



# ST. CHARLES PARISH

## ST. CHARLES PARISH PROCUREMENT OFFICE

P.O. BOX 302 • HAHNVILLE, LOUISIANA 70057  
(985) 783-5000 • FAX: (985) 308-1933

Website: [www.stcharlesparish-la.gov](http://www.stcharlesparish-la.gov) • [jschmill@stcharlesgov.net](mailto:jschmill@stcharlesgov.net)

MATTHEW JEWELL  
PARISH PRESIDENT

### ST. CHARLES PARISH PROCUREMENT OFFICE BID FORM

**DELIVER TO:**

ST. CHARLES PARISH  
PARISH PRESIDENT’S OFFICE  
PROCUREMENT OFFICE  
3<sup>RD</sup> FLOOR, ROOM 3400  
P. O. BOX 302,  
15045 RIVER ROAD,  
HAHNVILLE, LA 70057  
(985) 783-5000

**ITEM:**

**RADIO-BASED  
AUTOMATED METER  
READING SYSTEM METERS  
or APPROVED EQUAL**

**ON-LINE -** [www.centralbidding.com](http://www.centralbidding.com)

**BID DATE:** August 13, 2020

**OPENING:**

ST. CHARLES PARISH  
COURTHOUSE  
COUNCIL CHAMBERS 2<sup>ND</sup>  
FLOOR, 15045 RIVER ROAD  
HAHNVILLE, LA 70057

**BID TIME:** 11:00 A.M.

**DEPARTMENT:** WATERWORKS  
AND/OR ST. CHARLES PARISH

**PLEASE READ BID CAREFULLY!**

**LATE BIDS WILL NOT BE ACCEPTED**

**NOTE: ONLY BIDS IN INK WILL BE ACCEPTED. BIDS CONTAINING CORRECTIONS WILL BE DISQUALIFIED.**

Term of Contract: January 01, 2021 to December 31, 2021, with a one year renewal option  
(01-01-22 to 12-31-22), if agreed by both parties in writing.

NAME OF FIRM \_\_\_\_\_

**INSTRUCTIONS FOR BIDDERS AND GENERAL CONDITIONS**

**THE FOLLOWING INSTRUCTIONS APPLY TO ALL BIDS**

All bids submitted are subject to these instructions and general conditions and any special conditions and specifications contained herein, all of which are made part of this bid proposal reference. THIS BID PACKAGE MUST BE RETURNED IN ITS ENTIRETY. ALL BIDS SHALL BE PREPARED ON THE BID FORM AND RETURNED IN A SEALED ENVELOPE WITH THE APPROPRIATE BID ITEM(S) MARKED ON OUTSIDE OF ENVELOPE. BIDS MAY ALSO BE SUBMITTED ON-LINE AT [www.centralbidding.com](http://www.centralbidding.com). ANY FEDERAL, STATE, AND/OR LOCAL LICENSE REQUIRED BY LAW FOR MAINTENANCE CONTRACTS AND, LABOR AND MATERIALS COMBINED MUST BE INCLUDED. LOUISIANA CONTRACTOR'S NUMBER MUST BE "VISIBLY" MARKED ON OUTSIDE OF ENVELOPE FOR ALL BIDS. FOR THE PROCUREMENT OF VEHICLES, **ALL DEALERS** SHALL INCLUDE A COPY OF A VALID DEALERS LICENSE ISSUED UNDER THE PROVISIONS OF RS 32:1254.

The purpose and intention of this invitation to bid is to afford all suppliers an equal opportunity to bid on all construction, maintenance, repair, material, operating supplies and/or equipment listed in this bid proposal. Items bid must meet or exceed specifications. All specifications are minimum allowable.

**BONDS:** Upon award, when applicable, all contracts with labor, and/or labor and material combined in excess of \$25,000 will require a performance bond or a cashers check in the amount equal to 50% of the bid. Performance bonds do not apply to materials, supplies and services. Bonds shall be issued by a company licensed to do business in Louisiana and countersigned by a person who is under contract with the surety company or bond issuer as a licensed agent in the state and who is residing in this state.

**NOT TO EXCEED LIMITS:** Maintenance Projects that exceed \$30,000.00 will be reviewed by the St. Charles Parish Procurement Office and reserves the right to obtain quotes or publicly bid any project which may be most beneficial to St. Charles Parish. Maintenance Projects where Federal Funds are dispersed should not exceed \$150,000.

**AWARD OF CONTRACT:** ST. CHARLES PARISH reserves the right to award contracts or place orders on a lump sum or individual item basis, or such combination, as shall in its judgment be in the best interest of St. Charles Parish. Every bid shall be awarded to the LOWEST RESPONSIVE AND RESPONSIBLE BIDDER meeting specifications and at the same time, best fulfilling the needs of the St. Charles Parish Personnel. The Procurement Office will be the sole judge of equality of products and comparability to specifications.

In accordance with the provision of L.A R. S.38:2212.3, St. Charles Parish is authorized to reject the lowest bid if received from a bidder domiciled in a Communist Country, or if the materials or supplies are manufactured in a Communist Country, including but not limited to the Soviet Union, China, North Korea, and Vietnam, and to award the contract to the next lowest bidder, provided this Section shall not apply to any country having established trade relations agreements or approvals from the government of the United States. Preference is hereby given to materials, supplies, and provisions produced, manufactured or grown in Louisiana, quality being equal to articles offered by competitors outside the state, in accordance with R.S. 38:2251.

**EXCLUSIVE JURISDICTION and VENUE:** For all claims arising out of or related to this agreement, Contractor hereby consents and yields to the exclusive jurisdiction and venue of the Twenty-Ninth Judicial District Court for the Parish of St. Charles and expressly waives any (A) pleas of jurisdiction based upon Contractor's residence and (B) right of removal to federal court based upon diversity of citizenship.

**INSTRUCTIONS FOR BIDDERS AND GENERAL CONDITIONS:**

**USE OF BRAND NAMES:** The following specifications have been prepared by our office setting forth those items deemed necessary by our personnel. Certain brand names and "or approved equal" according to R.S. 38:2212 are listed to indicate the minimum quality acceptable to the St. Charles Parish Personnel. **They are not intended to be restrictive or discriminatory in any manner whatsoever. They are used to denote the quality standard of product desired and that they do not restrict bidders to the specific brand, make, manufacturer or specification named. Instead they are to be used only to set forth and convey the general style, type character and quality of the product.** Any deviation from these specifications must be noted on the deviation sheet if applicable. If any item of equal quality is substituted, a Technical Specification of the item must be provided with the bid. Include brochures or other literature describing all required quality features. The brand name and stock number of certain bid items must be listed on the bid form as indicated or attached to bid form. Anticipated delivery time must also be stated for each item.

**ORDERS:** Order placement and order quantity will be determined by the St. Charles Parish Procurement Office on a "when and as needed" basis, when applicable or otherwise stated in specifications. Failure to insert delivery days, when called for on the quotation form, may be cause for rejection of the bid.

**CANCELLATION OF CONTRACT:** The St. Charles Parish Procurement Office must be informed of any inability to supply an order within that stated period. The Procurement Office reserves the right to cancel and place with another vendor, any order that cannot be supplied as per the time specified. Repeated inability to fill orders may result in cancellation of the order and/or disqualification of the bidder. The Procurement Office reserves the right to seek additional bids for special projects beyond their normal operations. After thirty (30) days from delivery of written notice to either St. Charles Parish or the Contractor without cause and without prejudice to any other right or remedy, may elect to abandon and terminate the agreement. **Any bids submitted which contains additions, alternate bid, or irregularities which may make the proposal ambiguous as to its meaning shall be rejected.**

**PRICES:** St. Charles Parish is tax exempt. All prices for procurements by St. Charles Parish of supplies and materials shall be quoted in the unit measure specified and unless otherwise specified, shall be exclusive of state and parish taxes. All quotations shall be based on F.O.B. Destination Freight Prepaid, St. Charles Parish warehouse or job site, anywhere within the parish as designated by the Procurement Office. When called for, prices are to include the furnishing of all material, equipment, tools, delivery and all other facilities, and the performance of all labor services necessary or proper for the completion of the work except as may be otherwise expressly provided in the detailed specifications. Quantities listed are for bidding purposes only. Actual requirements may be more or less than quantities listed.

**CONTRACTING WITH MINORITY, WOMEN AND DISADVANTAGED FIRMS:** St. Charles Parish encourages the participation of small businesses and businesses owned by Women and Minorities in the Parish's Procurement Activity.

In attempt to reach out to these firms we are sending our advertisements for bid to [OMWBEwebadmin@OMWBHEW.gov](mailto:OMWBEwebadmin@OMWBHEW.gov)>

**INSURANCE REQUIREMENTS**

The following are standard insurance requirements for St. Charles Parish projects. Please be advised that additional requirements and/or limits may be required for services identifies as having additional risks or exposures. St. Charles Parish reserves the right to modify, alter, add, remove, or change any portion of the insurance requirement prior to execution of a contract or issuance of a purchase order.

The successful company shall maintain full force and effect during the life of this agreement all insurance necessary to protect itself and Parish against claims for property damage or bodily injuries or death of person or persons, whether or not employed by bidder, which may arise from any cause in connection with the services to be performed herein. The following is a list of minimum insurance requirements which must be met:

1. Minimum Limits of Coverage are as follows: **Parish has the right to examine policies to assure coverages.**
  - **Commercial General Liability**- \$1,000,000 combined Single Limit per occurrence for bodily injury and property damage;
  - Parish shall be added as additional insured on general liability;
  - **Comprehensive Automobile Liability** – Bodily Injury Liability \$1,000,000 each person: \$1,000,000 each occurrence. Property Damage Liability \$1,000,000 each occurrence. Must have coverage for loading & unloading. Auto Liability should include owned, hired and leased autos.
  - **Worker’s Compensation Insurance** – As required by Louisiana State Statute, exception; Employer’s Liability, Section B shall be \$1,000,000 per occurrence when work is to be over water and involves maritime exposure to cover all employees not covered under the State Worker’s Compensation Act, otherwise this limit shall be no less than \$500,000 per occurrence.
  - The vendor would be required to have the appropriate Maritime/Jones Act insurance for projects in/on/over the waterway.
  - Insurance policies shall be endorsed to provide for a waiver of subrogation in favor of St. Charles Parish. The certificate of insurance shall reference the waiver of subrogation endorsement;
  - The Worker’s Compensation Policy Territory Coverage Must include Louisiana
  - **Deductibles** – No insurance required shall include a deductible greater than \$50,000. The cost of the deductible is borne by the contractor. Company may be asked to disclose Deductible /SIR amounts.
  - **Umbrella Liability/Excess Coverage** – An umbrella policy or excess may be used to meet minimum requirements provided it has the appropriate “drop down” coverage required. If the company subcontracts any portion of this order, it is required that he carry insurance in amounts stated above. Subcontractors shall submit a certificate of insurance certifying the above insurance coverage. The successful company also assumes full responsibility for all Federal and State Contributions for Unemployment Insurance, Workmen’s Compensation, Disability Benefits Insurance, Federal Insurance Contributions Act Payments and Federal Withholding Tax of his employees.
  - **BUILDER’S RISK** – *For construction and repair projects*  
The contractor shall maintain Builder’s Risk Insurance Policy that covers the specific risks involved in the scope of work (subject to review and approval by the parish.)

2. Bidder agrees to indemnify and hold harmless St. Charles Parish, its officers and employees  
From any liability resulting indirectly or directly from the performance of the contract;
3. Certificate Holder shall read: St. Charles Parish; P.O. Box 302, Hahnville, LA
4. Vendors delivering flammable and/or toxic substances will require endorsement for Pollution Liability Coverage and meet all Federal, State, and Local laws applicable.
5. Insurance company must be authorized to do business in the State of Louisiana and have an AM best rating of at least AA-class/category VII;
6. Parish may request copies of the policy and/or sections of the policy for review;
7. It shall be the responsibility of Contractor to require that these insurance requirements are met by all contractors and sub-contractors performing work for and on behalf of contractor. Contractor shall further ensure the Parish is names as additional insured on all insurance policies provided by said contractor and/or sub-contractor through the duration of the project.
8. St. Charles Parish requires a 10-day notice of cancellation of policy.

**I hereby certify that the bid price(s) listed above and/or attached have been carefully checked and are submitted as correct and final.**

\_\_\_\_\_  
**NAME OF FIRM      AUTHORIZED SIGNATURE      DATE**

\_\_\_\_\_  
**PHYSICAL ADDRESS      TYPE OR PRINT NAME**

\_\_\_\_\_  
**P.O. BOX      E-MAIL ADDRESS (of Authorized Signature)**

\_\_\_\_\_  
**CITY, STATE, ZIP      TITLE**

\_\_\_\_\_  
**PHONE      FAX**

**DUNS NUMBER:** \_\_\_\_\_

**ST. CHARLES HERALD GUIDE**

**BID PUBLISHED:**

July 23, 2020

July 30, 2020

**PLEASE READ BID CAREFULLY!**

**LATE BIDS WILL NOT BE ACCEPTED**

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**TECHNICAL SPECIFICATIONS**

Following are the equipment specifications for bidders choosing to respond to this bid request for the Purchase of a Radio-Based Automated Meter Reading System Meters for the St. Charles Parish Department of Waterworks. A Manufacturer's brochure and samples of equipment warranties must accompany each bid to verify that bid specifications are minimum allowable.

The use of a certain brand, make or manufacturer in the specifications is to denote the quality standard of the equipment desired, but does not restrict bidders to the specific brand, make or manufacturer named. It is to set forth and convey to prospective bidders the general style, type, character and quality of the equipment desired, and equivalent products will be considered.

**SPECIFICATIONS FOR FIVE-EIGHTHS (5/8) INCH AND ONE (1) INCH COLD WATER METERS  
– MULTI-JET**

**1. GENERAL**

Except as otherwise modified or supplemented herein, the latest revision of AWWA Standard C-708 for Cold Water Meters - Multi-jet Type shall govern the materials, design, manufacture and testing of all meters furnished under this specification as approved by the Department Director or his appointed agent. AWWA Standard C708 is considered by St. Charles Parish to be minimum requirements and shall be supplemented herein to ensure the quality required by the utilities department.

Meters shall be manufactured by a company with a minimum of ten (10) years experience in manufacturing of water meters. All water meters and meter components shall be assembled and tested within the Continental United States of America. Manufacturer's corporate home office shall be in the United States. Bids will be considered only from those companies who are actively engaged in the manufacture of a complete line of water meters of various types, (i.e. multi-jet type, turbine, compound). Meters shall be bid *without* connections. Cold water meters 1" and smaller shall be magnetically driven, multi-jet, velocity type. The water utilities department reserves the right to request a sample meter to study prior to awarding a contract.

**2. METER MAIN CASE**

The main case shall be a solid case with removable bottom, cover ring or cover plate and will be manufactured to meet NSF 61 Annex G (AB1953) standards so constructed that the main case (including meter spuds) will withstand internal pressure and external stress to eliminate distortion, cracking and breaking, which will cause leakage, damage to other components or interfere with the proper operation of the meter in general. Bronze bottom, if applicable or cover shall be attached to the main case with stainless steel or bronze bolts. All external bolts, nuts and washers shall be of bronze, stainless steel or other non-corrosive metal. Main case connection for 5/8" x 3/4" and 1-inch meters shall be spuds having external water meter threads with dimension as indicated by AWWA Standards. The meter serial number shall be imprinted permanently on the main case as well as clearly on the register top lid and run consecutively per size, per order. The register housing and lid shall be made of bronze or a suitable synthetic polymer. The size, model number of the meter and direction of the flow through the meter shall be imprinted permanently on the outer case of all meters. All meter cases shall be machine finished, with no sharp edges.

**3. METER REGISTERS**

Meter Interface Units (MIUs) must be integrated and permanently sealed within the meter register using a stainless steel register base, wrap around gasket and tempered glass lens. The unit must be battery operated using two 3.6volt Lithium Thionyl Chloride batteries for long operational life greater than 10 years. The MIU must transmit the meter reading and other information via a 450-470 MHz FCC Part 90 licensed frequency to a Mobile Data Collector Unit. The MIU must be capable of being configured to transmit priority alarms for leak, reverse flow events, low battery, and magnetic tamper. The MIU must be capable of two-way communication for field programming of a user selected ID number or for resetting specific alarm codes. Unit must be able to be programmed remotely and programming must be accomplished without removing the MIU from a pit, basement, or wall application. The MIU must be capable of operating at temperatures of (-4°F to +149°F) and operating humidity of 0 to 95% condensing. The MIU must incorporate a dual band antenna capable of providing consistent and reliable connections while the pit environment is flooded or dry. Range will not be affected substantially when the pit is partially flooded. Must have an integrated unit option where the power source, RF circuitry, meter register, and antenna are fully enclosed in a single IP-68 rated ruggedized enclosure. The MIU must have an integrated unit option where the power source, RF circuitry, and meter register are connected to an external antenna in an IP-68 rated ruggedized solution. The MIU must be compatible with use on multiple brands of water meters. These units must have programmable gear ratios and available with LCD displays. LCDs must permanently display consumption status and alarms: Totalization, Rate of flow, Unit of Measure, Billable Units, Low Battery Alarm, Direction of flow. Each unit must be supplied with an appropriate register housing and adapter to retrofit the current make and model of 5/8” through 2” meters of the following meter manufacturers: Master Meter, Sensus SR11, AMCO/Elster C700, Hersey 400 / 500 Series, Neptune T-10, and Badger Recordall.

**4. MEASURING CHAMBER**

The measuring chamber shall be made of a suitable synthetic polymer material, which equals or exceeds AWWA Standards. It shall be secured in a position in the main case in such a manner that slight distortion of the main case will not affect sensitivity or registration of the meter. The measuring chamber shall be of the velocity type and designed as to allow the flow of water to pass through precision, converging orifices causing the impeller to rotate providing a synchronous relationship between the velocity of the water passing through the chamber and registration. The measuring chamber shall be constructed in such a manner as to facilitate easy removal from the main case. To ensure longevity of service, the performance of the measuring chamber shall be guaranteed to meet required meter standards of AWWA manual M-6 as follows:

New Meter Accuracy	Repaired Meter Accuracy
5/8” x 3/4” 5 years or 750,000 gallons	20 years or 2,500,000 gallons
1” 5 years or 1,100,000 gallons	15 years or 3,250,000 gallons

The measuring chamber shall be covered for this period by written warranty as required in these specifications.

**5. MAGNETIC COUPLINGS**

There shall be no stuffing box. The motion of the multivaned rotor shall be transmitted to the sealed register through the use of a direct magnetic coupling. Magnets shall be of ceramic or approved equal.



**6. STRAINERS**

All meters must be provided with a corrosion resistant strainer, which is easily removed from the meter.

**7. CHANGE GEARS**

Change gears are not acceptable. All registers of particular registration and meter size shall be identical and completely interchangeable.

**8. ACCURACY AND HEAD LOSS TESTS**

Meters shall conform to current AWWA test flow, head loss and accuracy standards.

**9. PRESSURE CAPABILITY**

Meters shall operate up to a working pressure of one hundred fifty (150) pounds per square inch and to a temperature of 120 degrees Fahrenheit, without leakage or damage to any parts. The accuracy shall not be affected when operating at this pressure to possible distortion.

**10. WARRANTY REQUIREMENTS**

The manufacturer's meter guarantee will be required with this bid and shall cover the following warranties: the entire meter shall be warranted to be free from defects in material and workmanship for a period of at least two years; and, the meter main case shall retain structural integrity for a period not less than twenty-five (25) years. All meters provided under this contract shall meet or exceed AWWA's C708 Standards for Accuracy as outlined above in Section 4 – Measuring Chamber.

**11. ACCEPTABLE METERS**

In the interest of standardization, the following meter lines are acceptable for use by St. Charles Parish provided they fully comply with the above specifications and meet all requirements in the bid package:

- A. Master Meter BLMJ
- B. Approved Equal

All meters not listed above shall pre-qualify. If any person contemplating submitting a bid desires approval of substitute materials or equipment, or is in doubt as to the meaning of any part of the specifications or other contract documents, he may submit to the Purchasing Agent a written request for prior approval or any interpretation no later than seven (7) days prior to the date for the receipt of bids. The person submitting the request will be responsible for its prompt delivery. Any interpretation of the proposed documents or approval of substitute materials or equipment will be made only by addendum duly issued and a copy mailed or delivered to each Bidder receiving a set of the specifications. The OWNER will not be responsible for any other explanation or interpretation of the specifications or proposed documents.

Technical support personnel shall be based within one hour's travel time.

**Vendor shall bid on entire package. Bid will be awarded as an all or none basis.**

**ALL METERS MUST HAVE THE CAPABILITY TO BE READ BY THE PREVIOUSLY PURCHASED RADIO-BASED AUTOMATED READING SYSTEM AS PER BID NUMBER 09-164. ITEM A.**

**SPECIFICATIONS FOR TWO (2) INCH THROUGH FOUR (4) INCH COLD WATER METERS – TRANSIT-TIME FLOWMETERS**

**1. GENERAL**

Except as otherwise modified or supplemented herein, the latest revision of AWWA Standard C-750 Transit-Time Flowmeters shall provide theory and operation specifics on the basic ultrasonic concept. This document will govern the materials, design, manufacture and testing of all meters furnished under this specification or equal as approved by the Director or his appointed agent.

AWWA Standard C750 is considered by St. Charles Parish to be only the minimum requirements and shall be supplemented herein to ensure the quality required by the utilities department.

Meters shall be manufactured by a company with a minimum of ten (10) years experience in manufacturing various types of cold water meters such as Multi-jet, Positive Displacement, Compound and Turbine Type water meters. The Manufacturer's corporate home office shall be in the United States.

Meters shall be bid without strainers and without companion flanges.

The water utilities department reserves the right to request a sample meter of a small size to study prior to awarding bids.

**2. METER MAIN CASE**

Outer cases shall be made of one of the following materials:

2" – 8": Stainless Steel SAE Grade 316 equaling or exceeding AWWA Standards such as those listed in ASTM A269.

All external bolts and nuts shall be made of bronze or stainless steel, and shall be so designed for easy removal after having been in service for a long period of time.

The main case shall withstand a working pressure of 175 PSI without leakage, seepage in the castings, or distortion affecting the free and accurate operation of the measuring unit.

The size of the meter and the direction of flow shall be case in raised letters on the outer surface of the case.

**3. REGISTER COVER**

The register box shall be made of an engineering plastic with the manufacturer's serial number inside the register lid. Serial number of the meter shall also be permanently programmed in the electronic register.

Register cover box shall be attached to main case in a tamper resistant manner. The register cover box shall be equipped with a hinged lid that will overlap the register to protect the reading area.

**4. REGISTER**

The factory sealed register shall be electronically driven only and shall be furnished with a low flow leak detection symbol and with a reverse flow notification symbol. The register shall be identical within a given size or model subject to the programming of appropriate flow factors for the particular meter. An effectively tamper proof meter with a displayed tamper indication symbol, is required. The register shall be programmed initially to read in US. Gallons as ordered by St. Charles Parish. The transparent LCD register glass lens shall be made of molded heat-treated 0.25" glass to ensure against scratching and breakage. Serial number shall be permanently programmed in the electronic register.

As defined in these specifications, a "factory sealed" register shall mean a non-fogging, moisture and dust-proof register, electronically driven by the measuring section transit time sensors. Appearance of any fogging or moisture inside the register within the warranty period shall constitute component failure and will require a factory replacement. Register shall indicate reverse flow, rate of flow, low battery indication, leak alert, as well as no flow condition.

**5. MEASURING SECTION**

The measuring section shall be a unitized unit, completely integral to the meter body. The measuring section shall not include any moving parts and the measuring section shall have an unobstructed flow passage area at least equal to 50% of the normal schedule 40 pipe size corresponding to the meter's size.

All parts of the measuring section shall be similar with assemblies of the same size and material.

The measuring section shall be secured in a position in the main case in such a manner that slight distortion of the outer meter case will not affect the sensitivity or registration of the meter.

To ensure longevity of service, the performance of the measuring chamber shall be guaranteed to meet required Compound meter accuracy standards of AWWA M6 Manual for a period of two years from date of manufacturer's shipment.

The measuring section shall be covered for this period by written warranty as required or mentioned elsewhere in these specifications.

**6. SIGNAL PROCESSING**

Two pairs of sensors are to be mounted in the chordal direct configuration in the measuring section to measure the actual transit time of the initiated and reception-generated ultrasonic sound pulses. Transit time measurements for a single pass of initiated and return pulses are to be accurate to within 300 pico-seconds for a loop time.

Multiple measurements are sampled at a minimum of 1 second intervals of these transit time loops that are made to significantly improve accuracy over a single pass transit time measurements as employed in typical AWWA C750 ultrasonic meters to achieve low flow rate measuring accuracy.

Ultrasonic meters using single directional sound transmission to determine flow measurements are not acceptable. Meters that use measurements principles based on Faraday's Law are not permitted.

**A. SIGNAL OUTPUTS**

The meter shall have 3 optional outputs – Analog, Dual Digital pulse output, or encoder output.

The Analog Output is a 4 – 20 mA current loop (the end user must supply power to the unit). 4 mA is always the set as the lower flow cutoff and the 20 mA output corresponds to the Max Flow Rate of the meter.

The Digital (pulse) Output is to be an open collector (open drain) transistor output that provides pulse per quantity with these options:

- 1. Two scaled forward flow pulses.
- 2. One scaled pulse forward flow and one flow direction.
- 3. One scaled forward flow pulse and one scaled reverse flow pulse.

The Encoder Output is to be serial communication collector utilizing UI1203 or UI1204 communication protocol.

St. Charles Parish shall choose one of these three basic output choices with dependent options on the Digital pulse option.

**7. INSTALLATION REQUIREMENTS**

Meters shall be designed so that no strainer or straightening vanes are required. There shall be no internal parts blocking the waterway. No straight runs of pipe shall be necessary before or after the meter.

**8. ACCURACY AND HEAD LOSS TESTS**

Meters shall EXCEED current AWWA C-702 test flow, head loss and accuracy standards as follows.

SIZE	SAFE MAXIMUM FLOW RATE	C-750 FLOW RANGE ACCURACY +/- 0.5%	NORMAL FLOW RANGE ACCURACY +/- 1.5%	EXTENDED LOW FLOW RANGE ACCURACY +/- 5%	HEAD LOSS @ SAFE MAXIMUM	LOW FLOW SENSITIVITY
2"	250 GPM	4 - 200 GPM	½ GPM – 250 GPM	0.25 GPM	1.3 PSI	1/16 GPM
3"	500 GPM	5 - 350 GPM	1 GPM – 500 GPM	0.50 GPM	2.4 PSI	1/16 GPM
4"	1,000 GPM	15 - 700 GPM	1 ½ GPM – 1,000 GPM	0.75 GPM	3.7 PSI	1/16 GPM

**9. PRESSURE CAPABILITY**

Meters shall operate up to a working pressure of one hundred seventy five (175) pounds per square inch (PSI) and to a temperature of 122 degrees Fahrenheit, without leakage or damage to any parts. The accuracy shall not be affected when operating at this pressure to possible distortion.

**10. ACCEPTABLE METERS**

In the interest of standardization, the following meter lines are acceptable to St. Charles Parish provided they fully comply with the above specifications and meet all requirements in the bid package:

- A. MASTER METER OCTAVE
- B. APPROVED EQUAL

All meter models shall be at a minimum ultrasonic type with at least two transit time paths. All meters not listed above shall pre-qualify. In order to pre-qualify, the manufacturer shall send necessary drawings and technical data to St. Charles Parish and complete a minimum of six-months in field-testing. Any exceptions to the specifications shall be pre-qualified by the above method.

**11. BIDDERS RESPONSIBILITY TO THIS SPECIFICATION**

It is the responsibility of each bidder to carefully examine these specifications and the bid documents and become familiar with the requirements set forth herein. In addition, it is the responsibility of each bidder to submit all necessary information concerning their product to St. Charles Parish. Failure to do so could result in your bid being declared as non-responsive.

The following items will be on a yearly requirements contract. Meters will be purchase on an as needed basis.

	Size	Price
1.	5/8" x 3/4" meters	_____
2.	1" meters	_____
3.	2" meters	_____
4.	3" meters	_____
5.	4" meters	_____

Make &/or Model \_\_\_\_\_

FOB DESTINATION FREIGHT PRE-PAID      ST. CHARLES PARISH WATERWORKS  
 301 THIRD STREET  
 LULING, LA 70070

DELIVERY TIME- 0 -10 DAYS ARO

NAME OF FIRM \_\_\_\_\_

# *PROCUREMENT AGREEMENT*

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St. Charles Parish, represented herein by Matthew Jewell, Parish President, and the successful vendor noted below, does hereby enter into this Procurement Agreement for the expressed purpose of providing the following in order to serve the public.

**Description of Procurement:** YEARLY REQUIREMENT CONTRACT - BID NUMBER 21-164

**RADIO-BASED AUTOMATED METER READING SYSTEM METERS or APPROVED EQUAL**

**Now Therefore,** St. Charles Parish does, hereby, enter into this Procurement Agreement with the undersigned below.

ST. CHARLES PARISH

By: \_\_\_\_\_  
Matthew Jewell, Parish President      Date

COMPANY NAME  
\_\_\_\_\_

\_\_\_\_\_  
Authorized Signature of Company      Date

**Please return this document back signed and attached to this bid form.**