

107 Holden Road, Paxton, MA 01612 (508) 753-9077 Fax: (508) 753-6155

### PAXTON WATER DEPARTMENT REQUEST FOR SERVICE

Account #				
Subject to all term hereby granted to		ons printed or written below, permission is		
	of	·		
(	(Name)	(Company Name)		
To renew □ repa	nir □ or install □ a water s	service line at the location		
of	for	r		
(Se	ervice Address)	(Property Owner)		
In consideration of	of the granting of this permit	t. I .		
		(Signature)		
Hereby agree to a	all terms described herein.			
Date:	Applicant's Ma	ailing Address:		
	Applicant's Tel	lephone #:		
issued. The water	er service, a tie-in fee is due service tie-in fee is determi	and payable on or before a service permit is ned by the number of living units. Please all fees. (Amount Due)		
Approved □	Disapproved □	Date:		
(Signature of Director of Public Works)		(Signature of Water Commissioner)		
		(Signature of Water Commissioner)		
		(Signature of Water Commissioner)		

## REQUEST FOR SERVICE PLEASE DIAGRAM PLOT PLAN BELOW

# PAXTON WATER DEPARTMENT GUIDELINES AND SPECIFICATIONS FOR WATER SERVICES AND MAINS

Note: All references to Water Department/Director of Public Works shall include: or authorized designee

#### 1. Application for Water Service

- **a.** Obtain and submit application to the Paxton Water Department office located at 107 Holden Rd., Paxton, MA 01612.
- **b.** Obtain DIG SAFE permit number and present plan or print of proposed project. DIG SAFE: (888) 344-7233
- **c.** Obtain trenching permit at DPW office located at 107 Holden Rd., Paxton, MA 01612
- **d.** Arrangements for installation are to be made a minimum of 72 hours in advance to any installation with the Director of Public Works. No installation will be allowed without water personnel on site. Inspections shall be made in accordance with ARTICLE V Section 15.

#### 2. Prior to Water Main Approval

**a.** Prior to approval of any water main upgrade, and/or water main extension added onto the system, all necessary flow testing, and/or hydraulic studies shall be done by an engineering company (approved by the Town Paxton Water Department), at the expense of the owner and/or contractor looking to do said work. The Town of Paxton Water Department shall not be responsible for any costs associated with upgrading the existing distribution system in order to proceed with said projects.

#### 3. Actual Installation

- **a.** Proper excavation and safety procedures will be followed regarding trenching for pipe installation. Applicable State and Federal regulations apply.
- **b.** Any material excavated from the trench which is deemed unsuitable by the Water Department or Director of Public Works, will be removed and replaced with material approved by the Water Department and the Director of Public Works.
- **c.** Proper back filling procedures will be used in refilling the trenches both to ensure proper protection of the pipeline and for the compaction of the trench. Care will be taken to protect existing utilities and any damage to existing facilities will be paid for by the party responsible.

- **d.** All water services, domestic, commercial, industrial, or institutional shall be installed in a straight line between the water main and the dwelling/building to be served. Any variations presented by on-site conditions shall be at the discretion of the Water Department. Such conditions shall include driveways, on-site septic design, or natural geology, i.e. ledge, boulders, etc.
- e. All pipes and fittings will be to Water Department Specifications and to AWWA specifications for water systems. No piping will be buried without inspection per ARTICLE V Section 15. Any piping buried without inspection will not be acceptable to the Water Department and will have to be uncovered for inspection.
- **f.** All service connections will have compression type connections unless otherwise approved by the Water Department. Compression type connections will be required on all joints where the pipe is jointed to the fitting. Meuller CC thread is required on all taps two (2) inches or less. Pipe threads will be required on all other fittings be adapted to compression fittings or to meter connections. Ball valves are required in the cellar both before and after the meter (cellar valve before). Pressure reducers may be required after the meter (see Plumbing Inspector). All water service pipes will be Type K copper on all services up to 150 feet in length. PE Thick wall plastic (minimum of 200PSI) pipe will be allowed for services over 150 feet in length with the stipulations that a meter pit be installed at the curb stop valve (at Consumers cost), tracing wire is adequately mounted to the piping, and water tape is laid two (2) feet above the pipe. All pipes will meet AWWA specifications for water service pipe. Only stainless steel inserts will be allowed. The approved contractor will provide all materials from the house to the curb stop valve (including tubing, adapters, inserts, etc.).
- g. All installations including tapping of water mains shall be performed only by the Water Department or authorized contractors who are listed and approved by the Water Department. All costs of the service installation including required system fees will be at the expense of the customer, contractor, or builder.
- **h.** Charges for services rendered will include all materials and labor supplied by the Water Department, including the meter and connections, plus appropriate overhead charges and billed to the owner.
- i. All subdivisions, condominium projects, and multiple family housing, or other type projects will supply everything needed to provide adequate domestic water supply and to meet the fire protection requirements to said projects. They will apply to the Board of Water Commissioners for a water connection permit (Fees may vary dependent upon the project). A complete set of engineered plans (engineering the project) must be submitted to the Water Department and approved by the Director of Public Works.
- **j.** These plans will include the layout of the water main, complete with all hydrants, valves, service connections, and other details necessary to

construct the water main. A locus map showing the location of the project must be provided. The Construction detail plan must show hydrant details (side view and top view); pipe laying and trench details; details for fitting and thrust blocks/rods, and any other detail the water department deems necessary. A complete set of technical specification details will be printed on the plans, so as there is no question in the field concerning requirements. The Water Department reserves the right to require additional details and make changes to any plan which the Water Department feels necessary. Knowing that all plans do not account for field changes, the Water Department reserves the right to approve any changes necessary because of field conditions.

- **k.** All meters for the above named projects will be supplied to the project by the developers, contractors, and/or builder at their expense, and according to Water Department specifications. All meters will have Radio Read remote devices that can be read from outside in accordance to the Water Department specifications. All pipes and fittings must be approved in advance of use by the Water Department and meet all Water Department requirements.
- 1. The service pipe in a public way may be installed by the Town, the Water Department, or a private contractor under the direction of the Water Department. This shall be at the discretion of the Water Department. Any service line installed by a private contractor in a public way must be guaranteed for one (1) year from the date of acceptance by the Water Department.
- m. Any water line installed in a public way must be inspected and approved by the Director of Public Works, or his designee before it is backfilled. All work performed in a public way by the Paxton DPW personnel including labor, equipment and materials will be billed to the applicant at the current going rates of the DPW. Water Department personnel shall inspect all water installations before any backfilling will be allowed (both on public and private property).

#### 4. Cancelling of Scheduled Installations

- **a.** If all necessary paperwork is not completed by the date of installation including street opening.
- **b.** If any charges owed to the Town of Paxton or the Water Department are outstanding.
- **c.** If safety equipment is not on-site as required.
- **d.** If proper equipment to do the job is not on-site (jack hammer, compressor, Shoring, trench boxes, etc.)
- **e.** If inclement weather conditions prevail.

#### 5. After Service Installation - Rules and Regulations

#### No Water Will Be Turned on Unless:

- **a.** Any and all construction bills owed to the Town of Paxton or the Paxton Water Department are paid in full.
- **b.** No water will be turned on without the completion of all necessary permits, inspections, and payment of fees.
- **c.** No Water will be turned on until all proper pressure and bacteria tests have been done and all results are satisfactory.
- **d.** No other source of water supply (either potable or non-potable) will be allowed to be attached to any plumbing system by the public water supply.
- **e.** Cross connection prevention devices have been installed where deemed necessary or required by law.

These specifications and guidelines have been set up to help the Town of Paxton Water Department control projects and to assist project engineers, contractors, developers, and builders in what is required for water services, and water main installations. They are not meant to supersede street opening permits, plumbing code regulations, or water regulations established by the EPA or the State of Massachusetts regulation, that would supersede local regulations.

## Technical Specifications Paxton Water Department

#### **Services:**

Corporation stops, curb stops, and fittings shall be No Lead brass conforming to the requirements set forth by the AWWA. Copper Tube Size (CTS) or Polyethylene (PE) tubing shall conform to AWWA C-901 requirements.

Corporation Stop: 1" Mueller or Ford fittings with CC thread and compression connection outlet

Curb Stop: 1" Mueller or Ford fittings with Compression Connections

Meters: 5/8" Hersey meters with radio read device or other approved meter brand or size. This is at the discretion of the Superintendent. (Meter type, style, and size must be approved by the Water Department Superintendent before installation).

Ball Valves and Cellar Valves: 1" Mueller or Ford accepted.

Tubing: 1" Type K CTS; PE tubing. (PE allowed on services greater in length the 150 feet but must be approved by the Water Department Superintendent before installation (minimum 200PSI, Meter pit will be required.)

Curb Boxes: Cast Iron, adjustable slide type, with cast Iron cover to match Paxton's specifications.

Tracing wire: If allowed to install PE, a tracing wire will be required which will be attached to the tubing and attached to metal on each side so the PE will be able to be located using pipe tracing equipment. Wire should be coated and of sufficient gauge as not to rot or deteriorate over time.

Grounding Wire: No electrical grounding wires shall be connected to any water service or pipe.

Water Tape: A metallic water tape is required for each water service. It shall be laid two (2) feet above and directly over every service pipe. It must state water line buried below.

#### **Testing and Disinfection**

#### *Testing*:

New water mains shall be filled and flushed under the direct supervision of the Water Department. All air shall be expelled from the line prior to testing. Testing shall be in accordance with AWWA C-600. The test pressure shall be 150 PSI or 1.5 times the working pressure, whichever is greater. The test duration shall be two (2) hours. Allowable leaking shall be based on section 4.1 of AWWA C-600.

#### Disinfection:

After an acceptable pressure test, the new water mains shall be chlorinated in accordance with AWWA C-601 and 651. Chlorine shall be introduced through a tap at one end of the pipeline while water is withdrawn from the opposite end. Chlorine dosage must be sufficient to produce a minimum in the pipeline of 50MG/L. Following a 24 hour contact time period, the treated water shall be flushed from the mains and samples (as determined by the Water Department) taken for coliform and background Bacteria. A set of repeat samples (a minimum of 24 hours apart) must also be taken. Mains will not be accepted or approved for service connections until all required samples show zero bacteria counts. The contractor shall again disinfect and resample until mains are acceptable and has met the zero Bacteria requirements.

#### Pipe:

Water mains shall be cement lined Ductile Iron Water Mains, with Bitumen coating inside and out, and with a minimum nominal diameter of 8". Pipe shall conform to the requirements of ANSI A21-50, A21.51, and AWWA C-150, C-151. All pipes shall be class 52 with push-on joints.

#### **Fittings:**

Fittings shall be cement lined Ductile Iron with Bitumen coating inside and out. Fittings shall conform to the requirements of ANSI A21.53 and AWWA C-153. Fittings shall be mechanical joint conforming to ANSI 21.11 and AWWA C-111. All fittings shall have concrete thrust blocks or be thrust rodded back to the next fitting or section of pipe as is detailed in the drawings.

#### Valves:

Gate valves shall be iron body, bronze mounted, double disc, side wedge type, and non-rising stem with "o" ring seals. Valves shall be New York pattern, Metropolitan type, conforming to the requirements of AWWA C-500. Resilient seat gate valves conforming to AWWA C-509 are acceptable. All valves shall have mechanical joint ends and shall open right, or clockwise. Valves shall be approved by the Water Department prior to installation and be of a manufacturer approved by the Water Department.

All gates shall be accompanied by gate boxes made of a heavy cast iron, adjustable slide type box, with a minimum 5" diameter barrel, cast iron cover with the word "Water" cast in the top. Boxes shall be designed and installed such that no pressure shall be exerted by the valve box on the water main or valve itself.

#### **Hydrants:**

Hydrants shall be Kennedy Guardian model K-81D or like model conforming to the Requirements of AWWA C-502. Hydrants will have a minimum 5 ¼ inch diameter valve opening and a 7" diameter barrel. Hydrants shall open right or clockwise and have a 5' 6" depth of bury. Hydrants shall have two (2) 2 ½ inch nozzles and a 5" steamer port nozzle.

#### **Granular Fill Materials**

Materials shall conform to the Commonwealth of Massachusetts "Standard Specifications for Highway and Bridges" latest edition.

<u>Washed Sand</u>: Only washed sand will be used around any water pipe installed throughout the distribution system. The sand shall be free of frost, loam, clay, and other deleterious materials. The washed sand shall not have stones greater in size then ½" in order to properly protect all water pipes installed in the system. All water services shall have a minimum of 6" of washed sand under the pipe and a minimum of 1' of washed sand covering the pipe. During the inspection, if any section of the pipe is found to have an insufficient amount of sand either below or above the pipe then the Water Department reserves the right to not accept the service until which time they determine it has been properly bedded with sand.

<u>Screened Gravel</u>: Screened gravel shall be hard, durable, rounded particles, free from sand, loam, clay, excess fines, and deleterious material. It shall be uniformly graded such that not less than 95% will pass a ½" sieve and not more than 5% pass a No. 4 sieve.

*Bank Run Gravel*: Bank run gravel shall be hard, durable, stone, and coarse sand free from frost, loam, clay, and other deleterious materials.

#### **Concrete:**

Materials shall conform to the Commonwealth of Massachusetts "Standard Specifications for Highway and Bridges" latest edition.

<u>Cement</u>: Shall be Type 11 Portland cement conforming to ASTM C-150.

#### **Inspections and Acceptance**

All materials and construction are subject to the approval of the Paxton Water Department and/or its designated inspector. The contractor shall not cover any work prior to said approval. The contractor is responsible for correction of all deficiencies to the satisfaction of the Water Department and/or its designated inspector. Approval shall in no way affect the obligation of the contractor to repair or renew subsequent deficiencies.

#### Construction

Prior to approval of any water main upgrade, and/or water main extension added onto the system, all necessary flow testing, and/or hydraulic studies shall be performed by an engineering company (approved by the Water Department), at the expense of the owner and/or contractor looking to do said work. The Water Department shall not be responsible for any costs associated with upgrading the existing distribution system in order to proceed with said projects. The Water Department shall determine whether the recommendations of the hydraulic study of said project should be fully implemented.

Trenches shall be excavated to the depth indicated on the drawings or as directed by the Water Department or its designated inspector and in widths sufficient for laying of the mains, services, and all appurtenances. All pipes shall have a minimum depth of 4' with a maximum of 5'6" of cover over the pipe.

If used, wood sheeting/blocking shall not be withdrawn if driven below the midpoint of the pipe. Sheeting/blocking shall be cut off no lower than 1' above the top of the pipe.

Blasting, if required, shall be conducted in full compliance with all state laws and local ordinances. The contractor is responsible for obtaining all permits and ensuring public safety.

All valves and hydrants shall be set plumb in true vertical alignment and all valve boxes shall be installed vertically, centered over the operating nut. The elevation of the top shall be set to finished grade and secured in a fashion as to not allow it to rise out of the ground; by means of cement, or other like substance. If valve boxes rise above finish grade, it is the responsibility of the contractor to reset the box to finished grade and resolve the issue so it does not happen again in the future.

The Water Department reserves the right to give additional instruction that it deems necessary above and beyond what has been previously stated to any contractor in order to properly protect the distribution system so we can continue to provide drinking that is safe, clean, and free from color and odor.

Paxton Water Dept. Service Charges				
SERVICE PERFORMED	SERVICE RATE	Rate/hr.	NOTES	
Residential water service hook-up fee for single family home	\$5,000.00		Subject to the approval of the Board of Water Commissioners	
Residential water service hook-up fee other than single family	\$5000.00 with an additional \$1250.00 per bedroom/unit		Subject to the approval of the Board of Water Commissioners	
Water service hook ups fee for properties other than residential	\$5000.00 up to one inch domestic feed line.		Greater than one inch domestic feed will be an additional \$1250/inch For example: 1" to 2" \$6,250.00 2" to 3" \$7,500.00 3" to 4" \$8,750.00	
Turn on/off at the curb		\$50.00	Minimum of 1 hour	
Seasonal turn off/on & meter pulled		\$50.00	Minimum of 1 hour	
Test/Re-Test of Backflow Device	\$50.00		Rates may be reduced if multiple devices are located on premises	
Cross Connection Survey	\$35.00		Per Survey	
Hydrant Flow Test		\$50.00	Plus water usage	
Meter Test (at customers request)	\$60.00		For up to 1" meters. No cost if meter fails, fee only applies if meter passes	
Temporary water hookup		\$50.00	Plus water usage	
Replacement of Cellar Valve		\$50.00	Plus cost of materials	
New Meter Setup		\$50.00	Plus cost of materials (when the replacement is due to the customer's negligence)	
Backhoe with Operator		\$50.00	If applicable	
Dump truck with operator		\$50.00	If applicable	
Laborer		\$50.00	4 Hour Minimum at O.T. RATES apply after regular business hours	
Meter Pit			(If required) cost of materials	
Water Main Tap	\$225.00			
Meter Testing (meters larger than 1")	\$160.00		Additional labor rates may apply. Meters will be tested in accordance with state and federal recommendations.)	

#### Notes:

A residential property is any property where people are residing. Any meter greater than one inch will be at the expense of the consumer. Other fees may apply at the discretion of the Superintendent of the Paxton Water Department, or the Board of Water Commissioners.