

APPENDIX A

**APPLICATION
REQUESTS & FORMS**

**KENT COUNTY WATER AUTHORITY
REQUEST FOR PLAN REVIEW
APPLICATION FORM
(ALL APPLICATIONS EXCEPT SINGLE-FAMILY, RESIDENTIAL)**

REVIEW TYPE: Design Review Preliminary _____
Design Review Final _____

Owner: _____
Address: _____

Engineer: _____
Address: _____

Telephone # _____
Contact Person: _____
Email: _____

Telephone # _____
Contact Person: _____
Email: _____

Project Reference Name: _____
Service Location: _____
Plat: _____ Lot: _____

TYPE OF SERVICE:

Residential: _____
Condominium: _____
Industrial: _____

Commercial: _____

(Single Duplex etc.) # Units _____
(Single Duplex etc.) # Units _____
(State Type & Uses) _____

(State Type & Uses) _____

ADDITIONAL SERVICES:

Swimming Pool: _____
Irrigation: _____
Fire Service: _____
Hydrants: _____
Misc.: _____

(State Types)

ROAD SYSTEM:

Public: _____
Private: _____
Other: _____

Engineer shall complete and attach all necessary checklists and supporting data:

- Private pumping booster station
- Design checklist preliminary and final
- Calculation checklists
- 2 Sets of plans
- Design calculations

BASIC INFORMATION ON BACK ➡

**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 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 and one at the effluent side of the second meter coupling.

Depth of service shall be at a minimum of four 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.

The City of Warwick requires K copper tubing for the complete customer side of the service installation.

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.

Reading devices if needed shall be mounted on a pressure treated 4 x 4 (36" above grade) post or directly under the outermeter pit cover. Owner must provide conduit access for wiring meter.

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.

PLEASE REVIEW ATTACHED PACKET IN ITS ENTIRETY

DATE: _____

EMPLOYEE: _____
NO: _____
OFFICE USE

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

NAME: _____

ADDRESS: _____

EMAIL: _____

PHONE# _____

SERVICE LOCATION: _____

LOT# OR DESCRIPTION: _____

SERVICE/METER SIZE: _____

_____	_____
APPLICANT SIGNATURE	DATE

	YES	NO
WATER AVAILABILITY: _____	<input type="checkbox"/>	<input type="checkbox"/>

	EMPLOYEE	
APPROVED BY KCWA: _____	<input type="checkbox"/>	<input type="checkbox"/>
	EMPLOYEE	

CUSTOMER CONTRACTOR INSTALLING SERVICE:	<input type="checkbox"/>	<input type="checkbox"/>
▪ INSPECTION FEE OF \$5.00 PER LINEAR FT. - FIELD DETERMINED		
▪ NOTIFY OFFICE 24 HOURS PRIOR TO WATER SERVICE		
INSTALLATION FOR INSPECTION APPOINTMENT		
INSPECTION FEE \$ _____		

LOCAL/STATE PERMIT NEEDED:	<input type="checkbox"/>	<input type="checkbox"/>
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KCWA CONTRACTOR INSTALLED:		
3/4" AND 1" SERVICE - \$1,500.00	<input type="checkbox"/>	<input type="checkbox"/>
1 1/2" AND 2" SERVICE - \$2,000.00	<input type="checkbox"/>	<input type="checkbox"/>

DEVELOPER INSTALLED (NO COST):	<input type="checkbox"/>	<input type="checkbox"/>
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USING EXISTING SERVICE - ACCT. NO. _____ SIZE _____	<input type="checkbox"/>	<input type="checkbox"/>
-----------------------------------------------------	--------------------------	--------------------------

KCWA COMMENTS: _____

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

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Services shall be copper type 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.

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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. **Two** sets of samples of acceptable samples, taken at a minimum of **24 hours apart** 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 be 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 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. Isolation valves on inlet and outlet.
- 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 scheduled appointment only. The owner or owner's contractor must be present when a new installation or any repairs to an existing installation are made within private property. KCWA employee shall not enter the premise without the owner or owner's representative being present."

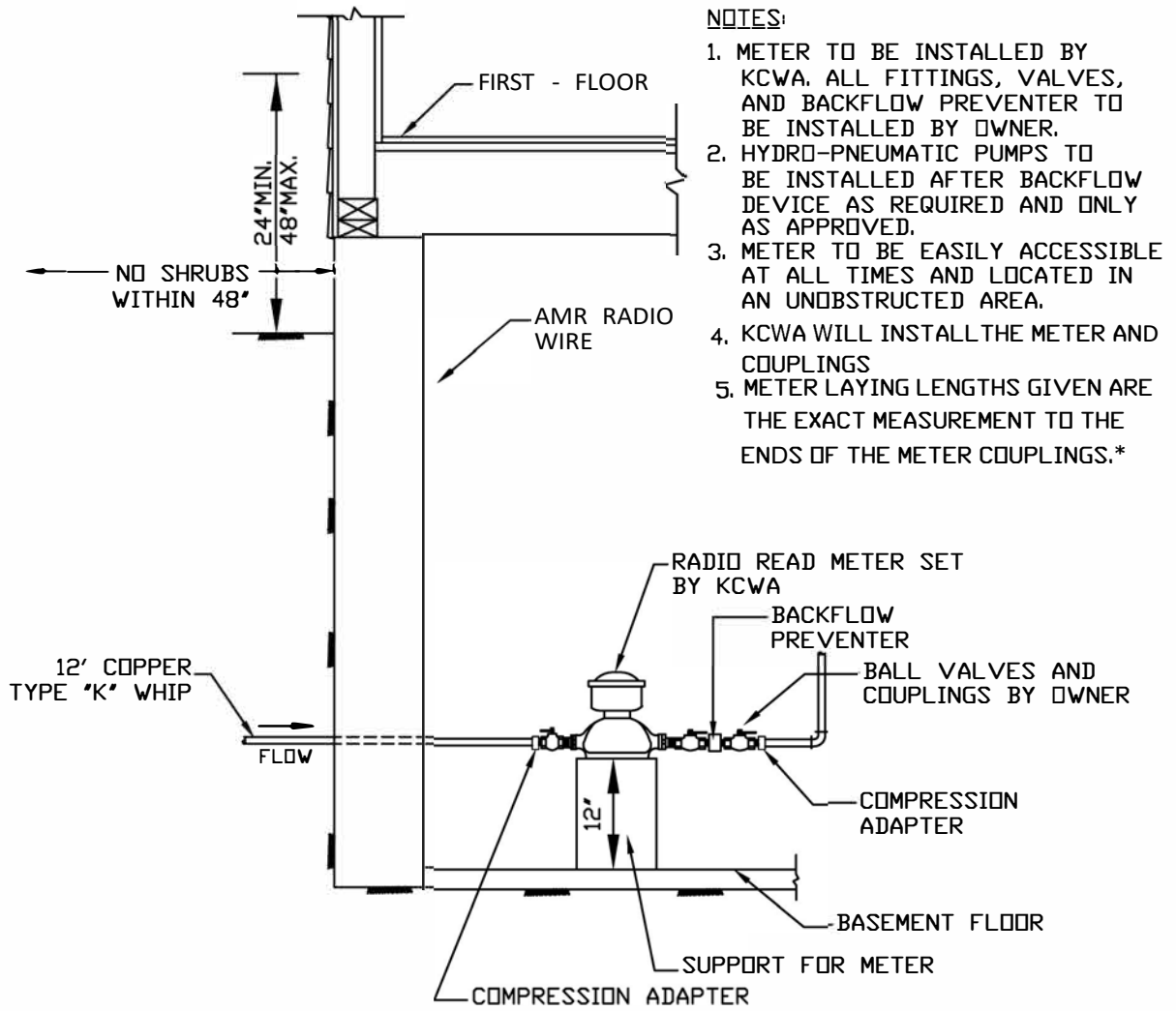
Location / Address

Owners / Developers Signature

Contact phone number

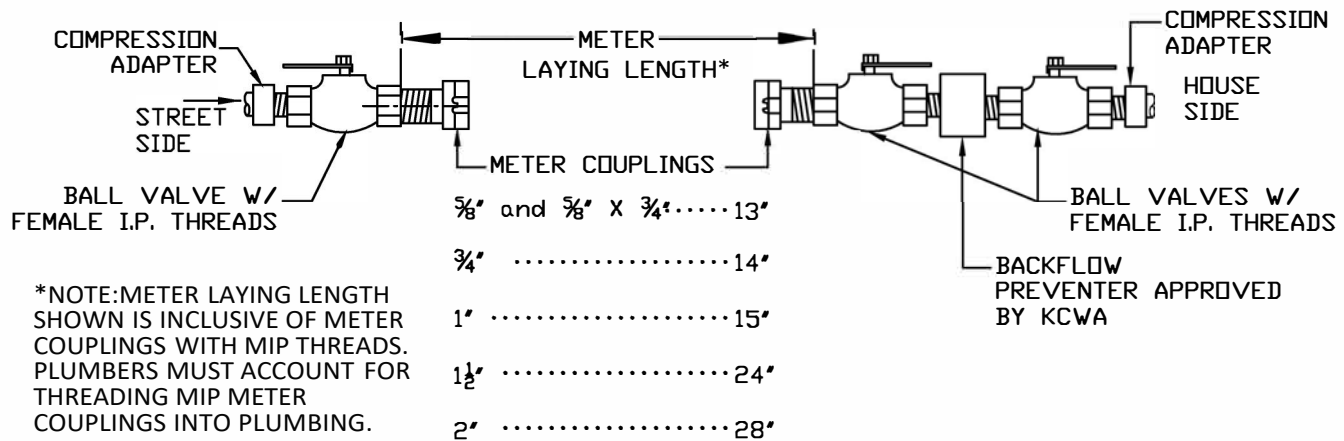
Date

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



- NOTES:**
1. METER TO BE INSTALLED BY KCWA. ALL FITTINGS, VALVES, AND BACKFLOW PREVENTER TO BE INSTALLED BY OWNER.
 2. HYDRO-PNEUMATIC PUMPS TO BE INSTALLED AFTER BACKFLOW DEVICE AS REQUIRED AND ONLY AS APPROVED.
 3. METER TO BE EASILY ACCESSIBLE AT ALL TIMES AND LOCATED IN AN UNOBSTRUCTED AREA.
 4. KCWA WILL INSTALL THE METER AND COUPLINGS
 5. METER LAYING LENGTHS GIVEN ARE THE EXACT MEASUREMENT TO THE ENDS OF THE METER COUPLINGS.*

WATER METER INSTALLATION



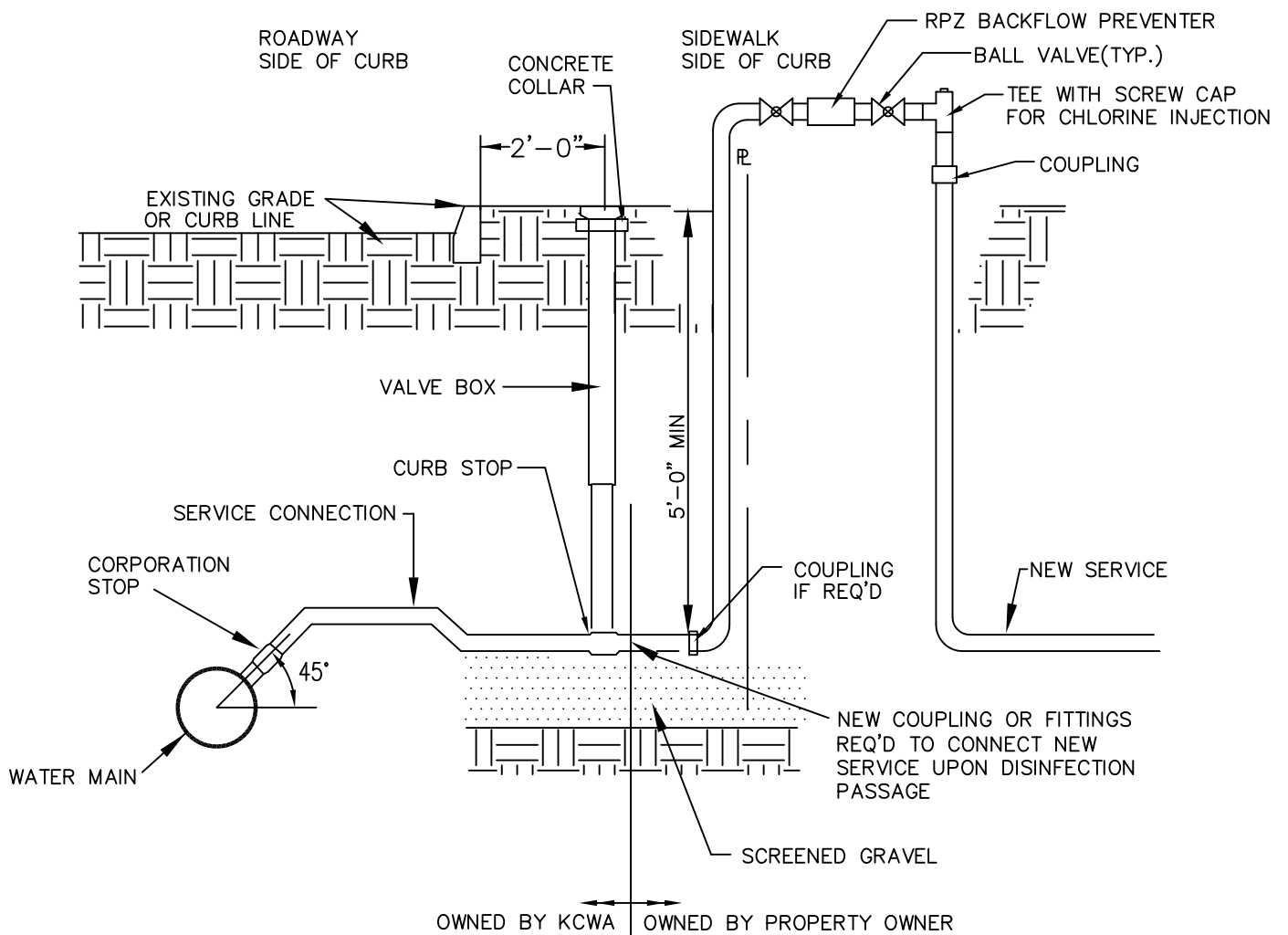
WATER METER SETTINGS WITH FITTINGS

KENT COUNTY WATER AUTHORITY
WATER METER INSTALLATION

KCWA
 "proudly serving"

NOT TO SCALE

DATE: 02/2020



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 #
<p>BAL LABORATORY 185 Frances Ave. Cranston, Rhode Island, 02910 Phone: 401-785-0241 Fax: 401-785-2374 http://www.ballaboratory.com/</p>	LAI00036
<p>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/</p>	LAI00004
<p>NORTHEAST ENVIRONMENTAL TESTING LABORATORY, INC. 472 Smith Street Providence, Rhode Island 02908 (401) 454-3400 http://www.neetl.com/</p>	LAI00119
<p>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/</p>	LAO00300
<p>RI ANALYTICAL LABORATORIES 41 Illinois Avenue Warwick, RI 02888-3007 Direct: 800.937.2580 Main: 401.737.8500 Fax: 401.738.1970 http://www.rianalytical.com/</p>	LAI0033
<p>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</p>	LAI00121

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

**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 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 and one at the effluent side of the second meter coupling.

Depth of service shall be at a minimum of four 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".

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The City of Warwick requires K copper tubing for the complete customer side of the service installation.

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METERS:

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

SINGLE UNIT RESIDENTIAL METER PITS:

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Reading devices if needed shall be mounted on a pressure treated 4 x 4 (36" above grade) post or directly under the outermeter pit cover. Owner must provide conduit access for wiring meter.

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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.

**KENT COUNTY WATER AUTHORITY
REQUEST FOR SERVICEABILITY
APPLICATION FORM
(PROJECTS WITH AVERAGE DAY FLOW OF 500,000 GPD OR GREATER)**

Owner: _____
Address: _____

Engineer: _____
Address: _____

Telephone # _____
Contact Person: _____
Email: _____

Telephone # _____
Contact Person: _____
Email: _____

Project Reference Name: _____
Service Location: _____
Plat: _____ Lot: _____

TYPE(S) OF SERVICE:

Multi-Unit Residential: _____
Condominium: _____
Industrial: _____

Commercial: _____

(Single Duplex etc.) # Units _____
(Single Duplex etc.) # Units _____
(State Type & Uses) _____

(State Type & Uses) _____

ADDITIONAL SERVICES:

Swimming Pool: _____
Irrigation: _____
Fire Service: _____
Hydrants: _____
Misc.: _____

DEMAND FLOWS

Average Day: _____
Maximum Day: _____
Peak Hour: _____
Needed Fire Flow: _____
Computerized Hydraulic Model Attached: _____

ROAD SYSTEM: PUBLIC: _____ PRIVATE: _____

SUBMISSION REQUIREMENTS

CUSTOMER APPLICATION REQUIREMENTS								
KENT COUNTY WATER AUTHORITY REQUIREMENTS	SINGLE FAMILY HOME	COMMERCIAL SERVICE	MAIN EXTENSION	SUBDIVISION OR CONDOMINIUM	RENOVATION CHANGE IN OCCUPANCY	PRIVATE HYDRANT OR FIRE SERVICE	SUB STANDARD PRESSURE LOW FLOW	REQUEST FOR SERVICEABILITY $\geq 500,000$
APPLICATION FORM		X	X	X	X	X		X
SINGLE RESIDENTIAL SERVICE FORM	X				X			
TEMPORARY SERVICE	X	X						
DESIGN DRAWINGS		X	X	X	X	X		X5
HYDRAULIC CALCULATION		X	X	X	X	X		X
THRUST BLOCK CALCULATION		X1	X	X	X	X		
WATER SYSTEM MODEL		X2	X2	X2	X2	X2	X	X
FIRE FLOW TEST		X	X	X	X	X	X	
FIRE DEPT. REVIEW LETTER		X	X	X	X	X		
EASEMENT DESCRIPTION		X3	X3	X3	X	X3		
KCWA DETAILS		X	X	X	X	X		
PUBLIC UTILITIES REVIEW							X4	

- X1 AS APPLICABLE TO SERVICE SIZE AND PRESSURE
- X2 AS DETERMINED BY GENERAL MANAGER/CHIEF ENGINEER
- X3 AS REQUIRED ON PRIVATE PROPERTY
- X4 PRESSURE LESS THAN 20 PSI UNDER ANY FLOW CONDITION, REQUIRES A SEPARATE REVIEW BY THE DIVISION OF PUBLIC UTILITIES/AND CARRIERS.
- X5 CONCEPTUAL DRAWINGS

**KENT COUNTY WATER AUTHORITY
TEMPORARY METER**

Date: _____ Misc # _____

Name: _____ Phone # _____

Address: _____

Serv Loc: _____ Town _____

Meter purchase YES NO

Meter size _____ Amount \$ _____

Deposit \$100.00 *(apply credit to Misc account - must be made for a temporary meter)* \$100.00

Total Due \$ _____

Meter appt date _____ Time _____

Temp line chlorinated YES NO

Sample passed YES NO

RPZ Backflow installed YES NO

Comments: _____

Turn on DATE INITIALS Beginning read _____

Turn off DATE INITIALS Ending read _____

Cut & Capped - Verified and took pictures

Completed by: _____ **Date** _____

Cubic feet to be billed _____ x.06161 _____

x.00219 _____

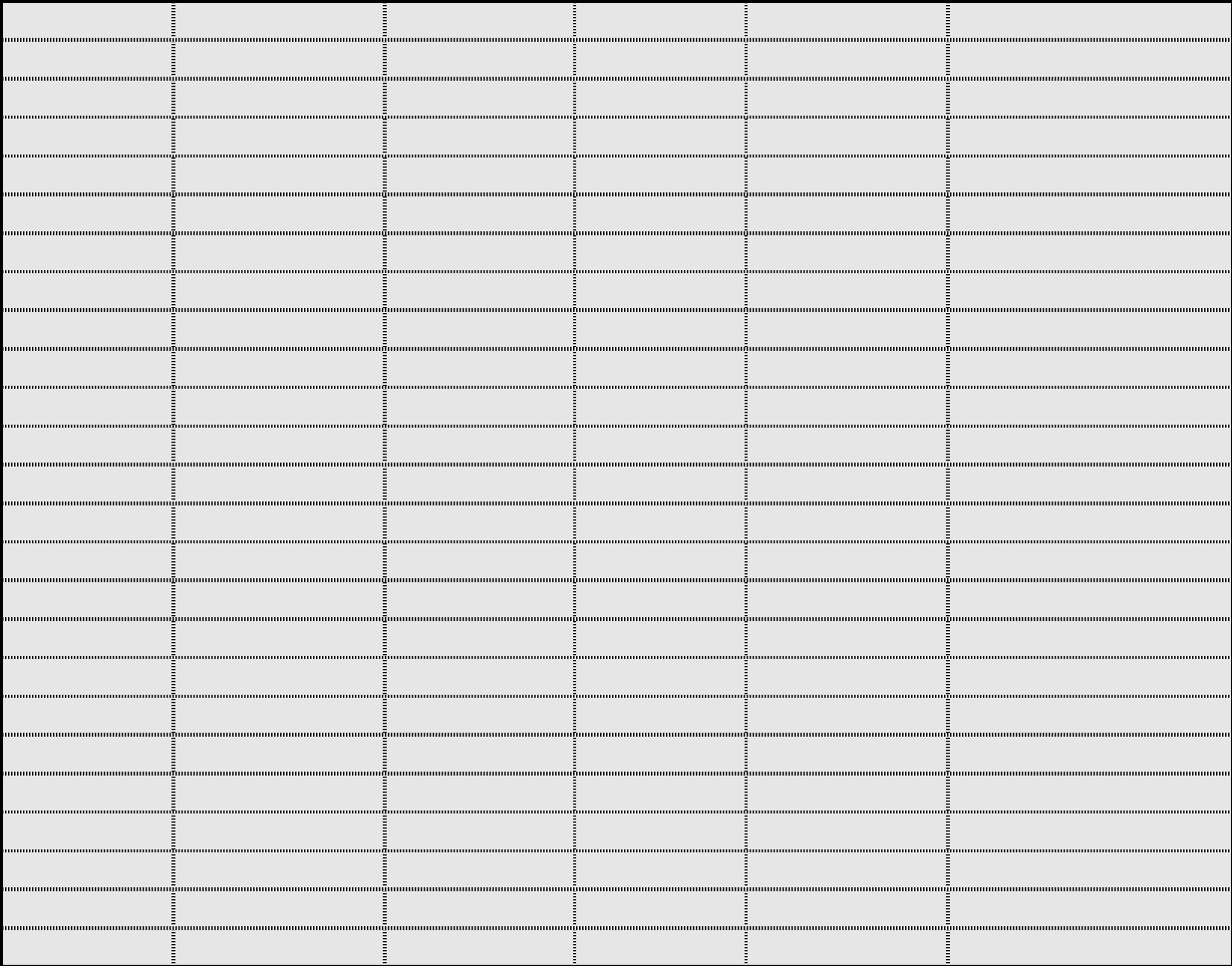
If this amount is over \$100.00 - generate an invoice Tax _____

If this amount is less \$100.00 - generate a refund to the customer **Deposit** **(\$100.00)**

Total _____

**KENT COUNTY WATER AUTHORITY
TEMPORARY METER**

SKETCH



**KENT COUNTY WATER AUTHORITY
APPLICATION FOR TEMPORARY SERVICE
BASIC INFORMATION**

BACKFLOW PREVENTION:

All temporary services must be equipped with reduced pressure zone backflow preventer.

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.

**KENT COUNTY WATER AUTHORITY
APPLICATION FOR WATER IRRIGATION SYSTEM**

KCWA NO. _____

DATE: _____

EMPLOYEE: _____

APPLICANT

NAME: _____

INSTALLER NAME: _____

ADDRESS: _____

BUSINESS NAME: _____

ADDRESS: _____

EMAIL: _____

EMAIL: _____

PHONE: _____

PHONE: OFFICE: _____ CELL: _____

SERVICE LOCATION/ACCOUNT#: _____

AND LOT NUMBER: _____

RESIDENTIAL: _____ COMMERCIAL: _____

SERVICE/METER SIZE: _____

WATER USE CALCULATIONS FROM INSTALLER:

NUMBER OF ZONES: _____ TOTAL AREA TO BE IRRIGATED: _____
(SQUARE FEET)

MINUTES RUNTIME PER ZONE: _____

GALLONS PER MINUTE PER ZONE: _____

TOTAL GALLONS PER DAY: _____

KCWA DISCOURAGES THE USE OF TREATED DRINKING WATER TO IRRIGATE. THE INSTALLATION OF AN IN-GROUND OR AUTOMATIC IRRIGATION SYSTEM DOES NOT ASSURE THE FUTURE USE. IRRIGATION SYSTEMS SHALL BE SHUT OFF DURING WATER SUPPLY EMERGENCIES AND MORATORIUMS IN CONJUNCTION WITH KENT COUNTY WATER AUTHORITY DROUGHT POLICY.

APPLICANT/OWNER SIGNATURE _____

DATE _____

KCWA REVIEW

	YES	NO
PLAN OF SYSTEM AND/OR MANUFACTURER'S DOCUMENTATION ATTACHED	<input type="checkbox"/>	<input type="checkbox"/>
RAIN SWITCH SENSORS (PROHIBIT OPERATION DURING RAIN EVENTS)	<input type="checkbox"/>	<input type="checkbox"/>
DRIP IRRIGATION (PLANTS, BEDS & SHRUBBERY)	<input type="checkbox"/>	<input type="checkbox"/>
TIMERS - TO ENSURE COMPLIANCE ODD/EVEN OUTSIDE WATERING POLICY	<input type="checkbox"/>	<input type="checkbox"/>
BACK FLOW PREVENTER	<input type="checkbox"/>	<input type="checkbox"/>
SOIL MOISTURE SENSORS - THAT PROHIBIT OPERATION OF THE SYSTEM WHEN SOIL MOISTURE CONTEXT DOES NOT REQUIRE IT.	<input type="checkbox"/>	<input type="checkbox"/>

APPROVED: _____ DISAPPROVED: _____

SIGNATURE KCWA REPRESENTATIVE

DATE

**KENT COUNTY WATER AUTHORITY
DESIGN CHECK LIST
FOR REVIEW**

PROJECT REFERENCE NAME: _____

SERVICE LOCATION: _____

PREPARED BY: _____ RIPE# _____

INSTRUCTIONS:
All applicable items to be initialed by preparer as completed prior to submission. Preparer shall be a Registered Professional Engineer in the State of Rhode Island. All non-applicable items please designate as N/A.

Item #:	Initials of preparer	Date
1. Is in conformity with all Rules and Regulations of Kent County Water Authority?	<input style="width: 60px; height: 20px;" type="text"/>	<input style="width: 60px; height: 20px;" type="text"/>
2. Complete hydraulic flow and design calculations included in design review package. (Two copies of each to be submitted)	<input style="width: 60px; height: 20px;" type="text"/>	<input style="width: 60px; height: 20px;" type="text"/>
3. Complete thrust block or restrained joint pipe calculation included in design review package.	<input style="width: 60px; height: 20px;" type="text"/>	<input style="width: 60px; height: 20px;" type="text"/>
4. Drawings meet all requirements of KCWA and have been prepared by and stamped by Rhode Island Professional Engineer. A statement shall be placed on the cover sheet of the drawing above. The professional engineer stamp stating as follows: "The attached drawing numbers ____ to ____ have been prepared by me or under my direct supervision and have been thoroughly checked by me." _____	<input style="width: 60px; height: 20px;" type="text"/>	<input style="width: 60px; height: 20px;" type="text"/>
(Signature with PE#)		
5. All details and proposed materials are in conformity with all prescribed requirements of KCWA, AWWA and Rhode Island Department of Health.	<input style="width: 60px; height: 20px;" type="text"/>	<input style="width: 60px; height: 20px;" type="text"/>
6. Location of all water lines have been checked to see if there is any conflict with existing and proposed utilities for this project.	<input style="width: 60px; height: 20px;" type="text"/>	<input style="width: 60px; height: 20px;" type="text"/>

Item #:	Initials of preparer	Date
7. Required mandated horizontal and vertical distances between water lines, sewer lines, catch basins and any other line or structure that could damage or contaminate the water system have been met.	<input type="text"/>	<input type="text"/>
8. Proper valve spacing and sufficient number of valves for isolation of lines meet or exceed KCWA requirements.	<input type="text"/>	<input type="text"/>
9. All valve location accessible.	<input type="text"/>	<input type="text"/>
10. Fire hydrant locations and spacing have been accepted by local jurisdiction fire chief. Letter of approval attached from fire chief.	<input type="text"/>	<input type="text"/>
11. Automatic air-release manholes comply with KCWA regulations and are accessible at all times.	<input type="text"/>	<input type="text"/>
12. All manual style blow off comply with KCWA regulation and are accessible at all times.	<input type="text"/>	<input type="text"/>
13. All valves and fittings are provided to simplify future expansion of the proposed system.	<input type="text"/>	<input type="text"/>
14. Water lines crossing roads, sewer lines, culverts, ditches, brooks and all other potential conflicts are shown in the respective profiles and details.	<input type="text"/>	<input type="text"/>
15. Chlorination specification complies with all requirements of AWWA and KCWA.	<input type="text"/>	<input type="text"/>
16. Chlorination ports have been located and designed to facilitate proper chlorination and indicated in the construction sequence or general notes.	<input type="text"/>	<input type="text"/>
17. Copies of any deed restrictions are included and will be attached to plat plans and deeds as required for special conditions as set forth by KCWA.	<input type="text"/>	<input type="text"/>
18. All easements on real estate for ownership of water lines has been written and approved by KCWA's legal counsel and executed by a representative of KCWA.	<input type="text"/>	<input type="text"/>
19. "General Notes" specifically refer contractor to KCWA Rules and Regulations for service installation and extensions for proper review and installation requirements.	<input type="text"/>	<input type="text"/>

**KENT COUNTY WATER AUTHORITY
CALCULATION CHECK LIST
FOR REVIEWS**

PROJECT REFERENCE NAME: _____

SERVICE LOCATION: _____

PREPARED BY: _____ RIPE# _____

INSTRUCTIONS:
Prior to submission, all applicable items are to be initialed by preparer. Preparer shall be a Registered Professional Engineer in the State of Rhode Island. All non-applicable items please designate as N/A.

Item #:	Initials of preparer	Date
1. All calculations have been prepared under my supervision by me for this project.	<input type="text"/>	<input type="text"/>
2. Fire flow calculations attached.	<input type="text"/>	<input type="text"/>
3. Fire flow test completed.	<input type="text"/>	<input type="text"/>
4. Average day, maximum day and peak hourly flows provided.	<input type="text"/>	<input type="text"/>
5. All flows calculated by the Hazen Williams formula using "C" Values of 100, 120, 140.	<input type="text"/>	<input type="text"/>
6. Thrust blocks or restrained joint pipe calculated and designed meet all requirements of Kent County Water Authority.	<input type="text"/>	<input type="text"/>
7. All commercial and industrial calculations are accompanied by printed back-up literature or other supporting documentation.	<input type="text"/>	<input type="text"/>
8. All irrigation flows calculated in accordance with regulations.	<input type="text"/>	<input type="text"/>
9. All restraining calculations provided for all bends, fittings and transitions.	<input type="text"/>	<input type="text"/>
10. Fire flows determined by discussion with local fire chief and use of Insurance Services Offices calculations tables.	<input type="text"/>	<input type="text"/>
11. All model assumptions listed and described.	<input type="text"/>	<input type="text"/>
12. All model runs provided for "C" values of 80, 100, 120 and 140.	<input type="text"/>	<input type="text"/>
13. All model calculations explained and graphically shown via road maps.	<input type="text"/>	<input type="text"/>

**KENT COUNTY WATER AUTHORITY
COMMERCIAL PUMPING BOOSTER STATION
CHECK LIST FOR REVIEWS**

GENERAL:

For all commercial private booster stations, the engineer shall complete the check list below, in addition to the standard requirements of submission, and provide all additional data requested.

1. Project name and location _____

2. Manufacturer _____

3. Style below or above grade _____

4. # Pumps, style, manufacturer _____

5. Pump Data (GPM)

Pump Data	Q-Design	Q-Maximum	Q-Minimum	Q-Fire
1)				
2)				
3)				

6. Static head _____ (ft)

7. Maximum service grade elevation _____ (ft msl)

8. Pumping head _____ (ft) From model Manual Calculation

9. Suction manifold size _____ (in)

10. Discharge manifold size _____ (in)

11. Surge suppression valves Yes No

 If yes Type _____ Size _____

 Manufacturer _____ (provide cut sheets)

12. Sump pump provided Yes No

13. Emergency generator provided Yes No

 If yes Type _____ Size _____

 Manufacturer _____ (provide cut sheets)

14. Alarms Yes No

 Provide information where alarms are to notify and types available

15. Details of meter installation (attach separate sheet)

16. References - Provide five (5) references of other booster stations similar to this that have been in operation for at least two (2) years, by same manufacturer.