



WATER DISTRIBUTION SYSTEM DEVELOPMENT STANDARDS

When adding to or extending the City's water distribution system, the following policies will apply. These are minimum standards, however, and larger mains or other additions may be required where deemed necessary by the Director of Public Works. These policies are taken from the "Bellingham Development Guidelines and Improvement Standards".

RESIDENTIAL ZONES

The minimum size water main shall be 6" in diameter with an average gridded spacing not to exceed 600'. An 8" diameter water main shall be used where an average grid of 600' is not possible; however, the maximum ungridded length may not exceed 1,500'. Four-inch diameter pipes may be allowed at the discretion of the Department when future extension is not anticipated, such as a cul-de-sac, and the line does not serve a fire hydrant.

COMMERCIAL / INDUSTRIAL AND INSTITUTIONAL ZONES

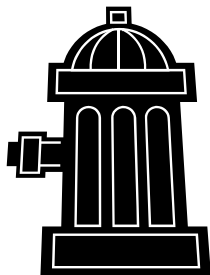
The minimum size water main shall be 8" in diameter with an average gridded spacing not to exceed 600'. A 10" diameter water main shall be used when the system is not gridded. The maximum ungridded length and size of the water main may be determined by site conditions and requirements for fire flow.

SUPPLY WATER MAINS

Where required, the minimum size supply main shall be 12" in diameter and shall be spaced on approximately 3,000' centers. The actual size of the supply main shall be determined by its ability to deliver water based on the peak daily demand plus designated fire flow.

VALVE SPACING

Gate valves shall be placed on each main at a junction point (node). Gate valves should be spaced along water main at intervals not to exceed 500' for pipe sizes 10" diameter and above, and not to exceed 800' for pipe sizes less than 10" diameter.



FIRE HYDRANT SPACING

Fire hydrants shall be spaced as follows:

- A. One and two-family unit developments: No greater than 500' intervals along public streets or approved fire routes.
- B. All other developments: No greater than 300' intervals along public streets or approved fire access routes.

FIRE FLOW RATES

All water main construction and reconstruction shall be done pursuant to a design that, when fully implemented, will provide the fire flow requirement of the Bellingham Fire Department's fire protection standards.

In any circumstance, when improvements which increase the fire flow requirement are made, the water system must be upgraded to support the changes.



FIRE MAINS AND HYDRANTS LOCATED ON PRIVATE PROPERTY

All fire hydrants and water mains serving hydrants will be publicly owned and maintained. A minimum 20-foot maintenance easement shall be granted to the City and recorded for any public water main on private property. Construction must meet City standards.

Water mains on private property serving building sprinkler systems will be privately owned and maintained as long as the main serves only one property and no hydrants are required. In this case, the following requirements apply:

1. An approved backflow device must be installed.
2. No domestic or other water service is allowed on a fire main.
3. No requirement for construction standards is imposed by Public Works. Contact the Fire Department for these standards.
4. No maintenance easement is necessary.
5. The water main is to be pressure tested by the Fire Department according to Fire Department standards.
6. The water main is to have two consecutive bacteriological samples taken 24 hours apart.
7. Connection of the main to the City's water system will be by City crews after the system has passed all bacteriological tests.