

3.6.7 FIRE FLOW REQUIREMENTS. Under maximum day demand conditions, fire flow shall be at least seven hundred fifty (750) gallons per minute at any one hydrant with a total fire flow of at least one thousand five hundred (1,500) gpm at any combination of two hydrants in the area, and/or must meet the requirements of the Federal Insurance Service Office. The total system design shall be such that fire flows and normal peak instantaneous flow demand (as called out within this sub-section) can be met while still maintaining a minimum pressure of twenty (20) psi at all points in the distribution system.

A maximum water velotown of ten (10) feet per second shall be utilized when designing for fire flows and/or other emergency conditions.

High density residential, commercial or industrial areas shall require special investigation to determine fire flow requirements and hydrant spacing per the Uniform Fire Code (UFC).

Existing and future static pressure and flow information used in the design shall be approved by the Town.

3.6.7.5 STORAGE TANKS. All water storage tanks built by or for the Big Plains Water District must be constructed of concrete and comply with Utah Division of Drinking Water Standards (R309-545). All water tanks will be designed by the Big Plains Water District based upon the required Town of Apple Valley and Big Plains Water Special Service District needs at the time of design.

3.6.8 MISCELLANEOUS WATER SYSTEM DESIGN CRITERIA.

3.6.8.1 All public water mains shall be installed in a public rights-of-way, dedicated roadway, or designated drainage way, with adequate access for maintenance vehicles. Pipelines will not be installed on back lot or side lot lines due to potential flood and other damage.

3.6.8.2 Dead-end mains shall be avoided wherever possible and if installed, shall not exceed six hundred feet. Hydrants shall be located at the end of dead-end mains and cul-de-sac mains for flushing purposes as well as for fire protection. Blow-off valves rather than fire hydrants are not desirable except where warranted by special circumstances as determined by the Town. Blow-off valves shall be installed per the standard drawings.

3.6.8.3 Each building or lot shall be served by a separate line and meter except in PUD's as approved by the Water Department. In some situations a common tap and service line from the main to a manifold with two meter setters and boxes may be installed to serve two adjacent properties. All lots shall have a minimum of three quarter (3/4) inch service line from the main to the meter box. Multiple housing of two units, or more, shall have a minimum of one (1) inch service. When there are more than two multiple housing units the service line shall be sized accordingly.