Town of Randolph Water Supply Protection and System Use Law

Local Law 2-2013

Adopted 2/13/13

Article 1

SHORT TITLE, PURPOSE AND APPLICABILITY

Section 101 – Short Title

For brevity and ease of communication, this Law may be cited as the Town of Randolph Water Supply Protection and System Use Law.

Section 102 – General Purpose

The general purpose of this Law is the following: To provide for efficient, economic, healthful and legal operation of the Water Supply Systems owned by the Town of Randolph.

Section 103 – Applicability

This Law shall apply to all areas within Town Water Districts of the Town of Randolph as well as to any parcels within the Town of Randolph outside such district connected or having access to water distribution lines of the Town of Randolph or within 1000 linear feet of wells of the Town of Randolph.

Article 2

DEFINITIONS

Section 201 – Defined Terms

Unless otherwise stated in this section where the term is used in this Law, the meaning of terms used in this Law shall be as stated below. When not inconsistent with the context, the present tense shall include the future, and words used in the plural shall include the singular and vice versa. Furthermore, a masculine pronoun shall include the feminine. Shall is mandatory; may is permissive.

Acceptable Backflow Prevention Device – An acceptable air gap, reduced pressure zone device or double check valve assembly as used to contain potential contamination within a facility. In order for such device to be acceptable, it must be listed in the most current New York State Department of Health List of Acceptable Backflow Prevention Device.

Adapter – A fitting used to connect pipe, tubing or other fittings having differing characteristics such as sizes, diameters or material.

Aesthetically objectionable facility – Is one in which substances are present which if introduced into the public water supply system could be a nuisance to other water customers, but would not adversely affect human health. Typical examples of such substances are food grade dyes, hot water and stagnant water from fire lines in which no chemical additives are used.

Agricultural-associated animal waste – Manure obtained from agricultural industries.

Air Gap Separation – The unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet supplying water to a tank, plumbing fixture or other device and the flood level rim of the receptacle. The differential distance shall be at least double the diameter of the supply pipe, measured vertically, and in no case shall the air gap be less than one (1) inch.

American Society for Testing and Materials – The latest edition of any ASTM specification, when stipulated in this Law.

Applicant – That person who makes application for any permit or his agent.

Approved – Accepted by the Superintendent as meeting an applicable specification stated or cited in this Article or as suitable for the proposed use.

Auxiliary water supply – Any water supply on or available to the premises other than from the public water supply system. These auxiliary waters may include water from natural sources such as a well, spring or stream.

Backflow – A flow condition, induced by differential in pressure, that causes the flow of water or other liquids and/or gases into the distribution system of a public water supply from any source other than its intended source.

Backpressure – The resulting backflow of water from a plumbing fixtures or other customer source(s) into a public water supply system due to greater pressure within the customer's system.

Board – The Town Board of the Town of Randolph.

Certified Tester – That individual or firm approved to accomplish the necessary inspections and operational tests of backflow prevention devices and who meets the required certification of the New York State Department of Health.

Chamfer – A bevel made on the end of a thread to facilitate thread engagement.

Chloride salt – The solid compounds or solutions of potassium chloride (commonly used as fertilizer), calcium chloride (commonly used for winter road maintenance) or sodium chloride (commonly used for water-softener regeneration).

Connection Charge (Tap Fee) – The one time application fee to offset Town's expense to process an application for a connection of a building/street lateral to the public water system. The fee also covers plan review, permit issuance, materials and labor expended by the Town in connection with the application and inspection costs. The fee may be scaled to the amount of work involved.

Containment – Cross connection control which isolates the customer's entire facility from the public water supply system in the event of a backflow from the customer's facility.

Contamination – The presence in water of a substance that tends to degrade its quality.

Contractor – A person, acceptable to the Town as qualified to perform the installation of water lines and appurtenances thereto.

Coupling – A fitting for connecting two pipe or thread sections together.

Cross connection – A physical connection through which a water supply could be contaminated.

Curb Box – The point of connection between a street lateral and a building lateral.

Curb Stop – A valve accessible for operations from the surface of the ground for interrupting flow at the curb box.

Customer – A water use serviced by the public water supply system.

Customer's water system – The piping used to convey water supplied by the public water supply system throughout a customer's facility. The system shall include all those parts of the piping beyond the control point of the Town. The control point is either the curb valve or the main valve located in the public right-of-way that isolates the customer's facilities from the Town's water distribution system.

Degree of Hazard – Whether a facility is rated as hazardous, aesthetically objectionable or non-hazardous.

Double check valve assembly acceptable – Two single independently acting check valves, with tightly closing shutoff valves located at each end of the assembly, and suitable connections for testing the water tightness of each check valve. This device must be approved as a complete assembly.

Easement – An acquired legal right for the specific use of land owned by others.

Fitting – A part used to connect piping or tubing.

Hazardous Facility – A facility, in which substances may be present which, if introduced into the public water system, would or may endanger or have an adverse effect on the health of other water customers. Typical examples are laboratories, sewage treatment plants, chemical plants, hospitals or mortuaries.

Herbicide – Any substance used to destroy or inhibit plant growth.

Human excreta – Human feces and urine.

Junkyard – An area where two or more unregistered, old or secondhand motor vehicles are being accumulated for purposes of disposal, resale of used parts or reclaiming certain materials such as metal, glass, fabric, and/or the like.

Lateral, Building – A water line owned by the owner of the property which it serves serving a building extending from a curb box downstream to a building.

Lateral, Street – A water line owned or to be conveyed to the Town running from a water main to a curb box.

Linear Distance – The shortest horizontal distance from the nearest point of the structure or object to the extension of the centerline of the wells.

Manufacturer – The party that manufactures, fabricates or produces materials or products.

Manure – Animal feces and urine.

National Pipe Thread – As specified in ANSI/ASME B1.20.1.

Nonagricultural-associated animal waste – Manure obtained from nonagricultural industries.

Non-hazardous Facility – Is one that does not require the installation of a backflow prevention device within the customer's system.

Owner – A Person having title to real property.

Person – Any individual, public or private corporation, political subdivision, Federal, State or local agency or entity, association, trust, estate or any other legal entity whatsoever.

Pesticide – Any substance used to destroy or inhibit pests such as rodents and insects.

Pollutant – Dredge, spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, chemical waste, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial and municipal and agricultural and nonagricultural-associated animal wastes.

Public Water Supply System – The water supply system owned by the Town, including source, treatment works, transmission mains, distribution system and storage facilities serving the public. This includes the distribution system up to its connection with the customer's water system.

Radiation – Ionizing radiation; that is any alpha particle, gamma ray, X-ray, neutron, high speed proton and any other atomic particle producing ionization, but shall not mean any sound or radio wave, or visible, infrared or ultraviolet light.

Radioactive Material – Any material in any form that emits radiation spontaneously.

Reduced Pressure Zone (RPZ) device, acceptable – A minimum of two (2) independently acting check valves, together with an automatically operated pressure differential relief valve located between the two check valves. During normal flow and at the cessation of normal flow, the pressure between these two check valves shall be less than the upstream (supply) pressure. In case of leakage of either check valve, the differential relief valve, by discharging to the atmosphere, shall operate to maintain the pressure between the checks at less than the supply pressure. The unit must include tightly closing shutoff valves located at each end of the device. Each device shall be fitted with properly located test cocks. This device must be approved as a complete assembly.

Refuse – All putrescible and nonputrescible solid wastes including garbage, manure, rubbish, ashes, incinerator residue, street cleanings, dead animals, offal and solid commercial and industrial wastes.

Refuse disposal area – Land used for the depositing of refuse except that it shall not include the land used for the depositing of refuse from a single family, a member of which is the owner, occupant or lessee of said land, or any part of a farm on which only animal wastes resulting from the operation of such farm are deposited.

Sewage – Any liquid or solid matter from a domestic, commercial, private or industrial establishment which is normally carried off in sewer or waste pipes.

Sewage disposal system – Any system used for disposing sewage.

Superintendent – That individual designated by the Board as the administrator of the Public Water Supply System of the Town or a portion thereof or his representative.

Supplier – The party that supplies materials or services. A supplier may not be the manufacturer.

Supplier of Water – The owner or operator of a public water system.

Town – The Town of Randolph, a municipal corporation of the State of New York located in the County of Cattaraugus.

Toxic substance – Any toxic substance as so defined by Subdivision 2 of Section 4801 of the Public Health Law.

Treatment works – Any treatment plant, sewer, disposal field, lagoon, pumping station, septic system, construction drainage ditch or surface water intercepting ditch, incinerator, and area devoted to sanitary landfill, or other works not specifically mentioned in this paragraph, installed for the purpose of treating, neutralizing, stabilizing or disposing of sewage.

User – Any person who is connected to or is required to be connected to the public water system of the Town.

Water Supply – The public water supply of the Town of Randolph.

Wells – Wells used as a source of the water supply.

Section 202 – Abbreviations

The following abbreviations shall have the designated meanings:

ANSI	-	American National Standards Institute
ASME	-	American Society of Mechanical Engineers
ASTM	-	American Society for Testing and Materials
C	-	Celsius
CSA	-	Canadian Standards Association
F	-	Fahrenheit
G	-	Grams
ISO	-	International Organization for Standardization
L	-	Liter
MG	-	Milligram
MM	-	Millimeter
NPT	-	National Pipe Thread
NSF	-	National Sanitation Foundation
NYCRR	-	Official compilation of the Codes, Rules and Regulations of the State of New York
NYSDOT	-	New York State Department of Transportation
OD	-	Outside Diameter
PE	-	Polyethylene
PPI	-	Polypropaline Pipe Institute
PPM	-	Parts per Million
PSI	-	Pounds per Square Inch
PVC	-	Polyvinyl Chloride
SDR	-	Standard Dimension Ration
SIDR	-	Standard Inside Dimension Ratio
UL	-	Underwriters Laboratories

Article 3

Use of Public Water System Required

Section 301 – Connection to Public Water Line Required

The owner of any real property which contains fixtures to dispense potable water or otherwise requires a supply of potable water and which abuts on any street or right of way in which public water distribution facilities owned by the Town are located is hereby required at his or her expense to connect such private water facilities directly with the proper public water facilities at a curb box installed or to be installed by the Town or owned by the Town in accordance with the provisions of this local law, within six (6) months after the date of official notice to do so. This section shall not apply to the extent that it would require an owner to install

more than two hundred fifty (250) feet of building lateral water line per household unit – or, for non-residential uses, determining units by dividing estimated annual usage in gallons by 40,000 rounded to the nearest tenth of a unit with a minimum of one unit – to be connected with the user units for property in unitary ownership in one located aggregated. The time within which such connection must be made may be extended by the Superintendent for good cause shown. Any such extension shall be reviewed annually by the Board. Nothing in this section shall be construed to prevent connection by properties not hereby required to be connected.

Section 302 – Limitation Upon Connection of Properties Within Agricultural Districts

Section 301 notwithstanding, for any property within an agricultural district pursuant to New York Agriculture and Markets Law Article 25-AA, only (1) existing facilities, (2) one new residence per tax map parcel existing at time of the filing of a final Notice of Intent of the Board with the Department of Agriculture and Markets to form the Town Water District providing service to such parcel pursuant to said Article 25-AA, (3) agriculture structures, and (4) land and structures that have been approved for development by the Town prior to the filing of said Notice of Intent may connect to public water distribution facilities owned by the Town.

Article 4

Private Water Supply (Cross Connection)

Section 401 – Purpose

The purpose of this Article is to safeguard the potable water supply of the Town from potential contamination by preventing backflow from a water user's system into the public water system and to comply with the requirements of the New York State Sanitary Code; Part 5, Section 5-1.31.

Section 402 – Responsibility

(1) The Superintendent shall be responsible for the protection of the water distribution system from contamination due to the backflow of contaminants through the water service connection. If, in the judgment of the Superintendent, an acceptable backflow prevention devise is required at any water service connection to any customer's premises, for the safety of the water system, the Superintendent shall give notice in writing to said customer to install such an acceptable backflow prevention device at each service connection to his or her premises. The customer shall install at such reasonable time determined by the Superintendent, such approved device or devices at his or her own expense; and failure, refusal or inability on the part of the customer to install said device or devices shall immediately constitute a ground for discontinuing water service to the premises until such device or devices have been properly installed.

(2) All users of the public water system shall prevent cross connections between the potable water piping system and all other piping systems within the premises.

Section 403 – Requirements

(1) The customer's water system shall be open for inspection at all reasonable times by the Superintendent.

(2) The Superintendent shall rate a customer's water service system according to its degree of hazard to the public water system. Some of the factors used in rating each facility shall be uses, toxicity and availability of contaminants; the availability of an auxiliary supply water; and a fire fighting system evaluation.

(3) Should access to any facility or dwelling be denied to the Superintendent for the purpose of determining if and/or what cross connection control device is necessary; then the maximum protection device will automatically be mandated with no further investigation.

(4) Where a residential customer maintains an auxiliary water supply in addition to the public water supply, the two systems must not be interconnected.

(5) An acceptable backflow prevention device shall be installed on each non-residential service line to the customer's water system at or near the property line immediately inside the building being served, but in all cases before the first branch line leading off the service line, as follows:

(a) Whenever a customer's water system is rated as hazardous, an acceptable reduced pressure zone device or air gap shall be installed.

(b) Whenever a customer's water system is rated as aesthetically objectionable, as a minimum, acceptable double check valve assembly shall be installed.

(6) The design of the installation of an acceptable backflow prevention device must Cross Connection Manual. The design must be approved by the Superintendent and all agencies required by the applicable New York State laws and regulations.

(7) It shall be the duty of the customer at any premises where backflow prevention devices are installed to have certified inspections and operational tests made at least once a year. In those rare instances where the Superintendent deems the hazard to be great enough, he or she may require certified inspections at more frequent intervals. Certified inspections and operational tests must also be made when any backflow prevention device is to be installed, repaired, overhauled or replaced, in addition to the requirement of an annual certified inspection and operational test. All inspections and tests shall be at the expense of the customer and shall be performed by the device manufacturer's representative, Town personnel, or by a certified tester approved by the Superintendent. The Superintendent shall make available the names, addresses and telephone numbers of these persons who are certified as testers for the backflow prevention devices. The customer shall notify the Superintendent in advance, in writing, when the tests are to be undertaken so that he or she may witness the tests if the Superintendent so desires. These devices shall be repaired, overhauled or replaced at the expense of the customer whenever said devices are found to be inadequate. Records of tests, repairs and overhauls shall be kept and made available to the Superintendent. Copies of all testing and maintenance records

shall be sent to the Superintendent immediately after the work is performed. The failure, refusal or inability on the part of the customer to obtain such certified inspections and operational tests shall immediately constitute a grounds for discontinuing water service to the premises until such inspections and tests have been properly conducted.

ARTICLE 5

NEW WATERMAINS OR WATER SYSTEM EXTENSIONS

Section 501 – Legal Requirements To Be Met

The Owner and the Town are subject to federal, state and county laws and regulations relating to the construction of new water mains or water system extensions whose application varies depending upon the circumstances and whose requirements must be complied with including the following:

A. New York State Environmental Quality Review Act. As early as possible, the Town has to determine whether an Environmental Assessment Form needs to be prepared for the proposed action. The extensions of water service to "approved subdivisions", not otherwise requiring the preparation of an Environmental Assessment Form, is exempt.

B. Cattaraugus County Sanitary Code and New York Public Health Law. The Cattaraugus County Department of Health must approve the plans and specifications.

C. Town Requirements. The requirements of the Town are set forth in this law. Additional requirements may need to be satisfied depending upon the Owner's particular proposal to implement the provisions and purposes of the law; such requirements may not be evident to the Town at the time of the initial review of the design to be submitted by the Owner under §502 of this Article but may arise as design, construction and testing of facilities progresses.

Section 502 – Design

A. Submissions to the Town. The Owner who desires to construct a new water main or a water system extension must submit the following to the Town:

1. Their plans and specifications.

2. Cattaraugus County Department of Health Application for Approval of Water Distribution System, partially completed with information specific to the water system extension. The Superintendent will supply related Town information on the form, will sign the application and will forward it to the Cattaraugus County Health Department.

B. Standards. Drawings to scale bearing the stamp of a New York licensed engineer are required. Such plans and specifications shall include without limitation the location, size, nature and specifications of all physical components of the system (e.g. water lines, valves and

associated equipment) the location and construction of all access roads, the location of any easements or other property rights to be provided to the Town, a surveyor's description of the property rights required for the operation, maintenance and repair and replacement of the water system extension and such other information as is deemed necessary by the Town or its engineers. Design of the system must include, without limitation, adequate means of ingress and egress to the entire system for its operation, maintenance, repair and replacement. Where deemed necessary by the Town, provision must be made for roads of sufficient hardness to support vehicular traffic.

C. Review. The Town and its engineers will review the materials submitted. The Owner must provide information and general cooperation with the Town as is necessary to effectuate the review.

D. Approval. The Town will either approve the Owner's plans and specifications, reject them in whole, or return them with comments for needed modifications. The Owner's engineer shall consult closely with the Town's staff during the review by the Town and the Cattaraugus County Department of Health. After the approval of the plans and specifications by the Cattaraugus County Health Department and the Town and the proof of liability insurance required by the Article is filed with the Town, construction may begin.

Section 503 – Construction

A. Inspection. During construction, the Town may have inspectors on the site from time to time, and the Owner shall make the site of the construction freely available to them. Such inspectors function solely to advise the Superintendent on the progress of construction. Their presence does not imply knowledge of or approval of any aspects of the construction, nor shall they have any responsibility to advise the Owner or the Owner's agents with respect to the construction.

B. Testing. Upon completion of construction, the Owner shall cause the system must be tested as set forth in this Article and other applicable laws and regulations by the Owner's engineer who shall witness such testing.

Section 504 – Materials for Water Pipe and Appurtenances

(1) Pipe used on new water mains or water systems extensions shall be constructed of new and unused pipe of one or the following materials. The choice of pipe for the specific application shall be as proposed by the design engineer and approved by the Water Superintendent:

(a) Ductile iron pipe manufactured in accordance with AWWA Standard C150 and C151 of Class 52 barrel thickness. The pipe shall be tyton joint type with the joint meeting the requirements of AWWA Standard C111. The pipe shall be cement mortar lined and double seal coated inside and out with a bituminous coating of at least 1 mil thickness in accordance with AWWA Standard C104.

(b) Polyvinyl chloride (PVC) pipe manufactured in accordance with AWWA Standard C900, being Pressure Class 200, DR 14. The pipe shall be marked by the manufacturer with the manufacturer's name, the DR rating and the pressure rating. The pipe shall be certified for use with potable water by NSF and shall be so marked with the seal of the agency. The outside dimensions of the pipe shall conform to the outside dimensions of ductile iron pipe.

(2) Mainline fittings:

(a) Shall be compact fittings manufactured of ductile iron in accordance with AWWA Standard C153, Class 350.
(b) Shall be cement mortar lined and seal coated inside and out with an approved bituminous coating at least 1 mil thick in accordance with AWWA Standard C104.
(c) All fasteners used on these fittings shall be flouro-carbon coated such as SC-1 fasteners as manufactured by StandCote, or approved equal.
(d) Mechanical joint restraints shall be installed in accordance with AWWA C600.
(e) Mechanical Joint Restraints shall be Megalug by EBAA Iron Sales, Inc., or approved equal.

(3) Gate Valves shall be resilient wedge with non rising stem, having parallel seats and a cast iron body and shall conform to AWWA Specification C509, and the following supplemental details:

(a) Valve Gates: Cast iron encapsulated with resilient material.
(b) Type of Stem Seal: O-ring (2).
(c) Ends are to be mechanical joint.
(d) Two inch (2") operating nut.
(e) Mainline and hydrant auxiliary valves shall have resilient seat.

(4) Valve Boxes shall be of three pieces, Buffalo style cast iron construction, and screw type threads integrally cast with the box.

(a) Coating: Two (2) coats of asphaltic coating.
(b) Extensions: If needed for abnormally deep valve installations.
(c) Lid: The word WATER shall be cast in the lid.

(5) Hydrants used in the work shall conform to AWWA Standard C502 and the following:

(a) Compression type with valve opening equal to 5 ¼ inches.
(b) Cast iron body, fully bronze mounted.
(c) Two (2) 2 ½ inch hose connections with national standard threading (NST thread).
(d) One (1) 4" pumper connection (4.72x6 TPI).
(e) The operating stem nut shall be a five-sided (pentagon) 1 ½" nut to open right (clockwise) of one piece bronze construction.

(f) The boot (base) shall be mechanical joint with a 6" inlet diameter.
(g) Hydrant shall be factory painted red.
(h) Traffic model with breakaway flange.
(i) Nozzle caps shall be securely fastened to the barrel with chain.
(j) A dirt (weather) shield shall be provided to protect the operating mechanism from grit buildup and corrosion due to moisture.
(k) Hydrant shall be draining.
(l) Manufacturer:
    a. Kennedy Guardian Hydrant (K81A)
    b. Waterous 5-1/4" Pacer Fire Hydrant

Section 505 – Water Pipe Installation

(1) Local utilities shall be contacted to verify construction plans and to make arrangements to disconnect all utility services, where required to undertake the construction work. The utility services shall later be reconnected. The work shall be scheduled so that there is a minimum inconvenience to local residents. Residents shall be provided proper and timely notice regarding disconnection of utilities.

(2) The construction right-of-way shall be cleared only to the extent needed for construction. Clearing consists of removal of trees which interfere with construction, removal of underbrush, logs and stumps, and other organic matter, removal of refuse, garbage and trash, removal of ice and snow, and removal of telephone and power poles, and posts. Any tree which will not hinder construction shall not be removed, and shall be protected from damage by any construction equipment. Debris shall not be burned, but hauled for disposal in an approved manner.

(3) The public shall be protected from personal and property damage as a result of the construction work.

(4) Traffic shall be maintained at all times in accordance with applicable highway permits. Where no highway permits are required, at least ½ of a street shall be kept open for traffic flow.

(5) Erosion control shall be performed throughout the project to minimize the erosion of soils onto lands or into waters adjacent to or affected by the work. Erosion control work shall be implemented following guidance provided in the New York State Guidelines for Urban Erosion and Sediment Control of the latest revision. If the project is large enough to require a State Pollutant Discharge Elimination Permit (SPDES) for the storm water runoff from the construction activity as required by NYSDEC regulations, a Storm Water Pollution Prevention Plan shall be prepared and filed with the Town and a Notice of Intent (NOI) shall be filed with NYSDEC prior to any work being completed.

(6) The trench shall be excavated only wide enough for proper installation of the water pipe and appurtenances. Allowances may be made for sheeting, de-watering, and other

similar actions to complete the work. Roads, sidewalks, and curbs shall be cut, by sawing, before trench excavation is initiated.

(7) Under ordinary conditions, excavation shall be by open cut from the ground surface. However, tunneling or boring under structures other than buildings may be permitted. Such structures include crosswalks, curbs, gutters, pavements, trees, driveways, and railroad tracks.

(8) Open trenches shall be protected at all hours of the day with barricades.

(9) Trenches shall not be open for more than 50 feet in advance of pipe installation nor left unfilled for more than 50 feet in the rear of the installed pipe, when the work is in progress, without permission of the Superintendent. When work is not in progress, including over night, weekends, and holidays, the trench shall be backfilled to ground surface.

(10) The trench shall be excavated as necessary to allow for the final design pipe line and grade. When unsuitable soils are encountered, these shall be excavated and replaced with select materials.

(11) Ledge rock, boulders, and large stones shall be removed from the trench sides and bottom. The trench shall be over-excavated at least 12 inches for five (5) feet, at the transition from rock bottom to earth bottom, centered on the transition.

(12) Maintenance of grade, elevation, and alignment shall be done by some suitable method or combination of methods approved by the Superintendent. All water mains and extensions shall be installed with a minimum depth of earth cover of 4.5 feet, unless specifically directed by the Superintendent.

(13) No structure shall be undercut unless specifically approved by the Superintendent.

(14) Proper devices shall be provided, and maintained operational at all times, to remove all water from the trench as it enters. At no time shall the water line be used for removal of water from the trench.

(15) To protect workers and to prevent caving, shoring and sheeting must be used, as needed. Caving shall not be used to backfill the trench. Sheeting shall not be removed but cut off no lower than one foot above the pipe crown and no higher than one foot below final grade, and left in the trench, during backfill operations.

(16) The pipe barrel shall be adequately supported, along its entire length.

(17) When the material encountered at grade in the trench is unsatisfactory to support the pipe or is otherwise harmful in the judgment of the Superintendent, the unstable or unsuitable soils shall be removed and replaced with select material or bedding stone.

(18) Ductile iron pipe shall be laid in accordance with AWWA Standard C600. Unless conditions require bedding as determined by the design engineer or the Superintendent, the trench shall have a flat bottom of sound earth which shall provide the pipe good bearing for its full length. Bell holes shall be hand excavated to allow the pipe to be supported for its full length. If the trench is in rock, the pipe shall be installed with a minimum of 6 inches of clean, washed No. 1 stone bedding beneath the entire length of the pipe barrel.

(19) If PVC piping is approved for the work, it shall be installed in accordance with AWWA Standard C605. The trench shall be over excavated to allow at least 6 inches of clean, washed No. 1 stone bedding beneath the entire length of the pipe barrel.

(20) In the case of PVC pipe, or in a rock trench condition, clean, washed No. 1 stone bedding shall be placed over the laid pipe to a depth of at least six (6) inches. Care shall be exercised so that stone is packed under the pipe haunches. Care shall be exercised so that the pipe is not moved during placement of the crushed stone.

(21) Clean earth fill free of debris and any stones larger than 4 inches shall be hand placed and compacted to a depth of at least 12 inches over the top of the pipe bell to provide proper pipe embedment prior to machine backfilling being allowed to begin.

(22) The remaining portion of the trench above the pipe embedment shall be backfilled in one foot lifts which shall be firmly compacted. Compaction near/under roadways, driveways, sidewalks, and other structures shall be done with select backfill compacted 95% of the maximum moisture-density relationship, as determined by ASTM Specification D 698, Method D. Ice, snow, or other frozen material shall not be used for backfill.

(23) All main extensions shall be of such length as to provide access to each premise to be served and shall be constructed across the entire frontage of the lot(s). The applicant shall construct the water service connections for each parcel within the approved development or extension.

(24) Prior to beginning installation of the water mains and appurtenances, the applicant shall provide the following:

(a) Name of the contractor, including an address and phone number, who will be installing the water mains and appurtenances;

(b) Shop drawings indicating that all materials utilized meet Town specifications;

(d) Minimum five (5) business days advance written notice of the starting date of construction.

Section 506 – Testing

(1) After installation is complete, the applicant shall conduct hydrostatic testing. The hydrostatic testing shall be conducted in accordance with the procedures outlined in AWWA

C600 for ductile iron pipe, and AWWA C605 for PVC pipe. The hydrostatic testing shall be performed by the applicant while under the observation of the Water Superintendent or his approved agent. Only Town personnel shall operate existing water valves.

(2) If the main should fail the hydrostatic test, the necessary corrective measures shall be taken and the tests repeated until satisfactory results are obtained.

(3) After the line has satisfactorily passed the hydrostatic testing the line shall be flushed with a sufficient volume of water to achieve a minimum velocity of 2.5 feet per second in the main. The flushing shall continue until the line is, in the opinion of the Water Superintendent or his agent, clear of all dirt and debris.

(4) After flushing is completed, the line shall be disinfected in accordance with AWWA C651 of the latest revision. After disinfection is complete, samples shall be taken at locations approved by the Superintendent for bacteriological testing.

(5) The applicant shall arrange for the bacteriological testing to be performed by the Cattaraugus County Health Department or an approved commercial laboratory. The results shall be given, in writing, to the Town and the Cattaraugus County Health Department. Should the results prove satisfactory, the line will be approved to be placed in service when all other requirements of this local law are met.

Section 507 – Dedication of Water System to Public Use

All water mains and extensions to the water system constructed at the Owner's expense, after final approval and acceptance by the Superintendent, shall become the property of the Town and shall thereafter be operated, maintained and repaired by the Town.

A. Bill of Sale. Legal transfer of the physical components of the system to the Town must be by Bill of Sale executed by the Owner accurately describing the components of the system.

B. Property Rights. Transfer of the system shall also include the grant of property rights acceptable to the Town to property surrounding the water system required for the operation, maintenance, repair and replacement thereof as identified on the plans including street laterals but excluding building laterals. The Owner shall obtain any necessary rights from other property owners, municipalities or right-of-way holders having such interests. Generally, no acquisition of property rights is necessary for water facilities to be installed within the right-of-way of a state, county, town or village road as long as the Owner obtains all necessary consents of such governmental entities to the placement of water facilities within bounds of such roads prior to construction.

C. Attorney's Certification of Good Title. The Owner shall provide within thirty (30) days of the recording of instruments conveying property rights required for the operation, maintenance, repair and replacement of the water system extension the certification by an attorney admitted to the practice of law within the State of New York stating that the party

transferring the system by Bill of Sale and conveyance of property rights as described in this article has clear and marketable title to the property rights transferred to the Town and that the grant of such rights to the Town is free and clear of any prior liens or encumbrances or a title insurance policy in an amount and containing terms acceptable to the Town to the same effect. The Owner is responsible for obtaining any subordination or other agreements necessary to grant clear title to the Town.

D. Warranty and Maintenance Bond. The Owner shall warrant the system to be free of defects for eighteen (18) months after the date of the first use of the system or its components and shall provide a cash deposit with the attorney for the Town, a Letter of Credit, or a Maintenance Bond or other security in a form and amount satisfactory to the Town holding the Town harmless from operation, maintenance, repair and replacement of such facilities arising from defects in the design, materials or construction of such facilities. The requirement for financial security may be waived by the Town where the sponsor of the water system extension providing the warranty hereunder is the State of New York, a New York municipal corporation or agencies thereof.

E. Third Party Warranties. The Owner will provide assignments of all warranties applicable to equipment or appurtenances to the system.

F. Professional Expenses of the Town. The Owner shall reimburse the Town for all expenses incurred by the Town incident to the project, including, but not limited to, engineering fees and legal fees, payable as bills are rendered therefore by the Town to the Owner.

G. Engineer's Certification and Record Drawings. The Owner shall provide the Town with (a) a certification to the Town by a New York licensed professional engineer that the system has been constructed in accordance with the approved plans and specifications and that it has been tested in accordance with this Law, and (b) three (3) sets of original signature paper copies of record drawings, designated as such, bearing the seal of the New York licensed professional engineer, plus a full digital copy, similarly annotated, in AutoCAD or equivalent software acceptable to the Town.

Section 508 – Liability Insurance Coverage During Construction Period

Before commencing work, the contractor performing the work shall file with the Town insurance certificates for the following:

(1) Workman's Compensation and Employer's Liability Insurance as required by the laws of the State of New York covering the contractor;

(2) Personal Injury Liability Insurance having limits of not less than $1,000,000 each occurrence and $2,000,000 aggregate (personal injury);

(3) Property Damage Liability Insurance having limits of not less than $1,000,000 for all damages arising during the life of the contract; and shall include, but not be limited to, the following designated hazards:

i. Premises and Operations;
ii. Independent Contractors;
iii. Completed operations and products;
iv. Property Damage; and
v. Explosion, collapse and underground;

(4) Comprehensive automobile liability (including non-owned and hired automobiles) having limits of not less than:

i. Bodily injury – each person $1,000,000 each occurrence $1,000,000
ii. Property damage – each occurrence $1,000,000

(5) All insurance policies must provide for fifteen (15) business days notice to the Town before cancellation.

Article 6

Building Laterals, Connections, and Fees

Section 601 – Permit Required for Connections to Public Water System; Permit and Tapping Fees

No unauthorized person shall uncover, make any connection with or opening into, use, alter or disturb any public water line or appurtenance thereof without first obtaining written permit from the Superintendent. A permit application shall be submitted to the Superintendent. The permit application shall be supplemented by any plans, specifications or other information considered pertinent in the judgment of the Superintendent. In addition to the tapping fee set forth in this article, a fee of $50 for a connection to a one or two-family residential structure, $150 for a connection to an industrial structure, or $100 for a connection to all other uses, including apartment buildings and commercial structures, shall accompany the application. The Town will furnish and install the main tap and curb box and stop only upon payment of the tapping fee. The tapping fee shall be determined at the time of connection and shall equal to the cost of materials, equipment and personnel required to perform the tap but shall exclude such costs if they were paid at the time of the construction of the water main serving the property to be connected. The tapping fee shall be reduced by the amount of the vacant lot benefit assessment which was paid subsequent to the initiation of water service in the area of such property by the property to be served.

Section 602 – Water Service Connections

(A) Upon completion of the application process, payment of all applicable charges, and subject to the other provisions of these rules, the Town will install the street lateral and curb box within the public right-of-way or on a water easement and furnish the water meter and remote meter reader if such facilities have not been previously installed. The street lateral and

curb box shall include the street lateral from the connection at the water main to, and including the curb box and curb stop located at or directly adjacent to the right-of-way or easement line.

(B) A water street lateral and curb box, including a curb box and curb stop, shall be required for each premises where the total quantity of water delivered and furnished is to be billed and metered to a single customer. If, the quantities of water furnished to the premises are to be separately and individually metered and billed by the Town to several occupants thereof, then a separate water street lateral and curb box, including a curb box and curb stop shall be installed for the delivery of water to each meter. The provision by the Town of separate services at the request of the property owner shall not relieve a property owner of ultimate liability for the charges therefore as provided by law.

(C) The Owner will be responsible to install the water service from the curb stop into the premises. A valve shall be located just inside the structure, at the point of entry of the street lateral, adjacent to and ahead of the meter to permit control of the water supply.

(D) As part of the tapping fee, the Town will provide the Owner with a meter and remote meter reader which the owner must install prior to receiving water. The Town will inspect this installation prior to turning on service.

(1) A separate curb box shall be installed for each meter.

(2) The size, type, make and location of the meter to be utilized on any connection shall be determined by the Town.

(3) Meter bypasses shall not be allowed unless otherwise approved by the Town.

(4) Whenever possible, the water meter shall be set in the basement or utility room. The meter shall be located at a convenient point approved by the Town so as to protect the meter and to measure the entire supply of water through the connection. When a meter cannot be set in the basement or utility room, it will be set inside the property line or in a place designated by the Town, and all expenses incurred by the Town in connection with its proper housing shall be reimbursed by the Owner to the Town.

(5) All meters and meter appurtenances shall at all times remain the sole property of the Town, and shall not be interfered with in any respects. All meters shall be maintained by and at the expense of the Town so far as ordinary wear and tear are concerned, but the customer will be held responsible for damage due to freezing, hot water or other external causes. In case of damage, the Town will repair the meter, or replace it if required, at the sole expense of the customer.

(6) The Town reserves the right to remove and replace any meter at any time as part of a maintenance program or for any other reason.

(E) If a water easement is determined to be necessary in order to service a property, the Owner shall obtain and cause to be recorded by the Cattaraugus County Clerk such easement

on a form acceptable to the Town to show the right of permanent access to the public water system before a permit will be issued.

(F) The Owner shall, at his sole expense, construct, maintain and, when necessary as determined by the Town, replace the building lateral extending into the serviced building. This installation and maintenance shall be performed by a qualified person and all work shall be constructed in a manner satisfactory to the Town. The minimum size, the materials, depth of cover and method of construction shall be in conformance with Town standards. If any defects in workmanship or materials are found or if the owner's building lateral has not been installed in accordance with such specifications or with requirements of the Town, water service will either not be turned on or will be discontinued if such defects are not remedied.

(G) All street laterals shall be installed throughout their length as nearly as possible at right angles to the structure to which service is to be rendered.

Section 603 – Requirements for Polyethylene Pipe

All property building laterals using polyethylene pipe shall conform to the following specifications:

A. Description:

(1) The Work specified by this section shall include all supervision, coordination, labor, materials, tools, equipment, services and incidentals necessary to furnish and install new polyethylene pressure pipe and tubing, ¾" through 3", and associated fittings and accessories, in association with new building laterals. Proposed water services 4" or larger, shall be constructed of ductile iron pipe.

(2) In general, Work shall include installation of potable water service, from the curb stop, to the meter valve, or meter setting appurtenance.

(3) In the event that the water main must be tapped to allow for installation of the water service, the Town shall be notified, and the tap shall be made by the Town or its authorized representative.

(4) This standard describes valves and fittings for use in the construction of the buried service line; extending from the curb stop, to the meter valve or meter setting appurtenance. Valves include corporation stops and curb stops. Fittings include various types of couplings and adapters.

(5) The performance of products depends on proper installation. The purchaser/installer must follow the instructions supplied by, or available from, the manufacturer.

B. Quality Assurance:

(1) Qualifications of the Manufacturer

a. Manufacturer shall have a minimum of five (5) years experience producing PE pipe, tubing, fittings and appurtenances, and shall show evidence of at least five (5) installations in satisfactory operation.
b. Parts Interchangeability: It is the intent of these Specifications that all materials furnished herein shall be compatible with similar materials of other manufacturers.

(2) Reference Standards

a. ASTM D1598, Test Method for Time-to-Failure of Plastic Pipe
b. ASTM D1599, Test Method for Short-Time Hydraulic Failure of Plastic Pipe, Tubing and Fitting
c. ASTM D2239, Specification for PE Plastic Pipe (SIDR-PR) Based on Controlled Inside Diameter
d. ASTM D2737, Specification for PE Plastic Tubing
e. ASTM D2837, Test Method for Obtaining Hydrostatic Design Basis for Thermoplastic Pipe Materials
f. ASTM D3035, Specification for PE Plastic Pipe (DR-PR) Based on Controlled Outside Diameter
g. ASTM D3350, Specification for PE Plastic Pipe and Fittings Materials
h. ASTM F412, Standard Terminology Relating to Plastic Piping Systems
i. CSA B137.1M 1983, Polyethylene Pipe, Tubing and Fitting for Cold Water Pressure Services
j. ISO R161-1960, Pipe of Plastic Materials for the Transport of Fluids, Part 1 Metric Series
k. NSF No.14, Plastic Piping Components and Related Materials
l. PPI TR-3, Policies and Procedures for Developing Hydrostatic Design Bases (HDB), Pressure Design Bases (PDB), Strength Design Bases (SDB), and Minimum Required Strengths (MRS) Ratings for Thermoplastic Piping Materials for Pipe
m. PPI TR-4, PPI listing of Hydrostatic Design Bases (HDB), Strength Design Bases (SDB), Pressure Design Bases (PDB) and Minimum Required Strength (MRS) Ratings for Thermoplastic Piping Materials for Pipe

C. Materials:

(1) All materials must be suitable for use in potable water systems.

(2) Polyethylene (PE) Pressure Pipe and Tubing shall conform to AWWA Specification C901, and the following supplemental details;

a. Material Designation: PE3408
b. Cell Classification: 345564C

c.	Density:	0.961 (black) g/cm^3
d.	Melt Index:	0.1 g/10 minutes
e.	Flexural Modulus:	> 140,000 psi
f.	Tensile Strength:	3700 psi
g.	SCG (PENT):	>1000 hours
h.	HDB at 73.4°F (23°C):	1600 psi
i.	Color; UV Stabilizer:	Black w/minimum 2% carbon black
j.	HDB at 140°F (60°C):	1000 psi
k.	Linear Thermal Expansion:	9x10-5 inch/inch/°F
l.	Elastic Modulus:	200,000 psi
m.	Brittleness Temperature:	<-130 (<-118) °F (°C)
n.	Hardness:	65 Shore D
o.	Size:	Copper Tube Size (CTS) – OD ASTM D-2737 – SDR 9 (200 psi); ¾", 1", 2"

(3) All PE pipe, tubing, and accessories must be new materials in first-class condition. Used or recycled materials will not be allowed, regardless of condition.

(4) Recommended Manufacturer: Performance Pipe's DriscoPlex 5100 Ultra-Line PE 3408 Piping Products, Silver-Line Plastics Ultra-Pure PE 3408 Piping Products, or approved equal.

D. Marking: All items shall be marked or labeled with the following information:

(1) Material Designation and Cell Classification
(2) Size and schedule
(3) ASTM specification number
(4) Name and location of supplier

E. Jointing:

(1) All PE pipe and fittings shall be joined by heat fusion jointing only.

(2) All joints shall be conform to the recommendations of the manufacturer and shall be made by skilled workmen.

(3) Joints shall develop full strength and shall be stronger than the pipe joined.

(4) The wall thickness of the adjoining pipes and fittings shall have the same DR at the point of fusion.

F. Service Connections:

(1) Service connections shall be made after the mainline pipe has been installed, but prior to the mainline pipe being tested.

(2) Service connection shall be made utilizing saddle tapping tees or molded service saddles, unless otherwise approved by the Superintendent, and shall be affixed to the mainline piping by means of sidewalk fusion or electro fusion.

(3) Corporation stops off of PE piping shall not be required, unless otherwise recommended by the pipe manufacturer or the Superintendent.

(4) PE service lines shall be connected to curb stops using a PE transition fitting, with an IPS stainless steel threading. Care shall be taken to order curb stops which will receive the transition fitting proposed.

(5) When PE services are coming off of ductile iron pipe, a PE transitions fitting shall be fused to the service line, to be received by the corporation stop, as well as the curb stop.

(6) 12-14 AWG copper locating wire with all HDPE pipe installations shall be installed such that the pipe can be accurately located after installation is complete. The locating wire shall not be placed directly on the pipe in the event that a large electrical surge which could damage the pipe is sent through the wire.

G. Size:

(1) All water services, shall at a minimum, be ¾-inch water services, unless otherwise directed by the Town.

(2) All water services 4-inches or larger, shall be constructed of ductile iron pipe, and shall require individual approval from the Town, as special materials, and installation and testing techniques, will be required.

H. Installation:

(1) All connections to PE pressure pipe and tubing shall be watertight at the required operating pressure. The operating pressure shall be obtained from the Town.

(2) Installation shall generally include installation of the water service from the curb box, which shall typically be located at the right-of-way line, to the meter valve or meter setting. In some cases, it may be necessary to replace an existing curb stop, and curb box. In this case, the Town shall be notified to provide a "shut-down" in order to make this repair.

(3) In general, the water service shall have a minimum cover of 4.5 feet. Installation depths proposed in excess of 5 feet shall be subject to approval by the Town.

(4) PE pressure pipe and tubing shall be installed using methods which will preserve the integrity of the pipe and protect persons and property affected by the work and

shall be bedded and backfilled in accordance with the applicable provisions of the Requirements for Backfill section of this Article.

(5) Exposed PE pressure pipe and tubing shall be carefully erected and neatly arranged.

(6) PE pipe and tubing shall be run parallel with walls inside structures and shall be pitched to drain. Drain valves shall be installed at the low points of liquid filled systems.

(7) The Contractor shall make every effort to complete the water service "run" using a single, continuous piece of pipe. When a joint is required, the number of joints shall be kept to a minimum.

(8) Unions shall be made as recommended by the manufacturer. Unions shall be made by fusion methods, unless otherwise approved by the Town.

(9) The Contractor shall install an approved copper tracing cable for future locating of all PE piping.

(10) The Town shall be provided the opportunity to inspect all proposed service installations throughout the course of the Work. The Contractor shall receive approval by the Town of all installed services prior to backfilling.

(11) The Contractor shall provide to the Town a sketch indicating the exact location of the installed water service upon completion of the Work. The sketch shall indicate dimensions from permanent structures (such as a house), along the water service line, such that the service line can be located in the future.

(12) Prior to backfilling, the Contractor shall test the new water service line for any leaks.

(13) Upon complete installation of all new water service lines, the Contractor shall thoroughly flush the new line to free any debris which may have entered the piping during the course of the Work such that said debris is flushed from the line prior to entry into the structure.

(14) Prior to placing the service line into service, the Contractor shall flush the line using a concentrated chlorine solution containing between 200 PPM (mg/l) and 300 PPM (mg/l) of free chlorine. The pipe shall be subjected to this solution for at least 30 minutes. The pipe shall then be flushed until the chlorine concentration is no higher than 1.0 mg/l.

Section 604 – Requirements for Copper Pipe

All property building laterals using copper pipe shall conform to the following specifications:

A. Description:

(1) The Work specified by this section shall include all supervision, coordination, labor, materials, tools, equipment, services and incidentals necessary to furnish and install new copper pipe and fittings as shown, specified and required, in association with new building laterals, ¾", up to, but not including, 4" in size. Proposed water services 4" or large, shall be constructed of ductile iron pipe.

(2) In general, Work shall include installation of potable water service, from the curb stop, to the meter valve, or meter setting appurtenances.

(3) In no case, will a Contractor be allowed to tap an existing water main. In the event that the water main must be tapped to allow for installation of the water service, the Town shall be notified, and the tap shall be made by the Town.

(4) This standard describes valves and fittings for use in the construction of the buried service line, extending from the curb stop, to the meter valve or meter setting appurtenance.

(5) The performance of products depends on proper installation. The purchaser/installer must follow the instructions supplied by or available from, the manufacturer.

B. Quality Assurance:

(1) Qualifications of the Manufacturer

a. Manufacturer shall have a minimum of five (5) years experience producing copper pipe, fittings and appurtenances, and shall show evidence of at least five (5) installations in satisfactory operation.

b. Parts Interchangeability: It is the intent of these Specifications that all materials furnished herein shall be compatible with similar materials of other manufacturers.

(2) Reference Standards

a. ASTM B32, Specification for Solder Metal
b. ASTM B42, Specification for Standard Size Seamless Copper Pipe
c. ASTM B68, Specification for Bright Annealed Seamless Copper Tube
d. ASTM B75, Specification for Seamless Copper Tube
e. ASTM B88, Specification for Seamless Copper Water Tube
f. ASTM B302, Specification for Threadless Copper Pipe

g. ASTM B306, Specification for Copper Drainage Tube (DWV)
h. NSF International (NSF) Standard 61
i. Underwriter's Laboratories (UL)
j. International Organization for Standardization (ISO)
k. Factory Mutual Research Corporation
l. National Fire Protection Association
m. ASME, Boiler and Pressure Vessel Code
n. Federal Specification WW-P-377D(1), Pipe, Copper, Seamless Standard Sizes (S/S by ASTM B42)
o. ANSI B16.22, Wrought Copper and Bronze Solder – Joint Pressure Fittings
p. 1996 Safe Drinking Water Act

(3) Water Services and plumbing shall conform to relevant local and/or state plumbing codes, or to the applicable National Plumbing Code.

C. Materials:

(1) All materials must be suitable for use in potable water systems.

(2) Copper Pipe: Copper pipe shall conform to the requirements of ASTM B88, for Type K copper.

(3) Couplings: Shall be compression style, both ends, for copper tubing, as manufactured by Mueller, or Ford Meter Box Company.

(4) All copper piping and accessories must be new materials in first-class condition. Used or recycled materials will not be allowed, regardless of condition.

D. Marking:

(1) Metal or alloy designation.
(2) Temper.
(3) Size and schedule.
(4) ASTM specification number.
(5) Name and location of supplier.

E. Jointing:

(1) All joints shall conform to the recommendations of the manufacturer and shall be made by skilled workmen.

(2) Joints shall develop full strength and shall be stronger than the pipe joined.

F. Size:

(1) All water services, shall at a minimum, be ¾-inch water services, unless otherwise directed by the Town.

(2) All water services 4-inches or larger, shall be constructed of ductile iron pipe, and shall require individual approval from the Town, as special materials, and installation and testing techniques, will be required.

G. Installation:

(1) All connections shall be watertight at the operating pressure. The operating pressure shall be obtained from the Town.

(2) Installation shall generally include installation of the water service from the curb box, which shall typically be located at the right-of-way line, to the meter valve or meter setting. In some cases, it may be necessary to replace an existing curb stop, and curb box. In this case, the Town shall be notified to provide a "shut-down" in order to make this repair.

(3) In general, the water service shall have a minimum cover of 4.5 feet. Installation depths proposed in excess of 5 feet shall be approved by the Town.

(4) Copper tubing shall be installed using methods which will preserve the integrity of the pipe and protect persons and property affected by the work and shall be bedded and backfilled in accordance with the applicable provisions of the Requirements for Backfill section of this Article.

(5) Exposed copper tubing shall be carefully erected and neatly arranged.

(6) Copper tubing shall be run parallel with the walls inside the structure, and shall be pitched to drain. Drain valves shall be installed at the low points of liquid filled systems.

(7) The Contractor shall make every effort to complete the water service "run" using a single continuous piece of pipe. When a joint is required, the number of joints shall be kept to a minimum.

(8) The Town shall be provided the opportunity to inspect all proposed service installations throughout the course of the Work. The Contractor shall receive approval by the Town of all installed services prior to backfilling.

(9) The Contractor shall provide to the Town, a sketch, indicating the exact location of the installed water service, upon completion of the Work. The sketch shall indicate dimensions from permanent structures (such as a house), along the water service line, such that the service line can be located in the future.

(10) Prior to backfilling, the Contractor shall test the new water service line for any leaks.

(11) Upon complete installation of all new water service lines, the Contractor shall thoroughly flush the new line, to free any debris which may have entered the piping during the course of Work, such that said debris is flushed from the line prior to entry into the structure.

(12) Prior to placing the service line into service, the Contractor shall flush the line using a concentrated chlorine solution containing between 200 PPM (mg/l) and 300 PPM (mg/l) of free chlorine. The pipe shall be subjected to this solution for at least 30 minutes. The pipe shall then be flushed until the chlorine concentration is no higher than 1.0 mg/l.

Section 605 – Requirements for Ductile Iron Pipe

All property building laterals using ductile iron pipe shall conform to the following specifications:

A. Description:

(1) The Work specified by this section shall include all supervision, coordination, labor, materials, tools, equipment, services and incidentals necessary to furnish and install new ductile iron pipe and fittings as shown, specified and required, in association with building laterals, 4" and larger.

(2) In general, Work shall include installation of the potable water service, form an existing valve, blow-off assembly, or harnessed end cap, to the facility to receive the water service.

(3) In no case, will a Contractor be allowed to tap an existing water main. In the event that the water main must be tapped to allow for installation of the water service, the Town shall be notified, and the tap shall be made by the Town.

(4) The performance of products depends on proper installation. The purchaser/installer must follow the instructions supplied by or available from, the manufacturer.

B. Quality Assurance:

(1) Qualifications of the Manufacturer

a. Manufacturer shall a minimum of five (5) years experience producing ductile iron pipe, fittings and accessories, and shall show evidence of at least ten (10) installations in satisfactory operation.

b. Parts Interchangeability: It is the intent of these specifications that all materials furnished herein shall be compatible with similar materials of other manufacturers.

c. The Contractor shall obtain each type of material from a single manufacturer.

d. The Town reserves the right to reject the material of a manufacturer if that material fails to meet the requirements or performance criteria of these specifications.

(2) Reference Standards

a. AWWA C104, American National Standard for Cement-Mortar Lining for Ductile Iron Pipe and Fittings for Water
b. AWWA C105, American National Standard for Polyethylene Encasement for Ductile Iron Pipe Systems
c. AWWA C110, American National Standard for Ductile-Iron and Gray-Iron Fittings, 3-inch though 48-inch, (75 mm through 1200 mm), for Water and Other Liquids
d. AWWA C111, American National Standard for Rubber-Gasket Joints for Ductile Iron Pressure Pipe Fittings
e. AWWA C115, American National Standard for Flanged Ductile-Iron Pipe with Ductile-Iron or Gray-Iron Threaded Flanges
f. AWWA C150, American National Standard for Thickness Design of Ductile-Iron Pipe
g. AWWA C151, American National Standard for Ductile Iron Pipe, Centrifugally Cast, for Water
h. AWWA C153, American National Standard for Ductile-Iron Compact Fittings, 3-inch through 24-inches (76 mm through 610 mm) and 54-inches through 64-inches (1400 mm through 1600 mm), for Water Service
i. ANSI B16.1, Cast Iron Pipe Flanges and Flanged Fittings
j. ANSI B1.20, Pipe, Threads, General Purpose (Inch)
k. ANSI B18.2.1, Square and Hex Bolts and Screws Inch Series, Including Hex Cap Screws and Lag Screws
l. ANSI B18.2.2, Square and Hex Nuts
m. ASTM A307, Specification for Carbon Steel Bolts and Studs, 60,000 psi Tensile Strength
n. ASTM A354, Specification for Quenched and Tapered Alloy Steel Bolts, Studs and Other Externally Threaded Fasteners
o. ASTM A536, Standard Specification for Ductile Iron Castings
p. NSF International (NSF) Standard 61
q. Underwriter's Laboratories (UL)
r. International Organization for Standardization (ISO)
s. Factory Mutual Research Corporation
t. 1996 Safe Drinking Water Act

C. Materials: General

(1) All materials must be suitable for use in potable water systems.

(2) All ductile iron pipe, fittings and accessories shall be designed for a working pressure and field hydrostatic test pressure as specified by the Town.

(3) All ductile iron pipe, fittings and accessories must be new materials in first-class condition. Used or recycled materials shall not be allowed, regardless of condition.

D. Ductile Iron Pipe:

(1) All pipe mains shall be ductile iron pipe with tyton-type bell and spigot joints (slip on) meeting AWWA C111.

(2) The pipe shall be in compliance with AWWA C150 and C151.

(3) The pipe shall have a Class 52 barrel thickness.

(4) The pipe shall be cement mortar lined and double seal coated inside and out with an approved bituminous coating 1 mil thick in accordance with AWWA C104.

E. Ductile Iron Fittings:

(1) All pipe main fittings shall be fabricated of ductile iron and shall be mechanical joint design with AWWA C153 and shall be Class 350.

(2) The fittings shall be cement mortar lined and seal coated inside and out with an approved bituminous coating 1 mil thick in accordance with AWWA C104.

(3) All fasteners used on fittings shall be StandCote SC-1 fluorocarbon coated Fasteners as manufactured by Standco Industries, Inc., or approved equal.

F. Accessories: Caps and Plugs

(1) Conform to the requirements of AWWA C110 for material, dimensions, tolerance, tests, markings and other requirements.

(2) Caps and plugs shall be mechanical joint or push-on joint and be furnished with all necessary joint accessories consisting of ductile iron follower glands, plain tipped rubber gaskets, nuts and bolts, unless otherwise specified.

(3) All nuts and tee bolts for mechanical joint accessories shall be fluorocarbon coated as specified herein.

(4) Threaded outlets or taps, (Mueller threads), shall be provided in plugs and caps as specified or required.

G. Thrust Blocking:

(1) All plugs, caps, tees, valves and bends of 22 ½" or more shall be anchored to prevent movement by providing suitable reaction blocking (thrust blocking). Concrete used for such blocking shall have a minimum 28-day compressive strength equal to 3000 psi.

(2) Prior to placing concrete, the fitting shall be completely wrapped with a 6-mil polyethylene membrane to prevent concrete bond to pipe or fittings.

(3) All thrust blocking shall be placed so that fittings, nuts, bolts, and joints are accessible for repairs.

(4) Blocking shall be placed against firm, undisturbed earth.

(5) Area of bearing on the pipe and the ground shall be as recommended by the manufacturer.

(6) As an alternative to Thrust Blocking, upon the approval of the Superintendent, Mechanical Joint Restraints complying with the following specifications may be used:

a. Restraint devices for nominal pipe size 3 inch through 48 inch shall consist of multiple gripping wedges incorporated into a follower gland meeting the application requirements of ANSI/AWWA C110/A21.10, ANSI/AWWA C151/A21.51, ANSI/AWWA C150/A21.50, ANSI/AWWA C153/A21.53, and ANSI/AWWA C111/A21.11.

b. The devices shall have a working pressure rating of 350 psi for 3-16 inch and 250 psi for 18-48 inch. Ratings are for water pressure and must include a minimum safety factor of 2 to 1 in all sizes.

c. Gland body, wedges and sedge actuating components shall be cast from grade 65-45-12 ductile iron material in accordance with ASTM A536.

d. Mechanical joint restraints shall be installed in accordance with AWWA C600.

H. Installation: General

(1) The Contractor shall coordinate all Work with the Town.

(2) The Contractor shall construct all water lines as recommended by the manufacturer, and as generally accepted by the industry.

(3) All materials incorporated into the Work shall be transported, handled, stored and installed in the work in such a manner as to insure against breakage, cracking or other damage. No such defective material shall be incorporated into the Work.

(4) Prior to installing pipe, every precaution shall be taken to ensure that no foreign material enters the pipe.

(5) Ductile Iron Pipe shall be installed in accordance with the applicable provisions of this Article. The water line should be installed to follow the designed lines and grades, and provide a minimum depth of cover of 4.5 feet over the top of the pipe bell.

(6) The trench bottom shall be graded flat to allow uniform support for the entire length of the pipe. This will require that the trench bottom be prepared with bell holes to allow the full-length support. After the pipe is carefully placed and the pipe layer has assured him that the pipe is uniformly supported, the trench shall be carefully backfilled by hand to the spring line. Care shall be taken to insure that the material is worked under the haunches of the pipe by hand. The trench shall then be carefully backfilled with the excavator bucket or by front-end loader to a depth of 12 inches of cover over the top of the pipe with excavated material free of stones larger than 3", wood, trash or other deleterious material.

(7) Proper implements, tools and facilities, shall be provided and used by the Contractor for the safe and convenient prosecution of the work, including hoists, ropers or other means to lower the material into the trench. Under no circumstances shall pipe, valves, specials, etc., be dropped or dumped into the trench.

I. Ductile Iron Pipe _ Underground Installation:

(1) The water line shall be installed in accordance with applicable sections of AWWA C-600 and this Specification.

(2) Every precaution shall be taken to prevent foreign material from entering the pipe at any time.

a. Excess dust, dirt or oil on the inside of the pipe shall be removed by an approved means prior to installing the pipe.

b. If the pipe laying crew cannot get the pipe into the trench without getting dirt into it, the ends shall be covered with a heavy tightly woven canvas

bag, which shall be left in place until the connection is to be made to the adjacent pipe.

c. At times when pipe laying is not in progress, the open ends of pipe shall be closed with a watertight plug or other approved means.

d. If water is in the trench when work is to resume, the seals shall remain in place until the trench is pumped completely dry (these provisions shall apply during the noon hour as well as overnight).

(3) Pipe shall be laid with the bell end facing in the direction of laying, unless otherwise directed by the Town.

(4) Installation shall be made in accordance with the recommendations of the manufacturer and as directed by the Town. The Contractor shall provide the Town with a copy of the manufacturer's instructions for making joints and installing pipe. In assembling the pipe, the Contractor shall not deflect the ductile iron pipe joints horizontally or vertically more than 5 degrees for the mainline pipe. Fittings shall be used to accomplish any change in alignment that exceeds the standard.

(5) Pipe cutting shall be done in a neat and workmanlike manner taking care not to damage the pipe. Cuts shall be smooth and at right angles to the axis of the pipe. Bevel ends as per manufacturer's recommendations.

(6) Each joint shall be assembled with no less than two (2) bronze wedges approved for establishing electrical continuity through the joint.

J. Sampling Taps:

(1) To facilitate the testing and subsequent chlorination and bacteriological sampling, sampling taps shall be installed.

(2) The sampling tap shall consist of a corporation stop installed in the main, with a soft copper pipe from the corporation to a point two (2) feet above the surface. For ease of operation, a curb stop may then be installed with a short soft copper gooseneck following the curb stop.

(3) At the completion of all testing, the sampling taps shall be properly abandoned. To do so, shut off the corporation stop, remove the copper riser, replace the plastic cap on the corporation stop and backfill.

K. Testing and Disinfection:

All testing and disinfection of ductile iron service line shall be done in accordance with all applicable sections of the AWWA Standards, specifically AWWA C600 and AWWA C651 and the Cattaraugus County Health Department.

Section 606 – Requirements for Backfill

Pipe bedding and backfill materials shall meet the following specifications:

A. Pipe Bedding

Pipe bedding shall consist of crushed stone or crushed gravel meeting the NYSDOT specification Section 703-02, being No.1 stone.

B. Select Backfill

Select backfill shall be NYSDOT approved gravel meeting the requirements of NYSDOT Specification Section 304-2.02 Type 4 with a size gradation as follows:

Sieve Size	Percent Passing By Weight
2 inch	100
¼ inch	30 to 65
No. 40	5 to 40
No. 200	0 to 10

C. Backfill and Fill Materials:

Excavated materials may be used for backfill provided:

(1) Material is sandy, loamy or similar to bank run gravel.

(2) Material is free of debris, hazardous materials, frozen materials, organic or other deleterious materials.

(3) Material greater than six (6) inches in any direction is unacceptable.

Section 607 – Separation From Sewer Pipes

No water pipe shall be laid in the same trench with a sewer pipe.

Section 608 – Maintenance of Building Lateral

The owner of the property served by a building lateral shall maintain it free of any leaks at his or her expenses.

Article 7

Protection of Water Supply

Section 701 – General Prohibition

No person shall perform any act or grant any permit or approval which may result in the contravention of the standards for water quality as contained in 10 NYCRR Part 170 and 6 NYCRR Parts 700-706, inclusive.

Section 702 – Specific Prohibitions

Without limiting the generality of the general prohibitions contained in Section 701 of this law:

(1) Cemeteries. No interment of a human body shall be made within a 250 foot linear distance of the wells.

(2) Chloride salt. No chloride salt shall be stored within a 500 foot linear distance of the wells except in weatherproof buildings or watertight vessels.

(3) Herbicides and Pesticides. No pesticides or herbicides shall be stored, discharged, applied or allowed to remain within a 500 foot linear distance of the wells unless a permit to do so has been obtained from the appropriate State agency having jurisdiction.

(4) Human excreta and sewage.

(i) No privy, privy vault, pit or other receptacle of any kind for either temporary storage or the permanent deposit of human excreta or sewage shall be constructed, located, placed, maintained or allowed to remain with 250 foot linear distance of the wells.

(ii) No human excreta or sewage shall be deposited or spread upon or beneath the surface of the ground within a 250 foot linear distance of wells.

(iii) No sewage or polluted liquid of any kind shall be discharged or allowed to flow on or beneath the surface of the ground within a 250 foot linear distance of the wells, except in watertight pipes connected to a sewage disposal system or treatment works for which a permit has been granted by the appropriate State agency having jurisdiction over such facility. No such watertight pipe shall be located within a 15 foot linear distance of the wells.

(5) Junkyards. No junkyards shall be located within a 250 foot linear distance of the wells.

(6) Radioactive material. No radioactive material shall be disposed of by burial in soil within a 500 foot linear distance of the wells and not within a 500 foot to a 1,000 foot linear distance of the wells unless authorization has been obtained from the appropriate State agency and such burial is in accordance with provisions of Part 16 of Title 10 of the Official Compilation of Codes, Rules and Regulations of the State of New York.

(7) Refuse. No refuse shall be deposited on or beneath the surface of ground within a 250 linear distance of the wells.

(8) Refuse disposal area. No refuse disposal area shall be located within a 500 foot linear distance of the wells.

(9) Toxic substances. No container used for the storage of toxic substances shall be buried beneath the surface of the ground within a 500 foot linear distance of the wells.

(10) Trespassing. No trespassing shall be allowed upon the property of the Town of Randolph upon which the wells are located and no person or persons shall enter in or upon such property except the person or persons authorized to enter said property by the Town of Randolph.

Article 8

Enforcement and Penalties

Administrative Remedies

Section 801 – Notification of Violation

Whenever the Superintendent finds that any person has violated or is violating this Law, the Superintendent may serve upon such person a written notice stating the nature of the violation. Within ten (10) calendar days of the date of the notice, an explanation of the violation and a plan for the satisfactory correction and prevention thereof shall be submitted to the Superintendent, by such person. The correction and prevention plan shall include specific actions. Submission of this plan in no way relieves the person of liability for any violations caused by such person before or after receipt of the Notice of Violation.

Section 802 – Consent Orders

The Superintendent is hereby empowered to enter into consent orders, assurances of voluntary compliance, or similar documents establishing an agreement with the person responsible for the noncompliance within a time period also specified by the order. Consent orders shall have the same force and effect as an administrative order.

Section 803 – Administrative or Compliance Order

When the Superintendent finds that a person has violated or continues to violate this Law or a permit or order issued there under, he may issue an order to such person responsible for the violation directing that, following a specified time period, water service shall be discontinued unless the violation is corrected and that there is no reoccurrence of the violation. Orders may also contain such other requirements as might be reasonably necessary and appropriate to address the noncompliance, including the installation of pretreatment technology, additional self-monitoring and management practices.

Such person may, within fifteen (15) days of receipt of such order, petition the Superintendent to modify or suspend the order. Such petition shall be in written form and shall be transmitted to the Superintendent by registered mail. The Superintendent may:

(1) Reject any frivolous petitions,
(2) Modify or suspend the order,
(3) Request additional information from such person, or
(4) Order the petitioner to show cause in accordance with Section 806.

Section 804 – Civil Penalties

Notwithstanding any other section of this law, any person who is found to have violated any provisions of this law, or permits or orders issued hereunder, shall be liable for a civil penalty in an amount not to exceed one thousand dollars ($1,000.00) per violation as initially established by the Superintendent subject to modification, if any, made by the Board pursuant to Section 806 of this law. Each day on which noncompliance shall occur or continue shall be deemed a separate and distinct violation. Any such penalty shall specify what portion thereof represents actual loss to the Town caused by the violation.

Such person may, within fifteen (15) calendar days of notification of such civil penalty, petition the Superintendent to modify or suspend the civil penalty. Such petition shall be in written form and shall be transmitted to the Superintendent by registered mail. The Superintendent may:

(1) Reject any frivolous petitions,
(2) Modify or suspend the civil penalty,
(3) Request additional information from such person, or
(4) Order the petitioner to show cause in accordance with Section 806

Section 805 – Cease and Desist Orders

When the Superintendent finds that a person has violated or continues to violate this law or any permit or order issued hereunder, the Superintendent may issue an order to cease and desist all such violations and direct those persons in noncompliance to:

(a) Comply forthwith

(b) Take such appropriate remedial or preventive action as may be needed to properly address a continuing or threatened violation, including halting operations or terminating the discharge.

Such person may, within 15 days of receipt of such order, petition the Superintendent to modify or suspend the order. Such petition shall be in written form and shall be transmitted to the Superintendent by registered mail. The Superintendent may:

(1) Reject any frivolous petitions,
(2) Modify or suspend the order,
(3) Request additional information from such person, or
(4) Order the petitioner to show cause in accordance with Section 806.

Section 806 – Show Cause Hearing

The Superintendent may order any person appealing administrative remedies for violations of this law or upon the original initiative of the Superintendent to show cause before the Board why an enforcement action, initiated by the Superintendent, should not be taken. A notice shall be served on such person specifying the time and place of a hearing to be held by the Board regarding the violation, the reasons why the action is to be taken, the proposed enforcement action, and directing such person to show cause before the Board why the proposed enforcement action should not be taken. The notice of the hearing shall be served personally or by registered or certified mail (return receipt requested) at least ten (10) calendar days before the hearing. Service may be made on any principal or executive officer of such person's establishment or to any partner in such person's establishment.

The Board may itself conduct the hearing and take evidence, or may designate any of its members or any officer or employee of the Town:

(1) Issue, in the name of the Board, notices of hearings requesting the attendance and testimony of witnesses, and the production of evidence relevant to any matter involved in such hearings,

(2) Take the evidence,

(3) Transmit a report of the evidence and hearing, including transcripts and other evidence, together with recommendations to the Board for action thereon.

After the Board has reviewed the evidence, it may order such person to comply with the Superintendent's order or civil penalty, modify the Superintendent's order or civil penalty or vacate the Superintendent's order or civil penalty.

Judicial Remedies

Section 807 – Fines

Any person who violates any of the provisions of or who fails to perform any duty imposed by this law, or any order or determination of the Superintendent promulgated under this law, or the terms of any permit issued hereunder, shall be liable to the Town for a fine not to exceed one thousand dollars ($1000) for each such violation, to be assessed after a hearing held in conformance with the procedures set forth in this Article. Each violation shall be separate and distinct violation, and in the case of continuing violation, each day's continuance thereof shall be deemed a separate and distinct violation. Such penalty may be recovered in an action brought by the Town's Attorney at the request of the Superintendent in the name of the Town in any court of competent jurisdiction. In addition to the above described penalty and damages, the Superintendent may recover reasonable attorney's fees, court costs, and other expenses associated with the enforcement activities. Such fine may be released or compromised by the Superintendent before the matter has been referred to the Town attorney, and where such matter has been referred to the Town attorney, any such penalty may be released or compromised and any action commenced to recover the same may be settled and discontinued by the Town Attorney, with the consent of the Superintendent.

Section 808 – Criminal Penalties

Any person who willfully violates any provision of this law or any final determination or order of the Superintendent made in accordance with this Article shall, in addition, be guilty of a misdemeanor, and upon conviction thereof, shall be punished by a fine of not less than five hundred ($500) nor more than one thousand dollars ($1,000). Each offense shall be a separate and distinct offense, and, in the case of a continuing offense, each day's continuance thereof shall be deemed a separate and distinct offense. In the event of a second conviction, such person shall be punishable by a fine not to exceed $3,000.00 per violation per day or imprisonment for not more than (3) three years or both.

Any person who knowingly makes any false statements, representations, or certifications in any application, record, report, plan or other document filed or required to be maintained pursuant to this law, or wastewater permit, or who falsifies, tampers with or knowingly renders inaccurate any monitoring device or method required under this law shall, upon conviction, be punished by a fine of not more than $1,000.00 per violation per day or imprisonment for not more than one year or both. In the event of a second conviction, such person shall be punishable by a fine not to exceed $3,000.00 per violation per day or imprisonment for not more than 3 years or both.

No prosecution, under this Section, shall be instituted until after the final disposition of a show cause hearing, if any was instituted.

Section 809 – Injunctive Relief

Whenever a person has violated or continues to violate the provisions of this law or permit or order issued hereunder, the Superintendent, through counsel may petition the Court, in the name of the Town, for the issuance of a preliminary or permanent injunction or both (as may be appropriate) which restrains the violation of, or compels the compliance with any order or determination there under by the Superintendent.

Section 810 – Damages

Any person violating any of the provisions of this law shall, in addition, be civilly liable to the Town for any expense, loss or damage occasioned to the Town by reason of such violation.

Miscellaneous

Section 811 – Delinquent Payments

If there shall be any payments which are due to the Town or any Department thereof, pursuant to any Article or Section of this law, which shall remain due and unpaid, in whole or in part, for a period of twenty (20) calendar days from the date of billing by the Town, the same shall constitute a default, and there shall be added to the entire amount of the original bill, a penalty equal to twenty percent (20%) of the original bill, and interest shall accrue on the unpaid balance, at the rate of two percent (2%) per month, retroactive to the date of the original billing.

Section 812 – Performance Bonds

The Superintendent may decline to reissue a permit to any person which has failed to comply with the provisions of this law or any order or previous permit issued hereunder unless such person first files with it a satisfactory bond, payable to the Town, in a sum not to exceed a value determined by the Superintendent to be necessary to achieve consistent compliance.

Section 813 – Levy of Civil Penalties

The Superintendent shall transmit to the Board or before September 1 of each year a list of those property owners within the Town against whom a civil penalty has been imposed pursuant to Section 804 of this law for which a show cause hearing has been held pursuant to Section 806 of this law, the notice for which having included advice that such a civil penalty will constitute a lien upon the property involved in the violation where such civil penalty has been outstanding and unpaid for at least thirty (30) days and has not previously been levied pursuant to this section. The list shall contain a brief description of the properties with respect to which such civil penalties were imposed, the names of the persons liable to pay for the same and the amount chargeable to each, including penalties and interest, computed, pursuant to Section 811 of this law, to December 31. The Town shall levy such sums against the properties liable and shall state the amount thereof in a separate column on the annual tax rolls of the Town under the name “Town Water Penalty”. Such amounts, when collected by the Town receiver of taxes, shall be paid over to the Chief Fiscal Officer of the Town to the credit of the water district serving such property. All of the provisions of the tax laws of the State of New York covering the enforcement and collection of unpaid taxes or assessments and special improvements not inconsistent herewith shall apply to the collection of such county water penalty.

Section 814 – Inspections

The Superintendent shall make regular and thorough inspections of the area surrounding the wells to ascertain compliance with the requirements of Article 7.

Article 9

Local Law In Force

Section 901 – Local Laws Superseded

Local Laws or parts of Local Laws in conflict herewith are hereby repealed prospectively.

Section 902 – Severability

If any clause, sentence, paragraph, subdivision, section or other part of this Local Law shall be adjudged by any court of competent jurisdiction to be invalid, such judgment decree or order shall not affect, impair or invalidate the remainder thereof, but shall be confined in its operation to the clause, sentence, paragraph, subdivision, section or other part thereof, directly involved in the controversy in which such judgment, decree or order shall have been rendered, and to this end the provisions of each section of this Local Law are hereby declared to be severable.

Section 903 – Effective Date

This Law shall take effect thirty (30) days after its filling in the Office of the New York Secretary of State.