

FINANCE DEPARTMENT  
DIVISION OF PURCHASES & SUPPLIES



Sheldon A. Neeley, Mayor

PROPOSAL #22000529

AMI METERS

Date Posted: 6/2/22

**CITY OF FLINT**  
**FINANCE DEPARTMENT**  
**DIVISION OF PURCHASES AND SUPPLIES**  
City Hall, 1101 S. Saginaw Street, Room #203 – Flint, Michigan 48502  
(810) 766-7340      [www.cityofflint.com](http://www.cityofflint.com)



**Sheldon Neeley**  
Mayor

**REQUEST FOR PROPOSALS**

**OWNER/RETURN TO:**

THE CITY OF FLINT  
FINANCE DEPARTMENT – DIVISION OF PURCHASES AND SUPPLIES  
1101 S. SAGINAW ST., ROOM 203, 2nd FLOOR  
FLINT, MI 48502

**PROPOSAL # 22000529**

**SCOPE OF WORK:**

The City of Flint, Finance Department of Purchases & Supplies, is soliciting sealed bids for providing:

**AMI METERS**

Per the attached additional requirements.

If your firm is interested in providing the requested services, please submit:

Submit to City:

- 1 original, printed, signed, original proposals and signed addenda
- 2 additional hard, unbound copies
- 1 electronic copy of your bid

Proposal submittal information MUST be received by the following dates and times:

1. The mail in **HARD COPY** with the original signature (signed documents) must be received by **Thursday, June 16, 2022 by 12:00 P.M. (EST)**, City of Flint, Finance Department - Division of Purchases and Supplies, 1101 S. Saginaw St., Room 203, Flint, MI, 48502. Bids must be in a sealed envelope clearly identifying the proposal name and proposal number.
2. **Electronic Copy**, please email to **PurchasingBids@cityofflint.com** by **Thursday, June 16, 2022 by 11:00 AM** (EST). Please note that in the subject line of the email, type in the proposal name and number.
2. Faxed bids are not accepted.
3. Both mail in proposal and electronic submittal must be received by due date and time.

**PLEASE NOTE: When dropping off a bid, please do not put bids in drop boxes on the outside of City Hall. Please call if you have any questions and need to drop off a bid.**

All additional proposal documents, requirements, addendums, specifications, and plans/drawings (if utilized) are available on the Purchasing page of the City of Flint's web site at <https://www.cityofflint.com/finance/purchasing/bids-2/> under "open bids" and the specific bid or proposal number assigned to this notice.

Effective immediately upon release of these Bidding Documents, and until notice of contract award, all official communications from proposers regarding the requirements of this Bid shall be directed to:

Lauren Rowley  
810-766-7340

[lrowley@cityofflint.com](mailto:lrowley@cityofflint.com)

The City, or designee, shall distribute all official changes, modifications, responses to questions or notices relating to the requirements of this Bid. Addendum to this Bid may be developed and shared with all Vendors. Any other information of any kind from any other source shall not be considered official, and proposers relying on other information do so at their own risk.

**NOTICE TO VENDOR** Offers, subject to the conditions made a part hereof, will be received at this office, *1101 S. Saginaw St., Flint, MI 48502 for the following:*

All additional proposal documents, requirements, addendums, specifications, and plans/drawings (if utilized) are available on the Purchasing page of the City of Flint's web site at <https://www.cityofflint.com/finance/purchasing/bids-2/> under "open bids" and the specific bid or proposal number assigned to this notice.

New vendors should complete and submit a vendor application, IRS W-9 Form, and Vendor ACH Payment Authorization Form with the City of Flint. Links to these forms are available at <https://www.cityofflint.com/finance/accounts-payable-department/>.

Results may be viewed next business day online EXCEPT when a bid is under review. The bidders/public will only see the names of the bidders that submitted a bid, not their cost. This will protect the bidders cost in case there is a re-bid.

<https://www.cityofflint.com/finance/purchasing/results/> under "bid results".

City of Flint has partnered with BidNet as part of the [MITN Purchasing Group](#) (branded page link) to post bid opportunities to this site. As a vendor, you can register with the [MITN Purchasing Group](#) and be sure that you see all available bids and opportunities. By selecting automatic bid notification, your company will receive emails once the City of Flint has a bid opportunity that matches your company's business. In addition, the site handles bid opportunities, RFPs, and RFQs for other member governmental agencies throughout Michigan. City of Flint looks forward to providing you with more bid information and simplifying the entire bid, proposal, and quote processes for everyone involved. We appreciate your cooperation and welcome your participation. If you need help registering, please call the MITN Purchasing Group support department toll free 1-800-835-4603 option #2.

Link to City of Flint open solicitations:

[MITN Purchasing Group](#) (branded page link)

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Any written questions regarding this project shall be directed to Lauren Rowley, Purchasing Manager at [lrowley@cityofflint.com](mailto:lrowley@cityofflint.com) using the subject title of "RFP #22-529 – AMI METERS." Questions must be submitted by **Thursday, June 9, 2022** before 10:00 A.M. (EST). Please see attached form for Question submittal form.

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**Bid Opening Due Date – Thursday, June 16, 2022 at 12:00 P.M.**

**Bid Opening via Google Meet: The public is invited to view the opening by joining the Google Meet link below:**

**Join with Google Meet**

Meeting ID

[meet.google.com/zxy-biov-muz](https://meet.google.com/zxy-biov-muz)

Phone Number

(US) [+1 617-675-4444](tel:+16176754444)

PIN: 992 098 224 1475#

If you have any problems signing in, please email [purchasingbids@cityofflint.com](mailto:purchasingbids@cityofflint.com).

### **MANDATORY PRESENTATIONS**

Mandatory presentations for this RFP will be held on **Wednesday, June 22, 2022, and Thursday, June 23, 2022**. These presentations are to review your bid and qualifications and is expected to last 20 minutes, with officials from Department of Public Works being present to facilitate it. Presentations can be conducted in person or virtually via Google Meet, Microsoft Teams, or Zoom. To schedule a presentation, please contact Yolanda Gray, Utilities Accounting Supervisor at [ygray@cityofflint.com](mailto:ygray@cityofflint.com) by **Tuesday, June 21, 2022, at 12:00 P.M. EST**. Details regarding presentations can be found on page 18. Failure to schedule a presentation may result in disqualification of your bid.

### **IN PERSON**

The public is invited to view the bid opening in person by attending at McKenzie Conference Room, 2nd Floor, 1101 S. Saginaw St., Flint, MI 48502.

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**INSTRUCTIONS TO VENDORS**

- 1) **PRE-BID INFORMATION AND QUESTIONS:** Each bid that is timely received will be evaluated on its merit and completeness of all requested information. In preparing bids, Bidders are advised to rely only upon the contents of this Request for Proposals (RFP) and accompanying documents and any written clarifications or addenda issued by the City of Flint. If a Bidder finds a discrepancy, error or omission in the RFP package, or requires any written addendum thereto, the Bidder is requested to notify the Purchasing contact noted on the cover of this RFP, so that written clarification may be sent to all prospective Bidders. **THE CITY OF FLINT IS NOT RESPONSIBLE FOR ANY ORAL INSTRUCTIONS.** All questions must be submitted in writing to the Finance Department of Purchases and Supplies before any pre-bid deadline (if specified) or at least one (1) week prior to the proposal opening date indicated on the front of this document.
- 2) **RFP MODIFICATIONS:** The City of Flint has the right to correct, modify or cancel the RFP, in whole or in part, or to reject any Bid, in whole or in part, within the discretion of the City of Flint, or their designee. If any such changes are made, all known recipients of the RFP will be sent a copy of such changes. If any changes are made to this RFP document by any party other than the City of Flint, the original document in the City of Flint's files takes precedence.
- 3) **PROPOSAL SUBMISSION:**
  - a) The Bidder must include the following items, or the proposal may be deemed non-responsive:
    - i) All forms contained in this RFP, fully completed.
  - b) Bids must be submitted to the Finance Department of Purchases and Supplies, City of Flint, 1101 S. Saginaw Street, Room 203, Flint, Michigan 48502 by the date and time indicated as the deadline. The Purchasing Department time stamp will determine the official receipt time. It is each Bidder's responsibility to insure that their proposal is time stamped by the Purchasing Department by the deadline. This responsibility rests entirely with the Bidder, regardless of delays resulting from postal handling or for any other reasons. Proposals will be accepted at any time during the normal course of business only, said hours being 8:00 a.m. to 5:00 p.m. local time, Monday through Friday, legal holidays as exception.
  - c) Bids must be enclosed in a sealed, non-transparent envelope, box or package, and clearly marked on the outside with the following: RFP Title, RFP Number, Deadline and Bidder's name.
  - d) Submission of a bid establishes a conclusive presumption that the Bidder is thoroughly familiar with the Request for Proposals (RFP), and that the Contractor understands and agrees to abide by each and all of the stipulations and requirements contained therein.
  - e) All prices and notations must be typed or printed in ink. No erasures are permitted. Mistakes may be crossed out and corrections must be initialed in ink by the person(s) signing the bid.
  - f) Proposals sent by email, facsimile, or other electronic means will not be considered unless specifically authorized in this RFP.

- g) All costs incurred in the preparation and presentation of the bid are the Bidder's sole responsibility; no pre-bid costs will be reimbursed to any Bidder. All documentation submitted with the proposal will become the property of the City of Flint.
- h) Proposals must be held firm for a minimum of 120 days.
- 4) **EXCEPTIONS:** Bidder shall clearly identify any proposed deviations from the Terms or Scope in the Request for Proposals. Each exception must be clearly defined and referenced to the proper paragraph in this RFP. The exception shall include, at a minimum, the proposed substitute language and opinion as to why the suggested substitution will provide equivalent or better service and performance. If no exceptions are noted in the bid, the City of Flint will assume complete conformance with this specification and the successful Bidder will be required to perform accordingly. Bids not meeting all requirements may be rejected.
- 5) **DUPLICATE BIDS:** No more than one (1) bid from any Bidder including its subsidiaries, affiliated companies and franchises will be considered by the City of Flint. In the event multiple proposals are submitted in violation of this provision, the City will have the right to determine which bid will be considered or, at its sole option, reject all such multiple proposals.
- 6) **WITHDRAWAL:** Bids may only be withdrawn by written notice prior to the date and time set for the opening of bids. No bid may be withdrawn after the deadline for submission.
- 7) **REJECTION/GOOD STANDING:** The City of Flint reserves the right to reject any or all bids, or to accept or reject any bid in part, and to waive any minor informality or irregularity in bids received if it is determined by the City of Flint, or their designee, that the best interest of the City will be served by doing so. No bid will be considered from any person, firm or corporation in arrears or in default to the City on any contract, debt, taxes or other obligation, or if the Bidder is debarred by the City of Flint from consideration for a contract award pursuant to Section 18-21.5 (d) of Article IV of the "Purchasing Ordinance of the City of Flint".
- 8) **PROCUREMENT POLICY:** Procurement for the City of Flint will be handled in a manner providing fair opportunity to all businesses. This will be accomplished without abrogation or sacrifice of quality and as determined to be in the best interest of the City. The City of Flint and their officials have the vested authority to execute a contract, subject to City Council and Mayoral approval where required.
- 9) **BID SIGNATURES:** Bids must be signed by an authorized official of the Bidder. Each signature represents binding commitment upon the Bidder to provide the goods and/or services offered to the City of Flint if the Bidder is determined to be the lowest Responsive and Responsible Bidder.
- 10) **CONTRACT AWARD/SPLIT AWARDS:** The City of Flint reserves the right to award by item and/or group of items. The Bidder to whom the award is made will be notified at the earliest possible date. Tentative acceptance of the bid, intent to recommend award of a contract and actual award of the contract will be provided by written notice sent to the Bidder at the address designated in the bid if a separate Agreement is required to be executed. After a final award of the Agreement by the City of Flint, the

Contractor/Vendor must execute and perform said Agreement. All proposals must be firm for at least 120 days from the due date of the proposal. If, for any reason, a contract is not executed with the selected Bidder within 14 days after notice of recommendation for award, then the City may recommend the next lowest responsive and responsible Bidder.

- 11) **NO RFP RESPONSE:** Bidders who receive this RFP but who do not submit a bid should return this RFP package stating “No Bid” and are encouraged to list the reason(s) for not responding. Failure to return this form may result in removal of the Bidder’s name from all future lists.
- 12) **FREEDOM OF INFORMATION ACT (FOIA) REQUIREMENTS:** Bids are subject to public disclosure after the deadline for submission in accordance with state law.
- 13) **ARBITRATION:** Contractor/Vendor agrees to submit to arbitration all claims, counterclaims, disputes and other matters in question arising out of or relating to this agreement or the breach thereof. The Contractor’s/Vendor’s agreement to arbitrate shall be specifically enforceable under the prevailing law of any court having jurisdiction to hear such matters. Contractor’s/Vendor’s obligation to submit to arbitration shall be subject to the following provisions:
  - a) Notice of demand for arbitration must be submitted to the City in writing within a reasonable time after the claim, dispute or other matter in question has arisen. A reasonable time is hereby determined to be fourteen (14) days from the date the party demanding the arbitration knows or should have known the facts giving rise to their claim, dispute or question. In no event may the demand for arbitration be made after the time when institution of legal or equitable proceedings based on such claim dispute or other matters in question would be barred by the applicable statute of limitation.
  - b) Within fourteen (14) days from the date that demand for arbitration is received by the City, each party shall submit to the other the name of one person to serve as an arbitrator. The two arbitrators together shall then select a third person, the three together shall then serve as a panel in all proceedings. Any decision concurred in by a majority of the three shall be a final binding decision.
  - c) The final decision rendered by said arbitrators shall be binding and conclusive and shall be subject to specific enforcement by a court of competent jurisdiction.
  - d) The costs of the arbitration shall be split and borne equally between the parties and such costs are not subject to shifting by the arbitrator.
  - e) This provision shall survive the expiration or termination of this Agreement in perpetuity.
- 14) **BID HOLD:** The City of Flint may hold bids for a period of one hundred twenty (120) days from opening, for the purpose of reviewing the results and investigating the qualifications of bidders prior to making an award.
- 15) **NONCOMPLIANCE:** Failure to deliver in accordance with specifications will be cause for the City of Flint and they may cancel the contract or any part thereof and purchase on the open market,



charging any additional cost to the Contractor/Vendor.

- 16) **DISCLAIMER OF CONTRACTUAL RELATIONSHIP:** Nothing contained in these documents shall create any contractual relationship between the City and any Subcontractor or Sub-subcontractor.
- 17) **ERRORS AND OMISSIONS:** Bidder is not permitted to take advantage of any obvious errors or omissions in specifications.
- 18) **INTERPRETATION:** In the event that any provision contained herein shall be determined by a court of competent jurisdiction or an appropriate administrative tribunal to be contrary to the provision of law or to be unenforceable for any reason, then, to the extent necessary and possible to render the remainder of this Agreement enforceable, such provision may be modified or severed by such court or administrative tribunal having jurisdiction over this Agreement and the interpretation thereof, or the parties hereto, so as to, as nearly as possible, carry out the intention of the parties hereto, considering the purpose of the entire Agreement in relation to such provision.
- 19) **LAWS AND ORDINANCES:** The Bidder shall obey and abide by all of the laws, rules and regulations of the Federal Government, State of Michigan, Genesee County and the City of Flint, applicable to the performance of this Agreement, including, but not limited to, labor laws, and laws regulating or applying to public improvement, local government, and its operational requirements.
- 20) **LOCAL PREFERENCE:** Contractors/bidders located within the corporate city limits of Flint, Michigan may be given a seven percent (7%) competitive price advantage. Additionally, if the lowest responsible bidder is not located within the limits of the City of Flint, but is located within the County of Genesee, and said bidder does not exceed the bid of the lowest non-local bidder by more than three and one-half percent (3-1/2%), then said lowest Genesee County bidder may be determined to be the lowest responsible bidder, and make the award to such Genesee County bidder accordingly, subject to the approval of the City Council. If the lowest non-local bidder does not exceed that of any Proposers/bidders by (7%) inside the City of Flint or (3-1/2%) inside the County of Genesee, then the Purchasing Director shall be allowed to request that the lowest local vendor match the price offered by the lowest non-local vendor.
- 21) **MATERIAL WORKMANSHIP AND STANDARDS OF PERFORMANCE:** The Bidder agrees to exercise independent judgment and to complete performance under this Agreement in accordance with sound professional practices. In entering into this Agreement, the City is relying upon the professional reputation, experience, certification and ability of the Bidder by her/him/themselves or by others employed by her/him/them and working under their direction and control. The continued effectiveness of this Agreement during its term or any renewal term shall be contingent, in part, upon the Bidder maintaining her/his/their operating qualifications in accordance with the requirements of federal, state and local laws. All materials furnished must be new, of latest model and standard first grade quality, or best workmanship and design, unless otherwise expressly specified. Bidder, if required, must furnish satisfactory evidence of quality materials; offers of experimental or unproven equipment may be disregarded.

- 22) **MODIFICATIONS/CHANGES:** Any modification to this agreement must be in writing and signed by the authorized employee, officer, board or council representative authorized to make such modifications pursuant to the State law and local ordinances.
- 23) **NON-COLLUSION:** The Bidder acknowledges that by signing this document that she/he/they is/are duly authorized to make said offer on behalf of the company she/he/they represent(s) and that said bid is genuine and not sham or collusive and not made in the interests or on behalf of any person not therein named, and that she/he/they and said bidder have not directly induced or solicited any other person(s) or corporation to refrain from responding to this solicitation and that she/he/they and said bidder have not in any manner sought by collusion to secure to themselves and said bidder any advantage over any other bidder.
- 24) **NON-DISCRIMINATION:** Pursuant to the requirements of 1976 P.A. 453 (Michigan Civil Rights Act) and 1976 P.A. 220 (Michigan Handicapped Rights Act), the local unit and its agent agree not to discriminate against any employee or applicant for employment with respect to hire, tenure, terms, conditions, or privileges of employment or a matter directly or indirectly related to employment because of race, color, religion, national origin, age, sex, height, weight, marital status or because of a handicap that is unrelated to the person's ability to perform the duties of nondiscrimination provision identical to this provision and binding upon any and all contractors and subcontractors. A breach of this covenant shall be regarded as a material breach of this contract.
- 25) **SUBCONTRACTING:** No subcontract work shall be started prior to the written approval of the subcontractor by the City. The City reserves the right to accept or reject any subcontractor.
- 26) **UNION COMPLIANCE:** Bidder agrees to comply with all regulations and requirements of any national or local union(s) that may have jurisdiction over any of the materials, facilities, services or personnel to be furnished by the City.
- 27) **WAIVER:** Failure of the City to insist upon strict compliance with any of the terms, covenants or conditions of this Agreement shall not be deemed a waiver of that term, covenant or condition or of any other term, covenant or condition. Any waiver or relinquishment of any right or power hereunder at any one or more times shall not be deemed a waiver or relinquishment of that right or power at any other time.
- 28) **CITY INCOME TAX WITHHOLDING:** Contractor and any subcontractor engaged in this contract shall withhold from each payment to his employees the City income tax on all of their compensation subject to tax, after giving effect to exemptions, as follows:
- a) Residents of the City:  
At a rate equal to 1% of all compensation paid to the employee who is a resident of the City of Flint.
  - b) Non-residents:  
At a rate equal to 1/2% of the compensation paid to the employee for work done or services performed in the City of Flint.

These taxes shall be held in trust and paid over to the City of Flint in accordance with City ordinances and State law. Any failure to do so shall constitute a substantial and material breach of this contract.

- 29) **CONTRACT DOCUMENTS:** The invitation for proposal, instructions to proposal, proposal, affidavit, addenda (if any), statement of Bidder's qualifications (when required), general conditions, special conditions, performance bond, labor and material payment bond, insurance certificates, technical specifications, and drawings, together with this agreement, form the contract, and they are as fully a part of the contract as if attached hereto or repeated herein.
- 30) **DISCLAIMER OF CONTRACTUAL RELATIONSHIP WITH SUBCONTRACTORS:** Nothing contained in the Contract Documents shall create any contractual relationship between the City and any Subcontractor or Sub-subcontractor.
- 31) **EFFECTIVE DATE:** Any agreement between the City and the Bidder shall be effective upon the date that it is executed by all parties hereto.
- 32) **FORCE MAJEURE:** Neither party shall be responsible for damages or delays caused by Force Majeure nor other events beyond the control of the other party and which could not reasonably have anticipated the control of the other party and which could not reasonably have been anticipated or prevented. For purposes of this Agreement, Force Majeure includes, but is not limited to, adverse weather conditions, floods, epidemics, war, riot, strikes, lockouts, and other industrial disturbances; unknown site conditions, accidents, sabotage, fire, and acts of God. Should Force Majeure occur, the parties shall mutually agree on the terms and conditions upon which the services may continue.
- 33) **INDEMNIFICATION:** To the fullest extent permitted by law, Bidder agrees to defend, pay on behalf of, indemnify, and hold harmless the City of Flint, its elected and appointed officials, employees and volunteers and others working on behalf of the City of Flint, including the Project Manager, against any and all claims, demands, suits, or losses, including all costs connected therewith, and for any damages which may be asserted, claimed, or recovered against or from the City of Flint, its elected and appointed officials, employees, volunteers or others working on behalf of the City of Flint, by reason of personal injury, including bodily injury or death and/or property damage, including loss of use thereof, which may arise as a result of Bidder's acts, omissions, faults, and negligence or that of any of his employees, agents, and representatives in connection with the performance of this contract. Should the Bidder fail to indemnify the City in the above-mentioned circumstances, the City may exercise its option to deduct the cost that it incurs from the contract price forthwith.

These provisions shall survive the termination or expiration of any agreement entered into as a result of this request.

- 34) **INDEPENDENT CONTRACTOR:** No provision of this contract shall be construed as creating an employer-employee relationship. It is hereby expressly understood and agreed that Bidder is an "independent contractor" as that phrase has been defined and interpreted by the courts of the State of Michigan and, as such, Bidder is not entitled to any benefits not otherwise specified herein.
- 35) **NO THIRD-PARTY BENEFICIARY:** No contractor, subcontractor, mechanic, material man, laborer, vendor, or other person dealing with the principal Contractor shall be, nor shall any of them be deemed to be, third-party beneficiaries of this contract, but each such person shall be deemed to have agreed (a) that they shall look to the principal Contractor as their sole source of recovery if not paid, and (b) except as otherwise agreed to by the principal Contractor and any such person in writing, they may not enter any claim or bring any such action against the City under any circumstances. Except as provided by law, or as otherwise agreed to in writing between the City and such person, each such person shall be deemed to have waived in writing all rights to seek redress from the City under any circumstances whatsoever.
- 36) **NON-ASSIGNABILITY:** Contractor shall not assign or transfer any interest in this contract without the prior written consent of the City provided, however, that claims for money due or to become due to Contractor from the City under this contract may be assigned to a bank, trust company, or other financial institution without such approval. Notice of any such assignment or transfer shall be furnished promptly to the City.
- 37) **NON-DISCLOSURE/CONFIDENTIALITY:** Contractor agrees that the documents identified herein as the contract documents are confidential information intended for the sole use of the City and that Contractor will not disclose any such information, or in any other way make such documents public, without the express written approval of the City or the order of the court of appropriate jurisdiction or as required by the laws of the State of Michigan.
- 38) **RECORDS PROPERTY OF CITY:** All documents, information, reports and the like prepared or generated by Contractor as a result of this contract shall become the sole property of the City of Flint.
- 39) **SEVERABILITY:** In the event that any provision contained herein shall be determined by a court or administrative tribunal to be contrary to a provision of state or federal law or to be unenforceable for any reason, then, to the extent necessary and possible to render the remainder of this Agreement enforceable, such provision may be modified or severed by such court or administrative tribunal so as to, as nearly as possible, carry out the intention of the parties hereto, considering the purpose of the entire Agreement in relation to such provision. The invalidation of one or more terms of this contract shall not affect the validity of the remaining terms.
- 40) **TERMINATION:** This contract may be terminated by either party hereto by submitting a notice of termination to the other party. Such notice shall be in writing and shall be effective 30 days from the date it is submitted unless otherwise agreed to by the parties hereto. Contractor, upon receiving such

notice and prorated payment upon termination of this contract shall give to the City all pertinent records, data, and information created up to the date of termination to which the City, under the terms of this contract, is entitled.

- 41) **TIME PERFORMANCE:** Contractor's services shall commence immediately upon receipt of the notice to proceed and shall be carried out forthwith and without reasonable delay.
- 42) **EVALUATION OF PROPOSAL:** In the City's evaluation of proposals, at minimum: cost, serviceability, financial stability, and all requirements set forth in this document shall be considered as selection and award criteria unless otherwise specified.
- 43) **PREVAILING WAGE:** When applicable, all work for this project, including that of any subcontractor or sub-subcontractor, must meet Davis-Bacon Act requirements and full prevailing wage. Information on Davis-Bacon reporting and requirements, including payroll reporting, can be found at: <https://www.dol.gov/whd/govcontracts/dbra.htm>
- 44) **INSURANCE & BONDS:** The bidder whose proposal is accepted will be required to furnish bonds and evidence of insurance within five days from date of Notice of Award. In case of failure or refusal on the part of the bidder to furnish bonds, if required, within the set period, the amount of deposit may be forfeited to the county and the contract may be awarded to the next lowest responsible bidder. Upon the notification of award and approval of the bond, the deposit will be returned to the proposer. The deposit of persons other than the one to whom an award is made will be returned to the person or persons making the proposal immediately after the contract and bonds have been executed.
- 45) **PROPOSAL SUBMISSION:** Proposals and all information requested of the vendor shall be entered in the appropriate spaces. Failure to do so may disqualify the vendor's offer. An authorized officer or employee of the bidder shall submit the proposal.
- 46) **PRICES:** Prices proposed shall be for new products in current production unless otherwise specified. Where refurbished or discontinued items are offered they must be clearly identified as such. Prices proposed shall be exclusive of any rebates due the City. Any rebates the City may be entitled to should be shown as a separate line item and include expiration date. Corrections and/or modifications received after the bid closing time specified will not be accepted. Unit prices prevail. All prices will be bid F.O.B. DESTINATION, INCLUDE ALL DELIVERY AND ANY ADDITIONAL CHARGES, and remain in effect as specified in the quotation.
- 47) **AWARD:** Unless otherwise stated in the proposal documents, the City cannot guarantee exclusivity of the contract for the proposed products or services. Award of the proposal shall be based upon a combination of factors, including but not limited to, adherence to proposal requirements, references and any other factors that may be in the City's best interest. The City reserves the right to reject any and all bids, and to waive any defect or irregularity in bids.

The City reserves the right to accept and separate items in the bid; and to accept the proposal that in the opinion of the City is to the best advantage and interest of the public we serve. The City also has the right to re-solicit bids if it is deemed to be in the best interest of the City.

The City reserves the right to reject low bids which have major deviations from our specification; to accept a higher quotation which has only minor deviations. By signing the bid, the vendor agrees to accept a split award unless the awarded vendor clearly indicates that it takes exception. The bid will be awarded to that responsible, responsive bidder whose proposal conforms to this solicitation, and will be most advantageous to the City, with regard not only to price, but also to availability of product, location and quality of product considered.

The City reserves the right to award all line items, to make no award or to award on an individual line item basis, whichever is deemed to be in the best interest of the City.

Time of delivery may be a consideration in the award.

48) **ETHICS IN PURCHASING:** Bidders and proposers are required to comply with Flint City Ordinance 3865 in its entirety. It is incumbent upon and the responsibility of the bidder to become familiar with and comply with the Purchasing ordinances as outlined in 3865 covering chapter 18 of the Flint City Ordinances. Bidder/Proposer acknowledges in accordance with Flint City Ordinance Section 18-21.19 Ethics in Purchasing, any and all communication about the bid selection process should be directed to those City employees delegated with the authority with respect to all purchases of goods and services.

Bidder/Proposer acknowledges and agrees that while a procurement is pending, bidders and proposers shall not communicate about the solicitation with any City employee, agent, or elected official, other than the purchasing director or other City personnel identify in the solicitation. This means that bidder and proposer are prohibited from communicating orally or by written communications, including but not limited to voicemail messages, social media, email, in person, among any other form of communication while the award is pending, to the aforementioned, with the exception to those employees designated by the City. If you are unclear about the process, it is your duty and obligation to contact the designated employee(s) for clarification.

Violations of the ethics provision of the ordinance, without regard to if the violation rises to the level of a criminal violation, may subject the bidder or proposer to debarment.

49) **BID PROTESTS:** If Bidder/Proposal believe that they are aggrieved in connection with the solicitation or award of the purchase order or contract, they may protest the action to the City as outlined in Flint City Charter Section 18-21.15.

<p style="text-align: center;"><b>PROPOSAL NO. 22000529</b> <b>AMI METERS</b></p>
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**THE FOLLOWING PAGES MUST BE COMPLETED AND INCLUDED WITH SUBMITTAL IN THE FOLLOWING ORDER.**

**Purchasing Checklist:**

- Cover Sheet
  
- Exhibit A - Complete Proposal Submittal with detailed Summary of Pricing
  
- Exhibit B –Qualifications and Licenses Requirements
  
- Exhibit C – Disclosure of Supplier Responsibility Statement
  
- Exhibit D - List of References
  
- Exhibit E - Certificate of Insurance
  
- Exhibit F – Non-Bidder’s Response
  
- City of Flint, Michigan Affidavit

**❖ EXHIBIT A - SUBMITTAL WITH DETAILED SUMMARY OF PRICING****PROPOSAL NO. 22000529  
AMI METERS**

City of Flint

Request for Proposal

Advanced Metering Infrastructure Project

## INTRODUCTION

## 1.1. GENERAL

The City of Flint (City) is seeking proposals from Prospective Proposers who offer a system-wide Advanced Metering Infrastructure (AMI) System. The Prospective Proposer must have demonstrated experience in the supply and delivery of water meters, registers, automatic meter reading endpoints and the supply, delivery and training of a cellular or remote wireless telemetry AMI system. All endpoints must operate with two-way capabilities from the endpoint to the Advanced Metering Analytics (AMA) software.

The AMA software will provide metering data to the City's billing system through an Application Program Interface (API). In addition, system information and other service tools will be provided to assist the City in serving their customers. The AMA software shall also provide a consumer engagement module that includes online access and a smart phone application to allow the City's customers and customer service staff access to meter usage information.

This Request for Proposal (RFP) invites proposers to submit a proposal describing the supply of the City's AMI System. Once complete, the City will operate and maintain the system, and provide customer billing, and related services.

Proposals can be retrieved at <https://www.cityofflint.com/finance/purchasing/>.

**Proposals must be submitted and received by the City no later than 12:00 PM EST: THURSDAY, JUNE 16, 2022 at the following location:**

**City of Flint  
Finance — Dept. of Purchases and Supplies  
2<sup>nd</sup> Floor City Hall - Room203  
Flint, MI 48502**

All proposals shall be submitted in sealed packages and in accordance with the requirements of Section 3 of this RFP's Instructions to Vendors.

## 1.2. OBJECTIVES AND REQUIREMENTS

The City of Flint is issuing this RFP from qualified, experienced contractors who will furnish all materials,



equipment and other services, including installation if proposed, as maybe required to completely install a new or maintain and expand our existing AMR and fixed network AMI System. The meters, parts and software that will be used for anticipated new construction and/or maintenance of existing units.

## 2. GENERAL BACKGROUND INFORMATION

### 2.1. OVERVIEW

The City of Flint operates an expansive water system encompassing all of the incorporated City with over 30,000 water meters, across a service area covering more than 32 square miles. Currently, the Water Utilities Department (Department) reads the system monthly with a mobile reading system (AMR) and through a cellular based AMI system. The goal of the Department is to migrate gradually to a fully automated reading system allowing readings to be collected remotely. Additionally, the City wishes to improve its service to its customers by providing tools to help manage consumption and promote conservation.

### 2.2. BACKGROUND

The Water Utilities Department has already begun converting to its automated meter reading program with replacement NSF/ANSI Standard 61 compliant meters and RF transponders. At this time, it has utilized a combination of AMR systems as the standard. The City has switched to a combination of Badger and Metron Farnier AMR meters. The Department is now in a position where it has to repair or replace remaining older units. Currently, the City is not able to accurately bill for all the water flowing through its system due to older inaccurate, faulty or damaged meters. It is estimated that the City of Flint can only account for 45%-55% of the water it buys wholesale from the Great Lakes Water Authority. The Department is also continuing to expand its number of service accounts with meters and registers through new installations, normal replacements and gradual system upgrades. For new development, an electronic AMA (Advanced Meter Analytics) with cellular or radio telemetry registers will be considered and for existing newer NSF/ANSI Standard 61 compliant meters a register interface upgrade compatible with a single AMA (Advanced Meter Analytics) system is being considered.

The system should provide customers with sophisticated leak detection features. Leak detection should not be limited to just continuous leaks (e.g. dripping faucets) but also be capable of detecting intermittent leaks such as leaking toilet valves that may only be active for a short period (minutes or hours) at a time and only a portion of the day.

It is the intent of the RFP for the City of Flint to obtain proposals for the replacement and repair of registers and transponders which may also include water meters, and the installation and operation of an AMI system to serve all connections in the City. The City's water system currently includes several brands and types of water meters and parts, such as Metron and Badger. Newer composite meters and equipment must stay in operation and be upgradable so that 100 percent of the system will ultimately be compatible with all new equipment proposed for this project. The desire of the City is to have a single AMI system for all connections served by the City.

## 3. RFP PROCESS

### 3.1. SUBMITTAL SCHEDULE

Respondents must submit according to the proposed schedule as the City will begin reviewing proposals as soon as they are submitted. Should the City decide a proposal meets all of the requirements in this RFP and determines it is in the best interest of the City; a contract will be negotiated and submitted to City Council for approval.

#### Tentative City Schedule

RFP Issued	6/2/2022
Cutoff for Requests for information	6/9/2022
Proposals Due	6/16/2022
Presentations	6/22/2022-6/23/2022
Selection	6/30/2022
City Council Approval	7/11/2022

### **3.2. REQUESTS FOR CLARIFICATION**

Requests for Clarification of any topics in this RFP shall be directed to:

Lauren Rowley, Purchasing Manager at [lrowley@cityofflint.com](mailto:lrowley@cityofflint.com) by  
Thursday, June 9, 2022 at 10:00 AM EST.

Requests for Clarification must be received in writing via email. Interpretation or modification of this RFP document will be done by Addenda only. Oral responses and interpretations or modification given by other methods are not binding. Responses to requests for clarification will be in writing and shall be distributed to all Respondents in the form of an Addendum and without identification of the source of any inquiry.

### **3.3 PROPOSAL EVALUATION PROCESS**

#### 3.3.1. OVERVIEW

In the evaluation of the proposals, the City will utilize the evaluation criteria (factors) set forth in this RFP. The result of the evaluation will be a recommendation to City Council by the Utilities Department to enter into one or more contracts with a Respondent to potentially fund, supply the materials and implement the AMI System and or to defer any further action on any of the proposals or any portion of the proposals.

City staff will evaluate the responses to this RFP. City staff may utilize technical, legal, and financial consultants in completing its evaluation.

#### 3.3.2. PRESENTATION

Presentations are anticipated to occur on **Wednesday, June 22, 2022 and Thursday, June 23, 2022**. This date is subject to change. Please email Yolanda Gray, Utilities Accounting Supervisor at [ygray@cityofflint.com](mailto:ygray@cityofflint.com) by **Tuesday, June 21, 2022 at 12:00 P.M. EST** to schedule your presentation.

Proposers shall also be required to provide a 30-minute presentation. Team members required to be at

the presentation are the proposed project manager, field supervisor, and lead training person with sufficient Information Technology knowledge to address technical issues. The presentation should include the following components as applicable to the proposed scope of work. 1. Overview and justification of selected meters (as applicable). 2. Overview of AMI solution technology. 3. Demonstration of software being proposed with the AMI solution. 4. Include the guaranteed read rate and what will be done to obtain this rate should it not be met. 5. Failure rate percentage and any known product issues or defects. What is currently being done to correct them? 6. Read increments and time length of data storage and any associated costs, including any cellular or data costs for transmissions to or from the cloud. Monthly infrastructure charges and any reoccurring charges, such as cellular or network charges. must be clearly defined. For cellular services, state the provider and term of agreement if applicable. 7. If the AMA is capable of displaying information pertaining to the battery life, backflow, communication errors, tampering alarms or alerts and the GPS location of the unit. 8. Address how backfilling will occur when reads are missed (i.e. transmission errors or battery failure if applicable). 9. If the meter cannot be read because of physical or electrical interference, explain how this will be addressed. 10. State what information will be available in the AMA, if the API will have the capability to upload meter attributes such as account number, cycle, route, GPS, meter size by meter or by group. 11. Describe the tools, training, computer, peripherals and software required for the installation and for ongoing maintenance and the associated costs for required equipment. 12. System warrantability and projected life expectancy.

### 3.3.3 PROPOSAL EVALUATION CRITERIA

All proposals received will be reviewed and evaluated by a committee of qualified personnel. This committee will recommend for selection the proposal that best meets the objectives outlined in the requirements of this request.

During the evaluation process, the City may require a Proposer's representative to answer questions with regard to the proposal and/or make a formal presentation to the review committee.

Each of the technical categories will be evaluated to determine the best score by category. The review committee will make a recommendation to award the contract or contracts based on the criteria set forth below:

**EVALUATION**

Evaluation Description	Weighted Value
Required Infrastructure to Ensure System-wide Coverage (Cost, Effort, Responsibility, Warranty, Risk)	30%
Customer Conservation Features (Usage Analytical Tools, Usage Interval Data, Advanced Leak Detection Algorithms, etc.)	10%
Cost (Infrastructure Investment for Full System Coverage, Scalability, Cost per End Point, retrofit (if proposed) to existing meters, Ongoing Support Fees Including all funding/financing options)	40%
Ease of Implementation (Required Onsite Software Implementation, Required in-house Hardware Installation, Training, ease of use, customer service, etc.)	10%
Other System Specific Advantages	
Should full system deployment extend in excess YIN of a 12 month contract period, will the proposer firm pricing in this proposal for all system components through full project completion (up to 18 months)?	

The City of Flint wishes to receive proposals to complete its “state of the art” automated meter reading water conservation system to achieve efficiency gains and provide its customers with tools for water usage management.

**5. RESPONSIVENESS TO RFP**

The City will consider responsiveness to the RFP requirements in evaluating the submittals. The degree of completeness of Respondent’s proposal will also be considered. The City reserves the right to accept or reject any proposal that is deemed by City staff, in their sole discretion to be incomplete or nonresponsive.

**6. REFERENCE CHECKS**

The City reserves the right to verify experience and qualifications, including verification of quality on past projects, through interviews and, possibly, site visits to proposed reference facilities at any point in the evaluation process. The City may choose to conduct any portion of the reference checks and site visits during the RFP process, Qualifications of firms and individuals may also be verified in this

manner. In addition, the City retains the right to interview and/or visit facilities where Respondent team members have worked.

## 7. REQUESTS FOR CLARIFICATION OR RESUBMISSIONS

At its sole discretion, the City may ask written questions of Respondents, seek written clarifications, conduct in-person or telephone discussions on proposals with Respondents, and solicit updated proposals during the evaluation and selection process.

## 8. ADMINISTRATIVE REQUIREMENTS

### 8.1. OTHER PROCUREMENT REQUIREMENTS

#### 8.1.1. RESPONDENT RESPONSIBILITY FOR PROPOSAL PREPARATION COSTS

The City is not liable for any costs incurred by any Respondent associated with the preparation of a proposal.

Selected Respondents may be asked to present their proposals and/or to demonstrate ability to provide products or services to the City in a personal presentation. The Respondent shall bear all costs for such presentations.

#### 8.1.2. SUBSTANTIVE PROPOSALS

By submitting a proposal, Respondent certifies that (a) Respondent's proposal is accurate and is not made in the interest of, or on behalf of, an undisclosed person, contractor (defined here as any entity capable of contracting with the City for provision of products or services), or entity; (b) Respondent has not directly or indirectly induced or solicited any other contractors to put in a false or sham proposal; (c) Respondent has not solicited or induced any other person, contractor, or entity to refrain or abstain from proposing; (d) Respondent has not sought by collusion to obtain for themselves any advantage over any other Respondent or over the City.

#### 8.1.3. INFORMATION DISCLOSURE TO THIRD PARTIES

All material provided to the City during the procurement process and any subsequent agreement negotiation and administration would be expected to be used without restriction by the City in the future.

Respondents shall clearly mark any portions of their proposal submittals that they are proprietary and confidential information by including the following language preceding that section of the proposal:

"The following section contains confidential and proprietary information that may not be disclosed to any party outside the City of Flint staff without prior written authorization by the Purchasing Department.

#### 8.1.4. CITY'S RIGHTS

This RFP constitutes an invitation to Respondents to submit proposals to the City. The City reserves,

holds without limitation, and may exercise, at its sole discretion, the following rights and conditions with regard to this RFP process, to which by responding to this RFP, Respondents acknowledge and consent to the following:

- To terminate the procurement process or decide not to award the project or enter into an agreement as a result thereof by written notice to the Respondents for any reason or no reason whatsoever.
- To waive any defect, technicality, or any other minor informality or irregularity in any proposal, or any other response from Respondents, as determined by the City in its sole discretion.
- To make major changes or alterations to the RFP schedule for any events associated with this procurement process upon notice to the Respondent. Minor modifications may be made without notice to Respondents.
- To eliminate any Respondent that submits an incomplete or inadequate response, or is not responsive to the requirements of this RFP, or is otherwise deemed by the City, in its sole discretion, to be unqualified during any stage of the procurement process.
- Without prior notice, to supplement, amend, or otherwise modify this RFP or otherwise request additional information.
- In the event the City receives questions concerning this RFP from Respondents prior to the deadline for response, the City reserves the right to provide such questions, and the City's responses, if any, to all prospective Respondents.
- Neither the City, nor its elected officials, staff, agents, employees, representatives nor Respondents will be liable for any claims or damages resulting from any aspect of this RFP process.
- To visit and examine any of the facilities referenced in the proposals and to observe and investigate the operations of such facilities, as well as other facilities not referenced in the proposals as may be deemed necessary by the City.
- To conduct investigations with respect to the qualifications and experience of each Respondent included in its proposal and to request additional evidence to support any such information.
- To take any action affecting the RFP process or the project that is determined to be in the City's best interests.
- To request clarifications, information, and/or revised proposals from Respondents.
- To discontinue negotiations with the selected Respondent and commence negotiations with another Respondent or any other party,
- To select and enter into an agreement with one Respondent whose proposal best satisfies the interests of the City and is most responsive in the judgment of the City to the requirements of this RFP.

9. SELECT AGREEMENT REQUIREMENTS

### 9.1. GENERAL

Respondent must submit a complete response to the RFP, which will be retained by the City. Proposals shall provide complete details of the Respondent's approach to meet the requirements of this RFP. The proposal submittal requirements are presented in Section 5 of this RFP.

### 9.2 AMENDMENTS TO THE RFP

The City of Flint reserves the right to amend this RFP by an Addendum at any time prior to the date set for receipt of proposals. Responses to requests for clarification will be in writing and shall be distributed to all Respondents in the form of an Addendum and without identification of the source of any inquiry. If revisions are of such a magnitude to warrant, in the City's opinion, the postponement of the date for receipt of proposals, an addendum will be issued announcing the new date.

## 10. SUBMITTAL REQUIREMENTS

### 10.1. GENERAL REQUIREMENTS

**Submit three (3) written copies: One (1) original and two (2) additional copies unbound with one (1) digital copy of the proposal on or before the stated submittal deadline to:**

**City of Flint  
Finance — Dept. of Purchases and Supplies  
2<sup>nd</sup> Floor City Hall Room203  
Flint, MI 48502**

**Send electronic copy in PDF format to [purchasingbids@cityofflint.com](mailto:purchasingbids@cityofflint.com) by the required due date.**

Proposals must be received by the date and time stated herein. The envelope shall be labeled as Proposal—Advanced Metering Infrastructure Project, and the name and address of the interested Respondent on the front of the envelope.

Interested Respondents are responsible for the timely and accurate delivery of their proposals. Only those proposals received at the above address on or before the date and hour set for receipt of proposals will be eligible for consideration. Any proposal received after the closing time, regardless of the method of delivery, may be returned to the Respondent unopened. Proposals may not be withdrawn after the closing time.

The City reserves the right to reject any or all proposals, including without limitation the rights to reject any or all nonconforming, nonresponsive, or conditional proposals and to reject the proposal of any Respondent if the City believes that it would not be in the best interest of the City to consider a project proposal from that Respondent, whether because the proposal is not responsive or the Respondent is unqualified or of doubtful financial ability or fails to meet any other pertinent standard or criteria established by the City. Pursuant to City of Flint Ordinance 518-21.5. "Lowest responsive responsible proposer" means the proposer that possesses financial or pecuniary ability to complete the contract, integrity and trustworthiness, skill, judgment, ability to perform conscientious work, promptness, experience, necessary facilities, and equipment for doing the work efficiently, previous performance of satisfactory work, together with essential factors particular to this project.

## 10.2. FORMAT REQUIREMENTS AND ORGANIZATION

The City desires to allow Respondents maximum flexibility to be efficient in preparing proposals. As such, no specific format restrictions or page limitations are required. However, Respondents are strongly encouraged to submit a concise proposal that provides the detailed explanation of Respondent's approach focusing on the requirements previously stated and categories of information that address stated.

Additional clarifying details related to Respondent's financial capacity to deliver the proposed project should be included along with more detailed information regarding the specific elements of the technical approach to deliver to the City the Advanced Metering Infrastructure Project.

### **American Iron and Steel Contract Language**

The Contractor acknowledges to and for the benefit of the city of the City of Flint( .. Purchaser") and the Michigan Department of Environmental Quality (the "State") that it understands the goods and services under this Agreement are being funded with monies made available by the State Revolving Fund and/or the Drinking Water Revolving Fund and such law contains provisions commonly known as "American Iron and Steel (AIS);" that requires all iron and steel products used in the project be produced in the United States ("AIS Requirements") including iron and steel 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 AIS Requirements, (b) all iron and steel used in the project will be and/or have been produced in the United States in a manner that complies with the AIS Requirements, unless a waiver of the requirements is approved or the State made the determination in writing that the AIS Requirements do not apply to the project, 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 AIS requirements, as may be requested by the Purchaser. 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.

## 11. AVAILABLE INFORMATION INCLUDED FOR RESPONDENTS USE

### ADDITIONAL VENDOR INSTRUCTIONS FOR FEDERAL FUNDED PROJECTS



This project has either been partially or fully funded by federal dollars. The selected vendor agrees to comply with all applicable federal requirements of Title 24 Code of Federal Regulations (CFR, part 570 of the Housing and Urban Development, state and local laws and all other regulations governing the funds provided for this project and must comply to the following Federal guidelines:

#### Employment Restrictions

The Selected vendor is prohibited from using funds provided herein or personnel employed in the administration of the program for political activities; sectarian or religious activities; lobbying, political patronage, and nepotism activities.

Where employees are engaged in activities not covered under the Occupational Safety and Health Act of 1970, they shall not be required or permitted to work, be trained, or receive services in buildings or surroundings or under working conditions which are unsanitary, hazardous or dangerous to the participants' health or safety.

Participants employed or trained for dangerous occupations, e.g., fire or police jobs, shall be assigned to work in accordance with reasonable safety practices. The Selected vendor will comply with the Michigan Right to Know Act.

#### Copeland "Anti-Kickback" Act (U.S.C. 874)

The selected vendor shall comply with the Copeland Anti-Kickback Act as supplemented by Department of Labor regulations (29 CFR Part 3, Contractors and Subcontractors on Public Building or public Work Financed in Whole or in Part by Loans or Grants from the United States.) The Act provides that contractors or subcontractors shall be prohibited from inducing by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he is otherwise entitled. All suspected or reported violations must be reported to HUD.

#### Davis-Bacon Act (40 U.S.C. 276A-7)

The selected vendor shall comply with the Davis-Bacon Act, as supplemented by Department of Labor regulations (29 CFR Part 5, Labor Standards Provisions Applicable to Contracts Governing Federally Financed and Assisted Construction). Under this Act, contractors shall be required to pay wages to laborers and mechanics at a rate not less than the minimum wages specified in a wage determination made by the Secretary of Labor. In addition, selected vendors shall be required to pay wages not less than once a week. All suspected or reported violations must be reported to HUD.

#### Contract Work Hours and Safety Standards Act (40 U.S.C. 327-333)

The selected vendor shall comply with the Contract Work Hours and Safety Act, as supplemented by Department of Labor regulations (29 CFR Part 5). Under the Act, each contractor shall be required to compute the wages of every mechanic and laborer on the basis of a standard workweek of 40 hours. Work in excess of the standard workweek is permissible provided that the worker is compensated at a rate of not less than 1 1/2 times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The Act also provides that no laborer or mechanic shall be required to work in surroundings or under working conditions that are unsanitary, hazardous or dangerous. These requirements do not apply to the purchase of supplies or materials or articles ordinarily available on the open market, or

contracts for transportation or transmission of intelligence.

The selected vendor shall maintain documentation, which demonstrates compliance with hour and wage requirements. Such documentation shall be made available to the City for review upon request.

The selected vendor agrees that, except with respect to the rehabilitation or construction of residential property of less than eight (8) households, all selected vendors engaged under contracts in excess of \$2,000.00 for construction, renovation or repair of any building or work financed in whole or in part with assistance provided under this contract, shall comply with federal requirements adopted by the City pertaining to such contracts and with the applicable requirements of the regulations of the Department of Labor, under 29 CFR, Parts 3, 1, 5 and 7 covering the payment of wages and ratio of apprentices and trainees to journeymen; provided, that if wage rates higher than those required under the regulations are imposed by state or local law, nothing is intended to relieve the Selected vendor of its obligation, if any, to require payment of the higher wage. The Selected vendor shall cause or require to be inserted in full, in all such contracts subject to such regulations, provisions meeting the requirements of this paragraph, for such contracts in excess of \$ 10,000.00.

Compliance with the provisions of Section 3, the regulations set forth in 24 CFR 135, and all applicable rules and orders issued hereunder prior to the execution of this contract, shall be a condition of the federal financial assistance provided under this contract and binding upon the City, the selected vendor and any sub-contractors. Failure to fulfill these requirements shall subject the City, the selected vendor and any sub-contractors, their successors and assigns, to those sanctions specified by the agreement through which federal assistance is provided. The selected vendor certifies and agrees that no contractual or other disability exists which would prevent compliance with these requirements. The selected vendor further agrees to comply with these "Section 3" requirements and to include the following language in all subcontract executed under this agreement:

"The work to be performed under this contract is a project assisted under a program providing direct federal financial assistance from HUD and is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701. Section 3 requires that to the greatest extent feasible opportunities for training and employment be given to lower income residents of the project area and contracts for work in connection with the project be awarded to business concerns which are located in, or owned in substantial part by persons residing in the areas of the project.

The Selected vendor certifies and agrees that no contractual or other disability exists which would prevent compliance with the requirements.

The Selected vendor agrees to send to each labor organization or representative of workers with which it has a collective bargaining agreement or other contract or understanding, if any, a notice advising said labor organization or worker's representative of its commitments under this Section 3 clause and shall post copies of the notice in conspicuous places available to employees and applicants for employment or training.

The Selected vendor will include this Section 3 clause in every subcontract and will take appropriate action upon finding that the selected vendor is in violation of regulations issued by the City. The selected vendor will not subcontract with any Contractor where it has notice or knowledge that the latter has been found in violation of regulations under 24 CFR 135 and will not let any subcontract unless the Selected vendor has first provided it with a preliminary statement of ability to comply with

the requirements of these regulations.

#### Conduct

The Selected vendor agrees that no funds provided, nor personnel employed under this contract, shall be in any way or to any extent engaged in the conduct of political activities in violation of Chapter 15 of Title V United States Code.

The Selected vendor agrees to abide by the provisions of 24 CFR 570.61 1 with respect to conflicts of interest, and covenants that it presently has no financial interest and shall not acquire any financial interest, direct or indirect, which would conflict in any manner with the performance of services required under this contract. The Selected vendor further covenants that in the performance of this contract no person having such a financial interest shall be employed or retained by the Selected vendor. These conflict of interest provisions apply to any person who is an employee, agent, consultant, officer, or elected official or appointed official of the City, or of any designated public agencies or Selected vendors which are receiving funds under the CDBG Entitlement program.

The Selected vendor hereby certifies that:

No Federal appropriated funds have been paid or will be paid, by or on behalf of it, to any person for influencing or attempting to influence an officer or employee or any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement

If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, it will complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying", in accordance with its instructions.

It will require that the language of paragraph (d) of this certification be included in the award documents for all subawards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all Selected vendors shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$ 10,000 and not more than \$ 100,000 for each such failure.

#### Equal Employment Opportunity

The Selected vendor agrees that it shall be committed to carry out pursuant to the Federal Government's specifications an Affirmative Action Program in keeping with the principles as provided in the President's Executive Order 1 1246 of September 24, 1965.

#### **Title VI – Civil Right Act of 1964**

The Selected vendor agrees to comply with Title VI of the Civil Rights Act of 1964 as amended, Title VIII of the Civil Rights Act of 1968 as amended, Section 104(b) and Section 109 of Title I of the Housing and Community

Development Act of 1974, Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, the Age Discrimination Act of 1975, Executive Order 1 1063, and with Executive Order 1 1246 as amended by Executive Orders 1 1375 and 12086. (24 CFR~~85.36(I)~~)

The Selected vendor shall not discriminate against any employee or applicant for employment with respect to hiring or tenure; terms, conditions, or privileges of employment or any matter directly or indirectly related to employment because of race, color, creed, religion, ancestry, national origin, age, sex, height, weight, disability or other physical impairment, marital status, or status with regard to public assistance.

The Selected vendor will take Federally Regulated affirmative action to insure that all employment practices are free from such discrimination. The Selected vendor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting agency setting forth the provisions of this nondiscrimination clause.

This contract is subject to the requirements of Title VI of the Civil Rights Act of 1964 (P.L. 88-352) and 24 CFR 570.601 and 602. In regard to the sale, lease, or other transfer of land acquired, cleared or improved with assistance provided under this contract, the Selected vendor shall cause or require a covenant running with the land to be inserted in the deed or lease for such transfer, prohibiting discrimination as defined, in the sale, lease or rental, or in the use or occupancy of such land, or in any improvements erected or to be erected thereon, providing that the City and the United States are beneficiaries of and entitled to enforce such covenants. The Selected vendor, in undertaking its obligation to carry out the program assisted hereunder, agrees to take such measures as are necessary to enforce such covenant.

The Selected vendor agrees to comply with any federal regulations issued pursuant to compliance with Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. 706) which prohibits discrimination against the handicapped in any federally assisted program.

#### ***Rights to Inventions. Copyrights. Patents and Data***

If this contract results in any materials that can be copyrighted, HUD and the City of Flint reserves the right to royalty free, non-exclusive and irrevocable license to reproduce, publish or otherwise use, and to authorize to use, the work or materials for government purposes. Should this contract result in any discovery or invention, HUD and the City of Flint shall retain any and all patent rights which arise or is developed in the course of or under said contract.

#### **Clean Air Act. 42 U.S.C., 1857. et seq.**

Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251, et seq., as amended, 1318 relating to inspection, monitoring, entry, reports, and information, as well as other requirements specified in said Section 1 14 and Section 308, and all regulations and guidelines issued thereunder.

#### ***CLEAN WATER ACT. 32 U.S.C.. 1368. ET SEO AND EPA REQUIREMENTS***

The Selected vendor shall comply with all applicable standards, orders, or requirements issued

under Section 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 1738, and Environmental Protection Agency regulations (40 CFR Part 15).

**REQUIRED STANDARD CONTRACT LANGUAGE: CLEAN WATER STATE  
REVOLVING FUND AND DRINKING WATER REVOLVING FUND**

- Davis-Bacon/Prevailing Federal Wages, Including Labor Standards Provisions
- Business Enterprise (DBE) Requirements\*
- Debarment/Suspension Certification

**\* Proposers should note these sections contain instructions regarding forms/information that must be completed/included with any submitted a proposal.**

Rev. 3-2015

**Davis-Bacon/Prevailing Federal Wage Rates**

P.L. 1 1 1-88 requires compliance with the Davis Bacon Act and adherence to the current US. Department of Labor Wage Decision. Attention is called to the fact that not less than the minimum salaries and wages as set forth in the Contract Documents (see Wage Decision included herein) must be paid on this project. The Wage Decision, including modifications, must be posted by the Contractor on the job site. A copy of the Federal Labor Standards Provisions is included and is hereby a part of this contract.

Replace this page with the appropriate Wage Decision and Modifications.

**NOTE:** The required/appropriate Wage Decision must be obtained from the United States Department of Labor (DOL) at:

<http://www.access.gpo.gov/davisbacon/index.html>

The Wage Decision that appears in the contract specifications must be that which was in effect on the date 10 days before bid opening.

The "Contracting Agency" or "Contracting Officer" for Davis-Bacon Wage Decision posters on jobsites is the loan applicant/bond issuer.

Questions regarding prevailing wage and labor standards provisions should be directed to the DOL.

## **29 CFR Part 5 — Labor Standards Provisions for Federally Assisted Projects**

### **S 5.5 Contract provisions and related matters.**

(a) The Agency head shall cause or require the contracting officer to insert in full in any contract in excess of \$2,000 which is entered into for the actual construction, alteration and/or repair, including painting and decorating, of a public building or public work, or building or work financed in whole or in part from Federal funds or in accordance with guarantees of a Federal agency or financed from funds obtained by pledge of any contract of a Federal agency to make a loan, grant or annual contribution (except where a different meaning is expressly indicated), and which is subject to the labor standards provisions of any of the acts listed in Sec. 5. I, the following clauses (or any modifications thereof to meet the particular needs of the agency, Provided, That such modifications are first approved by the Department of Labor):

(1) Minimum wages. (i) All laborers and mechanics employed or working upon the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section I (b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(I)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed,

without regard to skill, except as provided in Sec. 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (a)(I)(ii) of this section) and the Davis Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(ii)(A) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

- (1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
- (2) The classification is utilized in the area by the construction industry; and
- (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(C) In the event the contractor, the laborers, or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(I)(ii) (B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account asset for the meeting of obligations under the plan or program.

(2) Withholding. The (write in name of Federal Agency or the loan or grant recipient) shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), all or part of the wages required by the contract, the (Agency) may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(3) Payrolls and basic records. (i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section I(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section I of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and



certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii)(A) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the (write in name of appropriate federal agency) if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant, sponsor, or owner, as the case may be, for transmission to the (write in name of agency). The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the (write in name of appropriate federal agency) if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit them to the applicant, sponsor, or owner, as the case may be, for transmission to the (write in name of agency), the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sponsoring government agency (or the applicant, sponsor, or owner).

(B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

- (1) That the payroll for the payroll period contains the information required to be provided under Sec. 5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under Sec. 5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
- (2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;
- (3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the (write the name of the agency) or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(4) Apprentices and trainees--(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws

approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

(5) Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

(6) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(l) through (10) and such other clauses as the (write in the name of the Federal agency) may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

(7) Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

(8) Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

(9) Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

(10) Certification Of eligibility. (i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis Bacon Act or 29 CFR 1).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

(b) Contract Work Hours and Safety Standards Act. The Agency Head shall cause or require the contracting officer to insert the following clauses set forth in paragraphs (b)(1), (2), (3), and (4) of this section in full in any contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by Sec. 5.5(a) or 4.6 of part 4 of this title. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (b)(1) of this section the contractor and any subcontractor responsible there for shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (b)(1) of this section, in the sum of \$ 10 for each calendar day on which such individual was required or permitted to work in excess of the standard

workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (b)(l) of this section.

(3) Withholding for unpaid wages and liquidated damages. The (write in the name of the Federal agency or the loan or grant recipient) shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b)(2) of this section.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (b)( l) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (b)(l) through (4) of this section.

(c) In addition to the clauses contained in paragraph (b), in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other statutes cited in Sec.

5. I, the Agency Head shall cause or require the contracting officer to insert a clause requiring that the contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Further, the Agency Head shall cause or require the contracting officer to insert in any such contract a clause providing that the records to be maintained under this paragraph shall be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the (write the name of agency) and the Department of Labor, and the contractor or subcontractor will permit such representatives to interview employees during working hours on the job. Disadvantaged Business Enterprises (DBE)

Prime contractors bidding on this project must follow, document, and maintain documentation of their Good Faith Efforts, as listed below, to ensure that Disadvantaged Business Enterprises (DBEs) have the opportunity to participate in the project by increasing DBE awareness of procurement efforts and outreach. Bidders must make the following Good Faith Efforts for any work that will be subcontracted.

- 1 Ensure DBEs are made aware of contracting opportunities to the fullest extent practicable through outreach and recruitment activities. Place DBEs on solicitation lists and solicit DBEs whenever they are potential sources.

- 2 Make information on forthcoming opportunities available to DBEs. Arrange timeframes for contracts and establish delivery schedules, where the requirements permit, in a way that encourages and facilitates participation by DBEs in the competitive process. Whenever possible, post solicitation for bids or proposals for a minimum of 30 calendar days before the bid or proposal closing date. The DBEs should be given a minimum of 5 days to respond to the posting.
- 3 Consider in the contracting process whether firms competing for large contracts can be subcontracted with DBEs. Divide total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by DBEs in the competitive process.
- 4 Encourage contracting with a consortium of DBEs when a contract is too large for one DBE firm to handle individually.
- 5 Use the services and assistance of the Small Business Administration and the Minority Business Development Agency of the U.S. Department of Commerce.

Subsequent to compliance with the Good Faith Efforts, the following conditions also apply under the DBE requirements. Completed Good Faith Efforts Worksheets (Attachment I along with the required supporting documentation outlined in the instructions, must be submitted with your bid proposal. EPA form 6100-2 must also be provided at the pre-bid meeting. A copy of this form is available on the Forms and Guidance page of the Revolving Loan website.

1. The prime contractor must pay its subcontractor for work that has been satisfactorily completed no more than 30 days from the prime contractor's receipt of payment from the owner.
2. The prime contractor must notify the owner in writing prior to the termination of any DBE subcontractor for convenience by the prime contractor and employ the Good Faith Efforts if soliciting a replacement contractor.
3. If a DBE contractor fails to complete work under the subcontract for any reason, the prime contractor must employ the Good Faith Efforts if soliciting a replacement contractor.
4. The prime contractor must employ the Good Faith Efforts.

### **Debarment Certification**

The prime contractor must provide a completed **Certification Regarding Debarment, Suspension, and Other Responsibility Matters Form** with its bid or proposal package to the owner (Attachment 2).

**Attachment 1**  
**Michigan Department of Environmental Quality**  
**Office of Drinking Water and Municipal Assistance— Revolving Loan Section**  
**Disadvantaged Business Enterprise (DBE) Utilization**  
**State Revolving Fund/Drinking Water Revolving Fund GOOD FAITH EFFORTS WORKSHEET**

Proposer: \_\_\_\_\_

Subcontract Area of Work (one per worksheet):  
 \_\_\_\_\_

Company Name	Type of Contact	Date of Contact	Price Quote Received	Accepted/ Rejected	Please Explain if Rejected
				A R	
				A R	
				A R	
				A R	
				A R	
				A R	

Outreach Goal: Solicit a minimum of three (3) DBEs via email/letter/fax. It is recommended that various sources be used to locate the minimum number of DBEs. The Michigan Department of Transportation (MDOT) website and [www.sam.eov](http://www.sam.eov) registries may be two resources used to find a minimum of three DBEs.

List the DBEs contacted for the above area of work and complete the following information for each DBE.

Explanation for Not Achieving a Minimum of Three Contacts; you may include a printout of the MDOT and [www.sam.gov](http://www.sam.gov) search results (attach extra sheets if necessary).

MITA DBE Posting Date (if applicable) \_\_\_\_\_ : (attach a copy of the DBE advertisement)

Other Efforts (attach extra sheets if necessary):

**Please include the completed worksheet and supporting documentation with the bid proposal. Rev. 3-2015**

Authorized under Parts 53 & 54 of the Natural Resources and Environmental Protection Act. 1994 PA 451. as amended. [www.michigan.gov/deq](http://www.michigan.gov/deq)

**Michigan Department of Environmental Quality  
Office of Drinking Water and Municipal Assistance— Revolving Loan Section  
Disadvantaged Business Enterprise (DBE) Utilization**

Instructions to Bidders for the Completion of the Good Faith Efforts Worksheet

1. Separate worksheets must be provided for each area of work to be subcontracted out. This includes both major and minor subcontracts.
2. A minimum of three (3) DBEs must be contacted by a verifiable means of communication such as e-mail, letter, or fax for each area of work to be subcontracted out. Copies of the solicitation letters/emails and fax confirmation sheets must be provided with the worksheet.
3. If less than three (3) DBEs exist statewide for the area of work, then provide documentation that other DBE resources were consulted. This may include the MDOT and [www.sam.gov](http://www.sam.gov) registries and an advertisement in a publication. A printout of the website searched (conducted prior to the end of the bid period) must be submitted.
4. Posting solicitations for quotes/proposals from DBEs on the MITA website ([www.mitadbbe.com](http://www.mitadbbe.com)) is highly recommended to facilitate participation in the competitive process whenever possible. The solicitation needs to identify the project and the areas of work to be subcontracted out. A copy of the MITA DBE advertisement must be submitted with the Good Faith Efforts worksheet, if used, or a printout of the resulting quotes posted to the MITA website can be submitted with this form as supporting documentation.
5. If the area of work is so specialized that no DBEs exist, then an explanation is required to support that conclusion, including the documentation required in No. 3 above.
6. The date of the DBE contact must be identified, as it is important to document that the DBE solicitation was made during the bid period and that sufficient time was given for the DBE to return a quote.
7. Each DBE firm's price quote must be identified if one was received or N/A entered on the worksheet if a quote was not received. Copies of all quotes must be submitted with the worksheet.
8. If a quote was received, indicate if it was accepted or rejected. Justification for not accepting a quote and not using the DBE subcontractor must be provided.
9. Under Other Efforts, please indicate additional steps you have taken to obtain DBE contractors and provide the appropriate supporting documentation such as:
  - Follow-up e-mails, faxes, or letters.



- Copies of announcements, postings in newspapers, trade publications, or minority media that target DBE firms.

**Attachment 2**  
**Certification Regarding**  
**Debarment, Suspension, and Other Responsibility Matters**

The prospective participant certifies, to the best of its knowledge and belief, that it and its principals:

- (1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in transactions under federal non-procurement programs by any federal department or agency;
- (2) Have not, within the three-year period preceding the proposal, had one or more public transactions (federal, state, or local) terminated for cause or default; and
- (3) Are not presently indicted or otherwise criminally or civilly charged by a government entity (federal, state, or local) and have not, within the three year period preceding the proposal, been convicted of or had a civil judgment rendered against it:
  - (a) For the commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public transaction (federal, state, or local) or a procurement contract under such a public transaction;
  - (b) For the violation of federal or state antitrust statutes, including those proscribing price fixing between competitors, the allocation of customers between competitors, or bid rigging; or
  - (c) For the commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property.

I understand that a false statement on this certification may be grounds for the rejection of this proposal or the termination of the award. In addition, under 18 U.S.C. 51001, a false statement may result in a fine of up to \$10,000 or imprisonment for up to five years, or both.

\_\_\_\_\_  
 Name and Title of Authorized Representative

\_\_\_\_\_  
 Name of Participant Agency or Firm

\_\_\_\_\_  
 Signature of Authorized Representative \_\_\_\_\_ Date \_\_\_\_\_

- I am unable to certify to the above statement. Attached is my explanation.

## Attachment 3

**Frequently Asked Questions About  
Disadvantaged Business Enterprise (DBE) Solicitation  
Disadvantaged Business Enterprise (DBE) Requirements  
Frequently Asked Questions Regarding Contractor Compliance**

Q: What is the Good Faith Efforts Worksheet form and how is it to be completed?

A: This form captures efforts by the prime contractor to solicit DBEs for each area of work type that will be subcontracted out. A separate Good Faith Efforts Worksheet must be provided by the prime contractor for each area of work type to be subcontracted out. There are specific instructions that accompany this form that prescribe minimum efforts which bidders must make in order to be in compliance with the DBE requirements.

Q: Can non-certified DBEs be used?

A: While non-certified DBEs can be used, only DBEs, MBEs, and WBEs that are certified by EPA, SBA, or MDOT (or by tribal, state and local governments, as long as their standards for certification meet or exceed the standards in EPA policy) can be counted toward the fair share goal. Proof of certification by one of these recognized and approved agencies should be sought from each DBE.

Q: How does a DBE get certified?

A: Applications for certification under MDOT can be found at <http://mdotiboss.state.mi.us/UCP/LearnHowServlet>.

Applications for certification under EPA can be found on EPA's Small Business Programs website at <http://www.epa.gov/osbp/dbefinn.htm> under Certification Forms.

Q: If a bidder follows the MDOT DBE requirements, will the bidder be in compliance with the SRF/DWRF DBE requirements?

A: No. Federally funded highway projects utilize DBE goals, which require that a certain percentage of work be performed by DBE subcontractors. For SRF/DWRF projects, there is no financial goal. However, there is a solicitation effort goal. Bidders must use Good Faith Efforts for each and every area of work to be subcontracted out to obtain DBEs. The bidders are not required to use DBEs if the quotes are higher than non-DBE subcontractors. There is no required DBE participation percentage contract goal for the SRF/DWRF. However, if the SRF/DWRF project is part of a joint project with MDOT, the project can be excluded from SRF/DWRF DBE requirements (i.e., the Good Faith Efforts Worksheet is not required) as it would be difficult to comply with both programs' requirements.

Q. Must the Good Faith Efforts Worksheet and supporting documentation be turned in with the bid

proposals?

A: Yes. This is a requirement to document that the contractor has complied with the DBE requirements and the Good Faith Efforts. These compliance efforts must be done during the bidding phase and not after-the-fact. It is highly recommended that the need for these efforts and the submittal of the forms with the bid proposals be emphasized at the pre-bid meetings.

Failure to show that the Good Faith Efforts were complied with during the bidding process can lead to a prime contractor being found non-responsive.

Q: Does EPA form 6100-2 need to be provided at the pre-bid meeting?

A: Yes. The form must be made available at the pre-bid meeting.

Q: What kinds of documentation should a contractor provide to document solicitation efforts?

A: Documentation can include fax confirmation sheets, copies of solicitation letters/e-mails, printouts of online solicitations, printouts of online search results, affidavits of publication in newspapers, etc.

Q: How much time will compliance with the Good Faith Efforts require in terms of structuring an adequate bidding period?

A: Due to the extent of the efforts required, a minimum of 30 calendar days is recommended between bid posting and bid opening to ensure adequate time for contractors to locate certified DBEs and solicit quotes.

Q: How does a contractor locate certified DBEs?

A: The Michigan Department of Transportation has a directory of all Michigan certified entities located at <http://mdotiboss.state.mi.usAJCP/>. Additionally, the federal System for Award Management (SAM) is another place to search and can be found at [www.sam.gov](http://www.sam.gov). SAM contains information from the former Central Contractor Registration (CCR) database.

Q: If the bidder does not intend to subcontract any work, what forms, if any, must be provided with the bid proposal?

A: The bidder should complete the Good Faith Efforts Worksheet with a notation that no subcontracting will be done. However, if the bidder is awarded the contract and then decides to subcontract work at any point, then the Good Faith Efforts must be made to solicit DBEs.

Q: In the perfect world, the Good Faith Efforts Worksheet is required to be turned in with the proposal. What if no forms are turned in with the bid proposal or forms are blank or incomplete? Should this be cause to determine that the bidder is non-responsive?

A: While the Good Faith Efforts Worksheet is important, it is more critical to confirm that the contractor complied with the DBE requirements prior to bid opening. The owner should contact the bidder as soon as deficiencies are noted for a determination/documentation of efforts taken to comply with the DBE requirements. Immediate submittal of the completed forms will be acceptable provided the Good Faith Efforts were made and it is just a matter of transferring information to the forms.

Q: If the prime contractor is a DBE, does he have to solicit DBE subcontractors?

A: Yes, the DBE requirements still apply if the prime intends to subcontract work out. Good Faith Efforts must be used to solicit DBEs.

Q: If the area of work is one where there are less than three DBE contractors, how is the contractor to document this?

A: Copies of printouts from MDOT and SAM showing no DBEs and advertisements soliciting quotes for all subcontract areas, including the questionable areas, will be adequate if the dates on the printouts are prior to the bid or proposal closing date.

**13. SYSTEM REQUIREMENTS AND DESIGN SPECIFICATIONS**

The City of Flint Water Service Center is seeking an upgrade to its existing water meter system and the development of an advanced AMI Cellular Remote Read Water Meter System. All RFP's shall conform to the requirements, transparency and disclosure of information for proposing as may be required by the City of Flint and its state and federal funding partners and as may be established in any future system development agreement.

Water Meters and Cellular Compatible Registers/Remotes

**SPECIFICATIONS FOR NSF/ANSI 61 STANDARD COMPOSITE and (Lead Free) WATER METERS SIZES  
• 5/8" x 3/4", 1", 1-1/2", 2"**

TYPE:

NSF/ANSI 61 Standard type accepted composite and/or (lead free) metallic material constructed water meters. All proposed meters must meet the minimum performance standards indicated with independent and verifiable third party testing documentation.

<u>Meter Size</u>	<u>Low Flow</u> (at least 95%)	<u>Accuracy Range</u> (98.5%- 101.5%)
5/8 x 3/4" composite	1/10 gpm	1/8 -40 gpm
	1/4 gpm	1/2-70 gpm
1 1/2"	1/2 gpm	3/4 -105 gpm
2"	1/2 gpm	3/4 -185 gpm

PERFORMANCE:

Meters must meet the performance specifications outlined below. Proposer should submit technical documentation to support performance claims. Any proposed meter manufacturers must have had municipal meters in service in U.S. water utilities for a minimum of 10 years.

#### OPERATION

Meters proposed must meet or exceed minimum performance standards as indicated.

#### GUARANTEE:

These meters shall be guaranteed to be free from defects in material and workmanship for a period of five (5) years from date of shipment.

#### MAIN CASE

- The main case shall be made of non-corrosive lead free metal and/or a composite material depending upon meter size and shall withstand a working pressure of 230 P.S.I. without seeping or distortion affecting the free operation of the measuring unit.
- The direction of flow must be permanently indicated on the case.
- A twenty-year guarantee is required for the main case.
- Main case must be made of an NSF approved material.
- Lead free metallic meter bodies shall have scrap value. ●Epoxy coated meters shall not be considered.

#### ELECTRONIC CELLULAR REGISTER

- Proposed meter registers and remotes must have cellular or radio signal embedded technology and be compatible with existing meters in use/inventory with the COF and at newly supplied meters.

New meters shall include 8-digit electronic register that include an embedded cell modem for communications.

Existing installed meters shall be retrofitted with electronic registers that contain embedded cell modems for communications.

The electronic registers shall store the most recent 32,000 points of data usage in 5 minute intervals, continuously without effect on the battery warranty, with resolution down to one magnetic turn of the measuring element of the meter. Vendor shall include proof of resolution for all specified meter types supplied and meters to be retrofitted in the field.

- Registers shall include on-board data storage for interval consumption data at a minimum of 111 days that can be accessed via a field tablet for additional customer service.
- Registers shall communicate with cellular network daily to upload reading data, usage data, and to synchronize their internal clocks. All meter readings must be synchronized to within 1

second of the atomic clock and be time stamped at midnight for all daily meter status and meter reading transmission.

- During daily communications, register shall also perform any required two way functions such as backfilling no fewer than 9 days of missing interval data (actual data: inferred or calculated data is not acceptable), reconfiguration commands and allowing for periodic firmware updates.
- Registers must have no moving parts, induce zero drag on the meter measuring element and improve low flow accuracy of the meters.
- Register manufacturer must certify that the calibration of the meter will not be materially changed with the new register installed.
- One style of register must fit on all makes and models of the manufacturers' meter. ● The register must be a field-replaceable, encoded unit, electronically coupled to the meter and shielded from outside interference.
- The register must have full warranty covering defects in materials and workmanship for ten (10) years.
- The register must be securely fastened to the main case and provide adequate levels of tamper protection/evidence.

Meters shall operate accurately with no straight run of pipe before or after the meter.

STRAINER:

Meters operation shall be unaffected by sand or other particulates in the line. The manufacturer must warranty meter operation and accuracy with no strainer installed.

ADVANCED METERING ANALYTICS (AMA) SYSTEM

Backhaul

- System shall utilize existing cellular network to backhaul data directly from the meter to cloud based storage.
- No additional infrastructure shall be required.
- Manufacturer must be able to provide RSSI (signal strength) value for specific meter locations prior to installation with nothing more than GIS coordinates or an address.
- No Data collectors shall be required.
- All data must be channeled through a VPN (virtual private network) within the cellular network for data security.

Cloud Based Storage

- Reading and Interval Data shall be stored in a cloud-based database administered by the manufacturer.
- Software shall be located at Utility billing office to synchronize private customer data such as name, address etc. with cloud storage of reading and interval data. ● The Manufacturer shall

create the software upload conversion file which shall be compatible with the utility's existing billing software.

- Cloud storage shall store interval usage data and readings for a period of at least one (2) years.

#### Data Accessibility

- The Utility shall have complete access to all usage data for each end customer of the utility for purposes of billing dispute resolution including the following programmable alarm values:
  - leak detection (continuous and programmable thresholds in GPM)
  - excessive usage detection (programmable GPM and 24-hour usage)
  - back-flow detection (programmable values between .1 to 100,000 gallons)
  - monitoring and enforcing irrigation restrictions by address and time/day of the week
- disabled meter detection
- Zero use (programmable in number of days)
- Intermittent leak (must be able to program events by low flow GPM, period and maximum flow GPM of event)
- All above alarms shall generate email alerts to utility and/or end-users once activated and notification email addresses are added to website.
- The Manufacturer shall provide web-based, user-friendly software (desktop and mobile app) for use by utility personnel.
- The Manufacturer shall provide the utility with the ability to grant customers web-based access to view their own usage data.
- The Manufacture shall develop and offer to utility a suite of reporting tools for mining the cloud usage database in order to reduce system losses reduce unaccounted for water, enforce usage restrictions etc.
- Android and Apple mobile applications shall be available to end-users or utility personnel
- For security purposes, the utility shall retain sole possession of all private customer data such as name and address. This private data shall remain on site at the utility and access by the manufacturer shall not be required.
- The manufacturer is responsible for shipping malfunctioned parts and components.

#### ADAPTABILITY

Manufacturer shall provide details of the unit's ability to utilize digital electronic registers and remote reading cellular or radio signal telemetry technologies. Manufacturer must warrant that the encoded registers and remotes have cellular embedded technology and be compatible/adaptable with existing composite meters in use/inventory with the City of Flint including all newly proposed/ supplied meters.

**PRICING TABLE**

**(THIS PRICING TABLE MUST BE COMPLETED IN ITS ENTIRETY WITHOUT DEVIATION. FAILURE TO RESPOND WILL RESULT IN NO FURTHER AWARD CONSIDERATION)**

Unit Cost Per Meter Including All Remote Reading Costs over 10 Yr. Life Cycle per Meter (based upon providing/and or upgrading for automation 28,000 residential meters of the sizes indicated) A complete meter price will include:

- The meter itself, remote transponder and locking device
- Any reutilization of existing compost meters that may be adapted to the new AMI system cannot have a separate or exposed wire to adapt a remote transponder.

**2.1 General**

The system shall provide the means for a universal electronic register with an embedded wireless modem for use on existing meter bases so as to extend life of installed metering assets. The system shall also provide a stand-alone remote with an embedded wireless modem for a meter transponder connection to existing water meter and electronic registers that do not expose a wired connection that may cause a compromised connection to the meter either intentional or unintentional. Either of these devices will be the interface point from the water meter to the AMI system.

The electronic register and remote shall be designed specifically for the water utility/distribution industry and have appropriate features for battery operation, water/weather-proofing and specific water utility functionality.

The electronic register and remote shall be designed specifically to integrally incorporate cellular based or radio telemetry technology and shall utilize pre-existing cellular networks or a proposed radio signal networking system for the AMI backbone.

**A RESPONSE TO THIS PRICING TABLE IS REQUIRED FOR A RESPONSIVE PROPOSAL SUBMITTAL. FAILURE TO DO SO MAY RESULT IN DISQUALIFICATION FROM FURTHER CONSIDERATION**

It must include all annual costs and fees required (10 yr. system usage) for hosting on the proposed wireless telemetry remote reading system network including all annual customer portal fees, user or individual system device fee and any and all infrastructure hosting fees for 10 years. These fees must be equally divided and factored into the unit meter price over a 10 yr. life cycle expectancy.

Meter Size and Type		Remote Transponder and Type
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5/8" x 3/4 Meter Model: _____	\$ /meter	/meter
1" Meter Model: _____	\$ /meter	/meter
1-1/2" Meter Model: _____	\$ /meter	/meter

2" Meter Model: _____	/meter	/meter
Meter Coupling Security Locks - Applications for straight thru & right-angle valves - Protects against meter tampering and theft of service - Captures the shut-off valve and coupling nut - No modifications required to existing applications - Constructed of 16 gage steel with welded seams - Easy installation	\$ /ea.	

Proposer/Vendor: \_\_\_\_\_

**TECHNICALS**

Cellular-Based System Configuration

The following specification encompasses the entire cellular-based system. These specifications are divided into the following subsections:

1. System Overview
2. Endpoints
3. AMI Network
4. Meter Data Management to Cloud Server or Data Storage Options
5. Utility Software Applications
6. End-Consumer Software Applications
7. Applications Programming Interface (API)

### **Training, Documentation and Support**

#### 1. Endpoints

This section describes the water meter endpoint communication devices within the VN system.

#### 2.2 General

The system shall provide the means for a universal electronic register with an embedded wireless modem for use on existing meter bases so as to extend life of installed metering assets. The system shall also provide a stand-alone remote with an embedded wireless modem for a wired connection to existing water meter electronic registers. Either of these devices will be the interface point from the water meter to the AMI system.

The electronic register and remote shall be designed specifically for the water utility/distribution industry and have appropriate features for battery operation, water/weather-proofing and specific water utility functionality.

The electronic register and remote shall be designed specifically to integrally incorporate cellular-based technology and shall utilize pre-existing cellular networks for the AMI backbone.

#### 2.3 Electronic Register

The electronic register shall be designed specifically for commercially available and installed potable water meters with magnetically coupled measuring elements. This includes displacement, multi-jet, turbine and single-jet meters. The register shall be completely solid-state electronic and battery powered.

##### 2.3.1 Physical Specifications

The electronic register shall have the following physical specifications:

##### 2.3.1.1 Environmental

The electronic register shall be designed to handle both indoor and outdoor applications.

Humidity

The electronic register shall be sealed and designed for full watertight conditions for unlimited time duration.

#### Temperature

Operating temperature:	-40 °F to +176 °F -40 °C to +85 °C
Storage temperature:	-40°F to +c to +85 °C -40 °C to +85 °C

#### 2.3.1.2 LCD Display

The electronic register shall have an 8-digit LCD display with the following features:

- Units field configurable for US gallons, cubic feet, and cubic meters
- Decimal point field configurable for any point on the display
- Forward/Reverse indicator which serves as the leak indicator
- Flowrate indicator
- Test-mode indicator

The LCD display shall be configurable through the infrared port to allow for immediate adaptation to any of the supported meter models or via two-way communication from the MDMS following daily transmission of meter data.

#### 2.3.1.3 Measurement Sensor

The electronic register shall have a measurement sensor that measures the rotating magnet in the water meter's measuring element. The sensor shall be capable of detecting each quarter- revolution of the water meter's magnet. The sensor shall not be affected by the number of poles on the meter's magnet. Sensing elements that do not eliminate drag between the magnet located in the measuring chamber and the electronic register are not acceptable.

#### 2.3.1.4 Configuration Port

The electronic register shall have an embedded infrared port for local communications. This infrared port shall allow reading, configuration, data logging and diagnostic functions for the utility maintenance and installation personnel.

#### 2.3.1.5 Battery

The battery of the electronic register shall have the following specifications:

- \_ Lithium Thionyl Chloride composition
- \_ Minimum of 19 Ah capacity
- \_ Rated operational life time of 10 years, minimum

The battery must be fully enclosed within a chamber and meet the same environmental specifications as the primary electronics.

#### 2.3.1.6 Wireless Communications

The electronic register shall incorporate wireless circuitry to provide compatibility with an existing wireless network. The electronic register will use standard TCP/IP protocol for the network connectivity.

The electronic register shall be capable of using the wireless connectivity to report meter reading and interval usage data down to 5-minute resolution. The electronic register shall also be capable of two-way communications with the central meter data management system (MDMS) via the Cloud Service to accommodate additional data requests, re-configuration commands, firmware updates and other functions.

#### 2.3.1.7 Antenna

The electronic register shall have either an integral antenna or a remote-mount antenna. Both the integral and the remote antenna shall be fully sealed and waterproof. The antenna shall be a dual band antenna suitable for the wireless network. The remote shall have ability to indicate in the field, cell tower RSSI (signal strength) via the LCD to confirm application of integral or remote antennas.

#### 2.3.1.8 Data Resolution

The electronic register shall have the ability to store and transmit consumption data down to 5-minute intervals and resolution of 1/50 of a gallon or less for meter bases.

### 2.2.2 Functional Specifications

The electronic register shall have the following functional capabilities:

#### 2.2.2.1 Flowrate Mode

The electronic register shall have a selectable now-rate mode which shows actual working flow rate on the LCD display. The flowrate shall update at a minimum of every five (5) seconds. While in flowrate mode, the LCD display shall clearly indicate the flow units. At a minimum, gallons per minute shall be selectable as the flow units.

#### 2.2.2.2 Test Mode

The electronic register shall have a selectable test mode which will allow the user to conduct flow accuracy measurements. This mode will automatically display additional volume resolution to facilitate a timely (less volume/test) and accurate flow test. The test mode will utilize temporary totalizers so that the end customer will not incur additional billing costs.

#### 2.2.2.3 Data logging

The electronic register shall store 32,000 data points and no less than 111 days of five-minute log interval data. The data logging shall be utilized for both local data access and for post-transmission MDMS commands to access backfill interval consumption data to the cloud storage system. Backfilled data shall be actual time stamped data, calculated or inferred data is not acceptable. The data logging interval shall be configurable down to 5 minutes.

#### 2.2.2.4 Communication Service

The electronic register shall have data service across an existing reliable and compatible cellular wireless network (WAN) with consistent and sufficient service coverage 24/7 across all of the City of Flint. Proposed system shall be compatible with and able to employ the fastest and most current cellular bitrate technologies available at the time of this proposal. Proposed system should also have future adaptability if or when upgrades to cellular WAN technology become available.

#### 2.2.2.5 Consumption Flags

The Cloud-based web portal shall have advanced algorithms to detect and report consumption patterns. At a minimum, the system shall have the following functions which shall be configurable or flexible enough to handle residential and commercial applications.

The functions shall be configurable through a password protected web portal with a minimum of:

- Leak Detection: The leak detection function should monitor for consistent flow showing evidence of a leak.
- Leak Threshold Alarm: utility definable rate of flow (GPM) to eliminate nuisance alarms
- High-Usage Alarm: User definable maximum gallons/day alarm set point
- Conservation Monitoring: The system shall be able to discern irrigation events based on programmable GPM values based on a maximum of a 5 minute sample. The conservation function will be able to monitor for regular high consumption patterns showing evidence of irrigation. The function shall be configurable from a web-based portal so to be compatible with typical voluntary or mandatory watering restrictions based on time of day, number of days per week and odd/even addresses at a minimum. Field based programmable irrigation flags are not acceptable.
- Backflow Detection: The backflow function will be able to monitor for negative consumption. The function shall have web-based utility programmable backflow volume thresholds to eliminate nuisance alarms and to account for meter size and resolution.
- Zero-Usage: The zero-usage function will be able to monitor for a web-based settable number of days of allowable no use to set the flag.
- Unauthorized Usage: System shall accommodate and monitor routes of meters that are considered virtually shut off and generate an alarm when consumption is detected.
- Intermittent Leaks: System shall monitor for intermittent leaks at a maximum time interval of 5 minutes and provide web-based programmable algorithms based on minimum GPM values and maximum GPM values over a user-defined time interval between five minutes and twenty-four hours. Systems not based on GPM are unacceptable.
- Water Budget: System shall provide a Water Budget function that can be programmed by the homeowner or C/I customer as well as the utility to monitor water use as a percentage of a monthly or bi-monthly goals. The web-based Water Budget shall have graphics and provide user access via Apple, Android based devices as well as any internet connected laptop, tablet or computer.
- All above alarms shall trigger automatic email alerts if activated by utility or end- user.

All flags shall be self-clearing with the absence of the condition over a user-defined time period number of days (1-30) to highlight historical or active alarms on the web-based portal.

#### 2.2.2.6 Temperature

The electronic register shall have a minimum and maximum daily ambient temperature logged and transmitted within the daily transmission. High and low alarm temperature set points shall trigger automatic emails if enabled and activated.

#### 2.2.2.7 Low Battery Indicator

The electronic register shall have a low-battery indication which is accessible by utility maintenance personnel. The indicator shall be included within the standard daily transmission.

#### 2.2.2.8 Tamper Indication

The electronic register shall have a tamper function. The indicator shall be included within the standard daily transmission.

#### 2.2.2.9 Firmware Updates

The electronic register shall have the ability to have new functional firmware uploaded via the AMI network or local infrared transfer.

#### 2.2.2.10 Installation Test Function

The electronic register shall have a specific installation test functions that can be utilized to confirm proper configuration and connection to the cellular network at the time of installation.

#### 2.2.2.11 Configurability

The electronic register shall be configurable for the following parameters:

- Index ratio (magnet calibration)
- Measurement Units
- Output Data Format (pulse or 3-wire encoder)
- LCD Data Format
- Meter size, brand and type

All configurations shall be possible through the local IR port or through the AMI system.

### 2.2.3 Meter Compatibility

The electronic register shall be configurable to match the magnetic revolution ratio for the type of water meter attached. This configurable ratio shall calibrate the electronic register to within AWWA accuracy on any new water meter.

The electronic register shall be compatible with the minimum residential and commercial meters:

- Metron Spectrum single-jet water meters
- Metron Enduro single-jet water meters
- Sensus SR-II displacement meters
- Sensus PMM multijet meters

Neptune T-10 displacement meters

- Neptune Compound Meters
- Badger M-series displacement meters
- Badger Compound Meters

Elster/AMCO C-700 displacement meters

- Hersey M-series displacement meters

The electronic register shall have replaceable adapters to allow warehouse or field attachment of the register to the water meter. The attachment adapters shall be tamperproof.

#### 2.2.4 Warranty

The electronic register shall have a minimum (8) year full warranty on materials and workmanship. The battery shall have a minimum eight (8) year full warranty plus a five (5) year pro-rated warranty.

#### 2.3 Electronic Remote

The remote shall be completely solid-state electronic and battery powered. The unit shall be designed specifically for interfacing to water meter registers with encoded, switch closure and active pulse (generator) outputs.

##### 2.3.1 Physical Specifications

The remote shall have the following physical specifications:

###### 2.3.1.1 Environmental

The remote shall be designed to handle both indoor and outdoor applications.

###### Humidity

The remote shall be sealed and designed for full watertight conditions for unlimited time duration.

###### Temperature

Operating temperature: -40°F to +176°F

-40°C to +85°C

Storage temperature: -40 °F to +176 °F

-40 °C to +85 °C

###### 2.3.1.2 LCD Display

The remote shall have an 8 digit LCD display with the following features:

- Units configurable for US gallons, cubic feet and cubic meters
- Decimal point configurable for any point on the display

The LCD display shall be configurable through the infrared port to allow for immediate adaptation to any of the supported meter models.

### 2.3.1.3 Input Circuitry

The remote shall have input circuitry which will allow for connection to encoded, switch- closure and active pulse (generator) type registers. The input wiring shall have only three wires which are multi-purpose and assigned by the input type configured into the unit. The input wiring shall be minimum 22-AWG solid-core copper wire. The wiring color scheme shall be Red, Green and Black to conform to typical industry requirements.

### 2.3.1.4 Configuration Port

The remote shall have an embedded infrared port for local communications. This infrared port shall allow reading, configuration, data logging and diagnostic functions for the utility maintenance and installation personnel.

### 2.3.1.5 Battery

The battery of the remote shall have the following specifications:

- \_ Lithium Thionyl Chloride composition
- \_ Minimum of 19 Ah capacity
- \_ Rated operational life time of 15 years

The battery must be fully enclosed within a chamber and meet the same environmental specifications as the primary electronics.

### 2.3.1.6 Wireless Communications

The stand-alone remote shall incorporate wireless circuitry to provide compatibility with an existing wireless network proven to provide sufficient and consistent system wide support 24/7 across the City of Flint. The remote will use standard TCP/IP protocol for the network connectivity.

The remote shall be capable of using the wireless connectivity to report meter reading and interval usage data down to 5-minute resolution. The remote shall also be capable of infrared communication to accommodate additional data requests, re-configuration commands, firmware updates and other functions.

### 2.3.1.7 Antenna

The remote shall have either an integral antenna or a remote-mount antenna. Both the integral and the remote antenna shall be fully sealed and waterproof. The antenna shall be a dual-band antenna suitable for the wireless network. The remote shall have ability to indicate in the field, cell tower RSSI (signal strength) via the LCD to confirm application of integral or remote antennas.

### 2.3.1.8 Data Resolution

The remote shall have the ability to store and transmit consumption data down to 5 minute intervals.

## 2.3.2 Functional Specifications

The remote shall have the following functional capabilities:

### 2.3.2.1 Data logging



The electronic register shall store 32,000 data points and no less than 111 days of five minute log interval data. The data logging shall be utilized for both local data access and for post- transmission MDMS commands to access backfill interval consumption data to the cloud storage system. Backfilled data shall be actual time stamped data, calculated or inferred data is not acceptable. The data logging interval shall be configurable down to 5 minutes.

#### 2.3.2.2 Communication Service

The electronic register shall have data service across the Verizon Wireless network.

#### 2.3.2.3 Consumption Flags

The Cloud-based web portal shall have advanced algorithms to detect and report consumption patterns. At a minimum, the system shall have the following functions which shall be configurable or flexible enough to handle residential and commercial applications. The functions shall be configurable through a password protected web portal with a minimum of:

- Leak Detection: The leak detection function should monitor for consistent flow showing evidence of a leak.
- Leak Threshold Alarm: utility definable rate of flow (GPM) to eliminate nuisance alarms
- High-Usage Alarm: User definable maximum gallons/day alarm set point
- Conservation Monitoring: The system shall be able to discern irrigation events based on programmable GPM values based on a maximum of a 5 minute sample. The conservation function will be able to monitor for regular high consumption patterns showing evidence of irrigation. The function shall be configurable from a web-based portal so to be compatible with typical voluntary or mandatory watering restrictions based on time of day, number of days per week and odd/even addresses at a minimum. Field based programmable irrigation flags are not acceptable.
- Backflow Detection: The backflow function will be able to monitor for negative consumption. The function shall have web-based utility programmable backflow volume thresholds to eliminate nuisance alarms and to account for meter size and resolution.
- Zero-Usage: The zero-usage function will be able to monitor for a web-based settable number of days of allowable no use to set the flag.
- Unauthorized Usage: System shall accommodate and monitor routes of meters that are considered virtually shut off and generate an alarm when consumption is detected.
- Intermittent Leaks: System shall monitor for intermittent leaks at a maximum time interval of 5 minutes and provide web-based programmable algorithms based on minimum GPM values and maximum GPM values over a user-defined time interval between five minutes and twenty-four hours. Systems not based on GPM are unacceptable.
- Water Budget: System shall provide a Water Budget function that can be programmed by the homeowner or C/I customer as well as the utility to monitor water use as a percentage of a monthly or bi-monthly goals. The web-based Water Budget shall have graphics and provide user access via Apple devices, Android-based devices as well as any internet connected laptop, tablet or computer.

- All above alarms shall trigger automatic email alerts if activated by utility or end- user.

All flags shall be self-clearing with the absence of the condition over a user-defined time period number of days (1-30) to highlight historical or active alarms on the web-based portal.

#### 2.3.2.4 Temperature

The electronic register shall have a minimum and maximum daily ambient temperature logged and transmitted within the daily transmission. High and low alarm temperature set points shall trigger automatic emails if enabled and activated.

#### 2.3.2.5 Low Battery Indicator

The remote shall have a low-battery indication which is accessible by utility maintenance personnel. The indicator shall be included within the standard daily transmission.

#### 2.3.2.6 Tamper Indication

The remote shall have a tamper/communication error function which senses and indicates if the cable between the remote and the register is cut or damaged. The indicator shall be included within the standard daily transmission.

#### 2.3.2.7 Firmware Updates

The remote shall have the ability to upload firmware in the field.

#### 2.3.2.8 Installation Test Function

The remote shall have a specific installation test function which is utilized to confirm proper configuration and connection to the AMI network at the time of installation.

#### 2.3.2.9 Configurability

The remote shall be configurable for the following parameters:

- Measurement Units
- Output Data Format • LCD Data Format e Consumption flag setup

All configurations shall be possible through the local IR port.

### 2.3.3 Register Compatibility

The remote shall be compatible with the minimum following register types:

- Metron-Famier Hawkeye OER encoder
- Sensus ICE encoder
- Sensus ECR-II encoder
- Sensus iPerl
- Badger ADE encoder
- Badger E-Series
- Neptune E-Coder (standard mode) encoder

- Neptune ProRead encoder
- Neptune Auto encoder
- Elster Q electronic encoder
- Hersey Translator
  
- MasterMeter
- Generic Switch Closure

#### 2.3.4 Warranty

The remote shall have a ten (10) year full warranty on materials and workmanship. The battery shall have a ten (10) year full warranty plus a ten (10) year pro-rated warranty.

### 3.1 General

The system shall utilize an existing wireless broadband network for the infrastructure of the communications. The existing wireless network shall have 10-plus years of proven operations in the U.S. The wireless network shall have documented business plans for long-term support of machine-to-machine (M2M) applications.

### 3.2 Wireless Network Technology

The system shall utilize an existing wireless network based on the CDMA standard. The network shall support packet data speeds of 153 kbit/s and shall operate on dual band frequencies of 824-894 MHz and 1850-1990 MHz. The existing wireless network shall be capable of handling the typical endpoint densities of common urban, suburban and rural areas.

### 3.3 Infrastructure Requirements

The system shall not require any new infrastructure for the core operation of the wireless network. This prohibited infrastructure shall include any towers, masts, collectors, routers, repeaters, antennas or any other device used to facilitate the core operation of a wireless network.

### 3.4 Network Coverage

The existing wireless network provider shall be able to produce detailed network coverage maps for the targeted area upon request for immediate review. RSSI mapping at ground level shall be available for review for any of the water network.

For stopgap and last-mile instances where network coverage is not available, the system shall provide collector or mobile solutions. Any collector or mobile solution must provide proximate functionality and data resolution as the AMI network. The collector or mobile system data must be able to be seamlessly integrated into the Meter Data Management System.

### 3.5 Network Reliability

The existing wireless network shall have 99.9% documented up-time. The existing wireless network provider shall be capable of providing reliability statistics upon request.

### 3.5 Two-way Communications

The existing wireless network shall support 2-way communications between the endpoints and the data collection system.

### 3.6 Interoperability

The existing wireless network shall be a non-proprietary system which is open to multiple vendors and multiple applications.

### 3.7 Guaranteed Operation

The existing wireless network shall be guaranteed for the specific AMI application until at least January 1, 2024

## 2. Meter Data Management System

### 4.1 Hosted Server

This section describes the hosted computing service (the server) of the VN System which serves to receive, validate, process and transfer endpoint data and commands through the AMI network. The server is the front-end communications processor for the meter data management system.

#### 4.1.1 General

The server will provide a redundant data server as the hub of all system communications. This data server will be a cloud-based computing application with the appropriate scalability and processing power to handle typical utility populations.

The VN endpoints transmit daily packets across the existing wireless network. The packets are directed to a specific IP address, which corresponds to the dedicated cloud server for the utility. Packets are validated by the cloud server and data is parsed into the data storage.

#### 4.1.2 Server Operations

The system shall utilize IT best practices and technology to ensure the security and reliability of utility network traffic.

#### 4.2.1 Physical Security

The server shall be hosted by an established, reliable cloud service provider such as Microsoft Azure™. The provider must be able to demonstrate robust physical security for the hosted site(s),

#### 4.2.2 Redundancy

The hosting computing provider must be able to demonstrate multiple levels of server redundancy for the system cloud server. The cloud computing service must be guaranteed 99.9% up-time.

#### 4.2.3 Network Security

All incoming endpoint data shall be directed through a virtual private network (VPN) to ensure

isolation from any public domain. All data traffic on the VPN shall be authenticated and encrypted.

#### 4.2.4 Data Authentication

All access to the cloud computing service, such as endpoints and the MDMS, shall be authenticated by unique identifiers or traditional parameters such as username and password. The authentication parameters shall be kept secure at the utility location.

#### 4.2.5 Error Checking

All endpoint data transmissions shall be verified for data integrity via CRC checks on the data packet.

### 4.1.3 Server Functionality

The server shall receive all endpoint data packets and process the instantaneous and interval data into the data storage location. The server shall also automatically perform functions to fill voids in reading and interval data. The server shall also be able to handle ad-hoc commands from the MDMS system for 2-way communication to the endpoints.

#### 4.1.3.1 Data Processing

The server shall process all incoming endpoint transmissions and maintain storage tables for instantaneous meter information such as account number, meter ID, meter information, module information, current meter reading and consumption flags. The server shall maintain separate storage tables for high resolution interval data per account.

#### 4.1.3.2 Void Data Retrieval

The server shall maintain the current data status of all accounts and proactively request prior history from any endpoints to fill voids in the interval data. The current data status shall be continuously updated and available to the utility on the control panel.

#### 4.1.3.3 Command Processing

The server shall be able to send commands to any endpoint following the daily transmission. Commands can be initiated by the server or via the meter data management system (MDMS). Commands shall be available for additional data request, endpoint re-configuration and endpoint firmware update at a minimum.

#### 4.1.3.4 Notifications

The server shall be configurable for email notifications for multiple communications diagnostics and for consumption flags on individual accounts to the utility. The server shall also offer the capability of sending consumption and alert notifications to end-consumers.

## 4.2 Data Storage

This section describes the data storage options for the Meter Data Management System.

### 4.2.1 General

The data storage must accommodate all data storage requirements including current account status, historical data and diagnostics. The data storage should be built within a commercial-grade cloud provider.

#### 4.202 Security and Redundancy

The storage solution shall utilize a commercially-viable and established cloud service provider which can demonstrate a long-term business history and viable future.

##### 4.2.2.1 Physical Security

The data storage shall be hosted by an established, reliable cloud service provider such as Microsoft Azure™. The provider must be able to demonstrate robust physical security for the hosted site(s).

##### 4.2.2.2 Redundancy

The data storage provider must be able to demonstrate multiple levels of server redundancy for the system cloud storage. The cloud storage must be guaranteed 99.9% up-time.

##### 4.2.2.3 Isolation

The data storage shall be logically isolated from all other utility customers. Options for private configurations shall be available.

4.2.2.4 Data Backup The data storage tables shall be backed-up on a regular basis to ensure long-term data availability and integrity for the utility.

##### 4.2.2.5 Data Access Security

Data access to the data storage by the utility shall be through a secure protocol such as HTTPS/SSL or a dedicated VPN.

#### 4.3 Storage Functionality

The system data storage shall have the following functions and features.

##### 4.3.1 Data Structure

The data storage shall contain tables for each utility account. The tables will include primary information such as account number, meter ID, meter information, module information, current meter reading and consumption flags. The data storage shall maintain separate storage tables for high resolution interval data per account. Diagnostic tables shall be maintained for communication status and other statistics.

##### 4.3.2 Data Intervals

The data storage shall have the capability of storing consumption history for each utility account with a default of 5-minute intervals. The data storage shall also be able to optionally store data with 1-minute intervals.

##### 4.3.3 Storage Duration

Account storage shall be maintained for two full years past the current year at a minimum. This will allow for data retrieval for comparison between the current year and the past two complete years.

##### 4.3.4 Storage Compaction

Account storage beyond 8 years shall have the option to be compacted to daily reads.

#### 4.3.5 Data Transfer

A data transfer utility shall be available to allow the transfer of data from the cloud storage to a local utility location.

### 3. Utility Software Portals

This section describes the software portal for the utility personnel.

#### 5.1 General

The system shall provide a web-based portal designed specifically for utility personnel functions.

Primary functions for the utility portal are the billing system interface, system status, reporting and group and individual account lookup and account consumptive analytics.

#### 5.2 Operations

The Utility Portal shall operate with the following general specifications.

##### 5.2.1 Web Hosted Operations

The Utility Portal shall be a web application hosted on a commercial-grade platform such as Microsoft Azure. The web application shall be designed for scalability to allow for responsiveness for multiple concurrent utility users.

##### 5.2.2 Security

Access to the Utility Portal by the utility personnel shall be through a secure protocol such as HTTPS/SSL or a dedicated VPN.

##### 5.2.3 user Authentication & Session Controls

Access to the Utility Portal by the utility personnel shall be controlled by managed authentication credentials (username/password). The system shall provide at least 3 levels of credentials and control. The utility administrator shall have the capability to manage all other utility users. Session timeouts shall be automatic.

##### 5.2.4 Responsive Design

Access to the utility Portal by the utility personnel shall be through most common browsers, including Microsoft Internet Explorer, Google Chrome, Mozilla Firefox and Apple Safari. The Utility Portal shall be compatible with most computer screen resolutions.

### 5.3 Utility Portal Functionality

The Utility Portal shall provide the utility the software tools for viewing and reporting account data, sending required commands and interfacing to billing and/or customer service applications.

#### 5.3.1 Overview

An overview page shall be provided which allows the utility user to view the aggregate consumption of any billing, utility or customer group. The overview page shall also provide a messaging function

which allows the MDMS to send alerts and notifications to the utility.

#### 5.3.2 System Status

A system status page shall be provided which allows the utility user to view the reading performance of the system. The system status page shall also provide current status of all endpoints in the system.

#### 5.3.3 Billing System Interface

The system shall provide the function of generating a custom billing interface for most commercially available billing/CIS systems. The City of Flint currently supports Pervasive and BS&A .net Utility Billing Software. A billing interface page shall be provided on the Utility Portal which allows the utility user to manage the import and export files used for billing purposes. The Utility Portal shall provide event logs for the import and export process. The system shall be able to select any historical date to allow the utility to upload readings to match billing cycles. Vendor will be responsible for providing any and all data file conversions from the remote meter register telemetry as may be required to successfully and seamlessly import into the City of Flint's utility billing system and into a finished customer bill format acceptable to the City of Flint.

#### 5.3.4 Individual Account Lookup

The Utility Portal shall provide an account lookup function for direct access to all accounts within the system. The account lookup function will provide a list/grid view of any selected billing, utility or customer group. Filters and corresponding reports will be available directly on this page. The account lookup will also provide links to a graphical interface for any account.

The graphical interface will be similar in operation and function to the end-consumer portal and shall provide functions for meter information, consumption history, usage analysis, flow rate analysis, time of use and environmental.

#### 5.3.5 Maps

The utility Portal shall provide a map and imagery based interface for account lookup. The Utility Portal shall provide a GIS import and reference function which will allow the placement of icons on the map/imagery.

#### 5.3.6 Utility Groups

The Utility Portal shall provide a function to allow the utility user to create custom groups of accounts for analysis and reporting purposes.

#### 5.3.7 Customer Groups

The Utility Portal shall provide a function to allow the utility user to create custom groups of accounts for specific customers. The utility user will maintain all user login credentials. The customers with defined groups will be able to login to a limited version of the Utility Portal.

#### 5.3.8 Reports & Exports

The Overview, System Status and Account Lookup pages shall contain report generation functions. All reports/exports shall be available in CSV or Excel worksheet.



### 5.3.9 History Scanning and Notifications

The Utility Portal shall have functions to scan the consumption history of all utility accounts and nag consumption patterns noted in Section 2.3.2.3 above. The portal shall have the function to configure email notifications for each of the functions.

## 6. End-Consumer Software Portals

This section describes the software portal for end-consumers.

### 6.1 General

The system shall provide a web-based portal designed specifically for end-consumer data access functions. Primary functions for the End-consumer Portal are the meter information, consumption history, usage analysis, flowrate analysis, consumer monthly/bi-monthly water budget adherence and alerting to selected alarms via email. Consumption analytics shall be based on GPM and consumption based on interval data not to exceed five minutes.

### 6.2 Operations

The End-consumer Portal shall operate with the following general specifications.

#### 6.2.1 Web Hosted Operations

The End-consumer Portal shall be a web application hosted on a commercial-grade platform such as Microsoft Azure. The web application shall be designed for scalability to allow for responsiveness for many concurrent end-consumers.

#### 6.2.2 Security

Access to the End-consumer Portal by the end-consumers shall be through a secure protocol such as HTTPS/SSL or a dedicated VPN.

#### 6.2.3 User Authentication & Session Controls

Access to the End-consumer Portal by the end-consumers shall be controlled by managed authentication credentials (username/password). The utility administrator shall have the capability to manage all end-consumer accounts. Session timeouts shall be automatic.

#### 6.2.4 Responsive Design

Access to End-consumer Portal by the end-consumers shall be through most common browsers including Microsoft Internet Explorer, Google Chrome, Mozilla Firefox and Apple Safari. The End-consumer Portal shall be compatible with most computer screen resolutions.

### 6.3 End-consumer Portal Functionality

The End-consumer Portal shall provide an end-consumer the software tools for viewing that account's water consumption history and patterns in multiple formats.

#### 6.3.1 Meter Pane

The End-consumer Portal shall have a meter pane which shows a specific end-consumer's account number, address, name and meter ID. The meter pane shall also show the current meter read, corresponding billing read, meter type and picture and all current flags.

### 6.3.2 Consumption History

The End-consumer Portal shall have a module which shows a specific end-consumer's water consumption history. This history will be shown as both volume and flowrate. Controls shall be provided for active zooming and panning. The chart shall show the total consumption for the date range shown currently on the chart.

### 6.3.3 Usage Analysis

The End-consumer Portal shall have a module which shows a usage analysis for a specific end-consumer account. The usage analysis will show up to any 62 consecutive days of consumption categorized into domestic use, leakage and irrigation. The usage analysis will also show a forecasted usage and water cost based on the current pattern. The portal will provide controls to adjust the parameters of the analysis.

### 6.3.4 Flowrate Analysis

The End-consumer Portal shall have a module which shows a flowrate analysis for a specific end-consumer account. The flowrate analysis will show the percentage of usage over a range of flowrates and other flowrate statistics.

### 6.3.5 Time-of-use

The End-consumer Portal shall have a module which shows the water consumption for a specific end-consumer account by the time of use. The module will allow the end-consumer to adjust the time range for the chart.

### 6.3.6 Environmental

The End-consumer Portal shall have a module which shows the minimum and maximum meter temperature for a specific end-consumer account. The module will allow the end-consumer to adjust the time range for the chart.

### 6.3.7 Notifications

The End-consumer Portal shall have configurable settings which allow an end-consumer to sign up for email notifications for consumption alerts approved by the utility.

## 5. Application Programming Interface (API)

This section describes the API for utility and third-party data access.

### 7.1 General

The system shall offer an API for utility or 3<sup>rd</sup> Party data access. Use of the API will require a fee from the system provider. Additional fees will be charged for the API usage.

### 7.2 Operations

The API shall be a set of tools to allow a utility or approved 3<sup>rd</sup>-Party software developers to access data within the storage of the MDMS.

### 7.2.1 System Management

The system provider will perform the following functions for the system:

- Meter Registration
- Data Collection and Storage
- Endpoint Maintenance

### 7.2.2 End-Consumer Account Import

The utility or 3<sup>rd</sup> party will be required to develop a compatible import file format to regularly update the system.

### 7.2.3 End Point Configuration Data

The API will provide software toolset to allow the utility or approved 3<sup>rd</sup> Party software developer to access a subset of the Endpoint Configuration Data. This will allow for access to the latest meter reading for any utility account.

### 7.2.4 Consumption History Data

The API will provide software toolset to allow the utility or approved 3 -Party software developer to access the consumption history file for any utility account.

## 6. Training, Documentation and Support

This section describes the training, documentation, and support services available to the utility customer. These services are the baseline to be provided and can be augmented or customized by utility request.

### 8.1 Training

Training shall be provided on all aspects of the system at pre-determined points in the deployment.

#### 8.1.1 Formal Training

The following topics will be covered within an in-depth classroom setting.

- Register and Remote Endpoint Configuration
- Field Tablet Operations
- Register and Remote Endpoint Installation and Verification
- Meter Registration Process
- Utility User Registration Process
- End-Consumer Register Process

- Billing System Interface
- Customer Technical Support
- Warranty Support

#### 8.1.2 Field Training

In addition to the formal classroom training, the following field training will be performed with appropriate utility personnel:

- Register and Remote Endpoint Configuration
- Field Tablet Operations
- Register and Remote Endpoint Installation and Field Provisioning
- Register and Remote Endpoint Troubleshooting

#### 8.1.3 Additional Training

Additional training can be requested through the web support feature.

### 8.2 Documentation

The following documentation shall be provided to the utility customer upon system delivery and commissioning.

#### 8.2.1 Register and Remote Endpoint Installation

This document will focus on physical installation and verification

#### 8.2.2 Register and Remote Endpoint Configuration

This document will focus on the configuration parameters of the register and modem.

#### 8.2.3 Field Tablet System Operations

This document will focus on the hardware and software operations of the tablet computer used for register and remote endpoint provisioning and configuration.

#### 8.2.4 Utility Portal Operations

This document will focus on the operations of the utility portal

#### 8.2.5 End-Consumer Portal Operations

This document will focus on the setup and operation of the End-Consumer Web Portal.

### 8.3 Customer Support

The following support services shall be provided to the utility.

#### 8.3.1 Monthly AMI System Diagnostics

The utility will receive a monthly system status report showing reading statistics and trouble alerts. Based on the report, recommendations can be made on potential register and remote endpoint, or network changes required for improved system performance.

#### 8.3.2 Ad-hoc Technical Support

Technical support personnel shall be available during all business hours via telephone to provide technical or logistical support to the utility.

#### 8.3.3 Online Support

On-line support shall be available to the utility with advance notification. Online services shall include troubleshooting, software upgrades and training.

1. Failure to use this bid form shall result in bid disqualification.
2. Failure to bid on all items shall result in an "incomplete bid" determination.
3. List value-added considerations on a separate sheet of paper.
4. All bid pricing to include shipping and freight charges.

#### **THIS PAGE MUST BE COMPLETED AND INCLUDED WITH THE BID**

The undersigned hereby certifies, on behalf of the respondent named in this Certification (the "Respondent"), that the information provided in this offer submitted to the City of Flint, Department of

Purchase and Supplies is accurate and complete, and that I am duly authorized to submit same. I hereby certify that the Respondent has reviewed all documents and requirements included in this offer and accept its terms and conditions.

Terms: \_\_\_\_\_

Fed. ID #: \_\_\_\_\_

Company (Respondent): \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

City, State & Zip Code: \_\_\_\_\_

Phone / Fax Number: \_\_\_\_\_ FAX: \_\_\_\_\_

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

Print Name and Title: \_\_\_\_\_

(Authorized Representative)

Signed: \_\_\_\_\_

(Authorized Representative)

❖ **EXHIBIT B - QUALIFICATIONS AND LICENSES REQUIREMENTS**

**Please give a synopsis of your qualifications and experience with this service:**

**Please list Licenses:**

**How long have you been in business?**

**Have you done business with the City of Flint?**

**If yes, please state the project name.**

**❖ EXHIBIT C – DISCLOSURE OF SUPPLIER RESPONSIBILITY STATEMENT**

1. List any convictions of any person, subsidiary, or affiliate of the company, arising out of obtaining, or attempting to obtain a public or private contract, or subcontract, or in the performance of such contract or subcontract.

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2. List any convictions of any person, subsidiary, or affiliate of this company for offenses such as embezzlement, theft, fraudulent schemes, etc. or any other offense indicating a lack of business integrity or business honesty which affect the responsibility of the contractor.

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3. List any convictions or civil judgments under state or federal antitrust statutes.

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4. List any violations of contract provisions such as knowingly (without good cause) to perform, or unsatisfactory performance, in accordance with the specifications of a contract.

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5. List any prior suspensions or debarments by any government agency.

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6. List any contracts not completed on time.

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7. List any documented violations of federal or state labor laws, regulations or standards, or occupational safety and health rules.

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❖ EXHIBIT D – LIST OF REFERENCES: (3) SIMILAR SCOPE OF WORK FROM THE LAST 5 YEARS

Providing the following contact information enables the City of Flint to contact those accounts as references.

**Reference #1:**

Company/Municipality: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Title: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

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

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

Type of Project: \_\_\_\_\_

Project Timeline (Dates): \_\_\_\_\_ Budget: \_\_\_\_\_

**Reference #2:**

Company/Municipality: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Title: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

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

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

Type of Project: \_\_\_\_\_

Project Timeline (Dates): \_\_\_\_\_ Budget: \_\_\_\_\_

**❖ EXHIBIT D – LIST OF REFERENCES: (3) SIMILAR SCOPE OF WORK FROM THE LAST 5 YEARS (CONTINUES)**

**Reference #3:**

Company/Municipality: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Title: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

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

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

Type of Project: \_\_\_\_\_

Project Timeline (Dates): \_\_\_\_\_ Budget: \_\_\_\_\_

**❖ EXHIBIT E – CERTIFICATE OF INSURANCE****INSURANCE REQUIREMENTS**

The Contractor shall notify all insurance agents and companies retained by the Contractor that these insurance requirements shall be included in any Agreement between the Contractor and the City of Flint. The Contractor shall purchase and maintain, at its sole expense and as long as it is providing services to the City, the following insurance coverage:

Commercial General Liability - Occurrence form, including coverage for bodily injury, personal injury, property damage (broad form), premises/operations, blanket contractual, and products/completed operations. Coverage shall be endorsed to include the City as an additional insured for work performed by the Contractor in accordance with the Agreement.

Minimum Limits:

- \$1,000,000 per occurrence/\$2,000,000 general aggregate
- \$2,000,000 aggregate for products and completed operations
- \$1,000,000 personal and advertising injury

Automobile - Michigan "no-fault" coverage, and residual automobile liability, comprehensive form, covering owned, hired, and non-owned automobiles. Coverage shall be endorsed to include the City as an additional insured for work performed by the Contractor in accordance with the Agreement.

Minimum Limits:

- No-fault coverages - statutory
- \$500,000 per person/\$1,000,000 per accident - bodily injury
- \$500,000 per occurrence - property damage
- A combined single limit of \$1,000,000 per occurrence

Workers' Compensation and Employer's Liability- Statutory coverage or proof acceptable to the City of approval as a self-insurer by the State of Michigan.

**❖ EXHIBIT E – CERTIFICATE OF INSURANCE (CONTINUES)**

## Minimum Limits:

- Workers' Compensation - statutory
- Employer's Liability - \$100,000 each accident/\$100,000 disease - each employee
- \$500,000 disease - policy limit

Professional Liability - Covering acts, errors or omissions of a professional nature committed or alleged to have been committed by the Contractor or any of its subcontractors. Coverage shall be effective upon the date of the Agreement and shall remain effective for a period of three (3) years after the date of final payment thereunder. Such coverage shall be endorsed to include any subcontractors hired by the City.

## Minimum Limits:

- \$1,000,000 per occurrence, \$1,000,000 annual aggregate

Insurance coverage shall cover all claims against the City of Flint, its officials and employees, arising out of the work performed by the Contractor or any subcontractors under the Agreement. Should any work be subcontracted, it shall be the responsibility of the Contractor to maintain Independent Contractor's Protective Liability Insurance with limits equal to those specified above for Commercial General Liability Insurance. In addition, the Contractor shall provide proof of Workers' Compensation Insurance for all subcontractors in compliance with the required statutory limits of the State of Michigan.

Said policies of insurance shall be with companies licensed to do business in the State of Michigan and in a form satisfactory to the City. All insurance companies must maintain a rating of B+, VIII or better from AM. Best Company. Certificates of insurance with a thirty-(30) day cancellation clause shall be filed with and approved by the City at least five (5) days in advance of commencing work under the Agreement. Cancellation, material restriction, non-renewal or lapse of any of the required policies shall be grounds for immediate termination of the Agreement by the City.

The City reserves the right to request a complete certified copy of the policies for the above coverage's.

Any reduction or exhaustion in the limits of required insurance coverage shall not be deemed to limit the indemnification afforded in accordance with the Agreement or any amendments thereto.

Depending on the subject matter of the transaction, the City may require other insurance coverage in addition to the coverage's contained herein.

***THE BID NUMBER IS TO APPEAR ON ALL INSURANCE CERTIFICATES***

❖ **EXHIBIT F – NON-BIDDER'S RESPONSE**

VENDOR'S NAME: \_\_\_\_\_

**NON-BIDDER'S RESPONSE**

For the purpose of facilitating your firm's response to our invitation to bid, the City of Flint is interested in ascertaining reasons for prospective bidder's failure to respond to "Invitations to Bid". If your firm is not responding to this bid, please indicate the reason(s) by checking any appropriate item(s) below and return this form to the above address.

We are **not** responding to this "Invitation to Bid" for the following reason(s):

\_\_\_\_\_ Items or materials requested not manufactured by us or not available to our company.

\_\_\_\_\_ Our items and/or materials do not meet specifications.

\_\_\_\_\_ Specifications not clearly understood or applicable (too vague, too rigid, etc.).

\_\_\_\_\_ Quantities too Small.

\_\_\_\_\_ Insufficient time allowed for preparation of bid.

\_\_\_\_\_ Incorrect address used. Our correct mailing address is:

\_\_\_\_\_

\_\_\_\_\_ Our branch / division handles this type of bid. We have forwarded this bid on to them but for the future the correct name and mailing address is: \_\_\_\_\_

\_\_\_\_\_ **OTHER:** \_\_\_\_\_

\_\_\_\_\_

Thank you for your participation in this bid.

**AFFIDAVIT FOR INDIVIDUAL**

STATE OF \_\_\_\_\_

S.S.

COUNTY OF \_\_\_\_\_

\_\_\_\_\_ being duly sworn, deposes and says that they are the person making the above bid; and that said bid is genuine and not sham or collusive, and is not made in the interest of or on behalf of any person not therein named, and that they have not directly or indirectly induced or solicited any bidder to put in a sham bid; that they have not directly or indirectly induced or solicited any other person or corporation to refrain from bidding, and that they have not in any manner sought by collusion to secure themselves any advantage over other bidders.

Subscribed and sworn to before me at \_\_\_\_\_, in said County and State, this \_\_\_\_\_ day of \_\_\_\_\_, A.D. 20\_\_\_\_\_,

\_\_\_\_\_

\*Notary Public,  
\_\_\_\_\_ County, \_\_\_\_\_

My Commission expires \_\_\_\_\_, 20\_\_\_\_\_

FOR CORPORATION

STATE OF \_\_\_\_\_

S.S.

COUNTY OF \_\_\_\_\_

\_\_\_\_\_ being duly sworn, deposes and says that she/he/they

is \_\_\_\_\_ of \_\_\_\_\_

(Official Title)

(Name of Corporation)

a corporation duly organized and doing business under the laws of the State of \_\_\_\_\_

the corporation making the within and foregoing bid; that they executed said bid in behalf of said corporation by authority of its Board of Directors; that said bid is genuine and not sham or collusive and is not made in the interests of or on behalf of any person not herein named, and that they have not and said bidder has not directly or indirectly induced or solicited any other person or corporation to refrain from bidding; that they have not and said bidder has not in any manner sought by collusion to secure to themselves or to said corporation an advantage over other bidders.

Subscribed and sworn to before me at \_\_\_\_\_, in said County and State,

this \_\_\_\_\_ day of \_\_\_\_\_, A.D. 20\_\_\_\_\_,

\_\_\_\_\_  
\*Notary Public, \_\_\_\_\_ County, \_\_\_\_\_

My Commission expires \_\_\_\_\_, 20\_\_\_\_\_



FOR PARTNERSHIP

STATE OF \_\_\_\_\_

S.S.

COUNTY OF \_\_\_\_\_

\_\_\_\_\_ being duly sworn, deposes and says that they are a member of the firm of \_\_\_\_\_

\_\_\_\_\_, a co-partnership, making the above bid; that they are duly authorized to make said bid on behalf of said co-partnership; that said bid is genuine and not sham of collusive, and is not made in the interest of or on behalf of any person not therein named, and that they have and said bidder has not directly or indirectly induced or solicited any other person or corporation to refrain from bidding, and that they have not and said bidder has not in any manner sought by collusion to secure to themselves or to said bidder any advantage over other bidders.

Subscribed and sworn to before me at \_\_\_\_\_, in said County and State,

this \_\_\_\_\_ day of \_\_\_\_\_, A.D. 20\_\_\_\_\_,

\_\_\_\_\_

\*Notary Public, \_\_\_\_\_ County, \_\_\_\_\_

My Commission expires \_\_\_\_\_, 20\_\_\_\_\_

FOR AGENT

STATE OF \_\_\_\_\_

S.S.

COUNTY OF \_\_\_\_\_

\_\_\_\_\_ being duly sworn, deposes and says that they executed the within and foregoing bid in behalf of \_\_\_\_\_,

the bidder therein named, they having been theretofore lawfully authorized, as the agent of said bidder, so to do; that said bid is genuine and not sham or collusive and not made in the interests of or on behalf of any person not therein named, and that they have not and said bidder has not directly or indirectly induced or solicited any bidder to put in a sham bid; that they have not and said bidder has not directly or indirectly induced or solicited any other person or corporation to refrain from bidding, and that they have not and said bidder has not in any manner sought by collusion to secure to themselves or to said bidder any advantage over other bidders.

Subscribed and sworn to before me at \_\_\_\_\_, in said County and State,

this \_\_\_\_\_ day of \_\_\_\_\_, A.D. 20\_\_\_\_,

\_\_\_\_\_  
\*Notary Public, \_\_\_\_\_ County, \_\_\_\_\_

My Commission expires \_\_\_\_\_, 20\_\_\_\_

**NOTE: If executed outside of the State of Michigan, certificate by the Clerk of the Court of Record, authenticating the Notary's Signature and authority should be attached.**



<p><b>AMI METERS</b></p> <p><b>SUBMITTAL FORM FOR QUESTIONS</b></p> <p><b>Due Friday, June 10, 2022 by 10:00 A.M.</b></p>
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- 1.
- 2.
- 3.
- 4.
- 5.

<b>Company Name</b>	
<b>Representative Name</b>	
<b>Address:</b>	
<b>Telephone Number</b>	
<b>Email Address</b>	

\_\_\_\_\_  
(Representative Signature)

\_\_\_\_\_  
Date

Please email this form to the attention of Lauren Rowley, Purchasing Manager

Email: [lrowley@cityofflint.com](mailto:lrowley@cityofflint.com)