### WASHINGTON TOWNSHIP MUNICIPAL AUTHORITY

# PROCEDURE & REQUIREMENTS FOR CONNECTION TO THE WATER SYSTEM

**Revised November 2009** 

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## PROCEDURES AND REQUIREMENTS FOR CONNECTION TO THE WTMA'S WATER DISTRIBUTION SYSTEM

#### **Procedure for Arranging to Make Connection**

- 1. The property owner shall make his own arrangements for construction of the building water line with a plumber *registered* with the Authority to do water line construction.
- 2. The property owner or his appointed representative shall submit an *Application for Connection* and a *sketch* of the proposed water line to be reviewed by the Authority, accompanied with a copy of the *Building Permit*. After review, the Authority shall either approve or deny the application with an explanation of denial. The *appropriate fees* shall be paid prior to the connection permit being issued to the property owner.
- 3. The connection permit shall be valid for two (2) years. Failure to meet this requirement will result in the Authority returning all fees collected less 10% Administrative Fees.
- 4. Such person shall schedule with the Authority at least 2 business days in advance notice of the time when such connection will be made.

### Registration of Persons and/or Companies Performing Work on Water Facilities to be Connected

Persons performing work on facilities to be connected to the water system shall be subject to registration as follows:

- 1. The WTMA shall maintain a list of plumbers who are registered with the Authority and permitted to do work in the Township. Only plumbers or represented companies may install and/or do work on any water or sewer lines that connect between a building/structure and any main or lateral that connects to the Authority's system.
- 2. Prior to being certified, plumbers must make application to the WTMA to be placed on the list and pay a registration fee of \$25.00. All applicants must take, and successfully pass a test administered by the WTMA covering applicable rules, regulations and specifications.
- 3. All applicants who successfully pass the exam must also present the WTMA with a current blanket payment and/or performance bond, or proof of current liability insurance.
- 4. Successful applicants will then be presented to the WTMA Board of Directors for acceptance.
- 5. Following acceptance, all registered plumbers must provide the WTMA with updated proof of insurance annually. Failure to provide this information will result in the removal from the Registered Plumbers List. Companies who register one or more employees must also

verify that the registered employee is still employed by them.

- 6. All work done within the Township must be done to the current specifications of the Washington Township Municipal Authority.
- 7. A company is only required to have one registered plumber, however, all work done by that company is done under that person's certification, and the certified individual will be held liable for any and all work done by the company's employees.
- 8. Although the registered plumber is not required to be on site during all of the construction, they are required to be on site during the final inspection by the WTMA, which will be coordinated with at least 2 business day's notice.
- 9. A copy of a current, valid certification must be kept on the job site or otherwise available to be presented to an authorized representative of the WTMA upon request.
- 10. All registered plumbers are required to re-register with the Authority every three (3) years. If there have been no changes in the specifications, no additional testing will be required at that time.
- 11. Failure to abide by these rules and procedures will result in removal from the list. Once removed, individuals and companies must re-register and begin the process from the start.

Property owners may personally install water service laterals onto their own dwelling without being registered or maintaining general liability insurance. This waiver is only for registration and insurance requirements for work on private property by its owner. It does not waive materials and construction specifications. All work within a public right-of-way or utility easement must be done by or under the direct supervision of a registered plumber having the required registration and insurance.

#### **Connection Fees**

There is hereby imposed upon each owner of a residential property connecting to the water system, a Tapping Fee of four thousand seventy six (\$4,076.00) dollars for each Equivalent Dwelling Unit (EDU). A seventy (\$70.00) inspection fee shall also be imposed, entitling the owner two (2) inspections of the service line installation. Any additional inspections shall be charged at the WTMA's hourly rate, with a minimum of one (1) hour per visit. All fees must be paid in full prior to any inspection or subsequent approval of the service line.

The fees for commercial customers to connect to the WTMA Sanitary Water system shall be in accordance with the provisions of Washington Township Municipal Authority Resolution 09-7 (as it may be amended).

#### Water Rates, Rents, and Charges

The customer shall pay either the consumption charge or the minimum charge, whichever amount is greater.

#### Consumption Charge

In addition to the following applicable minimum charge, all metered consumers shall pay a consumption charge quarterly for consumption of water, as follows:

- 1. The first 5,000 gallons shall be billed at \$7.47/thousand gallons
- 2. Any usage over the first 5,000 gallons shall be billed at the rate of \$4.77/thousand gallons.

#### Minimum Charge

Metered customers shall be subject to the following minimum charges quarterly, whether or not there is metered water use. The minimum charge can only be cancelled by service termination. The minimum charge includes the use of a minimum amount of water according to meter size as indicated below.

Meter Size	Quarterly Minimum	
	Gallons / Charge	
5/8" or (5/8" x 3/4")	5,000 / \$37.35	
3/4"	11,000 / \$65.97	
1"	20,000 / \$108.90	
1 ½"	65,000 / \$323.55	
2"	160,000 / \$776.70	
3"	350,000 / \$1,683.00	
4"	670,000 / \$3,209.40	
6"	1,450,000 / \$6,930.00	

Whenever water service to any customer shall begin after the first day or shall terminate Before the last day of any quarterly period, and the minimum charge is to be assessed, the quarterly minimum rates, rents, and charges for such period shall be prorated on a daily basis.

When a single meter supplies more than one unit, the charges will be determined using the metered consumption per unit (total metered consumption divided by number of units). Unit shall mean the total number of dwellings designed for occupancy for more than 90 days and premises (laundries, administrative buildings, etc) located within the area being supplied water, whether they are occupied or not, at the time the master meter is read. The total minimum charge will be determined from the per unit minimum charge, based on the meter size required to serve each unit separately. The customer shall pay the metered consumption per unit as calculated or the total minimum charge, whichever is greater. This billing methodology shall apply to apartment buildings, mobile home parks, planned living communities, private water distribution systems, etc. where a single meter supplies more than one unit.

#### **Additional Charges**

For each service turn-off or turn-on whether at the curb, meter pit, or house valve shall be \$35.00 during regular work hours and \$85.00 for all other hours.

Service termination (either temporary or permanent) which shall include turn-off and removal of meter shall be \$100.00.

Service restoration which shall include installation of meter and turn-on of service shall be \$100.00.

Tapping Fees shall be charged according to Act 57 requirements and Authority resolutions.

The Authority's labor rate shall be \$35.00 per hour during regular work hours, with a minimum of one (1) hour. The Authority's labor rate shall be 1 ½ times this rate after normal business hours, with a 'call out' charge of \$85.00, which shall include the first hour of work. However, the labor rate for the Washington Township Supervisors shall be discounted 20%, unless otherwise specified.

All inspection fees shall be assessed as described above under "Connection Fees". Although the Authority does not perform routine inspections after regular hours, in the event it should be necessary to do so, the rate shall be 1 ½ times the normal regular rate, with a minimum of two (2) hours charged.

A \$10.00 charge will be made if the Authority reads a meter at the customers request for the determination of a final water bill.

#### **Water Meter Installation**

Upon inspection and approval of the water service line by the Authority or its authorized representative, the owner's water meter will be installed at the owner's request by the Authority. Billing begins the day that the water meter has been installed in the system.

After payment of fees and issuance of the connection permit, a water meter may be installed for construction water purposes before the water service line is installed.

#### **Permits for Connection**

No person shall uncover, connect with, make any opening into or use, alter or disturb in any manner, any portion of the water system without first making application for and securing a permit, in writing, from the Authority. Application for a permit shall be made by the owner of the Improved Property to be served or by his duly authorized agent.

#### Water Service Line General Rules

All costs and expenses of construction of a building water service line and all costs and expenses of connection of a building water service line to the Authority's water system shall be borne by

the owner of the Improved Property to be connected; and such owner shall indemnify and save harmless the Township and the Authority, from all loss or damage that may be occasioned, directly or indirectly, as a result of construction of a building water service line or of connection of a building water service line to a water main.

Every water service line of any Improved Property shall be maintained in a sanitary and safe operating condition by the owner of such Improved Property. The service line must be water-tight and constructed to all prevailing WTMA specifications.

If any person shall fail or refuse, upon receipt of a notice of the Authority, in writing, to remedy any unsatisfactory condition with respect to a water service line, within 60 days of receipt of such notice, the Authority may cut off said water service until such unsatisfactory condition shall have been remedied to the approval of the Authority. At its option, the WTMA may make such repairs at the expense of the property owner.

#### Inspection of Building Water Line during Installation

Building water lines shall be subject at all times to the inspection and approval of the Authority or its authorized representative, who shall have supervision and control over same. The owner shall provide the Authority's Assistant Project Supervisor with safe access for the inspection.

Such person shall have given the Authority at least 2 business days notice of the time when connection will be made, so that the Authority may supervise and inspect all the work of connection and necessary testing.

No water line shall be covered until it has been inspected and approved by the Authority. If any part of a water line is covered before being inspected and approved, it shall be uncovered for inspection at the cost and expense of the owner of the Improved Property to be connected to a water main.

Upon completion of each Service Installation, the Authority's Assistant Project Supervisor is to be notified and an appointment made for inspection. All pipes and pipe joints must be visible and accessible for this inspection.

#### Access to Properties for Inspection

This Authority, or its authorized representative, shall have the right to access at reasonable time to any part of the Improved Property served by the water system as shall be required for purposes of inspection, measurement, sampling and testing, and for performance of other functions relating to service rendered by the Authority through the water system.

#### **Requirements to Connect**

In accordance with Washington Township Ordinance No. 176, the owner of any property which is accessible to, and whose principal building is within 250 feet of, the water distribution system

shall, at their own expense, connect such building with the water system within sixty (60) days after written notice to such persons from the Authority.

The Authority shall, when a homeowner refuses to connect, tap the water main and extend the building water lateral to the edge of the right-of-way, at the owner's expense.

Procedure When Connection is Not Made in Time:

After expiration of the particular periods specified above, if any owner of an occupied building on property in the Township shall have failed to connect such property with the water system as required above, the WTMA shall refer the property owner to the Washington Township Supervisors for enforcement of Ordinance No. 176 and the penalty section therein, which include fines and penalties of not less than on hundred fifty (\$150.00) dollars and not more than one thousand (\$1,000.00) dollars **per day** and/or may be imprisoned for a term not exceeding thirty (30) days.

#### **Roadway Construction**

No work shall occur in a Township roadway until after a Permit is obtained from the Washington Township Supervisors. All work in a Township roadway shall be in accordance with Washington Township road restoration requirements.

Work in a PennDOT Right-of-Way requires a PennDOT Highway Occupancy Permit (HOP) and that all work be done in accordance with PennDOT's requirements governing such work. The application for a PennDOT HOP to work on an Authority water line shall be prepared by the owner of the property, in the name of the Washington Township Municipal Authority and delivered to the WTMA with the required Bonding.

The WTMA requires a Construction Bond/Letter of Credit or other Surety acceptable to the Authority for all work done within a roadway. The Construction Bond/Letter of Credit shall be for one (1) year, and equal to one hundred and ten (110%) percent of the construction cost estimate presented by the property owner and approved by the Authority. The Construction Cost Estimate and Construction Bond/Letter of Credit shall include all work in the PennDOT Right-of-Way for the construction, temporary road restoration, and final restoration.

#### **Installation of Water Service**

#### Materials

All materials to be used for a building's water service shall be a commercial grade and specifically made for use in public water supply systems and shall comply with applicable AWWA Standards. Products from most retail outlets fail to meet the required drinking water standards and will not pass the inspection. Materials used shall meet the listed specifications or approved equal. Preapproval for unlisted materials should occur prior to purchase installation to avoid delays and possible material replacement.

- 1. Meter, 5/8 X 3/4 inches SRII Meter TR/PL 1000 gal 4whplas bonnet sec screw CI bottom L/Conn, the meter and radio read transceiver are as supplied be Sensus, no substitutions.
- 2. Meter Transceiver Unit-Pit Version Touchcoupler single port, Model MXW520K-TL-1
- 3. Meter pit for new services shall be a Plastic Pit Setter for moderate to cold weather as manufactured by the Ford Meter Box Co, Inc., PDBHC-244-18-36Q. No substitutes accepted.
- 4. Meter setter shall be Ford, compression type, 24-inch padlock wings, double check on outlet, seal wire hole on inlet angle ball valve with 3/4 inch brace pipe eye, VBHC72-24-44-33Q.
- 5. Inlet valve shall be a Ford BA13-232W Angle Ball Valve
- 6. Outlet valve shall be Ford HHCA31-232 Angle cartridge Dual Check Valve
- 7. Meter shall be a 5/8 X 3/4 inches supplied by the WTMA and purchased by the owner
- 8. The inlet and outlet couplings shall be CTS Quick Joint JT
- 9. The pit diameter shall be 18 inches and the depth 40 inches
- 10. Meter Box Cover, Ford Walbash Double Lid Cover W3BPD Deep dish inner lid WA3L-C-T centered touch read lid
- 11. Tapping saddle, Smith-Blair Models 315 and 317, dual strap, 300 psi. A typical residential service shall be a 3/4 inch tap.
- 12. Corporation Valve, Ford Model No FB1000, shall be threaded into the tapping saddle.
- 13. Curb Stop, Ballcorp Model No. B44333 shall be installed no more than 2' before the meter pit.
- 14. Curb Box, Sames Model No. D-1P4, plug type, cast iron arch pattern base, slide type, with stationary 24 inch extension rod, 3' to 4' vary, Erie Pattern.
- 15. Polyethylene Tubing, 3/4 inch PE3408, 200 PSI, SDR 9, ASTM 2737 Pipe with short inserts
- 16. "Y" Branch shall be bronze alloy "Y" Branch manufactured by Ford Meter Box Company
- 17. Pressure Reducing Valve as manufactured by Watts, 3/4 2 inch, USB or equal, inlet pressure 5 to 250 psi, outlet pressure 40 to 150 psi.
- 18. 6 inch metallic locating tape

In the situation that calls for a plumber to install an "old-style" meter pit, a stabilizing bar (5/8" galvanized rod or a plastic 3/4" rod) must be utilized. This is to keep the meter at the proper depth. Rebar will not be accepted and/or approved by inspection.

#### Construction

#### Depth

Service line shall be a minimum of 4 feet depth, maximum of 7 feet depth. No exceptions allowed.

Curb Stop shall be 2 feet from meter pit and adjusted to final grade

Meter Box shall be adjusted to final grade and located at the edge of utility easement; however, at no time shall it be closer than 5 feet from electric and/or gas utilities or the driveway.

Meter spuds shall be 18 inches from finished grade. Any measurement not within 16 inches to 20 inches shall be reset to the required depth.

Metallic locating tape shall laid be on the stone bedding.

#### Separation of Water Lines and Sewer Lines

#### Horizontal Separation

Whenever possible, sewer pipes should be laid at least 10 feet horizontally from any existing or proposed water lines. Should local conditions prevent a horizontal separation of 10 feet, a sewer may be laid closer to a water main if:

It is laid in a separate trench

It is laid in the same trench, with the water line located at one side on a bench of undisturbed earth; and if

In either case, the crown of the sewer is at least eighteen inches (18") below the invert of the water line.

#### Vertical Separation

Sewers crossing under water mains should be constructed so that the sewer joints will be equidistant and as far as possible from the water main joints.

Where a water main must cross under a sewer, adequate structural support shall be provided for the sewer to prevent damage to the water main.

In either case, the crown of the "above" line is at least eighteen inches (18") below the invert of the "below" line.

#### Pressure reducing valve and shutoff valve

The meter setter and curb stop provide a shutoff valve and a back flow valve on the water service connection.

The owner shall also provide a shutoff valve, a check valve and a pressure reducing

valve on the owner's side of the water meter.

Pressure reducing valve reduces waterline pressure and protects the building's plumbing devices, which includes the hot water heater's pressure relief valve.

Backflow prevention (check valve) is recommended on all water services and required under the following conditions:

Residential customers are required to have backflow prevention devices in conjunction with irrigation systems, fire sprinkler systems, when another water source such as a well or cistern is available on the premises, or when there are other systems on the customer's premises that could present a cross connection. A double check valve assembly (DCVA) is the appropriate device for isolation of most systems noted above.

Commercial and industrial customers are required to have backflow prevention devices at the water meter and may need additional devices dependent upon the water-using equipment found on the premises. Services having a greater risk may be required by the Engineer to have a reduced pressure double check valve assembly (RPDCVA) and/or an air gap.

All DCVA's and RPDCVA's must be tested annually by a certified technician and a copy of the test results submitted to the Authority.

#### Frost Protection requirements:

Service line shall be 4 feet deep.

Meter box cover with plastic inset lid shall be adjusted to grade

Outside valves, when valves are installed outside a building or in a crawl space they shall be installed inside a standard meter pit. (Pressure reducing, shutoff and check valves).

Exposed waterlines in crawl spaces shall be installed within a standard meter pit, wrapped with heat tape, and insulated.

#### Bedding

All waterlines shall be bedded on 6 inches of stone, have 6 inches of stone bedding on each side and 1 foot of bedding covering the pipe.

All bedding shall be 1B or No. 8 stone.

Six inch metallic locating tape shall be placed on top of the stone bedding.

#### **Tapping Waterlines**

All water taps shall be wet-taps.

3/4 and 1-inch taps shall be made by the Authority at the Owners expense. Contact the Authority for the current price.

All other taps shall be scheduled no less than two business days in advance and will

be permitted only in the presence of an Authority representative.

All tapping equipment shall be inspected by an Authority representative prior to tapping a public water line **and properly disinfected at the tap site.** 

#### **Inspection and Testing**

The water service from the main to the curb stop shall be tested for pressure and leakage using the operating water main's pressure.

The water service from the meter to the building shut off valve shall be at the water main working pressure.

Approval of a water service lateral occurs upon the passing of the inspection, pressure tests, back filling of the trench, final road restoration (when applicable) and the adjustment of the valve boxes and the meter pit to grade. The water meter shall be a maximum of 18" from grade.

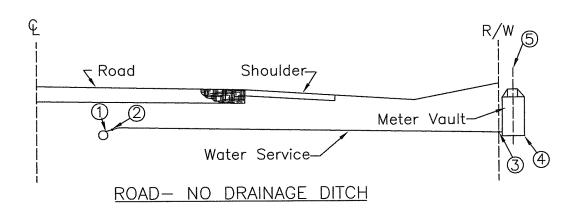
#### Ownership and Material Responsibility

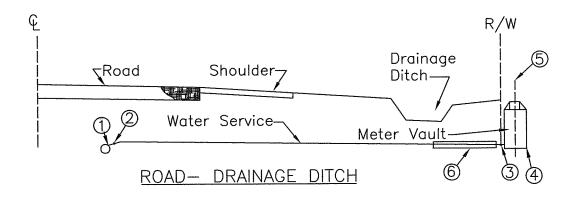
Water service lines to the curb stop are the responsibility of the property owner(s). WTMA must have access to maintain the meter.

All water services and water meters within the public right of way become part of the Authority's public water system upon the passing of the inspection and testing. All future maintenance on water lines and meters from the main to the curb stop shall be the Authority's responsibility.

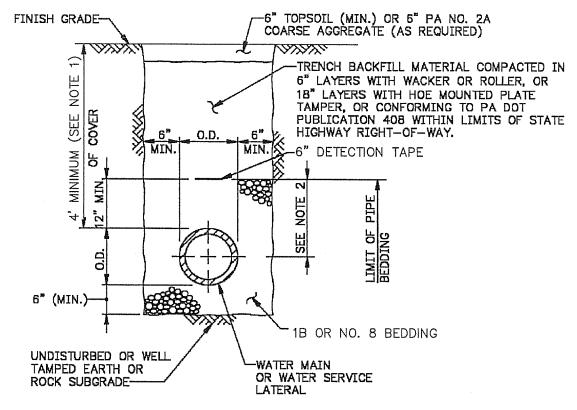
The property owner is responsible for all maintenance from the property owner's side of the curb stop. This includes the connection to the setter and all backflow prevention devices.

- 1. Tap on water main to be made at the 1 o'clock position.
- 2. Corporation stop.
- 3. Curb stop to be placed on Right-of-Way line.
- 4. Curb stop to be within 2' of meter vault.
- 5. Center line of meter vault to be 1'-6" from right of way line.
- 6. When water service is crossed by drainage swells the service lateral shall be bedded in clean clay. The intent is to prevent ground water from following the bedding.





STANDARD WATER DETAILS	DATE	REVISIONS
WATER METER LOCATION		
WATER METER LOCATION		
WASHINGTON TOWNSHIP MUNICIPAL AUTHORITY	SCALE NO SCA	DWG. NO. LE W-1



#### NOTE:

- ALL WATER SERVICE PIPING SHALL HAVE A MINIMUM 4' DEPTH AND A MAXIMUM 7' DEPTH.
- ENGINEER MAY APPROVE GREATER THAN 7' COVER ON A CASE—BY—CASE BASIS.

STANDARD DETAILS
TRENCH BACKFILL DETAIL
IN UNPAVED AREAS
WASHINGTON TOWNSHIP MUNICIPAL AUTHORITY

DATE	REVISIONS	
11/07	DWG. CREATED	
SCALE		DWG. NO.
NO SCALE		TR-W2