

Specifications & Contract Documents

prepared for the

Caldwell County Water District



for the proposed

**PARTIAL SYSTEM-WIDE METER
CHANGE OUT CONTRACT**

prepared by

MCGHEE ENGINEERING, INC.
Guthrie, Kentucky

August 2024

Partial Preview

Caldwell County Water District

PARTIAL SYSTEM-WIDE METER CHANGE OUT PROJECT

CONTRACT DOCUMENTS

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ADVERTISEMENT FOR BIDS

Caldwell County Water District
118 W. Market Street
Princeton, KY 42445

RE: Partial System-wide Meter Change Out Project

The **Caldwell County Water District** will receive separate, sealed Proposals for their **Partial System-wide Meter Change Out Project** until **1:30 p.m. local time, Tuesday, August 20, 2024** at the office of Caldwell County Water District in Princeton, Kentucky, at which time they will be publicly opened and read aloud. Mailed or shipped bids should be sent before bid opening to the District's business address of 118 W. Market Street; Princeton, KY 42445.

The contract involves the purchase of all equipment, hardware & software for use in implementing an automated water meter reading system within a portion of the Caldwell County Water District (Caldwell County, KY). The awarded vendor shall **deliver the purchased equipment to the Owner by October 15, 2024 unless modified otherwise.**

The Issuing Office for the Bidding Documents is: McGhee Engineering, Inc., at P.O. Box 267, 202 South Ewing Street, Guthrie, Kentucky 42234 or by calling (270) 483-9985. Perspective Bidders may examine the Bidding Documents at the Issuing Office on Mondays through Fridays between the hours of 8:30-4:30 pm, and may obtain copies of the Bidding Documents from the Issuing Office as described below. Plans must be ordered by visiting www.mcgheeengineering.com and clicking "**Bid Opportunities**". Plans will be sold with an option of Digital only OR Printed Set w/ Digital copy. Bids will be accepted only from registered contractors holding approved bid forms provided by the Issuing Office. Plan holders may be viewed at www.mcgheeengineering.com. **If Bidder offers other products that also meets the project's needs and specifications, the Bidder may elect to turn in an additional bid for consideration, which includes a separate, unbound copy of the Bid Form along with the Bidder's Qualifications Statement, all in a separate sealed envelope.**

This project will be funded with District Reserve monies and/or fully with Cleaner Water Program (CWP) grant funds administered through the Kentucky Infrastructure Authority (KIA). Applicable CWP requirements and provisions must be met by the Bidder and all subcontractors.

Small and Disadvantaged Business Enterprises are encouraged to participate in this project. The Caldwell County Water District is an Equal Opportunity Employer. **The District reserves the right to reject any or all Bids, to waive any technicality, and to accept any Bid which it deems advantageous. All Bids shall remain subject to acceptance for 90 days after the time set for receiving proposals.**

Published by the authority of the Caldwell County Water District
Sally Hart, Chairman

Dated: August 7, 2024

INSTRUCTIONS TO BIDDERS

A. These Instructions to Bidders establish requirements for Bidding and Award of Contract.

B. Table of Articles

Article 1 – Defined Terms

Article 2 – Copies of Bidding Documents

Article 3 – Qualifications of Bidders

Article 4 – Site and Other Areas; Existing Site Conditions; Examination of Site; Owner’s Safety Program;
Other Work at the Site

Article 5 – Bidder’s Representations

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Article 28 – Safety Standards & Accident Prevention

ARTICLE 1- DEFINED TERMS

Other terms used in the bidding documents and not defined elsewhere have the following meanings which are applicable to both the singular and plural thereof.

1.01 Terms used in these Instructions to Bidders will have the meanings indicated in the General Conditions and the Supplementary Conditions. Additional terms used in these Instructions to Bidders have the meanings indicated below which are applicable to both the singular and plural thereof.

- A. Bidder - The individual or entity who submits a Bid directly to OWNER.
- B. Issuing Office - The office from which the Bidding Documents are to be issued.
- C. Successful Bidder - The lowest responsible Bidder submitting a responsive Bid to whom OWNER (on the basis of OWNER's evaluation as hereinafter provided) makes an award.

ARTICLE 2 - COPIES OF BIDDING DOCUMENTS

2.01 Complete sets of the Bidding Documents may be obtained from the Issuing Office in the number and format stated in the advertisement or invitation to bid.

2.02 Complete sets of Bidding Documents must be used in preparing Bids; neither OWNER nor ENGINEER assume any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

2.03 OWNER and ENGINEER in making copies of Bidding Documents available on the above terms do so only for the purpose of obtaining Bids for the Work and do not confer a license or grant for any other use.

ARTICLE 3 - QUALIFICATIONS OF BIDDERS

3.01 To demonstrate Bidder's qualifications to perform the Work, after submitting its Bid and within **10** days of Owner's request, Bidder shall submit (a) written evidence establishing its qualifications such as financial data, previous experience, and present commitments, and (b) the following additional information:

- A. Evidence of Bidder's authority to do business in the state where the Project is located.
- B. Bidder's state or other contractor license number, if applicable.
- C. Subcontractor and Supplier qualification information; coordinate with provisions of Article 12 of these Instructions, "Subcontractors, Suppliers, and Others."

3.02 A Bidder's failure to submit required qualification information within the times indicated may disqualify Bidder from receiving an award of the Contract.

3.03 No requirement in this Article 3 to submit information will prejudice the right of Owner to seek additional pertinent information regarding Bidder's qualifications.

3.04 Bidder is advised to carefully review those portions of the Bid Form requiring Bidder's representations and certifications.

ARTICLE 4 - SITE AND OTHER AREAS; EXISTING SITE CONDITIONS; EXAMINATION OF SITE; OWNER'S SAFETY PROGRAM; OTHER WORK AT THE SITE

4.01 *Site and Other Areas*

- A. The Site is identified in the Bidding Documents. By definition, the Site includes rights-of-way, easements, and other lands furnished by Owner for the use of the Contractor. Any additional lands required for temporary construction facilities, construction equipment, or storage of materials and equipment, and any access needed for such additional lands, are to be obtained and paid for by Contractor.

4.02 *Existing Site Conditions*

A. Subsurface and Physical Conditions; Hazardous Environmental Conditions

1. The Supplementary Conditions identify:

- a. those reports known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site.
- b. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities).
- c. reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site.
- d. Technical Data contained in such reports and drawings.

- 2. Owner will make copies of reports and drawings referenced above available to any Bidder on request. These reports and drawings are not part of the Contract Documents, but the Technical Data contained therein upon whose accuracy Bidder is entitled to rely, as provided in the General Conditions, has been identified and established in the Supplementary Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any Technical Data or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings.

- 3. If the Supplementary Conditions do not identify Technical Data, the default definition of Technical Data set forth in Article 1 of the General Conditions will apply.

- B. Underground Facilities: Information and data shown or indicated in the Bidding Documents with respect to existing Underground Facilities at or adjacent to the Site are set forth in the Contract Documents and are based upon information and data furnished to Owner and Engineer by owners of such Underground Facilities, including Owner, or others.

- C. Adequacy of Data: Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to subsurface conditions, other physical conditions, and Underground Facilities, and possible changes in the Bidding Documents due to differing or unanticipated subsurface or physical conditions appear in Paragraphs 5.03, 5.04, and 5.05 of the General Conditions. Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to a Hazardous Environmental Condition at the Site, if any, and possible changes in the Contract Documents due to any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work, appear in Paragraph 5.06 of the General Conditions.

4.03 *Site Visit and Testing by Bidders*

- A. Bidder shall conduct the required Site visit during normal working hours, and shall not disturb any ongoing operations at the Site.

- B. Bidder is not required to conduct any subsurface testing, or exhaustive investigations of Site conditions.
- C. On request, and to the extent Owner has control over the Site, and schedule permitting, the Owner will provide Bidder access to the Site to conduct such additional examinations, investigations, explorations, tests, and studies as Bidder deems necessary for preparing and submitting a successful Bid. Owner will not have any obligation to grant such access if doing so is not practical because of existing operations, security or safety concerns, or restraints on Owner's authority regarding the Site.
- D. Bidder shall comply with all applicable Laws and Regulations regarding excavation and location of utilities, obtain all permits, and comply with all terms and conditions established by Owner or by property owners or other entities controlling the Site with respect to schedule, access, existing operations, security, liability insurance, and applicable safety programs.
- E. Bidder shall fill all holes and clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies.

4.04 *Owner's Safety Program*

- A. Site visits and work at the Site may be governed by an Owner safety program. As the General Conditions indicate, if an Owner safety program exists, it will be noted in the Supplementary Conditions.

4.05 *Other Work at the Site*

- A. Reference is made to Article 8 of the Supplementary Conditions for the identification of the general nature of other work of which Owner is aware (if any) that is to be performed at the Site by Owner or others (such as utilities and other prime contractors) and relates to the Work contemplated by these Bidding Documents. If Owner is party to a written contract for such other work, then on request, Owner will provide to each Bidder access to examine such contracts (other than portions thereof related to price and other confidential matters), if any.

ARTICLE 5 – BIDDER'S REPRESENTATIONS

5.01 It is the responsibility of each Bidder before submitting a Bid to:

- A. examine and carefully study the Bidding Documents, and any data and reference items identified in the Bidding Documents;
- B. visit the Site, conduct a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfy itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work;
- C. become familiar with and satisfy itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work,
- D. carefully study all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings;
- E. consider the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Site-related reports and drawings identified in the

Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs;

- F. agree, based on the information and observations referred to in the preceding paragraph, that at the time of submitting its Bid no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of its Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents;
- G. become aware of the general nature of the work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents;
- H. promptly give Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder discovers in the Bidding Documents and confirm that the written resolution thereof by Engineer is acceptable to Bidder;
- I. determine that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work; and
- J. agree that the submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

ARTICLE 6 – PRE-BID CONFERENCE

6.01 If warranted, a pre-Bid conference will be held at the time and location stated in the invitation or advertisement for bids. Representatives of Owner and Engineer will be present to discuss the Project. Bidders are encouraged to attend and participate in the conference. Engineer will transmit to all prospective Bidders of record such Addenda as Engineer considers necessary in response to questions arising at the conference. Oral statements may not be relied upon and will not be binding or legally effective.

ARTICLE 7 - INTERPRETATIONS AND ADDENDA

7.01 All questions about the meaning or intent of the Bidding Documents are to be submitted to Engineer in writing. Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda delivered to all parties recorded as having received the Bidding Documents. Questions received less than seven days prior to the date for opening of Bids may not be answered. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

7.02 Addenda may be issued to clarify, correct, supplement, or change the Bidding Documents. Addenda will be mailed no later than **three days** prior to the day set for receiving Bids. Failure of any Bidder to receive any such Addendum or interpretation shall not relieve such Bidder from any obligations under the Bid as submitted. All Addenda so issued shall become part of the Contract Documents.

7.03 Addenda may also be issued to clarify, correct, or change the Bidding Documents as deemed advisable by OWNER or ENGINEER.

7.04 Receipt of all addenda must be acknowledged in space provided in the Bid.

ARTICLE 8 - BID SECURITY

8.01 A Bid must be accompanied by Bid security made payable to OWNER in an amount of **five percent (5%)** of the Bidder's maximum Bid price and in the form of a certified check or a Bid Bond (EJCDC No. C-430, 2013 Edition) issued by a surety meeting the requirements of paragraphs 6.01 and 6.02 of the General Conditions.

8.02 The Bid security of the apparent Successful Bidder will be retained until Owner awards the contract to such Bidder, and such Bidder has executed the Contract Documents, furnished the required contract security, and met the other conditions of the Notice of Award, whereupon the Bid security will be released. If the Successful Bidder fails to execute and deliver the Contract Documents and furnish the required contract security within 10 days after the Notice of Award, Owner may consider Bidder to be in default, annul the Notice of Award, and the Bid security of that Bidder will be forfeited. Such forfeiture shall be Owner's exclusive remedy if Bidder defaults.

8.03 The Bid security of other Bidders that Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of seven days after the Effective Date of the Contract or 91 days after the Bid opening, whereupon Bid security furnished by such Bidders will be released.

8.04 Bid security of other Bidders that Owner believes do not have a reasonable chance of receiving the award will be released within seven days after the Bid opening.

ARTICLE 9 - CONTRACT TIMES

9.01 The number of days within which, or the dates by which the Work is to be substantially completed, and completed and ready for final payment, are set forth in the Agreement.

ARTICLE 10 - LIQUIDATED DAMAGES

10.01 Provisions for liquidated damages in any for failure to timely attain Substantial Completion or completion of the Work in readiness for final payment, are set forth in the Agreement.

ARTICLE 11 - SUBSTITUTE OR "OR-EQUAL" ITEMS

11.01 The Contract for the Work, if awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents, and those "or-equal" or substitute or materials and equipment subsequently approved by Engineer prior to the submittal of Bids and identified by Addendum. No item of material or equipment will be considered by Engineer as an "or-equal" or substitute unless written request for approval has been submitted by Bidder and has been received by Engineer at least 15 days prior to the date for receipt of Bids in the case of a proposed substitute and 5 days prior in the case of a proposed "or equal". Each such request shall comply with the requirements of Paragraphs 7.04 and 7.05 of the General Conditions. Each such request shall include Manufacturer's Certification letter for compliance with AIS requirements and subsequent statutes mandating domestic preference, if applicable. Refer to Manufacturer's Certification Letter provided in these Contract Documents.

11.02 All prices that Bidder sets forth in its Bid shall be based on the presumption that the Contractor will furnish the materials and equipment specified or described in the Bidding Documents, as supplemented by Addenda. Any assumptions regarding the possibility of post-Bid approvals of "or-equal" or substitution requests are made at Bidder's sole risk.

11.03 If award is made, Contractor shall be allowed to submit proposed substitutes and "or equals" in accordance with the General Conditions.

ARTICLE 12 - SUBCONTRACTORS, SUPPLIERS, AND OTHERS

12.01 A list of subcontractors, suppliers, individuals, or entities shall be submitted along with the Bid at the Bid Opening to the OWNER. If requested by Owner, such list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor, Supplier, or other individual or entity. If Owner or Engineer, after due investigation, has reasonable objection to any proposed Subcontractor, Supplier, individual, or entity, Owner may, before the Notice of Award is given, request apparent Successful Bidder to submit an acceptable substitute, in which case apparent Successful Bidder shall submit a substitute, Bidder's Bid price will be increased (or decreased) by the difference in cost occasioned by such substitution, and Owner may consider such price adjustment in evaluating Bids and making the Contract award.

12.02 If apparent Successful Bidder declines to make any such substitution, Owner may award the Contract to the next lowest Bidder that proposes to use acceptable Subcontractors, Suppliers, or other individuals or entities. Declining to make requested substitutions will constitute grounds for forfeiture of the Bid security of any Bidder. Any Subcontractor, Supplier, individual, or entity so listed and against which Owner or Engineer makes no written objection prior to the giving of the Notice of Award will be deemed acceptable to Owner and Engineer subject to subsequent revocation of such acceptance as provided in Paragraph 7.06 of the General Conditions.

12.03 CONTRACTOR shall not be required to employ any subcontractor, supplier, individual, or entity against whom CONTRACTOR has reasonable objection.

12.04 The CONTRACTOR shall not award work to Subcontractor(s) in excess of the limits stated in SC 7.06.

ARTICLE 13 – PREPARATION OF BID

13.01 The Bid Form is included with the Bidding Documents.

- A. All blanks on the Bid form must be typed or completed in ink and the Bid Form signed in ink. Erasures or alterations shall be initialed in ink by the person signing the Bid Form. A Bid price shall be indicated for each section, Bid item, alternative, adjustment unit price item, and unit price item listed therein.
- B. If the Bid Form expressly indicates that submitting pricing on a specific alternate item is optional, and Bidder elects to not furnish pricing for such optional alternate item, then Bidder may enter the words "No Bid" or "Not Applicable."

13.02 A Bid by a corporation shall be executed in the corporate name by a corporate officer (whose title must appear under the signature), accompanied by evidence of authority to sign. The corporate address and state of incorporation shall be shown. The corporate seal shall be affixed and attested by the secretary or an assistant secretary.

13.03 A Bid by a partnership shall be executed in the partnership name and signed by a partner (whose title must appear under the signature), accompanied by evidence of authority to sign. The official address of the partnership shall be shown below the signature.

13.04 A Bid by a limited liability company shall be executed in the name of the firm by a member and accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm shall be shown below the signature.

13.05 A Bid by an individual shall show the Bidder's name and address for receiving notices.

13.06 A Bid by a joint venture shall be executed by each joint venturer in the manner indicated on the Bid form. The joint venture's address for receiving notices shall be shown.

13.07 All names shall be typed or printed in ink below the signatures.

13.08 The Bid shall contain an acknowledgment of receipt of all Addenda, the number and dates of which must be filled in on the Bid form.

13.09 Postal and e-mail addresses and telephone number for communications regarding the Bid shall be shown.

13.10 The Bid shall contain evidence of Bidder's authority and qualification to do business in the state where the Project is located, or Bidder shall covenant in writing to obtain such authority and qualification prior to award of the Contract and attach such covenant to the Bid. Bidder's state contractor license number, if any, shall also be shown on the Bid Form.

ARTICLE 14 - BASIS OF BID; COMPARISON OF BIDS

14.01 Bidders shall submit a Bid on a unit price basis for each item of Work listed in the unit price section of the Bid Form.

14.02 The "Bid Price" (sometimes referred to as the extended price) for each unit price Bid item will be the product of the "Estimated Quantity" (which Owner or its representative has set forth in the Bid Form) for the item and the corresponding "Bid Unit Price" offered by the Bidder. The total of all unit price Bid items will be the sum of these "Bid Prices"; such total will be used by Owner for Bid comparison purposes. The final quantities and Contract Price will be determined in accordance with Paragraph 13.03 of the General Conditions.

14.03 Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

ARTICLE 15 - SUBMITTAL OF BID

15.01 Bid Form is to be completed and submitted with all the attachments as required. Bidder shall furnish at least one separate, unbound copy of the Bid Form, along with the Bidder's Qualifications Statement in a sealed envelope. **If Bidder offers other products that also meets the project's needs and specifications, the Bidder may elect to turn in an additional bid for consideration, which includes a separate, unbound copy of the Bid Form along with the Bidder's Qualifications Statement, all in a separate sealed envelope.** All envelopes prepared as outlined in Paragraph 15.02.

15.02 A Bid shall be received no later than the date and time prescribed and at the place indicated in the advertisement or invitation to bid and shall be enclosed in a plainly marked package with the Project title (and, if applicable, the designated portion of the Project for which the Bid is submitted), the name and address of Bidder, and shall be accompanied by the Bid security and other required documents. If a Bid is sent by mail or other delivery system, the sealed envelope containing the Bid shall be enclosed in a separate package plainly marked on the outside with the notation "BID ENCLOSED." A mailed Bid shall be addressed to the location of the bid opening, as listed in the Advertisement.

15.03 Bids received after the date and time prescribed for the opening of bids, or not submitted at the correct location or in the designated manner, will not be accepted and will be returned to the Bidder unopened.

ARTICLE 16 - MODIFICATION AND WITHDRAWAL OF BIDS

16.01 A Bid may be modified or withdrawn by an appropriate document duly executed in the manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the date and time for the opening of Bids. Upon receipt of such notice, the unopened Bid will be returned to the Bidder.

16.02 If a Bidder wishes to modify its Bid prior to Bid opening, Bidder must withdraw its initial Bid in the manner specified in Paragraph 16.01 and submit a new Bid prior to the date and time for the opening of Bids.

16.03 If within 24 hours after Bids are opened any Bidder files a duly signed written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid, and the Bid security will be returned. Thereafter, if the Work is rebid, that Bidder will be disqualified from further bidding on the Work.

ARTICLE 17 - OPENING OF BIDS

17.01 Bids will be opened at the time and place indicated in the advertisement or invitation to bid and, unless obviously non-responsive, read aloud publicly. An abstract of the amounts of the base Bids and major alternates, if any, will be made available to Bidders after the opening of Bids.

ARTICLE 18 - BIDS TO REMAIN SUBJECT TO ACCEPTANCE

18.01 All Bids will remain subject to acceptance for a period of **90 days**, but OWNER may, in its sole discretion, release any Bid and return the Bid security prior to the end of this period.

ARTICLE 19 – EVALUATION OF BIDS & AWARD OF CONTRACT

19.01 Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. Owner will reject the Bid of any Bidder that Owner finds, after reasonable inquiry and evaluation, to not be responsible. If Bidder purports to add terms or conditions to its Bid, takes exception to any provision of the Bidding Documents, or attempts to alter the contents of the Contract Documents for purposes of the Bid, then the Owner will reject the Bid as nonresponsive; provided that the Owner also reserves the right to waive all minor informalities not involving price, time, or changes in the Work.

19.02 If Owner awards the contract for the Work, such award shall be to the responsible Bidder submitting the responsive Bid perceived by the Owner as offering the greatest advantage to the Owner.

19.03 Evaluation of Bids

- A. In evaluating Bids, OWNER will consider whether or not the Bids comply with the prescribed requirements, and such alternatives, unit prices, and other data as may be requested in the Bid form or prior to the Notice of Award.
- B. For the determination of the apparent low Bidder(s) when unit price bids are submitted, Bids will be compared on the basis of the total of the products of the estimated quantity of each item and unit price Bid for that item, together with any lump sum items.

19.04 In evaluating whether a Bidder is responsible, Owner will consider the qualifications of the Bidder and may consider the qualifications and experience of Subcontractors and Suppliers proposed for those

portions of the Work for which the identity of Subcontractors and Suppliers must be submitted as provided in the Bidding Documents.

19.05 Owner may conduct such investigations as Owner deems necessary to establish the responsibility, qualifications, and financial ability of Bidders and any proposed Subcontractors or Suppliers.

19.06 The Bid is subject to Kentucky Revised Statutes Section 45A.490 through 45A.494, which in general provides that a "resident bidder" of Kentucky is to be given a bidding preference over a "nonresident bidder" who is registered in a state that gives preference to its in-state resident bidders over a Kentucky resident bidder. The bidding preference is to be the same as that stipulated of the state of the "nonresident bidder." If the state of "nonresident bidder" provides no specific preference, then "resident" and "nonresident bidders" are to be treated the same when evaluating Bids.

19.07 If a Contract is to be awarded, OWNER will give the successful Bidder a Notice of Award within 90 days after the time set for opening Bids. **Note that the OWNER reserves the right to revise the quantity of product to be purchased and to award Pricing Option(s) that it deems most advantageous considering costs, available funds, and readily product availability.**

ARTICLE 20 - BONDS AND INSURANCE

20.01 Article 6 of the General Conditions, as may be modified by the Supplementary Conditions, sets forth OWNER's requirements as to performance and payment bonds and insurances. When the Successful Bidder delivers the executed Agreement to OWNER, it must be accompanied by the required performance and payment bonds and insurances.

20.02 All bonds required by the project shall be payable to the OWNER in an amount of one hundred percent of the Contractor's maximum Base Bid price.

ARTICLE 21 - SIGNING OF AGREEMENT

21.01 When the OWNER gives a Notice of Award to the Successful Bidder, it will be accompanied by a list of items and information required of the Successful Bidder for evaluation by the OWNER and funding agency, if applicable. Within **10** days thereafter, the successful Bidder shall deliver the full number of original copies of the items listed and the Notice must be acknowledged by the Successful Bidder within **10** days thereafter. After receipt of an acknowledged Notice of Award, a pre-construction meeting will be scheduled at which time the OWNER and Successful Bidder will execute the required number of Agreements and Notice to Proceed. After certification by the Local Counsel and any other required parties, the OWNER shall deliver one fully signed counterpart to the Successful Bidder along with a complete set of Drawings with appropriate identification. OWNER will furnish the Contractor up to three (3) sets of conforming Contract Documents, Technical Specifications and Plans free of charge. Additional sets may be obtained from the Engineer at commercial reproduction rates. The successful bidder shall commence work within ten (10) calendar days after receipt of written notice to proceed and shall progress therewith so that the work shall be completed in accordance with the terms of the Contract Documents within the time allowed after the date of the commencement of contract time.

21.02 **This Contract is expected to be funded with District Reserves and/or fully in part with funds provided by the Cleaner Water Program (CWP) grant funds as administered by the Kentucky Infrastructure Authority (KIA). CWP requirements and provisions must be met by the Bidder and all subcontractors.**

21.03 Concurrence by KIA in the award of the Contract may be required before the Contract is effective.

ARTICLE 22 - RETAINAGE

22.01 Prior to Substantial Completion, OWNER will retain an amount equal to 5% of each progress payment application. Amounts previously retained shall not be paid to the CONTRACTOR until substantial completion of the Work. In no event shall the total Retainage be more than 5% of the value of the work satisfactorily completed.

22.02 Retainage shall be applicable to the Total Value of Work and Stored Materials less the Value of In-place OWNER Purchased Materials.

ARTICLE 23 – LICENSES, FEES, AND TAXES

23.01 The Bid shall include all taxes in effect at the time the Bid is submitted, unless specifically exempted in the Bidding Documents. No change will be allowed for taxes from which OWNER is exempt. Bidders who are uncertain as to what items are subject to tax, or who require further explanation or clarification, are requested to contact the State of Kentucky Revenue Cabinet.

23.02 Successful Bidder must comply with any City ordinances relating to Occupational License Fees, Business Licenses, payroll, and net profits taxes and any other ordinances which may apply to the project. Refer to the Supplementary Conditions SC-6.10 for additional information.

23.03 Successful Bidder must provide proof of having all such licenses or fees at or before the signing of the Contract.

ARTICLE 24 - WAGE RATE DETERMINATION

24.01 If the contract price is in excess of \$100,000, provisions of the Contract Work Hours and Safety Standards Act at 29 CFR 5.5(b) apply.

24.02 Pursuant to 2017 Kentucky House Bill 9, State prevailing wages do not apply to this Contract.

24.03 Federal Davis Bacon wage rates do not apply to this Contract.

ARTICLE 25 – OTHER BID REQUIREMENTS

25.01 Bidder shall complete the following documents attached to the Bid:

Statement of Experience

ARTICLE 26 – LAWS, ORDINANCES, AND REGULATIONS

26.01 Bidder must familiarize itself with all laws, ordinances, and regulations by federal, state, city, or other governmental agency, which by reason of being neglected or violated may affect the Work contemplated and must secure and pay the fee required for any permits which may be necessary unless such fees are otherwise indicated to be paid in the Bidding Documents.

26.02 Bidders must comply with Title VI of the Civil Rights Act of 1964, the Anti-Kickback Act, and the Contract Work Hours Standard Act.

26.03 Bidders must comply with the President's Executive Order No. 11246 as amended, which prohibits discrimination in employment regarding race, creed, color, sex or national origin.

26.04 This project will be in compliance with Executive Order 11246 (Equal Employment Opportunity) as amended.

26.05 The Contractor/Subcontractor will comply with 41CFR 60-4, in regard to affirmative action, to insure equal opportunity to females and minorities and will apply the time tables and goals set forth in 41 CFR 60-4.

26.06 Bidder will make positive efforts to use small, minority, women owned and disadvantaged businesses.

26.07 Bidder/Owner will comply to provisions for timely periodic payments and for limiting retainage (40 CFR 31.36).

ARTICLE 27 – INSURANCE

27.01 Before execution of Contract by OWNER, the successful Bidder shall furnish OWNER a certificate or certificates issued by or on behalf of insurers or a self-insurance program or group self insurance program, qualified to do business in the Commonwealth of Kentucky under KRS Chapter 304 or KRS Chapter 342, certifying that the successful Bidder complies with the Worker's Compensation laws of Kentucky and is insured or indemnified against public liability claims which may arise out of the performance of the Work under the proposed Contract.

ARTICLE 28 – SAFETY STANDARDS AND ACCIDENT PREVENTION:

28.01 With respect to all work performed under this contract, the contractor shall:

Comply with the safety standards provision of applicable laws, building and construction codes and the "Manual of Accident Prevention in Construction" published by the Associated General Contractors of America, the requirements of the Occupational Safety and Health Act of 1970 (Public Law 91-596), and the requirements of Title 29 of the Code of Federal Regulations, Section 1518 as published in the "federal Register", Volume 36, No. 75, Saturday, April 17, 1971. Exercise every precaution at all times for the prevention of accidents and the protection of persons (including employees) and property. Maintain at his/her office or other well know place at the job site, all articles necessary for giving first aid to the injured, and shall make standing arrangements for the immediate removal to a hospital or a doctor's care of persons (including employees), who may be injured on the job site before the employer has made a standing arrangement for removal of injured persons to a hospital or a doctor's care.

BID FORM

Project Identification: Caldwell County Water District
Partial System-wide Water Meter Change Out Project

Contract Identification: Partial System-wide Water Meter Change Out Project

ARTICLE 1 – BID RECIPIENT

1.01 This Bid is Submitted to: Caldwell County Water District
118 W. Market Street
Princeton, Kentucky 42445

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in the Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2 – BIDDER'S ACKNOWLEDGMENTS

2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for **90 days** after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

ARTICLE 3 – BIDDER'S REPRESENTATIONS

- 3.01 In submitting this Bid, Bidder represents that:
- A. Bidder has examined and carefully studied the Bidding Documents, and any data and reference items identified in the Bidding Documents, and hereby acknowledges receipt of the following Addenda:

Addendum No. _____ Dated _____
Addendum No. _____ Dated _____
Addendum No. _____ Dated _____
 - B. Bidder has visited the Point of Destination and site where the Goods or Special Services will be provided and become familiar with and is satisfied as to the observable local conditions that may affect cost, progress, or the furnishing of Goods and Special Services, if required to do so by the Bidding Documents, or if in Bidder's judgment, any local condition may affect cost, progress, or the furnishing of Goods and Special Services
 - C. Bidder is familiar with and has satisfied itself as to all Laws and Regulations that may affect cost, progress, performance of the Work.
 - D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings.
 - E. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and any Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost,

EJCDC® C-410, Bid Form for Construction Contracts.

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progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs.

- F. Bidder agrees, based on the information and observations referred to in the preceding paragraph, that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.
- G. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and confirms that the written resolution thereof by Engineer is acceptable to Bidder.
- I. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work.
- J. The submission of this Bid constitutes an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, and that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.
- K. **The Bidder understands final quantities of equipment and/or installations may differ at the time of the Notice to Proceed.**
- L. **The Bidder shall be aware of the current KRS 139.80(34) regarding the tax exemption for building materials, fixtures, and supplies purchased by a construction contractor for a sewer or water project with a governmental agency. No sales tax shall be included in the stated bid prices. The awarded contractor will be required to complete a Certificate of Exemption (see Appendix) with each vendor on the project.**

ARTICLE 4 – BIDDER'S CERTIFICATION

4.01 Bidder certifies that:

- A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;
- B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
- C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
- D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:
 - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process;
 - 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;

3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and
4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

ARTICLE 5 – BASIS OF BID

5.01 Bidder will furnish the Goods and Special Services in accordance with the Contract Documents for the following price(s):

5.02 BASE BID – AUTOMATED FIXED BASED AMI SYSTEM (Radio or Cellular):

BASE BID – Automated Fixed Base AMI Read System (EQUIPMENT)				
ITEM	QUANTITY	UNITS	UNIT PRICE	TOTAL
Provide New 5/8"x3/4" residential type water meter PLUS New communication transceiver unit & all accessories for full Fixed Base AMI read capability	500	EA	\$	\$
Provide Thru the Lid Mounting Kit, <u>as applicable</u> .	500	EA	\$	\$
Remote reading system including notebook computer, handheld units, radio receiver, all software, supplies and services, set-up and training.	1	LS	\$	\$
TOTAL BASE BID AMOUNT				\$ _____
For the smaller meter sizes (1" or smaller), the Bidder's AMI system utilizes (check one): <input type="checkbox"/> Electromagnetic Type <input type="checkbox"/> Ultrasonic Type (solid state) <input type="checkbox"/> Other (Specify) _____	Bidder's AMI system utilizes (check Brand): <input type="checkbox"/> Kamstrup <input type="checkbox"/> Badger Meter <input type="checkbox"/> Neptune Meter <input type="checkbox"/> Other (Specify) _____		Bidder's AMI System utilizes (check one): <input type="checkbox"/> Cell Communication <input type="checkbox"/> Radio Communication	

SUPPLEMENTAL EQUIPMENT BASE BID ITEMS:

ITEM	QUANTITY	UNITS	UNIT PRICE
Provide 1" water meter with new communication transceiver unit & all accessories for full Fixed Base AMI read capability	0-10	EA	\$

This Base Bid offer is made with (check all that apply):

- Estimated annual costs (i.e. subscriptions, fees), if applicable: \$ _____ /year
- No exceptions to the Time of Completion as defined in Article 6.
- Estimated Lead Time for delivery of Materials: _____ weeks
- No exceptions to the technical specifications and instructions to bidders.
- Exceptions as described in a _____ page attachment to this bid.
- Attached Propagation Study illustrating AMI coverage abilities.

5.03 ALTERNATE BID OPTION #1 – AUTOMATED DRIVE-BY AMR SYSTEM:

ALTERNATE BID – Automated Drive-By AMR System (EQUIPMENT)				
ITEM	QUANTITY	UNITS	UNIT PRICE	TOTAL
Provide New 5/8"x3/4" residential type water meter PLUS New communication transceiver unit & all accessories for full Drive-by AMR read capability	500	EA	\$	\$
Provide Thru the Lid Mounting Kit, <u>as applicable</u> .	500	EA	\$	\$
Remote reading system including notebook computer, handheld units, radio receiver, all software, supplies and services, set-up and training.	1	LS	\$	\$
TOTAL ALTERNATE BID OPTION #1 AMOUNT				\$ _____
For the smaller meter sizes (1" or smaller), the Bidder's AMR system utilizes (check one) :		Bidder's AMR system utilizes (check Brand) :		
<input type="checkbox"/> Electromagnetic Type <input type="checkbox"/> Ultrasonic Type (solid state) <input type="checkbox"/> Other (Specify) _____		<input type="checkbox"/> Kamstrup <input type="checkbox"/> Badger Meter <input type="checkbox"/> Neptune Meter <input type="checkbox"/> Other (Specify) _____		

SUPPLEMENTAL EQUIPMENT ALTERNATE BID ITEM:

ITEM	QUANTITY	UNITS	UNIT PRICE
Provide 1" water meter with new communication transceiver unit & all accessories for full drive-by read AMR capability	0-10	EA	\$

This Alternate Bid offer is made with (check all that apply):

- Estimated annual costs (i.e. subscriptions, fees), if applicable: \$ _____ /year
- No exceptions to the Time of Completion as defined in Article 6.
- Estimated Lead Time for delivery of Materials: _____ weeks
- No exceptions to the technical specifications and instructions to bidders.
- Exceptions as described in a _____ page attachment to this bid.

5.04 ALTERNATE BID OPTION #2 – AUTOMATED HYBRID AMR/AMI METER READ SYSTEM:

ALTERNATE BID – Automated Hybrid AMR/AMI Meter Read System (EQUIPMENT)				
ITEM	QUANTITY	UNITS	UNIT PRICE	TOTAL
Provide New 5/8"x3/4" residential type water meter PLUS New communication transceiver unit & all accessories for a hybrid bi-functional AMR & AMI read capability	500	EA	\$	\$
Provide Thru the Lid Mounting Kit, <u>as applicable</u> .	500	EA	\$	\$

Remote reading system including notebook computer, handheld units, radio receiver, all software, supplies and services, set-up and training.	1	LS	\$	\$
TOTAL ALTERNATE BID OPTION #2 AMOUNT				\$ _____
For the smaller meter sizes (1" or smaller), the Bidder's Hybrid read system utilizes (check one) : <input type="checkbox"/> Electromagnetic Type <input type="checkbox"/> Ultrasonic Type (solid state) <input type="checkbox"/> Other (Specify) _____	Bidder's Hybrid read system utilizes (check Brand) : <input type="checkbox"/> Kamstrup <input type="checkbox"/> Badger Meter <input type="checkbox"/> Neptune Meter <input type="checkbox"/> Other (Specify) _____		Bidder's Hybrid read system utilizes (check one): <input type="checkbox"/> Cell Communication <input type="checkbox"/> Radio Communication	

SUPPLEMENTAL EQUIPMENT ALTERNATE BID ITEMS:

ITEM	QUANTITY	UNITS	UNIT PRICE
Provide 1" water meter with new communication transceiver unit & all accessories for full Hybrid AMR/AMI read capability	0.10	EA	\$

This Alternate Bid offer is made with (check all that apply):

- Estimated annual costs (i.e. subscription fees), if applicable: \$ _____ /year
- No exceptions to the Time of Completion as defined in Article 6.
- Estimated Lead Time for delivery of Materials: _____ weeks
- No exceptions to the technical specifications and instructions to bidders.
- Exceptions as described in a _____ page attachment to this bid.
- Attached Propagation Study illustrating AMI coverage abilities.

5.05 Unit prices have been computed in accordance with paragraph 11.03A of the General Conditions.

5.06 Bidder acknowledges that estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

ARTICLE 6 – TIME OF COMPLETION

6.01 Bidder hereby states and agrees that their Equipment, as selected in Paragraph 5.1, will be fully delivered in accordance with the General Conditions no later than:

October 15, 2024

Provided that no exceptions are granted and/or provided that a contract is awarded and notice to proceed is issued no later than August 31, 2024.

6.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 7 – ATTACHMENTS TO THIS BID

7.01 The following documents are attached to and made a condition of the Bid:

- A. Required Bid security in the form of a Bid Bond (EJCDC No. C-430) or Certified Check (circle type of security provided);
- B. Statement of Experience

ARTICLE 8 – DEFINED TERMS

8.01 The terms used in this Bid with the initial capital letters have the meanings indicated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

ARTICLE 9 – BID SUBMITTAL

9.01 This Bid submitted by:

Submitted by:

Signature	Business
Printed or Typed Name	Bidder's Business Address
Title	City, State, Zip Code
Employer's Tax ID No.	Business Phone No. Business Fax No.
Business Email Address	Cell Phone No. Other Contact No.

9.02 Bid submitted on _____, 2024.

Seal (if required)

AUTOMATED WATER METER READING SYSTEM

1.0 GENERAL

Under this specification, all equipment, software, services and accessories to furnish an automated water meter reading system {drive-by, radio-based capable water meters; fixed based read (cellular or radio) capable water meters; **OR** Hybrid version of the listed two types} shall be supplied by a single vendor for installation by the Vendor or subcontractor. The system shall be designed to provide accurate meter reading data for customer billing purposes, and usage data to facilitate enhanced operation and management of the water distribution system.

The Bidder's proposal shall provide a detailed description of each component of the system offered, along with unit bid prices for each item. As a minimum, the Bidder shall:

- A. Provide a unit price Bid, using the quantities specified in the bid form for supplying the specified number of new meters and the automated system equipment, including all hardware, software and services.
- B. Provide supplemental bid prices as specified in the bid form.
- C. Provide a minimum of five (5) references with those references being similar municipalities or rural water utilities currently using the Bidder's proposed metering system. The reference information shall include contact names, addresses, and telephone numbers, along with a general description of the application.
- D. Provide the name and phone number of the service technician and meter supplier representative identified to provide service to the Utility for the Bidder's proposed metering system.
- E. Provide both a technical and layman's explanation of all the components and features proposed within the manufacturer's system including range of transmission, provisions for transmitting in flooded situations, reading collection devices, leak detection features, and error detection.

1.1 Description of the Water Distribution System

The Caldwell County Water District water system serves approximately 2,205 rural customers throughout Caldwell County (KY), excluding the incorporated cities. Currently, meters within their water system are read manually each month and the majority of the system's water meters were manufactured by Badger.

The approximate current inventory of meters is as follows:

5/8x3/4-Inch Meters	2,195
1-Inch Meters	10

The Caldwell County Water District system anticipates continuing use of its current billing software after the installation of the automated read meter system. The new meter manufacturer shall contact the water system to insure the Bidder's compatibility with all such software. The current software utilized with by the utility is as follows:

Billing Software: United Systems & Software
 Sale Rep = Dana Fennell
 800.952.3295

1.2 Scope of Work

Bidder will furnish the Goods and Special Services in accordance with the Contract Documents. Bidder shall perform their own propagation study with meter location data (provided by Owner) to insure adequate AMI coverage related to those Bid Pricing Options, listed below.

Any limitations related to the various Pricing Scenarios shall be detailed in the Bidder's Exception Notes, to be attached to this Bid.

Bidders will have the choice to submit pricing for Three (3) different Pricing Scenarios:

- Provide Fixed-base (AMI only; Radio or Cellular) Read Compatible Meters for a limited portion of the system {Base Bid Option}
- Provide Drive-by (AMR only) Radio-Read Compatible Meters for a limited portion of the system {Alternate Bid Option #1}.
- Provide a Hybrid AMR/AMI Read Compatible Meter System for a limited portion of the system {Alternate Bid Option #2}.

The Owner reserves the right to award Pricing Options in a matter that is most advantageous, including the combination of price offerings.

The Equipment portion of the Work shall consist, but not limited to, the following options and items:

A. **Items to be included in BASE BID EQUIPMENT Price:**

- a. Provide up to five hundred (500) new 5/8x3/4-Inch regular water meters with individual transmitter units (radio or cellular), all with fixed based read capability (AMI).
- b. Provide up to five hundred (500) of the manufacturer's 'thru-the-lid' kits for mounting the transmitter unit under the meter lid if necessary and as applicable to the meter product.
- c. Provide all hardware, software, equipment and accessories for a fully functional fixed based read meter system (utilizing cellular or radio communications), all of which is compatible with the Utility's present billing and operational systems. Provide one (1) new notebook computer or tablet with vehicle mounting brackets which may be utilized to collect the meter reading information. Provide at least one (1) handheld unit, including appropriate docking stations.
- d. Provide all software integration, system start-up and training services as specified.
- e. Provide all required warranties on meter transmitters as specified. Additionally, provide information on manufacturer's standard warranty related to the meter accuracy itself.
- f. Provide an estimate for any reoccurring costs to be associated with the fixed based system.

B. **Items to be included in ALTERNATE BID OPTION #1 EQUIPMENT Pricing**

- a. Provide up to five hundred (500) new 5/8x3/4-Inch regular water meters with individual transmitter units, all with drive-by radio read capability.
- b. Provide up to five hundred (500) of the manufacturer's 'thru-the-lid' kits for mounting the transmitter unit under the meter lid if necessary and as applicable to the meter product.
- c. Provide all hardware, software, equipment and accessories for a fully functional radio-read meter system, all of which is compatible with the Utility's present billing and operational systems. Provide one (1) new notebook computer or tablet with vehicle mounting brackets which may be utilized to collect the meter reading information. Provide at least one (1) handheld units, including appropriate docking stations.
- d. Provide all software integration, system start-up and training services as specified.

- e. Provide all required warranties on meter transmitters as specified. Additionally, provide information on manufacturer's standard warranty related to the meter accuracy itself.
- f. Provide an estimate for any reoccurring costs to be associated with the drive-by read system.

C. Items to be included in **ALTERNATE BID OPTION #2 EQUIPMENT Pricing**

- a. Provide up to five hundred (500) new 5/8x3/4-Inch regular water meters with individual transmitter units, all with hybrid AMR and AMI read capability.
- b. Provide up to five hundred (500) of the manufacturer's 'thru-the-lid' kits for mounting the transmitter unit under the meter lid if necessary and as applicable to the meter product.
- c. Provide all hardware, software, equipment and accessories for a fully functional radio-read meter system, all of which is compatible with the Utility's present billing and operational systems. Provide one (1) new notebook computer or tablet with vehicle mounting brackets which may be utilized to collect the meter reading information. Provide at least one (1) handheld units, including appropriate docking stations.
- d. Provide all software integration, system start-up and training services as specified.
- e. Provide all required warranties on meter transmitters as specified. Additionally, provide information on manufacturer's standard warranty related to the meter accuracy itself.
- f. Provide an estimate for any reoccurring costs to be associated with the hybrid fixed & drive-by read system.

D. Items to be included in Supplemental **BID EQUIPMENT Prices**

- a. Provide new 1-inch water meters with AMR, AMIR and/or Hybrid AMR/AMI read capability.

1.3 Meter Performance Requirements:

The automated-read meter system will utilize an FCC non-licensed frequency to communicate meter-reading data, tamper conditions, and leak detection notification to a receiver. The system shall be comprised of a transmitter located at the meter that transmits readings, tamper and leak data to the receiver when the receiver is in the proximity range of the transmitted signal. As an option, the transmitter may also contain data profiling capabilities. The transmitter with data profiling capabilities will have sufficient memory to store multiple readings with tamper detection and potential leak information that can be downloaded and graphed in an analysis software program. The system shall be able to process and maintain the information gathered from each transmitter in a database for billing purposes.

In combination with transmitters located at the meter, the automated-read meter system must be able to read the utility's meters. Minimum performance requirements for the new Water Meters are as follows:

- A. **Meter Reading:** The transmitter shall transmit readings with an optimal number of intervals in accordance with the manufacturer's normal performance.
- B. **High Resolution –** To provide useful consumption data, the automated-read meter system shall record usage through the meter to the closest one (1) gallon increment on residential size meters (5/8" through 2"). For larger meters, usage shall be recorded to the nearest ten (10) gallons.
- C. **Leak Detection –** To assist in the timely identification of potential leaks, the transmitter shall have the ability to report information to the utility in regards to potential leaks.
- D. **Tampering –** The transmitter shall detect and report any suspected evidence of meter tampering.

- E. Data Logging/Profiling – The transmitter shall also contain data profiling capabilities. The transmitter with data profiling capabilities will have sufficient memory to store multiple readings with tamper detection and potential leak information that can be downloaded and graphed in an analysis software program. The system shall be able to process and maintain the information gathered from each transmitter in a database for billing purposes.
- F. Operating Pressure - Meters should have a minimum operating pressure of 250 psi.
- G. Flow Ranges & Accuracy - Meters should meet or exceed the most recent version of ANSI/AWWA Standard C-700, C-708 & C-715 for flow ranges, accuracy, and pressure loss requirements.

1.4 Hardware Requirements

- A. Water meters are to be:
 - a. Electromagnetic or ultrasonic type; solid state “no moving parts” technology is preferred
 - b. 5/8”x3/4” for typical residential applications, meeting the requirements of AWWA C-708, most recent edition.
 - c. Meters should contain NO Lead, not just NSF61 approved low lead.
 - d. Meters shall be provided with a metal case and bottom, and externally threaded metal connections. Poly meter bodies and plastic connections are not desired but may be considered at the Owner’s preference and vetting. **(Bidders shall list any exceptions otherwise).**
 - e. Meters shall utilize an encoder register and mobile AMR register compatible with the reading system proposed. The radio system shall be contained internally within the meter box, and the manufacturer shall provide all accessories (i.e. lid mount, wires, antenna, etc) for each meter to transmit a signal be received further.
 - f. Meters shall register in US gallons.
- B. Mobile Reading System for Radio-Read System. The radio-read system shall consist of a ruggedized tablet or laptop computer (with 14” display suitable for outdoor use in direct sunlight conditions, spill- resistant keypad, multiple USB ports, wi-fi & Bluetooth enabled, and Windows 10 Pro operating system) and a truck mounted meter signal receiver. The tablet &/or laptop computer shall be Panasonic Toughbook CF-33, Panasonic FZ-G2 Tablet, or approved equals. Capabilities include reading up to 5,000 meters per minute limited only by travel speed and meter installation density. The Reading System shall be portable and adaptable to any vehicle with a 12VDC power supply. The Reading System shall include backup memory for previously read meters. Bidders shall list any exceptions within their bid detailing alternate options to their proposed reading device.
- C. Mobile Reading System Upload/Download: Meter readings (routes) shall be transferred between the reading system and the utility’s computer by use of wi-fi connection (primary), and USB memory stick or by directly networking the system laptop into the utility’s networked system (secondary).
- D. Mobile Meter Reading: The meter transmitter sends data to the Reading System including: ID number, meter reading, and tamper/leak status.

1.5 Software Requirements

The reading software shall be a Geographic Information System (GIS) based meter reading system. The version shall have the capability of using a GIS system for displaying meter reading information on a MAP program, and the version shall have the capability of using Global Positioning System (GPS) to display the location of the vehicle reading the meters on the MAP program. The City will provide mailing address data on water meters for use by the equipment supplier in setting up the meter reading system.

Leak detection shall be available with the software. The transmitter sends an alarm condition to the meter reading software when the meter is read. The system shall report a leak condition based on parameters set-up by the Utility’s management during start-up.

Route management software shall be provided which allows transfer of route information from the reading system to the utility computer. Software shall provide splitting, re-sequence and combining of routes. Management reports shall include meter reading, exception and productivity information along with

standard and customized reporting features. An interface program must be written, if warranted, to allow the billing software and the route management software to communicate with each other. Appropriate documentation regarding interface requirements must be supplied to the billing vendor (See Paragraph 1.2). The successful bidder must provide assistance to the utility in order to complete the interface program.

1.6 FCC Requirements & Communication Parameters

All transmitters and receivers shall operate as a non-licensed system and be certified by the manufacturer. The transmitter shall operate at a frequency requiring only FCC certification but no customer license.

1.7 Installation, Training, Tools & Product Support

The manufacturer's certified training personnel shall set up and test the Automated-Read Meter System and related software at the utility location. Upon successful completion of the set-up, the manufacturer's certified training personnel shall provide a minimum of two (2) days training at the utility site on the operation and maintenance of the system. Training shall include training of field technicians on the installation of field transmitters. Initial configuration and initial test are the complete responsibility of the successful bidder.

Phone support for the system shall be provided free of charge during the warranty period. Manufacturer shall provide continued support of the Automated-Read Meter System after completion of training. Technical support shall be available 24 hours a day, 365 day a year.

2.0 MATERIAL AND EQUIPMENT

The Contractor acknowledges to and for the benefit of the Caldwell County Water District ("Purchaser") and the Commonwealth of Kentucky (the "State") that it understands the goods and services under this Agreement may be funded with monies made available by the Cleaner Water Program grant funds that could have statutory requirements commonly known as "American Iron and Steel;" that requires all of the iron and steel products used in the project to be produced in the United States ("American Iron and Steel Requirement") including iron and steel products provided by the Contractor pursuant to this Agreement. The Contractor hereby represents and warrants to and for the benefit of the Purchaser and the State that (a) the Contractor has reviewed and understands the American Iron and Steel Requirement, (b) all of the iron and steel products used in the project will be and/or have been produced in the United States in a manner that complies with the American Iron and Steel Requirement, unless a waiver of the requirement is approved, and (c) the Contractor will provide any further verified information, certification or assurance of compliance with this paragraph, or information necessary to support a waiver of the American Iron and Steel Requirement, as may be requested by the Purchaser or the State. Notwithstanding any other provision of this Agreement, any failure to comply with this paragraph by the Contractor shall permit the Purchaser or State to recover as damages against the Contractor any loss, expense, or cost (including without limitation attorney's fees) incurred by the Purchaser or State resulting from any such failure (including without limitation any impairment or loss of funding, whether in whole or in part, from the State or any damages owed to the State by the Purchaser). While the Contractor has no direct contractual privity with the State, as a lender to the Purchaser for the funding of its project, the Purchaser and the Contractor agree that the State is a third-party beneficiary and neither this paragraph (nor any other provision of this Agreement necessary to give this paragraph force or effect) shall be amended or waived without the prior written consent of the State.

Materials, products and equipment shall be properly containerized, packaged, boxed and protected to prevent damage during transportation and handling. Provide suitable temporary weather tight storage facilities as may be required for materials or equipment which will be damaged by storage in the open. Protect from damage all materials delivered at the site.

Manufactured articles, materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned as directed by the respective manufacturers unless directed otherwise by the provisions of these Specifications.

3.0 SUBMITTALS

Provide at least four copies of each submittal, and allow two weeks for Engineer's review. Such submittals are to be approved by Engineer prior to incorporation of any materials into the work.

4.0 WARRANTIES

Meter transmitters should have a 10 year full plus 10 year prorated warranty, including any batteries. The warranty shall include repair or replacement without cost to the Owner of any component of the system failing as a result of manufacturer's defect during the warranty period.

All handheld and mobile reading equipment (i.e. Toughbook laptop or tablet) included with the Automated Reading System shall include an original manufacturer's warranty, along with a hardware service contract on all hardware components of the system from delivery through **December 31, 2026**. Software supplied with the system shall be updated and maintained by the manufacturer guaranteed for compatibility with all other components of the system through **December 31, 2026**.

The warranty shall include repair or replacement without cost to the Owner of any component of the system failing as a result of manufacturer's defect during the warranty period.

END OF SECTION 02-201

Partial Preview