### PLEASE REVIEW ATTACHED PACKET IN ITS ENTIRETY

DATE:	EMPLOYEE:
<del></del>	NO:
	OFFICE USE

### KENT COUNTY WATER AUTHORITY APPLICATION FOR WATER SERVICE/METER (SINGLE FAMILY RESIDENTIAL)

PRINT NAME:		
ADDRESS:		
PHONE#		
SERVICE LOCATION:		
LOT# OR DESCRIPTION:		
SERVICE/METER SIZE:		
APPLICANT SIGNATURE	DATE	
WATER AVAILABILITY:  EMPLOYEE	YES	NO
APPROVED BY KCWA:  EMPLOYEE		
CUSTOMER CONTRACTOR INSTALLING SERVICE:  • INSPECTION FEE OF \$5.00 PER LINEAR FT FIELD DETERMIN  • NOTIFY OFFICE 24 HOURS PRIOR TO WATER SERVICE INSTALLATION FOR INSPECTION APPOINTMENT INSPECTION FEE \$	NED	
LOCAL/STATE PERMIT NEEDED:		
KCWA CONTRACTOR INSTALLED:		
3/4" AND 1" SERVICE - \$1,500.00		Щ
1 1/2" AND 2" SERVICE - \$2,000.00		
DEVELOPER INSTALLED (NO COST):		
USING EXISTING SERVICE - ACCT. NOSIZE		
KCWA COMMENTS:		

### KENT COUNTY WATER AUTHORITY APPLICATION FOR NEW SERVICE BASIC INFORMATION

### REQUIREMENTS FOR SERVICE AND METER INSTALLATION

#### **SERVICES:**

All single-family residential units shall be equipped with a minimum of 3/4" service. Single family and commercial units over 200' from the water main shall be equipped with a meter chamber and a minimum of 1" service.

Services shall be copper type  $\underline{K}$  or polyethylene C.T.S. 200PSI rated. If polyethylene is chosen, then a minimum of a 12' copper whip shall be installed just prior to house entry and up to the meter. Stainless steel inserts shall be utilized at all connections for polyethylene pipe.

A ball valve rated for the service pressure shall be installed just prior to the location of the meter coupling, a second ball valve at the effluent side of the second meter coupling, the backflow preventer, then a third ball valve as shown on the attached detail drawing.

Depth of service shall be at a minimum of five feet finished grade throughout installation.

All fittings and pipe shall be swabbed with approvable chlorine solution prior to installation.

Identification tape, as specified in Section 3.21.14 shall be utilized for the full length of services and set to a depth from finished grade of no more than 1' - 0".

From the date of application a waiting period of two weeks can be expected before installation of the service. All meter sizes must be the same size as the service.

All service easements are the responsibility of the property owner and not Kent County Water Authority. No services will be installed in private easements by Kent County Water Authority.

#### **METERS:**

Refer to Rules and Regulations, Section 4 for the Kent County Water Authority.

All meters shall be read in cubic feet and compatible with the system employed by Kent County Water Authority.

### SINGLE UNIT RESIDENTIAL METER PITS:

Residential meter pits shall be used for services that exceed 200' in length from the curb box.

Influent and effluent valves shall be provided inside the pit before and after the meter couplings. Ball valves on either side or ball valve, check valve combination will be acceptable.

If polyethylene is chosen, a minimum of a 12' copper whip shall be installed up to the meter.

Vault and ring style pits shall have an access ladder and be the customer's responsibility to maintain safe and dry conditions of the pit.

Vault and ring style pits shall have K copper tubing on the inlet and outlet sides of the pit with a 12' copper whip in each direction.

### **BACKFLOW PREVENTION:**

Residential units must be equipped with dual check backflow preventer after the meter and non-removable vacuum breakers on all outside hose bibbs prior to service connection and meter installation. Style shall be non-removable self-draining type Watts No. 8D or equal.

All commercial or residential lawn sprinkler systems must be provided with a positive vacuum breaker or reduced pressure zone type assembly where the system connects to water supply. It shall be in a location that is always free draining and will not be submerged.

### **RELATED ITEMS:**

Customer is referred to the Kent County Water Authority Rules & Regulations and all related policies for proper installation, operation and all governing procedures and policies.

### CUSTOMER WATER SERVICE DISINFECTION POLICY

All new or repaired potable water system service pipe and necessary connecting pipe fittings, control valves and all appurtenances in or adjacent to any residence building structure or premise shall be purged of all deleterious material and disinfected prior to utilization or permanent connection or re-connection to the Kent County Water Authority system. That portion of the customer service pipe extending from the curb stop to the building shall be disinfected under the purview of the local plumbing official. The owner must provide written documentation from the plumbing inspector that disinfection was properly conducted in accordance with the American Water Works Association standard C651 and Rhode Island Plumbing Code. A copy of the bacteriological test results indicating compliance with the Rhode Island Department of Health drinking water quality standards must be obtained before making any permanent connection to the Kent County Water Authority system or reactivation of an existing water service for potable water consumption can be authorized. The owner/applicant or customer is responsible for all costs associated with disinfection process or procedures. A plumbing permit from the local municipality is required in conjunction with this work.

Disinfection Procedures

- 1. The owner, plumber and/or plumbing official shall coordinate activities by contacting the Kent County Water Authority five working days prior to conducting the disinfection process to:
  - Obtain authorization to temporarily connect to the public water system if an alternative supply is not used.
  - Arrange for a representative of the Authority to examine the isolated connection to the public water system.
  - Obtain a reading from the temporary meter (if used).
  - Coordinate activation of the water connection to complete the disinfection and sample retrieval process.
- 2. The service pipe shall be flushed with clean potable water supplied by the contractor or from an isolated connection to the Kent County Water Authority system until all deleterious material is removed. If the contractor chooses to use the public water system, the contractor shall be responsible to provide a suitable, isolated connection to the Authorities system from the new service pipe.
- 3. Fill the service piping thereof with a chlorine solution containing at least 50 parts per million chlorine. Once the chlorine concentration in the effluent discharge reveals the proper concentration, the system shall be valved off and allowed to stand for the required time.
- 4. Following the required standing time, the service pipe shall be flushed with clean potable water until the chlorine is purged from the service piping. <u>Two</u> sets of samples of acceptable samples, taken at a minimum of <u>24 hours apart</u> shall be analyzed. The customer shall elicit the services of a laboratory certified by the Rhode Island Department of Health to analyze the water samples using membrane

filter technique SM9222B19EDT for compliance with Rhode Island Department of Health coliform regulations, and standard heterotrophic plate count test. This requires **two (2)** sample bottles per set of samples, one for the coliform test and one for the heterotrophic plate count. The RI Department of Health has a listing of certified laboratories. The sample retrieval shall be conducted under the purview of the local plumbing official per the requirements contained in the Rhode Island State Plumbing code.

- 5. The disinfection process shall be repeated until the results of the bacteriological testing confirm compliance with the Rhode Island Department of Health drinking water quality standards and heterotrophic plate count consistent with Kent County Water Authority quality.
- 6. The water service applicant must provide the Authority with copies of the satisfactory laboratory test results and inspection verification letter (per section 107 of plumbing code) from the local plumbing official, before permission will granted to complete the permanent connection to the public water system.
- 7. All connection materials shall be kept free of any potential contamination and be swabbed with chlorine solution prior to connection to the newly disinfected service.

A \$50 SERVICE CHARGE WILL BE APPLIED TO EACH REVISIT TO THE SITE BY A KENT COUNTY WATER AUTHORITY REPRESENTATIVE.

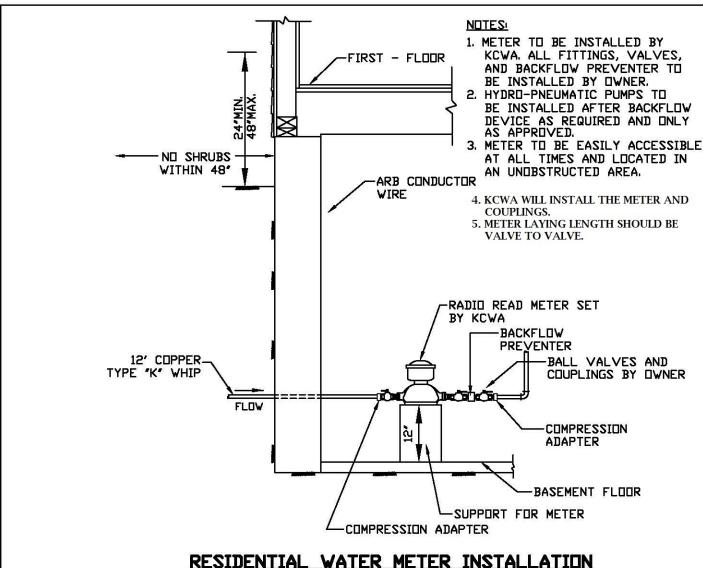
## KENT COUNTY WATER AUTHORITY METER INSTALLATION NEEDS CHECK LIST

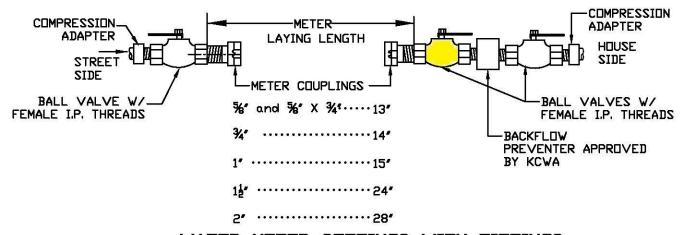
## THE APPLICANT MUST VERIFY THAT THE FOLLOWING ITEMS HAVE BEEN PROPERLY COMPLETED TO FACILITATE METER INSTALLATION

## CHECK LIST MUST BE COMPLETED AND PRESENTED UPON APPLICATION FOR METER INSTALLATION

1	Access to building clear and attainable, stairs in place, area properly lighted, and protected	1
	from freezing.	
2	Meter setting installed and properly secured with supports. Isolation ball valves located on	
	the street side and house side of plumbing. See attached detail sheets.	
3	Double check (residential application) backflow preventer installed after the meter setting isolation valve. Reduced pressure zone (commercial application). Thermal expansion protection. <u>Isolation valves on inlet and outlet.</u>	
4	Copper service pipe (whip 12' or all copper piped) installed and connected to meter setting.	
5	Curb stop installed. Box is at grade, aligned, and perpendicular for easy access to valve.	
6	Outside faucet tamper resistant vacuum breaker installed or manufactured into outside faucet.	
7	Plumbing permits have been obtained and visible at site. Inspection approval stickers in	
	place on meter setting.	
8	Verification of water service laboratory bacteria test results. (Copy of both sets of results must be attached.)	
9	Signed plumbing inspection verification letter verifying conformance with RI Plumbing Code.  This letter must be on city or town letterhead. (Copy must be attached.)	
10	For Pit location	
	a. Shipping spacer removed from meter setting.	
	b. Freeze proof pit design. Pit installed to proper grade.	
Per	KCWA Rules & Regulations, Section 2.5, "Residential meters will be installed by scho	eduled
арр	pointment only. The owner or owner's contractor must be present when a new installat	tion or
any	y repairs to an existing installation are made within private property. KCWA employe	e shall
not	enter the premise without the owner or owner's representative being present."	
Loc	cation / Address Owners / Developers Signature	
Cor	ntact phone number Date	

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### WATER METER SETTINGS WITH FITTINGS

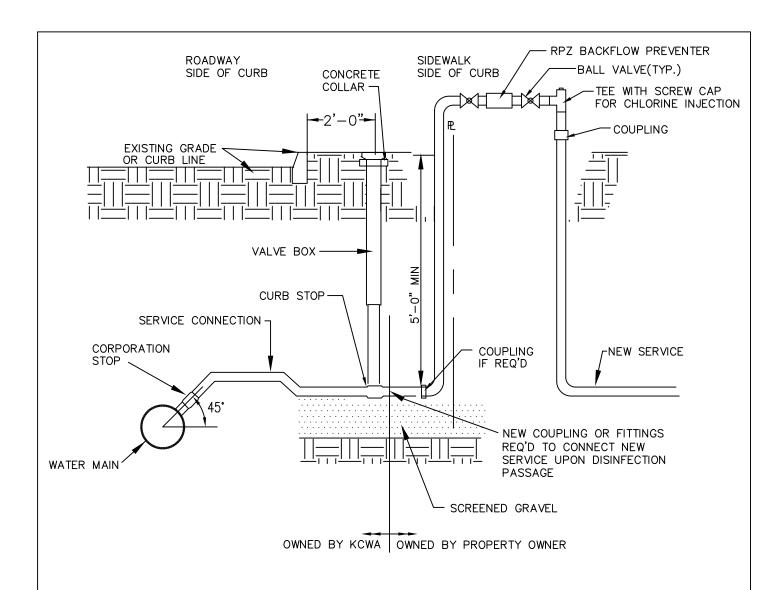
KENT COUNTY WATER AUTHORITY

**KCWA** "proudly serving"

### RESIDENTIAL WATER METER

NOT TO SCALE

DATE: 09/2006



### NOTE:

- 1.) SERVICE MATERIALS AND DISINFECTION REQUIREMENTS PER KCWA SPECIFICATION UNLESS CITY OR TOWN CODES REQUIRE SPECIFIC MATERIALS THAT HAVE BEEN APPROVED BY KCWA.
- 2.) SERVICE LINE FROM CURB BOX TO BUILDING SHALL BE INSPECTED, TESTED AND APPROVED BY THE LOCAL PLUMBING INSPECTOR.
- 3.) ONCE DISINFECTED FOLD AND CUT SERVICE LINE TO CONNECT TO CURB STOP.
- 4.) BACKFLOW AND VALVES
  MAY BE PLACED BELOW GRADE
  IF SECURE PLATE IS USED TO
  COVER OPEN EXCAVATION.

## TEMPORARY SERVICE CONNECTION FOR PRESSURE TESTING & DISINFECTION

NOT TO SCALE

### Single Family Home New Service Sampling Procedures

- 1. Faucets, valves, and specially-installed sampling lines are the most common types of sampling appurtenances found at new service installations. If faucets are used, each faucet should be examined carefully to ensure its suitability. Poor faucet design or sample lines may contribute to non-compliant, failed, or invalid sample results. The service pipe RPZ backflow isolation appurtenance must be properly installed at the curb box prior to commencing the sampling process
- 2. Wash or sanitize hands. Remove any aerator, strainer, or hose that is present, as any of these may harbor bacteria and cause a false coliform positive sample result.
- 3. Disinfect the sample tap with a 5 % chlorine solution (unscented household bleach) using the squeeze bottle in the sampling kit. Squirt the terminal end of the tap inside and out with the chlorine solution
- 4. Turn on and run the water to flush the tap for 5 minutes or when the temperature has stabilized, whichever is longer. Reduce the flow so that the stream is no greater than ¼ inch in diameter, or the width of a pencil. Check for steady flow with no splashing. Continue this laminar flow for a minimum of 10 minutes. While the water is running, fill out the labels, tags, and laboratory forms. Apply the labels to the containers. Do not change the water flow once the desired sampling flow stream has started as that could dislodge microbial growth.
- 5. Two sample bottle need to be filled for the lab. One sample is for the detection, or Presence/Absence (P/A), of coliform bacteria and the other is for Heterotrophic Plate Count (HPC). Check and make sure there are blue sodium thiosulfate pills in the bottles before sampling. If there is no pill, discard and use a new bottle. Flip the bottle cap open on its hinge being extremely careful not to contaminate the sample by touching the inside of the cap or the inside of the sample container with your fingers. Make sure the cap is extended back as to not get in the way of the water flow when taking each sample.
- 6. At the 10 minute point, quickly position each bottle under the water flow. Water dripping from your hands may also cause contamination of the sample so extra care should be taken when collecting this sample. Fill each bottle to the 100 ml fill line.
- 7. The sample bottles should be tightly capped being careful only to touch the outside of the cap. The bottles then get zipped tied using the attached latch and zip system. Blot the sample containers with a paper towel to dry it off. If a refrigerated cooler is not available, ice packs or bagged ice is sometimes needed for use in shipping. It is highly recommended that samples be bagged separately to eliminate any cross contamination of the sample from the ice packs or the ice condensate.
- 8. Using tap water, rinse the outside and terminal end of the faucet and any other surface at the sample site that the chlorine solution came in contact. Turn the tap off. Wipe down the tap with a clean paper towel and replace the aerator, strainer, or hose if removed for the sample.
- 9. Check that the information on the label is correct cross reference sample ID, analytical results, and time with laboratory chain-of-custody.
- 10. Keep samples in closed chest, preferably kept at 10°C (48°F), out of sunlight and deliver to the lab within the same day. Confirm sample IDs with lab receiver and log in cooler temperature on chain of custody.

# STATE OF RHODE ISLAND CERTIFIED LABORATORIES FOR POTABLE WATER MICROBIOLOGICAL TESTING

LAB CONTACT INFO CERTIFICATE #

LAB CONTACT INFO	CERTIFICATE #
BAL LABORATORY	
185 Frances Ave.	
Cranston, Rhode Island, 02910	
Phone: 401-785-0241	
Fax: 401-785-2374	
http://www.ballaboratory.com/	
Tittp.//www.ballaboratory.com/	LAI00036
NEW ENGLAND TESTING LABORATORY, INC.	
1254 Douglas Avenue	
North Providence, Rhode Island 02904	
Phone:1-888-863-8522	
Fax: 1-401-354-8951	
http://www.newenglandtesting.com/	
inttp.//www.newengianatesting.com/	LA100004
NORTHEAST ENVIRONMENTAL TESTING LABORATORY, INC.	
472 Smith Street	
Providence, Rhode Island 02908	
(401) 454-3400	
http://www.neetl.com/	
inttp://www.neeti.com/	LAI00119
PREMIER LABORATORY INC.	
61 Louisa Viens Drive	
Dayville, CT 06241	
Phone: (800)334-0103 - (860)774-6814	
Fax: (860)774-2689	
http://www.premierlaboratory.com/	14000300
RI ANALYTICAL LABORATORIES	LAO00300
41 Illinois Avenue	
Warwick, RI 02888-3007	
Direct: 800.937.2580	
Main: 401.737.8500	
Fax: 401.738.1970	
http://www.rianalytical.com/	LAI0033
RI DEPARTMENT OF HEALTH LABORATORY	
50 Orms Street	
Providence, RI 02904	
Direct: 401-222-5600	
FAX: 401-222-6985	
http://www.health.ri.gov/programs/laboratory	LAI00121

The lab used for testing should be contacted directly for specific bottle order and Chain of Custody