Amendments to Standards and Specifications Section 6 – Water Distribution

- Section 6.01 Ductile iron pipe (DIP CL-350) shall be used for water mains six (6) inches twelve (12) inches and larger in diameter. C900 PVC pipe shall be used for 4-, 6-, and 8-inch water mains. SDR 13.5 PVC pipe shall be used for 2-inch water mains.
- Section 6.02.c All backflow prevention devices must be installed above ground. In certain circumstances involving commercial, industrial, or institutional uses, backflow prevention devices may be inordinately large, making it more desirable to place them in-ground.
- Section 6.02.h.1 Each dwelling unit, whether attached or detached, shall be metered. The only exception to this metering requirement shall be in the case of apartment buildings institutional uses where metering of individual dwelling units may be impractical.

<u>Each tenant within a multi-tenant commercial establishment shall also be metered separately.</u>

 Section 6.02.h.2 – Multiple meters on branched services are acceptable for multi-family projects, providing they conform with the following table:

Size Of Individual Service (Meter)	Size Of Feeder Service	No. Of Branches
3/4" **	3/4"	2 <u>1</u>
3/4"	1"	3 <u>2</u>
3/4"	1 1/4"	4
3/4"	1 1/2"	5-10

Section 6.02.k - <u>Irrigation systems shall be metered separately</u>.
 (Effective July 1, 2009)

- Section 6.03.a General Requirements Water Distribution Mains
 All water mains to be installed within the jurisdictional limits of the Town of
 Boiling Springs shall be either PVC Pipe or Ductile Iron Pipe.
- Section 6.03.b All PVC pipe shall meet the requirements of AWWA C900. Pipe shall be Class 150, SDR 18, integral bell, iron pipe O.D., 20-ft. length, with an elastomeric gasketed compression joint. All pipe used for water mains shall be blue in color. PVC pipe shall be as furnished by Jones-Manville, Clow, Robin-Tech, or equal as may be approved by the DPW. Tracer wire shall be used on water mains.
- Section 6.03.I.1 General Requirements Direct taps without saddles may be permitted to ductile iron pipe in accordance with the following table:

Main Size (DIP)	Maximum Size Of Direct Tap — DIP
8" and larger	2"
6"	1 1/2"
4"	3/4"

All water service tubing shall be copper 200 psi rolled pipe.

- Section 6.03.I.5 Meter setters for a ¾" service shall be copper, 7.5" high with lockable angle meter stop and angle duel check valve. Meter setters for a 1" service shall be copper, 12" high with lockable angle meter stop and angle duel check valve.
- Section 6.07- Taps shall be installed at an angle of 45 degrees to the vertical axis of the water main. Direct taps shall only be made in accordance with the provisions of Section 6.03(k) (1) hereof.
- Section 6.08 Water meter installations shall conform to Details 6.03 through 6.05 for meter sizes through 4-inch. (Note: The details referenced in the Standards require a concrete vault. Staff would like to have discretion to change the detail to include an option of a high-strength polybox. The concrete vault is necessary if there is a chance of vehicle traffic overrunning the box; otherwise the polybox is adequate at a much lower cost.)

Proposed Amendments to Standards and Specifications Section 7 – Sanitary Sewers and Section 8 – Force Mains

- Section 7.02.c.1 PVC sewer pipe for gravity flow installations shall be manufactured in accordance with all requirements of ASTM Standard D-2241 for SDR-21, "Type PSM Polyvinyl Chloride Sewer Pipe and Fittings." <u>All pipe used for gravity sewer shall be white in color.</u>
- Section 8.06.a All pump stations shall have an automatic standby power generation system conforming to these specifications. The system shall consist of a natural gas- (if available) or propane (with a buried tank) diesel—(with a tent tank) fueled standby generator in a weatherproof enclosure complete with all equipment and accessories required to automatically supply power to the pump station during a utility power failure.
- Section 8.06.b Engine shall be propane fueled, 4-cycle. Engine shall be 1800 rpm, unless the TOWN waives this requirement.

Engine shall be liquid cooled and shall have a radiator, coolant pump, thermostat and fan. Air-cooled engines may be approved by the Town for installation of less than 10 kW.

Fuel system shall be for gaseous propane.

- Section 8.07.a Force mains <u>above 8-inch</u> shall be constructed of ductile iron pipe as specified herein. PVC pipe may be utilized on force mains <u>up to 3 8-inches</u> and smaller.
- Section 8.07.c All pipe used for sewer force mains shall be green in color.