

Water Meters

A. **General.** All water supplied by the Authority for domestic, commercial or industrial purposes shall be measured through a water Meter for the purpose of ascertaining the amount of water supplied. All water service lines must include an individual Meter which will service only a single Customer unless otherwise approved by the Authority. All Meters will be furnished and installed by the Authority and shall remain the property of the Authority.

B. **Multi-dwelling Units/Apartments.**

1. In cases where a single structure is so constructed to allow for multiple residential units (apartments) or occupancy, each residential unit shall have a separate meter installed on the service line to allow separate shut-offs for each unit. The minimum rate for water will be equal to the minimum unit rate times the number of units available for occupancy. This can be accomplished by having a specially constructed "meter room" where individual control valves and meters will be located for each separate, prospective customer. Each individual meter set-up will be in compliance with the Authority's Rules and Regulations, and each prospective customer will be required to pay all applicable fees and charges and abide by these Rules and Regulations, as would a customer supplied by a typical, single Service Line. The meter room shall be so constructed and locked so that access is gained via an outside door and access is limited to the landlord, Authority, and other utilities. The separate customers must not be able to gain access to the meter room.
2. When more than one customer is supplied through a single, common service Line, due to a pre-existing condition, at the discretion of the Authority, a single meter of appropriate size may be installed. However, the minimum rate for water will be equal to the minimum unit rate times the number of units available for occupancy.

C. **New Service Line or Replacement Line from the Public Line to the Residence/Building.**

1. **Brand New Service/Water Tap.** Anytime brand-new service or water tap is requested and installed from the public line to a residence/building, the work performed must include an individual Meter which will service only a single Customer and shall be installed in a Meter Pit. The Authority will install the water tap and the Meter Pit. The Authority will invoice the property owner for the water tap and the installation of the Meter Pit. The requirement of a Meter Pit for brand new service may be waived by the Authority if it determines, in its sole discretion, that the installation of a Meter Pit is too difficult or costly and the Authority is satisfied with the location, installation, backfill, and integrity of the Customer Service Line

2. **Replacement Service Line.** When a new replacement service line is installed from the public line to a residence/building, the work performed must include an individual Meter which will service only a single Customer and shall be installed in a Meter Pit. The installation and design of the Meter Pit is to be made in accordance with a drawings or instructions furnished and approved by the Authority. The installation of the Meter Pit shall permit adequate access to the meter and its ready installation or removal. The cost of the Meter Pit and its installation (all parts except the meter) shall be the responsibility of the Property Owner and will be invoiced and considered due and payable upon receipt. The Meter Pit will remain the property of the Authority, as are the other Authority-installed facilities comprising the service connection. The requirement of a Meter Pit for new replacement lines may be waived by the Authority if it determines, in its sole discretion, that the installation of a Meter Pit is too difficult or costly and the Authority is satisfied with the location, installation, backfill, and integrity of the Customer Service Line. Additionally, the requirement that the property owner be responsible for the construction, installation and costs of a Meter Pit may be waived if the Meter Pit is being installed as part of an Authority funded project.

D. **Existing Water Service and Meter Replacement.** When the Authority installs a new Meter on an existing service line (existing line from public line to the residence/building), the cost of said Meter installation will be paid by the Authority with exception of damaged or frozen meters. If it is determined that the Meter is damaged or frozen as a result of a property owner's failure to protect the meter, the cost of replacement shall be the responsibility of the property owner. The Authority shall have the power to withhold water service from an owner's property or unit who fails to pay for the replacement of a damaged or frozen meter.

E. **Type of Meter.**

1. Generally, the Authority shall have the power to determine the type and size of the meter to be installed on any Service Line regardless of the type of water line (i.e. new, existing, replacement, domestic, commercial, etc.).
2. In the case of a service line requiring a meter of 2" or larger, which requires a Meter Pit, the Meter Pit shall include a "Bilco" type access hatch, steps, 6½' of headroom, floor drain, adequate inside dimensions for primary and by-pass plumbing, and insulation as needed to prevent freezing of the Meter. The installation of the Meter Pit and the all costs associated with the construction and installing same (except the actual Meter) will be the responsibility of the Property Owner. After construction, the Authority assumes ownership of all facilities within such Meter Pit, and the Meter Pit itself, and will maintain same. The Property Owner is responsible for maintaining all facilities beyond (downstream) the outside wall of the Authority's Meter Pit. For additional information concerning service lines 2" or greater, property owners will require specific guidance from the Authority on the type of Meter to be installed and the type and manner of how the Meter will attach to the service line (i.e. Meter Pit, Vault, etc.). The guidance from the Authority will be based upon approved engineering practices. The Meter for said lines will be provided by the Authority, but the costs associated with constructing and installing the Meter Pit, Vault, etc. will be the responsibility of the Property Owner with the facilities remaining the property of the Authority.

F. **Installation.**

1. Any Meter installed shall be assessable to the Authority at all reasonable hours and shall be subject to its control exclusively. Nothing shall be built, constructed or placed in proximity to the Meter which would hamper the Authority's ability to readily inspect, maintain or replace said meter.
2. The Meter will be set after the property owner has prepared his plumbing to accept same, following the standards, drawings and instructions as required by the Authority. These standards may be changed from time to time. Prior to completing the plumbing requirements, a Property Owner must contact the Authority to determine those requirements in effect at the time. The specifications for water service installation are attached as Appendix A. ("Water Service Installation") of the Authority's Rules and Regulations.
3. For brand new service lines or new replacement service lines (public line to the residence/building), which require Meter Pits, the Authority may require that the Meter be connected to a transceiver unit (MXU), which transmits reading data. The Authority reserves the right to approve the location of Meter Pits, including the location of the associated Touch Pad or MXU Unit. Property Owners are advised to secure authorization of Meter Pit location prior to preparing the necessary plumbing arrangement. The drawings and specifications for the installation of Meter Pits are attached as Appendix B ("Meter Pit Details") and Appendix C ("Meter Pit Specifications & Reading System") of the Authority's Rules and Regulations.

4. Any Customer who schedules a meter installation date/time must have all required plumbing completed prior to said date/time. If the Authority meter-installation personnel are unable to complete the scheduled work due to faulty or incomplete preparation of the Property Owner's plumbing, or if the Authority personnel are unable to gain access to the location, the Authority may charge a fee (See Rates and Fees) for each subsequent return visit needed to complete the meter installation.
5. For water service installations utilizing PVC Pipe, Polyethylene Pipe or other types of Non-metallic Pipe, a locating wire shall be used. The locating wire shall be constructed of #12 AWG Solid (.0808" diameter), steel core soft drawn high strength tracer wire, 380# average tensile break load, 30 mil high molecular weight-high density BLUE polyethylene jacket complying with ASTM-D-1248, 30 volt rating. The wire shall be attached to the exterior of the water line every five (5') feet with Duct Tape. The locating wire shall be extended to the ground surface for use by utility operations personnel to inside a separate Curb Box at all valve boxes. Loop wire inside box to provide sufficient slack for removal and use. (Installation of the wire in a separate dedicated box reduces the risk of damaging and breaking the wire when operating the valve.) The location wire continuity shall be tested immediately following water line installation and trench backfilling operations. Breaks in the wire shall be immediately repaired. Contractor shall supply/provide information after restoration is completed that there are no breaks in the tracing wire. If breaks are found prior to job closeout. They shall be "fixed" at the Contractors expense, with no additional cost to the owner, for any costs associated with the "fix" including restoration.

G. **Maintenance, Care and Responsibility for Damage.** The Authority will maintain all Meters at its expense, except that the owner of the property is liable and responsible for damaged or frozen Meters on his premises or in Meter Pits or Boxes located at the curb. The owner of a property shall be required to protect the Meter from damage. In the event of the damage to or impairment of the Meter, the customer shall promptly notify the Authority. If the Meter is damaged, the Authority will furnish and set another Meter to replace damaged Meter, however, the cost of the repairs, including replace parts, labor, and transportation charges, as well as the cost of testing and costs for reinstallation or changing of the Meter, shall be billed to the owner of the property and paid for by him. The minimum cost for repairing a frozen Meter shall be such cost as is currently in effect. The Authority shall have the power to withhold water service from an owner's property or unit who fails to pay for the replacement of a damaged or frozen Meter.

H. **Changes in Ownership.** Prior to the sale, date of mortgage settlement, closing, or transfer of any improved real property, it is a condition of receiving service that the owner, seller, transferor, or any agent thereof bring the plumbing into compliance with the same standards as required for brand new installations (i.e. Meter Pit installation). If the property cannot accommodate the standards for a brand-new installation, at a minimum, all plumbing at the property must be updated and made of approved materials, including a properly operating shut off valve, pressure reducing valve, proper connections and spacing to receive a meter, and a check valve or backflow preventer. Failure to do so will result in termination of service until the plumbing is brought into compliance by the owner, seller, transferor, or any agent thereof.

I. **Accuracy of Meter.** If at any time a customer questions the accuracy of the Meter, upon their request and accompanied by payment of the appropriate fee (See Rates and Fees), the Authority will have the Meter tested and adjust the matter accordingly if the test proves the meter to have been operating outside of permissible limits.

If the meter so tested shall be found to be accurate to within 4% (high or low), the Customer's advance payment for the Meter test will be retained by the Authority and the bill(s) in question considered accurate and due and payable. If the Meter shall be found to be registering over 4% from actual, the

advance payment will be refunded and the account corrected and reduced by the percentage difference between the test result percentage and 4%. In no case will correction of billing be for greater than two months prior to the time of the Meter test, unless the Authority is satisfied that the inaccuracy has been of longer duration.

APPENDIX A.

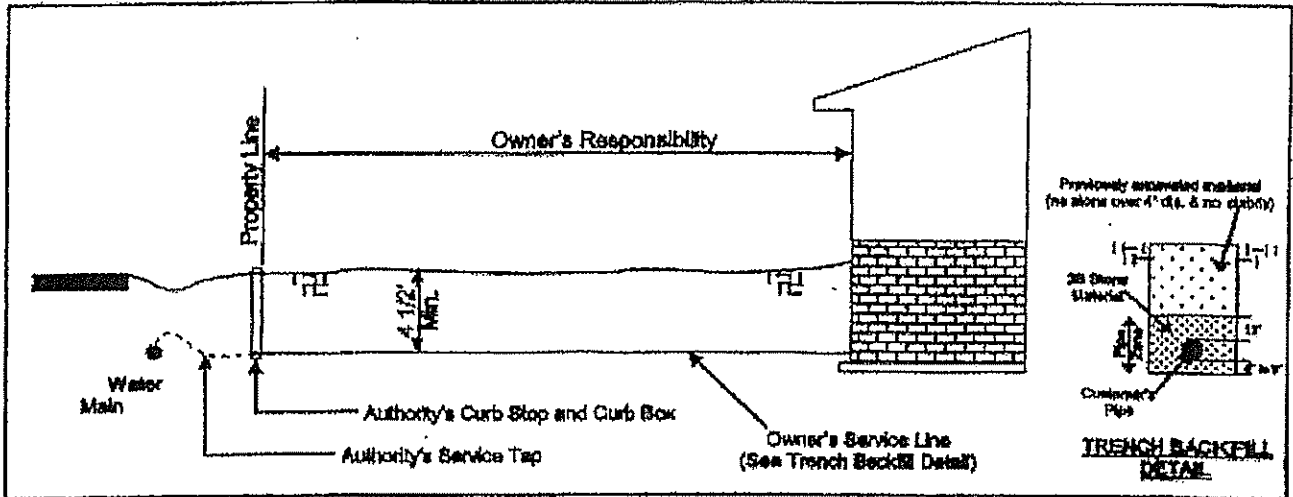
WATER SERVICE INSTALLATION

The owner's service line must be a minimum of 3/4" diameter. It must be buried at a minimum of 4 1/2'. Approved pipe materials are:

TYPE "K" COPPER - If fittings are used underground, only compression fittings are approved.

HIGH DENSITY POLYETHYLENE PLASTIC PIPE - Rated for 160 PSI or greater, CTS (Copper Tube Size). If fittings are used underground, only compression fittings with stainless steel stiffeners are approved.

CROSS-LINKED POLYETHYLENE (PEX) - Rated for 160 PSI or greater, CTS (Copper Tube Size). If fittings are used underground, only mechanical or compression fittings with insert stiffeners are approved.

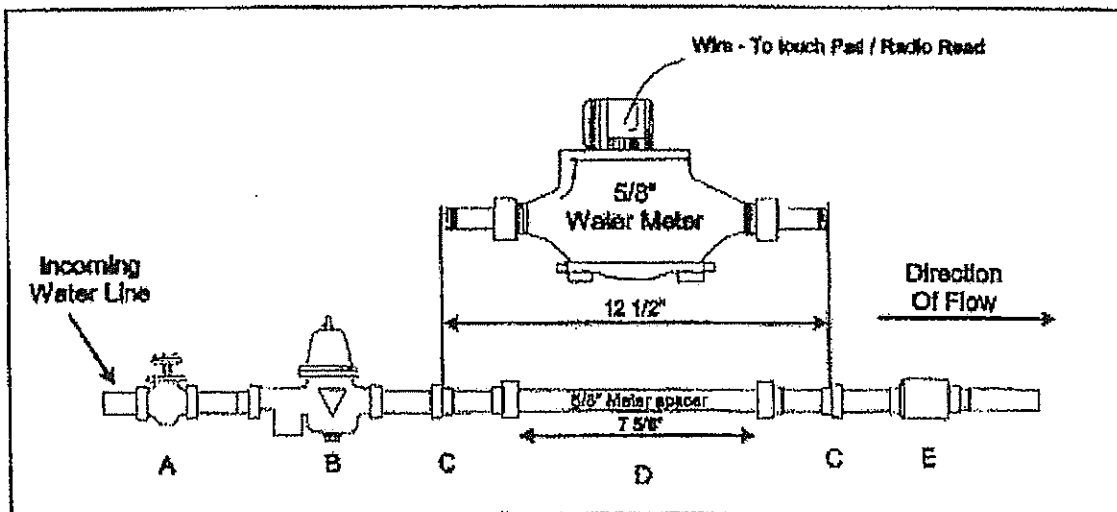


REQUIRED PLUMBING FOR METER INSTALLATION

Coming into the basement from the outside, extend the pipe a minimum of 5" from the wall. Bring the pipe to a horizontal position a minimum of 2' and a maximum of 4' from the floor level, and install as shown below in this order:

- (A) 3/4" shut off valve
- (B) 3/4" Pressure Reducing Valve
- (C) 3/4" x 3/4" F.I.P. adaptor
- (D) 12 1/2" spacer (includes (2) 5/8" x 3/4" meter couplings and 5/8" meter spacer)
- (C) 3/4" x 3/4" F.I.P. adaptor
- (E) 3/4" Check Valve

Everything in this diagram is the property and maintenance responsibility of the customer with the exception of (D) The Meter Spacer.



APPENDIX B

CONNECT EXISTING LINE TO PROPOSED LINE WITH REQUIRED FITTINGS

WATER MAIN

CURB STOP AND BOX

PROPERTY LINE

EXISTING CURB STOP AND BOX (TO BE REMOVED)

EXISTING SERVICE LINE (TO REMAIN)

PRV METER

CONNECT EXISTING LINE TO PROPOSED LINE WITH REQUIRED FITTINGS

METER BOX

CORPORATION COCK STOP

PLAN

INSTALL ALL ITEMS AS PER MANUFACTURERS RECOMMENDATIONS

ANGLE DUAL CHECK VALVE

1 1/2" INSULATING DISC
METER BOX, FRAME AND COVER, ERT BRACKET

15" LOCKING ELECTRONIC READ LID

PROPERTY LINE

ANGLE BALL METER VALVE
CURB STOP AND BOX

EXISTING CURB STOP AND BOX (TO BE REMOVED)

GRADE EL.

MAGNETIC LOCATOR TAPE

MAGNETIC LOCATOR TAPE

LOCATOR WIRE

3" SAND BED ALL AROUND (TYP)

VARIES

50"

CONNECT EXISTING LINE TO PROPOSED LINE WITH REQUIRED FITTINGS (TYPICAL BOTH SIDES OF METER PIT)

15"Ø x 48" DEEP PVC METER PIT

EXISTING SERVICE LINE (TO REMAIN)

WATER MAIN

CORPORATION COCK STOP

UNDISTURBED EARTH
GRAVEL, MIN. 4" DEPTH

SECTION

TYPICAL PROPOSED METER AND CURB STOP ASSEMBLY

NOT TO SCALE

TYPICAL METER AND CURB STOP ASSEMBLY NOTES:

1. FOR CLARITY, METER PIT AND NEW CURB BOX IS SHOWN "OFFSET", HOWEVER, THEY CAN BE SITUATED AT THE EXISTING SERVICE LINE LOCATION IF CONDITIONS ALLOW.
2. IF PAYMENT FOR METER PIT INSTALLATION IS REQUIRED PER THE REGULATIONS, IT WILL BE LUMP SUM PER INDIVIDUAL LOCATION AS INDICATED. PAYMENT SHALL INCLUDE, BUT IS NOT LIMITED TO ALL MATERIALS, LABOR AND EQUIPMENT NECESSARY FOR A COMPLETE METER INSTALLATION AND ALL RESTORATION OF SURFACE AREA DISTURBED.
3. IF AN EXISTING METER IS PRESENT, IT SHALL BE RETURNED TO "OWNER", AT NO ADDITIONAL COST TO OWNER.
4. NEW PIPING OUTSIDE OF PIT SHALL BE HDPE CTS
PIPING INSIDE OF PIT SHALL BE HDPE CTS
5. IF SERVICE LINE SIZE VARIES FROM WHAT IS INDICATED BEING PURCHASED THRU COSTARS, THE CONTRACTOR WILL RECEIVE NO ADDITION COMPENSATION FOR ANY MATERIALS, LABOR, EQUIPMENT ETC., REQUIRED FOR A COMPLETE METER INSTALLATION.
6. TRAFFIC RATED LIDS SHALL BE INSTALLED ON ALL METER PITS.
7. CONTRACTOR SHALL USE APPROVED SELECT GRANULAR MATERIAL (2A) FOR ALL BACKFILL WITHIN LOCAL AND PENNDOT RIGHT-OF-WAY. IN ALL OTHER AREAS BACKFILL CAN BE SUITABLE EXCAVATED MATERIAL.
8. THE LOCATION OF THE METER PIT SHALL BE LOCATED AS NEAR AS PRACTICAL TO THE CUSTOMER'S PROPERTY LINE FRONTING THE STREET, OR RIGHT-OF-WAY IN WHICH THE WATER MAIN IS LOCATED. IT SHALL ALSO BE WITHIN 5 FEET OR LESS OF THE CURB STOP. THE CONTRACTOR WILL BE DIRECTED BY AUTHORITY PERSONNEL OR ENGINEER (OR REPRESENTATIVE) AS TO THE LOCATION OF PROPOSED METER PIT LOCATION.
9. THE LOCATION SHALL BE RELATIVELY SAFE FROM BEING DAMAGED BY VEHICLES AND SNOW-REMOVAL EQUIPMENT.
10. THE LID OF THE METER PIT OR BOX SHALL BE TIGHT FITTING, TAMPER RESISTANT, AND PLACED FLUSH WITH THE GROUND SURFACE SO THAT IT DOES NOT CREATE A TRIPPING HAZARD OR INTERFERE WITH LAWN MOWING.
11. WHERE GROUND FROST IS EXPECTED, THE RISER PIPES SHALL BE 1 TO 2 INCHES AWAY FROM ANY PORTION OF THE METER BOX WALLS TO AVOID FREEZING.
12. THE DISTANCE BELOW GROUND SURFACE AT WHICH THE METER SPUDS OR COUPLINGS ARE TO BE LOCATED SHALL BE SPECIFIED. IN GENERAL, SMALL METERS ARE RAISED TO FACILITATE READING AND METER REPLACEMENT.
13. THE DIMENSIONS OF THE METER BOX TO BE USED FOR EACH SIZE METER MUST BE SPECIFIED.