

WATER REGULATIONS

TOWN OF HANOVER - BOARD OF PUBLIC WORKS - WATER DIVISION

RULES AND REGULATIONS

These regulations and all subsequent changes, amendments or additions thereto shall be considered a part of the agreement and contract with every water taker. Violations of any rules and regulations or evidence of fraud, abuse of, or tampering with equipment shall be considered as cause to discontinue the water supply to the offender and/or take such action as provided under applicable laws and these regulations.

DEFINITIONS:

Reference to Water Division, Water Works, Superintendent, and Board shall refer to the municipal water supply and facilities owned by the Town of Hanover under administrative control of the Board of Public Works and managed by the Superintendent and/or Deputy Superintendent of Public Works to whom all questions regarding these regulations shall be referred.

The customer, consumer, water taker, contractor, developer or owner shall refer to each property owner, agent and/or leasee in certain instances to whom water is to be or is now furnished from the municipally owned water supply of the Town of Hanover.

Water rates shall refer to the published schedule of water rates and charges pursuant to the authority provided under applicable laws and they shall be considered a part of these rules and regulations.

GENERAL:

1. All applications for Installation, turning on or turning off a water service including fire sprinkler services must be in writing. No rebate for water used prior to discontinuing a service shall be made and no service shall be re-established unless all arrears are paid in full.
2. The owner of any property supplied with water shall be responsible for keeping tight and in good condition all fixtures and piping both inside buildings and from the curb stop at the property line into any building and shall protect them from freezing. No fixtures shall be left open to protect from freezing any part of the fixtures or piping from the curb stop on the property line into and including the building or for any other purpose except the reasonable use of water without waste unless authorized by the Water Division.
3. Whenever a leak occurs on the owner's property, or a pipe, riser or valve (other than the meter and meter valve), between the property line and the meter is found to be in imminent danger of failure, the owner must accomplish repairs at once. Failure to do so will be justification for shutting off the service at the street until repairs are accomplished by the owner at the owner's expense and approved by the Water Division.
4. A water service may be shut off after five days written notice if the customer does not comply with the rules and regulations.
5. The Water Division shall restrict the use of water in any parts of the Town if determined to be necessary for the purpose of maintaining adequate pressures for fire protection, conservation of the

water supply and protection of the public safety, health and welfare. If a usage restriction is established all customers will be notified in writing and by public notice. Any user found to be in violation of the restriction for five (5) days following notification and publication shall be given warning to comply. The water service for any customer used in violation of the restriction after the five (5) day warning period shall be shut off without notice.

6. There will be a \$25.00 restoration charge for turning on any service shut off for violation of these rules and regulations. There will be a \$50.00 service restoration charge for turning on any service shut off for violating a restricted use regulation. All restoration charges must be paid in advance.

7. The Water Division shall discontinue any water service, the use of which may constitute a potential hazard to or unreasonable use of the water supply of the Town and shall not re-establish a service so discontinued until the potential hazard or circumstance of waste has been corrected by and at the owner's expense to the satisfaction of the Water Division.

8. No private water supply, process, equipment, fixture or appliance which would or could be a potential hazard to the water supply of the Town may be connected to any part of a water service or distribution piping thereto without first complying with all requirements of the Drinking Water Regulations of Massachusetts and the rules and regulations of the Massachusetts Division of Environmental Quality Engineering and obtaining written approval of the Water Division.

9. The Water Division may at any time shut off the water for the purpose of making repairs or changes in its distribution system or for any necessary purpose. Timely notice will be given to all users when possible. It may also shut off the water upon failure of a user to observe its rules and regulations. The Town of Hanover, its agents and/or employees shall not be liable for any damage caused by shutting off the water or any variation in pressure nor shall the user be entitled to any rebate by reason thereof.

10. The Water Division may shut off water supply in case of non-payment and all costs and arrears must be paid in full before water is turned on again. Water takers shall not supply water to any adjoining property or to persons or appurtenances not entitled to its use without permission in writing from the Water Division.

11. No service shall be installed or connected to for more than one residence or premises. If a piece of property is divided to that one service is serving two separately owned premises a new service must be installed to the residence or premises not serviced directly or furthest from the existing curb box and the connection to the original service. The cost shall be paid by the owner or owners of the original property or the newly subdivided property.

12. The Superintendent and Deputy Superintendent of Public Works and employees of the Water Division may enter the property of an owner or customer at any reasonable time for the purpose of inspecting, testing, reading and/or repairing meters and inspecting the pipes, fixtures or attachments used by the owner or customer to ascertain whether water is being used unreasonably or contrary to these regulations.

13. No person shall open or make use of a hydrant except the Fire Department or Water Division, or operate any other fixtures or valves on the water supply distribution system as installed within the layout of public ways, easements and extensions in developments which have been satisfactorily

completed, tested and disinfected and through which water is being furnished to property owners without written consent of the Water Division.

14. It is the responsibility of an owner to equip plumbing, water heaters, etc., with proper safety appliances (relief valves, vacuum breakers, backflow preventers, pressure reducing valves). The Water Division will not be responsible for any damage which may occur through variation of water pressure or loss of water supply.

15. The use of water for direct cooling without a recirculating water conservation device is prohibited. When water is used for cooling purposes in recirculating devices, such as evaporative condensers or cooling towers, engineering and design data sufficient to determine that the cooling system will not require the constant addition of lower temperature make-up water during high peak loads must be furnished prior to the installation of the equipment.

16. In the event of an emergency situation in which there exists a potential hazard to the water supply the Water Division will close such valves as are necessary to protect the water supply without prior notification to users.

NEW WATER SERVICES APPLICATIONS:

1. For installation of a water service up to 3" size from a distribution main to a residence or other type building or use, an application may be obtained from the Water Division. Applications must be filled at least three weeks prior to the work being performed and a copy of the plan filled with the Board of Health showing the approval of that Board of disposal system, the location of the building to be served, the location of the proposed water service and the location or proposed location of any underground drain, gas service, electric wiring or service and telephone wiring or service.

2. For the installation of a 4" or larger water service or extension of a water main, the owner or his agent shall make a letter application to the Water Division office. The application must be filled five (5) weeks prior to the date upon which the proposed work is to start and shall be accompanied by two copies of plans, specifications and list of materials for the work to be performed in accordance with Water Division regulations. The overall plan shall be at a scale no smaller than 1" to 40' but the detail of the fittings, hydrants, and similar mechanical facilities shall be at a scale of 1/2" – 1'. The plan shall be stamped, dated and signed by a registered professional engineer. All utilities, (electric, telephone and gas) drainage and sewage shall be shown on the plan.

CHARGES:

All costs for water main extensions and water services shall be paid for by the owner of the property. All costs shall be paid in advance in accordance with the established schedule of rates or charges. On work or charges for which there is no established schedule of rates and charges the Water Division will make an estimate of the total cost of which the owner shall pay 80% in advance and the balance within ten (10) days of completion and prior to turning on the water to the connected extension. The Board of Public Works will not certify to the Building Inspector nor will the water supply be turned on to any new extension or service to allow occupancy or the issuance of an occupancy permit unless all charges due to the Town have been paid.

JURISDICTION:

1. The Water Division will perform all work and furnish all materials required to extend a water main or water service to the property line on an accepted street and the cost shall be paid by the property owner for whom the work is performed.
2. The Water Division will inspect all water main and water service installations on private property. Owners or installing contractors must arrange for scheduled inspections during the progress of any work.
3. Work not meeting the approval of the Water Division shall be corrected before a meter will be installed and/or water furnished to the new main or service.

CONTRACTOR APPROVAL:

The contractor who is to install a water main and water service shall submit to the Water Division the names and locations of three (3) similar installations in the Town of Hanover or surrounding towns completed within the past three (3) years. Only contractors of proven ability and/or experience will be acceptable and the Board of Public Works may require the owner or contractor to post a cash bond sufficient in their opinion to insure proper completion of the extension or service.

INSPECTIONS:

1. Water services and water main extensions must be inspected in various stages of installation. Owners or installers must notify the Water Division before 11:00 a.m. if they will not be ready for inspection between 12:30 p.m. and 3:00 p.m., in the afternoon or before 4:00 p.m., if ready for inspection the following day between 8:30 a.m. and 12 noon. If inspection is required at any other time there will be a charge of \$15.00 per hour payable to the Town of Hanover at the time of the inspection for each after-hour inspection.
2. On any water main or water services, the Water Division may assign an engineer inspector to the project to insure that the rules and regulations are being complied with and the owner shall be charged \$45.00 per hour for this activity, payable to the Town of Hanover, due within ten (10) days after completion of the project and prior to turning on the water for use through the newly connected service or main.

PRIOR APPROVAL REQUIRED:

No water service shall be connected:

- A. To a residence in a development when the lot has not been released for construction by the Planning Board.
- B. To a residence in a development in which the water distribution system has not been completed satisfactorily and in accordance with these rules and regulations including the filing of the as-installed plan of the extension if in development.
- C. To a residence or building which does not have a sewage disposal system approved by the Town of Hanover Board of Health.
- D. To a property and project for which the proper permits have not been issued.

- E. To a property or use which could be a potential hazard to the water supply system unless proper permits for backflow prevention devices or similar equipment have been obtained.

WATER METERS:

1. Except for water used by the Water Division performing maintenance and repairs and by the Fire Department from hydrants, all water from the Town of Hanover water supply shall pass through a meter and all water used through a meter shall be paid for in accordance with the published schedule of charges and rates.
2. The Water Division will furnish, install and/or supervise installation, seal and maintain all meters and remote readers. The owner will provide a readily accessible, adequate and proper space or housing, heated if necessary, to protect same from freezing. Cost of repair or replacement of seals, meters or remote readers, damaged by freezing, neglect, tampering or vandalism shall be paid by the property owner. All metering equipment is the property of the Town.
3. The owner shall maintain the area of the water meter and remove reader free from rubbish or any other material which may obstruct access by Water Division employees and shall keep vicious dogs secure or confined to avoid interference with maintenance and meter reading.
4. Meters, readers and seals may not be removed except by or under the supervision of Water Division personnel. Only Water Division personnel may remove or replace the seals, which if broken, may indicate the meter has been tampered with.
5. Meters shall be read and water use billed quarterly.
6. The Water Division is not responsible for leaks on the user premises. Water passing through a meter is considered consumed. No abatement will be made for usage due to leakage. Usage due to leakage on customer's property is considered unreasonable use and when determined by the Water Division the customer will be given written notice of the unreasonable use and fifteen (15) days will be allowed for the customer to correct the leakage. If not corrected within that time the water service may be shut off.
7. The Water Division will test, remove, repair and/or replace meters as a part of regular maintenance. The consumer may at any time request that a meter be tested in accordance with Massachusetts General Laws and billing adjustments made accordingly.
8. The valves on a meter are under jurisdiction of the Water Division and considered a part of the meter.

WATER SERVICES, INSTALLATION AND SPECIFICATIONS:

1. Water services shall be 1" size or greater as determined by the Water Division and all charges must be paid prior to the installation of the service from the water main to the curb stop and the meter.
2. Copper tubing type K-soft shall be used for all services 3" or smaller. Services larger than 3" shall be treated as water main extensions.
3. Plastic pipe may be used from the curb stop to the meter stop providing the first ten (10) feet from the curb stop is type K-soft copper tubing and the last twenty (20) feet before the foundation and running to the meter stop is type K-soft copper tubing. Plastic pipe when used is subject to prior

approval. When plastic pipe is used a detectable locating tape shall be installed 12" below finish grade and the wiring inspector notified according to Massachusetts General Laws.

4. All service fitting shall be Mueller Compression type New England Pattern or an approved equal.

5. Water services shall be installed at a depth of not less than 5 ½ feet.

6. No other utility shall be installed in the same trench.

7. Water service trenches shall be excavated to a depth of not less than 6' and back-filled with 6" of sand across the full width of the trench prior to the installation of the tubing.

8. After installation, testing and disinfecting, the tubing shall be covered and trench back-filled across the full width with 12' of sand. Excavated material from the trench may be used above the 12" layer provided it is approved by the Water Division. The back-fill material shall contain no stones larger than 6" diameter and all back-fill is to be clean and free of debris.

9. In the event of a high water table, ½" broken stone or crushed gravel shall be used for bedding and cover in the same manner specified for water mains.

10. On an accepted street the water main shall be excavated, tapped and the service installed including a curb stop and box at the property line at the owner's expense by the Water Division. On an unaccepted street or in a development the developer or owner shall accomplish this work as a part of the required installation of the water distribution system with inspection carried out at that time by the Water Division.

11. All water service installations from the curb stop at the property line to the meter location shall be inspected in the course of installation as follows:

- A. When the trench has been excavated to a depth of 6'.
- B. When the 6" bedding and tubing is installed at which point it shall be pressure tested and disinfected.
- C. When 12" cover has been placed.
- D. If plastic pipe is used when the indicating tape is placed in the trench.

12. Each water service shall be pressure tested to 150 lbs. PSI and must maintain that pressure for 15 minutes with no leaks. After a successful pressure test, one ounce of 70% dry chlorine shall be put in the service tubing at the curb box and the service turned on and flowed at a ¼ GPM until a strong odor of chlorine is present at the angle meter stop on the street side of the meter. The service shall be shut off at that angle meter stop and the chlorine solution left in the service for 24 hours after which it may be flushed.

13. The Water Division will not install the meter and no water may be taken from the service for any purpose until the service has been pressure tested, disinfected, flushed, and the meter installed.

WATER MAIN EXTENSION – GENERAL

The design shall be subject to approval of the Water Division. The determination of pipe size will be required to be large enough to meet present as well as future needs as a part of the overall distribution system of the Town.

An extension of a water main must run from an existing water main. It is the responsibility of the owner or developer to obtain easements to cross private property to install and connect to an existing water main and turn them over to the Town. If the extension for any reason cannot be connected to an existing water main to provide through flow it will be looped and returned to the main from which it originated. No dead end water main extensions will be allowed.

APPROVALS:

A list of all materials proposed to be used shall be submitted to the Water Division in duplicate with the plan and specifications five (5) weeks prior to the date which the proposed work is begun. The following are the approved materials for use in extensions to the water distribution system.

PIPE:

Cast iron and/or Ductile iron pipe cement lined with rubber ring gasketed bell and spigot type joints and wall thickness per AWWA Standards to meet 525 lb. surge at five (5) foot bury depth and of sufficient wall thickness to have a 100-year minimum life with regard to corrosion. Plastic-Johns Manville "Blue Brute" PVC water pipe Class 150-200 PSI.

PIPE FITTINGS:

Shall be Ductile Iron mechanical joint AWWA approved.

GATE VALVES:

AWWA 300 lb. test IBBM w/2" stem nut, mechanical joint, opening left and boxed.

HYDRANTS:

Eddy Mfg. or Mueller Centurion w/6" bottom connection-Mechanical Joint-5" clear gate opening – one steamer nozzle and two 2 ½" nozzles with NST to fit Hanover Fire fighting equipment – Break flange construction 5 ½" bury depth, all hydrants open left.

WATER MAIN INSTALLATION REGULATIONS AND SPECIFICATIONS:

1. Water mains up to size 12" are to be installed at 5 ½' minimum depth from center line of pipe to finished grade and no other utility or drain may run in the same trench. Water mains larger than 12" shall be installed a minimum of 5' from the top of the main to finish grade.
2. The trench shall be excavated to a minimum depth of 6" below the bottom of the pipe and 6" sand spread and compacted over the full width of the bottom of the trench prior to laying pipe.
3. After laying pipe sand shall be used to fill trench to the top of the pipe and tamped.
4. After tamping 12" of sand is to be placed in the trench on top of the pipe.
5. All sand for bedding and back-fill shall be the full trench width from the bottom of the trench to a point 12" above the top of the pipe.
6. Excavated material may be used for bedding and back-filling only if approved by a representative of the Water Division.

7. Water mains and fittings being laid in a trench which is below the water table shall be bedded with $\frac{3}{4}$ - inch approximate sized broken stone or crushed gravel from a depth of 6" below the bottom of the water main to a point equal to the top of the water main and the full width of the trench. The trench shall be dewatered to allow the bedding stone to be place on a firm bottom.
8. The pipe must be protected from contamination and dirt at all times. Protective end caps shall be kept in place except during the actual connecting of one piece to another in the trench.
9. Water mains shall be installed 7' from the property line and not in the area to be paved if possible.
10. If a temporary dead-end is allowed in the course of construction of a development it shall be fitted with a gated full size hydrant and a sampling and disinfection service connection on the main side of the gate.
11. No tapping sleeve gated are allowed. Whenever a Tee, Y or Cross is installed in an existing water main or an extension of a water main there shall be a gate valve installed on each branch of the fitting. When two tee's are used as a cross it may be gated as a cross.
12. There shall be a main line gate valve at every brook or stream crossing on each side 30' from the stream and/or for every 1000' of water main installed. All gates shall be boxed.
13. Hydrant connections to the water main shall be 6" sized and gated. Hydrants and the connections, fittings, and gate valve shall be mechanical joint, rodded back to the main and a concrete thrust block shall be provided on the back side of the hydrant and the tee at the main. Care shall be taken in placing the thrust block not to plug the hydrant drains or drains with cement and to have enough pervious material to provide effective dry well for the hydrant drainage. Hydrants shall be installed 6' off the water main and/or on Town property with steamer connections 20" above grade. Hydrants shall be spaced no greater than 750' apart and additional hydrants may be required in the best interest of the Town as determined by the Board of Public Works and/or the Fire Chief.
14. All fittings which change the direction of flow more than 10° shall have rodded mechanical joints and be thrust blocked.
15. All gate valves at a Tee, Y or Cross shall be rodded back to that fitting, and the fitting shall be backed up with a concrete thrust block.
16. Whenever non-conductive or plastic pipes are used an approved type electronically traceable tape shall be buried 18" below finish grade and directly above the center line of the pipe and on the sand level 12" above the top of the water main.
17. Back-filling material for use above the sand level 12" on top of the water main be free from stones larger than 6" in the longest dimensions and stones used must be placed along the wall of the trench. No stone larger than 2" in the longest dimension is to be used in the top 12" of a trench.

DISINFECTING AND TESTING TAPS:

There shall be a one inch corporation cock and a one inch service installed to the sideline of the street one foot off the property line with a curb cock, curb box and a riser at the start of each extension and at each intersection and each temporary termination point or temporary dead-end to allow for proper testing and disinfecting of the newly installed water main.

TESTING AND DISINFECTION OF WATER MAIN EXTENSIONS:

Upon completion of installation of a water main extension and prior to the connection of any service to the extended main the water main extension shall be pressure tested and after meeting the requirements, shall be disinfected. Testing and disinfecting must be carried out under the direction of a registered sanitarian or registered professional engineer, the method and results documented and samples tested and reported in writing by an approved laboratory. The contractor performing this work must have prior approval of the Water Division.

TESTING:

All water mains shall be tested as follows:

After the pipe is laid and anchored or completely back-filled as may be necessary it shall be tested by filling with water and all air evacuated and pressurized to 200 lbs. per square inch. All leaks shall be repaired and the leakage in any section of pipe shall not exceed 2 gallons in 24 hours per lineal foot joint. Disinfecting tappings may be used for pressure testing.

DISINFECTING:

After successful pressure testing, and before any water is distributed for consumption, the water main shall be disinfected by introducing and maintaining a solution of 50 PPM of chlorine in the piping for a period of 24 hours and then the chlorine solution shall be removed by flushing until no evidence of chlorine remains, after which the water in the system is to be sampled, tested for coliform bacteria by an approved laboratory and the test results furnished to the Water Division.

Should the test indicate evidence of nonpotability, the water in the extension will be disinfected in a manner which shall be prescribed by the Water Division at that time until the resulting sample of water shows no evidence of pollution and/or the source of pollution is determined and corrected and after disinfection at the direction of the Water Division results in an acceptable test result.

AS BUILT DRAWINGS:

On any water main extension on private property or in a sub-division an "as built" drawing at a scale of 40' to an inch shall be prepared by a registered professional engineer and furnished to the Water Division, (one reproducible and two prints) showing locations of all gate valves, main line fittings, hydrants, corporation, services and curb boxes and the depth and location of all piping relative to the finished grade of the street. There shall be shown on the plan two permanent reference point measurements to each of the above mentioned specific items as well as each point where drainage crossed over or under the water main including the depth of the water main and drainage piping at the point of crossing, the lateral distance between the catch basins and the water main and in the event there are cables, pipes or conduits for sewage, gas, telephone, television or electricity buried they shall be shown in equal reference to the water supply system.

PRECONSTRUCTION CONFERENCE:

At least one (1) week prior to the start of installation of a water main extension there shall be a preconstruction conference at the site to be attended by representatives of the Water Division, the owner and contractor. At this meeting the final determination of the location of the water main, valves,

fittings, services and hydrants shall be made. Also at this time the schedule of carrying out the work and an inspection schedule will be determined. In general, inspections will be made at the following times, more often if necessary:

1. When trench has been completely excavated.
2. When the water main has been laid.
3. When sand has been tamped around pipe.
4. When pipe covered with one foot of sand over top of pipe.
5. When trench has been backfilled to within 18" of finish grade and traceable tape is being placed if non-conductive or plastic is being used.
6. When being tested and/or disinfected.

If any provision or regulation hereof and the application thereof to any person or circumstance is held invalid such invalidity shall not affect other provisions or regulations hereof or application thereof which can be given effect without the invalid provision or application.