COMMISSIONERS
Robert Frederico
Michael Corda
Kenneth Grew

GWD
GRAFTON WATER DISTRICT
Serving Your Water Needs

44 Millbury Street
Grafton, MA 01519
(508)839-2302 - Fax: (508)839-2367

SUPERINTENDENT
David Erickson

Treasurer
Wendy Graves

e-mail: customerservice@graftonwaterdistrict.org

website: graftonwaterdistrict.org

Rules and Regulations

of the

Grafton Water District

of

Grafton, Massachusetts

Revised April 2025
Revised May 2026
Revised Nov 2026

INTRODUCTION

The Grafton Water District of Grafton, in the Commonwealth of Massachusetts, hereinafter referred to as the "District" was established by the acceptance of Chapter 135 of the Acts of 1984 and as amended by Chapter 427 of the Acts of 1987. The Act sets forth the corporate powers and the duties of the District. The following Rules and Regulations are supplementary to and in accordance with Section 11 of the Act.

These Rules and Regulations and all subsequent amendments thereto shall be considered a part of the agreement with the property owner served, hereinafter referred to as "Person" and are supplementary to the Act and the By-Laws of the District.

GRAFTON WATER DISTRICT

RULES AND REGULATIONS

TABLE OF CONTENTS

INTRODUCTION

ARTICLE I Definitions

ARTICLE II General Regulations

Section 1 Power to Establish Regulations
Section 2 Prevention of Water Waste
Section 3 Authorization for Entering of Premises
Section 4 Decision on Waste of Water; Shut off Supply
Section 5 Determination of Water Rates
Section 6 Water Bill Appeals
Section 7 System Operation
Section 8 Appointment and Duties of the Water Superintendent
Section 8A Appointment and Duties of the Business Superintendent
Section 9 Backflow Prevention
Section 10 Betterment's and Procedures

ARTICLE III Water Mains

Section 1 General
Section 2 Entrance Fees
Section 2A Accessory Dwelling Unit
Section 3 Payment of Entrance Fees
Section 4 Application
Section 5 Right to Water
Section 6 Service Pipes and Connection
Section 7 Maintenance and Repair of Services and Mains
Section 8 Meters
Section 9 Shutting off Water
Section 10 Renewal of Service
Section 11 Fire Services – Public Fire Hydrants
Fire Services – Private Fire Hydrants
Section 12 District Extensions
Section 13 Developer Extensions
Section 14 Miscellaneous

ARTICLE IV License and Permit Requirements
Licenses
Section 1 General

Section 2	License Fee
Section 3	Approval
Section 4	Insurance
Section 5	Performance of Work
	Permits
Section 6	Purpose
Section 7	Where to Obtain a Permit
Section 8	Who can Obtain a Permit
Section 9	Revocation
Section 10	Time Limit
Section 11	Approval
Section 12	Existing Services
Section 13	Other Permits
Section 14	Other Requirements
ARTICLE V	Construction
Section 1	General
Section 2	Permits
Section 3	Mains
Section 4	Valves and Boxes
Section 5	Hydrants
Section 6	Construction Requirements
Section 7	Connections
Section 8	Inspection
Section 9	Testing
Section 10	Disinfection
Section 11	As-Builts

WEBSITE INFORMATION -- http://www.graftonwaterdistrict.org

1.0 Application and Forms.
2.0 Rates and Payments.
3.0 Fee Table

ARTICLE I

Definitions (Arranged in alphabetical order)

Terms not specifically defined in this section, shall have the meanings given by the definitions section of the Grafton Zoning By-Laws, which are for that purpose herein by reference.

Unless the context specifically indicates otherwise, the meaning of the terms used in this document shall be as follows:

ABANDONMENT

"Abandonment" shall mean, the lack of use of a water service, where the dwelling or its use has been unoccupied and not in use for a length of time greater than two years.

ACCESSORY DWELLING

"Accessory Dwelling Unit" (ADU) shall mean any proposed ADU, intended to be inhabited, regardless of size, located on a lot where a pre-existing dwelling or structure exists regardless or present use and is serviced by a water service, shall require a separate water service, meter and connection fee as per the district table.

APPLICANT

"Applicant" shall mean any person that has submitted a request to the District for water whether it is for a single family home, a multi-family home, subdivision, a commercial business or industry.

BACKFLOW

"Backflow" shall mean the flow of water or other liquids, mixtures or substances into the distribution pipes of a potable water supply from any source other than the intended source.

BACKFLOW PREVENTION DEVICE OR DEVICES

"Backflow Prevention Device or Devices" shall mean any method to prevent backflow approved by the DEP for use in Massachusetts.

BRANCH

"Branch" shall mean any water main to be connected to an existing water main where the existing main is greater than four (4) inches in diameter.

BUSINESS SUPERINTENDENT

"Business Superintendent" shall mean the person appointed by the Commissioners responsible for the financial aspects of the District's office operations, as described in the Job Description on file in the District office

COMMISSIONERS

"Commissioners" shall mean the duly elected members of the Board of Water Commissioners of the Grafton Water District or their authorized employee, agent or representative.

CROSS CONNECTION

"Cross Connection" shall mean any actual or potential connection between a distribution pipe of potable water from a public water system and any waste pipe, soil pipe, sewer, drain or other unapproved source.

CROSS CONNECTION VIOLATION LETTER

"Cross Connection Violation Letter" shall mean a violation letter designated to the DEP which is sent to the owner by the water supplier delineating cross connection violations found on the owner's premises and a procedure for corrective action.

DEPARTMENT OF ENVIRONMENT PROTECTION

"DEP" shall mean the Commonwealth of Massachusetts, Department of Environmental Protection, Division of Water Supply within such department, unless another division has jurisdiction over the subject matter of a regulation herein, in which case, the reference is to the appropriate division.

DISTRICT

"District" shall mean the Grafton Water District.

DISTRICT ENGINEER

"District Engineer" shall mean any engineering firm or engineer that the Commissioners have selected to perform or assist in an evaluation relating to the operation of the water system.

DOUBLE CHECK VALVE ASSEMBLY

"Double Check Valve Assembly" shall mean a backflow prevention device, which incorporates, and assembly of check valves, with shut-off valves at each end and appurtenances for testing.

GROUP HOME

"Group Home" shall mean a residential facility that contains a group housing arrangement with multiple bedrooms, providing custodial care, but not medical care, requiring supervision around the clock.

IN-PLANT PROTECTION

"In-plant Protection" shall mean the location of approved backflow prevention devices in a manner, which provides simultaneous protection of the public water system and potable water system within the premises.

LICENSEE

"Licensee" shall mean any contractor who has been deemed capable and has been granted permission, by the Commissioners or their designee to perform work on the water system, once a permit has been issued.

MAIN

"Main" shall mean any water line in use by the District to supply water to more than one person's property on more than one lot.

MULTI-FAMILY

"Multi-Family" home shall be a building that is designed for and occupied exclusively as a residence and containing two (2) or more dwelling units.

PERMITS

"Permit" shall mean the authorization by the District to a licensed contractor to perform a specific task on the water system that has been approved by the Commissioners.

PERSON

"Person" shall mean any individual, firm, company, association, society, corporation or group.

REDUCED PRESSURE BACKFLOW PREVENTOR

"Reduced pressure backflow preventor" shall mean an approved backflow prevention device incorporating (1) two or more check valves, (2) an automatically operating differential relief valve located between the two checks, (3) two shut-off valves, and (4) necessary appurtenances for testing.

RIGHT TO WATER

"Right to Water" shall mean that a person has submitted an application to the District, met the requirements of the District and that the Commissioners have approved the application, or that the person be a current water user.

SERVICE

"Service" shall mean any water line, between the curb stop and the water meter, connecting a water main to a person's property.

SHALL; MAY

"Shall" is mandatory, "May" is permissive.

SUBDIVISION

"Subdivision" shall mean the division of a tract of land into two (2) or more lots.

SUPERINTENDENT

"Superintendent" shall mean the person appointed by the Commissioners whose sole responsibility is the operation of the District water system and staff, as described in the job description on file in the District office.

ARTICLE II

General Regulations

Section 1 Power to establish regulations

The Commissioners may establish, change and amend the Rules and Regulations for the introduction and use of water at any duly noticed meeting of the Commissioners by a majority vote.

Section 2 Prevention of water waste

All persons taking the water supplied by the District shall prevent all waste of water.

Section 3 Authorization for entering of premises

The Superintendent, an employee of the District or their designee may at reasonable times enter the premises of any water taker to examine any meters, water pipes and plumbing therein or thereon for the purpose of ascertaining whether there is any waste of water; for the purpose of determining the quantity of water used; the manner of use; and for the further purpose of shutting off the water for nonpayment of bills, fines, or for any alleged violation of the provisions of these Rules and Regulations.

Section 4 Decision on waste of water; shut off of supply

The Commissioners shall have the power to decide what is waste or improper use of water and to restrict its use. If the water taker refuses or neglects to comply with any order of the Commissioners after twenty four (24) hours notice is given, the water shall be shut off and not turned on except by payment of reasonable charges, including the cost to repair or replace defective equipment causing such waste.

Section 5 Determination of water rates

A. The Commissioners shall determine and assess the water rates.

B. The Commissioners will hold a public meeting prior to the effective date of any new rates to allow for public comment.

C. The Commissioners shall determine all other incidental charges, fees, and assessments at any regularly scheduled Commissioners meeting

D. In all cases, bills will be sent to and liability for payment will rest with the owner of the property.

E. Water bills shall be issued monthly or quarterly and are due thirty (30) days thereafter. Delinquent bills or accounts in arrears will be assessed a penalty or two percent (2%) per month or the unpaid balance, plus a $5.00 late charge. A penalty (per the District Fee Table) will be charged if termination or service is rendered due to the non-payment of a delinquent water bill or other termination of service for violations of the rules and regulations.

F. Any person using water, in addition to such entrance fees as put forth in Article III, Section 2, shall pay for the water used at the established rates of the District and shall also pay for all service work and materials on that person's property.

G. Should a person desire, due to vacancy or prolonged nonuse, to have a water service shut off, they shall notify the Commissioners in writing of the request, and the Superintendent will shut the service off at the curb stop and will have the meter removed. No bill will be issued while a service is shut off at the curb stop, however, a minimum bill, in accordance with the District's water rate schedule, will be issued in all other cases. When it is desired to have water turned back on, the person should notify the Commissioners, and service will be reactivated and a fee in accordance with the District Fee Table will be charged.

Section 6 Water Bill Appeals Procedure

GRAFTON WATER DISTRICT
WATER BILL APPEAL PROCEDURE

1. **Office Manager/ District Manager Review:** The Office Manager/District Manager may make adjustments to water bills upon receiving a written or verbal request from the property owner. The request should state the reasons for the requested adjustment, together with all information necessary to evaluate its merits. Excessive water usage caused by pipe leaks or leaking fixtures on the owner's property, beyond the meter, shall not be considered grounds for an adjustment. Should the owner request that the meter be removed and tested, this shall be done in accordance with ARTICLE III, Section 8, Meters.
2. **Eligibility to Appeal:** Any person aggrieved by the decision of the Office Manager and/or District Manager may appeal the decision to the Board of Water Commissioners, provided the bill in question is in the amount of one hundred fifty dollars ($150.00) or more. Bills under one hundred fifty dollars ($150.00) are not eligible for appeal.

3. **Appeal Deadline:** Customers must notify the Grafton Water District of their intent to appeal within twenty (20) days of the initial billing date. After twenty (20) days of the bill date charges are non appealable.

4. **Written Submission:** All appeals must be submitted in writing by mail, hand delivery, or email. The appeal must identify the specific billing period and charges being disputed and include an explanation of the reason for the appeal. It is the customer's responsibility to ensure that the District receives the appeal by the applicable deadline.

5. **Supporting Documentation:** Customers must provide supporting information and documentation necessary for the Board to review the appeal. The District may request additional information if needed to evaluate the matter.

6. **Meeting Notification:** The District will notify the customer of the date of the Board of Water Commissioners' meeting at which the appeal will be placed on the agenda.

7. **Attendance Requirement:** Customers requesting an appeal must attend the scheduled Board of Water Commissioners' meeting, either in person or via Zoom, to present their concerns and supporting information.

8. **Unforeseen Circumstances:** If an unforeseen circumstance prevents the customer from attending the scheduled meeting, the District must receive at least twenty-four (24) hours' notice so the situation can be addressed. Rescheduling is not guaranteed.

9. **Failure to Attend:** Failure to attend the scheduled meeting, either in person or via Zoom, may result in the Board considering and deciding the appeal without the customer's participation. If the customer does not attend, they forfeit the opportunity to present their case before the Board makes its decision.

10. **Payment During Appeal:** Customers are encouraged to pay the disputed bill while the appeal is under review to avoid late fees and other applicable penalties. Submitting an appeal does not suspend the customer's payment obligations.

11. **Board Decision:** Following its review, the Board of Water Commissioners may approve or deny the appeal by a majority vote of the Board.

Section 7 System Operation

A. The Commissioners may make repairs, extensions, or improvements on the water system, etc. to the extent that such actions do not impair the District’s ability to deliver water, serve existing customers, reduce the water services below safe limits, or place the District in debt not authorized by the District’s voters.

B. The District does not guarantee constant pressure nor uninterrupted service, nor does it assure either a full volume of water or the required pressure per square inch necessary to effectively operate appliances of any kind, the same being subject to the variable conditions, which may occur in the use of water from the main.

C. The District will not be responsible for damages caused by shutting off water for the purpose of doing any work on the system, including but not limited to repairs on mains, valves, hydrants, or any other fixtures. In addition, the District will not accept responsibility for damage due to low pressure resulting from any cause. Reasonable notice shall be given, if possible, to all persons before the water is shut off, except in cases of emergency.

D. Any work on the water system by a private contractor or agent shall only be performed after procurement from the Commissioners of all necessary permits and licenses as herein described.

E. No plumber or other person not in the employ of the District shall shut water off or turn on the water at any service pipe, except at the cellar wall.

F. No person, not in the employ of the District, or a member of the Fire Department in the performance of his or her duties shall turn on any hydrant, public or private, without first obtaining permission from the Commissioners.

G. Whenever, by request of the owner or representative, water is turned on or off at the curb stop for testing plumbing or other purposes, the charge for shutting off and turning on water shall be in accordance with the District Fee Table.

H. A fine will be assessed per the District Fee Table for any unauthorized or non-metered use of water from any connection to the District's water supply system.

I. A fine will be assessed per the District Fee Table for any non-essential water use of water from any connection to the Districts water supply system.

J. A fine will be assessed per the District Fee Table for any unauthorized use by any persons shutting water off or turning water on at any service pipe, except at the cellar wall.

Section 8 Appointment and Duties of the Water Superintendent

A. The Commissioners shall appoint a full time Superintendent of the water system. The Superintendent shall have such experience and education as may be required by the Commissioners, and certifications and licenses as my be required by state and federal agencies to operate the water system. The Superintendent shall report to the Commissioners and the Commissioners shall set compensation.

B. The Superintendent shall exercise a constant supervision of the water system and shall be responsible for, its general operations, including, but not limited to:

- Hiring
- Selecting Vendors
- Superintendent District Office
- Meter Reading

- Billing and Collection
- Maintaining System Logs
- System Inspections
- Water Quality Testing
- Enforcing Rules and Regulations
- System Maintenance
- Financial Report

C. The Superintendent shall be the primary advisor to the Commissioners with regards to the overall operation of the water system.

D. The authority of the Superintendent is derived from the powers granted the Commissioners by the District. As such, all decisions of the Superintendent are subject to review by the Commissioners, any persons wishing to appeal a decision by the Superintendent shall submit a written request setting forth the factual details, to the Commissioners for review and action.

E. The Superintendent shall report to the Commissioners on a monthly basis with respect to the general condition of the system additions, special projects, etc.

F. The Superintendent shall record all financial transactions from the collection of funds from water bills and make a report to the District Treasurer on a monthly basis.

G. The Superintendent shall issue to the Commissioners an interim report on the status and condition of the system. This interim report shall cover the term from July 1 to one month prior to the annual District meeting for the fiscal year.

H. The Superintendent shall issue to the Commissioners an annual report detailing all aspects of the operations of the system for the fiscal year just completed. The annual report shall be due no later than August 3, following the end of such fiscal year.

I. The Superintendent shall prepare an estimated budget for the upcoming fiscal year by the end of January of the preceding year based on the present years operation and present it to the Commissioners.

Section 8A Appointment and Duties of the Business Manager

A. Under the supervision of the Commissioners, provide budget and financial management support, professional procurement and accounts management for the District, assisting the Commissioners, Superintendent, Office Manager and Treasurer with certain financial aspects of the District operations. The Business Superintendent shall have no supervisory capacity in their role.

B. The Business Manager shall be responsible for the following:

a. Prepare the Annual budget with support staff.
b. Prepare warrant for Annual meeting.

c. Monitor Monthly expenses and receipts.
d. Review and advise monthly warrant with Superintendent.
e. Manage 30-B procurement with support staff.
f. Review contracts with insurance company, solicit insurance quotes as needed.
g. Review water billing and collection data as needed.
h. Review monthly financial payables and receivables with support staff.
i. Assist in the Annual Audit review.
j. Advise Superintendent on a monthly basis regarding budget expenditures.
k. Suggest rate and miscellaneous charges and adjustments to the Board, as needed.
l. Develop long-term capital expense plan as needed.
m. Review monthly financial reports with Treasurer.
n. Manage investments with Treasurer.
o. Manage OPEB account and report to Board annually.
p. Manage Solar contracts and billings.
q. Manage Smart Plan with employees.

Section 9 Backflow Prevention

The District, acting under the Drinking Water Regulations of Massachusetts 310CMR22.22 and the Federal Drinking Water Act of 1974 (Public Law 93-523), as the supplier of public water is responsible for the safety of the public water system under its jurisdiction. To this extent

1. The District has the authority to survey and inspect any industrial, commercial, residential or institutional premises served by the public water system to determine if cross connections exist and that all cross connections are property protected by an appropriate device.

2. If, as a result of such survey or inspection of the premises, the District determines that an approved backflow prevention device is required at the District's water service connection or as in-plant protection on any customer's premises, the District shall issue a cross connections violation letter to said customer to install approved backflow prevention devices. The customer shall within a time frame determined by the District, install such approved device or devices at his own expense, and failure or refusal or inability on the part of the customer to install said device within the specified time frame shall constitute ground for discontinuing water service to the premises until such device or devises have been professionally installed as a safeguard to the integrity of the public water supply.

3. All reduced pressure backflow preventors and double check valve assemblies installed on the distribution system as provided in 310CMR22.22 (9) (d) shall be tested as per the Rules & Regulations of the DEP. All testing shall be performed by testers certified and licensed by the Commonwealth of Massachusetts. If the supply is used less than six months of the year, these devices shall be inspected and tested by the District once a year.

4. For each commercial and industrial customer where backflow prevention devices are required to be tested, a fee as per the District Fee Tables will be charged. The Board of Water Commissioners established such fees under powers derived from the Chapter 135 Commonwealth of Massachusetts enabling act legislature and under M.G.L. Section 38421.

Section 10 Betterment's

Betterment will be used to share the cost of laying of pipes with the property owners that will be receiving a benefit to their property by the laying of pipes.

A. Betterment will only apply to those projects that are voted on prior to the start of installation. Betterment can be used in any instance where benefit is receive including the following situations:

   1. District Initiated Projects

      When the Commissioners plan a new water main extension (laying of pipes) the capital expenditure will be voted on a scheduled District meeting called, therefore. The maximum of 25% of the finished project will be subject to betterment charges.

   2. Petitions

      When a petition is received by the Commissioners to extend a new water main into an area that is not supplied by existing water mains the petition will be voted on at a scheduled district meeting called, therefore. The entire project will be subject to the betterment charges.

B. Betterment charges will be calculated by the Commissioners for each individual project. The unit cost per linear foot shall be computed by dividing the cost of the project by the total number of linear feet assigned to all properties.

C. The minimal frontage assigned to a lot will be 125 feet except for vacant lots not eligible for building, such as wetlands.

D. The maximum frontage assigned a residential lot of a smaller size than that eligible for subdivision under any existing rule, which is vacant or contains one single-family residence, shall be 300 feet.

E. Commercial and industrial property will be assessed based on the full frontage of the lot.

F. Lots of large enough area to be eligible for subdivision that are vacant or have a single-family resident may elect to defer the payment. Payment for the first 300 feet will be made as part of the initial assessment with the balance, in excess of the 300 feet deferred for 10 years or until the parcel is built upon, whichever occurs first, at which time the deferred principle and accrued interest will be assessed.

G. All municipal properties shall be exempt.

H. Abatements must be applied for on the proper form within six (6) months of the mailing of the original betterment bill. The Commissioners will notify the Assessor's office if an

abatement is granted. The burden of proof will be on the owner to justify the need for an abatement.

I. Any person who has benefited by the installation of a water main with a public way abutting their property shall pay the betterment assessment with a six-(6) month period from the time of notification by the Commissioners. Payment may be made in full or over a period of time, to be determined by the Commissioners. Payment not made in full shall be charged interest at a maximum rate allowed by state law. All unpaid betterment charges will become a lien upon the property.

J. Land, which is not built upon, may have payment of the full betterment deferred for a period of 10 years or until the parcel is built upon whichever comes first, notwithstanding Section F above. All betterment charges will become due at the issue of a building permit and before any water service connections are made. Payment deferred shall be charged interest at a rate allowed by state law. All unpaid betterment charges will become a lien upon the property.

K. The application for service connection to the water system shall not be included in the betterment charge. The application for service shall be applied for and paid separately at the Water District Office in advance of the connection being made.

L. All current users of the Grafton Water District will be exempt.

M. A late charge of $25.00 and a 14% interest penalty will be assessed on any payments not received in our office by the close of business on the due date.

ARTICLE III

Water Mains

Section 1 General

Extension of water mains shall be subject to approval by the Commissioners and shall be constructed under the supervision of the Superintendent and/or the District's Engineer.

Section 2 Entrance Fees

The Entrance Fee charged by the District is for the privilege of any person to be allowed to connect to the water system. This fee will be used to offset the future expenditures that will be required due to the additional water usage by a new connection. The Entrance Fee does not include any material, labor, or water.

Entrance fees for any service pipe connected into the water system shall be in accordance with the following schedule:

1. Residential

a. Single family residence: As per Fee Table.

b. Multiple family residence (including all structures containing more than one (1) dwelling unit where each unit is required that an individual service and curb stop be installed under these Rules and Regulations: As per the Fee Table.

c. Multiple family residence (including all structures containing more than one (1) dwelling unit, where the building is allowed to be on a single service and curb stop under these Rules and Regulations): As per the Fee Table.

2. Nonresidential

a. Entrance fee shall be based on size of meter as per the fee table.

2.1 Group Home

a. Entrance fee shall be based on size of meter as per the fee table.

3. Subdivisions

a. Single family residential subdivision. The entrance fee shall be per the table.

b. Multi-family residential subdivision. The entrance fee shall be per the table.

4. Commercial or Industrial

a. The entrance fee shall be per the table.

5. Fire protection

a. Any service pipe to be used for fire protection purposes (i.e. feeding hydrants, sprinkler systems, etc.) shall be a separate service from the main and subject to an entrance fee as per the Fee Table.

6. Non-Essential Water use fines

a. Any use of non-essential water use that are subject to mandatory band includes of lawns via sprinklers or automatic irrigation systems, washing of vehicles, except in a commercial car wash or as necessary for operator safety; and washing of exterior building surfaces, parking lots, driveways or sidewalks, except as necessary to apply surface treatments such as paint, preservatives, stucco, pavement or cement and are subject to a water non-essential water use fee as per the Fee Table.

b. The following uses may be allowed when mandatory restrictions are in place include irrigation to establish a new lawn and new plantings during the months of May and

September; irrigation of gardens, flowers and ornamental plants by means of a hand-held hose or drip irrigation systems; and irrigation of lawns by means of a hand-held hose only.

Section 3 Payment of Entrance Fees

A. The entrance fee for all applicants shall be payable at the time of application.

- Single family applications, if not approved within 60 days, the entrance fee shall be returned and the applicant may reapply
- All other applications, if not approved within 60 days, the entrance fee shall be returned and the applicant may reapply.

B. All entrance fees shall become non-refundable after approval of the application by the commissioners.

Section 4 Application

A. The District reserves the right to reject any application for service installation.

B. Single family residence

1. Any persons desiring to connect to the water supply system should apply to the District's office and fill out the application form ("Request for Service").

2. The prescribed from must be accompanied in all cases by a plot plan showing the location of the proposed connection and appurtenances, unless the Commissioners waive this requirement.

3. The plot plan shall include a list of the proposed material to be used in the installation.

C. All other applications

1. The developer shall file with the District, after approval from the Planning Board and Conservation Commission, and all other permits.

2. The prescribed form must be accompanied with two (2) copies of the plan showing in detail the proposed water system. The plan must meet the following:

   a. Be prepared by a registered engineer

   b. All plans for a water system in the District will show and/or specify the following:
      - Main locations & size
      - Valve locations & size
      - Service tap locations

- Hydrant locations
- Dwelling locations
- Lot locations

c. All taps to the existing system will specify a tapping sleeve and gate valve or at the Commissioners discretion, a cut-in tee and three-way valve.

3. A detailed water supply impact study may also be required to be filed covering

a. A study of the water system within the subdivision covering pipe size, location, elevations, valves, flows, pressures, etc., and other pertinent information.

b. A study of the impact of the subdivision on the existing water system.

c. These studies shall be prepared by an engineer registered in the Commonwealth of Massachusetts.

d. The report shall be such that the Commissioners, together with such professional consultants as it elects to employ, can make judgment and render a decision as to whether the Commissioners shall allow a connection to the water system. Following their review, the Commissioners will determine whether and under what conditions these connections shall be made.

4. Commercial property shall file a fire system plan at the time of application.

5. The applicant shall pay all costs of reviewing the impact studies required by the District for service. In order to ensure a complete understanding of this, the Superintendent will have the applicant sign a District letter in which the developer agrees to pay all costs associated with the review of the impact study being submitted, including, but not limited to, phone correspondence, secretarial duties, superintendents review, field inspections, and an engineering review by the District Engineer selected by the Commissioners.

D. After a review by the Commissioners, any comments on the plans will be forwarded along with any additional requirements that would allow the system to properly supply the applicants proposed development and to meet the long-range plans of the District.

E. Approval will be granted, by the Commissioners signing the application, after all comments have been satisfactorily resolved.

F. In the case of all other users, whether commercial, residential or industrial, the details as spelled out above shall be used, except that for small commercial or industrial users the detailed study may be modified after individual review by the Commissioners. In all cases, the approval must be in writing prior to any connections.

Section 5 Right to Water

A. Approval of an application will guarantee the applicant the right to connect to the water system and that the present system is capable of supplying the proposed development.

B. Any right to water granted by the District will be restricted by a time duration as follows:

1. Installation granted under Article III Section 2.A will have one (1) year to connect to the District's system.

2. Installation granted under Article III Section 2.B (subdivisions) will have a time limit on the project based upon the proposed phases of that project as approved by the Planning Board and the Commissioners. Entrance fees subject to change during the construction phase as per any amendments to the fee tables.

C. After one year has expired on an approved applications , the Board of Water Commissioners shall implement one of the following:

1. The applicant shall be deemed to have waived his right to water and the District may reallocate the right to water. Refunds of any paid Entrance fees is subject to the approval of the Commissioners. Allocations of water shall expire on any unpaid Entrance fees within one year of application approval.

2. The applicant shall be assessed an additional Entrance fee charge for each unit.

D. If an applicant has lost the right to water, that person may reapply by submitting an application to the District and paying the present entrance fee.

Section 6 Service pipes and connections

A. In the case of the construction of an individual single-family home, it will be the responsibility of the property owner to have the service pipe installed. A contractor licensed by the District must install services. All work performed will be in accordance with these Rules and Regulations and District Specifications.

B. All services shall be installed by the developer or property owner, they will furnish any material, labor and whatever else is necessary to complete service. This includes the furnishing and installing of tapping sleeves and valves for larger services. The District will specify the kind and quality of the materials, which shall be used for the service. This work shall be done in accordance with these Rules and Regulations and any District Specifications.

C. No drain, sewer, gas, chemical, etc., lines shall be laid nearer than (10) feet horizontally to the water service pipes and at least two feet above or below the water line. Any sewer lines must be under the water line unless otherwise approved by the District. Existing or future crossings, public or private, must be disclosed to the District and the person proposing the

crossing shall provide to the District a plan certified by an engineer showing in detail the proposed crossing in relation to the District's mains and full compliance with the District's Rules and Regulations and Specifications. The District may grant exceptions in writing after approval of other agencies.

D. All service pipe trench with pipe properly laid from the property line to the meter shall remain open until inspected and approved by an agent of the District. The cost of inspection shall be paid by the applicant or other sponsoring parties at the billing rate per the District Fee Table.

E. No fixture shall be attached to nor shall any branch be made in the service pipe between the meter and the street main.

F. The service pipe shall be at least five (5) feet below the surface grade but at no depth greater than 8' and shall be placed on firm and continuous earth to give unyielding and permanent support.

G. Each premise shall be supplied through an independent service pipe from a separate curb stop, and all multi-family houses, apartment houses, office buildings, or business blocks shall have a separate service connection and curb stop for each tenant unless otherwise specifically approved or ordered by the District in which case the property owner is to be solely responsible for all water used on and in said building or premises.

Section 7 Maintenance and repair of services and mains

A. Maintenance and repair of all service pipes beyond the curb stop or property line whichever is closest to the street shall be the responsibility of the property owner.

B. Maintenance and repair of the service valve and fittings before the meter shall be repaired by the District at the owner's expense.

C. Major repairs or relays of pipes, whether deemed necessary by the Commissioners or requested by the property owner, shall be the responsibility of the property owner.

D. The District will only make emergency repairs that the Commissioners may deem necessary at the time and the property owner shall be billed accordingly.

E. The District will be responsible for repairs up to and including the curb stop or property line whichever is closest to the street.

F. Any mains located on non-town accepted roads will be the responsibility of the property owner or association to maintain and repair. The District may in an emergency situation repair or maintain, and bill the owner as required.

Section 8 Meters

A. All individual services from the water supply, except those feeding sprinkler systems shall be metered by the District.

B. The District will furnish and install all meters for which a service charge detailed in the District Fee Table shall be paid by the person requesting the service.

C. The Applicant shall be responsible for providing and installing all parts associated with the meter setting including but not limited to valves, meter spuds, flanges, bypasses and backflow prevention devices, before any meter will be installed.

D. All meters shall be as determined by the Commissioners.

E. All meters one (1) inch or less will be maintained and replaced at the expense of the District, except in the cases of damage or injury for which the District is not responsible, and then such meter shall be repaired or replaced by the District at the expense of the owner. Those meters over one (1) inch will be maintained and replaced by the District at the expense of the owner in all cases.

F. No person, except an Agent of the District, shall change, alter, disconnect, or in any manner disturb the meter.

G. The meter and shutoff valves shall be installed in a place satisfactory to the District and readily accessible for the purpose of reading, making repairs, or replacement.

H. The property owner shall provide access to the meter at any reasonable times.

I. If the owner requests the Superintendent to remove the meter and check its accuracy, there will be a charge assessed to the owner, if the meter is found to be running accurately (within two percent 2%), a charge will be assessed as indicated in the District Fee Table. Should the meter prove to be operating in excess of 102%, no charge will be made. All requests to the Commissioners shall be in writing by the property owner.

J. Any meter over two (2) inches in diameter shall be tested by the District at a cost to the person requesting the test without regard to the accuracy of the meter.

K. No meter shall be disconnected from the service pipe, moved, or disturbed without first obtaining the permission of the Commissioners, who will send a property authorized agent to attend to any change needed. The property owner will be charged for all costs associated with the change.

L. Meters must not be exposed to danger from frost, contamination, or physical damage. A charge of time plus materials will be assessed for any damage meter which requires repair or replacement, which is not due to normal wear and tear. Meters requested to be installed between November 1st and April 15th can only be approved if there is heat available to keep the service line and meter from freezing or by approval of Superintendent.

M. Whenever a discrepancy occurs between the remote reader and the meter installed in the water line, the water line meter will be used as the final determination of water usage.

Section 9 Shutting off water

A. The District shall have the right at the discretion of the Commissioners to shut off water for the following reasons:

1. Making unauthorized alterations of repairs to meters, mains, or pipes.

2. Disregard of the Rules and Regulations of the District or the requirements of the Commissioners.

3. Neglecting to make payments of charges for water service or any other charges against the owner of the premises.

4. Misrepresentation on application as to the premises or fixtures to be supplied, or the use of the water supply.

5. Use of water for any premises or purpose not described in the application.

6. Tampering with any service pipe, meter, curb stop, seal, or any appliance of the District.

7. Failure to maintain, in good order, connections, service lines, or fixtures for which the customer or property owner is responsible.

8. Waste of water through improper or imperfect pipes, fixtures or otherwise.

9. Vacancy of the premises.

10. Refusal of access to premises to inspect, read, maintain, or remove meters.

11. Refusal to conserve water during periods of restricted supply.

12. Failure to pay water bills or charges at a prior location.

13. Any cross connection which would introduce water or any liquid other than that supplied by the District.

The District assumes no responsibility for damage resulting from shutting off water for such reasons.

B. The District shall have the right at the discretion of the Commissioners to restrict the use of water whenever public emergency so requires.

C. The District will undertake to use reasonable care to prevent and avoid interruptions and fluctuations in the service, but it cannot and does not guarantee that such will not occur. The District shall not be held liable for any damage to property or persons resulting from any delay or interruption in service unless caused by the willful act of the District.

D. A penalty (Per the District Fee Table will be charged if payment is not received within 75 days regardless of if service is actually terminated.

E. Upon the termination of service as a result of non-payment of a water bill, payment shall be received in the District office in full. If payment is made by check and is returned to the District office by the bank for non-sufficient funds, a charge of $25.00 will be added to the payment due. Immediately upon receipt, by the District, of a returned check subject to nonsufficient funds, which was received as payment for termination, the District shall terminate service and assess an additional fee as per the fee table.

Section 10 Renewal of Service

When water service to any premises has been terminated or abandoned for any reason other than temporary vacancy it will be renewed only after the acceptance of a new application and when the conditions, circumstances or practices which caused the water service to be discontinued are corrected to the satisfaction of the District, and upon the payment of all charges due and payable by the customer in accordance with the rates, and Rules and Regulations. A payment plan on overdue charges can be arranged if so desired and approved by the Commissioners. Any water use greater than the original or grandfathered approved use shall require the payment of additional entrance fees.

Section 11 Fire Services

Public Fire Hydrants

A. The fire department shall have necessary use of hydrants at fires, but no other person shall be allowed to operate hydrants without permission of the Commissioners or their agents.

B. The fire department shall obtain permission from the Commissioners at least two days in advance of any proposed use of hydrants other than fires.

C. A proper hydrant wrench must be used when removing the cap and opening the hydrant.

D. No person shall obstruct the access to any hydrant by placing or permitting any snow, debris, building materials, or other obstruction to remain on or about the materials, or other obstruction to remain on or about the hydrant which will in any manner interfere with its use.

E. All public fire hydrants shall be maintained by the District.

F. Inspections and tests of public hydrants will be made by the District at convenient times and reasonable intervals.

G. Whenever a change in location size or type, or permanent removal or a fire hydrant is requested by the Town and/or a customer, such change will be made by the District at the expense of the Town and/or customer.

H. A charge per the District Fee Table will be assessed for the use and installation of a meter attached to a hydrant for private use.

I. A charge per the District Fee Table will be assessed for the testing of fire flows associated with the usage of District hydrants.

J. A charge per the District Fee Table will be assessed for the use of hydrants for filling swimming pools.

Private Fire Service

K. Private fire service pipes may be installed by an industry at the owner's expense including by the street connection. The layout of check valves, type and size of pipe, and control valves shall be subject to the approval of the District, Grafton Fire Department, the Fire Underwriters and the Mass. Department of Environmental Protection.

L. Owners shall install backflow prevention devices of the type required by the Mass. Department of Environmental Protection.

M. No service line or tap is to be taken from any private fire service line. Failure to comply with this regulation will subject the customer to discontinuance of service, and/or liability for quantity of water used as estimated by the District.

N. No consumption is permitted through fire connections except for the extinguishing of fires.

O. Owners with private fire services may be subject to standby charges as determined by the District.

P. The District is not responsible for the maintenance of pressures, volumes, or supply of water. The service may be subject to interruptions of service or variations in pressure as system operations require or as a result of casualty.

Q. Individual structures with multiple sprinkler risers are subject to fees based upon square foot area protected by each riser.

Section 12. District Extensions

Any extensions to be made by the District for a group of people who desire to be served by the water system or any extensions to the water system to be made as capital improvements shall be made as follows:

A. Any group of five or more people in the District who desire to be served by the water system shall submit a petition to the Commissioners.

B. The Commissioners shall give to the Superintendent any petitions or proposed capital improvements or proposed capital improvements to be made to the system in the next fiscal year by the first of November.

   1. The Superintendent shall receive an estimate of the cost for the main extension and present it to the Commissioners by November 15th.

   2. The Commissioners shall hold a public hearing by the 1st of December for the purpose of hearing objections to and arguments for such extension. Minutes of said hearing shall be made and preserved by the Commissioners. The Commissioners shall publish due notice of the time and place of said hearing and shall publish their findings and recommendations regarding each requested extension at least once before January 15th of the following year in a newspaper having a general circulation in the town.

   3. The Commissioners shall insert an article in the warrant for the next annual District meeting providing for all of the extensions.

C. In the event that any person(s) wishes to be serviced by the water system immediately and without complying with the provisions of these Rules and Regulations, they shall be required to pay to the District in advance of construction, the full cost of same and may thereafter petition the District for the privilege of being brought under the terms of these Rules and Regulations and the Superintendent is hereby authorized to expend money collected under the provision for such purposes with the Commissioners approval. Expenditure of funds may require the approval of the voters of the District at a duly called and posted meeting.

D. Upon vote of the District to construct a water main, the Superintendent shall proceed with the construction by seeking bids from licensed contractors.

E. All mains installed shall conform to the Rules and Regulations on construction and any District Specifications that apply.

F. Alternatively, a capital improvement or extension of service may be made in accordance with Massachusetts General Laws Chapter 40, Sections 420, 42H, and 411, providing for the assessment of betterment by the District on the land particularly benefited by an improvement or extension. Betterment will be assessed as per the Rules and Regulations.

Section 13 Developer Extensions

A. The design of any proposed water system addition must be approved by the Commissioners prior to issuance of permits for construction. Water system construction must be inspected and approved by the Superintendent and/or the District Engineering and the cost of engineering inspection of the construction shall be paid by the developer or other sponsoring parties or agencies at the hourly billing rate as per the Fee Table.

1. The applicant and owner of the property shall pay all costs relating to the laying of water main and appurtenances.

2. The applicant shall perform all work in accordance with these Rules and Regulations and with current specifications of the District.

3. Water mains shall be constructed by a competent licensed contractor and shall be cleaned, disinfected, flushed and tested before connection of the water system addition to the District's water system.

4. The applicant shall hold the District harmless and indemnify the District and the Town of Grafton against any liability resulting from any defective materials, workmanship, or operation in connection with said installation. When working in public ways the applicant and/or contractors shall maintain Public Liability Insurance in the amount not less than one million dollars ($1,000,000) for injuries, including wrongful death to any one person, subject to the same limit for each person in an amount not less than one million dollars ($1.000,000) on account of an accident.

5. The applicant shall agree to pay for the privilege of connecting a water system addition to the District's water system in accordance with the provisions of Section 2.

B. When any subdivision as determined by the Commissioners requires wells, pump standpipes, booster station, etc., the cost of each such installation shall be the responsibility of the applicant.

C. The applicant will file a Deed of Easement and Right of Way for placement of Water Mains and Pipe prior to the acceptance of water mains by the Commissioners and before the water is turned on for the project.

D. All system additions, i.e. mains, branches, hydrants, valves, wells, pumps, standpipes, etc. shall become the deeded property of the District. The Commissioners will accept a system by signing the permit after the final inspection has been completed. From that time on, the equipment will be maintained and serviced by the District except as stated in Section 7-F.

E. All work performed, material, and equipment will be warranted to the District for one (1) year, from the date of acceptance by the Commissioners, by the contractor who installed said equipment. This will include the cost to replace the defective work, material, or equipment.

F. Whenever possible, any extensions will have the mains looped to prevent dead ends in the water system. This should also include the possibility of providing two (2) flow paths for supplying water.

G. All main extensions shall have corporations and curb stops installed for each dwelling located along the new main route. The cost of each such installation shall be borne by the applicant.

Section 14 Miscellaneous

A. All future applicants for connections to the water system will be notified that no connection will be made to any service, any part of which is connected to a system designed to use the supplied water for purposes such as landscape watering, fountains, or any other uses not essential to securing necessary occupancy permits and human habitation, the Commissioners shall further take any steps available to control such uses on existing services, and to control the use of all uses not essential to proper human occupancy.

B. All persons seeking service from the District shall be governed by these Rules and Regulations and the obligations and responsibilities assigned herein to applicants and customers.

C. The District reserves the right to place a lien on the real estate of any person who fails to pay bills for water or services supplied to or for the benefit of the owner's land (Massachusetts General Laws Chapter 40, Section 42A through F).

ARTICLE IV

License and Permit Requirements

Licenses

Section 1 General

A. Contractors or individuals of established qualifications, reputation, and experience shall be licensed by the District to make connections to the water system.

B. No connection shall be made or service pipes installed by any contractor or individual not so licensed.

C. No licenses shall be transferable.

D. A list of all licenses shall be kept by the office Superintendent

Section 2 License Fee

All licenses shall be subject to compliance with the following requirements.

A. Filing an application form "Application for License" with the Superintendent.

B. Applicants for licenses are required to pay a filing fee of in accordance with the District Fee Table, payable to the District, which will be refunded in full to the applicant if the application is rejected.

C. All licenses issued will expire on December 31 of each year after which they will be renewed upon payment to the District of a renewal fee in accordance with the District Fee Table.

Section 3 Approval

A. Applicants for licenses will be approved or disapproved within a period of thirty (30) days after filing the application.

B. The Commissioners reserve the right to revoke or suspend any license if any provision of said license is violated.

Section 4 Insurance

Applicants for licenses, after approval by the Commissioners, shall file with the Commissioners a certificate of insurance in the sum greater than one million dollars ($1,000.000) of general liability and aggregate of two million ($2,000.000) and a certificate of insurance covering current workmen's compensation, all of which shall remain in full force and effect for a period of at least one (1) year from the date of the original approval and each calendar year thereafter upon renewal. Said insurance shall indemnify the District and the Town of Grafton against any and all claims, liability or action for damages incurred in any way connected with the performance of the work of the licensee and for or by reason of any acts or omissions of said licensee in the performance of work.

Section 5 Performance or Work

A. The licensee shall abide by all conditions of these Rules and Regulations and District Specifications with particular reference to Article V, construction requirements.

B. The licensee shall comply with all District, town, state, and federal codes, rules and regulations.

C. All licensees are required, if, during the course of their work, they should encounter any previous violations of these Rules and Regulations, to give a full written report to the Commissioners within twenty-four (24) hours of such discovery.

D. All licensees are required to give personal attention to all installations and shall employ only competent and courteous workers.

E. All licensees shall have all necessary equipment, tools and material to perform this work.

F. The licensee shall make repairs without cost to the District for any defect in the work or parts of the work furnished or built by the licensee. Any damage due to faulty workmanship or equipment furnished by the licensee in which defects or damage appear within one (1) year from the date of final inspection shall also be repaired by the licensee.

Permits

Section 6 Purpose

The purpose of the permit is to inform the Superintendent, where the work is to be performed, who is performing the work and what is being done to the system. This permit will also allow the Superintendent a chance to make sure all the proper permits for the various state and town requirements are met.

Section 7 Where to obtain a permit

Permits for installing water services and for connections to water mains may be obtained weekdays at the office of the Water District between the hours of 8:30 am and 4:00 pm

Section 8 Who can obtain a permit?

Permits will only be issued to competent contractors licensed in the District. Permits are not transferable between contractors nor are they transferable between locations for water service connections.

Section 9 Revocation

Permits shall be subject to revocation when any of the Rules and Regulations and District Specifications are not being followed.

Section 10 Time Limit

If the work under the permit is not completed within ninety (90) days, a new permit must be obtained.

Section 11 Approval

Permits will not be issued until the applicant has filed a layout plan accurately showing the location of existing utility connections, house location and route of water service, and said layout has been approved by the Commissioners.

Section 12 Existing Services

Permits must be obtained for renewal of existing water service connections. Responsibility and liability for any repair work shall be the same as are imposed for original connections.

Section 13 Other Permits

The issuance of a permit by the District in no way relieves the applicant, contractor or the property owner of the responsibility to comply with the Rules and Regulations set forth by the Town of Grafton, the State of Massachusetts, or any other governmental authority.

Section 14 Other Requirements

No permit shall be issued, except in cases of emergency, to dig up or make an excavation in a public way until the applicant files with the Department of Public Works copies of the notices to public utility companies as required by General Laws, Chapter 82, Section 40.

ARTICLE V

CONSTRUCTION

Section 1 General

A. The Rules and Regulations in this Article shall be considered the minimum requirements for any service, branch, or main added to the system by any licensed contractor. Additional requirements may be imposed by the Commissioners in particular instances on proposed construction work for sound engineering reasons, such as, to meet the long-range system plan, prevent a subdivision from having a negative impact on system operations, and to prevent the expenditure of funds by the District to support the addition of a subdivision to the system, etc.

B. The Commissioners may from time to time develop standard specifications for equipment installation, which will be used in addition to the Rules and Regulations and will be filed with the District office.

Section 2 Permits

Before any permit is issued for the installation of a service, branch, or main, the following must be presented to the Superintendent:

A. A copy of the plot or subdivision plans approved by the Planning Board and the Commissioners to be kept on file.

B. The Dig Safe Permit and the road-opening permit issued by the Highway Supervisor.

C. In the case of a permit being required by the State Department of Public Works, the contractor will fill out all required applications and the Superintendent will submit it on behalf of the District. All bonds required will be posted by the contractor on behalf of the District in addition to those required by the District.

Section 3 Mains

A. All pipe used for mains shall be a minimum of eight (8) inches in diameter, except for hydrant branches.

B. All pipe shall be of a type specified by the District Engineers.

C. Mains installed as part of a subdivision shall include a corporation stop, piping, curb stop and box & rod to the property line for each lot shown on the approved plan.

D. All mains installed shall be inspected by the District/District Engineering prior to backfilling.

E. All water mains over six (6) inches in diameter shall be Ductile Iron, Class 52 in accordance with AWWA standards.

F. Excavations will be to a depth that provides a minimum of five (5) feet of cover over the pipe and a depth no greater than eight (8) feet.

G. If excavation is in ledge; a minimum of eight (8) inch spacing below and 2' to the vertical sides around the pipe will be required to allow for selected backfill material. It will be at the discretion of the District/District Engineer as to the type of bedding used and will depend on field conditions. In any event, it will be either crushed bank gravel or three fourths-inch (¾") stone. No stones larger than three (3) inches in diameter may be used within the first foot of backfill over the pipe. Once the pipe has sufficient cover with select material, normal backfilling may proceed with care.

H. Jointing of push-on pipe will be with the use of a come-along or bar. If a bar is used, a block of wood will be used between it and the pipe. The same applies for having a backhoe set larger diameter pipe, a block of wood will be inserted between the bucket and pipe; in no event will there be a metal to metal driving force to set the pipe. If this is not strictly complied with, the length of pipe will be removed and a new one used in its place.

I. All mains shall be installed per the District's specifications or as directed by the District's Engineer. In all cases, this will include the installations of thrust blocks at all plugs, caps, tees, bends and hydrants to prevent movement.

J. Main line taps will always be done with the use of a tapping sleeve and gate valve. The tapping sleeve to be Mueller or approved equal. If the contractor is to make the tap,

evidence of competence through previous work must be furnished and the contractor must have the necessary tools to perform the work satisfactorily.

K. If nometallic pipes are used in the installation of any water main or service pipe, a warning ribbon shall be used. Said ribbon shall be blue in color and imprinted with the words "CAUTION WATER LINE BELOW," or words of similar intent, and shall be metallic to provide for future locating with inductive tape locators.

Section 4 Valves and Boxes

A. No main shall extend over one thousand (1,000) feet in length without the use of a gate valve.

B. Main valves shall be either:

1. Resilient Wedge Valves that are open left and approved by the District Engineer.

2. Butterfly valves may be used on pipe size twelve (12) inches and up. Subject to Superintendent approval.

3. All main valves shall be epoxy coated on the inside and outside surfaces.

4. All main valves shall be equipped with gate box aligner.

C. Main gate boxes shall be cast iron, slide-type with at least six (6) inches of adjustment and at least five (5) feet long. The covers shall be flush close fitting with the letter "W" or the word "Water" cast into the cover and be "American" made.

D. All intersections of mains shall be gated in their respective direction.

E. Service box and valve covers must be plumb and set at finish grade.

Section 5 Hydrants

A. All hydrants shall be within seven hundred fifty (750) feet of each other or so spaced at the discretion of the Commissioners after review by the Fire Chief.

B. All hydrants shall be located before and as close as possible to the gate valve specified in Section 4 to allow for flushing.

C. All hydrants shall be equipped with mechanical joint hubs.

D. All hydrant branches shall be a type and style consistent with District specifications.

E. Hydrants shall have six (6) inch mechanical joint shoe, 5 ¼ inch valve opening, and five (5) foot six (6) inch bury, open left with two (2) one and a half (1 ½) inch hose nozzles and one (1) four and a half (4 ½) inch pumper connection, National Standard Threads and operating nut.

F. No hydrants shall be placed within fifteen (15) feet of a driveway or access road.

G. Hydrants shall meet or exceed AWWA specification C-502.

H. Hydrants shall be able to be rotated 360 degrees. Nozzles shall be threaded in and pinned. They shall have a positive closing, self-cleaning drain valve and drainage area shall be completely bronze or brass lined.

Section 6 Construction Requirements

A. Work performed by the District

In the event that the District is involved either in the installation of a new service or relay to single-family residence or repairs to an existing service, the work shall be performed in accordance with the following:

1. Trenches or areas of excavation, after completion of installation or repairs, shall be rough graded and hand raked. Permanent repairs on the landowner's property (i.e. loaming, seeding, cold patching and hot topping of drives and walks, cement sidewalks, steps, etc.) shall be their responsibility.

2. Fences or walls of any kind, if not removed by the landowner, will, if within the District's means and capabilities, be removed and staked on the landowner's property. Upon completion of the work, re-erection or rebuilding shall be the responsibility of the landowner.

3. Trees, bushes, shrubs, hedges, flowers, lawn ornaments, etc., if not removed by the landowner, will, if within the District's means and capabilities, be removed and staked on the landowner's property. Upon completion of the work, replanting, or replacement of these items shall be the responsibility of the landowner.

4. In the event that the work necessitates the cutting of roots of trees, bushes, shrubs, hedges, etc., the District will not be responsible for their continued life.

5. The landowner shall be responsible for notifying the District of any underground wiring, wells, septic system pipes, drainage pipes, etc. that may be in line of construction. Unless the District is notified in advance, it will assume no liability for resulting damages.

6. All decisions made by the Superintendent pertaining to Subsection A (1) through A (5) above will be subject to appeal to the Commissioners.

B. Work performed by developers and/or private contactors.

In the case of a water main extension, the owner of the property or developer thereof shall construct and install the mains and house connections in accordance with the following Rules and Regulations:

1. Any contractor involved in construction work in the District will strictly adhere to the provisions as set forth in these Rules and Regulations.

2. No equipment, tools, or material will be rented or loaned by the District to a contractor.

3. All material used must be of the same make and quality as specified by the District.

4. All labor and material cost to install a water system as specified herein will be borne by the owner, developer, or contractor, whatever the case may be. Costs for taps into the system and the restoration of any public way will be borne by the owner, developer or contractor.

5. Excavation in any public way will require a road-opening permit from the Highway Department. Necessary forms may be obtained from and filed with the Highway Department. It will be the contractor's responsibility to notify Dig Safe, utility companies, such as gas, telephone, electric, etc. if there is any possibility of their equipment or property being jeopardized by excavation. After receiving all other permits, the contractor will then file with the District Superintendent per Section 2 for a District permit.

6. It shall be the contractors responsibility to notify the Fire and Police Departments of said work to be performed and, if necessary, to hire uniformed police for traffic control. In the event that the roadway cannot be restored to its normal surface immediately following the work, sufficient care will be taken to make the roadway smooth for traffic and, if necessary, to light with flashers as a warning to motor vehicles.

Section 7 Connections

A. Service connections shall have as their minimum size one (1) inch diameter. All service pipe two (2) inches or under will be either Type K copper tubing or plastic tubing. Any service pipe larger than two (2) inches and less than eight (8) inches in diameter will be of material approved by the District.

B. Plastic tubing will be copper tube size for use with standard stops and fittings with AWWA outlets or compression-type outlets with a minimum of two hundred (200) pounds per square inch.

C. All connections to the main will be preapproved by the Superintendent/District Engineer. A curb stop and box shall be installed at the property line on the owner's side for each service. The curb stop shall be lead free brass T head open left, without a drain. Any service one (1) inch or greater shall employee an oriseal curb with drip. Under no circumstances will any inverted key curbs be installed in any water system. The curb box or service box shall be four and one-half to five and one-half foot, extension type, three-fourths inch rod, and cover to be counter sunk one-inch brass plug tapped for one-inch iron pipe. Minimum cover for services shall be five (5) feet zero (0) inches. A sand backfill material will be carefully placed around the service pipe to protect it from normal backfill and compaction.

D. On the inside of the building there shall be a meter installed by the District as set forth under Article III Section 8.

E. Each meter will have a ball valve, before by District and after by owner, and each valve will be within one (1) foot zero (0) inches of the meter. Where pressures are in excess of eighty (80) pounds per square inch, a pressure-reducing valve will be employed in the line. This equipment is to be supplied and installed by the contractor or property owner.

F. Backflow prevention devices shall be installed when applicable.

Section 8 Inspection

A. Inspection will be provided by the District only on a limited or part time basis. Before any backfilling is done, the Superintendent/District Engineer will be notified twenty-four (24) hours in advance and a District employee, will inspect the completed work. This method of operation will be used for hydrant installations, main taps, service taps, etc. If the Superintendent/District Engineer feels that insufficient workmanship and care is being taken in the installation, a District employee will be assigned by the District on a full-time basis. The contractor or owner will be charged the cost of this employee at the rate as per the District Fee Table. Monday through Friday, from 8:00 am to 4:00 pm , or in the case of summer hours, 8:00 am to 4:00 pm. Any time spent on the site, not within these limits or Saturday, Sunday, Holidays, etc. will be as per the District Fee Table..

B. In cases where inspections of work performed by the applicant is required hereunder, or under any agreement between the applicant and the District, the applicant shall pay to the District the following fees:

District Engineer Inspection, the current hourly billing rate multiplied by the number of hours on the job.

Section 9 Testing

The contractor shall test all piping installed. Testing shall be performed concurrent with installation and no more than one thousand (1,000) feet of pipe shall be installed without being tested.

A. The pump, pipe connections and all necessary apparatus for the pressure and leakage tests, including gauges and metering devices, shall be furnished by the contractor.

B. After the pipe has been laid, thrust backing cured and the trench backfilled, the entire pipeline, or any section thereof, shall be subjected to hydrostatic pressure and leak tests. These tests shall be performed in accordance with ANSI/AWWA C600, Section 4-Hydrostatic Testing. Each test will be of duration of at least one (1) hour and at a test pressure of at least one hundred seventy-five (175) psi. Other time durations and psi levels may be needed at the Superintendents discretion.

C. Should any test disclose leakage greater than that permitted, the contractor shall, at their expense, locate and repair the defective joints and/or pipe until the leakage is within the permitted allowance of the District.

D. Allowable leakage in gallons per hour per one thousand (1,000) feet of pipeline shall be as follows as taken from AWWA C600:

Test	Pipe Size (Inches)					
PSI	2	4	6	8	12	16
100	0.15	0.30	0.45	0.60	0.90	1.20
125	0.17	0.34	0.50	0.67	1.01	1.34
150	0.19	0.37	0.55	0.74	1.10	1.47
175	0.20	0.40	0.59	0.80	1.19	1.59
200	0.21	0.43	0.64	0.85	1.28	1.70
225	0.23	0.45	0.68	0.90	1.35	1.80

Section 10 Disinfection

The completed pipeline is to be disinfected with a chlorine concentration of approximately fifty (50) parts per million prior to being placed in service. The introduction of this chlorine shall be accomplished by pumping or siphoning a calcium hypochlorite solution into the main. The chlorinated water is to remain in the new pipeline for a period of twenty-four (24) hours. During this period, proper precautions are to be taken to prevent this chlorinated water from flowing back into the existing system. Other methods of disinfection may be used after approval in writing is given by the Superintendent.

Section 11 As-Builts

As-built plans will be furnished to the District in duplicate by the contractor or owner at the completion of the project and before supplying water to the system. The plans will depict exact distances between gate valves, ties and gate valves, both in the main and hydrant branches. Curb box location referenced to the house or building that it serves by at least two (2) ties from permanent points.

WEBSITE INFORMATION www.graftonwaterdistrict.org