

## SPECIFIC SPECIFICATIONS AND SPECIAL CONDITIONS

### EVENT # 4613 METER BOXES & LIDS

- 4.0 The purpose of these specifications is to describe meter boxes and meter box lids for use of the Water and Sewer Department of the City of Savannah.

To submit pricing electronically for this event, enter pricing for each line item shown under the lines tab on the event summary. To enter pricing manually, complete the attached bid proposal form.

#### 4.1 **Detailed Specifications:**

- 4.1.1 Meter boxes, both standard and jumbo, must be manufactured of HDPE or approved equal. Physical properties of the meter box follow:

- 4.1.2 ASTM Test:

<u>Property</u>	<u>Method</u>	<u>HDPE</u>
1. Tensile Strength	D-638	3,000-4,400psi
2. Flexural Modulus	D-790	min 140,000 - 240,000psi max
3. Notched Izod Impact Strength	D-256	0.5 - 3.0
4. Deflection Temperature	D-648	150 - 220 F

- 4.1.3 Physical properties of the meter box must meet or exceed the value ranges as indicated by the current valid ASTM-Test methods.

- 4.2 **Standard Meter Box:** 17” long x 11-7/8” wide at the top, 21” long x 16” wide at the base, 12-1/4 ” depths. Minimum body weight of 7lbs. Thickness of meter box at top must be a minimum of 3/4”. Meter box must have a minimum of four (4) reinforcing ribs on long sides of box for crush strength. Carson L Series 1419-12 or approved equal.

- 4.2.1 **Meter Box Lid:** Meter box lid must be constructed of high grade cast iron with a non-skid surface. Weight range of 12 to 17lbs. Meter top must have a lip of 1 3/4" and fit firmly into meter box. Meter top must be flush with the side of the meter box. Any overhang of the meter top over the meter box will not be accepted. Meter box lid must fit firmly into meter box with a minimum of 1 3/4" set. Lid must not shift or vibrate under normal pedestrian or traffic loads.

- 4.3 **Jumbo Meter Box:** The meter box shall be of cast iron with solid lid. Meter box must be of a high grade cast iron with non-skid surface and 1” lettering “Savannah Waterworks” on the upper side of the lid. Meter box shall be in size approximately 32-1/2" long x 19-1/2" with at the top, 40-1/2" long x 27-1/4" wide at the base, 18" in depth. A minimum body weight of 26 lbs.



- 4.3.1 **Cover:** Captive L-Bolt Lock Cover - Fully recessed into body of box with no overhang. 30-1/2" long x 17-1/2" wide, and 2" in depth. Meter box must be of a high grade cast iron with non-skid surface and 1" lettering "Savannah Waterworks" on the upper side of the lid. Weight - 12lbs. Carson L Series 1730-18 or Approved Equal.
- 4.4 **Cast Iron Standard Meter Box:** The meter box shall be of cast iron with solid lid. Meter box must be of a high grade cast iron with non-skid surface and 1" lettering "Savannah Waterworks" on the upper side of the lid. Standard Cast Iron Water Meter Boxes shall be of cast iron ASTM A48, class 30B one piece molded construction for durability and impact strength with a solid cast iron meter lid. Meter box shall be in size approximately 20" long x 12" high x 13" wide with mouse holes on both ends.
- 4.5 **Cast Iron Jumbo Meter Box:** The meter box shall be of cast iron with solid lid. Meter box must be of a high grade cast iron with non-skid surface and 1" lettering "Savannah Waterworks" on the upper side of the lid. Jumbo Cast Iron Water Meter Boxes shall be of cast iron ASTM A48, class 30B one piece molded construction for durability and impact strength with a solid cast iron meter lid. Meter box shall be in size approximately 30" long x 18" high x 19" wide with mouse holes on both ends.
- 4.6 **Standard Quazite Water Meter Box:** The meter box shall have an ANSI Tier rating of 22 made of polymer concrete & fiber glass reinforced polymer with self-aligning replaceable EZ-NUT, one piece molded construction for durability and impact strength and shall have pre-cut pipe entry areas 2" wide x 4" high located on the center of each end of the box. The meter box lid shall have an ANSI Tier rating of 15 with "Savannah Waterworks" stamped in the lid. Walls of box to be straight, not flared and able to with stand a 22,500lb., vertical load and an 800lb/sq. ft. Have a lateral load per the ANSI/SCTE 77 2007 "Specification for Underground Enclosure Integrity". The box shall be designed in such a way as to have an integral flange no more than 3" from the top to support the box in concrete, paving or soil and a bottom inward facing flange a minimum of 1" wide to help retard settling. The box shall be designed in such a way as to be securely stackable and weigh no more than listed weight for each meter size for safety and ease of handling, transporting and installing. 13" wide x 20" long x 12" deep water meter boxes shall be of fiberglass reinforced polymer concrete & fiberglass reinforced polymer one piece molded construction for durability and impact strength with a wall thickness of no less than 1/4". Meter box shall be gray in color.
- 4.7 **Jumbo Quazite Water Meter Box:** The meter box shall have an ANSI Tier rating of 22 made of polymer concrete & fiberglass reinforced polymer with self-aligning replaceable EZ-NUT, one piece molded construction for durability and impact strength and shall have pre-cut pipe entry areas 4" wide x 4" high located on the center of each end of the box. The meter box lid shall have an ANSI Tier rating of 15 with "Savannah Waterworks" stamped in the lid. Walls of box to be straight, not flared and able to with stand a 22,500lb., vertical load and an 800lb/sq. ft. Have a lateral load per ANSI/SCTE 77 2007 "Specification for underground Enclosure Integrity". The box shall be designed in such a way as to have an integral flange no more than 3" from the top to support the box in concrete, paving or soil



and a bottom inward facing flange a minimum of 1” wide to help retard settling. The box shall be designed in such a way as to be securely stackable and weigh no more than listed weight for each meter size for safety and ease of handling, transporting and installing. 19” wide x 32” long x 18” deep water meter boxes shall be of fiberglass reinforced polymer concrete & fiberglass reinforced polymer one piece molded construction for durability and impact strength with a wall thickness of no less than ¼”. Meter box shall be gray in color and have a polymer concrete reinforced lid.

4.8 **Stretch/Yoke Box System Specifications for Male/Female Type Threads with Low Lead Bronze**

4.8.1 **General:** The installation device shall incorporate the design concept of combining a standard water meter and an ASSE dual check backflow preventer as a unit in a meter box, to make a combined length of meter and dual check of 11.25". (11.25" represents the combined length of Savannah's standard domestic water meter and proposed backflow preventer). The meter box shall be so designed as to allow the installation and/or removal of this water meter/backflow as a unit. The design shall also incorporate permanent spacing and alignment for the water/backflow unit and its installation accessories. The center line of the pipe connections shall be 8" below grade. The device shall be supplied assembled with all necessary valves, connection accessories and parts needed to install a 5/8" x 3/4" water meter. All iron castings shall be painted black. All bronze fittings (valve and outlet piece) in contact with outside earth shall be 5,5,5,5 AWWA alloy. Other bronzes may be of the same alloy generally used in water meter housing. All basic components of the system shall be standard, interchangeable and replaceable. The design shall also incorporate permanent spacing and alignment for the meter/backflow unit and its installation accessories.

4.8.2 **Unit Base:** The unit base shall form the foundation of the installation system. It shall be of ASTM A48-74 Class 30-B cast iron. The casting shall be of machine quality; no rough municipal quality will be accepted. The base casting shall be made to accept an inlet control valve and outlet piece. These parts shall be installed to the base with bronze lock nuts. A permanent spacing of 13.20" shall be provided between inlet valve and the outlet piece. The base shall have 8 ground water drain holes.

4.8.3 **Expansion Connections:** The expansion connection shall be of a three piece design (expansion hand-wheel, expansion barrel piece, expansion thimble) and shall include a beveled expansion connection gasket and a meter washer. The expansion connection shall permit quick and easy installation and/or removal of water meter/spacer unit without the use of a wrench inside the box. This fitting shall be made of bronze. Two rubber end washers are to be supplied.

4.8.4 **Upper Housing:** The housing shall be made of high density polyethylene structural foam. The material shall be virgin stock with no fillers used. The unit shall meet the following standards:

Tensile Strength	ASTM D-638 - 3,100 to 5,500 PSI
Flexural Modulus	ASTM D-790 -100,000 to 210,000 PSI
Deflection Temperature	ASTM D-648 - 140 <sup>0</sup> to 190 <sup>0</sup> F



- 4.8.5 **Unit Cover:** The standard lid shall be cast iron to ASTM A48-74 Class 30-B and be of machine quality. The lid shall have an easy off pick-up bar. It shall also have deep "guide fingers" to prevent traffic kick off. The lid shall be solid and/or adaptable for electronic read with a hole size 1-27/32" with a non-skid surface and "Savannah Waterworks" cast in 1" high letters on upper side.
- 4.8.6 **Inlet Control Valve:** The valve shall have straight entry into the box and be of ball design. The ball shall be Teflon coated for long life. The valve shall have an integral compression connection for 3/4" and/or 1" CTS 250 PSI Polybutylene Tubing. The compression nut shall have a split clamp device to insure against pullout. The outlet of the valve shall provide a recess for the rubber installation washer and form a front cradle for the meter/spacer unit. Inlet control valve shall be of inverted key design made of low lead bronze connection for CTS 250 PSI Polybutylene Tubing.
- 4.8.7 **Outlet Piece:** This piece shall be recessed for the rubber installation washer and form the rear cradle for the meter/spacer unit. The outlet shall be of horizontal design and have 3/4" Male Pipe Threads. The outlet piece shall be made of low lead bronze.
- 4.8.8 **Outlet Piece:** This piece shall be recessed for the rubber installation washer and form the rear cradle for the meter/backflow preventer unit. The outlet shall be of horizontal design and have 3/4" Female Pipe Threads. The outlet piece shall be made of low lead bronze.
- 4.8.9 For stretch meter boxes located in heavy traffic areas, a rectangular Anchor Flange is required. This Flange should be cast iron and must fit on the plastic upper housing specified herein and be compatible with the meter box lid specified herein. The Anchor Flange should come with all attaching hardware needed for field installation (A.Y. McDonald 776-2CF or equal).
- 4.8.10 All meter boxes and lids shall be black in color.
- 4.9 Bid prices must remain firm for the duration of the contract.
- 4.10 Quantities stated in these specifications are based on prior usage and are **estimates only**.
- 4.11 All pricing should include freight.
- 4.12 **Basis of Award:** This contract will be awarded to the vendor that offers the lowest net price to the City, and who meets or exceed all specifications herein. The City reserves the right to split the award if deemed to be in its best interest. The City also reserves the right to appoint a primary and secondary vendor if deemed advantageous.



5.0 **General Specifications:**

5.1 The bid response must include the following documents in this order.

- Bid Proposal
- Exception Sheet
- Non-Discrimination Statement
- Proposed Schedule of MWBE Participation
- Other requested submittals as stated

All referenced documents must be completed and returned in their entirety to constitute a complete bid.

5.2 Bids may be submitted manually to the address listed in the bid documents or electronically via the supplier portal in sufficient time to ensure receipt by the Purchasing Department on or before 1:30 P.M. on the date specified in the web page listing for this event. Requested documentation may be attached to the bidder's response. A supplier guide for assistance in submitting responses can be found by clicking on the Important Documents tab of the Purchasing SavEPro webpage at: <http://www.savannahga.gov/index.aspx?NID=590>

5.3 To submit and be awarded bids, vendors must be registered as suppliers on the City of Savannah's website at [www.savannahga.gov](http://www.savannahga.gov).

5.4 **Bidders must provide the manufacturer and part number of each item bid in the space provided on the bid form.**

5.5 Original invoices shall be mailed to:

City of Savannah  
Accounts Payable Dept.  
P.O.1027  
Savannah, GA 31402

5.6 The successful vendor must have the following items on every invoice to the City:

- A) The exact description of the purchased item as described in this contract,
- B) The unit price of the item, and
- C) The total of the invoice.

5.7 Vendor is responsible for determining and acknowledging any addenda issued in connection with this bid solicitation.

5.8 Bidder acknowledges that by submitting a bid for the specified Event, it is waiving any right to insist upon the inclusion of any exculpatory provisions in the parties' contract. The City will not enter into any contract that contains exculpatory provisions in favor of Bidder.

5.9 This is an annual contract and prices are to be held firm for a period of one (1) year (12 months). This agreement may be renewed for up to two (2) additional twelve (12) month periods, if all contracting parties so agree and services provided by the vendor have been satisfactory.



BID PROPOSAL FORM

(SUBMIT AS THE COVER SHEET)
SUBMIT A MINIMUM OF TWO COPIES

City of Savannah Purchasing Department
3rd Floor, City Hall
P. O. Box 1027
Savannah, Georgia 31402
ATTN: Purchasing Director

EVENT NUMBER: 4613

Business Location: (Check One)
Chatham County
City of Savannah
Other

ALL BIDDERS MUST BE REGISTERED VENDORS ON THE CITY'S WEBSITE. PLEASE REGISTER AT WWW.SAVANNAHGA.GOV.

Name of Bidder:

Street Address:

City, State, Zip Code:

Phone: Fax:

Email:

DO YOU HAVE A BUSINESS TAX CERTIFICATE ISSUED IN THE STATE OF GEORGIA? (CHECK ONE) YES: NO:

FROM WHAT CITY/COUNTY

TAX CERTIFICATE #: FED TAX ID #:

INDICATE LEGAL FORM OF OWNERSHIP OF BIDDER (STATISTICAL PURPOSES ONLY): CHECK ONE: CORPORATION PARTNERSHIP INDIVIDUAL OTHER (SPECIFY: )

INDICATE OWNERSHIP STATUS OF BIDDER (CHECK ONE):

NON-MINORITY OWNED ASIAN AMERICAN
AFRICAN AMERICAN AMERICAN INDIAN
HISPANIC OTHER MINORITY (describe)
WOMAN (non-minority)

Do you plan to subcontract any portion of this project? Yes No

If yes, please complete the attached schedule of M/WBE participation. Also complete the schedule if you will be using any M/WBE suppliers.



THE UNDERSIGNED PROPOSES TO FURNISH THE FOLLOWING ITEMS IN STRICT CONFORMANCE TO THE BID SPECIFICATIONS AND BID INVITATION ISSUED BY THE CITY OF SAVANNAH FOR THIS BID. ANY EXCEPTIONS ARE CLEARLY MARKED IN THE ATTACHED COPY OF BID SPECIFICATIONS.

ITEM NO	DESCRIPTION	ESTIMATE D QUANTITY	MANUFACTURER & MODEL #	UNIT PRICE	TOTAL
1	Meter Box Plastic	800			
2	Lids CI for Meter Box Plastic	800			
3	Meter Box Large w/Top	160			
4	Meter Box Stretch/Yoke System	800			
5	Anchor Flanges	50			
6	Meter Box Standard Cast Iron	50			
7	Meter Box Jumbo Cast Iron	16			
8	Meter Box Standard Quazite	10			
9	Meter Box Jumbo Quazite	6			

Total Bid: \_\_\_\_\_

**PAYMENT TERMS: PLEASE CHECK ONE AND FILL IN BLANKS**  
 (Minimum of 10 working days must be allowed for discount to be considered in bid award)

\_\_\_ Less \_\_\_ % \_\_\_ Days Prompt Payment Discount (if offered)

(\_\_\_\_\_)

\_\_\_ Net - 30 Days (no discount offered)

- 0 -

**TOTAL NET BID**

\$ =====



TIME REQUIRED FOR DELIVERY AFTER RECEIPT OF ORDER: \_\_\_\_\_ DAYS

CONFIRM RECEIPT OF ANY ADDENDA ISSUED FOR THIS BID:

ADDENDUM \_\_\_\_\_ #

DATE \_\_\_\_\_

I certify this Bid complies with the General and Specific Specifications and Conditions issued by the City except as clearly marked in the attached copy.

\_\_\_\_\_  
Please Print Name

\_\_\_\_\_  
Authorization Signature

\_\_\_\_\_  
Date





**EXCEPTION SHEET**

If the commodity (ies) and/or services proposed in the response to this bid is in anyway different from that contained in this proposal or bid, the bidder is responsible to clearly identify by specification section number, all such differences in the space provided below. Otherwise, it will be assumed that bidder's offer is in total compliance with all aspects of the proposal or bid.

Below are the exceptions to the stated specifications:

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Company

\_\_\_\_\_  
Title



## NON-DISCRIMINATION STATEMENT

The prime contractor / bidder must certify that:

- (1) No person shall be excluded from participation in, denied the benefit of, or otherwise discriminated against on the basis of race, color, national origin, or gender in connection with any bid submitted to the City of Savannah or the performance of any contract resulting therefrom;
- (2) That it is and shall be the policy of this Company to provide equal opportunity to all business persons seeking to contract or otherwise interested in contracting with this Company, including those companies owned and controlled by racial minorities, cultural minorities, and women;
- (3) In connection herewith, we acknowledge and warrant that this Company has been made aware of, understands and agrees to take affirmative action to provide such companies with the maximum practicable opportunities to do business with this Company;
- (4) That this promise of non-discrimination as made and set forth herein shall be continuing in nature and shall remain in full force and effect without interruption;
- (5) That the promises of non-discrimination as made and set forth herein shall be and are hereby deemed to be made as part of and incorporated by reference into any contract or portion thereof which this Company may hereafter obtain and;
- (6) That the failure of this Company to satisfactorily discharge any of the promises of non-discrimination as made and set forth herein shall constitute a material breach of contract entitling the City of Savannah to declare the contract in default and to exercise any and all applicable rights and remedies including but not limited to cancellation of the contract, termination of the contract, suspension and debarment from future contracting opportunities, and withholding and or forfeiture of compensation due and owing on a contract.

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Signature

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Title



**PROPOSED SCHEDULE OF M/WBE PARTICIPATION**

All M/WBEs listed **must be certified as a minority-owned or women-owned business** by the City of Savannah or a federally-recognized or state-level certifying agency (such as USDOT, State DOT, SBA 8(a) or GMSDC) that utilizes certification standards comparable to the City of Savannah **prior** to the due date of this bid. **Other business certifications that do not specify majority woman or minority ownership may not be substituted. Proof of M/WBE certification from the certifying agency is required to accompany the bid.** A firm that has submitted an application for M/WBE certification but has **not** been certified is **not** qualified as a certified M/WBE and will not be recognized as such during the City's evaluation process. To expedite verification, please provide accurate phone numbers for all M/WBEs listed and ensure firms understand contact will be made following bid submittal.

Name of Proposer: \_\_\_\_\_ Event No. \_\_\_\_\_

Project Title: \_\_\_\_\_

**NOTE: Unless certified through the City of Savannah M/WBE Program, proof of M/WBE certification must be attached for all firms listed.**

Name of M/WBE Participant	Name of Majority Owner	Telephone	Address (City, State)	Type of Work Sub-Contracted	Estimated Sub-contract Value	MBE or WBE	Certified? (Y or N)	Certifying Agency? (City of Sav. or Other)
					%			
					%			
					%			
					%			
					%			
					%			

MBE Participation Value: \_\_\_\_\_ %      WBE Participation Value: \_\_\_\_\_ %      M/WBE Participation Value: \_\_\_\_\_ %

The undersigned will enter into a formal agreement with the M/WBE Subcontractors/Proposers identified herein for work listed in this schedule, conditioned upon executing a contract with the Mayor and Aldermen of the City of Savannah. The Prime's subcontractor that subcontracts work must enter into a formal agreement with the tier subcontractor identified herein for work listed in this schedule. The Prime may count toward the goal any tier of M/WBE subcontractors and/or suppliers that will be utilized in the contract work. However, when an M/WBE subcontracts part of the work, the value of the subcontracted work may **only** be counted toward the goal **if the tier subcontractor is an M/WBE**. Any work an M/WBE firm subcontracts to a non-M/WBE firm **will not count toward the M/WBE goal**. It is the responsibility of the Prime contractor to advise all M/WBEs of this requirement and to ensure compliance by subcontractors.

**Joint Venture Disclosure**

If the prime bidder is a joint venture, please describe the nature of the joint venture, the level of work and the financial participation to be provided by the Minority/Female joint venture firm in the space provided below.

Joint Venture Firms	Level of Work	Financial Participation

Printed name (company officer or representative): \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Title: \_\_\_\_\_ Email: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_



## Developing a Strong M/WBE Participation Plan

### ***Key facts every bidder/proposer needs to know prior to developing their M/WBE Participation Plan:***

1. All bidders/proposers must submit a "Proposed Schedule of M/WBE Participation" which identifies the minority and/or woman-owned companies that have agreed to participate in the project if awarded. All companies listed on the form must be certified as either minority-owned and controlled or woman-owned and controlled. The City does not accept a company's "self-identification" as minority or woman-owned.
2. **Proof** of M/WBE certification from the certifying agency is required to accompany the bid; and certification must have been completed by the City of Savannah, a federally-recognized or a state-level certifying agency (USDOT, State DOT, SBA 8(a) or GMSDC) utilizing certification standards comparable to the City of Savannah.
3. The certification must have been approved prior to the due date of this bid. A firm that has submitted an application for certification but has not been certified will not be counted toward the M/WBE goal.
4. The M/WBE Office **will be contacting all M/WBE firms** included in the bidder's M/WBE Plan to confirm each: a) was contacted by the bidder/proposer; b) performs the type of work listed; and c) agreed to participate.
5. To expedite the verification process, bidders/proposers need to: provide accurate phone numbers for all M/WBEs listed; ensure M/WBEs know to expect to be contacted by phone and email; request M/WBEs be accessible during the critical period before bid-opening; and advise M/WBEs that City staff **must** receive the M/WBE's confirmation that the firm agreed to participate in the bid/proposal in order for the prime contractor to receive credit toward their proposed M/WBE participation goals.
6. If a proposed M/WBE cannot be confirmed as certified, performing the type of work described or agreeing to participate, the bidder/proposer will be notified and given a pre-determined period to submit a correction. If an M/WBE still cannot be confirmed or replaced, the proposed percentage of participation associated with the unverified M/WBE firm will **not be counted** and **will be deducted** from the overall proposed M/WBE goal.
7. Any tier of M/WBE subcontractors or suppliers that will be utilized in the contract work may count toward the MBE and WBE goal **as long as the tier subcontractors/suppliers are certified M/WBEs**. Work that an M/WBE subcontracts to a non-M/WBE firm does **not** count toward the M/WBE goal.
8. M/WBEs must perform a "**commercially useful function**" which is the provision of **real and actual work or products**, or performing a distinct element of work for which the business has the skills, qualifications and expertise, and the responsibility for the actual management and supervision of the work contracted.
9. Per the *Proposed Schedule of M/WBE Participation* "the undersigned (bidder/proposer) will enter into a formal agreement with the M/WBE Subcontractors/Proposers identified herein for work listed in this schedule, conditioned upon executing a contract with the Mayor and Aldermen of the City of Savannah." **This signed commitment is taken seriously by the City**, so do not list M/WBEs you do not plan to utilize. Any proposed changes must be pre-approved by the M/WBE Office, be based on legitimate business-related reasons, and still meet the M/WBE participation goals per the City's contract.
10. A bidder who is a certified M/WBE may count toward the goal the portion of work or services on a City contract that is actually performed by the M/WBE, including: the cost of supplies/materials purchased or equipment leased for contract work, fees for bona fide services such as professional or technical services, or for providing bonds or insurance specifically required for the performance of a City contract.
11. If awarded the contract, the MWBE Office **will be reviewing your company's subcontracts, invoices and payment records** to substantiate the completion of work and payment of M/WBEs. If the prime contractor is an M/WBE that is being included in its M/WBE goal, the prime contractor must maintain records **that will be inspected** to prove the portion of work performed, cost of work, and payments to the prime company.
12. Most bids for goods and materials do not have specific MWBE goals established for the contract. If no goals are include in the scope of work or General Specifications, you are not required to submit MWBE participation but encouraged to do so when the opportunity is available. The City maintains this information for statistical purposes only and it is not reflected in the award decision.