CASTLETON FIRE DISTRICT NO. 1
CASTLETON, VERMONT

CONSTRUCTION STANDARDS

GENERAL

These General Construction Standards are to be used as a basic standard for persons planning to work in the District water distribution system. It is not intended by Castleton Fire District No. 1 (DISTRICT) that these Standards be a complete set of specifications. All materials listed shall be acceptable to the DISTRICT and any materials not listed will require acceptance by the DISTRICT before installation. Failure to receive acceptance of materials prior to their incorporation into the system shall leave the person having the work done liable to replace of those substandard materials with acceptable materials at his/her cost.

The applicant(s) proposing extensions or alterations to the existing water system shall be responsible for complying with all applicable rules, regulations, and ordinances (local, state and federal). Applicants shall submit all necessary documentation, including but not limited to, plans, details and drawings, specifications, and permits and shall have obtained all acceptances and paid all applicable fees.

Water mains and their related appurtenances shall be eligible for acceptance as part of the DISTRICT's water system when the following criteria have been complied with:

- The installation and materials have been accepted by the DISTRICT.
- The installation has passed the necessary hydrostatic pressure and leakage tests in accordance with the latest revisions of AWWA C-600.
- The installation has been disinfected in accordance with the latest revision of AWWA C-651 and has been certified by the Vermont Department of Health or other DISTRICT-accepted testing facility to be free of bacteriological contamination.
- No new main shall be placed in service until it has met the above requirements.
- The installation must be within an existing Town highway Right-of-Way or within a proposed highway Right-of-Way that is deeded to the Town.
- The DISTRICT has been furnished two (2) sets of Record Drawings. All Record Drawings shall be 24" x 36" in size and drawn to a 1" = 50" or less scale. All Record Drawings shall be provided to the DISTRICT on a CD in PDF and AutoCAD format.
- After a minimum of three (3) years from the date that the new installation was placed in service, it may be deeded to the DISTRICT and become a part of its distribution system and by such acceptance, the DISTRICT shall be responsible for the maintenance of it. However, it should be clearly understood that prior to acceptance into the distribution system, full responsibility for the maintenance and repair of the new main and its related appurtenances shall rest with the Owner.

1.0 MATERIALS

1.1 Ductile Iron Pipe

Pipe shall conform to current AWWA/ANSI – C151/A21.51 Standards. Push-on joint pipe shall be thickness Class 52.

Push-on joint accessories shall conform to applicable requirements of AWWA/ANSI – C111/A21.11.

Pipe shall be cement mortar lined on the inside in accordance with AWWA/ANSI – C104/A21.4 Standard except that the cement lining thickness shall not be less than 3/16". A plus tolerance of 1/8" will be permitted.

Pipe shall be given an exterior bituminous coating of coal tar or asphalt base in accordance with Specification ANSI A21.51.

All ductile iron pipe shall be polyethylene encased in accordance with ANSI A21.5 American National Standard for Polyethylene Encasement for Ductile-Iron Pipe Systems.

1.2 Fittings

Ductile iron fittings shall conform to AWWA/ANSI C104/A21.4, Class 350 working pressure.

Bolts and nuts shall conform to AWWA/ANSI – C111/A21.11 and shall be Type 18-8 stainless steel.

1.3 Anchor Tees and Anchor Couplings

Anchor tees shall be a standard mechanical joint tee except that the branch is plain end with an integral retaining ring and split gland. Tee will be Class 350 ductile iron, cement lined, conforming to AWWA Standards C110 (latest version), C111 (latest version), and C104 (latest version).

1.4 Gate Valves

Buried gate valves shall be mechanical joint, 200 psi, non-rising stem, iron-body, resilient-seated gate valve conforming to AWWA C509. Valve body shall be coated inside and out, with fusion-bonded epoxy in conformance with AWWA C550. Wedge shall be constructed of ductile-iron fully encapsulated in synthetic rubber.

Buried valves shall be inside-screw, mechanical-joint end valves with 2-inch by 2-inch operating nuts.

Valves shall have O-ring stuffing boxes.

Operating nuts shall be turned counterclockwise to open.

The design and machining of the valves shall be such as to permit packing under pressure.

Each valve shall have maker's name, pressure rating and year in which manufactured cast on the body. Prior to shipment from the factory, each valve shall be tested by hydrostatic pressure equal to twice the specified working pressure.

Valves shall have retainer glands.

1.5 Tapping Valves and Tapping Sleeves

Tapping valves shall conform to AWWA C-509 Standard for Gate Valves, 3" through 48" for water and other liquids, except as modified herein. Valve body and bonnet shall be fusion banded epoxy coated per AWWA C-550. Valves shall open counterclockwise and shall have a minimum working pressure of 150 psi. End connections shall be mechanical joint by tapping for bolting of the valve to the branch outlet.

Tapping sleeves shall be of the split sleeve design constructed with two solid half-sleeves bolted together. Sleeves shall be constructed of stainless steel and shall have a working pressure of 150 psi. with mechanical joint ends and side gasket seals.

All exterior nuts and bolts used with the tapping sleeve and valve shall be Type 18-8 stainless steel.

Buried tapping valves shall be provided with a 2" square wrench nut and shall be installed with a valve box as required in these specifications for buried valves.

Tapping valves and sleeves shall be Clow or accepted equal.

1.6 Valve Boxes

Cast-iron two (2) piece slide type; 5 ¼" shaft; 6' trench depth.

Cast-iron cover shall be marked "WATER" and shall indicate direction of opening.

1.7 Air Release Valves

Valves shall have stainless steel or bronze trim. A brass gate valve shall be provided in the connecting piping ahead of the valve. Valves shall be manufactured by APCO or accepted equal. Orifice shall be 3/16" and valve, isolating valve, and connection piping shall be 1" unless otherwise specified.

1.8 Pipeline Couplings

Pipeline couplings shall conform to AWWA Standards C110 (latest version) and ANSI A21.10 (latest version) and shall be installed in accordance with the manufacturer's recommendation and at locations directed by the Engineer.

All nuts and bolts used with pipeline couplings shall be Type 18-8 stainless steel.

1.9 Backflow Preventers

All new water service connections shall be constructed with backflow preventers at the Property Owner's expense. If the Property Owner of such new water service connection fails to install backflow preventers on their service within a time limit specified by the DISTRICT, service shall be discontinued.

"Backflow Preventer" shall mean a device or means designed to prevent backflow. Examples include:

Air Gap: 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 level rim of said vessel. An approved air-gap shall be at least double the diameter of the supply pipe, measured vertically above the top of the overflow rim of the vessel; and in no case less than one inch.

Reduced Pressure Principle Device (RPZ): An assembly of two independently acting approved check valves together with a hydraulically operating, mechanically independent pressure relief valve located between the check valves and at the same time below the first check valve. The unit shall include properly located test cocks and tightly closing shut-off valves at each end of the assembly. The assembly shall operate to maintain the pressure on the public water supply side of the device. At cessation of normal flow the pressure between the two check valves shall be less than the pressure on the public water supply side of the device.

In case of leakage of either of the check valves the differential relief valve shall operate to maintain the reduced pressure in the zone between the check valves 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. To be approved these devices must be readily accessible for in-line testing and maintenance and be installed in a location where no part of the device will be submerged.

Double Check Valve Assembly (DCV): An assembly of two independently operating approved check valves with tightly closing shut-off valves on each end of the check valves, plus properly located test cocks for the testing of each check valve. To be approved these devices must be readily accessible for in-line testing and maintenance.

Dual Check Valve Assembly (DC): Shall mean a non-testable device installed at residential homes and light commercial properties for backflow prevention. It shall be installed in-line and downstream of the water meter and contains no shut off valves. The check valve cartridge shall be removable without removing the body from the service line.

The following is a general list of the types of facilities, which are considered as possible cross connection hazards, and the backflow device assembly typically required for each. This list is for general reference only.

AG: Air Gap
RPZ: Reduced Pressure Zone Backflow Preventer (health hazard application)
DCV: Double Check Valve Assembly (non-health hazard application)
PVB: Pressure Vacuum Breaker

Type of Device To be Used	AG	RPZ	DCV	PVB
Medical Facilities:				
Hospitals	X	X		
Clinics	X	X		
Laboratories	X	X		
Veterinary Hospitals/Clinics	X	X		
Nursing and Convalescent Homes		X	X	
Physical Therapy Clinics		X	X	
Morgues		X	X	
Mortuaries	X	X		
Autopsy Facilities		X	X	
Embalmers	X	X		
Dental Offices	X	X		
Medical offices with radiographic, physical therapy, and/or lab facilities	X	X		
Treatment Plants:				
Sewerage	X	X		
Waste Water	X	X		
Industrial Waste		X	X	
Pumping Stations		X	X	
Commercial Manufacturing/Storage:				
Automotive Plants	X	X		
Aircraft/Missile Plants		X	X	
Beverage Bottling Plants		X	X	
Breweries/Distilleries	X	X		
Chemical Plants		X	X	
Car Wash Facilities	X	X		
Dairies and Cold Storage Plants		X	X	X
Dye Works	X	X		

Type of Device To be Used	AG	RPZ	DCV	PVB
Food Processing		X	X	
Irrigation Systems	X	X		X
Laundries	X	X	X	
Meat Packing Plants	X	X		
Metals Manufacturing Plants	X	X		
Paper/Paper Product Plants	X	X		
Petroleum or Gas Processing Plants		X	X	
Photographic Film Processing Plants	X	X		
Plating Plants	X	X		
Power Plants	X	X		
Radioactive Handling Plants	X	X		
Rubber Plants	X	X		
Sand, Gravel, Concrete, or Asphalt Plants		X	X	
Swimming Pools		X	X	X
Technical Schools, Colleges, Universities		X	X	X
Solar Energy/Heating Systems		X	X	
Temporary Services using Hydrants		X	X	X
Waterfront Facilities	X	X		
Where a Cross Connection is Maintained		X	X	
Buildings:				
With Sewerage Ejectors		X	X	
With Water Booster Pump and/or Storage Tank	X	X		
Supermarkets	X	X	X	
Restaurants	X	X	X	
Schools, Research Facilities, Any Building with Laboratories:		X	X	
Buildings with Fire Service		X	X	X
Warehouses used for Hazardous Material Storage		X	X	
Factories	X	X	X	
Shopping Malls		X	X	X
Multi Family	X	X	X	
Multi Story	X	X	X	
Miscellaneous Equipment and Facilities:				
Domestic Water Booster Pumps		X	X	
Food and Drug Processing		X	X	X
Hydraulic Equipment	X	X		
Sinks with Hose Threads	X	X		X
Submerged Inlets		X	X	
Valved Outlets or Fixtures with Hose Attachments	X	X	X	X
High and Low Pressure Boilers		X	X	

Type of Device To be Used	AG	RPZ	DCV	PVB
Reservoirs – Cooling Tower Re-circulating Systems		X	X	X
Premises Where Inspection is Prohibited		X	X	
Commercial Dishwashers		X	X	X
Soap Injector		X	X	
Steam Generating Plant		X	X	
Tank Truck – Lawn Care, Sweeper		X	X	X
Water Cooled Equipment		X	X	
Boilers			X	
Heat Exchangers with Added Chemicals			X	
Solar Heating Systems with Added Chemicals				X

Single Family Residential (up to 1 ¼" service) – Dual Check Valve Assembly (non-health hazard residential application)

Residential (>1 ¼" service) – Double Check Valve Assembly (DCV)

1.10 Fire Hydrants and Branch Connections

Fire hydrants shall be Mueller Model Super Centurion 250 3-Way; with the following specifications:

1. Shall meet ANSI/AWWA C502, UL 246, dry barrel type.
2. Valve: 5 inch.
3. Pipe connection: 6 inch mechanical joint with gaskets, retainer glands and joint restraints.
4. Direction of opening: Left or counter-clockwise.
5. Hose and Steamer Connection: (2) 2 ½ inch and (1) 4 ½ NST nozzles in accordance with municipal fire department requirements, 1 ½ inch pentagon operating nut.
6. Traffic feature with stainless steel safety stem coupling; true traffic type.
7. Field replaceable hose and pumper nozzles.
8. 250 psig maximum working pressure, 500 psig test pressure.
9. Hydrant Extensions: Mueller Extension Kit
10. Hydrants shall have a minimum length of 6 feet from the ground line to the bottom of the 6-inch mechanical joint ball connection. The centerline of the pumper connection shall be a minimum of 18 inches from the ground line.
11. The hydrant drain shall be constructed as follows:
    a. Hydrants set above any potential groundwater table shall include an automatic drain feature which includes the necessary drain ring, seat and valve mechanism to automatically allow drainage of the hydrant barrel when the hydrant valve is fully closed. The drain ports shall be automatically closed when the operating rod is turned no more than two full turns.

b. Hydrants set in a possible groundwater table or within ten feet of a potential source of contamination, like a sewer, shall not have a drain feature by furnishing a drain ring without drain holes or a special ring with threaded drain outlet which must be plugged. Hydrants without a drain may affect its acceptance by the DISTRICT.

12. Hydrant shall meet the ADA requirement of operating at less than 5-lb of force.
13. Hydrant shall be lockable.
14. All moving parts are to be serviceable from the surface without the need to excavate the hydrant.
15. Finish: Primer and two coats of enamel color in accordance with Fire District requirements. DISTRICT color coding of fire (and where applicable flushing) hydrants may be as follows:
    a. Top Colors (per NFPA 291: RECOMMENDED PRACTICE FOR FIRE FLOW TESTING AND MARKING OF HYDRANTS) for hydrant available flow at a local residual pressure of 20 psi:

i.	RED	≥ 1500 gpm	Very good flows
ii.	RED	1000 to 1499 gpm	Satisfactory for residential areas
iii.	RED	500 to 999 gpm	Marginally adequate flows
iv.	RED	< 500 gpm	Inadequate flows

    Hydrants rated at less than 20 psi shall have the rated pressure stenciled in black on the hydrant top.

    b. Outlet Cap Colors shall be as follows:

i.	RED	≥ 120 psi	Extremely high pressure
ii.	RED	50 to 120 psi	Standard pressure range
iii.	RED	< 50 psi	Poor. May require pumping

    c. Hydrant Markings may include the following:
        i. Orange arrow: Indicates direction of water flow on a hydrant located on a dead end main.
        ii. Orange arrow with vertical bar: Indicates direction (arrow) and last hydrant (bar) on a dead end main.
        iii. Orange “R” in a circle: Indicates that hydrant is located on a regulated pressure zone.
    d. Hydrant body colors may be as follows:

i.	RED	DISTRICT (public) SYSTEM hydrant
ii.	RED	Private hydrant connected to DISTRICT SYSTEM
iii.	RED	Special operation hydrant/usage only
iv.	RED	Non potable supply such as a dry hydrant

1.11 Services

Taps on ductile iron watermains shall be direct tapped. Taps on other mains shall require a bronze saddle and straps or a ductile iron nylon coated saddle with stainless steel single strap. All service brass shall be in accordance with AWWA Specification C-800.

All plumbing pipes, fixtures and fittings used to convey or dispense water for human consumption shall comply with the State of Vermont Act 193 requirements for maximum lead content.

Service lines ¾" to 2" shall be Type K copper tubing and larger than 2" shall be ductile iron pipe.

Corporation stops shall be manufactured by Mueller or accepted equal.

Curb stops shall be manufactured by Mueller or accepted equal.

Curb boxes and stops shall not be constructed beneath drives or sidewalks.

Curb boxes shall be Erie type with stainless steel pins and a stainless steel operating rod connected to the curb stop and the box consisting of an arch pattern base and an adjustable upper section. Curb boxes shall be Mueller H-10314 or accepted equal.

2.0 INSTALLATION

Push-on joint pipe shall be laid with bell ends facing upstream and in accordance with the manufacturer's instructions. A thin film of lubricant supplied by the pipe manufacturer shall be used to facilitate joint assembly.

Laying pipe and fittings shall be in accordance with the requirements of AWWA *Standard Specifications for Installation of Gray and Ductile Cast-Iron Water Mains and Appurtenances*, C600 and as provided herein.

Pipe shall be laid according to lines and grade shown on the drawings but in no case shall deviate from a straight line by more than the deflection recommended by the manufacturer for specific diameters and joint types.

For pressure piping, concrete thrust blocks shall be installed at all fittings and bends. Joints must be protected by polyethylene prior to placing concrete. Concrete shall be placed against undisturbed material and shall not cover joints, bolts, or nuts, or interfere with the removal of any joint. Excess concrete shall not be discarded in the trench.

At all times when pipe laying is not in progress or the trench is unattended, the open ends of pipe shall be closed by watertight plugs or other DISTRICT-accepted means. Service lines and curb stops shall not be installed within driveways.

All curb stops shall be installed within the Town Right-of-Way.

3.0 TESTING AND DISINFECTION

The pipeline, including hydrant laterals, shall be tested in accordance with AWWA Standard C600-93 (latest version) at the Contractor's expense.

Minimum test pressure shall be 150 psi, and will be monitored at the highest elevation in the lengths of pipeline being tested. The AWWA Standard for maximum allowable leakage is as follows:

$$L = \frac{SD\sqrt{P}}{148{,}000}$$

where: L = Leakage Allowed, gph.
S = Section of Pipe Length, ft.
D = Diameter Pipe, inches.
P = Average test pressure, psi.

Disinfection and testing of the pipeline shall be directed by the Design/Project Engineer at the Contractor's expense and in the presence of the DISTRICT. AWWA Standard C651 (latest version) shall be used as a basis for the disinfection process outlined as follows:

1. Complete flushing of the pipeline to wash out all dirt, debris, etc. which may have accumulated in the pipeline during construction.
2. Following flushing, the Contractor will add chlorine to the entire pipeline volume of water and let the mixture set for at least 24 hours.
3. After the 24-hour duration, the water in the pipeline shall be tested for residual free chlorine and must contain a minimum of 50 mg/l chlorine. If less than 50 mg/l is found, then the disinfection procedure shall be repeated until at least 50 mg/l chlorine residual is indicated by test.
4. Upon successful completion of step 3 above, the pipeline shall be flushed again until the chlorine concentration in the pipeline is no higher than that prevailing in the supply system.
5. Chlorinated water flushed from the pipeline shall be dechlorinated prior to being discharged to any surface water.
6. After this final flushing and before the pipeline is placed in service, two (2) consecutive sets of bacteriological samples shall be collected by the Design/Project Engineer in the presence of the Public Works Department. The two (2) samples shall be taken 24 hours apart from each other and delivered by the Design/Project Engineer to the Vermont Health Department, or other DISTRICT-accepted testing facility for analysis. At least one set of samples shall be collected from every 1,200 feet of new water main, plus one set from the end of the new water main and at least one set from each branch. All costs associated with sampling and testing shall be paid for by the Owner.

7. If the initial disinfection fails to produce samples which pass the Vermont Water Supply Division requirements for potable drinking water, then the process shall be repeated at the Contractor's expense until satisfactory results are obtained.
8. Upon satisfactory test results by the Vermont Health Department and with the DISTRICT's acceptance, the pipeline may be placed in service.

4.0 REQUIREMENTS FOR CONSTRUCTION OF WATER LINES AND APPURTENANCES

After all permits for construction are obtained and all construction approvals are obtained, construction may proceed.

It shall be the responsibility of the Property Owner to schedule a pre-construction meeting between the Property Owner or the Property Owner's agent, the contractor(s) and the DISTRICT'S representative at least fifteen (15) days prior to beginning any excavation relating to installation of any water lines or appurtenance(s). If the work is being paid for by the DISTRICT, it is understood that the Contract Agreement between CASTLETON FIRE DISTRICT No. 1 and the contractor, if applicable, is executed prior to the pre-construction meeting.

The purpose of this meeting, which shall be held at the site of the planned project with the approved Water Connection Permit on hand, is to review with the contractor(s) the DISTRICT requirements and to familiarize the contractor(s) with the site conditions, which may, in the opinion of the DISTRICT'S representative, bear review.

If there is a change in contractor(s) after the date of the pre-construction meeting, the Property Owner shall schedule another pre-construction meeting before commencing/continuing with construction.

During the pre-construction meeting, the DISTRICT'S representative shall keep a record of all the items discussed and/or required by the DISTRICT.

The Property Owner shall hereby attest that it recognizes the authority of CASTLETON FIRE DISTRICT No. 1's representative at the site. If the DISTRICT's representative determines that the work is not being performed in a manner consistent with the Construction Standards of the DISTRICT or in accordance with the standards or written specifications to which the Property Owner has agreed, the DISTRICT shall notify the Property Owner that their service connection will not be allowed until the problem has been resolved.

The Property Owner shall hereby attest that it shall not hold CASTLETON FIRE DISTRICT No. 1 individually or collectively or the DISTRICT's representative liable for work stoppages, construction impacts or any costs occasioned by such actions.

The Property Owner shall hereby attest that he/she shall not hold the DISTRICT liable for loss or damage that may directly or indirectly result from the performance of the permitted activity.

The Property Owner shall hereby attest that he/she agrees to pay all costs and expenses related to the permitted work including, but not limited to, street damage, damage to underground and aboveground utility lines, which result from the performance of the permitted activity.

Winter Shut-Down: The validity of the Water Connection Permit approval shall be superseded by the DISTRICT'S winter shut-down policy unless an exemption is granted by the PRUDENTIAL COMMITTEE.

The validity of the Water Connection Permit approval shall also be superseded by Town or State emergency policies unless an exemption is granted by said entities.

The applicant shall be responsible for scheduling the installation of SYSTEM appurtenances with CASTLETON FIRE DISTRICT No. 1 at least fifteen (15) days before beginning the permitted activities.

The applicant shall pay the entire cost of design and construction of all water lines, appurtenances, and extensions of the SYSTEM, regardless of whether such construction or extension is ultimately accepted by the DISTRICT after installation.

Construction of water lines and appurtenances shall be performed in accordance with all applicable DISTRICT permits, State of Vermont permits, municipal permits and all subsequent written changes or additions thereto which the DISTRICT and the permittee have agreed.

A. At a minimum, all construction piping shall be built to the Construction Standard specifications of the DISTRICT, and the most restrictive applicable specifications of the Town of Castleton, the Vermont Department of Environmental Conservation (Water Supply Rule and Wastewater System and Potable Water Supply Rule, current revisions), U.S. Environmental Protection Agency, and any other State or Federal agencies having jurisdiction of same.

The DISTRICT representative must visually inspect and, if satisfied, provide written approval of the water line and appurtenance construction, prior to said infrastructure being backfilled/covered.

Construction of water lines and appurtenances must be inspected, successfully pressure tested, successfully disinfected, successfully bacteriologically tested, thoroughly flushed, and certified in writing by a State of Vermont licensed Professional Engineer prior to being connected to the SYSTEM and accepted by the DISTRICT. New waterlines shall be constructed with necessary valving on either end so as to maintain a closed system, completely separate from the DISTRICT SYSTEM, until the above-mentioned requirements have been met.

The Customer shall not connect any plumbing fixtures that are currently connected to the DISTRICT water service, to a well, spring or other source of water. Connections to the DISTRICT SYSTEM shall be entirely separate from any other water service.

No Customer shall utilize any service pipe or interior plumbing as the building electrical ground, unless such grounding is in accordance with the Electrical Code.

Applicants who propose to install a sprinkler system shall apply to the PRUDENTIAL COMMITTEE on the forms prescribed by the PRUDENTIAL COMMITTEE – see Article 5 for the description of the water allocation and connections procedures. Installation of a sprinkler system in an existing building connected to the SYSTEM shall be considered a Change of Use in accordance with Section 5.17 of this ORDINANCE. The Property Owner shall be responsible to design the system in accordance with readily available parameters, such as residual SYSTEM pressure at estimated maximum flow rates, prior to presentation to the DISTRICT. Sprinkler systems may be approved contingent upon a certification from a sprinkler company working for the Property Owner indicating that the system meets applicable State codes and requirements.

CASTLETON FIRE DISTRICT No. 1 may decline to supply service, in whole or in part, to any sprinkler system if in the determination of the PRUDENTIAL COMMITTEE the system would place undue demands upon any portion of the DISTRICT's SYSTEM.

The applicant shall furnish the DISTRICT with a complete set of drawings which show the locations of the premises to be sprinklered and the location of all valves, pipes, hydrants, tanks, sprinkler heads and other appurtenances. These plans will remain as the property of CASTLETON FIRE DISTRICT No. 1. The applicant shall also furnish record drawings of any later revisions to piping or appurtenances when they are made.

All sprinkler systems shall be subject to periodic inspections by CASTLETON FIRE DISTRICT No. 1 for the purpose of determining water usage only. Periodic sprinkler inspections for sprinkler compliance purposes shall be the responsibility and at the cost of the Property Owner. The Property Owners of these systems will give DISTRICT representatives all reasonable assistance in making their water consumption inspection and shall give all required information about the system. Inspections will be made with as little inconvenience to the Property Owner as possible.

CASTLETON FIRE DISTRICT No. 1 may install public fire hydrants wherever and whenever it deems necessary.

The DISTRICT will consider written requests for the installation of public fire hydrants by Property Owners connected to the SYSTEM.

The DISTRICT will consider official requests from the Town of Castleton for the installation of public fire hydrants by the DISTRICT at the expense of the person/entity requesting the hydrant.

CASTLETON FIRE DISTRICT No. 1 may require any applicant for new or expanded service to install public fire hydrants in its project as a condition for receiving approval to connect to the SYSTEM. The number and location of the hydrants shall be determined by CASTLETON FIRE DISTRICT No. 1. The type, brand and model number of said hydrants shall be in accordance with the DISTRICT's Construction Standards. All hydrants erected as a portion of a waterline replacement or extension shall be inspected and approved by CASTLETON FIRE DISTRICT No. 1 before water service is restored or provided to the replaced or extended section of waterline.

All fire hydrants and their connections become the property of CASTLETON FIRE DISTRICT No. 1 once they have been inspected, approved and accepted, provided the water supply piping the hydrants are connected to also becomes part of CASTLETON FIRE DISTRICT No. 1 property. Fire hydrants which cannot be accepted by the DISTRICT shall be removed and remediated or replaced with a flushing hydrant. A flushing hydrant may or may not become the property of the DISTRICT and shall be color-coded in accordance with the DISTRICT's Construction Standards document.

No person or persons shall obstruct the access to any fire hydrant by placing or permitting snow, debris, or building materials, or other obstruction to remain on or about the hydrant.

All use of fire hydrants shall be under the direct supervision of the DISTRICT, the Fire Department, or other DISTRICT authorized personnel and shall be for bona fide purposes of fire protection and DISTRICT maintenance ONLY, unless written consent of the PRUDENTIAL COMMITTEE is obtained.

All hydrants found to be inoperative shall be flagged/bagged, in a manner acceptable to the DISTRICT, to indicate that condition. When hydrants are found to be inoperative the DISTRICT shall be notified in writing within twenty-four (24) hours.

DISTRICT color-coding of fire (and where applicable flushing) hydrants shall be in accordance with the DISTRICT's Construction Standards document.

Upon completion and approval of the installation of a new service line (including payment of all applicable charges by the applicant to CASTLETON FIRE DISTRICT No. 1 and legal transfer of rights-of-way where required):

A. The portion of the service line from the transmission main up to and including the curb stop shall be maintained by the DISTRICT. Under no circumstances shall the responsibility of the DISTRICT traverse private property over which they do not have rights of entry, maintenance and construction. Furthermore, the DISTRICT will be responsible for maintaining in good repair the water meter.

B. The portion of the service line from the curb stop to the building, or other point agreed upon by CASTLETON FIRE DISTRICT No. 1 and the applicant, shall be maintained by the Property Owner. This shall include the maintenance and cost of maintenance for repairing breaks and/or leaks in, or replacement of, the service line on the Customer's side of the curb stop, for repairing or replacing faulty household plumbing, and for repairing or replacing fixtures which, when not functioning properly, discourage or tend to discourage the inspection, removal or replacement of the water meter by authorized persons. Furthermore, the Property Owner shall be responsible for maintaining in good repair the pressure regulator and backflow preventer. The Property Owner shall be responsible for all costs of such maintenance whether the maintenance is undertaken at the Property Owner's discretion or upon the order of the PRUDENTIAL COMMITTEE.

All Customers are responsible for maintaining the area around their curb stop.

These CONSTRUCTION STANDARDS shall be in full force and effect from and after its passage, approval, recording and publication as provided by law.

Duly enacted and ordained by the PRUDENTIAL COMMITTEE of CASTLETON FIRE DISTRICT No. 1, Castleton, Vermont, Rutland County, State of Vermont, on the 10th day of July, 2014 at a duly called and duly held meeting of said PRUDENTIAL COMMITTEE.

PRUDENTIAL COMMITTEE OF
CASTLETON FIRE DISTRICT No. 1

I, the undersigned duly elected Clerk for CASTLETON FIRE DISTRICT No. 1, do acknowledge by my signature that this document is the Construction Standards as adopted by the PRUDENTIAL COMMITTEE on July 18, 2014.

Dated this 18th day of July, 2014.

Sara C. Grey
Clerk's Signature

SARA C. GREY
Clerk's Printed Name