Valve. A pressure-reducing valve (herein referred to as a PRV) shall be required on the customer's side of the meter on all new construction, with a water hookup, inside or outside the city limits of Duvall. The size of the PRV will be determined by the water superintendent according to meter size.
- B. Water System Specifications. Water systems specifications for the water systems inside and outside the city of Duvall.
  - 1. Property Owner Responsibility. In the event the installation of a water line shall be made by, or under the direction of, property owner/owners, the owner/owners shall be responsible for all maintenance and repairs for a period of one year from the date of the initial meter installation. No hookup shall be made unless water lines meet with city specifications and have been inspected as provided for in this chapter. The city specifications shall consist of, and conform to, the special provisions and detail specifications of A.W.W.A. standard specifications, as

Title 9 - WATER, SANITARY SEWERS AND STORM SEWERS

Chapter 9.02 WATER UTILITY\*

supplemented by the city of Duvall Developer Extension Manual, prepared by the development review committee.

2. Size of Mains. All distribution mains shall be eight inches, or larger, as required by the comprehensive plan, or by "Washington Survey and Rating Bureau" standards, and there shall be a fire hydrant installation as described elsewhere.
  3. Plan Check. Plans shall be checked by the water superintendent and/or the city engineer. They shall determine whether the plan is adequate and conforms to the overall water system of the city water system. The tract or area to be served shall be inspected by the water superintendent.
  4. Corrections. Any corrections, or additions, deemed necessary by the water superintendent and/or the city engineer, will be indicated on the proposed plan, and one copy returned to the applicant/applicants for correction of the original and resubmission with the application. The amount of any recovery contract payment and city connection charges due will also be indicated on the print returned.
  5. Approval. If no corrections were required to the plans submitted, and the applicant/applicants agree to the charges indicated by the water superintendent and/or the city engineer, the application will then be submitted to the development review committee for approval.
  6. Registered Engineer Required. The design and construction of the water main/mains, which are to be connected to the city water system, shall be supervised by a registered professional engineer of the state of Washington. Details and methods of construction shall conform to the Duvall standard specifications. Responsibility for providing line and grade, and taking measurements for as-built drawings rest with the owner/owner's engineer.
  7. Testing. Upon completion of construction, the mains and appurtenances shall be inspected by the water superintendent, shall be tested in accordance with Duvall standard specifications, and be sampled for satisfactory disinfection. The cost of this sampling shall be at the owner/owner's expense.
  8. As-Built Drawings. As-built drawings of the completed installation of the water main/mains to be connected to the city water system shall be submitted to the water superintendent and/or the city engineer, and be approved by him/them, before the city council of Duvall shall consider accepting the said water main/mains. These as-built drawings shall be drawn, subject to approval of the city engineer as to quality. They shall be drawn to a scale not larger than one inch equals fifty (50) feet, nor smaller than one inch equals one hundred (100) feet. They must show the location of all mains, valves, hydrants and fittings, giving sizes and types of each. The distance from main/mains to property lines must also be given.
  9. Conveyance to City. Upon completion of the water main/mains to be connected to the city water system, title to said main/mains, shall be conveyed to the city, together with an affidavit that there were no unsatisfied liens, or unpaid bills of any kind, for any of the materials used in construction, or installation, of said water main/mains. An affidavit must be submitted to the city from the contractor and his engineer stating that all labor used by them in connection with the installation of said water main/mains has been paid, and that they themselves have been paid in full in accordance to the contract.
  10. Acceptance. When all the stipulations and requirements, as set forth in this section, have been fulfilled, the city engineer, and/or water superintendent and the councilmember for the water of the city council of Duvall, shall recommend to said council that the title for said main/mains, along with all franchises, permits, easements and affidavits be accepted, and that individual applications for water service from the above mentioned main/mains be considered.
- C. Water Systems, Cross-Connections and Back Flow Prevention.

Title 9 - WATER, SANITARY SEWERS AND STORM SEWERS

Chapter 9.02 WATER UTILITY\*

1. Interpretation and Intent. The regulations set out in this section are to be reasonably interpreted. It is their intent to recognize the varying degrees of hazard and to apply the principal that the degree of protection should be commensurate with the degree of hazard.
2. Conformance to Rules and Regulations. Any customer, regardless of whether residing within or without the city limits, who is now receiving water from the city system or who will in the future receive water from the city, shall comply with the rules and regulations contained in this section.
3. Organization and Conformance. Any water district, municipal organization, or other organization, which is connected to the city water supply and/or which is furnished to people or members within said district or organization, shall cause all the people or members within said district or organization as well as the district or organization itself, to comply with the rules and regulations contained in this section.
4. Definitions. As used in this section, unless the context states otherwise, the following definitions shall apply:
  - a. "Air gap separation" means the unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet supplying water to a tank, plumbing fixture, or other device, and the flood level rim of the receptacle, and shall be at least double the diameter of the supply pipe measured vertically above the flood level rim of the vessel. In no case shall the gap be less than one inch.
  - b. "Auxiliary supply" means any water source or system, other than the public water supply, that may be available in the building or premises.
  - c. "Back flow" means the flow, other than the intended direction of flow, of any foreign liquids, gases, or substances, into the distribution system of a public water supply.
  - d. "Back flow prevention device" means a device to counteract back flow pressures or prevent back siphonage.
  - e. "Back pressure" means back flow caused by a pump, elevated tank, boiler, or other means that could create pressure within the system greater than the supply pressure.
  - f. "Back siphonage" means a form of back flow due to a negative or subatmospheric pressure within a water system.
  - g. "Cross-connection" means any physical arrangement whereby a public water supply is connected, directly or indirectly, with any other water supply system, sewer, drain, conduit, pool, storage reservoir, plumbing fixture or other device which contains, or may contain, contaminated water, sewage, or other waste or liquid of unknown or unsafe quality which may be capable of imparting contamination to the public water supply as a result of back flow, bypass arrangements, jumper connections, removable sections, swivel or change over devices, and other temporary, or permanent, devices through which, or because of which, back flow could occur.
  - h. "Customer" means any person, family, business, corporation, partnership or firm connected to the city water supply.
  - i. "Double check valve assembly" means an assembly composed of two single, independently acting check valves, including tightly closing shutoff valves located at each end of the assembly and suitable connections for testing the water tightness of each check valve.
  - j. "Reduced pressure principal back flow prevention device" means a device incorporating two or more check valves and an automatically operating differential relief valve, located between the two checks, two shutoff valves, and equipped with necessary appurtenances for testing. The device shall operate to maintain the pressure in the zone between the two

Title 9 - WATER, SANITARY SEWERS AND STORM SEWERS

Chapter 9.02 WATER UTILITY\*

check valves, less than the pressure on the public water supply side of the device. At the cessation of normal flow, the pressure between the check valves shall be less than the supply pressure. In the case of leakage of either check valve, the differential relief valve shall operate to maintain this reduced pressure by discharging to the atmosphere. When the inlet pressure is two pounds per square inch or less, the relief valve shall open to the atmosphere, thereby providing an air gap in the device.

5. Cross-Connection Prohibited—Exceptions. Except as provided in this subsection, all cross-connections, as defined in subsection (C)(4)(g) of this section, whether or not such cross-connections are controlled by automatic devices such as check valves or by hand-operated mechanisms such as a gate valve or stopcocks, are prohibited.
6. Cross-Connection—Failure to Discontinue. Failure on the part of persons, firms, or corporations to discontinue the use of any and all cross-connections will be sufficient cause for the discontinuance of the public water service to the premises on which the cross-connection exists.
7. Cross-Connection—Removal. The water superintendent shall, in cooperation with the health officer or the local plumbing inspector, make periodic inspections of the premises served by the public water supply to check for the presence of cross-connections. Any cross-connection found in such inspection shall be ordered removed by the responsible agency or authority. If an immediate hazard to health is caused by the cross-connection, water service to the premises shall be discontinued until it is verified that the cross-connection has been removed.
8. Back Flow Prevention Device—Installation. Back flow prevention devices shall be installed at the service connection or within any premises wherein the judgment of the water superintendent, the nature and extent of the activities, or the materials used in connection with the activities on the premises, or materials stored on the premises, would present an immediate and dangerous hazard to health should a cross-connection occur, even though such cross-connection does not exist at the time the back flow device is required to be installed. This shall include, but not be limited to, the following situations:
  - a. Premises having an auxiliary water supply, unless the quality of the auxiliary supply is in compliance with the rules and regulations of the state;
  - b. Premises having internal cross-connections that are not correctable, or intricate plumbing arrangements which make it impractical to ascertain whether or not a cross-connection exists;
  - c. Premises where entry is restricted so that inspections for cross-connections cannot be made with sufficient frequency, or at sufficiently short notice, to assure that cross-connections do not exist;
  - d. Premises having a repeated history of cross-connections being established, or reestablished;
  - e. Premises on which any substance is handled under pressure so as to permit entry into the public water supply, or where a cross-connection could reasonably be expected to occur. This shall include the handling of process waters and cooling waters;
  - f. Premises where material of a toxic or hazardous nature are handled such that if back siphonage should occur, a serious health hazard may result;
  - g. The following types of facilities will fall into one of the above categories where a back flow prevention device shall be installed at these facilities as set forth in this section, unless the water superintendent determines no hazard exists:
    - i. Hospitals, mortuaries, clinics,
    - ii. Piers and docks,

Title 9 - WATER, SANITARY SEWERS AND STORM SEWERS

Chapter 9.02 WATER UTILITY\*

- iii. Laboratories,
  - iv. Sewage treatment plants,
  - v. Food and beverage processing plants,
  - vi. Chemical plants using a water process,
  - vii. Petroleum processing or storage plants,
  - viii. Radioactive material processing plants or nuclear reactors,
  - ix. Others specified by the secretary of the department of social and health services.
9. Back Flow Prevention Device—Degree of Hazard. The type of protective device required shall depend on the degree of hazard which exists, as follows:
- a. An air gap separation or a reduced pressure principle back flow prevention device shall be installed, where the water supply may be contaminated with sewage, industrial waste of a toxic nature or other contaminant which would cause a health or system hazard.
  - b. In the case of a substance which may be objectionable but not hazardous to the health, a double check valve assembly, air gap separation, or a reduced pressure principle back flow prevention shall be installed.
10. Back Flow Prevention Device—Location. Back flow prevention devices required in this section shall be installed at the property line of the premises or at the meter, where meters are used, or at a location designated by the secretary of social and health services, or by the water superintendent.
11. Back Flow Prevention Device—Installation. Back flow prevention devices required in this section shall be installed under the supervision of, and with the approval of the city.
12. Protective Device—Approval Required. Any protective device required in this section shall be a model approved by the secretary of the department of social and health services. A double check valve assembly or a reduced pressure principle back flow prevention device will be approved if it has successfully passed performance tests of the University of Southern California engineering center or other testing laboratories satisfactory to the secretary of the department of social and health services.
13. Back Flow Prevention Device—Inspection, Tests. Back flow prevention devices installed under this section shall be inspected and tested annually, or more often where successive inspections indicate failure. The devices shall be repaired, overhauled, or replaced whenever they are found to be defective. Inspection, tests, repairs and records thereof shall be done under the city's supervision.
14. Failure to Comply—Termination. Failure of any customer, or any district, or any organization to cooperate in the installation, maintenance, testing of back flow prevention devices, or the requirements of an air gap separation, shall be grounds for the termination of the water service at a point where such flow, which is to be terminated by the city, would best prevent possible contamination of the public water supply.
- D. Variances.
- 1. No variance from the minimum requirements outlined in this section shall be granted by the development review committee until the following have been complied with:
    - a. Application for Variance. The owner/owners, requesting a variance shall make written application to the development review committee setting forth the name/names of the owner/owners of the properties in a plat of the properties, and a dimensioned sketch showing the proposed installation. The application shall state the reasons for requesting

Title 9 - WATER, SANITARY SEWERS AND STORM SEWERS

Chapter 9.02 WATER UTILITY\*

the variance and the agreement of the applicants to pay all costs and expenses incurred by the city in processing the application.

- b. Filing Fee. The application for a variance shall be accompanied by a fee, which shall not be refundable, but which shall be applied to the costs and expenses of the city in processing the application. The amount of this fee will be fixed from time to time by resolution of the city council.
- c. Factors to be Considered. In considering the application for variance, including temporary lines, the development review committee shall consider the following factors:
  - i. Whether or not the variance would have an adverse effect upon the accomplishment of the comprehensive water plan;
  - ii. Whether or not the proposed variance is consistent with the comprehensive water plan;
  - iii. Whether or not there would be adverse effects upon the adjoining or neighboring properties;
  - iv. Any benefits to the city generally resulting from the proposed variance;
  - v. Whether or not the applicant/applicants will be deprived of a use of his property/properties enjoyed by other property owners similarly situated;
  - vi. The minimum standards for public water systems, as published by the division of social and health services, department of health of the state of Washington shall be met.
- d. The city may require as a condition of granting the variance:
  - i. The applicant/applicants must agree to replace the temporary line or substandard improvement with facilities meeting city standards within two years or less without the right of reimbursement.
  - ii. A bond or other adequate security shall be required in the amount of two times the current estimated cost, said bond running to the city and the adjoining property owners.
  - iii. If an intermediate property owner desires to install a permanent line, the temporary line shall be replaced and the properties benefited by the temporary line shall pay one-half of the cost of the permanent line installation and a lien shall be filed in favor of the city and adjoining property owners to insure payment prior to water hookup.
- e. Informing City Council. Before any variance may be granted, the development review committee must inform the city councilmember in charge of water, and the mayor, of the pending application for variance.

(Ord. 1071 § 1 Exh. A (part), 2008)

**9.02.050 Water services outside the city limits.**

A. Intent to Annex.

- 1. No water service shall be provided to any property contiguous with the city limits of the city of Duvall until the property is annexed to the city. In the case of any owner of property not contiguous with the city limits of the city of Duvall, who desires to connect to the city water system, the owner will sign a statement of intention to annex to the city and shall agree in said statement to petition for and consent to such annexation immediately upon any request by the