

TOWN OF UXBRIDGE

DEPT. OF PUBLIC WORKS

MINIMUM STANDARDS FOR PUBLIC WATER SYSTEM CONSTRUCTION AND RELATED RULES AND REGULATIONS

Adopted 8/29/02

Revised 3/24/03

SECTION 1

GENERAL

1.1 SURVEYS AND PERMITS

The contractor shall furnish all boundary surveys and establish all base lines for locating the principal component parts of the work together with a suitable number of benchmarks adjacent to the work. The contractor shall develop and make all detail surveys needed for construction such as slope stakes, batter boards, stakes for pile locations and other working points, lines, elevations and cut sheets. Plans and profiles shall be 1"= 40' horizontal scale and profiles shall be 1"= 4' vertical scale.

The contractor shall provide three (3) copies of design plans and documents to the Department of Public Works for approval. No changes to approved plans will be permitted without prior written approval of the Department of Public Works. Following the completion of construction and prior to acceptance by the Town, the contractor shall furnish three (3) copies of as-built drawings to the Dept. of Public Works, which shall indicate any deviations from the original plans and specifications.

The contractor shall carefully preserve bench marks, reference points and stakes and, in case of willful or careless destruction, shall be charged with the resulting expense and shall be responsible for any mistakes that may be caused by their unnecessary loss or disturbance.

Permits and licenses necessary for the prosecution of the work shall be secured and paid for by the contractor. A connection/inspection fee shall be paid to the Town prior to the start of any work and a system development charge shall be paid to the Town prior to the water being turned on to the property (see Section 5 for a complete description of all assessments). Permits, licenses and easements for facilities shall be secured and paid for by the contractor, unless otherwise specified. The contractor shall give all notices and comply with all laws, ordinances, rules and regulations.

Any person proposing a new extension to an existing public water main shall notify the Department of Public Works at least thirty (30) days prior to any proposed work to allow for review of the application and design and to determine if adequate water volume and pressure is provided. Analysis of the design and determination of adequate volumes and pressures may be performed by a consultant to the Department of Public Works utilizing a hydraulic computer

model of the Uxbridge Water System. Costs associated with the consultant's hydraulic analysis will be the responsibility of the contractor. Notification to the Department of Public Works shall include the filing of an application for a permit for the extension of the public water main or water service connection or any other work in relation thereto. Separate permits shall be required for water main extensions and for each individual water service connection. Permit applications shall be obtained from the Department of Public Works. System Development charges shall also be submitted with the application.

Permits shall not be transferable. A change in ownership of a parcel of land to be serviced, or a change in the contractor, shall require a new permit.

Installation of water mains or services in the public way shall be prohibited between the dates of November 15th and March 15th unless extenuating circumstances exist and written approval is granted by the Department of Public Works.

1.2 PROTECTION OF WORK, PROPERTY AND PERSONS

The contractor will be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the work. The contractor will provide all necessary protection to prevent damage, injury or loss to all employees on the work and other persons who may be affected thereby, to all the work and to all materials or equipment to be incorporated therein, and other property at the site or adjacent thereto.

Damaged or defective materials shall be removed from the work and from the job site. The contractor shall replace any damaged material with new material consistent with requirements and approvals.

Contractors or customers shall notify the Department of Public Works at least three (3) days prior to any repair work on water service lines on private property unless in case of an emergency.

No permit shall be issued until the applicant provides a valid Dig Safe number to the Department of Public Works.

The contractor will comply with all applicable laws, ordinances, rules, regulations and orders of any public body having jurisdiction. The contractor will erect and maintain, as required by the conditions and progress of the work, all necessary safeguards for safety and protection. The contractor will notify owners of adjacent utilities when prosecution of the work may affect them. The contractor will remedy all damage, injury or loss to any property caused, directly or indirectly, in whole or in part, by the contractor, any subcontractor or anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable. Contractors shall supply all needed repair items and will be responsible for their cost.

1.3 SUPERVISION BY CONTRACTOR

The contractor will supervise and direct the work. The contractor will be solely responsible for the means, methods, techniques, sequences and procedures of construction. The contractor will employ and maintain on the work site a qualified supervisor or superintendent who shall have been designated in writing by the contractor as the contractor's representative at the site. The supervisor shall have full authority to act on behalf of the contractor and all communications given to the supervisor shall be as binding as if given to the contractor. The supervisor shall be present on the site at all times as required to perform adequate supervision and coordination of the work.

The contractor shall provide the Town with a list of emergency contacts (names and numbers) that can be reached twenty-four (24) hours a day and seven (7) days a week in case of emergencies (such as service leaks, main breaks, pump station problems, etc.). The contractor will be responsible for correcting any such problems until the guarantee period specified in Section 1.7 has expired.

1.4 INSURANCE

The contractor shall purchase and maintain such insurance as will protect them from claims which may arise out of or result from the contractor's execution of the work, whether such execution be by the contractor or by any subcontractor or by anyone for whose acts any of them may be liable.

Unless otherwise specified in the contract documents, the minimum insurance requirements provided in Appendix A shall apply.

1.5 CONTRACT SECURITY

The contractor shall furnish the Town with a Performance Bond and a Payment Bond in penal sums equal to the project cost, conditioned upon the performance by the contractor of all undertakings, covenants, terms, conditions and agreements. Such bonds shall be executed by the contractor and a corporate surety company licensed to transact such business in the Commonwealth of Massachusetts. The expense of these bonds shall be borne by the contractor. If at any time a surety on any such bond is declared bankrupt or loses its right to do business in the Commonwealth, the contractor shall, within ten (10) days after notice from the Town to do so, substitute an acceptable bond (or bonds) in such form and sum and signed by such other surety or sureties as may be satisfactory to the Town. The premiums on such bond shall be paid by the contractor.

1.6 INDEMNIFICATION

The contractor will indemnify and hold harmless the Town, its agents and employees from and against all claims, damages, losses and expenses including attorney's fees provided that any such claims, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property including or in part by any negligent or willful act or omission of the contractor, and subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable.

In any and all claims against the Town or its agents or employees, by any employee of the contractor, any subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the contractor or any subcontractor under Workmen's Compensation Acts, Disability Benefit Acts or other Employee Benefits Acts.

1.7 GUARANTEE

The contractor shall guarantee all materials and equipment furnished and work performed for a period of one (1) year from the date of substantial completion (date of substantial completion shall be defined as the date of acceptance by the Town). The contractor shall warrant and guarantee for a period of one (1) year from the date of substantial completion of the system that the completed system is free from all defects due to faulty materials or workmanship and the contractor shall promptly make such corrections as may be necessary by reason of such defects including the repairs of any damage to other parts of the system resulting from such defects. The Town will give notice of observed defects with reasonable promptness. In the event that the contractor should fail to make such repairs, adjustments or other work that may be made necessary by such defects, the Town may do so and charge the contractor the cost thereby incurred. The Performance Bond shall remain in full force and effect through the guarantee period.

1.8 INSPECTION AND TESTING

All materials and equipment used in the construction of the project shall be subject to adequate inspection and testing in accordance with generally accepted standards and as specified herein. The Department of Public Works will provide an inspector on the job at all times. All costs associated with the inspection will be billed to the contractor and shall be paid by the contractor within thirty (30) days.

The Town will at all times have access to the work. In addition, authorized representatives and agents of any participating agencies shall be permitted to inspect all work.

A pre-construction meeting with the Town and the contractor shall be held before material is ordered or work begins.

If any work is covered prior to inspection by the Town or contrary to the written instructions of the Town, it must, if requested by the Town, be uncovered for observation and restored at the contractor's expense.

1.9 EXTENSIONS

Whenever a water main extension has been constructed into a public or private way, upon satisfactory completion of inspection and testing, said extension shall be available for use or further extension by the public.

1.10 NEW SERVICES

When property is developed on streets where there are existing water lines but no service connection to the property, the person developing the property is responsible for all costs for water service installation from the new building to the existing water main.

1.11 RECORD DRAWINGS (AS-BUILTS)

The contractor shall be responsible for obtaining all data for the Record Drawings. The contractor shall submit Record Drawings of all water main construction. Record Drawings shall show forty (40) scale plan views and shall be prepared on standard size mylar sheets, 24 x 36 inches in size and also provided in electronic CAD files in a format specified by the DPW. Record Drawings shall be prepared by a Registered Professional Engineer and, at a minimum, shall show a plan view, with accurate locations of public water main, corporations, service pipe, fittings, valves and hydrants. A minimum of 3 ties shall be provided to all corporations, valves, curb stops (or service line), tees and all bends of 1 1/4" or more, taken to permanent existing features, and including the depth to the top of the water main.

Record Drawings shall indicate all approved changes from the original drawings. Changes shall be shown by drawing a single line through the value changed and indicating the "as-built" value in a revision "cloud" to highlight the change.

1.12 RULES AND REGULATIONS

The use of fire hydrants, town and private, is restricted to members of the Fire Department of the Town of Uxbridge and employees of the Department of Public Works.

Other persons may use the fire hydrants only with specific permission from the Department of Public Works.

No person shall operate any valve or curb stop without specific permission from the Department of Public Works.

No person shall uncover or make any connections with or opening unto, use or alter, or disturb any public water main or water service or appurtenance thereof, without first obtaining written permission from the Department of Public Works.

Penalties and fines shall be assessed based on a schedule established by the Board of Public Works and attached hereto as Appendix B.

Service pipes in the public way shall be installed by the Town of Uxbridge, Department of Public Works or a contractor approved by the DPW and all costs shall be paid by the property owner or the contractor. Service lines installed on private property shall be paid for by the property owner or contractor and may be installed by the Department of Public Works or by a private contractor subject to the requirements of the Department of Public Works. The Town will only be responsible for the repair of service lines in the public way, unless in the case of an emergency. In an emergency, the Town may do any repair work on private property and all costs and expenses shall be borne by the individual property owner. The property owner will be given the option to hire a private contractor to complete the repair or accept responsibility for payment of costs to the Town.

The Town may be required and shall have the right to temporarily discontinue the water supply to make repairs, changes or connections to its mains and other equipment. It will use reasonable effort to notify the customer in advance of such discontinuance of service, but it will not be liable for any damage or inconvenience suffered by the customer because of such discontinuance of service or because of failure to notify the customer in advance of its need to discontinue service.

The Town does not guarantee constant pressure or uninterrupted service, nor does it assure the customer either a full volume of water or the required pressure per square inch necessary to effectively operate elevators, sprinkler systems, or other appliances. The same being subject to all the variable conditions that may take place in the use of water from the Town mains.

No customer shall be entitled to damages or payment refunded for any interruption of service occasioned either by accident to any portion of the water system or by the stoppage or shortage of supplied water due to the causes beyond the control of the Department of Public Works or the Town, such as excessive drought, excessive use of or waste of water by other customers, or by leaks or defects in the pipes or appliances owned by the customer or other customers.

The Town will not be responsible for damages caused by dirty water resulting from the opening or closing of any valve for repairs and the use of any hydrants or the breaking of any structures. The Town will take precautions that will minimize potential damages when water system valves and hydrants are operated.

Customers having boilers or any attachments or equipment on their premises depending upon the pressure, quantity or quality of the water in the Town's mains are cautioned against the danger of collapse of boilers or other damage to their equipment as all such damage must be borne exclusively by the customer.

The Town shall have the right to reserve a sufficient supply of water at all times in its reservoirs to provide for fire or any other emergencies and may restrict or regulate the quantity of water used by its customers in case of scarcity or whenever the public welfare may require it.

Service may be discontinued for any one of the following reasons:

- a. Use of water for purposes other than described in the application.
- b. Misrepresentation in application.
- c. Willful waste of water.
- d. Unauthorized use, operation, modification or tampering with Town property including gates, valves, hydrants or meters.
- e. For vacancy.
- f. Non-payment of bills when due.
- g. For cross-connecting the Town service pipe with any other supply source without appropriate backflow protection devices.
- h. Refusal of reasonable access to property.

In the case of vacancy of a customer's property, the customer must notify the Town in writing of such vacancy, and upon failure to do so, will become responsible for any damage either to their own property or to the property of the Town, arising from such failure to notify the Town. Owners of a premises shall notify the Town of the change in ownership; until the Town is so notified of such change in ownership, the owner of record will be held responsible for all unpaid bills.

SECTION 2

CONSTRUCTION

2.1 WORK IN PUBLIC WAYS

The contractor shall be required to obtain a Highway Opening Permit prior to any excavations within a public way. All work within the public way shall be conducted in accordance with the Uxbridge Department of Public Works Standards for Utility Cuts. The contractor shall supply all needed manpower, equipment and supplies for completion of job.

2.2 PROTECTION OF UNDERGROUND STRUCTURES

All existing gas pipes, conduits, water pipes, sewers, drains or other structures which are uncovered by the excavation shall be carefully supported and protected from injury by the contractor, and if injured or removed, they shall be restored by the contractor with identical or superior material to the satisfaction of the Department of Public Works.

The contractor shall provide suitable temporary channels for the flow of all water courses and shall hold the Town harmless against all claims for damages growing out of obstruction to the flow in sewers, drains or gutters, or because of injury to gas, water or other pipes or conduits to the owners of such pipes or fixtures. Whenever it becomes necessary to change the location of any water pipe, sewer, drain or other structure uncovered by the excavation, the contractor shall do the whole or such portions by making such changes as the Town may direct at the contractor's expense.

2.3 CONNECTIONS TO EXISTING MAINS

Connections which require the extension from the end of an existing main shall be completed by removing the existing plug or end cap and inserting a new valve before installing the new main.

Connections along an existing main shall be completed by "cutting in" a new "tee" and installing new valves on each leg of the tee. Prior to any cutting, the Water Division of the Department of Public Works shall be contacted to shut down the main and observe the contractor while the contractor drains the main.

The use of tapping sleeves may be allowed with prior approval from the Department of Public Works if the Department of Public Works determines that tapping sleeves are in the best interest of the Town.

2.4 PIPE LAYING

All roads and easements, through which water main is to be laid, shall be excavated to the proposed sub-grade elevation before water main construction starts.

Trenches shall be excavated to a width sufficient to allow for proper compaction of the backfill adjacent to the water main. Trenches shall be excavated to a level grade not more than 6 feet below the proposed finish grade, measured at the centerline of the pipe and providing a minimum depth of cover of 4 feet. At pipe joints, additional width and depth shall be excavated to permit proper installation and inspection of the completed joint.

Pipe shall be carefully laid to the lines and grades as shown on the plans submitted. The pipe barrel, and not the joints, shall be provided with an even bearing surface for its full length.

All pipe is to be laid in accordance with AWWA Standards and according to all manufacturers requirements. Should the material at grade prove unsatisfactory for a suitable foundation, additional depth must be excavated and refilled with acceptable material. Acceptable material for the pipe foundation or bearing surface (pipe bedding) shall be sand, select granular material or well-graded gravel.

Bedding material shall be carefully laid to grade and bedding carried half way up pipe barrel, to the full width of the trench. Bedding material shall be carefully and lightly tamped under pipe to provide uniform support. The remainder of the backfill, up to a minimum depth of 12 inches over the top of the pipe, shall be made of processed or well-graded gravel material carefully compacted in layers as placed.

2.5 THRUST BLOCKS

Thrust blocks shall be placed at all tees, bends, caps, plugs, hydrants or other fittings that change direction. Thrust blocks shall be pre-cast concrete or boulders at least 1 cubic yard in size. Thrust blocks shall be placed in contact with the fitting, not the pipe itself or the joint, and shall rest against undisturbed soil for proper bearing.

2.6 BACKFILLING

The trenches and other excavations shall be backfilled, unless otherwise directed by the Town, as soon as the laying of the pipe and inspection by the Town is complete. Backfill, to a minimum depth of 12 inches over the top of the pipe, shall be of selected material as specified above. The remainder of the trench, above an elevation 12 inches higher than the top of the pipes,

shall be backfilled with either flowable fill (on heavily traveled roads) or selected material, thoroughly tamped with mechanical rammers or vibrators in layers not exceeding 1 foot in depth. No rock greater than 6 inches will be permitted in backfilling until there is at least 2 feet of suitable earth fill over the main, and no rock fragment weighing more than 100 pounds will be used for refilling trenches. In depositing rock, care shall be taken that no injury is caused to the main or other components.

When, in the opinion of the Town, the backfilling at elevations higher than 1 foot above crown of pipe can be compacted in a suitable manner by flooding, jetting or puddling with water, the contractor will be permitted to do so.

In trenches within street surfaces, the top 18 inches of trench backfill shall be a road base processed gravel, approved by the Town, placed during backfilling operation. Gravel shall be placed, compacted, graded and treated with calcium chloride to maintain the surface until the resurfacing is placed.

Specifications for resurfacing shall conform to the Uxbridge Department of Public Works Standards for Utility Cuts.

2.7 FLUSHING

After laying of the pipe is completed, the Department of Public Works shall be notified to operate the valves necessary to slowly fill the pipe with water. Means shall be provided by the contractor, either by hydrants or corporation stops, to allow any air in the pipe to be expelled during the filling operation. When the line appears full of water and that the air has been expelled, the line may be flushed for several minutes to remove any sediments or other foreign material that may be present due to construction operations.

Following flushing, any discharge points shall be closed and the Department of Public Works will slowly close the valve(s) to the new line. The new line should set for twenty-four hours to allow the joints and cement lining to set-up before any testing begins.

2.8 TESTING

A pressure test shall be conducted by the contractor and at his expense, on all water pipe installed. The test shall be conducted only after the backfilling and compaction operation has been completed, and the test shall be made under the observation of the Department of Public Works.

When the water line being tested has been filled and has set for twenty-four hours, additional water may be added to compensate for any lost in the twenty-four hours. With the valve still open and all discharges closed, the static pressure in the new line will be determined. The valve to the new line will then be closed and the test may start. A pump shall be used to increase the pressure in the new line to 150 psi or 1.5 times the static pressure, whichever is greater. The pump shall include a pressure gauge to measure the pressure in the line during the test. The duration of the test shall be not less than 2 hours. Any loss of pressure would indicate leakage and a loss of pressure of more than 10 psi per 1,000 feet will be cause for a failed test. At the conclusion of the test, additional water will be pumped into the line until the pressure is equal to the pressure at the start of the test; the amount of this additional water will be carefully measured in order to calculate the leakage during the test. This calculation will be compared to the allowable leakage found in the attached American Water Works Association table to determine if the test is acceptable. Certified copies of the test report from the independent testing company shall be forwarded to the Department of Public Works.

2.9 CHLORINATING AND WATER QUALITY TESTING

Following completion of a successful pressure test, new mains shall be chlorinated for disinfection. Chlorine shall be introduced into the main and shall remain in the main at least twenty-four hours before a water quality sample is taken. The water quality sample shall be submitted for bacteriological analysis at a state certified lab and will be considered acceptable if negative coliform test results are obtained. If positive coliform results are received, the main shall be rechlorinated and tested again for water quality.

Following receipt of acceptable water quality test results, the main shall be flushed thoroughly to remove residual chlorine.

Certified copies of acceptable water quality test results shall be provided to the Department of Public Works.

2.10 HOUSE SERVICE CONNECTIONS

House service connections should be made only after a new main has obtained acceptable results for pressure testing and water quality testing.

Water service pipe or water mains shall not be installed within a minimum horizontal distance of 10 feet from any sanitary sewer main or house connection nor 15 feet from any cesspool or leaching pit. No water service pipe will be allowed to cross a sewer service. The contractor or property owner is required to mark out the sewer service or septic system prior to inspection of the water service by the Department of Public Works. The DPW may require a drawing or plan prepared by a Land Surveyor licensed in the Commonwealth of Massachusetts to detail the layout of water and sewer services and show compliance with required separations.

Dead-end sections of water mains will require looped connections where feasible.

House service connections shall be constructed from the water main to the sideline of the street layout, one connection for each house or vacant lot, as directed by the Town. Connection to water main shall be made with a 1-inch brass corporation stop and 1-inch polypropylene tubing shall be placed between the corporation stop and the curb stop at the sideline of the street layout. The 1-inch polypropylene service line shall continue from the curb stop into the building. A tracing wire or marking tape, capable of being detected by a metal detector, shall be installed approximately 12 inches above all plastic service lines.

Service lines shall be laid on clean sand bedding that is placed to a depth of 6 inches. Completed service lines must be inspected by the Department of Public Works following twenty-four hour notice and before backfilling. Following Department of Public Works inspection, another 6 inches of clean sand shall be placed above the service line. The remainder of backfill shall be carefully placed so as not to cause any damage to the service line. No stones, debris or foreign material that is greater than 6 inches in diameter shall be used for backfill. Trenches excavated in roadways or sidewalks shall be backfilled and resurfaced in accordance with Department of Public Works Standards for Utility Cuts.

All service lines shall be installed through the wall. Service lines proposed to be installed under garage or cellar floors shall be approved by the DPW prior to the start of any work.

SECTION 3

MATERIALS

3.1 SUBMITTALS

The material requirements specified herein are provided to detail minimum standards for material construction and quality. References to specific manufacturers are provided to establish minimum levels of quality and are not intended as endorsements of any particular manufacturer.

Contractors or property owners will be responsible to provide submittals to the Department of Public Works to demonstrate compliance with the material requirements specified herein. Submittals shall include manufacturer's literature, catalog cuts, manufacturer's data, specifications, drawings and similar documentation. The submittals shall identify the manufacturer and the model number intended for use in the project. Submittals shall be provided for each of the materials listed below.

3.2 PIPE

Pipe for public water mains shall be Ductile Iron (D.I.), push-on joint, meeting the requirements of ANSI A21.51-81 (AWWA C151-81), or latest revision thereto, thickness Class 52, and as follows:

8" 0.33 inch wall thickness
10" 0.35 inch wall thickness
12" 0.37 inch wall thickness
14" 0.39 inch wall thickness
16" 0.40 inch wall thickness

Pipe joint shall be rubber ring, push-on style, meeting the requirements of ANSI A21.11-80 (AWWA C111-80), or latest revision thereto.

Pipe and fittings shall be tar coated and double cement lined, 1/8-inch minimum thickness and meeting the requirements of ANSI A21.4-80 (AWWA C104-80), or latest revision thereto.

3.3 FITTINGS

Fittings shall be short body mechanical joint, all bell, Ductile Iron, minimum pressure rating of 350 psi, meeting the requirements of ANSI A21.10-82 (AWWA C110-82), or latest revision thereto. Fitting joint shall also meet the requirements of ANSI A21.11-80 (AWWA C111-80) or latest revision thereto.

Retainer glands shall be cast of high strength Ductile Iron and fitted with Ductile Iron wedging devices and twist off pressure nuts. All joints from and including the main line tee to the hydrant shall be equipped with retainer glands. All bends and dead ends shall also be equipped with retainer glands.

Transition couplings shall be cast iron compression joint type, rated at 150 psi working pressure, with corrosion resistant bolts and shop coated.

Dresser couplings are not allowed on mains; use solid sleeves only.

3.4 VALVES

Valves 6 inches to 10 inches shall be Ductile Iron body, resilient seat gate valves, American Water Works Association specification valves, for 200 pound working pressure, as manufactured by the M&H Valve Co., Styles 3067-NRS or equal. All valves shall be mechanical joint and shall open "RIGHT".

Valves 12 inches or greater in size shall be high strength Cast Iron body, mechanical joint butterfly valves with stainless steel body seat and mechanically secured rubber seat, for 150 to 200 pounds working pressure, as manufactured by M&H Valve Co., Model 450 and 4500 or equal. All valves shall be mechanical joint and shall open "RIGHT".

3.5 VALVE BOXES

Valve boxes shall be heavy duty Cast Iron, 5-1/4 inch diameter, two piece, sliding type with covers marked "WATER".

3.6 HYDRANTS

Hydrants shall be 6 inch mechanical joint Cast Iron with 5 feet "bury" (5'-6' trench depth) with 2-2 1/2" standard thread hose connection and 1-4 1/2" standard thread pumper connection. Hydrants shall be compression type, as manufactured by the M&H Valve Co., Style 929 "Reliant" open "RIGHT". Hydrants shall be provided with drains and installation shall include clean, crushed stone around the drain to allow self-draining following use. Hydrants shall include a breakaway flange installed within 2 inches of finish grade.

Hydrant extensions, when required, shall be paid for and installed by contractor to the Department of Public Works satisfaction.

3.7 CORPORATION STOPS

Corporation stops shall be as manufactured by Ford Model F-1000– 1” or approved equal.

3.8 PIPE FOR SERVICES

All service pipes to house shall have a minimum cover of at least 5 feet. All new service pipes shall not be less than 1 inch inside diameter for single residences and shall be plastic tubing with a pressure rating of 200 psi, unless otherwise required by the Department of Public Works.

Service pipes shall not be laid in the same trench with gas pipes, sewer pipe or any other facility of a public service company nor within 3 feet of any open excavation or vault.

3.9 CURB STOPS

Curb-stops shall be manufactured by the Ford, or approved equal.

3.10 BALL VALVES

Ball valves (2 inches and smaller) shall be Watts Series FBV, full port, threaded end, bronze body, brass ball and brass stem or approved equal. Valve shall be pressure rated at 600 psi WOG, 125 psi saturated steam.

3.11 CHECK VALVES

Check valves (2 inches and smaller) shall be as manufactured by Ford, Model HHC11-333, straight cartridge, and dual check valve or approved equal.

3.12 METERS

Meters shall be Uxbridge Standard Meters (Badger Model #25), 5/8” x 3/4” with cast iron frost plate bottom and plastic top with outside reader.

SECTION 4

METERS

All water use shall be metered. All meters shall be supplied and owned by the Town of Uxbridge and shall be sealed to prevent tampering. The Water Division shall read and maintain all meters. If additional meters are allowed, fees, in addition to the System Development Charge, will be assessed for the use and maintenance of same.

When the supply of water through a service is covered by a single meter, the Division will read and maintain this meter. If additional or auxiliary meters are warranted, additional fees will be assessed for maintaining same.

The authorized agents of the Town shall have the right of access at all reasonable hours to the premises supplied with water for the purpose of reading meters, examining fixtures and pipes, observing manner of using water and for any other purpose which is proper and necessary in the conduct of the Water Division business.

The Water Division will have the right to remove, repair or replace any meter at any time it deems fit. It shall be the duty of all consumers to see that meters on service connections, where ever located, shall be readily accessible at all times to the Water Division.

On every new service pipe immediately after entering into the building, there shall be installed the following equipment in the following order: an approved ball valve, an approved check valve, an approved meter and an approved check valve.

All dwelling units shall be a separate service from curbstop to meter.

The meters shall be sized for the intended use, and approved by the Water Division. A external type of register is required, mounted on exterior of building, in an accessible location approved by the Water Division.

The customer shall permit no one except an employee of the Water Division or their authorized agent to inspect or service the meter or other property of the Water Division on their premises. No one is to tamper with the meter. The customer shall notify the Town as soon as it comes to their knowledge of any damage to, or any stoppage in registration of the meter. Any violation of this section shall be punishable by a fine established by the Board of Public Works and attached hereto as Appendix B.

The contractor or customer shall be responsible for protection of the meter immediately following installation by the Water Division. The meter shall be protected from damage due to construction activities, vandalism, freezing, etc. Costs associated with replacement of a damaged meter shall be the responsibility of the contractor or owner.

Revised 2/25/03

SECTION 5

ASSESSMENTS

5.1 WATER CONNECTION/INSPECTION FEE

Any person connecting a water service to the municipal water system shall file an application with the Department of Public Works. A connection/inspection fee shall be paid to the Town at the time of application to cover the costs for the Town to inspect the installation of the service line from the main into the foundation (prior to backfill).

All costs for labor, materials and supplies to install the service line are the responsibility of the property owner. The Town will supply water meters for single family dwellings and duplexes as specified in Section 4, however, labor costs for installation and costs for incidental materials (such as valves and fittings) are the responsibility of the property owner.

5.2 SYSTEM DEVELOPMENT CHARGE

The System Development Charge is a fee to compensate the Town of Uxbridge for the consumption of system capacity. The amount of the System Development Charge shall be established by the Board of Public Works. This fee shall be paid to the Town at the time the water is turned on to the property.

5.3 CHARGES AND RATES

Consumers of water will be charged with and held responsible for all water passing through their service pipe until such time as they shall notify the Water Division, in writing, they no longer desire the use of water. In case of the sale of property, such notice shall include the name and address of the new owner.

All cost and expenses incidental to the installation, connection and repairs of the water service, from the curb stop to the meter, shall be borne by the owner.

When an existing service is enlarged, only the difference between the charge for the new service connection and the charge that was collected or would have been collected shall apply.

In the case of multiple dwellings, buildings or services, the System Development Charge shall apply to each separately metered service.

There shall be a fixed schedule of prices and rates established by the Board of Public Works in accordance with MGL C41 S69B and Article 27, Annual Town Meeting, June 16, 1981. Said rates shall include user fees, system development charges, equipment and labor rates.

5.4 PENALTIES

Any person found to be violating any provision of these standards shall be served by the Town with written notice stating the nature of the violation and providing a reasonable time limit for the satisfactory correction thereof. The offender shall, within the period of time stated in such notice, permanently cease all violations.

Any person who shall continue any violation beyond the time limit provided, shall be guilty of a misdemeanor, and on conviction thereof shall be fined in the amount not exceeding one hundred dollars (\$100.00) for each violation. Each day in which any such violation shall continue shall be deemed a separate offense.

Any person violating any of the provisions of standards shall become liable to the Town of any expense, loss, or damage occasioned by the Town by reason of such violation.

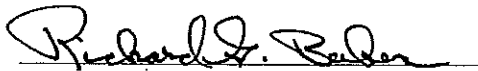
SECTION 6

VALIDITY


The invalidity of any section, clause, sentence, or provision of these standards shall not affect the validity of any other part of these standards which can be given effect without such invalid part or parts.

Approved by:

Board of Public Works


Chairman Richard Baker


Lanny Kenmillard


Peter Hicks

Date: 3/24/03

INSURANCE

Insurance to be maintained by the Vendor

1 Insurance: It is the responsibility of the Vendor to provide the Town with a Certificate of Insurance showing insurance coverage for General Liability, automobile and Workmen's Compensation (Statutory). It is the Vendor's responsibility to purchase and maintain adequate insurance to protect the Vendor and the Town from all claims as follows:

a. Workmen's Compensation
Employer's Liability

Statutory

Bodily Injury Each Accident	- \$100,000.
Bodily Injury Disease - Aggregate	- \$500,000.
Bodily Injury Disease - Each Employee	- \$100,000.

- b. 1. Comprehensive General Liability:
2. Owner's Protective Liability:
3. Comprehensive Public Liability:

1, 2, & 3 Bodily Injury: Anyone Person/Aggregate
\$1,000,000./\$2,000,000.

1, 2, & 3 Property Damage: Per Occurrence/Aggregate
\$1,000,000./\$2,000,000.

The Liability Policy should be Broad Form and include coverage for Premises and Operations and Product Liability.

c. Comprehensive Automobile Liability:

Bodily Injury:	Per Person \$1,000,000
Property Damage:	Per Accident \$500,000
or Bodily Injury	CSL \$1,000,000

The Comprehensive Automobile Liability Insurance should be written to include owned, hired and non-owned vehicles and it shall provide Extra Territorial Coverage.

- d. The Town of Uxbridge, MA should be named as an additional insured on the Vendor's policy. No insurance shall be subject to cancellation without at least thirty (30) days prior written notice forwarded by registered or certified mail to the Town of Uxbridge. All parties shall also be notified of the attachment of any restrictive amendments to the policies.

- e. The Board of Public Works reserves the right to amend the insurance requirements specified above to protect the interests of the Town. Any deviation from the insurance requirements must be noted by the Contractor, in writing.

APPENDIX B

PENALTIES AND FINES

<u>Offense</u>	<u>Penalty / Fine</u>
Unauthorized operation of valve or curb stop	\$100 per offense
Unauthorized connection to the water system	\$300 per offense
Unauthorized use/operation of a hydrant	\$100 per offense
Meter tampering	\$100 per offense