

**CITY OF PAWTUCKET**  
**and**  
**PAWTUCKET WATER SUPPLY BOARD**  
**REQUEST FOR SEALED BIDS**



**Pawtucket**  
WATER SUPPLY BOARD

**BID No. 23-029**  
**Water Works Materials and Other Supplies**

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**1.0 - Bid/Solicitation Information**

**Schedule**

Pre-Bid/Proposal Conference:  No  Yes

Requests for Further Information Prior to: **April 10, 2023**

Requests for information or clarification must be made electronically to the attention of:

Russell Houde – Assistant Chief Engineer

E-mail: [rhoude@pwsb.org](mailto:rhoude@pwsb.org)

Please reference the Sealed Bid number on all correspondence. Answers to questions received, if any, will be posted on the internet as an addendum to this bid solicitation.

Sealed Bid Submission Deadline: **April 27, 2023, at 3:00 PM**  
**Late submittals will not be considered.**

Bids will be publicly opened on **April 27, 2023, at 4:00 PM** during a scheduled Purchasing Board meeting in City Council Chambers, City Hall.

Sealed Bids must be mailed or hand-delivered in a sealed envelope **marked with the Sealed Bid # and Project Name** to:

Pawtucket City Hall - Purchasing Office  
137 Roosevelt Avenue  
Pawtucket, RI 02860

**Bonds/Surety Required**

Surety Bond:  No  Yes

Bidder is required to provide a bid surety in the form of a bid bond or certified check payable to the City of Pawtucket in an amount not less than ten percent (10%) of the bid price.

Fidelity Bond:  No  Yes

Performance Bond and Labor and Material Bond:  No  Yes

The successful bidder will be required to furnish all insurance documentation as outlined in the specifications document.

**Miscellaneous**

The bid process and resulting contract are subject to the Rules and Regulations and General Terms and Conditions of Purchase. Submission of a bid in response to this solicitation is acknowledgement and acceptance of these Rules and Regulations and General Terms and Conditions of Purchase.

The City of Pawtucket reserves the right to award on the basis of cost alone, accept or reject any or all bids, and to act in its best interest including, but not limited to, directly negotiating with any vendor who submits a proposal in response to this Sealed Bid and to award a contract based upon the results of those negotiations alone. Proposals found to be technically or substantially non-responsive at any point in the evaluation process will be rejected and not considered further. The City of Pawtucket may, at its sole option, elect to require presentations(s) by bidders clearly in consideration for award.

## 2.0 - Instructions and Notifications to Bidders

- The words “City of Pawtucket” when used, shall also mean the Pawtucket Water Supply Board acting through its Chairman.
- It is the vendor's responsibility to examine all specifications and conditions thoroughly and comply fully with specifications and all attached terms and conditions. Vendors must comply with all Federal, State, and City laws, ordinances and regulations, and meet any and all registration requirements where required for contractors as set forth by the State of Rhode Island. Failure to make a complete submission as described herein may result in a rejection of the proposal.
- All costs associated with developing or submitting a proposal in response to this Request, or to provide oral or written clarification of its content shall be borne by the bidder. The City of Pawtucket assumes no responsibility for these costs.
- A submittal may be withdrawn by written request to the Purchasing Agent by the proposer prior to the stated Sealed Bid deadline.
- Prior to the proposal deadline established for this Sealed Bid, changes may be made to a proposal already received by the City if that vendor makes a request to the Purchasing Agent, in writing, to do so. No changes to a proposal shall be made after the Sealed Bid deadline.
- Proposals are considered to be irrevocable for a period of not less than ninety (90) days following the opening date, and may not be withdrawn, except with the express written permission of the Purchasing Agent. Should any vendor object to this condition, the vendor must provide objection through a question and/or complaint to the Purchasing Agent prior to the proposal deadline.
- All pricing submitted will be considered to be firm and fixed unless otherwise indicated herein.
- The vendor has full responsibility to ensure that the proposal arrives at the Purchasing Division Office prior to the deadline set out herein. The City assumes no responsibility for delays caused by the U.S. Postal Service or any other delivery service. Postmarking by the due date will not substitute for actual receipt of response by the due date. Proposals arriving after the deadline may be returned, unopened, to the vendor, or may simply be declared non-responsive and not subject to evaluation, at the sole discretion of the Purchasing Agent. **For the purposes of this requirement, the official time and date shall be that of the time clock in the City of Pawtucket’s Purchasing Office.**
- It is intended that an award pursuant to this Sealed Bid will be made to a prime contractor, who will assume responsibility for all aspects of the work. Joint venture and cooperative proposals will not be considered, but subcontracts are permitted, provided that their use is clearly indicated in the bidder's proposal, and the subcontractor(s) proposed to be used are identified in the proposal.
- Bidders are advised that all materials submitted to the City of Pawtucket for consideration in response to this Sealed Bid shall be considered to be public records as defined in Title 38 Chapter 2 of the Rhode Island General Laws, without exception, and may be released for inspection immediately upon request once an award has been made.
- Vendors are responsible for errors and omissions in their proposals. No such error or omission shall diminish the vendor's obligations to the City.
- The City reserves the right to reject any or all proposals, or portions thereof, at any time, with no penalty. The City also has the right to waive immaterial defects and minor irregularities in any submitted proposal at its sole discretion. All material submitted in response to this Sealed Bid shall become the property of the City of Pawtucket upon delivery to the Purchasing Agent.

### 3.0 - Overview

The City of Pawtucket is seeking sealed bids for the furnishing of waterworks materials and other supplies for the Pawtucket Water Supply Board. This two-year annual materials contract shall commence on July 1, 2023 and end June 30, 2025.

The words "City of Pawtucket" when used in all sections of this bid, shall also mean the Pawtucket Water Supply Board (PWSB) acting through its Chairman.

### 4.0 - Scope of Work

This contract is grouped into the following six material categories:

- Group 1 – Pipe, Pipe Fittings and Miscellaneous
- Group 2 – Fire Hydrants and Hydrant Parts
- Group 3 – Water Service Materials
- Group 4 – Couplings, Clamps and Saddles
- Group 5 – Valves, Valve Parts and Tapping Materials
- Group 6 – Meters, Meter Couplings and Cable

**Proposed prices should remain in effect for the duration of the contract.**

The contract award will be made for an entire Group. Vendors may be awarded one or more Groups based on Bid Proposal. **To be eligible for consideration, a Bidder must quote on EACH AND EVERY ITEM within the Group and complete the "Anti-Kickback Acknowledgment" form attached (APPENDIX A) to this document.**

### 5.0 - Insurance

The vendor shall maintain and keep in force such comprehensive general liability insurance as shall protect them from claims which may arise from operations under any contract entered into with the City of Pawtucket and the PWSB, whether such operations be by themselves or by anyone directly or indirectly employed by them.

The amounts of insurance shall be not less than \$1,000,000.00 combined single limit for any one occurrence covering both bodily injury and property damage, including accidental death.

The City of Pawtucket and the PWSB shall be named as additional insured on the vendor's General Liability Policy.

The vendor shall maintain and keep in force such Workers' compensation insurance limits as required by the statutes of the State of Rhode Island, and Employer's Liability with limits no less than \$500,000.

### 6.0 - Acknowledgement of Risk & Hold Harmless Agreement

In addition to the indemnity provisions in the City of Pawtucket's Terms and Conditions of Purchase and to the fullest extent permitted by law, the selected vendor, its officers, agents, servants, employees, parents, subsidiaries, partners, officers, directors, attorneys, insurers, and/or affiliates (Releasors) agree to release, waive, discharge and covenant not to sue the City of Pawtucket and the PWSB, its officers, agents, servants or employees (Releasees) from any and all liability, claims, cross-claims, rights in law or in equity, agreements, promises demands, actions and causes of action whatsoever arising out of or related to any loss, damage, expenses (including without limitation, all legal fees, expenses, interest and penalties) or injury (including death), of any type, kind or nature whatsoever, whether based in contract, tort, warranty, or other legal, statutory, or equitable theory of recovery, which relate to or arise out of the Releasors use of or presence in and/or on City of Pawtucket property. The Releasors agree to defend,

indemnify and hold harmless the Releasees from (a) any and all claims, loss, liability, damages or costs by any person, firm, corporation or other entity claiming by, through or under Releasors in any capacity whatsoever, including all subrogation claims and/or claims for reimbursement, including any court costs and attorney's fees, that may incur due to Releasors use of or presence in and on City of Pawtucket property; and (b) any and all legal actions, including third-party actions, cross-actions, and/or claims for contribution and/or indemnity with respect to any claims by any other persons, entities, parties, which relate to or arise out of Releasors use of or presence in and on City of Pawtucket property.

The Releasors acknowledge the risks that may be involved and hazards connected with use of or presence in and on City of Pawtucket property but elect to provide services under any contract with the City of Pawtucket and the PWSB with full knowledge of such risks. Releasors also acknowledge that any loss, damage, and/or injury sustained by Releasors is not covered by Releasees insurance. Releasors agree to become fully aware of any safety risks involved with the performance of services under any contract with the City of Pawtucket and the PWSB and any safety precautions that need to be followed and agree to take all such precautions.

The duty to indemnify and/or hold harmless the City of Pawtucket and the PWSB shall not be limited by the insurance required under the City of Pawtucket Terms and Conditions of Purchase.

## **7.0 - Additional Insurance Requirements**

In addition to the insurance provisions in the City of Pawtucket Terms and Conditions of Purchase, the liability insurance coverage, except Professional Liability, Errors and Omissions or Workers' Compensation insurance required for performance of a contract with the City of Pawtucket and the PWSB shall include the City of Pawtucket and the PWSB, its divisions, officers and employees as Additional Insureds but only with respect to the selected vendor's activities under the contract. The insurance required through a policy or endorsement shall include:

- A. a Waiver of Subrogation waiving any right to recovery the insurance company may have against the City of Pawtucket and the PWSB; and
- B. a provision that the selected vendor's insurance coverage shall be primary with respect to any insurance, self-insurance or self-retention maintained by the City of Pawtucket and the PWSB and that any insurance, self-insurance or self-retention maintained by the City of Pawtucket and the PWSB shall be in excess of the selected vendor's insurance and shall not contribute.

There shall be no cancellation, material change, potential exhaustion of aggregate limits or non-renewal without thirty (30) days written notice from the selected vendor or its insurer(s) to the City of Pawtucket's Purchasing Agent. Any failure to comply with the reporting provision of this clause shall be grounds for immediate termination of the contract with the City of Pawtucket and the PWSB.

Insurance coverage required under the contract shall be obtained from insurance companies acceptable to the City of Pawtucket and the PWSB. The selected vendor shall pay for all deductibles, self-insured retentions and/or self-insurance included hereunder.

The City of Pawtucket's Purchasing Agent reserves the right to consider and accept alternative forms and plans of insurance or to require additional or more extensive coverage for any individual requirement.

## **8.0 - Proposal Content and Organization**

Pricing must include all costs as specified in this solicitation. Pricing for this proposal must be indicated on the Bid Form in Section 11.0 and must be submitted in a separate, sealed envelope marked with the words "Pricing Proposal".

All Bid Forms must be signed.

Vendors must include on the Bid Form a list of at least four (4) references with whom they have contracted to do similar work by including the company name, telephone number, contact person, and number of years they have served this customer. Preferably, references should be municipalities which are of approximate size as the City of Pawtucket, and a website address should be included if available.

Respondents must also include an overview of their company's experience including, but not limited to, the number of years the company has been providing these services, the size of the company (including the number of employees and locations), a description of work undertaken that is similar to what is being requested in this Sealed Bid, and, if applicable, certifications that show a knowledge of equipment that would be serviced or provided under this contract.

If any subcontractors are to be used in the performance of any work contracted for under this Sealed Bid, please list their name(s), contractor license #, address and phone number, and specific description of the subcontract work to be performed.

Two (2) copies of your proposal, one (1) original and one (1) copy, must be submitted at the time of submission. Proposals must be comprised of the following:

- Bid Form
- Anti-Kickback Acknowledgment

Please state any and all additions, deletions, and exceptions, if any, that you are taking to any portion of this proposal. If not addressed specifically, the City of Pawtucket assumes that the vendor will adhere to all terms and conditions listed in this Sealed Bid.

Submission of a proposal is acknowledgement and acceptance of the City of Pawtucket's Purchasing Rules and Regulations and General Terms and Conditions of Purchase.

## **9.0 - Evaluation Criteria**

The evaluation of proposals will be conducted in a time frame convenient to the City.

The City of Pawtucket reserves the right to award on the basis of cost alone, accept or reject any or all proposals, and to otherwise act in its best interest including, but not limited to, directly negotiating with any Supplier who submits a proposal in response to this Sealed Bid and to award a contract based upon the results of those negotiations alone. Further, the City reserves the right to waive irregularities it may deem minor in its consideration of proposals.

Proposals found to be technically or substantially non-responsive at any point in the evaluation process will be rejected and not considered further. The City of Pawtucket may elect to require presentations(s) by vendors in consideration for award.

Proposals will be evaluated in two (2) phases:

1. The first phase is an initial review to determine if the proposal, as submitted, is complete. To be complete, a proposal must meet all the requirements of this Sealed Bid.
2. The second phase is an in-depth analysis and review based on award to the lowest qualified bidder.

In the event that the City requires further information and/or a demonstration of any equipment or process offered in any proposal, all vendors asked for same will do so at no cost to the City.

## **10.0 - Miscellaneous**

Vendors shall at all times comply with all federal, state, and local laws, ordinances and regulations and shall defend, indemnify and save harmless the City of Pawtucket against any claims arising from the violation of any such laws, ordinances and regulations, including but not limited to challenges as to the legality of any and all vendor installations.

The City is exempt from the payment of the Rhode Island State Sales Tax under the 1956 General Laws of the State of Rhode Island, 44-18-30, Paragraph 1, as amended. Further, the City is also exempt from the payment of any excise or federal transportation taxes. The proposal prices submitted must be exclusive of same and will be so construed.

The City of Pawtucket reserves the right to cancel an agreement with the Vendor with thirty (30) days written notice and to award the contract to the next highest evaluated bidder.

The City of Pawtucket reserves the right to renegotiate the terms of this contract with the Vendor for subsequent years provided the Vendor agrees to the contract terms for the renewal period.

The payment and performance of any obligations under this contract for years beyond the first fiscal year are subject to the availability of funds.

The words "City of Pawtucket" when used, shall also mean the Pawtucket Water Supply Board acting through its Chairman.



# 11.0 – Bid Form and Specifications

## FURNISHING PIPE, VALVES, FIRE HYDRANTS, WATER METERS AND OTHER SUPPLIES

The Pawtucket Water Supply Board (PWSB) is soliciting bids for the furnishing of waterworks materials and other supplies. These materials will be ordered from the selected supplier(s) at times and in quantities as determined by the Pawtucket Water Supply Board. Several shipments may, therefore, be required during the course of the contract. The bidder agrees that all materials shall be shipped as ordered and shall be delivered to the Pawtucket Water Supply Board stock room as soon as possible after an itemized order is placed. Complete delivery of all items ordered at various times must be made within 30 days of the order unless a longer lead time is noted for specific items on the bid sheet. At least 24 hours advance notice shall be provided prior to making any delivery. No delivery will be accepted before 7:00 A.M. nor after 3:00 P.M.

The undersigned hereby proposes to furnish the materials listed in the Proposal for the unit prices indicated and in accordance with the attached specifications. The unit prices will include all charges such as freight, unloading, etc. Material quantities as listed are estimates only and the actual quantity of materials ordered may vary from the stated quantities. The bidder further agrees that, should he be awarded the contract, the unit prices offered in this Proposal shall remain valid through June 30, 2025. Materials may be ordered at any time during this period at the unit prices shown in the bid. Certain items may not be ordered at all. Upon mutual agreement of both parties, the contract may be extended for not more than one (1) additional year with no change in unit prices.

The contract award will be made for an entire Group. Vendors may be awarded one or more Groups based on Bid Proposal. **To be eligible for consideration, a Bidder must quote on EACH AND EVERY ITEM within the Group and complete the “Anti-Kickback Acknowledgment” form attached (APPENDIX A) to this document.**

Payment will be made for the total quantity of materials delivered at the unit prices stipulated in the Proposal. Delivery time must be filled in for each Group. Payment will be made only after all items to be supplied on each order or partial order as requested by the PWSB are delivered.

**BID PROPOSAL**  
(July 1, 2023 thru June 30, 2025)

**(All blanks on this form must be completed in ink or typewritten)**

Bidder acknowledges receipt of the following addendum: \_\_\_\_\_

Name of Bidder (Type or Print) \_\_\_\_\_

Signature \_\_\_\_\_

Title \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

Telephone Number and Extension \_\_\_\_\_

The bidder understands that the Pawtucket Water Supply Board reserves the right to reject any or all bids, to award contracts to various bidders for any one or more groups of items, and to award contracts which will be in the best interest of the Pawtucket Water Supply Board.

# PWSB MATERIAL SPECIFICATIONS

## Information to Bidders

General: All tools, equipment and materials to be furnished shall conform to existing industry standards as established by the following: American Water Works Association (AWWA), American National Standards Institute (ANSI), American Society for Testing and Materials (ASTM), and other established standards organizations as applicable. All items shall conform as a minimum to the above referenced standards as they are applicable to the specific item, and shall further conform to any specific requirements called for in this specification; it is understood that the latest revision of the standards referenced shall apply. Where a specific manufacturer and part number are listed in the proposal with an "or equal" allowable, the bidder shall provide, along with his bid documents, data supporting the "or equal" product to be of a quality better than or equal to the specified product in every way, as determined by the Pawtucket Water Supply Board, including, but not limited to, function, durability, operability, serviceability, and reliability. No substitutions will be allowed for fire hydrants and hydrant parts listed in the proposal.

All materials are scheduled by nominal pipe size. All couplings clamps and saddles must be suitable for use on pipe of varying outside diameters. Unless otherwise noted, the minimum range acceptable for each nominal size shall be as follows:

<u>Normal Size</u>	<u>Range of Outside Diameter (Minimum)</u>
4 inch	4.80 to 5.00
6 inch	6.90 to 7.10
8 inch	9.05 to 9.30
10 inch	11.10 to 11.40
12 inch	13.20 to 13.50
16 inch	17.40 to 17.80
20 inch	21.60 to 22.06
24 inch	25.80 to 26.32

## COMPLIANCE OF MATERIALS

The Bidder fully understands that the Pawtucket Water Supply Board reserves the right to inspect, and reject and return, at the Bidder's expense, any and all items and materials it finds to be unacceptable, of poor quality, or not in conformance with this Specification, Proposal and/or referenced Standards.

## GROUP 1 – PIPE, PIPE FITTINGS AND MISCELLANEOUS

Ductile Iron Pipe. Unless otherwise noted in the Proposal all pipe shall be ductile iron pipe conforming to the provisions of AWWA Standard C151 (ANSI A21.51).

Pipe Lining. All ductile iron pipe shall be furnished with a cement mortar lining and seal coating conforming to the provisions of AWWA Standard C104 (ANSI A21.4). The lining shall be "**double thickness**" as specified in paragraph 4-8.2 of the referenced standard.

Pipe Fittings. Pipe fittings shall be ductile iron with a minimum pressure rating of 350 psi. The fittings shall conform to the provisions of AWWA Standard C153 (ANSI A21.10). Fittings shall be furnished with mechanical joint or plain ends. Interior surfaces shall be cement lined, double thickness with bituminous material seal coat. Exterior surfaces shall be coal tar base bituminous coating, approximately 1-mil thick. The number of pounds of fittings to be paid for shall be the weight stated in AWWA C153, latest revision.

Mechanical Joint Restraint. Joint for ductile iron pipe for mechanical joint fittings and appurtenances conforming to either ANSI/AWWA C111/A21.11 or ANSI/AWWA C153/A21.53. Restraint devices for nominal pipe sizes 3 inch through 54 inch shall consist of multiple gripping wedges incorporated into a follower gland meeting the applicable requirements of ANSI/AWWA C110/A21.10. The devices shall have a working pressure rating of 350 psi for 3-16 inch, 250 psi for 18-48 inch and 200 psi for the 54 inch size. Gland body, wedges and wedge actuating components shall be cast from grade 65-45-12 ductile iron material in accordance with ASTM A536. Ductile iron gripping wedges shall be heat treated within a range of 370 to 470 BHN. Mechanical joint restraint shall be Megalug Series 1100 produced by EBAA Iron Inc.

End Cap. Alpha XL Restrained Joint end cap as manufactured by Romac Industries, Inc. Restrained Joint for multi-purpose use from IPS PVC through Cast iron rated for installed pipe to 350 psi. Castings: All cast components (end rings, center ring, and bolt guides) to be ductile iron meeting or exceeding the requirements of ASTM A 536, grade 65-45-12. Grippers: Ductile iron, meeting or exceeding ASTM A 536, Grade 65-45-12. Machine sharpened and heat treated. Gaskets: SBR compounded for water per ASTM D2000, classified by UL to meet NSF61 or NBR compounded for water per ASTM D2000, NSF61 Certified. Draw hooks: Uncoated 304 stainless steel. Bolts and Nuts: 5/8-11 bolts with heavy hex nuts.

Xylan coated to reduce friction and provide corrosion resistance. Washer is 304 stainless steel. Coatings: fusion bonded epoxy, NSF 61 Certified. End rings are Romabond polyester

Foster Adaptor Fitting. Mechanical joint (MJ) valves and fittings shall be connected using a bolt-through positive restraint mechanism manufactured of ductile iron conforming to ASTM A536, 65-45-12. The positive restraint device shall connect the valves and/or fittings at a linear distance not to exceed three (3) inches and without attachment to pipe. The device shall come complete with all accessories, including standard styrene butadiene rubber (SBR) MJ gaskets conforming to the latest revision of AWWA C111/ASTM F-477 and weathering steel (Corten) bolts conforming to AWWA C111/A21.11 and ASTM A242. Nuts for 3 through 12-inch sizes shall be SAE Grade 5 steel with black oxide coating. Nuts for 14-inch and larger adaptors shall be heavy hex Corten steel conforming to ASTM A242. Sizes 3-12-inch of the bolt-through MJ positive restraining device shall be supplied with an NSF 61 asphaltic seal coating in accordance with ANSI/AWWA C104/A21.4. Sizes 14-36-inch shall be supplied with NSF 61, 7-mil. fusion bonded epoxy conforming to AWWA C116/ A21.16-09 as well as the coating, surface preparation and application requirements of ANSI/AWWA C550. The device shall be used with standard mechanical joint fittings (AWWA C110 or C153) and valves. The device shall be Infact Corporation FOSTER ADAPTOR or approved equal.

## GROUP 2 – FIRE HYDRANTS AND PARTS

Fire hydrants. All fire hydrants shall be of the compression type, with 5-1/4 inch main valves closing with line pressure. Hydrants shall comply fully with AWWA Standard C502 and be ULFM approved. Depth of bury shall be as specified in the bidding sheets. Hydrant shall be furnished with a sealed oil reservoir in the bonnet so that all threaded and bearing surfaces are lubricated each time the hydrant is operated.

Hydrant shall be equipped with two 2-1/2 inch hose nozzles and one 4-1/2 inch steamer nozzle, all with National Standard Threads. Each nozzle shall be furnished with a cap with a 1-1/2 inch pentagon nut. The hydrant operating nut shall be of the same size.

The hydrant shall have at least two bronze or copper lined drain outlets. The shoe of the hydrant shall have a mechanical joint end, suitable for use with either centrifugally cast pipe or Class D pit cast iron pipe. Lugs shall be cast on the shoe for securely anchoring the hydrant. Hydrants shall be furnished with a breakable feature that will break cleanly upon impact with a minimum amount of damage to the hydrant and no leakage from the valve. Breakable feature shall include a two part breakable safety flange and a breakable stem coupling. Frangible bolts and shear pins are not acceptable. Barrel shall be designed so that nozzles may be rotated to any position without disassembling the groundline flange.

All hydrants shall be OPEN LEFT (counterclockwise). An arrow and the word "OPEN" shall be clearly cast on the bonnet.

Hydrants must be consistent both in design and in appearance with those currently in use by the Pawtucket Water Supply Board, which is the Mueller Super Centurion 250 model (Catalog Number A-423). All Mueller hydrant parts shall be genuine Mueller replacement parts that match the manufacturer's original equipment specifications with regard to dimensions, materials and performance. Hydrants shall be painted two coats yellow above ground line. Sample color will be furnished to the supplier.

## GROUP 3 – WATER SERVICE MATERIALS

Copper service tubing. All copper tubing used for water services shall be seamless tubing suitable for underground installations, designated as annealed (soft) copper tubing, Type "K" as manufactured by Cerro Manufacturing, East St. Louis, Missouri, or approved equal, and shall be supplied in conformance with applicable provisions of ASTM Specification B-88 and AWWA C800. One inch size tubing shall be supplied in coils of 60 feet. All tubing dimensions shall be standard "copper tube size" (CTS) dimensions as specified in the applicable standards.

Curb stops. Valves shall be of the ball type as specified in the proposal. The ball shall be teflon coated brass and shall be held in a position by and sealed off against seats of Buna-N rubber that are held securely in place with epoxy adhesive. Valves shall be water tight against flow in either direction. The stem that turns the ball shall exert no other force on it except to open and close the valve and shall be held securely in place by means of a bronze ring. The valve shall have a substantial T-head for the operation of the valve. The stops or lugs for controlling the motion of the T-head shall be enclosed and properly positioned to line up the waterway through the ball with the water passage through the valve body. The valves shall have in common the following functions and characteristics:

- a. Open with one quarter turn (90°) LEFT (counterclockwise) from fully closed to fully open position, with checks to stop at each extreme position.
- b. T-head, for operation with standard slotted wrench, which aligns with the valve port to provide quick identification of valve position.

- c. Valves shall be of bronze or brass, meeting AWWA Standard C800.
- d. Valve opening shall be designed to allow straight through flow, eliminating turbulence and causing a minimum of resistance, with waterway no smaller than nominal valve size.
- e. Inlet and outlet openings shall be for use with copper tubing, Type "K", unless otherwise noted
- f. When inlet and outlet are specified for iron pipe thread (IPT) connections, threads shall be the standard female iron pipe thread conforming to Table 9 of AWWA C800.
- g. Ball valves shall have a 300 psig working pressure rating.

Curb stops shall be manufactured of low-lead "Mueller Brass", CDA/UNS Brass Alloys C89520 or C89833, conforming to ASTM B584.

Corporation stops. Threads for corporation stops shall conform to the provisions of AWWA Standard C800. Inlet threads shall be standard tapered corporation threads conforming to Table 7 of AWWA C800, commonly known as "Mueller Threads", "AWWA Threads", or "CC Threads". Outlet threads shall be either a compression connection conforming to AWWA C800 or standard male iron pipe threads (MIPT) conforming to ANSI B2.1 (see Table 8 of AWWA C800), as designated in the Proposal. Where specified in the Proposal, the outlet end shall also be tapped with female driving threads conforming to Table 8 of AWWA C800. Corporation stops shall be manufactured of low-lead "Mueller Brass", CDA/UNS Brass Alloys C89520 or C89833, conforming to ASTM B584. Corporation stops shall be equipped with ball type valve.

Curb boxes. Curb boxes shall be 1-inch inside diameter, telescoping type. The construction shall provide adjustment for varying grade levels and make allowance for settlement or frost heave. A heavy weight applied to the top of the box shall cause the upper section to slide downward into the box without damaging the curb stop or the service piping. A stop type device shall be an integral part of the curb box to prevent the upper section from being pulled out of the base. Operating rods shall be furnished with each box. The rod shall be thirty-three (30) inches long, plus or minus two (2) inches, and shall be so constructed that one end is slotted to fit the T-head of the curb stop with a fastening device to ensure a linkage with the valve. The other end shall be formed so a standard slotted wrench may be used to operate the valve. The rod shall be designed to permit minimum lateral movement in the upper section of the box. The top section shall be threaded to receive a lid, and the lid shall have a removeable threaded plug.. The plug shall be a standard pentagon nut in the center of the lid. The word "WATER" shall be clearly cast into the lid. The telescoping curb box shall extend to a maximum of at least 5 feet 6 inches. The box shall be coated inside and out with a tar based enamel.

Miscellaneous brass fittings. Miscellaneous brass fittings shall be manufactured of low-lead "Mueller Brass", CDA/UNS Brass Alloys C89520 or C89833, conforming to ASTM B584. Unless otherwise noted in the Proposal, all fittings shall have compression type connections equipped for use with copper service tubing, Type "K". Threads shall conform to Table 8 of AWWA Standard C800.

#### GROUP 4 – COUPLINGS, CLAMPS, AND SADDLES

Mechanical couplings. The pipe couplings shall meet or exceed the requirements of AWWA Standard C219 (Bolted Sleeve-Type Couplings for Plain-End Pipe). The pipe couplings shall be of a gasketed sleeve type with diameter to properly fit the pipe. Each coupling shall consist of one (1) ductile iron middle ring, of thickness and length specified, two (2) ductile iron followers, two (2) rubber compounded wedge section gaskets and sufficient track-head stainless steel bolts to properly compress the gaskets. The middle ring and followers shall be epoxy coated. Field joints shall be made with this type of coupling.

- a. The middle ring and followers of the coupling shall be true circular sections free from irregularities, flat spots, or surface defects. They shall be formed from mill sections with the follower-ring section of such design as to provide confinement of the gasket. After welding, they shall be tested by cold expanding a minimum of 1% beyond the yield point.
- b. The bolts shall be of stainless steel and meet or exceed the requirements of ASTM F593. The nuts shall be of stainless steel and meet or exceed the requirements of ASTM F594 or ASTM F836M. The manufacturer shall supply information as to the recommended torque to which bolts shall be tightened. The followers shall have an integral bolt head pocket for one wrench installation.
- c. The gaskets of the coupling shall be composed of a natural or synthetic rubber base compounded with other products to produce a material which will not deteriorate from age, heat or exposure to air under normal storage conditions. It shall also possess the quality of resilience and ability to resist cold flow of the material so that the joint will remain sealed and tight indefinitely when subjected to shock, vibration, pulsation and temperature or other adjustments of the pipeline.

Pipe repair clamps. The pipe repair clamps shall be stainless steel band type clamps used to make pipe repairs.

Repair clamp bands shall be made of annealed, non corrosive, 18-8 nickel bearing type 302, Austenitic Stainless Steel. The band shall be flexible to absorb normal line stresses and preshaped to fit the pipe for easier installation. Bolts for repair clamps shall have double radius heads and a substantial shoulder. Deep non-galling threads shall be rolled and sized. Heavy series semi-finished hexagonal nuts shall be spin fit. Both nuts and bolts shall be type 304 Stainless Steel for extreme corrosion resistance. Bolt threads or nuts shall be teflon molybdenum disulfide coated to prevent galling.

Lugs of high grade iron casting shall be heat treated to relieve internal stress and designed for maximum strength and durability. The lugs shall be contour designed for the OD of the pipe to provide proper shape and strength and to apply uniform pressure around the pipe and on the gasket.

The specially compounded neoprene gasket shall be cemented to the band and shall have the proper degree of toughness and softness for maximum sealing efficiency. The gasket shall be resistant to weather, gas, oil, and impervious to water. It shall not crack or harden. The gasket shall be the gridded interlocking finger type. All repair clamps shall be clearly marked with size ranges and other identification information. Where specified in the Proposal the clamps shall include a corporation tap for the AWWA or Mueller tapered thread of the size indicated.

Bell joint repair clamps. The bell joint repair clamps shall be suitable for sealing both caulked and rubber ring or push-on type bell and spigot joints in cast iron or ductile iron pipe without removing the pipeline from service. Bell-spigot rings shall be ductile iron per ASTM 536. Nuts and bolts shall be stainless steel. Gaskets shall be grade 60 with interlocking ends that facilitate field assembly.

Service Repair Saddles. The service saddles shall be of heavy design, constructed of Ductile Iron body ASTM-A 536 with a reinforced section for extra strength. The service saddles shall have two (2) extra wide straps made of Type 304 stainless steel, accurately shaped to conform to the outside diameter of the pipe with stainless steel nuts and studs. Service saddles shall fit all classes of cast iron pipe, with minimum range as specified, and have its range size clearly marked on the saddle. Saddles shall be treated in a manner to provide (maximum) corrosion resistance. The gasket shall be a proven product, capable of resisting damage from oil, natural gas, acids, alkalis, water, etc., and be securely cemented into place for easy installation. The service saddles shall be for the corporation stop (Mueller) type "CC" thread.

#### GROUP 5 – VALVES, VALVE PARTS AND TAPPING MATERIALS

Gate Valves. Gate valves shall be resilient-seated and meet or exceed the requirements of AWWA Standard C515 (Reduced-Wall, Resilient-Seated Gate Valves for Water Supply Service) or C509 (Resilient-Seated Gate Valves for Water Supply Service) and the following specifications. All valves shall be OPEN RIGHT; operating nuts shall be painted red for identification. Valves shall have an unobstructed waterway equal to or greater than the full nominal diameter of the valve. Valves shall be non-rising stem (NRS).. The AWWA Standards specify a minimum working pressure rating of 200 psi.

Butterfly Valves. Butterfly valves, where specified, shall be manufactured to meet or exceed the requirements of AWWA Standard C504 for class 150B service and the following specifications.

Valves shall be equipped with standard two (2) inch operating nuts and shall OPEN RIGHT (clockwise); operating nuts shall be painted red for identification. Unless otherwise specified in the Proposal, all valves shall be furnished with mechanical joint ends conforming to AWWA Standard C111.

Gate valve boxes. Gate valve boxes (road boxes) shall be cast iron, two piece telescoping type with 5-1/4 inch barrels. The box shall be adjustable from a minimum depth of 36 inches to a maximum of 60 inches, and shall be designed to permit the use of extension pieces when the depth exceeds 60 inches. The cover shall have a tapered surface edge with long side skirts to prevent "pop-out". The cover shall also sit inside the upper section, with the word "WATER" clearly cast on the top. The valve box and cover shall be thoroughly coated inside and out with a coal tar epoxy coating.

#### GROUP 6 – METERS, METER COUPLINGS, CABLE

##### Cold Water Meter

All cold water meters (solid state meters 5/8" – 2") furnished shall be produced in a manufacturing facility whose QMS is ISO 9001 certified and meets or exceeds the accuracy requirements specified in the "Standard Specifications for Cold Water Meters" C715 latest revision issued by AWWA. Meters shall be Mach 10 solid state ultrasonic as manufactured and supplied by Neptune or approved equivalent.

The size, capacity, and meter lengths shall be as specified in AWWA Standard C715 latest revision.

All meter maincases shall be cast from NSF/ANSI 61 certified lead free bronze alloy containing a minimum of 85% copper. Maincases that do not accommodate inline piping stresses are not acceptable. The serial number should be displayed in a permanent location on the meter maincase and register. Maincase markings shall indicate size, model, direction of flow, and NSF 61 certification. Plastic maincases or flow tubes are not acceptable as the spuds are susceptible to cross threading or breaking during installation, or from pipe stress over time. Maincases such as coated steel that are susceptible to corrosion over time are not acceptable.

All lead free maincases shall have a lifetime warranty and be free from manufacturing defects in workmanship and material. All maincase bolts shall be 316 non-magnetic stainless steel to prevent corrosion. Connections shall be furnished as specified.

Only meters featuring ultrasonic solid state metrology will be accepted because of enhanced low flow accuracy performance and extended accuracy over meter life.

The solid state meter technology provided must be ultrasonic-based technology featuring continuous measurement (greater or equal to 4 times per second) to ensure desired accuracy at low-end flow and during typical variable flow conditions.

**Meter Register for ultrasonic meters**

- The unit of measure shall be in Cubic Feet.
- The register shall provide at least a 9-digit visual registration at the meter to facilitate testing.
- The register shall provide an 8-digit meter reading for transmission through the RF AMR/AMI endpoint.
- The register shall employ a visual LCD leak detection indicator as well as provide remote leak detection through an ASCII format to the RF AMR/AMI endpoint.
- The register shall provide and display reverse flow detection on the LCD and communicated as ASCII format data to the RF AMR/AMI endpoint.
- Reverse flow detection shall be calculated based on 15-minute interval consumption.
- The register shall provide an indication of days of zero consumption, communicated as ASCII format data to the RF AMR/AMI endpoint.
- The register should accumulate and register consumption whether or not it is connected to a receptacle or RF AMR/AMI endpoint.
- The register shall provide empty pipe detection that is visibly displayed on the meter’s LCD register.
- The register shall display flow rate information (interleaved with the current meter reading).
- The register shall subtract reverse flow from the total registration.
- The register shall provide and display low battery detection on the LCD and communicated as ASCII format data to the RF AMR/AMI endpoint.
- The meter endpoint shall provide a minimum of 96 days of downloadable consumption data.

**Meter Register for positive displacement meters**

Registers shall be direct reading hermetically sealed or open and shall read in cubic feet. They shall be in accordance with the latest revision of AWWA Standard C707 and be ANSI/NSF 61 certified. Registers shall not be affected by prolonged submergence in water. They shall be of the 6 active wheel odometer type and shall be capable of encoding and relaying the 4 most significant digits to the remote receptacle. Digital electronics shall be employed; analog devices are not acceptable. Registration for various size meters shall be:

<u>Size</u>	<u>Reading/Revolution</u>	<u>Capacity</u>
5/8"	1 cu ft	1,000,000 cu ft
3/4"	1 cu ft	1,000,000 cu ft
1"	10 cu ft	10,000,000 cu ft
1-1/2"	10 cu ft	10,000,000 cu ft
2"	10 cu ft	10,000,000 cu ft

**PERFORMANCE** – To ensure accuracy, each meter must be accompanied by a factory test tag certifying the accuracy at the flows required by AWWA C715 (low, intermediate, and full flow). The meter(s) shall have an Extended Low Flow measured at 100% +/- 3% which exceeds AWWA Standard C715 extended low flow accuracy requirements.

All meters shall be warranted as follows:

**Low Flow**

**Low Flow**

<b>Size</b>	<b>Low Flow</b>	<b>New Meter Accuracy</b>	<b>Repaired Meter Accuracy</b>
5/8"	0.05 gpm @ 100%	5 Yrs or 500,000 Gal	5-10 years or 1,500,000 Gal
3/4"	0.05 gpm @ 100%	5 Yrs or 750,000 Gal	5-10 years or 2,300,000 Gal
1"	0.25 gpm @ 100%	5 Yrs or 1,000,000 Gal	5-10 years or 3,000,000 Gal
1-1/2"	0.30 gpm @ 100%	1 year	1 year
2"	0.50 gpm @ 100%	1 year	1 year

Normal meter operating range shall be warranted per AWWA C715 Section 4.2 Table 1.

<b>Size</b>	<b>Range (100 +/- 1.5)</b>
5/8"	0.10 – 25 gpm
3/4"	0.10 – 35 gpm
1"	0.40 – 55 gpm
1-1/2"	0.80 – 125 gpm
2"	1.50 – 160 gpm

Meters and meter parts shall be manufactured, assembled, and tested within the Continental United States. Manufacturers may be required to provide proof of where and of what percentage of the meter register, chamber, and maincase is manufactured as per specified. Manufacturers shall have a minimum of fifteen years of field and production experience with all sizes of the model quoted for model standardization. Manufacturers shall provide only one model of meter that complies with these specifications.

### **Electronic Absolute Encoder (E-Coder) Meter Register**

It may be the preference of the Pawtucket Water Supply Board to obtain an advanced encoder-based remote metering system capable of providing electronically encoded meter information as described in this specification.

#### **1. Description - General**

A self-contained electronic absolute encoder (E-Coder) register metering system shall be capable of obtaining remote simultaneous water meter registration that is guaranteed to exactly match the registration on the register odometer. The metering information shall be obtained through a remotely located receptacle or Meter Interface Unit (MIU) or integrated MIU using a compatible data capture system. The above system shall be configured as follows:

1. Electronic absolute encoder (E-Coder) meter register — Direct mounting, electro-magnetically encoded measuring element into an electronic solid-state odometer. Encoder shall provide value-added flow data including leak, tamper and back flow detection when connected to a compatible RF AMR MIU. Batteries and digital counters using volatile memory are not allowed.
2. Remotely mounted receptacle or MIU or integrated MIU providing a communication link for the transmission of information from the register.
3. Data acquisition equipment with which the above components can be interrogated. Such equipment shall be configured in two types:
  - a. A device that captures information and displays it visually to confirm correct system installation and wiring.
  - b. A device that is pre-programmed with route information and is capable of storing collected data in solid-state memory. This device shall also electronically transfer the data for use by the utility billing computer.

#### **2. Solid-State Encoder Register Unit**

##### **A. Registration**

1. The register shall provide at least a nine-digit visual registration at the meter.
2. The unit shall provide an 8-digit meter reading for transmission through the radio MIU.
3. The dial shall have a high resolution nine-digit LCD display for meter testing.
4. The register shall employ a visual LCD leak detection indicator as well as provide remote leak detection through an ASCII format to the RF AMR MIU.

5. The manufacturer will guarantee that the reading obtained electronically matches the LCD odometer reading on the register and that the manufacturer will pay the difference at the current rate whenever a discrepancy appears.
6. The register should accumulate and register consumption without connecting to a receptacle or MIU.

## **B. Mechanical Construction**

1. The unit shall possess a hermetic sonic weld seal.
2. The register shall be attached to the meter case by a bayonet attachment. Fastening screws or nuts shall not be required. A tamper-proof seal pin shall be used to secure the register to the maincase
3. The register shall be removable from the meter without disassembling the meter body and shall permit field installation and/or removal without taking the meter out of service.
4. Provision shall be made in the register for the use of seal wires to further secure the register.
5. Terminal screws must be accessible on the register for transmission wire connection to the remote receptacle or a future AMR system. A permanently potted wire connection shall be available as an option.

## **C. Electrical Construction**

1. The electronic absolute encoder register shall incorporate an Application Specific Integrated Circuit (ASIC) and firmware designed to verify accurate measurement, information transmission and data integrity.
2. Connection shall be made to the register by three screw-type terminals sonically inserted into the register top. Access to the terminals shall be available to all models of register with the exception of a permanently potted version. A port cover shall be provided to cover the terminals after they have been wired.

## **D. Meter Reading Information**

1. The electronic absolute encoder register shall provide to the reading equipment an eight-digit meter reading. An identification number of up to ten digits shall be provided with each reading when read using a probed reading device.
2. The electronic absolute encoder register shall have the capability of providing additional value-added information remotely when connected to a radio MIU (i.e. detailed leak detection data, days of leak state, days of no consumption, and back flow indication). This information shall be communicated through the encoder protocol and RF MIU to the route management software to allow the seamless integration of data into a CIS package.

## **RF Meter Interface Unit (MIU)**

The MIUs must be compact electronic devices connected to the water meters. They shall interrogate the encoder register and transmit the meter reading and other information to a remote reading device. They shall be compatible with encoder registers using either Neptune ProRead/E-CODER® protocol or Sensus-protocol (UI-1203).

MIUs shall feature "auto detect" functionality to detect the type of encoder connected and shall not require reprogramming in the field. The same RF MIUs must be capable of being read by a walk-by handheld computer equipped with a RF receiver, a mobile system with an RF receiver mounted in a vehicle, and a fixed network data collection system. This shall allow an easy migration between the three-meter reading systems without any change to the MIU devices or revisiting the site.

The MIU shall log 96 days of hourly consumption data, available for retrieval via RF activation from the handheld or mobile data collection device

The MIUs shall be attached to new meters or shall retrofit to existing meters in the field. The MIUs shall be manufactured in both wall and pit models. The wall MIU shall have the ability to be mounted in a basement or on the outside of a house. The pit MIU shall have the ability to be mounted in a pit or an underground vault and offer an optional through-the-pit-lid antenna. The wall and pit MIUs shall have a fully-potted, submersible design.

MIUs shall also be available as integrated devices in which the encoder register, and RF transmitter module are integrated into a single module. The unit shall interrogate the integrated absolute encoder register and transmit the meter reading and other information to a data collection reading device.

The absolute solid-state encoder register with integrated MIU shall be attached to new meters, or they shall retrofit existing meters in the field via a bayonet mount on top of the meter main case. The absolute solid-state encoder register with integrated MIU shall be manufactured in both inside and pit models. The inside MIU shall have a water-resistant enclosure and a permanent internal antenna. The pit MIU enclosure shall be a roll-sealed copper can and glass lens, designed to

ensure a watertight seal with a permanent internal antenna and offer an optional through-the-pit-lid antenna to optimize performance in hard-to-read or fixed network applications.



## Physical / Mechanical Requirements

### Wall Unit

- The MIU housing shall be constructed of a polycarbonate plastic compound and be capable of mounting both indoors and outdoors on wall or pole or attached directly to the meter. The device must be water resistant and capable of exposure to spray and splash. The device must be able to withstand a 200-hour salt fog test as specified in NEMA 4 standard.
- The device shall provide a location for a tamper-deterrent seal. Tampering with the device functions or connections shall not be possible without causing visible damage to the device exterior or to the seal.
- The device shall be capable of operating at temperatures of -22°F to +149°F (-30°C to +65°C) with operating humidity of 0 to 100% condensing.
- The circuit board and the battery will be protected by a potting material.
- The MIU device must be protected against static discharge without loss of data per IEC 801-2, issue 2.
- The unit must retrofit to existing installations.
- The unit can be mounted either outside the building or inside the building. The Pawtucket Water Supply Board intends to install wall-mount MIU's on the exterior of all buildings. MIU's may also be integrated into the electronic solid-state register.

### Pit Unit

- For pit or vault applications, the MIU antenna shall be designed to be installed through the industry standard 1 $\frac{3}{4}$ " hole in the pit lid with no degradation of transmission range. The MIU antenna unit will be capable of mounting to various thicknesses of pit lids from  $\frac{1}{2}$ " to 2 $\frac{1}{2}$ ".
- The device shall be capable of operating at temperatures of -22°F to +149°F (-30°C to +65°C) and operating humidity of 0 to 100% condensing.
- The range will not be affected when the pit is flooded.
- The circuit board and the battery will be protected by a potting material.
- The antenna shall be made of a metallic and polymer material to withstand traffic and shall have a dual seal connection to the MIU housing.
- The MIU device must be protected against static discharge without loss of data per IEC 801-2, issue 2.

### Operation Specifications

#### FCC Licensing and Certification:

- The MIU shall operate within FCC Part 15.247 regulations for devices operating in the 902 MHz to 928 MHz unlicensed band. The output power of the devices will be governed by their conformance to these relevant FCC standards.
- To minimize the potential for RF interference from other devices, the MIU shall transmit using the frequency hopping, spread spectrum technique comprised of alternating pseudo-random frequencies within the 902 MHz to 928 MHz unlicensed band.
- For ease of implementation, the System shall not require any special licensing, including licenses from the FCC. The System must, therefore, operate in the 902 MHz to 928 MHz unlicensed band.
- The System must be expandable at any time without getting authorization from the FCC.
- No wake-up tone shall be necessary.

#### Field and Installation Operations:

- No MIU programming shall be necessary for installation.
- The MIU shall be mounted per the manufacturer's installation instructions to ensure a reliable and quality installation throughout the life of the MIU.
- The handheld reading equipment shall provide a test mode to verify proper operation of the MIU by displaying the MIU ID number and meter reading.

- The handheld reading equipment shall provide a test mode to verify proper operation as well as troubleshooting of the MIU on the AMI network by displaying the MIU ID number and latest meter reading.
- The MIU shall be capable of being received by a handheld receiver, mobile receiver, or fixed network data collector without special configuration, programming of operation modes, or re-manufacture.

#### Data Transport:

- The MIU shall provide 8-digit reading resolution from encoded registers using either Neptune E-CODER® or Sensus UI-1203 protocol in mobile as well as AMI network data collection applications, simultaneously, without need for programming.
- The MIU shall read the encoded register at 15-minute intervals to provide accurate leak and reverse flow detection using 8-digit resolution reads.
- The MIU shall transmit readings from the encoder that are not older than 15 minutes.
- The MIU shall transmit the meter reading continuously at a predetermined transmission interval.
- The MIU shall transmit AMI network messages every 7 ½ minutes – standard. No programming shall be necessary to activate transmission of AMI network messages.
- Each AMI network message shall include capability to include 3-meter readings for redundancy to improve read success rates.
- The MIU shall transmit mobile messages every 14 seconds – standard. No programming shall be necessary to activate or revert to transmission of mobile messages.
- In the event of a cut wire, the MIU shall not send the last good read as this can lead to miss-billing. The MIU shall transmit a trouble code in lieu of the meter reading.
- Tamper – If wiring has been disconnected, a “non-reading” shall be provided indicating wire tamper; a reading that gives the last available reading is an incorrect reading.
- Each device shall have unique pre-programmed identification numbers of ten (10) characters. ID numbers will be permanent and shall not be altered. Each device shall be labeled with the ID number in numeric and barcode form. The label shall also display FCC approval information, manufacturer’s designation, and date of manufacture.
- The MIU shall transmit the encoder meter reading and a unique MIU ID number.
- The MIU shall interface to encoder registers using Neptune ProRead, Neptune E-CODER® or Sensus UI- 1203 communication protocol via a 3-conductor wire without need for special configuration to the MIU.
- The MIU shall periodically transmit a packet that includes the register information such as register ID, register type, and other status information no less than weekly.

#### Operational Characteristics:

- Power shall be supplied to the MIU by a lithium battery with capacitor.
- The number of radio-based meter reads performed must not affect the battery life.
- The battery life shall not be affected by outside erroneous wake-up tones (e.g., other water, gas, or electric utilities reading and therefore sending out a wake-up tone).
- The battery shall be a fully potted component of the MIU with no external wires.
- The vendor shall warrant that the MIUs shall be free of manufacture and design defects for a period of twenty (20) years – the first ten (10) years from the date of shipment from factory without prorating and the second ten (10) years with prorating, as long as the MIU is working under the environmental and meter reading conditions specified.

**GROUP 1- Pipe, Pipe Fittings and Miscellaneous**

Total Bid Price in Words \_\_\_\_\_

Total Bid Price in Figures \_\_\_\_\_

Delivery Time \_\_\_\_\_

Name of Bidder and Title (Type or Print) \_\_\_\_\_

Signature \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

Telephone Number and Extension \_\_\_\_\_

NOTE: The price bid shall be written in words and figures. In case of a discrepancy between writing and figures, the writing will prevail. Unit price will prevail if there is a discrepancy between the unit price and extended price. The bidder understands that the Water Supply Board reserves the right to reject any and or all bids to award the contract or contracts in the best interests of the Water Supply Board.

**Group 1 - Pipe, Pipe Fittings Miscellaneous**

Bid Item	Description	Quantity	Unit Price		UOM	Total Price	Material Uid	Vendor Part#
<b>Ductile Iron Pipe. Cement-lined (double thickness). "Tyton" push-on joint. Class 52.</b>								
1.01.1	PIPE, 4" DUCTILE	400		per	FT		658-046-00006	
1.01.2	PIPE, 6" DUCTILE	800		per	FT		658-046-00007	
1.01.3	PIPE, 8" DUCTILE	600		per	FT		658-046-00008	
1.01.4	PIPE, 10" DUCTILE	60		per	FT		658-046-00009	
1.01.5	PIPE, 12" DUCTILE	100		per	FT		658-046-00010	
1.01.6	PIPE, 16" DUCTILE	40		per	FT		658-046-00011	
1.01.7	PIPE, 20" DUCTILE	40		per	FT		658-046-00012	
1.01.8	PIPE, 24" DUCTILE	40		per	FT		658-046-00013	
1.01.9	PIPE, 36" DUCTILE	20		per	FT		658-046-00014	
<b>Duct. iron fittings. Cement-lined (double thickness). 350 psi. AWWA C-153. No accessories.</b>								
1.02.01	CAP, 4" MJ, 9 LBS	1		per	EACH		659-044-00033	
1.02.02	CAP, 6" MJ, 15 LBS	1		per	EACH		659-044-00034	
1.02.03	CAP, 8" MJ, 22 LBS	1		per	EACH		659-044-00035	
1.02.04	CAP, 10" MJ, 32 LBS	1		per	EACH		659-044-00047	
1.02.05	CAP, 12" MJ, 42 LBS	1		per	EACH		659-044-00036	
1.02.06	CAP, 16" MJ, 92 LBS	1		per	EACH		659-044-00037	
1.02.07	CAP, 20" MJ, 125 LBS	1		per	EACH		659-044-00059	
1.02.08	CAP, 24" MJ, 166 LBS	1		per	EACH		659-044-00048	
1.02.09	CAP, 6" MJ WITH 2" THREADED TAP, 15 LBS	1		per	EACH		659-044-00066	

**Group 1 - Pipe, Pipe Fittings Miscellaneous**

Bid Item	Description	Quantity	Unit Price		UOM	Total Price	Material Uid	Vendor Part#
1.02.10	CAP, 8" MJ WITH 2" THREADED TAP, 22 LBS	1		per	EACH		659-044-00067	
1.02.11	PLUG, 4" MJ, 10 LBS	1		per	EACH		659-044-00083	
1.02.12	PLUG, 6" MJ, 16 LBS	1		per	EACH		659-044-00030	
1.02.13	PLUG, 8" MJ, 26 LBS	1		per	EACH		659-044-00031	
1.02.14	PLUG, 12" MJ, 46 LBS	1		per	EACH		659-044-00032	
1.02.15	TEE, MJ x MJ 6" x 4", 46 LBS	1		per	EACH		659-084-00003	
1.02.16	TEE, MJ x MJ 6" x 6", 56 LBS	1		per	EACH		659-084-00004	
1.02.17	TEE, MJ x MJ 6" x 8" "BULLHEAD", 56 LBS	1		per	EACH		659-084-00005	
1.02.18	TEE, MJ x MJ 8" x 4", 60 LBS	1		per	EACH		659-084-00006	
1.02.19	TEE, MJ x MJ 8" x 6", 72 LBS	1		per	EACH		659-084-00007	
1.02.20	TEE, MJ x MJ 8"X 8", 86 LBS	1		per	EACH		659-084-00008	
1.02.21	TEE, MJ x MJ 10" x 6", 90 LBS	1		per	EACH		659-084-00017	
1.02.22	TEE, MJ x MJ 10" x 8", 105 LBS	1		per	EACH		659-084-00001	
1.02.23	TEE, MJ x MJ 10" x 10", 120 LBS	1		per	EACH		659-084-00012	
1.02.24	TEE, MJ x MJ 12" x 6", 110 LBS	1		per	EACH		659-084-00009	
1.02.25	TEE, MJ x MJ 12" x 8", 125 LBS	1		per	EACH		659-084-00010	
1.02.26	TEE, MJ x MJ 12" x 12", 160 LBS	1		per	EACH		659-084-00011	
1.02.27	TEE, MJ x MJ 16" x 6", 228 LBS	1		per	EACH		659-084-00002	
1.02.28	TEE, MJ x MJ 16" x 8", 248 LBS	1		per	EACH		659-084-00015	
1.02.29	TEE, MJ x MJ 20" x 6", 315 LBS	1		per	EACH		659-084-00020	

**Group 1 - Pipe, Pipe Fittings Miscellaneous**

Bid Item	Description	Quantity	Unit Price		UOM	Total Price	Material Uid	Vendor Part#
1.02.30	TEE, MJ x SWIVEL 6" x 6", 56 LBS	1		per	EACH		659-084-00023	
1.02.31	TEE, MJ x SWIVEL 8" x 6", 72 LBS	1		per	EACH		659-084-00014	
1.02.32	TEE, MJ x SWIVEL 10" x 6", 90 LBS	1		per	EACH		659-084-00018	
1.02.33	TEE, MJ x SWIVEL 12" x 6", 110 LBS	1		per	EACH		659-084-00013	
1.02.34	TEE, MJ x SWIVEL 16" x 6", 228 LBS	1		per	EACH		659-084-00019	
1.02.35	TEE, MJ x SWIVEL 16" x 8", 248 LBS	1		per	EACH		659-084-00021	
1.02.36	CROSS, MJ 6" x 6", 75 LBS	1		per	EACH		659-036-00001	
1.02.37	CROSS, MJ 8" x 6", 74 LBS	1		per	EACH		659-036-00002	
1.02.38	CROSS, MJ 8" x 8", 105 LBS	1		per	EACH		659-036-00003	
1.02.39	CROSS, MJ 12" x 6", 126 LBS	1		per	EACH		659-036-00004	
1.02.40	CROSS, MJ 12" x 8", 149 LBS	1		per	EACH		659-036-00005	
1.02.41	CROSS, MJ 12" x 12", 213 LBS	1		per	EACH		659-036-00006	
1.02.42	BEND, 4" MJ (1/32-11.25 DEG) 16 LBS	1		per	EACH		659-017-00013	
1.02.43	BEND, 4" MJ (1/16-22.5 DEG.) 18 LBS	1		per	EACH		659-017-00014	
1.02.44	BEND, 4" MJ (1/8-45 DEG) 22 LBS	1		per	EACH		659-017-00015	
1.02.45	BEND, 4" MJ (1/4-90 DEG) 25 LBS	1		per	EACH		659-017-00016	
1.02.46	BEND, 6" MJ (1/32-11.25 DEG) 30 LBS	1		per	EACH		659-017-00001	
1.02.47	BEND, 6" MJ (1/16-22.5 DEG) 31 LBS	1		per	EACH		659-017-00002	
1.02.48	BEND, 6" MJ (1/8-45 DEG) 32 LBS	1		per	EACH		659-017-00003	
1.02.49	BEND, 6" MJ (1/4-90 DEG) 39 LBS	1		per	EACH		659-017-00004	

**Group 1 - Pipe, Pipe Fittings Miscellaneous**

Bid Item	Description	Quantity	Unit Price		UOM	Total Price	Material Uid	Vendor Part#
1.02.50	BEND, 8" MJ (1/32-11.25 DEG) 42 LBS	1		per	EACH		659-017-00005	
1.02.51	BEND, 8" MJ (1/16-22.5 DEG) 46 LBS	1		per	EACH		659-017-00006	
1.02.52	BEND, 8" MJ (1/8-45 DEG) 46 LBS	1		per	EACH		659-017-00007	
1.02.53	BEND, 8" MJ (1/4-90 DEG) 57 LBS	1		per	EACH		659-017-00008	
1.02.54	BEND, 10" MJ (1/32-11.25 DEG) 58 LBS	1		per	EACH		659-017-00018	
1.02.55	BEND, 10" MJ (1/16-22.5 DEG) 64 LBS	1		per	EACH		659-017-00017	
1.02.56	BEND, 10" MJ (1/8-45 DEG) 70 LBS	1		per	EACH		659-017-00019	
1.02.57	BEND, 12" MJ (1/32-11.25 DEG) 67 LBS	1		per	EACH		659-017-00009	
1.02.58	BEND, 12" MJ (1/16-22.5 DEG) 80 LBS	1		per	EACH		659-017-00010	
1.02.59	BEND, 12" MJ (1/8-45 DEG) 86 LBS	1		per	EACH		659-017-00011	
1.02.60	BEND, 12" MJ (1/4-90 DEG) 108 LBS	1		per	EACH		659-017-00012	
1.02.61	BEND, 16" MJ (1/16-22.5 DEG) 172 LBS	1		per	EACH		659-017-00025	
1.02.62	REDUCER, 6" x 4" MJ, 24 LBS	1		per	EACH		659-065-00008	
1.02.63	REDUCER, 8" x 4" MJ, 32 LBS	1		per	EACH		659-065-00012	
1.02.64	REDUCER, 8" x 6" MJ, 36 LBS	1		per	EACH		659-065-00005	
1.02.65	REDUCER, 12" x 6" MJ, 58 LBS	1		per	EACH		659-065-00006	
1.02.66	REDUCER, 12" x 8" MJ, 57 LBS	1		per	EACH		659-065-00007	
1.02.67	REDUCER, 12" x 10" MJ, 61 LBS	1		per	EACH		659-065-00013	
1.02.68	REDUCER, 16" x 12" MJ, 108 LBS	1		per	EACH		659-065-00009	
1.02.69	REDUCER, 20" x 12" MJ, 205 LBS	1		per	EACH		659-065-00010	

**Group 1 - Pipe, Pipe Fittings Miscellaneous**

Bid Item	Description	Quantity	Unit Price		UOM	Total Price	Material Uid	Vendor Part#
1.02.70	REDUCER, 24" x 12" MJ, 305 LBS	1		per	EACH		659-065-00011	
1.02.71	OFF-SET, 6" x 24" MJ, 110 LBS	1		per	EACH		659-017-00020	
1.02.72	SOLID SLEEVE, 4" MJ x MJ, 20 LBS	4		per	EACH		659-073-00073	
1.02.73	SOLID SLEEVE, 6" MJ x MJ, 29 LBS	4		per	EACH		659-073-00072	
1.02.74	SOLID SLEEVE, 8" MJ x MJ, 45 LBS	4		per	EACH		659-073-00071	
1.02.75	SOLID SLEEVE, 12" MJ x MJ, 62 LBS	4		per	EACH		659-073-00075	
<b>TEE bolts and nuts for DI fittings.</b>								
1.03.1	TEE BOLT AND NUT, 3/4" x 3-1/2"	250		per	EACH		320-022-00009	
1.03.2	TEE BOLT AND NUT, 3/4" x 4-1/2"	250		per	EACH		320-022-00010	
1.03.3	TEE BOLT AND NUT, 3/4" x 6-1/2"	50		per	EACH		320-022-00011	
<b>MJ Bolt and Gasket Pack for C-153 fittings (without gland)</b>								
1.04.1	4"	30		per	EACH		659-044-00008	
1.04.2	6"	60		per	EACH		659-044-00007	
1.04.3	8"	60		per	EACH		659-044-00010	
1.04.4	10"	25		per	EACH		659-044-00017	
1.04.5	12"	40		per	EACH		659-044-00011	
<b>MJ Accessory Pack for C-153 fittings (with gland, gasket, nuts/bolts)</b>								
1.05.1	4"	20		per	EACH		659-044-00020	
1.05.2	6"	40		per	EACH		659-044-00029	



**Group 1 - Pipe, Pipe Fittings Miscellaneous**

Bid Item	Description	Quantity	Unit Price		UOM	Total Price	Material Uid	Vendor Part#
1.05.3	8"	40		per	EACH		659-044-00025	
1.05.4	10"	20		per	EACH		659-044-00028	
1.05.5	12"	20		per	EACH		659-044-00022	
<b>Gravity Sewer Pipe, PVC (SDR 35), Green Color, 14-ft. laying length.</b>								
1.06.1	PIPE, 2" PVC SEWER (20' LENGTHS)	200		per	FT		658-060-00007	
1.06.2	PIPE, 4" PVC SEWER	200		per	FT		658-060-00008	
1.06.3	PIPE, 6" PVC SEWER	200		per	FT		658-060-00003	
1.06.4	PIPE, 8" PVC SEWER	200		per	FT		658-060-00004	
1.06.5	PIPE, 10" PVC SEWER	200		per	FT		658-060-00005	
1.06.6	PIPE, 12" PVC SEWER	200		per	FT		658-060-00006	
1.06.7	PIPE, 15" PVC SEWER	200		per	FT		658-060-00015	
<b>Gravity Sewer Pipe gasketed fittings, PVC (SDR35).</b>								
1.07.1	BEND, 4" (1/32, 11.25 DEG) PVC SEWER	30		per	EACH		658-060-00020	
1.07.2	BEND, 4" (1/16, 22.50 DEG) PVC SEWER	30		per	EACH		658-060-00010	
1.07.3	BEND, 4" (1/8, 45 DEG) PVC SEWER	30		per	EACH		658-060-00009	
1.07.4	BEND, 4", (1/4, 90 DEG) PVC SEWER	30		per	EACH		658-060-00018	
1.07.5	BEND, 6" (1/16, 22.50 DEG) PVC SEWER	30		per	EACH		658-060-00011	
1.07.6	BEND, 6" (1/8, 45 DEG) PVC SEWER	30		per	EACH		658-060-00012	
1.07.7	BEND, 6" (1/4, 90 DEG) PVC SEWER	30		per	EACH		658-060-00016	

**Group 1 - Pipe, Pipe Fittings Miscellaneous**

Bid Item	Description	Quantity	Unit Price		UOM	Total Price	Material Uid	Vendor Part#
<b>Tyton Joint Restraint; "FIELD LOK" 350 gasket for ductile iron pipe.</b>								
1.08.1	GASKET, 4" FIELD LOK FOR TYTON JOINT	12		per	EACH		659-044-00094	
1.08.2	GASKET, 6" FIELD LOK FOR TYTON JOINT	20		per	EACH		659-044-00095	
1.08.3	GASKET, 8" FIELD LOK FOR TYTON JOINT	20		per	EACH		659-044-00096	
1.08.4	GASKET, 10" FIELD LOK FOR TYTON JOINT	6		per	EACH		659-044-00097	
1.08.5	GASKET, 12" FIELD LOK FOR TYTON JOINT	10		per	EACH		659-044-00072	
<b>MJ "FIELD LOK" kit for ductile iron pipe. Includes gland, gasket with embedded grip lugs, bolts/nuts.</b>								
1.09.1	MJ FIELD LOK KIT 4"	20		per	EACH		659-044-00021	
1.09.2	MJ FIELD LOK KIT 6"	80		per	EACH		659-044-00023	
1.09.3	MJ FIELD LOK KIT 8"	50		per	EACH		659-044-00024	
1.09.4	MJ FIELD LOK KIT 10"	8		per	EACH		659-044-00026	
1.09.5	MJ FIELD LOK KIT 12"	10		per	EACH		659-044-00073	
<b>MEGALUG SERIES 1100 (WITH ACCESS.) for ductile iron pipe. Includes gland, gasket, bolts/nuts.</b>								
1.10.1	MEGALUG, 4" WITH ACCESSORIES	20		per	EACH		659-044-00039	
1.10.2	MEGALUG, 6" WITH ACCESSORIES	100		per	EACH		659-044-00038	
1.10.3	MEGALUG, 8" WITH ACCESSORIES	60		per	EACH		659-044-00040	
1.10.4	MEGALUG, 10" WITH ACCESSORIES	8		per	EACH		659-044-00042	
1.10.5	MEGALUG, 12" WITH ACCESSORIES	20		per	EACH		659-044-00041	
1.10.6	MEGALUG, 16" WITH ACCESSORIES	4		per	EACH		659-044-00099	

**Group 1 - Pipe, Pipe Fittings Miscellaneous**

Bid Item	Description	Quantity	Unit Price		UOM	Total Price	Material Uid	Vendor Part#
1.10.7	MEGALUG, 20" WITH ACCESSORIES	4		per	EACH		659-044-00060	
1.10.8	MEGALUG, 24" WITH ACCESSORIES	4		per	EACH		659-044-00087	
<b>MEGALUG SERIES 1100 for ductile iron pipe. No accessories.</b>								
1.11.1	MEGALUG, 4" (NO ACESSORIES)	10		per	EACH		659-044-00003	
1.11.2	MEGALUG, 6" (NO ACCESSORIES)	20		per	EACH		659-044-00002	
1.11.3	MEGALUG, 8" (NO ACCESSORIES)	20		per	EACH		659-044-00004	
1.11.4	MEGALUG, 10" (NO ACCESSORIES)	10		per	EACH		659-044-00001	
1.11.5	MEGALUG, 12" (NO ACCESSORIES)	20		per	EACH		659-044-00005	
<b>Romac Alpha EC XL End Cap. Complete, including all hardware.</b>								
1.12.1	END CAP, 4" ROMAC ALPHA	6		per	EACH		659-044-00102	
1.12.2	END CAP, 6" ROMAC ALPHA	6		per	EACH		659-044-00103	
1.12.3	END CAP, 8" ROMAC ALPHA	6		per	EACH		659-044-00104	
<b>Tyton Push-on Joint Gaskets. SBR rubber.</b>								
1.13.1	GASKET, 4" PIPE TYTON	12		per	EACH		658-046-00019	
1.13.2	GASKET, 6" PIPE TYTON	12		per	EACH		658-046-00020	
1.13.3	GASKET, 8" PIPE TYTON	12		per	EACH		658-046-00021	
1.13.4	GASKET, 10" PIPE TYTON	12		per	EACH		658-046-00037	
1.13.5	GASKET, 12" PIPE TYTON	12		per	EACH		658-046-00022	
1.13.6	GASKET, 16" PIPE TYTON	12		per	EACH		658-046-00018	

**Group 1 - Pipe, Pipe Fittings Miscellaneous**

<b>Bid Item</b>	<b>Description</b>	<b>Quantity</b>	<b>Unit Price</b>		<b>UOM</b>	<b>Total Price</b>	<b>Material Uid</b>	<b>Vendor Part#</b>
1.13.7	GASKET, 20" PIPE TYTON	6		per	EACH		658-046-00040	
1.13.8	GASKET, 24" PIPE TYTON	6		per	EACH		658-046-00035	
<b>MJ Foster Adaptor, includes accessories.</b>								
1.14.1	ADAPTOR, 4" FOSTER MJ WITH ACCESSORIES	4		per	EACH			
1.14.2	ADAPTOR, 6" FOSTER MJ WITH ACCESSORIES	4		per	EACH		659-017-00021	
1.14.3	ADAPTOR, 8" FOSTER MJ WITH ACCESSORIES	4		per	EACH		659-017-00022	
1.14.4	ADAPTOR, 12" FOSTER MJ WITH ACCESSORIES	4		per	EACH		659-017-00023	
<b>"Upside-Down" Survey Marking Paint; ~17 oz. cans, 12 cans/case (equal to Aervoe's Survey Marking Spray Paint)</b>								
1.15.1	BLUE	60		per	CASE		N/A	
1.15.2	WHITE	40		per	CASE		N/A	
1.15.3	BLACK	2		per	CASE		N/A	
1.15.4	FLUORESCENT ORANGE	2		per	CASE		N/A	
<b>Rust &amp; Stain Remover Powder; ~12 to 16 oz. bottles, 12 bottles/case (equal to "Iron Out" or "Red-B-Gone" brands)</b>								
1.16.1	RUST REMOVER	40		per	CASE		N/A	

**GROUP 2 – Fire Hydrants and Parts**

Total Bid Price in Words \_\_\_\_\_

Total Bid Price in Figures \_\_\_\_\_

Delivery Time \_\_\_\_\_

Name of Bidder and Title (Type or Print) \_\_\_\_\_

Signature \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

Telephone Number and Extension \_\_\_\_\_

NOTE: The price bid shall be written in words and figures. In case of a discrepancy between writing and figures, the writing will prevail. Unit price will prevail if there is a discrepancy between the unit price and extended price. The bidder understands that the Water Supply Board reserves the right to reject any and or all bids to award the contract or contracts in the best interests of the Water Supply Board.

**Group 2 - Fire Hydrants and Parts**

Bid Item	Description	Quantity	Unit Price		UOM	Total Price	Material Uid	Vendor Part#
<b>Fire Hydrant Complete; 5-1/4" valve, MJ shoe, open left - Mueller Centurion Model A-423, color: chrome yellow.</b>								
2.01.1	HYDRANT, 4'-6" (O.L.) Model A-423	10		per	EACH		340-060-00063	
2.01.2	HYDRANT, 5'-0" (O.L.) Model A-423	20		per	EACH		340-060-00064	
2.01.3	HYDRANT, 5'-6" (O.L.) Model A-423	40		per	EACH		340-060-00065	
2.01.4	HYDRANT, 6'-0" (O.L.) Model A-423	10		per	EACH		340-060-00066	
2.01.5	HYDRANT, 6'-6" (O.L.) Model A-423	6		per	EACH		340-060-00067	
<b>Fire Hydrant Upper Barrel, complete (includes parts A-1 thru A-30); 5-1/4" valve, open left, Mueller Centurion Model A-423, color: chrome yellow.</b>								
2.02.1	HYDRANT, UPPER BARREL, COMPLETE	4		per	EACH		340-060-00086	
<b>Hydrant Bonnet, Mueller A-8; Mueller Model A-423, color: chrome yellow</b>								
2.03.1	BONNET, HYDRANT A-8, chrome yellow	6		per	EACH		340-060-00085	
<b>Hydrant Bonnet Bolts and Nuts, Mueller Model A-423; A-9.</b>								
2.04.1	BOLT, AND NUT 1/2" x 2-1/4" HEX ZINC PLATED (BONNET)	48		per	EACH		320-022-00003	
<b>Hydrant Upper Stem, open left.</b>								
2.05.1	UPPER STEM, HYDRANT (NEW STYLE) H-103	10		per	EACH		340-060-00002	
2.05.2	STEM, UPPER O.L. (LONGER- STEM) A-11 for A-423, (1977-1986), 28-plus inches	10		per	EACH		340-060-00053	
2.05.3	STEM, UPPER O.L.(SHORTER- STEM) A-11 CENTURION 200, (1987-present), 27-plus inches	12		per	EACH		340-060-00052	

**Group 2 - Fire Hydrants and Parts**

Bid Item	Description	Quantity	Unit Price		UOM	Total Price	Material Uid	Vendor Part#
<b>Hydrant Bonnet Gasket, Mueller</b>								
2.06.1	GASKET, BONNET, H-59 (FLAT)	40			per EACH		340-060-00036	
2.06.2	O-RING, BONNET, A-10	40			per EACH		340-060-00037	
2.06.3	O-RING, BONNET A-5	12			per EACH		340-060-00104	
<b>Hydrant Nozzle Locks, Mueller Model A-423, pumper and hose; ref.# A-13</b>								
2.07.1	NOZZLE LOCK HYDRANT A-13	10			per EACH		340-060-00041	
<b>Hydrant Pumper Nozzle, Mueller Model A-423</b>								
2.08.1	NOZZLE, PUMPER A-14 CENTURION LHT	2			per EACH		340-060-00082	
2.08.2	NOZZLE, PUMPER (R.H.T.) A-14 HYDRANT	2			per EACH		340-060-00010	
<b>Hydrant Hose Nozzle, for Mueller Hydrant Model A-423</b>								
2.09.1	NOZZLE, HOSE (L.H.T.) A-18 HYDRANT	6			per EACH		340-060-00009	
2.09.2	NOZZLE, HOSE (R.H.T.) A-18 HYDRANT	6			per EACH		340-060-00013	
<b>Hydrant Safety Flange Gasket</b>								
2.10.1	GASKET, SAFETY FLANGE H-76	12			per EACH		340-060-00021	
2.10.2	O-RING, SAFETY FLANGE, A-27	12			per EACH		340-060-00005	
<b>Hydrant Extension Parts Kit – HRPI-375</b>								
2.11.1	HYDRANT EXTENSION PARTS KIT, HRPI-375	20			per EACH		340-060-00093	
<b>Hydrant Extension Stem, 5-1/4", A-423</b>								

**Group 2 - Fire Hydrants and Parts**

Bid Item	Description	Quantity	Unit Price		UOM	Total Price	Material Uid	Vendor Part#
2.12.1	EXTENSION STEM, 6" HYDRANT, part #158287	12		per	EACH		340-060-00072	
2.12.2	EXTENSION STEM, 12" HYDRANT, part #158288	6		per	EACH		340-060-00074	
2.12.3	EXTENSION STEM, 18" HYDRANT part #158289	6		per	EACH		340-060-00076	
2.12.4	EXTENSION STEM, 24" HYDRANT part #158290	6		per	EACH		340-060-00070	
<b>Hydrant Extension Kit, 5-1/4", A-320</b>								
2.13.1	EXTENSION KIT, 6" HYDRANT, A-320	12		per	EACH		340-060-00058	
2.13.2	EXTENSION KIT, 12" HYDRANT, A-320	12		per	EACH		340-060-00059	
2.13.3	EXTENSION KIT, 18" HYDRANT A-320	2		per	EACH		340-060-00060	
2.13.4	EXTENSION KIT, 24" HYDRANT A-320	2		per	EACH		340-060-00061	
<b>Oil Filler Plug</b>								
2.14.1	OIL PLUG, 1/2" x 1/2" S.S. A-7 HYDRANT	40		per	EACH		340-060-00015	
<b>Safety Stem Rod Coupling</b>								
2.15.1	COUPLING, SAFETY STEM A-25 OR H-125	25		per	EACH		340-060-00016	
<b>Clevis Pins</b>								
2.16.1	CLEVIS PINS, HYDRANT (A-30)	50		per	EACH		340-060-00019	
<b>Nozzle Caps - NST</b>								
2.17.1	CAP, HOSE NOZZLE (A-21), H-72 GASKET, H-69 CHAIN	10		per	EACH		340-060-00023	
2.17.2	CAP, PUMPER NOZZLE (A-17), H-68 GASKET, H-69 CHAIN	10		per	EACH		340-060-00024	
<b>MJ Duck-Tipped Boot Gasket. Equal to Mueller 194733</b>								



**Group 2 - Fire Hydrants and Parts**

Bid Item	Description	Quantity	Unit Price		UOM	Total Price	Material Uid	Vendor Part#
2.18.1	GASKET, HYDRANT BOOT	30		per	EACH		340-060-00003	
<b>Safety Flanges Repair Kit, etc.</b>								
2.19.1	SAFETY FLANGE REPAIR KIT A-301 (TRAFFIC)	120		per	EACH		340-060-00055	
2.19.2	SAFETY FLANGE BOLT AND NUT A-26	48		per	EACH		340-060-00098	
<b>Hydrant Lubricating Oil, 10-1/2 oz.</b>								
2.20.1	HYDRANT OIL (LUBRICANT) A-51	40		per	EACH		340-060-00043	
<b>Hydrant Hose Reducer, Brass</b>								
2.21.1	REDUCER, 2-1/2" x 3/4" HYDRANT HOSE BRASS	5		per	EACH		340-060-00080	
2.21.2	REDUCER, 2-1/2" x 1" HYDRANT HOSE BRASS	5		per	EACH		340-060-00079	
2.21.3	REDUCER, 2-1/2" x 1-1/2" HYDRANT HOSE BRASS	5		per	EACH		340-060-00078	
2.21.4	REDUCER, 2-1/2" x 2" HYDRANT HOSE BRASS	5		per	EACH		340-060-00077	
2.21.5	Fire Hose Adapter: NPT x NH, Male x Female, 2 in x 2-1/2 in Fitting Size, GRAINGER ITEM #6APD5	4		per	EACH		340-060-00094	
<b>Hydrant Cap Safety Chains, Electrogalvanized, 10" chain (with ring) x 3</b>								
2.22.1	CHAIN, A-22 (FOR HYDRANT CAPS)	50		per	SET		340-060-00006	
2.22.2	S-HOOK FOR HYDRANT SAFETY CHAINS	50		per	EACH		340-060-00008	
<b>Hydrant Out-of-Service Bags</b>								
2.23.1	HYDRANT OUT-OF-SERVICE BAGS - 8/PKG (ORANGE/BLACK)	6		per	PKG		340-060-00056	

**Group 2 - Fire Hydrants and Parts**

Bid Item	Description	Quantity	Unit Price		UOM	Total Price	Material Uid	Vendor Part#
<b>Hydrant Lubricants</b>								
2.24.1	ANTI-SEIZE LUBRICANT FOR HYDRANTS (FOOD GRADE), 16 OZ.	24		per	EACH		340-060-00057	
2.24.2	HYDRA-EZE LUBE 1 GAL. TUB	12		per	EACH		340-060-00109	
2.24.3	HYDRA-EZE LUBE 9 OZ. TUBE	18		per	EACH		340-060-00110	
2.24.4	HYDRA-EZE THREAD CLEANER SPRAY 18 OZ. CAN	24		per	EACH		340-060-00111	
<b>Hydrant Main Valve</b>								
2.25.1	VALVE, MAIN HYDRANT 5-1/4" REVERSIBLE (190354)	20		per	EACH		340-060-00088	
2.25.2	VALVE, MAIN HYDRANT 5-1/4" NON-REVERSIBLE (192913)	15		per	EACH		340-060-00034	
<b>Hydrant Lower Valve Plate, etc.</b>								
2.26.1	PLATE, LOWER VALVE HYDRANT, REVERSIBLE (190356)	6		per	EACH		340-060-00038	
2.26.2	PLATE, LOWER VALVE HYDRANT, NON-REV. (175233)	6		per	EACH		340-060-00081	
2.26.3	NUT, LOWER VALVE PLATE A-49	12		per	EACH		340-060-00099	
2.26.4	LOCK WASHER FOR PLATE NUT A-48	12		per	EACH		340-060-00100	
2.26.5	CAP NUT SEAL A-47	12		per	EACH		340-060-00112	
<b>Hydrant Wrenches</b>								
2.27.1	WRENCH, HYDRANT A-311 (#174510)	20		per	EACH		340-060-00025	
2.27.2	WRENCH, HYDRANT 15" KNURLED ZINC ADJUSTABLE	20		per	EACH		670-015-00078	
2.27.3	WRENCH, HYDRANT A-391 OPERATING TAMPER PROOF	10		per	EACH		340-060-00047	
2.27.4	WRENCH, HYDRANT A-374 TAMPER PROOF OPERATING	5		per	EACH		340-060-00048	

**Group 2 - Fire Hydrants and Parts**

<b>Bid Item</b>	<b>Description</b>	<b>Quantity</b>	<b>Unit Price</b>		<b>UOM</b>	<b>Total Price</b>	<b>Material Uid</b>	<b>Vendor Part#</b>
2.27.5	WRENCH, SPANNER A-384	3		per	EACH		670-015-00006	
<b>Miscellaneous Hydrant Parts</b>								
2.28.01	DRAIN VALVE FACING (PLASTIC) A-34	48		per	EACH		340-060-00101	
2.28.02	HOLD DOWN NUT A-84	12		per	EACH		340-060-00102	
2.28.03	HOLD DOWN NUT O-RING A-3	12		per	EACH		340-060-00103	
2.28.04	ANTI FRICTION WASHER A-6	12		per	EACH		340-060-00105	
2.28.05	WEATHER SEAL A-85	12		per	EACH		340-060-00106	
2.28.06	HYDRANT BRASS SLEEVE TOOL A-367	6		per	EACH		340-060-00107	
2.28.07	SHOE REPAIR KIT 5-1/4" #280357	12		per	EACH		340-060-00108	
2.28.08	NUT, HYDRANT OPERATION A-1 (OPEN LEFT)	12		per	EACH		340-060-00027	
2.28.09	O-RING, STEM A-12	12		per	EACH		340-060-00035	
2.28.10	O-RING, TOP SEAT A-39	12		per	EACH		340-060-00089	
2.28.11	O-RING, BOTTOM SEAT A-44	12		per	EACH		340-060-00090	

**GROUP 3 – Water Service Materials**

Total Bid Price in Words \_\_\_\_\_

Total Bid in Figures \_\_\_\_\_

Delivery Time \_\_\_\_\_

Name of Bidder and Title (Title or Print) \_\_\_\_\_

Signature \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

Telephone Number and Extension \_\_\_\_\_

NOTE: The price bid shall be written in words and figures. In case of a discrepancy between writing and figures, the writing will prevail. Unit price will prevail if there is a discrepancy between the unit price and extended price. The bidder understands that the Water Supply Board reserves the right to reject any and or all bids to award the contract or contracts in the best interests of the Water Supply Board.

**Group 3 - Water Service Materials**

Bid Item	Description	Quantity	Unit Price		UOM	Total Price	Material Uid	Vendor Part#
<b>Copper Tubing, Type K, as manufactured by Cerro Mfg.</b>								
3.01.1	COPPER TUBING, 3/4" TYPE K - 60 FOOT COIL	120		per	FT		658-088-00007	
3.01.2	COPPER TUBING, 1" TYPE K - 60 FOOT COIL	5000		per	FT		658-088-00003	
3.01.3	COPPER TUBING, 2" TYPE K - 20 FOOT LENGTHS	300		per	FT		658-088-00004	
3.01.4	COPPER TUBING, 2" TYPE K - 40 FOOT COIL	400		per	FT		658-088-00006	
<b>Curb Stop, Mueller B-25209, open <u>left</u>, compression connection, ball type. Or approved equal.</b>								
3.02.1	CURB STOP, 1" COMP. x COMP.	300		per	EACH		670-069-00006	
3.02.2	CURB STOP, 2" COMP. x COMP.	20		per	EACH		670-069-00002	
<b>Curb Stop, Mueller B-25204, open <u>left</u>, flared-ends connection, ball type.</b>								
3.03.1	CURB STOP 2" (FLARE X FLARE) (O.L.)	2		per	EACH		670-069-00028	
<b>Curb Stop, Mueller B-20283, open <u>left</u>, Female Thread ends, ball type.</b>								
3.04.1	CURB STOP 1" FEM. X FEM. IPS THREAD	100		per	EACH		670-069-00009	
3.04.2	CURB STOP 2" FEM.X FEM. IPS	10		per	EACH		670-069-00010	
<b>Straight Coupling, compression connection x female (IPT) Mueller H-15451.</b>								
3.05.1	COUPLING, 1" STRAIGHT (COMP.x FEM.THREAD)	300		per	EACH		659-033-00054	
3.05.2	COUPLING, 2" STRAIGHT (COMP. x FEM.THREAD)	20		per	EACH		659-033-00041	
<b>Straight Coupling, flared-end connection x female (IPT) Mueller H-15450.</b>								
3.06.1	COUPLING, 1" FEMALE (STRAIGHT x FLARE)	20		per	EACH		659-033-00018	

**Group 3 - Water Service Materials**

Bid Item	Description	Quantity	Unit Price		UOM	Total Price	Material Uid	Vendor Part#
<b>Straight Coupling, compression connection x male (IPT) Mueller H-15428.</b>								
3.07.1	COUPLING, 1" STRAIGHT (COMP. x MALE THREAD)	200		per	EACH		659-033-00042	
3.07.2	COUPLING, 2" STRAIGHT (COMP. x MALE THREAD)	15		per	EACH		659-033-00043	
3.07.3	COUPLING, 1 x 3/4", (COMP. x MALE)	35		per	EACH		659-033-00071	
3.07.4	COUPLING, 3/4" STRAIGHT (COMP. x MALE THREAD)	30		per	EACH		659-033-00049	
<b>Straight Coupling, flared-end connection x male (IPT) Mueller H-15425.</b>								
3.08.1	COUPLING, 1" STRAIGHT (MALE x FLARE)	20		per	EACH		659-033-00020	
<b>Straight Coupling, copper to iron pipe, IPS PVC pack joint x copper (CTS) pack joint Mueller V-15441.</b>								
3.09.1	COUPLING, 1" STRAIGHT (PVC-PJ x CTS-PJ)	80		per	EACH		659-033-00055	
3.09.2	COUPLING, 3/4" STRAIGHT (PVC-PJ x 1" CTS-PJ)	20		per	EACH		659-033-00077	
<b>Corporation Stop, Mueller, compression connection outlet H-25008 ball type. CC threads.</b>								
3.10.1	CORPORATION STOP, 3/4" x 1" COMP.	30		per	EACH		670-069-00050	
3.10.2	CORPORATION STOP, 1" CC x COMP.	100		per	EACH		670-069-00005	
3.10.3	CORPORATION STOP, 2" COMP.	20		per	EACH		670-069-00004	
<b>Corporation Plug, Mueller, square head with Mueller "CC" thread H-10033.</b>								
3.11.1	PLUG, 3/4" CORPORATION	20		per	EACH		659-054-00002	
3.11.2	PLUG, 1" CORPORATION	20		per	EACH		659-054-00017	
3.11.3	PLUG, 1-1/4" CORPORATION	10		per	EACH		659-054-00001	
3.11.4	PLUG, 1-1/2" CORPORATION	10		per	EACH		659-054-00023	

**Group 3 - Water Service Materials**

Bid Item	Description	Quantity	Unit Price		UOM	Total Price	Material Uid	Vendor Part#
3.11.5	PLUG, 2" CORPORATION	10		per	EACH		659-054-00021	
<b>Straight Three Part Union, comp. conn. x comp. conn. Mueller H-15403. (No Center Stop)</b>								
3.12.1	UNION, 3-PART 3/4" COMP x COMP	50		per	EACH		659-033-00062	
3.12.2	UNION, 3-PART 1" STRAIGHT COMP x COMP	150		per	EACH		659-033-00053	
3.12.3	UNION, 3-PART 1" x 3/4" STRAIGHT COMP x COMP	100		per	EACH		659-033-00056	
3.12.4	UNION, 3-PART 2" STRAIGHT COMP x COMP	15		per	EACH		659-033-00027	
<b>Curb Box Lid and Plug.</b>								
3.13.1	LID, 1-1/4" CURB BOX LID & PLUG (89375)	200		per	EACH		659-047-00020	
3.13.2	LID, 1" CURB BOX LID & PLUG (89376)	200		per	EACH		659-047-00021	
<b>Pentagon Plug, recessed style (plug only = Mueller No. 58039); fits 1-1/4" curb boxes.</b>								
3.14.1	PLUG, 1-1/4" PENTAGON CURB BOX BRASS	100		per	EACH		659-054-00009	
<b>Pentagon Brass Plug (plug only); fits 1" curb box lids.</b>								
3.15.1	PLUG, 1" PENTAGON BRASS CURB BOX (36571)	200		per	EACH		659-054-00010	
3.15.2	PLUG, PENTAGON 1" CURB BOX COURSE THREAD	200		per	EACH		659-054-00016	
<b>Curb Valve Box; 1-inch, Erie Type with lid (with slotted top), coarse thread brass plug, Mueller H-10334. (rods separately)</b>								
3.16.1	CURB BOX, 1" MUELLER ERIE STYLE 4-1/2' to 5-1/2' bury	500		per	EACH		670-063-00001	
3.16.2	ROD, 24" x 5/8" CURB VALVE BOX OPERATING	100		per	EACH		670-063-00002	
3.16.3	ROD, 30" x 5/8" CURB VALVE BOX OPERATING	100		per	EACH		670-063-00003	
<b>Curb Valve Box Adapters (EXTENSIONS), for Erie Type boxes, I.P.S.</b>								

**Group 3 - Water Service Materials**

Bid Item	Description	Quantity	Unit Price		UOM	Total Price	Material Uid	Vendor Part#
3.17.1	EXTENSION, 1" x 6" CURB BOX	150		per	EACH		659-047-00002	
3.17.2	EXTENSION, 1-1/4" x 6" CURB BOX	100		per	EACH		659-047-00003	
<b>Curb Valve Box Foot Piece, heavy, enlarged base, Erie type For 2 –inch Mueller Curb Stop.</b>								
3.18.1	FOOT PIECE, HEAVY FOR 2" CURB STOP TALL	40		per	EACH		670-063-00004	
<b>Brass Ball Valve, Quarter Turn with Lever Handle, Female Iron Pipe Thread.</b>								
3.19.1	VALVE, BALL 3/4" THREADED, 1/4 TURN	30		per	EACH		670-069-00034	
3.19.2	VALVE, BALL 1" THREADED, 1/4 TURN	30		per	EACH		670-069-00035	
3.19.3	VALVE, BALL 1-1/2" THREADED, 1/4 TURN	6		per	EACH		670-069-00048	
3.19.4	VALVE, BALL 2" THREADED, 1/4 TURN	6		per	EACH		670-069-00041	
<b>Brass Pipe Fittings - Iron pipe thread</b>								
3.20.01	NIPPLE, 3/4" CLOSE BRASS	40		per	EACH		658-022-00009	
3.20.02	NIPPLE, 3/4" x 6" BRASS	100		per	EACH		658-022-00013	
3.20.03	NIPPLE, 1" CLOSE BRASS	50		per	EACH		658-022-00007	
3.20.04	NIPPLE, 1" X 6" BRASS	200		per	EACH		658-022-00014	
3.20.05	NIPPLE, 1-1/4" x 6" BRASS	20		per	EACH		658-022-00020	
3.20.06	NIPPLE, 1-1/2" x 6" BRASS	20		per	EACH		658-022-00019	
3.20.07	NIPPLE, 2" x 2" BRASS	20		per	EACH		658-022-00025	
3.20.08	NIPPLE, 2" x 3" BRASS	20		per	EACH		658-022-00005	
3.20.09	NIPPLE, 2" x 6" BRASS	20		per	EACH		658-022-00004	
3.20.10	BUSHING, 3/4" x 1/2" REDUCING BRASS	100		per	EACH		659-024-00007	



**Group 3 - Water Service Materials**

Bid Item	Description	Quantity	Unit Price		UOM	Total Price	Material Uid	Vendor Part#
3.20.11	BUSHING, 1" x 3/4" REDUCING BRASS	50		per	EACH		659-024-00006	
3.20.12	BUSHING, 2" x 1-1/2" REDUCING BRASS	20		per	EACH		659-024-00001	
3.20.13	BUSHING, 2" x 1-1/4" REDUCING BRASS	40		per	EACH		659-024-00002	
3.20.14	COUPLING, 3/4" x 5/8" REDUCING BRASS	40		per	EACH		659-033-00003	
3.20.15	COUPLING, 1" x 3/4" REDUCING BRASS	40		per	EACH		659-033-00011	
3.20.16	COUPLING, 1-1/4" x 1" REDUCING BRASS	40		per	EACH		659-033-00010	
3.20.17	COUPLING, 2" x 1" REDUCING BRASS	40		per	EACH		659-033-00007	
3.20.18	COUPLING, 2" x 1-1/4" REDUCING BRASS	40		per	EACH		659-033-00006	
3.20.19	COUPLING, 2-1/2" x 2" REDUCING BRASS	20		per	EACH		659-033-00002	
3.20.20	COUPLING, 3/4" BRASS	40		per	EACH		659-033-00004	
3.20.21	COUPLING, 1" BRASS	40		per	EACH		659-033-00013	
3.20.22	COUPLING, 1-1/4" BRASS	40		per	EACH		659-033-00005	
3.20.23	COUPLING, 1-1/2" BRASS	40		per	EACH		659-033-00015	
3.20.24	COUPLING, 2" BRASS	40		per	EACH		659-033-00001	
3.20.25	ELBOW, 3/4" BRASS	20		per	EACH		659-041-00003	
3.20.26	ELBOW, 1" BRASS	25		per	EACH		659-041-00002	
3.20.27	ELBOW, 1-1/4" 90 Degree BRASS	10		per	EACH		659-041-00006	
3.20.28	ELBOW, 1-1/2" BRASS	10		per	EACH		659-041-00004	
3.20.29	ELBOW, 1" x 3/4" REDUCING BRASS	10		per	EACH		659-041-00005	
3.20.30	ELBOW 2" 90 Degree BRASS	10		per	EACH		659-041-00001	

**Group 3 - Water Service Materials**

Bid Item	Description	Quantity	Unit Price		UOM	Total Price	Material Uid	Vendor Part#
3.20.31	TEE, 1" BRASS	20		per	EACH		658-022-00006	
3.20.32	TEE, 2" x 2" x 1" BRASS	10		per	EACH		658-022-00002	
3.20.33	TEE, 2" X 2" BRASS	10		per	EACH		658-022-00003	
3.20.34	CAP 3/4" BRASS	10		per	EACH		658-022-00001	
3.20.35	CAP 1" BRASS	10		per	EACH		658-022-00021	
3.20.36	CAP 2" BRASS	10		per	EACH		658-022-00001	
3.20.37	PLUG 3/4" BRASS	10		per	EACH		659-054-00018	
3.20.38	PLUG 1" BRASS	10		per	EACH		659-054-00019	
3.20.39	PLUG, 1-1/4" BRASS	10		per	EACH		659-054-00030	
3.20.40	PLUG, 1-1/2" BRASS	10		per	EACH		659-054-00024	
3.20.41	PLUG, 2" BRASS	20		per	EACH		659-054-00020	
3.20.42	3/4" MALE GARDEN HOSE to 3/4" IPT MALE ADAPTER	10		per	EACH		658-022-00013	
3.20.43	3/4" GARDEN HOSE DOUBLE MALE ADAPTER	10		per	EACH		658-022-00012	
<b>Galvanized Steel Pipe Fittings - iron pipe thread</b>								
3.21.01	COUPLING, 1" GALV.	150		per	EACH		658-046-00004	
3.21.02	COUPLING, 1-1/4" X 1" REDUCING GALV.	150		per	EACH		658-046-00016	
3.21.03	COUPLING, 1-1/4" GALV.	100		per	EACH		658-046-00017	
3.21.04	COUPLING, 1-1/2" GALV.	100		per	EACH		658-046-00028	
3.21.05	COUPLING, 2" GALV.	100		per	EACH		658-046-00029	
3.21.06	NIPPLE, 1" CLOSE GALV.	100		per	EACH		658-046-00003	

**Group 3 - Water Service Materials**

Bid Item	Description	Quantity	Unit Price		UOM	Total Price	Material Uid	Vendor Part#
3.21.07	NIPPLE, 1-1/2" CLOSE GALV.	150		per	EACH		658-046-00031	
3.21.08	NIPPLE, 1" x 6" GALV.	150		per	EACH		658-046-00005	
3.21.09	NIPPLE, 1-1/4" x 2" GALV.	100		per	EACH		658-046-00015	
3.21.10	NIPPLE, 1-1/4" x 6" GALV.	100		per	EACH		658-046-00001	
3.21.11	NIPPLE, 1-1/2" x 6", GALV.	20		per	EACH		658-046-00023	
3.21.12	PLUG, 1" GALV.	20		per	EACH		659-054-00027	
3.21.13	PLUG, 1-1/4" GALV.	20		per	EACH		659-054-00006	
3.21.14	PLUG, 1-1/2" GALV.	20		per	EACH		659-054-00007	
3.21.15	PLUG, 2" GALV.	20		per	EACH		659-054-00008	
<b>Pentagon Key Wrench, Steel</b>								
3.22.1	Mueller H-10323 Std.	20		per	EACH		670-015-00087	
3.22.2	Pentagon End Key 48" Length	15		per	EACH		670-015-00085	
3.22.3	Pentagon Key replacement end	24		per	EACH		670-015-00086	
<b>Drill and Tap; cc thread</b>								
3.23.1	Mueller No. 680540 1"	5		per	EACH		670-015-00053	
<b>Drill and Tap; cc thread</b>								
3.24.1	Mueller No. 36069 1-7/8"	3		per	EACH		670-015-00054	
<b>Curb Box Key; Mueller H-10322</b>								
3.25.1	6-foot model	10		per	EACH		670-015-00087	

**Group 3 - Water Service Materials**

Bid Item	Description	Quantity	Unit Price		UOM	Total Price	Material Uid	Vendor Part#
3.25.2	4-foot model	30		per	EACH		670-015-00086	
3.25.3	Curb Box Key replacement end	24		per	EACH		670-015-00084	
<b>Drilling &amp; Tapping Machine Cutting Grease 1-QT Cans</b>								
3.26.1	Mueller No. 88366	40		per	EACH		670-015-00020	
<b>Flaring Tool Mueller H-18000</b>								
3.27.1	3/4"	2		per	EACH		670-015-00117	
3.27.2	1"	2		per	EACH		670-015-00118	
3.27.3	2"	2		per	EACH		670-015-00119	
<b>Stainless Steel Cotter Pins for Curb box Rods</b>								
3.28.1	3/16" x 2" stainless steel	500		per	EACH		670-015-00021	
<b>Anti – Seize paste 8 oz. bottle w/cap brush</b>								
3.29.1	Aluminum Anti-seize paste 8 oz bottle	40		per	EACH		670-015-00022	
<b>PTFE Paste Thread Sealant 8 oz. bottle w/cap brush</b>								
3.30.1	Pipe Thread Sealant paste 8 oz bottle	80		per	EACH		670-015-00023	
<b>Wheeler Rex Copper Service Line Shut Off Tool</b>								
3.31.1	Line Crimper 3/4"-1" w/case	2		per	EACH		670-015-00024	

**GROUP 4 – Couplings, Clamps and Saddles**

Total Bid Price in Words \_\_\_\_\_

Total Bid Price in Figures \_\_\_\_\_

Delivery Time \_\_\_\_\_

Name of Bidder and Title (Type or Print) \_\_\_\_\_

Signature \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

Telephone Number and Extension \_\_\_\_\_

NOTE: The price bid shall be written in words and figures. In case of a discrepancy between writing and figures, the writing will prevail. Unit price will prevail if there is a discrepancy between the unit price and extended price. The bidder understands that the Water Supply Board reserves the right to reject any and or all bids to award the contract or contracts in the best interests of the Water Supply Board.

**GROUP 4 - COUPLINGS, CLAMPS, and SADDLES**

Bid Item	Description	Quantity	Unit Price		UOM	Total Price	Material Uid	Vendor Part#
<b>Coupling, Smith-Blair #411 with stainless steel hardware</b>								
4.01.1	COUPLING, 1/2" #411 COMPRESSION (BLUE)	10		per	EACH		659-033-00021	
4.01.2	COUPLING, 3/4" #411 COMPRESSION (BLUE)	30		per	EACH		659-033-00022	
4.01.3	COUPLING, 1" #411 COMPRESSION (BLUE)	150		per	EACH		659-033-00023	
4.01.4	COUPLING, 1-1/2" #411 COMPRESSION (BLUE)	20		per	EACH		659-033-00025	
4.01.5	COUPLING, 2" #411 COMPRESSION (BLUE)	30		per	EACH		659-033-00026	
<b>Stainless Steel Repair Clamp, Smith-Blair #261 with stainless steel hardware</b>								
4.02.1	CLAMP, 2" x 10" REPAIR (RANGE 2.35-2.63)	6		per	EACH		670-052-00011	
4.02.2	CLAMP, 4" x 15" REPAIR (RANGE 4.80-5.00)	8		per	EACH		670-052-00013	
4.02.3	CLAMP, 6" x 15" REPAIR (RANGE 6.84-7.24)	50		per	EACH		670-052-00014	
4.02.4	CLAMP, 8" x 15" REPAIR (RANGE 9.05-9.30)	40		per	EACH		670-052-00015	
4.02.5	CLAMP, 10" x 15" REPAIR (RANGE 11.10-11.60)	4		per	EACH		670-052-00047	
4.02.6	CLAMP, 12" x 15" REPAIR (RANGE 13.20-13.50)	12		per	EACH		670-052-00018	
<b>Stainless Steel Service Saddle, Smith-Blair #317 with stainless steel hardware, CC tap</b>								
4.03.1	SADDLE, SERVICE 4" x 2" (RANGE 4.80 5.00)	4		per	EACH		659-073-00001	
4.03.2	SADDLE, SERVICE 6" x 2" (RANGE 6.90-7.10)	10		per	EACH		659-073-00002	
4.03.3	SADDLE, SERVICE 8" x 2" (RANGE 9.05 9.30)	16		per	EACH		659-073-00003	
4.03.4	SADDLE, SERVICE 10" x 2" (RANGE 11.10 11.40)	4		per	EACH		659-073-00004	
4.03.5	SADDLE, SERVICE 12" x 2" (RANGE 13.20 13.50)	10		per	EACH		659-073-00005	

**GROUP 4 - COUPLINGS, CLAMPS, and SADDLES**

Bid Item	Description	Quantity	Unit Price		UOM	Total Price	Material Uid	Vendor Part#
4.03.6	SADDLE, SERVICE 16" x 2" (RANGE 17.40 17.80)	4		per	EACH		659-073-00013	
4.03.7	SADDLE, SERVICE 20" x 2" (RANGE 21.60 22.06)	4		per	EACH		659-073-00014	
4.03.8	SADDLE, SERVICE 24" x 2" (RANGE 25.80 - 26.32)	4		per	EACH		659-073-00015	
<b>Repair Service Saddle, Smith-Blair #331 with stainless steel hardware, CC tap.</b>								
4.04.1	SADDLE, SERVICE REPAIR 4" x 1" (RANGE 4.80-5.00)	10		per	EACH		659-073-00061	
4.04.2	SADDLE, SERVICE REPAIR 6" x 1" (RANGE 6.90 7.10)	12		per	EACH		659-073-00008	
4.04.3	SADDLE, SERVICE REPAIR 8" x 1" (RANGE 9.05 9.30)	12		per	EACH		659-073-00010	
4.04.4	SADDLE, SERVICE REPAIR 10" x 1" (RANGE 10.64 12.12)	4		per	EACH		659-073-00052	
4.04.5	SADDLE, SERVICE REPAIR 12" x 1" (RANGE 13.20 13.50)	10		per	EACH		659-073-00011	
4.04.6	SADDLE, SERVICE REPAIR 12" x 2" (RANGE 13.20 13.50)	10		per	EACH		659-073-00012	
<b>Coupling, Smith-Blair #441 with stainless steel hardware</b>								
4.05.1	COUPLING, 4" #441 LR (RANGE 4.80-5.10)	4		per	EACH		659-033-00031	
4.05.2	COUPLING, 6" #441 LR (RANGE 6.90-7.22)	150		per	EACH		659-033-00032	
4.05.3	COUPLING, 8" #441 LR (RANGE 9.05-9.30)	120		per	EACH		659-033-00033	
4.05.4	COUPLING, 10" #441 LR (RANGE 11.10-11.40)	6		per	EACH		659-033-00034	
4.05.5	COUPLING, 12" #441 LR (RANGE 13.20-13.50)	30		per	EACH		659-033-00035	
<b>Hymax-2000 Wide Range Coupling</b>								
4.06.1	COUPLING, 4" HYMAX, (RANGE 4.25 to 5.63)	10		per	EACH		659-033-00047	
4.06.2	COUPLING, 6" HYMAX, (RANGE 6.42 to 7.68)	10		per	EACH		659-033-00051	

**GROUP 4 - COUPLINGS, CLAMPS, and SADDLES**

<b>Bid Item</b>	<b>Description</b>	<b>Quantity</b>	<b>Unit Price</b>		<b>UOM</b>	<b>Total Price</b>	<b>Material Uid</b>	<b>Vendor Part#</b>
4.06.3	COUPLING, 8" HYMAX, (RANGE 8.54 to 9.84)	10		per	EACH		659-033-00052	
4.06.4	COUPLING, 10" HYMAX, (RANGE 10.70 to 12.00)	10		per	EACH		659-033-00074	
4.06.5	COUPLING, 12" HYMAX, (RANGE 13.15 to 14.41)	10		per	EACH		659-033-00068	
4.06.6	COUPLING, 16" HYMAX, (RANGE 17.10 to 19.20)	4		per	EACH		659-033-00069	
4.06.7	COUPLING, 20" HYMAX, (RANGE 21.50 to 23.60)	4		per	EACH		659-033-00067	
4.06.8	COUPLING, 24" HYMAX, (RANGE 24.60 to 26.70)	4		per	EACH		659-033-00059	
<b>Transition Coupling, Smith-Blair #413 with stainless steel hardware</b>								
4.07.1	COUPLING, 16" #413 TRANS. (RANGE 17.40-17.80)	8		per	EACH		659-033-00036	
4.07.2	COUPLING, 20" #413 TRANS. (RANGE 21.60-22.06)	8		per	EACH		659-033-00037	
4.07.3	COUPLING, 24" #413 TRANS. (RANGE 25.80- 26.32)	8		per	EACH		659-033-00038	
4.07.4	COUPLING, 36" #413 TRANS. (RANGE 36.00-38.30)	2		per	EACH		659-033-00039	
<b>Full Circle, single band, service repair clamp with CC-threads outlet, Smith-Blair #238 with stainless steel hardware</b>								
4.08.1	CLAMP, 6" x 15" x 1" SERVICE REPAIR (RANGE 6.84-7.24)	10		per	EACH		670-052-00008	
4.08.2	CLAMP, 8" x 15" x 1" SERVICE REPAIR (RANGE 8.99-9.39)	10		per	EACH		670-052-00040	
4.08.3	CLAMP, 10" x 15" x 1" SERVICE REPAIR (RANGE 11.04-11.44)	2		per	EACH		670-052-00041	
4.08.4	CLAMP, 12" x 15" x 1" SERVICE REPAIR (RANGE 13.1-13.5)	8		per	EACH		670-052-00012	
4.08.5	CLAMP, 6" x 15" x 2" SERVICE REPAIR (RANGE 6.84-7.24)	6		per	EACH		670-052-00039	
4.08.6	CLAMP, 8" x 15" x 2" SERVICE REPAIR (RANGE 8.99-9.39)	6		per	EACH		670-052-00054	
4.08.7	CLAMP, 10" x 15" x 2" SERVICE REPAIR (RANGE 11.04-11.44)	6		per	EACH		670-052-00055	



**GROUP 4 - COUPLINGS, CLAMPS, and SADDLES**

Bid Item	Description	Quantity	Unit Price		UOM	Total Price	Material Uid	Vendor Part#
4.08.8	CLAMP, 12" x 15" x 2" SERVICE REPAIR (RANGE 13.10-13.50)	6		per	EACH		670-052-00056	
<b>Anti-Rotation Bolts (high strength low alloy steel). Square-profile shank at the tee-head. NOT REQUIRED ON WORK ORDERS</b>								
4.9.1	BOLT, TEE, 3/4" x 3-1/2" ANTI-ROTATION	100		per	EACH		320-022-00005	
4.9.2	BOLT, TEE, 3/4" x 4" ANTI-ROTATION	100		per	EACH		320-022-00006	
<b>PVC to PVC Pipe Coupling, Fernco 1056-</b>								
4.10.1	COUPLING, 4" PVC -- 4" PVC FERNCO	40		per	EACH		658-031-00003	
4.10.2	COUPLING, 6" PVC -- 6" PVC FERNCO	40		per	EACH		658-031-00004	
4.10.3	COUPLING, 8" PVC -- 8" PVC FERNCO	40		per	EACH		658-031-00005	
4.10.4	COUPLING, 10" PVC -- 10" PVC FERNCO	20		per	EACH		658-031-00006	
4.10.5	COUPLING, 12" PVC -- 12" PVC FERNCO	20		per	EACH		658-031-00007	
<b>Clay Pipe to PVC Pipe Coupling, Fernco 1002-</b>								
4.11.1	COUPLING, 4" CLAY -- 4" PVC FERNCO	40		per	EACH		658-031-00008	
4.11.2	COUPLING, 6" CLAY -- 6" PVC FERNCO	40		per	EACH		658-031-00009	
4.11.3	COUPLING, 8" CLAY -- 8" PVC FERNCO	40		per	EACH		658-031-00010	
4.11.4	COUPLING, 10" CLAY -- 12" PVC FERNCO	40		per	EACH		658-031-00017	
4.11.5	COUPLING, 12" CLAY -- 12" PVC FERNCO	40		per	EACH		658-031-00012	
<b>Bell Joint Leak Clamp, Smith-Blair #274, for CI and DI</b>								
4.12.1	CLAMP, 4" BELL JOINT LEAK, O.D. Range 4.80-5.00	6		per	EACH		670-052-00046	
4.12.2	CLAMP, 6" BELL JOINT LEAK, O.D. Range 6.90-7.10	6		per	EACH		670-052-00022	

**GROUP 4 - COUPLINGS, CLAMPS, and SADDLES**

<b>Bid Item</b>	<b>Description</b>	<b>Quantity</b>	<b>Unit Price</b>		<b>UOM</b>	<b>Total Price</b>	<b>Material Uid</b>	<b>Vendor Part#</b>
4.12.3	CLAMP, 8" BELL JOINT LEAK, O.D. Range 9.05-9.30	6		per	EACH		670-052-00023	
4.12.4	CLAMP, 10" BELL JOINT LEAK, O.D. Range 11.10-11.40	6		per	EACH		670-052-00024	
4.12.5	CLAMP, 12" BELL JOINT LEAK, O.D. Range 13.20-13.50	6		per	EACH		670-052-00025	
4.12.6	CLAMP, 16" BELL JOINT LEAK, O.D. Range 17.40-17.80	6		per	EACH		670-052-00026	
4.12.7	CLAMP, 20" BELL JOINT LEAK, O.D. Range 21.60-22.06	6		per	EACH		670-052-00027	
4.12.8	CLAMP, 24" BELL JOINT LEAK, O.D. Range 25.80-26.32	6		per	EACH		670-052-00028	
4.12.9	CLAMP, 36" BELL JOINT LEAK, O.D. Range 37.96-38.70	2		per	EACH		670-052-00030	

**GROUP 5 – Valves, Valve Parts, Tapping Sleeves**

Total Bid Price in Words \_\_\_\_\_

Total Bid Price in Figures \_\_\_\_\_

Delivery Time \_\_\_\_\_

Name of Bidder and Title (Type or Print) \_\_\_\_\_

Signature \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

Telephone Number and Extension \_\_\_\_\_

NOTE: The price bid shall be written in words and figures. In case of a discrepancy between writing and figures, the writing will prevail. Unit price will prevail if there is a discrepancy between the unit price and extended price. The bidder understands that the Water Supply Board reserves the right to reject any and or all bids to award the contract or contracts in the best interests of the Water Supply Board.

**GROUP 5 - VALVES, VALVE PARTS, TAPPING**

Bid Item	Description	Quantity	Unit Price		UOM	Total Price	Material Uid	Vendor Part#
<b>Resilient Wedge Gate Valves, MJ x MJ, <u>Open Right</u> (Mueller A-2361-23, or equal), no accessories</b>								
5.01.1	VALVE, 4" GATE	10		per	EACH		670-069-00019	
5.01.2	VALVE, 6" GATE	30		per	EACH		670-069-00020	
5.01.3	VALVE, 8" GATE	30		per	EACH		670-069-00021	
5.01.4	VALVE, 10" GATE	4		per	EACH		670-069-00022	
5.01.5	VALVE, 12" GATE	10		per	EACH		670-069-00023	
<b>Butterfly Valves (Class 150B service), MJ x MJ, Open Right (Mueller Lineseal III, or equal).</b>								
5.02.1	VALVE, 16" BUTTERFLY, WITH ACCESSORIES	2		per	EACH		670-069-00033	
5.02.2	VALVE, 20" BUTTERFLY, WITH ACCESSORIES	2		per	EACH		670-069-00029	
5.02.3	VALVE, 24" BUTTERFLY, WITH ACCESSORIES	2		per	EACH		670-069-00039	
<b>Two-inch gate valve operating nut, red, open right, Mueller Part No. G-38.</b>								
5.03.1	NUT, 2" VALVE OPER. FOR 4" - 8" VALVES	2		per	EACH		670-069-00024	
5.03.2	NUT, 2" VALVE OPER FOR 10"-24" VALVES	2		per	EACH		670-069-00025	
<b>Mechanical Joint Gasket for valves &amp; fittings, AWWA C111.</b>								
5.04.1	GASKET, MECHANICAL JOINT 4"	4		per	EACH		659-044-00006	
5.04.2	GASKET, MECHANICAL JOINT 6"	20		per	EACH		659-044-00009	
5.04.3	GASKET, MECHANICAL JOINT 8"	20		per	EACH		659-044-00043	
5.04.4	GASKET, MECHANICAL JOINT 10"	8		per	EACH		659-044-00092	
5.04.5	GASKET, MECHANICAL JOINT 12"	12		per	EACH		659-044-00045	

**GROUP 5 - VALVES, VALVE PARTS, TAPPING**

Bid Item	Description	Quantity	Unit Price		UOM	Total Price	Material Uid	Vendor Part#
5.04.6	GASKET, MECHANICAL JOINT 16"	4		per	EACH		659-044-00080	
5.04.7	GASKET, MECHANICAL JOINT 20"	4		per	EACH		659-044-00084	
5.04.8	GASKET, MECHANICAL JOINT 24"	4		per	EACH		659-044-00085	
<b>Fabricated Stainless Steel Tapping Sleeve, 6" and larger, Smith-Blair Model 664, AWWA C223.</b>								
O. D. Ranges: 6" - 6.90 to 7.10      8" - 9.05 to 9.30      10" - 11.10 to 11.40      12" - 13.20 to 13.50 16" - 17.40 to 17.80      20" - 21.60 to 22.06      24" - 25.80 to 26.32								
5.05.01	TAPPING SLEEVE, 6" x 4" STAINLESS	8		per	EACH		659-073-00028	
5.05.02	TAPPING SLEEVE, 6" X 6" STAINLESS	8		per	EACH		659-073-00026	
5.05.03	TAPPING SLEEVE, 8" X 4" STAINLESS	8		per	EACH		659-073-00025	
5.05.04	TAPPING SLEEVE, 8" X 6" STAINLESS	8		per	EACH		659-073-00030	
5.05.05	TAPPING SLEEVE, 8" X 8" STAINLESS	4		per	EACH		659-073-00063	
5.05.06	TAPPING SLEEVE, 10" X 4" STAINLESS	1		per	EACH		659-073-00059	
5.05.07	TAPPING SLEEVE, 10" X 6" STAINLESS	1		per	EACH		659-073-00060	
5.05.08	TAPPING SLEEVE, 10" x 8" STAINLESS	1		per	EACH		659-073-00047	
5.05.09	TAPPING SLEEVE, 10" X 10" STAINLESS	1		per	EACH		659-073-00076	
5.05.10	TAPPING SLEEVE, 12" X 4" STAINLESS	8		per	EACH		659-073-00062	
5.05.11	TAPPING SLEEVE, 12" X 6" STAINLESS	8		per	EACH		659-073-00027	
5.05.12	TAPPING SLEEVE, 12" x 8" STAINLESS	4		per	EACH		659-073-00041	
5.05.13	TAPPING SLEEVE, 12" X 10" STAINLESS	1		per	EACH		659-073-00077	
5.05.14	TAPPING SLEEVE, 12" X 12" STAINLESS	1		per	EACH		659-073-00090	

**GROUP 5 - VALVES, VALVE PARTS, TAPPING**

Bid Item	Description	Quantity	Unit Price		UOM	Total Price	Material Uid	Vendor Part#
5.05.15	TAPPING SLEEVE, 16" x 4" STAINLESS	2		per	EACH		659-073-00039	
5.05.16	TAPPING SLEEVE, 16" x 6" STAINLESS	2		per	EACH		659-073-00032	
5.05.17	TAPPING SLEEVE, 16" X 8" STAINLESS	2		per	EACH		659-073-00048	
5.05.18	TAPPING SLEEVE, 16" X 10" STAINLESS	2		per	EACH		659-073-00078	
5.05.19	TAPPING SLEEVE, 16" X 12" STAINLESS	2		per	EACH		659-073-00091	
5.05.20	TAPPING SLEEVE, 20" X 4" STAINLESS	2		per	EACH		659-073-00049	
5.05.21	TAPPING SLEEVE, 20" X 6" STAINLESS	2		per	EACH		659-073-00050	
5.05.22	TAPPING SLEEVE, 20" X 8" STAINLESS	2		per	EACH		659-073-00067	
5.05.23	TAPPING SLEEVE, 20" X 10" STAINLESS	2		per	EACH		659-073-00079	
5.05.24	TAPPING SLEEVE, 20" X 12" STAINLESS	2		per	EACH		659-073-00092	
5.05.25	TAPPING SLEEVE, 24" X 4" STAINLESS	2		per	EACH		659-073-00066	
5.05.26	TAPPING SLEEVE, 24" X 6" STAINLESS	2		per	EACH		659-073-00068	
5.05.27	TAPPING SLEEVE, 24" X 8" STAINLESS	2		per	EACH		659-073-00070	
5.05.28	TAPPING SLEEVE, 24" X 10" STAINLESS	2		per	EACH		659-073-00080	
5.05.29	TAPPING SLEEVE, 24" X 12" STAINLESS	2		per	EACH		659-073-00093	
<b>Tapping Valve (res. seat), Flange x MJ, Open Right, with regular and transitional gaskets. (Mueller T-2361-16, or equal).</b>								
5.06.1	VALVE, 4" TAPPING	30		per	EACH		670-069-00015	
5.06.2	VALVE, 6" TAPPING	30		per	EACH		670-069-00016	
5.06.3	VALVE, 8" TAPPING	10		per	EACH		670-069-00017	
5.06.4	VALVE, 10" TAPPING	1		per	EACH		670-069-00026	

**GROUP 5 - VALVES, VALVE PARTS, TAPPING**

Bid Item	Description	Quantity	Unit Price		UOM	Total Price	Material Uid	Vendor Part#
5.06.5	VALVE, 12" TAPPING	1		per	EACH		670-069-00018	
<b>Flange gaskets, full face. 1/8 - inch thickness, red rubber (ASTM D1330), ANSI B16.1, Class 125.</b>								
5.07.1	GASKET, 4" FLANGE	12		per	EACH		670-069-00046	
5.07.2	GASKET, 6" FLANGE	12		per	EACH		670-069-00037	
5.07.3	GASKET, 8" FLANGE	12		per	EACH		670-069-00043	
5.07.4	GASKET, 12" FLANGE	10		per	EACH		670-069-00047	
<b>Road Valve Box, complete, 2-piece telescoping type, range 36" to 60", with cover marked "WATER". cast iron</b>								
5.08.1	ROAD VALVE BOX 5-1/4" 2-PC. W/COVER (36"-60")	120		per	EACH		659-047-00018	
<b>Road Valve Box, top section only, with cover marked "WATER". cast iron</b>								
5.09.1	ROAD VALVE BOX TOP SECTION WITH COVER	80		per	EACH		659-047-00023	
<b>Road Valve Box Riser (fixed) for 5-1/4" telescoping type. cast iron</b>								
5.10.1	RISER, 1" ROAD BOX	80		per	EACH		659-047-00012	
5.10.2	RISER, 1-1/2" ROAD BOX	80		per	EACH		659-047-00013	
5.10.3	RISER, 2" ROAD BOX	80		per	EACH		659-047-00014	
5.10.4	RISER, 3" ROAD BOX	80		per	EACH		659-047-00015	
5.10.5	RISER, 4" ROAD BOX	20		per	EACH		659-047-00016	
5.10.6	RISER, 6" ROAD BOX	20		per	EACH		659-047-00017	
5.10.7	RISER, 12" ROAD BOX	20		per	EACH		659-047-00024	
5.10.8	RISER, 18" ROAD BOX	8		per	EACH		659-047-00025	

**GROUP 5 - VALVES, VALVE PARTS, TAPPING**

Bid Item	Description	Quantity	Unit Price		UOM	Total Price	Material Uid	Vendor Part#
5.10.9	RISER, 24" ROAD BOX	8		per	EACH		659-047-00026	
<b>Cover marked "WATER" for 5-1/4" road valve box. cast iron</b>								
5.11.1	COVER, 5-1/4" ROAD BOX, "WATER"	120		per	EACH		659-047-00019	
<b>Posi cap for centering 5-1/4" road valve box. black plastic</b>								
5.12.1	POSI CAP	120		per	EACH		340-060-00051	
<b>In Fact Corp. polypropylene Mud Plug 4" x 6-3/8" for road box.</b>								
5.13.1	PLUG, MUD FOR VALVE BOX	40		per	EACH		659-044-00046	
<b>Heavy Wall Steel Tubing Gate Wrench, 2" operating nut, 6' length. 24" handle</b>								
5.14.1	GATE WRENCH	12		per	EACH		340-060-00052	
<b>Heavy Duty Square Tube Telescoping Gate Wrench, 2" operating nut, 6'-10' length.</b>								
5.15.1	TELESCOPING GATE WRENCH	4		per	EACH		340-060-00053	
<b>Valve Box Cleaner, clam digger style, high strength mud &amp; sand clam blade, for road box, 6' length.</b>								
5.16.1	CLAM DIGGER	8		per	EACH		340-060-00054	
<b>Valve Box Cleaner, high strength mud &amp; sand clam replacement blade kit.</b>								
5.17.1	REPLACEMENT BLADE KIT	20		per	EACH		340-060-00055	
<b>Blue Screw, 5'-8" x 4.5", Road Box Cleaner for road box, with magnets, 6' length.</b>								
5.18.1	BLUE SCREW	8		per	EACH		340-060-00056	
<b>Rounded Nut Gator Grip Gate Wrench, 2" operating nut, 6' length.</b>								
5.19.1	GATOR GRIP GATE WRENCH	4		per	EACH		340-060-00057	



**GROUP 6 – Meters, Meter Couplings and Cable**

Total Bid Price in Words \_\_\_\_\_

Total Bid Price in Figures \_\_\_\_\_

Delivery Time \_\_\_\_\_

Name of Bidder and Title (Type or Print) \_\_\_\_\_

Signature \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

Telephone Number and Extension \_\_\_\_\_

NOTE: The price bid shall be written in words and figures. In case of a discrepancy between writing and figures, the writing will prevail. Unit price will prevail if there is a discrepancy between the unit price and extended price. The bidder understands that the Water Supply Board reserves the right to reject any and or all bids to award the contract or contracts in the best interests of the Water Supply Board.

**GROUP 6 - METER MATERIALS**

Bid Item	Description	Quantity	Unit Price		UOM	Total Price	Material Uid	Vendor Part#
<b>Water Meter (Ultrasonic), Cold; w/Electronic Register per specifications</b>								
6.1.1	5/8" METER	500		per	EACH		890-044-00038	
6.1.2	3/4" METER	200		per	EACH		890-044-00039	
6.1.3	1" METER	100		per	EACH		890-044-00040	
6.1.4	1-1/2" SCREW END	5		per	EACH		n/a	
6.1.5	1-1/2" FLANGE END	10		per	EACH		890-044-00041	
6.1.6	2" SCREW END	5		per	EACH		n/a	
6.1.7	2" FLANGE END	10		per	EACH		890-044-00042	
<b>COUPLINGS, WATER METER, COLD; "NO LEAD" BRASS WITH INTEGRAL SEAL HOLE</b>								
6.2.1	5/8" METER	500		per	EACH		890-045-00003	
6.2.2	3/4" METER	100		per	EACH		890-045-00004	
6.2.3	1" METER	50		per	EACH		890-045-00005	
6.2.4	1-1/2" SCREW END	6		per	EACH		890-045-00007	
6.2.5	1-1/2" FLANGE END	10		per	EACH		890-045-00006	
6.2.6	2" SCREW END	6		per	EACH		890-045-00009	
6.2.7	2" FLANGE END	10		per	EACH		890-045-00008	
<b>ELECTRONIC E-CODER REGISTER PER SPECIFICATION</b>								
6.3.1	5/8" REGISTER	100		per	EACH		890-044-00023	

**GROUP 6 - METER MATERIALS**

Bid Item	Description	Quantity	Unit Price		UOM	Total Price	Material Uid	Vendor Part#
6.3.2	3/4" REGISTER	100		per	EACH		890-044-00026	
6.3.3	1" REGISTER	50		per	EACH		890-044-00024	
6.3.4	1-1/2" REGISTER	25		per	EACH		890-044-00022	
6.3.5	2" REGISTER	25		per	EACH		890-044-00025	
<b>RF METER INTERFACE UNIT (MIU)</b>								
6.4.1	MIU	1000		per	EACH		890-045-00028	
<b>DIRECT MOUNT KIT FOR RF METER INTERFACE UNIT (MIU)</b>								
6.7.1	MOUNT KIT MIU	100		per	EACH		890-045-00027	
<b>CABLE, COLD WATER METER REGISTER/RECEPTACLE; 3-WIRE CABLE FOR INTER. BETWEEN REGISTER AND RECEPTACLE, 1,000 FT ROLLS</b>								
6.6.1	CABLE	60		per	ROLL		890-045-00026	
<b>LEATHER WASHERS FOR 5/8" THRU 1" WATER METER COUPLINGS, 1/8" THICKNESS, 100 WASHERS PER BAG</b>								
6.7.1	5/8" WASHERS	120		per	BAG		890-045-00050	
6.7.2	3/4" WASHERS	15		per	BAG		890-045-00051	
6.7.3	1" WASHERS	15		per	BAG		890-045-00052	
<b>FULL FACE FLANGE RUBBER GASKET FOR 1-1/2" &amp; 2" FLANGE END METERS, 1/8" THICKNESS</b>								
6.8.1	1-1/2" GASKET	100		per	EACH		890-045-00053	
6.8.2	2" GASKET	100		per	EACH		890-045-00054	
<b>FLANGE BOLT AND NUT PACK FOR 1-1/2" &amp; 2" FLG END METERS (FOUR-5/8"x2-1/2" HEAVY HEX HEAD NUTS AND BOLTS, ZINC PLATED</b>								

**GROUP 6 - METER MATERIALS**

<b>Bid Item</b>	<b>Description</b>	<b>Quantity</b>	<b>Unit Price</b>		<b>UOM</b>	<b>Total Price</b>	<b>Material Uid</b>	<b>Vendor Part#</b>
6.9.1	1-1/2" BOLT AND NUT PACK	100		per	EACH		890-045-00055	
6.9.2	2" BOLT AND NUT PACK	100		per	EACH		890-045-00056	
<b>LEAD SEAL WITH 18' LENGTH OF 3 PLY #25 WIRE ATTACHED 7/16" LEAD SEAL (100 PACK BAG)</b>								
6.10.1	LEAD SEAL	25		per	BAG		890-045-00043	

**ANTI-KICKBACK ACKNOWLEDGMENT**

**ALL BIDDERS/OFFERORS MUST ATTEST TO THE FOLLOWING:**

The vendor acknowledges, under the pains and penalties of perjury, that he/she has not been offered, paid, or solicited for any contribution or compensation, nor has he/she been granted a gift, gratuity, or other consideration, either directly or indirectly by any officer, employee or member of the governing body of the City of Pawtucket who exercises any functions or responsibilities in connection with either the award or execution of the project to which this contract pertains.

Further, the vendor acknowledges, under the pains and penalties of perjury, that he/she has not offered, paid, or solicited by way of any contribution or compensation, nor has he/she granted a gift, gratuity or other consideration either directly or indirectly to any officer, employee, or member of the governing body of the City of Pawtucket who exercises any functions or responsibilities in connection with either the award or execution of the project to which this project or contract pertains.

\_\_\_\_\_  
SIGNATURE OF OFFEROR

\_\_\_\_\_  
DATE

\_\_\_\_\_  
TITLE

\_\_\_\_\_  
COMPANY

Title of RFP or Bid:

Water Works Materials and Other Supplies  
\_\_\_\_\_

# Appendix B

## CITY OF PAWTUCKET GENERAL TERMS AND CONDITIONS OF PURCHASE

### *Preamble*

The City of Pawtucket's Purchasing Office may, from time to time, make amendments to the General Terms and Conditions when the City of Pawtucket's Purchasing Agent determines that such amendments are in the best interest of the City of Pawtucket. Amendments shall be made available for public inspection at the Purchasing Office located in Pawtucket City Hall but shall not require formal public notice and hearing. Copies of the Terms and Conditions shall be provided to any individual or firm requesting them. The words "City of Pawtucket" when used, shall also mean the Pawtucket Water Supply Board acting through its Chairman.

### **CITY OF PAWTUCKET'S PURCHASING OFFICE GENERAL CONDITIONS OF PURCHASE**

All City of Pawtucket purchase orders, contracts, solicitations, delivery orders and service requests shall incorporate and be subject to the provisions of Rhode Island General Laws 8-15-4 and the City of Pawtucket purchasing rules and regulations adopted pursuant thereto, all other applicable provisions of the Rhode Island General Laws, the Pawtucket City Charter, specific requirements described in the Request or Contract, and the following General Conditions of Purchase:

#### 1. GENERAL

All purchase orders, contracts, solicitations, delivery orders, and service requests are for specified goods and services, in accordance with express terms and conditions of purchase, as defined herein. For the purposes of this document, the terms "bidder" and "contractor" refer to any individual, firm, corporation, or other entity presenting a proposal indicating a desire to enter into contracts with the City of Pawtucket, or with whom a contract is executed by the City of Pawtucket's Purchasing Agent, and the term "contractor" shall have the same meaning as "vendor".

#### 2. ENTIRE AGREEMENT

The City of Pawtucket's Purchase Order, or other City of Pawtucket contract endorsed by the City of Pawtucket Purchasing Office, shall constitute the entire and exclusive agreement between the City of Pawtucket and any contractor receiving an award. In the event any conflict between the bidder's standard terms of sale, these conditions or more specific provisions contained in the solicitation shall govern.

All communication between the City of Pawtucket and any contractor pertaining to any award or contract shall be accomplished in writing.

- a. Each proposal will be received with the understanding that the acceptance, in writing, by contract or Purchase Order by the City of Pawtucket Purchasing Agent of the offer to do work or to furnish any or all the materials, equipment, supplies or services described therein shall constitute a contract between the bidder and the City of Pawtucket. This shall bind the bidder on his part to furnish and deliver at the prices and in accordance with the conditions of said accepted proposal and detailed specifications and the City of Pawtucket on its part to order from such contractor (except in case of emergency) and to pay for at the agreed prices, all materials, equipment, supplies or services specified and delivered. A contract shall be deemed executory only to the extent of funds available for payment of the amounts shown on Purchase Orders issued by the City of Pawtucket to the contractors.
- b. No alterations or variations of the terms of the contract shall be valid or binding upon the City of Pawtucket unless submitted in writing and accepted by the City of Pawtucket Purchasing Agent. All orders and changes thereof must emanate from the City of Pawtucket Purchasing Office: no oral agreement or arrangement made by a contractor with a department or employee will be considered to be binding on the City of Pawtucket Purchasing Agent, and may be disregarded.
- c. Contracts will remain in force for the contract period specified or until all articles or services ordered before date of termination shall have been satisfactorily delivered or rendered and accepted and thereafter until all terms and conditions have been met, unless:
  1. terminated prior to expiration date by satisfactory delivery against orders of entire quantities, or
  2. extended upon written authorization of the City of Pawtucket Purchasing Agent and accepted by the contractor, to permit ordering of the unordered balances or additional quantities at the contract price and in accordance with the contract terms, or
  3. canceled by the City of Pawtucket in accordance with other provisions stated herein.
- d. It is mutually understood and agreed that the contractor shall not assign, transfer, convey, sublet or otherwise dispose of this contract or his right, title or interest therein, or his power to execute such contract, to any other person, company or corporation, without the previous consent, in writing, of the City of Pawtucket Purchasing Agent.

- e. If, subsequent to the submission of an offer or issuance of a purchase order or execution of a contract, the bidder or contractor shall merge with or be acquired by another entity, the contract may be terminated, except as a corporate resolution prepared by the contractor and the new entity ratifying acceptance of the original bid or contract terms, condition, and pricing is submitted to the City of Pawtucket Purchasing Office, and expressly accepted.
- f. The contractor or bidder further warrants by submission of an offer or acceptance of a purchase order or other contract that he has no knowledge at the time of such action of any outstanding and delinquent or otherwise unsettled debt owed by him to the City of Pawtucket, and agrees that later discovery by the City of Pawtucket Purchasing Agent that this warranty was given in spite of such knowledge, except where the matter is pending in hearing or from any appeal therefrom, shall form reasonable grounds for termination of the contract.

3. SUBCONTRACTS

No subcontracts or collateral agreements shall be permitted, except with the City of Pawtucket's express written consent. Upon request, contractors must submit to the City of Pawtucket Purchasing Office a list of all subcontractors to be employed in the performance of any Purchase Order or other contract arising from this Request.

4. RELATIONSHIP OF PARTIES

The contractor or bidder warrants, by submission of an offer or acceptance of a purchase order or other contract, that he is not an employee, agent, or servant of the City of Pawtucket, and that he is fully qualified and capable in all material regards to provide the specified goods and services. Nothing herein shall be construed as creating any contractual relationship or obligation between the City of Pawtucket and any sub-bidder, subcontractor, supplier, or employee of the contractor or offeror.

5. COSTS OF PREPARATION

All costs associated with the preparation, development, or submission of bids or other offers will be borne by the offeror. The City of Pawtucket will not reimburse any offeror for such costs.

6. SPECIFIED QUANTITY REQUIREMENT

Except where expressly specified to the contrary, all solicitations and contracts are predicated on a specified quantity of goods or services, or for a specified level of funding.

- a. The City of Pawtucket reserves the right to modify the quantity, scope of service, date of delivery or completion, or funding of any contract, with no penalty or charge, by written notice to the contractor, except where alternate terms have been expressly made a part of the contract.
- b. The City of Pawtucket shall not accept quantities in excess of the specified quantity except where the item is normally sold by weight (where sold by weight, the City of Pawtucket will not accept quantities greater than ten per cent [10%] of the specified quantity), or where the Request or Contract provides for awards for other than exact quantities.
- c. Purchase Orders or other contracts may be increased in quantity or extended in term without subsequent solicit with the mutual consent of the contractor and the City of Pawtucket, where determined by the City of Pawtucket Purchasing Agent to be in the City of Pawtucket's best interest.

7. TERM AND RENEWAL

Where offers have been requested or contracts awarded for terms exceeding periods of twelve (12) months, it is mutually understood and agreed that the City of Pawtucket's commitment is limited to a base term not to exceed twelve (12) months, subject to renewal annually at the City of Pawtucket's sole option for successive terms as otherwise described, except where expressly specified to the contrary. Purchase orders appearing to commit to obligations of funding or terms of performance may be executed for administrative convenience, but are otherwise subject to this provision, and in such cases the City of Pawtucket's renewal shall be deemed to be automatic, conditional on the continued availability of appropriated funds for the purpose, except as written notice of the City of Pawtucket's intent not to renew is served.

8. DELIVERY/COMPLETION

Delivery must be made as ordered and/or projects completed in accordance with the proposal. If delivery qualifications do not appear on the bidder's proposal, it will be interpreted to mean that goods are in stock and that shipment will be made within seven (7) calendar days. If the project completion date is not specified in the proposal, the date shall be determined by the City of Pawtucket Purchasing Agent. The decision of the City of Pawtucket Purchasing Agent, as to reasonable compliance with the delivery terms, and date of completion shall be final. Burden

of proof of delay in receipt of order shall rest with the contractor. No delivery charges shall be added to invoices except when authorized on the Purchase Order.

9. FOREIGN CORPORATIONS

In accordance with Title 7 Chapter 1.1 ("Business Corporations") of the General Laws of Rhode Island, no foreign corporation shall have the right to transact business in this state until it shall have procured a certificate of authority so to do from the Secretary of State.

10. PRICING

All pricing offered or extended to the City of Pawtucket is considered to be firm and fixed unless expressly provided for to the contrary. All prices shall be quoted F.O.B. Destination with freight costs included in the unit cost to be paid by the City of Pawtucket, except, where the Request or Contract permits, offers reflecting F.O.B. Shipping Point will be considered, and freight costs may then be prepaid and added to the invoice.

11. COLLUSION

Bidder or contractor warrants that he has not, directly or indirectly, entered into any agree participated in any collusion or otherwise taken any action in restraint of full competitive bidding. In special circumstances, an executed affidavit will be required as a part of the bid.

12. PROHIBITION AGAINST CONTINGENT FEES AND GRATUITIES

Bidder or contractor warrants that he has not paid, and agrees not to pay, any bonus, commission, fee, or gratuity to any employee or official of the City of Pawtucket for the purpose of obtaining any contract or award issued by the City of Pawtucket. Bidder or contractor further warrants that no commission or other payment has been or will be received from or paid to any third party contingent on the award of any contract by the City of Pawtucket, except as shall have been expressly communicated to the City of Pawtucket Purchasing Agent in writing prior to acceptance of the contract or award in question. Subsequent discovery by the City of Pawtucket of non-compliance with these provisions shall constitute sufficient cause for immediate termination of all outstanding contracts and suspension or debarment of the bidder(s) or contractor(s) involved.

13. AWARDS

Awards will be made with reasonable promptness and by written notice to the successful bidder (only); bids are considered to be irrevocable for a period of ninety (90) days following the bid opening unless expressly provided for to the contrary in the Request, and may not be withdrawn during this period without the express permission of the City of Pawtucket Purchasing Agent.

- a. Awards shall be made to the bidder(s) whose offer(s) constitutes the lowest responsive price offer (or lowest responsive price offer on an evaluated basis) for the item(s) in question or for the Request as a whole, at the option of the City of Pawtucket. The City of Pawtucket reserves the right to determine those offers which are responsive to the Request, or which otherwise serve its best interests.
- b. The City of Pawtucket reserves the right, before making award, to initiate investigations as to whether or not the materials, equipment, supplies, qualifications or facilities offered by the bidder meet the requirements set forth in the proposal and specification, and are ample and sufficient to insure the proper performance of the contract in the event of award. If upon such examination it is found that the conditions of the proposal are not complied with or that articles or equipment proposed to be furnished do not meet the requirements called for, or that the qualifications or facilities are not satisfactory, the City of Pawtucket may reject such a bid. It is distinctly understood, however, that nothing in the foregoing shall mean or imply that it is obligatory upon the City of Pawtucket to make any examinations before awarding a contract; and it is further understood that if such examination is made, it in no way relieves the contractor from fulfilling all requirements and conditions of the contract.
- c. Qualified or conditional offers which impose limitations of the bidder's liability or modify the requirements of the bid, offers for alternate specifications, or which are made subject to different terms and conditions than those specified by the City of Pawtucket may, at the option of the City of Pawtucket, be
  1. rejected as being non-responsive, or
  2. set aside in favor of the City of Pawtucket's terms and conditions (with the consent of the bidder), or
  3. accepted, where the City of Pawtucket Purchasing Agent determines that such acceptance best serves the interests of the City of Pawtucket.

Acceptance or rejection of alternate or counter-offers by the City of Pawtucket shall not constitute a precedent which shall be considered to be binding on successive solicitations or procurements.

- d. Bids submitted in pencil, or which do not bear an original signature, in ink, by an owner or authorized agent thereof, will not be accepted.
- e. Bids must be extended in the unit of measure specified in the Request. In the event of any discrepancy between unit prices and their extensions, the unit price will govern.



- f. The City of Pawtucket Purchasing Agent reserves the right to determine the responsibility of any bidder for a particular procurement.
- g. The City of Pawtucket Purchasing Agent reserves the right to reject any and all bids in whole or in part, to waive technical defects, irregularities, and omissions, and to give consideration to past performance of the offerors where, in his judgment the best interests of the City of Pawtucket will be served by so doing.
- h. The City of Pawtucket Purchasing Agent reserves the right to make awards by items, group of items or on the total low bid for all the items specified as indicated in the detailed specification, unless the bidder specifically indicates otherwise in his bid.
- i. Preference may be given to bids on products raised or manufactured in the City of Pawtucket or State of Rhode Island, other things being equal.
- j. The impact of discounted payment terms shall not be considered in evaluating responses to any Request.
- k. The City of Pawtucket Purchasing Agent reserves the right to act in the City of Pawtucket's best interests regarding awards caused by clerical errors by the City of Pawtucket Purchasing Office.

#### 14. SUSPENSION AND DEBARMENT

The City of Pawtucket Purchasing Agent may suspend or debar any vendor or potential bidder, for good cause shown:

- a. A debarment or suspension against a part of a corporate entity constitutes debarment or suspension of all of its divisions and all other organizational elements, except where the action has been specifically limited in scope and application, and may include all known corporate affiliates of a contractor, when such offense or act occurred in connection with the affiliate's performance of duties for or on behalf of the contractor, or with the knowledge, approval, or acquiescence of the contractor or one or more of its principals or directors (or where the contractor otherwise participated in, knew of, or had reason to know of the acts).
- b. The fraudulent, criminal or other serious improper conduct of any officer, director, shareholder, partner, employee, or any other individual associated with a contractor may be imputed to the contractor when the conduct occurred in connection with the individual's performance of duties for or on behalf of the contractor, or with the contractor's knowledge, approval or acquiescence. The contractor's acceptance of benefits derived from the conduct shall be evidence of such knowledge, approval, or acquiescence.
- c. A vendor or contractor who knowingly engages as a subcontractor for a contract awarded by the City of Pawtucket to a vendor or contractor then under a ruling of suspension or debarment by the City of Pawtucket shall be subject to disallowance of cost, annulment or termination of award, issuance of a stop work order, or debarment or suspension, as may be judged to be appropriate by the City of Pawtucket's Purchasing Agent.

#### 15. PUBLIC RECORDS

Contractors and bidders are advised that certain documents, correspondence, and other submissions to the City of Pawtucket's Purchasing Office may be voluntarily made public by the City of Pawtucket absent specific notice that portions of such submittals may contain confidential or proprietary information, such that public access to those items should be withheld.

#### 16. PRODUCT EVALUATION

In all specifications, the words "or equal" are understood after each article when manufacturer's name or catalog are referenced. If bidding on items other than those specified, the bidder must, in every instance, give the trade designation of the article, manufacturer's name and detailed specifications of the item the bidder proposes to furnish; otherwise, the bid will be construed as submitted on the identical commodity described in the detailed specifications. The City of Pawtucket's Purchasing Agent reserves the right to determine whether or not the item submitted is the approved equal the detailed specifications.

- a. Any objections to specifications must be filed by a bidder, in writing, with the City of Pawtucket's Purchasing Agent at least 96 hours before the time of bid opening to enable the City of Pawtucket's Purchasing Office to properly investigate the objections.
- b. All standards are minimum standards except as otherwise provided for in the Request or Contract.
- c. Samples must be submitted to the City of Pawtucket's Purchasing Office in accordance with the terms of the proposals and detailed specifications. Samples must be furnished free of charge and must be accompanied by descriptive memorandum invoices indicating whether or not the bidder desires their return and specifying the address to which they are to be returned (at the bidder's risk and expense), provided they have not been used or made useless by tests; and absent instructions, the samples shall be considered to be abandoned. Award samples may be held for comparison with deliveries.
- d. All samples submitted are subject to test by any laboratory the City of Pawtucket's Purchasing Agent may designate.

#### 17. PRODUCT ACCEPTANCE

All merchandise offered or otherwise provided shall be new, of prime manufacture, and of first quality unless otherwise specified by the City of Pawtucket. The City of Pawtucket reserves the right to reject all nonconforming goods, and

to cause their return for credit or replacement, at the City of Pawtucket's option. Contract deliverables specified for procurements of services shall be construed to be work products, and subject to the provisions of this section.

- a. Failure by the City of Pawtucket to discover latent defect(s) or concealed damage or non-conformance shall not foreclose the City of Pawtucket's right to subsequently reject the goods in question.
- b. Formal or informal acceptance by the City of Pawtucket of non-conforming goods shall not constitute a precedent for successive receipts or procurements.
- c. Where the contractor fails to promptly cure the defect or replace the goods, the City of Pawtucket reserves the right to cancel the Purchase Order, contract with a different contractor, and to invoice the original contractor for any differential in price over the original contract price.
- d. When materials, equipment or supplies are rejected, the same must be removed by the contractor from the premises of the City of Pawtucket within forty-eight (48) hours of notification. Rejected items left longer than two days will be regarded as abandoned and the City of Pawtucket shall have the right to dispose of them as its own property.

18. PRODUCT WARRANTIES

All product or service warranties normally offered by the contractor or bidder shall accrue to the City of Pawtucket's benefit, in addition to any special requirements which may be imposed by the City of Pawtucket. Every unit delivered must be guaranteed against faulty material and workmanship for a period of one year unless otherwise specified, and the City of Pawtucket may, in the event of failure, order its replacement, repair, or return for full credit, at its sole option.

19. PAYMENT

Unless otherwise provided for by the Request or Contract, payment shall not be made until delivery has been made, or services performed, in full, and accepted. Payment shall not be due prior to thirty (30) working days following the latest of completion, acceptance, or the rendering of a properly submitted invoice.

- a. Payment terms other than the foregoing may be rejected as being nonresponsive.
- b. No partial shipments, or partial completion will be accepted, unless provided for by the Request or Contract.
- c. Where a question of quality is involved, or failure to complete a project by the specified due date, payment in whole or part against which to charge back any adjustment required, shall be withheld at the direction of the City of Pawtucket Purchasing Agent. In the event a cash discount is stipulated, the withholding of payments, as herein described, will not deprive the City of Pawtucket from taking such discount.
- d. Payments for used portion of inferior delivery or late delivery will be made by the City of Pawtucket on an adjusted price basis.
- e. Payments on contracts under architectural or engineering supervision must be accompanied by a Certificate of Payment and Statement of Account signed by the architect or engineer and submitted to the City of Pawtucket Purchasing Office for approval.

20. THIRD PARTY PAYMENTS

The City of Pawtucket recognizes no assigned or collateral rights to any purchase agreement except as may be expressly provided for in the bid or contract documents, and will not accede to any request for third party or joint payment(s), except as provided for in specific orders by a court of competent jurisdiction, or by express written permission of the City of Pawtucket's Purchasing Agent. Where an offer is contingent upon such payment(s), the offeror is obligated to serve affirmative notice in his bid submission.

21. SET-OFF AGAINST PAYMENTS

Payments due the contractor may be subject to reduction equal to the amount of unpaid and delinquent state taxes (or other just debt owed to the State), except where notice of delinquency has not been served or while the matter is pending in hearing or from any appeal therefrom.

22. CLAIMS

Any claim against a contractor may be deducted by the City of Pawtucket from any money due him in the same or other transactions. If no deduction is made in such fashion, the contractor shall pay the City of Pawtucket the amount of such claim on demand. Submission of a voucher and payment, thereof, by the City of Pawtucket shall not preclude the City of Pawtucket's Purchasing Agent from demanding a price adjustment in any case when the commodity delivered is later found to deviate from the specifications and proposal.

- a. The City of Pawtucket's Purchasing Agent may assess dollar damages against a vendor or contractor determined to be non-performing or otherwise in default of their contractual obligations equal to the cost of remedy incurred by the City of Pawtucket, and make payment of such damages a condition for consideration for any subsequent award. Failure by the vendor or contractor to pay such damages shall constitute just cause for disqualification and rejection, suspension, or debarment.

23. CERTIFICATION OF FUNDING

The Director of Finance shall provide certification as to the availability of funds to support the procurement for the current fiscal year ending June 30th only. Where delivery or service requirements extend beyond the end of the current fiscal year, such extensions are subject to both the availability of appropriated funds and a determination of continued need.

24. UNUSED BALANCES

Unless otherwise specified, all unused Blanket Order quantities and/or unexpended funds shall be automatically canceled on the expiration of the specified term. Similarly, for orders encompassing more than one fiscal year, unexpended balances of funding allotted for an individual fiscal year may be liquidated at the close of that fiscal year, at the City of Pawtucket's sole option.

25. MINORITY BUSINESS ENTERPRISES

Pursuant to the provisions of Title 37 Chapter 14.1 of the General Laws, the City of Pawtucket reserves the right to apply additional consideration to offers, and to direct awards to bidders other than the responsive bid representing the lowest price where:

- a. the offer is fully responsive to the terms and conditions of the Request, and
- b. the price offer is determined to be within a competitive range (not to exceed 5% higher than the lowest responsive price offer) for the product or service, and
- c. the firm making the offer has been certified by the R.I. Department of Economic Development to be a small business concern meeting the criteria established to be considered a Minority Business Enterprise.

26. PREVAILING WAGE REQUIREMENT

In accordance with Title 37 Chapter 13 of the General Laws of Rhode Island, payment of the general prevailing rate of per diem wages and the general prevailing rate for regular, overtime and other working conditions existing in the locality for each craft, mechanic, teamster, or type of workman needed to execute this work is a requirement for both contractors and subcontractors for all public works.

27. EQUAL OPPORTUNITY COMPLIANCE, HANDICAPPED ACCESS AND AFFIRMATIVE ACTION

Contractors of the City of Pawtucket are required to demonstrate the same commitment to equal opportunity as prevails under federal contracts controlled by Federal Executive Orders 11246, 11625, 11375 and 11830, and Title 28 Chapter 5.1 of the General Laws of Rhode Island.

Affirmative action plans shall be submitted by the contractor for review by the State Equal Opportunity Office. A contractor's failure to abide by the rules, regulations, contract terms and compliance reporting provisions as established shall be grounds for forfeiture and penalties as shall be established, including but not limited to suspension.

28. DRUG-FREE WORKPLACE REQUIREMENT

Contractors who do business with the City of Pawtucket and their employees shall abide by the State's drug-free workplace policy and the contractor shall so attest by signing a certificate of compliance.

29. TAXES

The City of Pawtucket is exempt from payment of excise, transportation and sales tax imposed by the Federal or State Government. These taxes should not be included in the proposal price. Exemption Certificates will be furnished upon request.

30. INSURANCE

All construction contractors, independent tradesmen, or firms providing any type of maintenance, repair, or other type of service to be performed on City of Pawtucket premises, buildings, or grounds are required to purchase and maintain coverage with a company or companies licensed to do business in the state as follows:

- a. Comprehensive General Liability Insurance  
Combined Single Limit not less than \$1,000,000 each occurrence for bodily injury and property damage.
  - 1) Independent Contractors;
  - 2) Contractual - including construction hold harmless and other types of contracts or agreements in effect for insured operations;
  - 3) Products and Completed Operations;  
Personal Injury (with employee exclusion deleted)
  - 4) Personal Injury (with employee exclusion deleted)
- b. Automobile Liability Insurance

Combined Single Limit not less than \$1,000,000 each occurrence for Bodily Injury and Property Damage including non-owned and/or hired vehicle coverage.

OR

Bodily Injury, per person, \$500,000/ Bodily Injury, \$1,000,000 per accident/Property Damage, \$500,000 per accident including non-owned and/or hired vehicle coverage.

- c. Workers' Compensation Insurance  
As required by the General Laws of Rhode Island. Employers liability \$500,000.

The City of Pawtucket and the PWSB shall be named as an additional insured on the vendor's Comprehensive General Liability Policy and Automobile Liability Policy.

The City of Pawtucket's Purchasing Agent reserves the right to consider and accept alternate forms and plans of insurance or to require additional or more extensive coverage for any individual requirement. Successful bidders shall provide certificates of coverage, reflecting the City of Pawtucket and the PWSB named as additional insured, to the City of Pawtucket Purchasing Office, forty-eight (48) hours prior to the commencement of work, as a condition of award. Failure to comply with this provision shall result in rejection of the offeror's bid.

### 31. BID SURETY

When requested, a bidder must furnish a Bid Bond or Certified Check for 10% of his bid, or for the stated amount shown in the solicitation. Bid Bonds must be executed by a reliable Surety Company authorized to do business in the State of Rhode Island. Failure to provide Bid Surety with bid may be cause for rejection of bid. The Bid Surety of any three bidders in contention will be held until an award has been made according to the specifications of each proposal. All others will be returned by mail within 48 hours following the bid opening. Upon award of a contract, the remaining sureties will be returned by mail unless instructed to do otherwise.

### 32. PERFORMANCE AND LABOR AND PAYMENT BONDS

A performance bond and labor and payment bond of up to 100% of an award may be required by the City of Pawtucket's Purchasing Agent. Bonds must meet the following requirements:

- a. Corporation: The Bond must be signed by an official of the corporation above his/her official title and the corporate seal must be affixed over his/her signature.
- b. Firm or Partnership: The Bond must be signed by all of the partners and must indicate that they are "Doing Business As (name of firm)."
- c. Individual: The Bond must be signed by the individual owning the business and indicate "Owner."
- d. The Surety Company executing the Bond must be licensed to do business in the State of Rhode Island or Bond must be countersigned by a company so licensed.
- e. The Bond must be signed by an official of the Surety Company and the corporate seal must be affixed over his signature.
- f. Signatures of two witnesses for both the principal and the Surety must appear on the Bond.
- g. A Power of Attorney for the official signing of the Bond for the Surety Company must be submitted with the Bond.

### 33. SUSPENSION, DEFAULT AND TERMINATION

#### a. Suspension of a Contract by the City of Pawtucket

The City of Pawtucket reserves the right at any time and for any reason to suspend all or part of this contract, for a reasonable period, not to exceed sixty days, unless the parties agree to a longer period. The City of Pawtucket shall provide the contractor with written notice of the suspension order signed by the Purchasing Agent or his or her designee, which shall set forth the date upon which the suspension shall take effect, the date of its expiration, and all applicable instructions. Upon receipt of said order, the contractor shall immediately comply with the order and suspend all work under this contract as specified in the order. The contractor shall take all reasonable steps to mitigate costs and adverse impact to the work specified in the contract during the suspension period. Before the order expires, the City of Pawtucket shall either:

- 1. cancel the suspension order;
- 2. extend the suspension order for a specified time period not to exceed thirty (30) days; or
- 3. terminate the contract as provided herein.

The contractor shall resume performance once a suspension order issued under this section is canceled or expires. If as a result of the suspension of performance, there is a financial or schedule impact upon the contract, an appropriate adjustment may be made by, or with the approval of, the City of Pawtucket's Purchasing Agent. Any adjustment shall be set forth in writing. After a suspension order has been canceled or expires, the contractor shall

provide any request for adjustment to the City of Pawtucket's Purchasing Agent within thirty (30) days after resuming work performance.

b. Termination of a Contract by the City of Pawtucket

1. Termination for Default or Nonperformance

If, for any reason, the contractor breaches the contract by failing to satisfactorily fulfill or perform any obligations, promises, terms, or conditions, and having been given reasonable notice of and opportunity to cure such default, fails to take satisfactory corrective action within the time specified by the City of Pawtucket, the City of Pawtucket may terminate the contract, in whole or in part, the termination of all outstanding contracts or sub-contracts held by the contractor, and the suspension or debarment of the contractor from future procurements by giving written notice to the contractor specifying the date for termination. The City of Pawtucket shall endeavor to provide such notice at least seven (7) calendar days before the effective date of the termination.

A contractor who fails to commence within the time specified or complete an award made for repairs, alterations, construction, or any other service will be considered in default of contract. If contractor consistently fails to deliver quantities or otherwise perform as specified, the City of Pawtucket's Purchasing Agent reserves the right to terminate the contract and contract for completion of the work with another contractor and seek recourse from the defaulting contractor or his surety. In the event of a termination for default or nonperformance, in whole or in part, the City of Pawtucket may procure similar goods or services in a manner and upon terms it deems appropriate, and the contractor shall be liable for the excess costs incurred by the City of Pawtucket as a result of the contractor's default. The contractor, or its surety, agrees to promptly reimburse the City of Pawtucket for the excess costs, but shall have no claim to the difference should the replacement cost be less.

2. Termination Without Cause

The City of Pawtucket may terminate the contract in whole or in part without cause at any time by giving written notice to the contractor of such termination at least thirty (30) days before the effective date of such termination. The notice shall specify the part(s) of the contract being terminated and the effective termination date.

Within thirty (30) days of the effective date of the termination of the contract the contractor shall compile and submit to the City of Pawtucket an accounting of the work performed up to the date of termination. The City of Pawtucket may consider the following claims in determining reasonable compensation owed to the contractor for work performed up to the date of termination:

- a. contract prices for goods or services accepted under the contract;
- b. costs incurred in preparing to perform and performing the terminated portion of the contract;  
or
- c. any other reasonable costs incurred by the contractor as a result of the termination.

The total sum to be paid to the contractor shall not exceed the total contract price, less any payments previously made to the contractor, the proceeds from any sales of goods or manufacturing materials, and the contract price for work not terminated.

3. Contractor's Obligations in the Event of Termination

If the contract is terminated for any reason, or expires pursuant to its terms, the contractor shall transfer and deliver to the City of Pawtucket in the manner and to the extent directed by the City of Pawtucket:

- a. all finished or unfinished material prepared by the contractor; and
- b. all material, if any, provided to the contractor by the City of Pawtucket.

For the purposes of the contract, "material" shall include, but is not limited to, goods, supplies, parts, tools, machinery, equipment, furniture, fixtures, information, data, reports, summaries, tables, maps, charts, photographs, studies, recommendations, files, audiotapes, videotapes, records, keys, security badges, and documents.

If the contract is terminated for cause, the contractor shall not be relieved of liability to the City of Pawtucket for damages sustained because of any breach by the contractor. In such event, the City of Pawtucket may retain any amounts which may be due and owing to the contractor until such time as the exact amount of damages due the City of Pawtucket from the contractor has been determined by the City of Pawtucket Purchasing Agent. The City of Pawtucket may also set off any damages so determined against the amounts retained.

Upon termination of the contract, the contractor shall stop performance on the date specified, terminate any outstanding orders and subcontracts applicable to the terminated portion of the contract, and shall incur no further commitments or obligations in connection with the terminated performance. The contractor shall settle all liabilities and claims arising out of the termination of subcontracts and order generating from the terminated performance. The City of Pawtucket may direct the contractor to assign the contractor's right, title and interest under terminated orders or subcontracts to the City of Pawtucket or a third party.

Terminations of Purchase Order Contracts or Master Pricing Agreements shall require the signature of the City of Pawtucket Purchasing Agent or his designee. Notice of termination by either party shall be submitted in writing to the other party in accordance with the termination clause of the contract, or where no specific termination clause is included, written notice shall be provided no later than thirty (30) days before the expiration of the contract.

#### 34. INDEMNITY

The contractor guarantees:

- a. To save the City of Pawtucket, its agents and employees, harmless from any liability imposed upon the City of Pawtucket arising from the negligence, either active or passive, of the contractor, as well as for the use of any copyrighted or uncopied composition, secret process, patented or unpatented invention, article or appliance furnished or used in the performance of the contract of which the contractor is not the patentee, assignee or licensee.
- b. To pay for all permits, licenses and fees and give all notices and comply with all laws, ordinances, rules and regulations of the City of Pawtucket and of the State of Rhode Island.
- c. That the equipment offered is standard new equipment, latest model of regular stock product with all parts regularly used with the type of equipment offered; also, that no attachment or part has been substituted or applied contrary to manufacturer's recommendations and standard practice.

#### 35. CONTRACTOR'S OBLIGATIONS

In addition to the specific requirements of the contract, construction and building repair contractors bear the following standard responsibilities:

- a. To furnish adequate protection from damage for all work and to repair damages of any kind, for which he or his workmen are responsible, to the building or equipment, to his own work, or to the work of other contractors;
- b. The contractor, its subcontractor(s) and their employees and/or agents, shall protect and preserve property in the contractor or subcontractor's possessions in which the City of Pawtucket has an interest, and any and all materials provided to the contractor or subcontractor by the City of Pawtucket;
- c. To clear and remove all debris and rubbish resulting from his work from time to time, as directed or required, a completion of the work leave the premises in a neat unobstructed condition, broom clean, and in satisfactory order and repair;
- d. To store equipment, supplies, and material at the site only upon approval by the City of Pawtucket, and at his own risk;
- e. To perform all work so as to cause the least inconvenience to the City of Pawtucket, and with proper consideration for the rights of other contractors and workmen;
- f. To acquaint themselves with conditions to be found at the site, and to assume responsibility for the appropriate dispatching of equipment and supervision of his employees during the conduct of the work;
- g. To ensure that his employees are instructed with respect to special regulations, policies, and procedures in effect for any City of Pawtucket facility or site, and that they comply with such rules, including but not limited to security policies or practices and/or criminal background checks for any employees and/or subcontractors;
- h. The contractor shall ensure that its employees or agents are experienced and fully qualified to engage in the activities and services required under the contract;
- i. The contractor shall ensure that at all times while services are being performed under this contract at least one of its employees or agents on the premises has a good command of the English language and can effectively communicate with the City of Pawtucket and its staff;
- j. The contractor and contractor's employees or agents shall comply with all applicable licensing and operating requirements required by federal or state law and shall meet accreditation and other generally accepted standards of quality in the applicable field of activity;
- k. The contractor shall secure and retain all employee-related insurance coverage for its employees and agents as required by law; and
- l. The contractor, subcontractor, and his or her employees and agents shall not disclose any confidential information of the City of Pawtucket to a third party. Confidential information means:

- (1) any information of a sensitive or proprietary nature, whether or not specially identified as confidential or proprietary; or
- (2) any information about the City of Pawtucket gained during the performance of a contract that is not already lawfully in the public domain.

36. **FORCE MAJEURE**

All orders shall be filled by the contractor with reasonable promptness, but the contractor shall not be held responsible for any losses resulting if the fulfillment of the terms of the contract shall be delayed or prevented by wars, acts of public enemies, strikes, fires, floods, acts of God, or for any other acts not within the control of the contractor and which by the exercise of reasonable diligence, the contractor is unable to prevent.