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**SECTION I**  
**REQUEST FOR BIDS**  
**INSTRUCTIONS AND SPECIFICATIONS FOR:**

**Village of Oak Park**  
**2021-22 Water Meter Replacement Program**  
**Bid Number: 21-136**  
**Issuance Date: 9/22/2021**

The Village of Oak Park will receive Bids from qualified contractors to preform water meter upgrades and replacements for the remainder of 2021 through the calendar year 2022 pursuant to this Request for Bids. This Bid covers the replacement or upgrade of the existing water meter with meters or registers furnished by the Village. Sealed Bids will be accepted at the Public Works Center, 201 South Blvd., Oak Park, IL 60302 Monday through Friday, 7:30 a.m. to 4:00 p.m. local time until **10:00 a.m. on Thursday, October 14, 2021**, at which time they will be read out load. Bids will be reviewed and the results of the review will be presented to the Village Board of Trustees of the Village of Oak Park on November 1, 2021.

Specifications and bid forms may be obtained at <http://www.oak-park.us/bid> or at the Public Works Center at the address listed above.

The Village Board of Trustees reserves the right to accept or reject any and all bids or to waive technicalities, or to accept any item of any bid. Information is available from the Water & Sewer Project Manager, James Eggen at 708-358-5700 or [jeggen@oak-park.us](mailto:jeggen@oak-park.us).

Do not detach any portion of this document. Upon formal award to the successful Bidder, a written agreement will be executed for the Project in substantially the form attached.

**Submission of Bids**

The Bid shall be submitted on the Bid form included herewith. The Bid shall be submitted in a **sealed** envelope marked "**BID: 21-136, 2021-22 Water Meter Replacement Program**", shall bear the return address of the bidder, and shall be addressed as follows:

TO: James Eggen, Water & Sewer Project Manager  
Department of Public Works  
201 South Blvd.  
Oak Park, IL 60302

In responding to this Request for Bids the official logo of the Village of Oak Park is not to be used in any form. Use of the Village logo is strictly prohibited by law and such use could subject the proposer to disqualification.

## **LEGAL NOTICE**

The Village of Oak Park will receive sealed bids from qualified contractors at the Public Works Center, 201 South Boulevard, Oak Park, Illinois 60302 Monday through Friday, 7:30 a.m. to 4:00 p.m. local time until 10:00 a.m. on Thursday, October 14, 2021 for the following:

**Village of Oak Park  
2021/2022 Water Meter Replacement Project  
Bid Number: 21-136**

Bid documents may be obtained from the Village's website at <http://www.oak-park.us/bid>. For questions, please call Public Works at (708) 358-5700 during the above hours.

**Issued: September 22, 2021**

**BID FOR:**  
**Village of Oak Park**  
**2021-22 Water Meter Replacement Program**  
**SECTION II**  
**BID INSTRUCTIONS, TERMS AND CONDITIONS**

**Preparation and Submission of Bid:**

All Bids must be delivered to the Public Works Center by the specific time indicated on the cover page. Bids arriving after the specified time will not be accepted. Mailed bids that are received by the Village after the specified hour will not be accepted regardless of the post-marked time on the envelope. Bids must be signed by an officer of the company who is authorized to enter into agreements on behalf of the company. Bids shall be sealed in an envelope and marked as stated on the cover page.

**Bid Bond**

The Bidder shall provide a Bid Bond in the amount of ten percent (10%) of the total bid price. The attached form may be used or the bidder may provide cash or a certified check in the amount specified. Bid bond amounts shall be based on all proposed work where estimated amounts have been provided by the Village of Oak Park. Do not include unit price amounts where work is "On-Demand" or "As Required". The Bid Bonds, cash or checks will be returned once the selected bidder has entered into an Agreement for this work and provided the Contract Bond in an amount of fifty thousand dollars (\$50,000.00) for the contract awarded.

**Contract Term**

The initial contract term shall be from the date of award to December 31, 2021. The Village of Oak Park intends to suspend work on this contract by November 13<sup>th</sup>, 2021 due to having suitable conditions to patch the road. Any work performed after November 13<sup>th</sup> would be on an emergency basis.

**Contract Renewal**

The Contractor shall invoice the Village for the Work provided pursuant to this Contract the rates set forth in its Proposal. The term of this Contract may be extended in writing for up to two (2) additional one (1)-year periods of time pursuant to the consent of the parties.

**Rate Adjustment**

The Contractor shall be permitted to adjust its rates subject to one (1) adjustment annually, effective on the anniversary date of this Contract. Written notice to the Village from the Contractor must be provided for any annual rate adjustment providing the basis for the requested increase and supporting document justification within thirty (30) days prior to the anniversary date. The annual adjustment shall be based upon 100% of the percentage of change of the index published in November (as defined below) as compared to the September index for the previous year. The index shall be the United States Department of Labor, Bureau of Labor Statistics, Revised Consumer Price Index for all Urban Wage Earners for Chicago, Illinois - Gary, Indiana - Kenosha, Wisconsin (all items, 1982-84 = 100). Notwithstanding anything contained herein to the contrary, the annual adjustment shall not be greater than five percent (5%) of the previous year's rates for services provided under this Contract in any year. If the Contractor fails to justify the requested increase, the Village reserves the right to reject the request and terminate the remaining term of this Contract.

**Notice to Proceed**

Work shall begin within fourteen (14) days from the **Notice to Proceed** from the Water & Sewer Project Manager, James Eggen, as locations are assigned. All work shall be completed in accordance with the detailed specifications set forth herein this document.

**Recertification**

If the Village renews the contract for an additional one year term, the Bidder will provide the Village with a renewed certification in the form in Section V indicating that it continues to be eligible to contract with units of local government. If a contractor or subcontractor is not able to certify that it continues to meet all requirements, it shall provide a detailed explanation of the circumstances leading to the change in certification status.

**Award of Agreement**

The Agreement will be awarded in whole or in part to the responsible Bidder or Bidders whose bids, conforming to the request for bids, will be most advantageous to the Village; price and other factors considered.

**Costs of Preparation**

The Village will not be responsible for any expenses incurred in preparing and submitting a Bid or entering into the applicable Agreement.

**Taxes not Applicable**

The Village of Oak Park as an Illinois municipality pays neither Illinois Sales Tax nor Federal Excise Tax. Contractors should exclude these taxes from their prices.

**Withdrawal of Bids:**

Any Contractor may withdraw its Bid at any time prior to the time specified in the advertisement as the closing time for the receipt of Bids, by signing a request therefore. No Contractor may withdraw or cancel its Bid for a period of sixty (60) calendar days after the advertised closing time for the receipt of Bids. The successful Contractor may not withdraw or cancel its Bid after having been notified that the Bid was accepted by the Village Board of Trustees.

**Investigation of Contractors**

The Village will make such investigations as are necessary to determine the ability of the Contractor to fulfill Bid requirements. If requested, the Contractor should be prepared to present evidence to the Village of Oak Park of ability and possession of necessary facilities and financial resources to comply with the terms of the attached specifications and Bids. In addition, the Contractor shall furnish the Village with any information the Village may request, and shall be prepared to show completed work of a similar nature to that included in its Bid. The Village reserves the right to visit and inspect the premises and operation of any Contractor.

**Rejection of Contractor**

The Village will reject any Bid from any person, firm or corporation that appears to be in default or arrears on any debt, agreement or the payment of any taxes. The Village will reject any Bid from a Contractor that failed to satisfactorily complete work for the Village under any previous agreement.

### **Conditions**

Contractors are advised to become familiar with all conditions, instructions and specifications governing the work. Contractors shall be presumed to have a familiarity with this category of work. Work site, conditions and scope of the work before submitting a Bid.

### **Compliance with Applicable Laws**

The Bidder will strictly comply with all ordinances of the Village of Oak Park and Village Code and laws of the State of Illinois.

### **Governing Law**

All agreements entered into by the Village of Oak Park are governed by the laws of the State of Illinois without regard to conflicts of law. Any action brought to enforce an agreement with the Village of Oak Park must be brought in the state and federal courts located in Cook County, Illinois.

### **Subletting of Agreement**

No agreement awarded by the Village of Oak Park shall be assigned or any part sub-agreement without the written consent of the Village of Oak Park or as noted in the Contractor's Bid. In no case shall such consent relieve the Contractor from its obligations or change the terms of the Agreement.

### **Interpretation of Agreement Documents:**

Any Contractor with a question about this Bid may request an interpretation thereof from the Village no later than 8:00 A.M. on Monday, October 11, 2021. If the Village changes the Bid, either by clarifying it or by changing the specifications, the Village will issue a written addendum, and will post the Addenda on the Village website no later than 1:00 P.M. on Tuesday, October 12, 2021. All bidders will be responsible to check for any addenda. The Village will not assume responsibility for receipt of such addenda. In all cases, it will be the Contractor's responsibility to obtain all addenda issued. Contractors will provide written acknowledgment of receipt of each addendum issued with the Bid submission on the sealed bid envelope.

### **Minority Business and Women Business Enterprise Requirements**

The Village of Oak Park, in an effort to reaffirm its policy of non-discrimination, encourages the efforts of Contractors and subcontractors to take affirmative action in providing for Equal Employment Opportunity without regard to race, religion, creed, color, sex, national origin, age, handicap unrelated to ability to perform the job or protected veteran's status.

### **Licenses**

The Contractor shall be responsible for becoming a licensed Contractor in the Village. It is also understood that all plumbing work on this contract will be completed by a Licensed Plumbing Contractor in the State of Illinois.

### **Agreement**

The selected bidder shall enter into an Agreement with the Village to complete the Project in a form substantially similar to the Agreement attached hereto. The Agreement shall be executed by the Contractor and returned, together with the Contract Bond within ten (10) calendar days after the Agreement has been mailed to the Contractor. The Contractor shall execute three copies of the Agreement. One fully executed copy will be returned to the Contractor. See Section XIII for a sample copy of the agreement.

**Contract Bond**

The successful bidder shall, within ten (10) calendar days after award of the bid, furnish a Contract Bond in the amount of fifty thousand dollars (\$50,000.00) for the contract awarded. The bond shall insure faithful performance of the work, and the payment for materials, labor and of the subcontractors. The bond shall be with a surety or sureties with a rating of "A" or better by A.M. Best and Company and such sureties shall be approved by the Village. Bonds in the form of certified or cashier's check shall be made payable to the Village of Oak Park, Illinois. The Contract Bond shall be furnished in the same number of copies as the number of copies of the Agreement to be executed. See section XII for a sample copy of the Contract Bond.

**Fees and Cost**

In the event any action is brought to enforce any agreement entered into by the Village of Oak Park, or to collect any unpaid amount from the Village of Oak Park, each party bears the responsibility of paying its own attorneys' fees and costs.

**Dispute Resolution**

The Village of Oak Park does not agree to mandatory arbitration of any dispute.

### **III**

## **GENERAL SPECIFICATIONS**

### **Scope of Work**

The Village is seeking Bids from qualified contractors for the replacement of 3084 water meters and the upgrade of 5576 water meters. Water meters will vary in size from 5/8" to 2". 5/8", 3/4" and 1" meter replacements will use existing meter connectors with meters and washers to be furnished by the Village. 1-1/2" and 2" meters will use existing flanges with new nuts and bolts furnished by the contractor. New gaskets and meters furnished by Oak Park. Meter upgrades will consist of replacing the meter register on the existing water meter without the need to interrupt the flow of water to the customer. The locations and sizes of water meters are estimated for bidding purposes as the Village field crews are continuously upgrading meters on a day to day basis.

### **Responsibility of Contractor**

The selected contractor shall furnish all labor, supervision, tools, equipment, materials and supplies, and other means necessary for performing and completing the work, including debris hauling.

### **Extent of Services**

This contract shall cover work as assigned by the Village for scheduling appointments and completing the meter upgrades or replacements as outlined in these specifications.

### **Detail Specifications**

#### **1. Location of the Improvements**

The location of the work is known as: Various addresses within the Village of Oak Park, Illinois, in residences and on right-of-way. Some meters will be located in Meter Pits located in the parkway.

#### **2. Description of the Improvements**

The Village of Oak Park is upgrading its water meter infrastructure to transition to a fixed-base radio system. This contract will upgrade or exchange 2" or smaller water meters to be compatible with the future meter reading system.

It is anticipated that the work under this contract will supplement and assist work performed by Village staff. Actual contract quantities are estimated and are expected to vary.

The scope of this service is described further within these specifications.

#### **3. Project Schedule**

This Contract will be for scheduled work to be completed in 2021 and 2022. This contract will include a second-year renewal (2023) as outlined in the Contract Agreement. The contractor shall initiate contact with the water customers by mail as names are provided after the Notice to Proceed.

#### Project Timeline

Project Advertising	Wednesday, September 22, 2021
Deadline for Questions	Monday, October 11, 2021 @ 8:00 A.M.
Deadline for Addendum	Tuesday, October 12, 2021 @ 1:00 P.M.
Bid Opening	Thursday, October 14, 2021 @ 10:00 A.M.
Contract Award	Monday, November 1, 2021
Notice of Award	Tuesday, November 2, 2021
Preconstruction Meeting	To be Determined
Notice to Proceed	To be Determined

Any questions pertaining to the contract shall be submitted in writing to the contact person for this contract. Any major issues or clarifications shall be summarized and issued in an addendum form to be published on the Village website. No questions shall be accepted after 8:00 A.M. on Monday, October 11, 2021 with no addenda to be issued after 1:00 P.M. on Tuesday, October 12, 2021. It is the bidder's responsibility to check the Village website for any addenda related to this contract.

The contact person for this contract shall be JAMES EGGEN, WATER & SEWER PROJECT MANAGER. Written questions shall be e-mailed to [jeggen@oak-park.us](mailto:jeggen@oak-park.us) with 2021-22 WATER METER REPLACEMENT PROGRAM in the subject line.

#### 4. Reporting

The Bidder is responsible for keeping the Village updated on its work on a weekly basis. The Bidder will be required to provide the Village via email or in person a weekly report identifying the date the work was completed at each site was completed during the week as well as the materials used at the site. These reports are due before the close of business each Friday. Village staff will be spot checking locations each week.

#### 5. Property Damage

The Bidder shall take great care to avoid damaging adjacent property, including sidewalk, fencing, landscape borders and landscaping (trees, shrubs, turf, etc.). Bidder shall be held responsible for all damage to property including, but not limited to, existing landscaping including turf, planters, bicycle racks, litter containers, light and traffic signal poles, parking meters, fire hydrants, curbs, vehicles, buildings and structures, etc. All damage will be the responsibility of the Bidder to repair to its original condition and to the satisfaction of the Village.

#### 6. Idling of Equipment

The Department of Public Works has a "No Idling" policy. A copy of the policy is available from the Department of Public Works if needed. The bidder is expected to adhere to this policy as they are an extension of the Public Works Department staff.

#### 7. Project Inspection

Upon Request the contractor must provide the location of crews working within the village. The Water & Sewer Project Manager or his representative will periodically inspect the work and will always be available should any problems arise. The Water & Sewer Supervisor or Superintendent can be contacted at 708-358-5700.



#### 8. Obstruction of Streets and Rights-of-Way

The bidder shall arrange to keep sidewalks open for traffic when possible, and to block portions of the streets only when deemed necessary to protect private property.

The bidder shall remove all surplus materials and debris from the streets as the work progresses so that the public may have the use of the streets a maximum amount of time. Bidder is to erect appropriate warning signs and furnish adequate barricades that identify the work zone for the motoring public and pedestrians.

#### 9. Accident Prevention

The bidder shall exercise every precaution at all times for the protection of the persons and properties. The safety provisions of all applicable laws and ordinances shall be strictly observed. Any practice obviously hazardous in the opinion of the Water & Sewer Superintendent or authorized representative shall be immediately discontinued by the bidder upon their receipt of instructions from the Water & Sewer Superintendent, or authorized representative, to discontinue such practice.

The bidder shall abide by all applicable laws, standards, and regulations that apply to the completion of the work, including EPA and OSHA safety standards and regulations.

#### 10. Motorized Equipment

Under no circumstances shall any motorized equipment be permitted to be driven on the private property or driveways without prior authorization from the resident and the Water & Sewer Superintendent while performing work under the provisions of this contract. Plywood or other support or protection must be placed on the parkway and/or private property prior to operating or parking vehicles or equipment on or over such property or other support or protection must be placed on the private property prior to operating or parking vehicles or equipment on or over private property.

#### 11. Parking

No off-street parking for equipment shall be provided for by the Village of Oak Park on any of the Village's public properties except as may be designated by the Water & Sewer Supervisor or Superintendent.

#### 12. Traffic Control Plan

Traffic control shall be in accordance with the applicable sections of the Standard Specifications for Road and Bridge Construction, the applicable guidelines contained in the Illinois Manual on Uniform Traffic Control Devices for Streets and Highways, these Special Provisions, and any special details and Highway Standards.

#### 13. Pedestrian Traffic Control

While the work under this contract is taking place, the bidder shall block off the sidewalk to pedestrian traffic immediately adjacent to the work site if there is a reasonable concern of harm to pedestrians. No open holes shall be left unattended or accessible by pedestrians.

### **Licenses and Permits**

The Contractor shall be responsible for becoming a Licensed Plumbing Contractor with the Village of Oak Park. The Village will issue any necessary permits for this work at no fee.

### **Alterations, Omissions and Extra Work**

The Village of Oak Park reserves the right to increase or decrease the quantity of any item or portion of the work, or to omit portions of the work as may be deemed necessary.

### **Method of Payment**

The Village of Oak Park will pay monthly, all undisputed invoices within 30 days of approval as provided in the Local Government Prompt Payment Act, 50 ILCS505/4. The maximum interest rate for any payment not made within 30 days of approval is 1%. Invoicing is to be submitted in accordance to the schedule of prices per project location. The work per location shall be billed once work at the location is complete.

### **Change Orders**

Change Orders: Changes in the Work may be agreed to after execution of the Agreement, and without invalidating the Agreement, if the Change Order is in writing and signed. Any changes to the scope of work which result in an increase in the agreement price will be subject to an agreement addendum which must be signed by both parties. Any such Change Order will be prepared by the Village. The Contractor may only proceed with the Change upon receipt of the written Change Order signed by the Village.

Emergency Changes: Contractor may perform work not included in the Scope of Work if necessary to remedy a condition that poses an immediate threat to persons or property. Work of this nature shall be carried out only to the extent of bringing the condition under control. The Village shall be notified immediately. A Change Order will then be negotiated and executed for the work performed, and for work remaining, if any.

Minor Changes (Field Orders): The Village may verbally authorize minor changes in the Scope of Work in order to prevent a delay in the progression of the Work. These field orders may not involve a change in the agreement price or be inconsistent with the Scope of Work.

Changes Due to Unknown Conditions: The Contractor is not responsible for Changes in the Work that are due to conditions that were not reasonably observable or conditions that have changed. In such cases, the Contractor shall notify the Village and a Change Order will be negotiated.

Any Change which results in a total agreement price in excess of \$10,000 must be approved by the Village of Oak Park Board of Trustees.

### **Correction of Work Prior To Final Payment**

The Village has the right to stop work if the Contractor fails to carry out the work in a manner acceptable to the Village. If the Village deems the Contractor's work unacceptable, at the Village's election, the Contractor shall do one of the following:

1. Promptly repair or replace the defective work, without expense to the Village, including costs associated with repairing any damage to property caused by the replacement work; or;
2. If the Village deems it unacceptable to have the Contractor correct work which has been incorrectly done, a deduction from the agreement price shall be made based on the costs to the

Village to have the work repaired. Such a deduction from the agreement price shall in no way affect the Village's other remedies or relieve the Contractor from responsibility for defects and related damage occurring as a result of defective or unacceptable work.

#### **Bidder's Representative**

The bidder shall have at all times a competent foreman or superintendent on the job that shall have full authority to act for the bidder, and to receive and execute orders from the Director of Public Works or appointed representative. Any instructions given to such superintendent or person executing work for the bidder shall be binding on the bidder as though given to him personally. Bidder's representative must be proficient in the use and interpretation of the English language.

#### **Workers**

The bidders shall employ competent laborers and shall replace, at the request of the Director of Public Works any incompetent, unfaithful, abusive or disorderly workers in their employ. Only workers expert in their respective branches of work shall be employed where special skill is required. Inappropriate behavior or examples of unproductive work effort will not be tolerated. The Village has the right to require a bidder's employee to be immediately removed from the work crew if the above behavior is exhibited.

#### **Time of Work**

Bidder shall primarily work on weekdays, (Monday through Friday), from 7:30 a.m. to 4:30 p.m. Work will be allowed outside the standard workhours, on weekends or on legal holidays as recognized by the Village of Oak Park, to accommodate the schedule of Oak Park water customers.

#### **Dispute Resolution**

All disputes, including collection disputes, shall be brought in the Circuit Court of Cook County, Illinois. This agreement shall be interpreted in accordance with the laws of the State of Illinois. In any dispute resolution process, each party shall bear its own costs, including attorney's fees. Any purported agreement between the parties that states terms contrary to this paragraph M will be deemed per se invalid.

#### **Reporting Requirements**

The following forms must be completed in their entirety, notarized and included as part of the Bid document. Failure to respond truthfully to any question on the list or failure to cooperate fully with further inquiry by the Village of Oak Park will result in disqualification of your Bid.

## SUPPLEMENTAL SPECIAL PROVISIONS

### INTRODUCTION

#### **Project Description:**

Replace approximately 3084 water meters and upgrade approximately 5576 meter registers with integral radio transmitters throughout the village limits according to the specifications contained herein. The Village of Oak Park utilizes metering equipment from Neptune Technology Group.

#### **Detailed Specifications:**

**Scope of Work:** This section describes the materials, equipment, procedures, and contractor requirements for removing existing water meters and associated reading infrastructure and installation of new water meters and associated reading infrastructure. This is meant to be a guide and the contractor will be responsible for the complete installation of the new water meters and associated equipment.

#### **Definitions:**

- A. **Customer:** An adult, 18 years or older, who is the property owner or another person with a legal right to possession of the property, or a person with apparent authority to allow entry.
- B. **Endpoint:** Device which reads the meter register and transmits this and other relevant data automatically to the data collection system. Also referred to as a meter interface unit (MIU) Neptune R-900i.
- C. **Meter Transceiver Unit (MXU):** Existing component currently installed on some Village water meters to read the meter register and transmit data to a mobile (drive-by) collection system.
- D. **Service Line:** Water service line from the entrance into the building to the valve after the meter including the valve.

#### **Existing Water Meter Infrastructure to be Upgraded:**

- E. The existing water distribution system includes approximately 12,500 water meters. Approximately 8660 meters will be upgraded or replaced with this contract.
- F. Meter sizes for replacement or upgrade are estimated as follows:

	Full Meters to Replace	Meter Heads to Replace
5/8 inch	1965	4097
3/4 inch	299	446
1 inch	528	671
1-1/2 inch	200	213
2 inch	92	149
Totals:	3084	5576

- G. Existing meters are currently read via mobile radio read, or fixed radio read.
- H. Approximately 3080 of the system's meters are more than 15 years old.
- I. Some larger meters are proposed to remain in service but will be retrofitted with new Endpoints under separate agreements. Inspections by Village staff will determine their status and upgrade required.

**Meter / Endpoint Installation Contractor Requirements:**

**J. Installer Qualifications**

1. The meter / endpoint installation crew shall be employed directly by the Contractor. Subcontractors shall not be used without the Village's approval.
2. Each meter installation crew shall have a licensed plumber in the State of Illinois. Submit a copy of State of Illinois plumbing license(s) for each plumber employed to install meters for this project.
3. Installation crews shall be experienced, trained, and technically competent.
4. Employees shall pass a criminal background check approved by the Village and sign a waiver release prior to entering customer properties.
  - a. Submit a list of employees authorized by the contractor to enter and install water meters / endpoints.
  - b. Criminal background checks shall be completed for employees by an agency approved by the Village.
  - c. Submit copies of criminal background checks to the Village. Note: all submissions to the Village are public record. Personal information listed in background checks, such as social security numbers, may be blocked out in the submittal.
  - d. Based on the results of the background check, the Village shall have the right to prohibit employees from entering customer properties.
  - e. Promptly submit updated employee lists and background checks if staffing is revised.

- K. Internal Plumbing Irregularities: The Contractor shall report to the Village all internal meter or plumbing irregularities including but not limited to meters installed backwards, disconnected meters, other indication of tampering such as magnets, if meter has been removed and replaced with connecting pipes; if meter is connected with non-compliant connections; if registers are disconnected from meter; if there are illegal connections before the meter, or if there are any other circumstances that warrants communication with the Village. Photographs shall be taken of all irregularities and supplied to the Village on the forms provided. Contractor shall not proceed with the installation of a new meter until the Village has authorized the project to continue.

- L. The Contractor shall be available to respond to calls from customers concerning leaks, loss of service, or other issues related to the installation. The Contractor must be available to respond to problems associated with the installation twenty-four hours a day, seven days a week basis, and must respond to make necessary repairs within two

hours of receiving the call. Records of all calls and the response provided shall be provided to the Village the next work day.

- M. Property Damage: The Contractor shall be responsible for all damages caused by an installer, and shall make all necessary repairs at its sole cost and expense. In the event a service line fails during or after the installation, the Contractor will oversee the repair work to the water service or damaged property to the Owners satisfaction.
- N. Upon completion of the meter installation, all refuse and unused material shall be removed from the site. The site shall be returned to its original condition.

**Employee Conduct:**

- O. Contractor shall not enter a property unless admitted by an adult (18 years or older) who is the property owner or another person with a legal right to possession of the property, or a person with apparent authority to allow entry.
- P. All employees entering customer properties shall wear a company uniform and carry employee identification and Village issued identification.
- Q. Employee vehicles shall be clearly marked with the name, phone number, and/or logo of the installation contractor or meter/AMI supplier.
- R. Do not track in mud, dirt, snow, or water. Utilize boot covers as required to prevent tracking.
- S. Contractor shall not solicit, advertise, or leave promotional materials with the property owner in the execution of the meter/endpoint replacement project.
- T. Crews actively engaged in the installation of water meters/endpoints shall not perform any other work on a customer's property during the same visit(s), unless the property owner is paying to have work done for the installation of the new water meter.
- U. Contractor shall not smoke in or on customer property (including outside).
- V. Contractor employees shall treat customers in a courteous and respectful manner. If customers have objections or complaints about the project or the installation, direct the customer to contact appropriate Village staff.
- W. If a customer becomes irate, confrontational, or threatening, the contractor shall leave the property immediately and contact appropriate Village staff.

**Materials:**

- X. GENERAL: Ensure all materials comply with the Illinois Plumbing Code and Village of Oak Park Village Code.
- Y. WATER METERS: All new water meters shall be manufactured by Neptune Technology Group and be provided by the Village.
- Z. REGISTER: New water meter registers will be provided by the Village. The registers shall be installed to provide a means for the customer to view the meter reading.
- AA. ENDPOINT: Neptune R-900i MIU as provided by the Village.

- BB. METER GASKET: Install new rubber gaskets provided by the Village.
- CC. METER COUPLING: Where approved, install new brass meter couplings provided by the Village.
- DD. SEAL WIRE AND LEAD SEAL: Copper seal wire 3 ply #27 with lead seal to be **provided by the Contractor**.
- EE. VALVES: All valves are owned by the property owner and shall have brass or bronze bodies and be in compliance of the Illinois Plumbing Code for potable water. All valves that need to be replaced will be at the discretion of the property owner and installation paid to the contractor by the property owner under the contract price agreed upon in this contract for additional work needed to complete the new meter installation.
- FF. PIPE: Copper tubing for water piping shall meet Illinois Plumbing Code requirements.
- FITTINGS: Provide all copper, brass, or bronze fittings. Di-electric pipe connectors will be required to connect dissimilar materials. Plastic fittings will not be allowed.
- GROUNDING JUMPER WIRE: Provide #8 AWG copper grounding wire with pipe clamps for all new water meter settings and existing settings where absent. Wire and grounding clamps shall be furnished by the Contractor.

#### **Equipment:**

- GG. PIPE FREEZE EQUIPMENT: Provide commercial pipe freeze equipment capable of freezing copper or steel lines up to and including 1-inch diameter. Pipe freeze equipment shall be available on-site prior to beginning any installation where curb stop is not accessible. Obtain authorization from the Village prior to freezing pipes.
- HH. HANDHELD FIELD PROGRAMMER / SMART PHONE / TABLET:
1. Provide handheld field programmer, smart phone, tablet or similar device with software capable of verifying communication between the radio, register and collector. Such devices shall be capable of recording and downloading all required data.
  2. Installation documents shall be in electronic .PDF format and used for documentation of the install and sent to the Village as verification of the install.

#### **Scheduling Individual Meter and Endpoint Installations:**

Coordinate exchange of water meters with each property owner according to the following minimum requirements. Customer names, addresses, meter data and account numbers will be provided.

#### **II. GENERAL LETTER:**

1. Prepare a general letter for delivery on Village of Oak Park letterhead to all affected property owners explaining the following:

- a. Description of the meter replacement project;
  - b. Need for entry/access;
  - c. Typical time required for installation;
  - d. Name and phone number of contractor to complete the installation;
  - e. Notification that contractor will be contacting the property owner to schedule installation; and,
  - f. Customers rights and responsibilities information.
2. Submit proposed general letter to the Village of Oak Park for review and consideration. Upon approval, the contractor will print the letter with the Village logo. The Village will provide #10 window envelopes with the Village return address.
  3. Mail a copy of the general letter to each property owner approximately two weeks prior to contacting them for installation. Postal charges will be paid by the contractor.

#### JJ.SCHEDULING PROCESS:

1. Prepare a letter from the contractor to the property owner requesting that the property owner contact the contractor to schedule a time for meter installation. Contractor shall utilize a local phone number and website for residents to schedule appointments. Provide resident with installer's name, company, phone number, and photo identification, along with installation date and time, via email, online portal, or U.S. mail prior to starting work. Notify the Customer of any change to this information as soon as practical.
2. Submit a letter to the Village of Oak Park for review and consideration. Upon approval, letters may be sent to Customers.
3. Mail the initial request and document the date sent on Village letterhead.
4. If no response to the initial request is received within two weeks, send a follow-up letter, or deliver a copy of the letter via door hanger.
5. If no response to the second attempt is received within one week, visit the property to attempt contact in person.
6. If no contact is made, leave a door hanger with a copy of the letter.
7. If no response is received within a week after making the third attempt at contact, notify the Village of Oak Park.
8. Village Contact Process:
  - a. The Village of Oak Park will deliver a shut off notice of failure to schedule a meter install appointment and allow access to the water meter and will terminate service if an appointment is not scheduled within five (5) days.
  - b. The Village will shut off the water supply to the property until the owner schedules an installation. If the appointment is not upheld the water will be terminated until the meter is installed.



9. Notify the Village immediately after the property owner establishes contact and schedules the installation.
10. Contractor shall prioritize installation at properties where water has been shut off.

**KK. INSTALLATION HOURS:**

Work is permitted at individual homes between the hours of 7:00 AM to 8:00 PM, Monday through Saturday. Work on Sundays and holidays recognized by the State of Illinois will not be required. Other work schedules may be permitted with prior approval of the Village to deal with unique circumstances such as restaurants or industrial sites.

**LL. INSTALLATION SEQUENCE:**

Contractor shall be assigned the accounts for each month, at the beginning of the previous month for specific grouping of meters.

The Contractor shall staff accordingly to complete installation of meters as suggested to the following schedule in order to ensure completion by December 31, 2022:

PROPOSED METER UPGRADE SCHEDULE											
	2" Meter Exchange	2" Register Exchange	1-1/2" Meter Exchange	1-1/2" Register Exchange	1" Meter Exchange	1" Register Exchange	3/4" Meter Exchange	3/4" Register Exchange	5/8" Meter Exchange	5/8" Register Exchange	# of Meters per Month
December-21	46	50									96
January-22	46	50	50	100							246
February-22		49	75	113	78						315
March-22			75		150	225	199	226			875
April-22					150	225	100	220	200		895
May-22					150	221			400	100	871
June-22									315	647	962
July-22									300	700	1000
August-22									300	700	1000
September-22									300	700	1000
October-22									150	750	900
November-22										250	250
December-22										250	250
TOTALS	92	149	200	213	528	671	299	446	1965	4097	

**Inspection and Documentation:**

**MM. INSPECTION**

1. Prior to shutting off water and beginning installation, inspect the existing service and document the service material entering the residence or building.

2. Notify the Village of Oak Park of the following conditions and do not proceed with the installation until reviewed and directed by the Village:
  - a. The existing meter is inaccessible.
  - b. The existing meter is set vertically.
  - c. The existing service does not comply with the plumbing code or is not constructed of standard potable water supply materials.
  - d. The existing service needs repairs prior to installing the water meter.
  - e. Meter connectors are non-compliant and need to be replaced.
  - f. Other conditions that would prohibit the safe and effective replacement of the water meter.

NOTE: No work will be performed that will disturb lead service lines. Care shall be used to loosen existing meter couplings without disturbing lead service piping. Notify the Village representative immediately of any issues that prevent the work from being performed.

NN. DOCUMENTATION

1. Obtain digital photographs of existing meter installation documenting the condition and configuration of the existing meter installation. Include the property address and date in the photo or identify digitally in the file name or other means acceptable to the Village.
2. Obtain a digital photo of existing meter register showing the register reading and meter size on register face. Confirm register size matches meter body.
3. Record the following information electronically in the field and provide records to the Village in Microsoft Excel Master File and PDF installation file format for each installation with pictures along with property owners signature approving the installation. Confirm format of data with Village prior to beginning work. File format requirements for Billing Program are provided in Appendix B.
  - a. Property address.
  - b. Account number.
  - c. Water service diameter and material (before the meter).
  - d. Water piping diameter and material (after the meter).
  - e. Register reading and serial number of the old meter with pictures.
  - f. Serial number of the old MXU/MIU.
  - g. Serial number and register reading of the new water meter with pictures.
  - h. Serial number, size and last inspection of any backflow devices.

4. Provide a daily report of replaced meters and addresses to the Village of Oak Park within 24 hours of completing. The report may be submitted electronically. All meter installations will also have a PDF file of each installation with photographs, and signature of property owner or their representative. Daily reports will be utilized to check quantities on monthly invoicing.

**Water Meter Exchange with Integral Radio Installation (R900i):**

**OO. General:**

1. Perform all work in accordance with the Illinois Plumbing Code.
2. Credentials shall be presented establishing his/her identity to the customer prior to entering the house.
3. Provide customer with the lead information literature and instructions on how to read the meter register at the time of the appointment.
4. Ensure all necessary, equipment, piping, fittings, valves, and other materials are available at the job site prior to beginning installation.
5. Cut and secure wires for existing remote radio endpoints. Replace meter. Clean area.
6. Upon completion of the work, obtain customer's signature on work order acknowledging completion and acceptance of the meter installation.

**PP. Meter Removal**

1. Complete electric connection across meter gap with jumper cables.
2. Close shut off valves on each side of the meter.
3. If shutoff valves are missing or do not operate properly, turn off the outside valve at the buffalo box. If the outside valve is not operable or cannot be keyed, notify the Village. The use of a pipe freezing machine is not anticipated. All buffalo box repairs that need to be completed will be done by the Village. Include all repairs on the install documentation and data file for the Village. Operate pipe freeze machine according to manufacturer's recommendations. No additional compensation will be allowed for freezing a water service without prior authorization. Under no circumstances shall the mainline water valves be operated.
4. Protect surroundings and personal property from water draining out of meter or dripping from pipes.
5. Loosen the meter coupling nut on either side of the meter.
6. Remove old meter. Confirm register size matches meter body size. Label meter with date and address.

QQ. Meter Installation

1. Clean existing meter couplings or flanges.
2. Set new meter in place with new washers or drop in gaskets.
3. Hand thread meter coupling nut onto meter until threads engage.  
Ensure threads are not cross threaded.
4. Tighten coupling nuts with a wrench until snug. For flanged meters, tighten bolts alternately ensuring gasket is centered on meter flange opening.
5. Install ground wire jumper if required or replace existing ground wire jumper across meter if removed.
6. Install seal wire with "do not tamper" tag **supplied by Contractor**. Seal wire shall be run through both meter couplings and register to ensure register cannot be removed without breaking the seal wire. Install seal button lead or plastic supplied by the contractor.
7. Purge air from system.
  - a. Open the inlet (upstream) shutoff valve slowly until the meter is full of water.
  - b. Open the outlet (downstream) valve slowly until air is out of the meter and service line.
  - c. Select a faucet, remove aerator and open slowly to allow entrapped air to escape.
  - d. Close customer faucet.
  - e. Inspect installation for leaks.

1. Valve Vault/Meter Pit Installation

- a. Meters installed inside valve vaults shall have "pit" registers and have lid mounted MIU. Valve vault lids shall have a penetration provided by the contractor to mount the MIU. Payment for meter installations in valve vaults will be on a case by case basis and agreed upon by both the Village and contractor prior to the install.

**Upgrade Existing Meter With New Endpoint (E-coder w/ R900i):**

- RR. Follow applicable scheduling, inspection, and documentation requirements described above.
- SS. Inspect existing meter register and ensure proper sizing to meter body. If existing register is not compatible, contact the Village.
- TT. Replace new register on meter. Document installation accordingly as above.
- UU. Test radio signal transmission.

### **Water Meter Upgrade with Remote Radio Installation (R900 MIU Wall Mounted):**

- VV. General: Installation of wall mounted endpoints on exterior of buildings will be used to troubleshoot locations
1. Perform all work in accordance with the Illinois Plumbing Code.
  2. Credentials shall be presented establishing his/her identity to the customer prior to entering the house.
  3. Provide customer with the lead information literature and instructions on how to read the meter register at the time of the appointment.
  4. Ensure all necessary equipment and other materials are available at the job site prior to beginning installation.
  5. Replace meter register with the corresponding size ProCoder Register.  
Determine location to install wall mounted R900 Meter Interface Unit. Utilize existing wire will be allowed. Run new three conductor wire or repair existing wire between meter and wall unit. Make connections and check signal.
  6. Interior Endpoint Installation: If the endpoint cannot be installed on the exterior of the building, mount endpoint on inside surface of an exterior wall, or as close to an exterior wall as possible, and as high as possible. Neatly coil excess wire and securely attach to the endpoint.
  7. Upon completion of the work, obtain customer's signature on work order acknowledging completion and acceptance of the meter installation.

### **Activation and Testing**

- WW. Activate meter and endpoint according to meter supplier's recommendations.
- XX. Test and verify endpoint can communicate with the register and transmit data.
- YY. Verify communications by remotely reading the endpoint ID number and meter reading. Ensure transmitted meter reading matches register display.
- ZZ. Open customer faucet to purge air and ensure the new meter is reading flow.

### **Cleanup**

- AAA. Clean up and remove all debris from the property.
- BBB. Obtain digital photographs prior to leaving the property:
1. Overall work areas
  2. Installed meter
    - i. Closeup of register read and meter number
    - ii. Context photo showing location of meter relative to room
  3. MIU
    - i. Mount to structure showing installed location relative to structure
    - ii. Closeup of any wire penetration hole

### **Additional Work:**

CCC. If extra compensation is required to address the situation is less than \$500.00, proceed according to the following:

1. Notify the Village immediately of the issue and explain what extra work is required and the cost of the additional work.
2. The Village representative will be authorized to review and approve individual change order items up to \$500.00.
3. If the Village representative authorizes the extra work, oral authorization to proceed will be provided at that time, followed by written authorization within one business day.
4. It is the intent of this section that extra work required for water meter installations will be reviewed and change orders authorized promptly to permit the work to be completed during the scheduled installation visit and to avoid the necessity to reschedule the installation.

DDD. If extra compensation is required to address the situation is equal to or greater than \$500.00, proceed according to the following:

1. Notify the Village immediately of the issue and explain what extra work is required and the cost of the additional work.
2. The Village representative will need to meet with the installer to review the proposed work and then receive approval from the appropriate Village manager for individual change order items \$500.00 or more.
3. If the Village representative authorizes the extra work, oral authorization to proceed will be provided at that time, followed by written authorization within one business day.
4. It is the intent of this section that extra work required for water meter installations will be reviewed and change orders authorized promptly to permit the work to be completed during the scheduled installation visit and to avoid the necessity to reschedule the installation.

### **Reset Water Meter:**

If authorized by the Village (to resize meter), or requested by the owner, the meter shall be reset including new isolation valves and a boiler drain after the meter. It is not the intention of this contract to replace shut off valves, but this work may be necessary at random locations. New flanges or meter connectors will be provided by the Village. All copper materials would be required. Lead service piping shall not be disturbed. The installation of by-pass lines for larger meters would be classified as Additional Work.

**Base Bid:**

The following prices include labor and materials:

- 5/8" Meter Exchange
- 3/4" Meter Exchange
- 1" Meter Exchange
- 1.5" Meter Exchange
- 2" Meter Exchange
- 5/8" Meter Register Upgrade
- 3/4" Meter Register Upgrade
- 1" Meter Register Upgrade
- 1.5" Meter Register Upgrade
- 2" Meter Register Upgrade
- Additional price to install new grounding wire around meter
- Manhour labor rate for any additional plumbing contacted price for Village and property owner.
- Contract price for property owner to replace 3/4", 1", 1.5" or 2" ball valves (Reset Meter) including labor.

Saturday installations will be allowed, the contract price will be the same for week day or Saturday appointments.

All of the replaced Meters and endpoint equipment shall be returned to the Village.

**Basis of Payment:**

This work will be paid for at the contract unit price per meter exchange with integral radio units using existing meter couplings or meter register upgrade. The unit price shall include all equipment, materials, and labor required for this installation that is not provided by the Village as stated in the Materials Section in Appendix A.

Install new ground wire around meter shall be paid at the contract unit price for locations where new grounding jumper is installed as authorized by Village representative.

Labor rate for any additional plumbing will be utilized to provide compensation for work outside the scope of these specifications to fix or repair work as directed by the Village. The same rate will be extended to the customer to replace shut-off valves or perform miscellaneous work at the meter setting.

**Billing/Invoicing:**

All billing and invoicing will be done monthly with detailed itemized billing as summarized in daily reports. Billing will include the date and the work items performed. After receipt of a correct invoice, payments shall be due and owing by the Village in accordance with the terms and provisions of the Local Government Prompt Payment Act, Illinois Compiled Statutes, Ch. 50, Sec. 505, et. seq.

## CONTRACTOR'S EQUIPMENT LIST

[illegible]

If additional sheets are needed, please make copies.



**IV**  
**BID FORM (Pricing)**

The undersigned bidder agrees to all terms and conditions of the preceding specifications for 2021-2022 Water Meter Replacement Program and will furnish all the insurance documents and security deposits as stipulated. The unit prices listed below should be valid through December 31, 2022. Bid bond amount should be 10% of the sum of Bidder's Estimate amount listed below.

<p style="text-align: center;">VILLAGE OF OAK PARK 2021-2022 WATER METER REPLACEMENT PROGRAM PROJECT # 21-136</p>					
ITEM #	ITEM DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	COST
1	2" WATER METER EXCHANGE	92	EACH		
2	1-1/2" WATER METER EXCHANGE	200	EACH		
3	1" WATER METER EXCHANGE	528	EACH		
4	3/4" WATER METER EXCHANGE	299	EACH		
5	5/8" WATER METER EXCHANGE	1965	EACH		
6	2" WATER METER REGISTER UPGRADE	138	EACH		
7	1-1/2" WATER METER REGISTER UPGRADE	213	EACH		
8	1" WATER METER REGISTER UPGRADE	671	EACH		
9	3/4" WATER METER REGISTER UPGRADE	446	EACH		
10	5/8" WATER METER REGISTER UPGRADE	4097	EACH		
11	INSTALL NEW GROUND WIRE AROUND METER	150	EACH		
12	LABOR RATE FOR ANY ADDITIONAL PLUMBING	200	MAN-HR		
13	RESET 3/4" WATER METER	10	EACH		
14	RESET 1" WATER METER	5	EACH		
15	RESET 1-1/2" WATER METER	4	EACH		
16	RESET 2" WATER METER	2	EACH		
17	INSTALL REMOTE R900 WALL METER INTERFACE UNIT	10	EACH		
TOTAL:					

\_\_\_\_\_  
(Print Name of Individual Signing)

\_\_\_\_\_  
Signed

Illinois Plumbing License #: \_\_\_\_\_



**BID FORM CONTINUED**

Complete Applicable Paragraph Below

(a) Corporation

The bidder is a corporation, which operates under the legal name of

\_\_\_\_\_ and is organized and existing under the laws of the State of

\_\_\_\_\_. The full names of its Officers are:

President \_\_\_\_\_

Secretary \_\_\_\_\_

Treasurer \_\_\_\_\_

The corporation does have a corporate seal. (In the event that this Bid is executed by a person other than the President, attach hereto a certified copy of that section of Corporate By-Laws or other authorization by the Corporation that permits the person to execute the offer for the corporation.)

(b) Partnership

Names, Signatures, and Addresses of all Partners

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

The partnership does business under the legal name of \_\_\_\_\_, which name is registered with the office of \_\_\_\_\_ in the county of \_\_\_\_\_.

(c) Sole Proprietor

The bidder is a Sole Proprietor whose full name is \_\_\_\_\_. If the

bidder is operating under a trade name,

said trade name is \_\_\_\_\_,

which name is registered with the office of \_\_\_\_\_

in the county of \_\_\_\_\_.

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

Sole Proprietor

In compliance with the above, the undersigned offers and agrees, if his/her Bid is accepted within ninety (90) calendar days from date of opening, to furnish any or all of the items upon which prices are quoted, at the price set opposite each item, delivered at the designated point within the time specified above.

### **MUNICIPAL QUALIFICATION REFERENCE SHEET**

Bidders shall furnish a minimum of four (4) references from projects similar in scope within the last two (2) years.

**MUNICIPALITY**

**ADDRESS**

**CONTACT**

**PHONE**

**WORK**

**PERFORMED**

**MUNICIPALITY**

**ADDRESS**

**CONTACT**

**PHONE**

**WORK**

**PERFORMED**

**MUNICIPALITY**

**ADDRESS**

**CONTACT**

**PHONE**

**WORK**

**PERFORMED**

**MUNICIPALITY**

**ADDRESS**

**CONTACT**

**PHONE**

**WORK**

**PERFORMED**

V  
**BIDDER CERTIFICATION**

\_\_\_\_\_, as part of its Bid on an agreement for **2021-2022 Water Meter Replacement Program** for the Village of Oak Park, hereby certifies that said bidder selected is not barred from proposing on the aforementioned agreement as a result of a violation to either Section 33E-3 or 33E-4 of Article 33E of Chapter 38 of the Illinois Revised Statutes or Section 2-6-12 of the Oak Park Village Code relating to "Proposing Requirement.

\_\_\_\_\_  
(Authorized Agent of bidder selected)

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 2021.

\_\_\_\_\_  
Notary Public's Signature

- Notary Public Seal -

VI  
**TAX COMPLIANCE AFFIDAVIT**

\_\_\_\_\_, being first duly sworn, deposes and  
says:

that he/she is \_\_\_\_\_ of  
(partner, officer, owner, etc.)

\_\_\_\_\_  
(bidder selected)

The individual or entity making the foregoing Bid or proposal certifies that he/she is not barred from entering into an agreement with the Village of Oak Park because of any delinquency in the payment of any tax administered by the Department of Revenue unless the individual or entity is contesting, in accordance with the procedures established by the appropriate revenue act, liability for the tax or the amount of the tax. The individual or entity making the Bid or proposal understands that making a false statement regarding delinquency in taxes is a Class A Misdemeanor and, in addition, voids the agreement and allows the municipality to recover all amounts paid to the individual or entity under the agreement in civil action.

\_\_\_\_\_  
By:

Its:

\_\_\_\_\_  
(name of bidder if the bidder is an individual)  
(name of partner if the bidder is a partnership)  
(name of officer if the bidder is a corporation)

The above statement must be subscribed and sworn to before a notary public.

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 2021.

\_\_\_\_\_  
Notary Public's Signature

- Notary Public Seal -

**VII**  
**ORGANIZATION OF BIDDING FIRM**

**Please fill out the applicable section:**

**A. Corporation:**

The Contractor is a corporation, legally named \_\_\_\_\_ and is organized and existing in good standing under the laws of the State of \_\_\_\_\_. The full names of its Officers are:

President \_\_\_\_\_

Secretary \_\_\_\_\_

Treasurer \_\_\_\_\_

Registered Agent Name and Address: \_\_\_\_\_

The corporation has a corporate seal. (In the event that this Bid is executed by a person other than the President, attach hereto a certified copy of that section of Corporate By-Laws or other authorization by the Corporation that permits the person to execute the offer for the corporation.)

**B. Sole Proprietor:**

The Contractor is a Sole Proprietor. If the Contractor does business under an Assumed Name, the Assumed Name is \_\_\_\_\_, which is registered with the Cook County Clerk. The Contractor is otherwise in compliance with the Assumed Business Name Act, 805 ILCS 405/0.01, et. seq.

**C. Partnership:**

The Contractor is a Partnership which operates under the name \_\_\_\_\_

The following are the names, addresses and signatures of all partners:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Signature

\_\_\_\_\_

Signature

(Attach additional sheets if necessary.) If so, check here \_\_\_\_\_.

If the partnership does business under an assumed name, the assumed name must be registered with the Cook County Clerk and the partnership is otherwise in compliance with the Assumed Business Name Act, 805 ILCS 405/0.01, et. seq.

**D. Affiliates:** The name and address of any affiliated entity of the business, including a description of the affiliation: \_\_\_\_\_

\_\_\_\_\_

Signature of Owner

**SECTION VIII**  
**BID BOND**

WE \_\_\_\_\_

as PRINCIPAL, and \_\_\_\_\_  
as SURETY, are held and firmly bound unto the Village of Oak Park, Illinois (hereafter referred to as "VOP") in the penal sum of Ten Percent (10%) of the total bid price, as specified in the invitation for bids. We bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly to pay to the VOP this sum under the conditions of this instrument.

WHEREAS THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH that, the said PRINCIPAL is submitting a written bid to the VOP acting through its awarding authority for the completion of the work designated as the above section.

THEREFORE if the bid is accepted and an agreement awarded to the PRINCIPAL by the VOP for the above-designated section and the PRINCIPAL shall within fifteen (15) days after award enter into a formal agreement, furnish surety guaranteeing the faithful performance of the work, and furnish evidence of the required insurance coverage, all as provided in Specifications then this obligation shall become void; otherwise it shall remain in full force and effect.

IN THE EVENT the VOP determines the PRINCIPAL has failed to enter into a formal agreement in compliance with any requirements set forth in the preceding paragraph, then the VOP acting through its awarding authority shall immediately be entitled to recover the full penal sum set out above, together with all court costs, all attorney fees, and any other expense of recovery.

IN TESTIMONY WHEREOF, the said PRINCIPAL and the said SURETY have caused this instrument to be signed by their respective officers this \_\_\_\_\_ day of \_\_\_\_\_ A.D. 2021.

PRINCIPAL

(Company Name)

(Company Name)

By: \_\_\_\_\_ By: \_\_\_\_\_  
(Signature & Title) (Signature & Title)

(If PRINCIPAL is a joint venture of two or more Contractors, the company names, and authorized signatures of each Contractor must be affixed)



**BID BOND CONTINUED**

Subscribed to and Sworn before me on the

\_\_\_\_\_ day of \_\_\_\_\_, 2021.

\_\_\_\_\_  
Notary Public

**NAME OF SURETY**

By: \_\_\_\_\_  
Signature of Attorney-in-Fact

Subscribed to and Sworn before me on the

\_\_\_\_\_ day of \_\_\_\_\_, 2021.

\_\_\_\_\_  
Notary Public

**SECTION IX**  
**COMPLIANCE AFFIDAVIT**

I, \_\_\_\_\_, (Print Name) being first duly sworn on oath depose and state:

1. I am the (title) \_\_\_\_\_ of the Proposing Firm and am authorized to make the statements contained in this affidavit on behalf of the firm;
2. I have examined and carefully prepared this Bid based on the request and have verified the facts contained in the Bid in detail before submitting it;
3. The Proposing Firm is organized as indicated above on the form entitled "Organization of Proposing Firm."
4. I authorize the Village of Oak Park to verify the Firm's business references and credit at its option;
5. Neither the Proposing Firm nor its affiliates<sup>1</sup> are barred from proposing on this project as a result of a violation of 720 ILCS 5/33E-3 or 33E-4 relating to Bid rigging and Bid rotating, or Section 2-6-12 of the Oak Park Village Code relating to "Proposing Requirements".
6. The Proposing Firm has the M/W/DBE status indicated below on the form entitled "EEO Report."
7. Neither the Proposing Firm nor its affiliates is barred from agreementing with the Village of Oak Park because of any delinquency in the payment of any debt or tax owed to the Village except for those taxes which the Proposing Firm is contesting, in accordance with the procedures established by the appropriate revenue act, liability for the tax or the amount of the tax. I understand that making a false statement regarding delinquency in taxes is a Class A Misdemeanor and, in addition, voids the agreement and allows the Village of Oak Park to recover all amounts paid to the Proposing Firm under the agreement in civil action.
8. I am familiar with Section 13-3-2 through 13-3-4 of the Oak Park Village Code relating to Fair Employment Practices and understand the contents thereof; and state that the Proposing Firm is an "Equal Opportunity Employer" as defined by Section 2000(E) of Chapter 21, Title 42 of the United States Code Annotated and Federal Executive Orders #11246 and #11375 which are incorporated herein by reference. **Also complete the attached EEO Report or Submit an EEO-1.**
9. I certify that the Contractor is in compliance with the Drug Free Workplace Act, 41 U.S.C.A, 702

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

Name and address of Business: \_\_\_\_\_

Telephone \_\_\_\_\_ E-Mail \_\_\_\_\_

Subscribed to and sworn before me this \_\_\_\_\_ day of \_\_\_\_\_, 2019.

\_\_\_\_\_  
Notary Public

- Notary Public Seal -

<sup>1</sup> Affiliates means: (i) any subsidiary or parent of the agreementing business entity, (ii) any member of the same unitary business group; (iii) any person with any ownership interest or distributive share of the agreementing business entity in excess of 7.5%; (iv) any entity owned or controlled by an executive employee, his or her spouse or minor children of the agreementing business entity.

**SECTION X**  
**M/W/DBE STATUS AND EEO REPORT**

Failure to respond truthfully to any questions on this form, failure to complete the form or failure to cooperate fully with further inquiry by the Village of Oak Park will result in disqualification of this Bid. For assistance in completing this form, contact the Department of Public Works at 708-358-5700.

1. Contractor Name: \_\_\_\_\_

2. Check here if your firm is:

- ☐ Minority Business Enterprise (MBE) (A firm that is at least 51% owned, managed and controlled by a Minority.)
- ☐ Women's Business Enterprise (WBE) (A firm that is at least 51% owned, managed and controlled by a Woman.)
- ☐ Owned by a person with a disability (DBE) (A firm that is at least 51% owned by a person with a disability)
- ☐ None of the above

[Submit copies of any W/W/DBE certifications]

3. What is the size of the firm's current stable work force?

\_\_\_\_\_ Number of full-time employees

\_\_\_\_\_ Number of part-time employees

4. Similar information will be requested of all subcontractors working on this agreement. Forms will be furnished to the lowest responsible Contractor with the notice of agreement award, and these forms must be completed and submitted to the Village before the execution of the agreement by the Village.

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

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

EEO REPORT

Please fill out this form completely. Failure to respond truthfully to any questions on this form, or failure to cooperate fully with further inquiry by the Village of Oak Park will result in disqualification of this Bid. An incomplete form will disqualify your Bid. For assistance in completing this form, contact the Purchasing Department at 708-358-5473.

An EEO-1 Report may be submitted in lieu of this report.

Contractor Name \_\_\_\_\_

Total Employees \_\_\_\_\_

Job Categories	Total Employees	Total Males	Total Females	Males				Females				Total Minorities
				Black	Hispanic	American Indian & Alaskan Native	Asian & Pacific Islander	Black	Hispanic	American Indian & Alaskan Native	Asian & Pacific Islander	
Officials & Managers												
Professionals												
Technicians												
Sales Workers												
Office & Clerical												
Semi-Skilled												
Laborers												
Service Workers												
TOTAL												
Management Trainees												
Apprentices												

This completed and notarized report must accompany your Bid. It should be attached to your Affidavit of Compliance. Failure to include it with your Bid will be disqualify you from consideration.

\_\_\_\_\_, being first duly sworn, deposes and says that he/she is the \_\_\_\_\_

(Name of Person Making Affidavit)

(Title or Officer)

of \_\_\_\_\_ and that the above EEO Report information is true and accurate and is submitted with the intent that it

be relied upon. Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

( Signature )

( Date )

**SECTION XI**  
**NO BID EXPLANATION**

If your firm does not wish to propose on the attached specifications, the Village of Oak Park would be interested in any explanation or comment you may have as to what prevented your firm from submitting a Bid.

Bid Name:     **Project No. 21-136; Village of Oak Park 2021-2022 Water Meter Replacement Program**

Comments:

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

Phone: \_\_\_\_\_

**XII**  
**CONTRACT BOND**  
**(For Reference – Do Not Fill Out)**

**Contract Bond**

\_\_\_\_\_, as PRINCIPAL, and  
\_\_\_\_\_ as SURETY, are held and firmly bound unto the  
Village of Oak Park (hereafter referred to as "Village") in the penal sum of  
\_\_\_\_\_, well and truly to be paid to the  
Village, for the payment of which its heirs, executors, administrators, successors and assigns,  
are bound jointly to pay to the Village under the conditions of this instrument.

**WHEREAS**, THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH that, the Principal has entered into a written contract with the Village, acting through its President and Board of Trustees, for the construction of work, which contract is hereby referred to and made a part hereof as if written herein at length, and whereby the Principal has promised and agreed to perform the work in accordance with the terms of the contract, and has promised to pay all sums of money due for any labor, materials, apparatus, fixtures or machinery furnished to such Principal for the purpose of performing such work, including paying not less than the prevailing rate of wages in Cook County, where the work is for the construction of any public work subject to the Prevailing Wage Act, and has further agreed to save and indemnify and keep harmless the Village against all liabilities, judgments, costs and expenses which may in any manner accrue against the Village in consequence of granting such contract or which may in any manner result from the carelessness or neglect of the Principal, his agents, employees or workmen in any respect whatever; and has further agreed that this bond will inure to the benefit of any person, firm, company, or corporation, to whom any money may be due from the Principal, subcontractor or otherwise, for any such labor, materials, apparatus, fixtures or machinery so furnished and that suit may be maintained on such bond by any such person, firm, company, or corporation, for the recovery of any such money.

**NOW THEREFORE**, if the Principal shall well and truly perform the work in accordance with the terms of the contract, and shall pay all sums of money due or to become due for any labor, materials, apparatus, fixtures or machinery furnished to it for the purpose of constructing such work, and shall commence and complete the work within the time prescribed in the contract, and shall pay and discharge all damages, direct and indirect, that may be suffered or sustained on account of such work during the time of performance thereof and until the work shall have been accepted, and shall save and indemnify and keep harmless the Village against all liabilities, judgments, costs and expenses which may in any manner accrue against the Village in consequence of granting such contract or which may in any manner result from the carelessness or neglect of the Principal, his agents, employees or workmen in any respect

**CONTRACT BOND CONTINUED**

whatever; and shall in all respects fully and faithfully comply with all the provisions, conditions, and requirements of the contract, then this obligation will be void; otherwise it will remain in full force and effect.

**IN WITNESS WHEREOF**, the PRINCIPAL and the SURETY have caused this instrument to be signed by their respective officers this \_\_\_\_\_ day of \_\_\_\_\_, 2021.

**NAME OF PRINCIPAL**

By: \_\_\_\_\_  
Signature

By: \_\_\_\_\_  
Printed Name

Its: \_\_\_\_\_  
Title

Subscribed to and Sworn before me on the  
\_\_\_\_\_ day of \_\_\_\_\_, 2021.

\_\_\_\_\_  
Notary Public

**NAME OF SURETY**

By: \_\_\_\_\_  
Signature of Attorney-in-Fact

Subscribed to and Sworn before me on the  
\_\_\_\_\_ day of \_\_\_\_\_, 2021.

\_\_\_\_\_  
Notary Public

**XIII**  
**AGREEMENT**  
**(For Reference – Do Not Fill Out)**

**INDEPENDENT CONTRACTOR AGREEMENT**

**THIS INDEPENDENT CONTRACTOR AGREEMENT** ("Contract") is entered into on the \_\_\_\_ day of \_\_\_\_\_ 2021, by and between the Village of Oak Park, an Illinois home rule municipal corporation (hereinafter the "Village"), and \_\_\_\_\_, a \_\_\_\_\_ (hereafter the "Contractor").

**RECITALS**

**WHEREAS**, the Contractor submitted a Proposal to perform Water Service Line Replacement at select locations (hereinafter referred to as the "Work"), pursuant to the Village's Request for Proposals, attached hereto and incorporated herein by reference; and

**WHEREAS**, the Contractor represented in said Proposal that it has the necessary personnel, experience, and competence to promptly complete the Work and the work required hereunder; and

**WHEREAS**, the Contractor's Proposal is attached hereto and incorporated herein by reference into this Agreement; and

**WHEREAS**, the Contractor shall perform the Work pursuant to the terms and conditions of this Contract.

**NOW, THEREFORE**, in consideration of the premises and the mutual promises contained in this Contract, and other good and valuable consideration received and to be received, it is mutually agreed by and between the parties as follows:

**1. RECITALS INCORPORATED**

The above recitals are incorporated herein as though fully set forth.

**2. SCOPE OF WORK**

The Contractor shall perform the Work in accordance with its Proposal for an annual cost not to exceed \$ \_\_\_\_\_ ("Contract Price"), complete the Work in accordance with any applicable manufacturers' warranties and in accordance with the Village's Request for Proposals, the Contractor's Proposal and this Contract, all of which, together shall constitute the Contract Documents. The Contractor acknowledges that it has inspected the sites where the work is to be performed and that it is fully familiar with all



of the conditions at the sites, and further that its Proposal has adequately taken into consideration all of the conditions at the sites. The Contractor hereby represents and warrants that it has the skill and experience necessary to complete the Work in a good and workmanlike manner. The Contractor further represents and warrants that the Work will be completed in a good and workmanlike manner in accordance with the Contract Documents, and that the Work will be free from defects. The Contractor shall achieve completion of all work required pursuant to the Contract Documents.

### **3. DESIGNATED REPRESENTATIVES**

The Contractor shall designate in writing a person to act as its designated representative with respect to the Work to be performed under this Agreement. Such person shall have complete authority to transmit and receive instructions and information, interpret and define the Contractor's policies and decisions with respect to the Work governed by this Contract. The Village's Water & Sewer Superintendent shall have complete authority to transmit and receive instructions and information, interpret and define the Village's policies and decisions with respect to the Work governed by this Contract, or such other person as designated in writing by the Village Manager.

### **4. TERM OF CONTRACT**

The Contractor shall perform the Work pursuant to this Contract beginning on the effective date as defined herein and shall expire on December 31, 2022. The Contractor shall invoice the Village for the Work provided pursuant to this Contract the rates set forth in its Proposal. The term of this Contract may be extended in writing for up to two (2) additional one (1)-year periods of time pursuant to the consent of the parties.

### **5. RATE ADJUSTMENT**

The Contractor shall be permitted to adjust its rates subject to one (1) adjustment annually, effective on the anniversary date of this Contract, January 1, 2023. Written notice to the Village from the Contractor must be provided for any annual rate adjustment providing the basis for the requested increase and supporting document justification within thirty (30) days prior to the anniversary date. The annual adjustment shall be based upon 100% of the percentage of change of the *index published in September* (as defined below) as compared to the September index for the previous year. The index shall be the United States Department of Labor, Bureau of Labor Statistics, Revised Consumer Price Index for all Urban Wage Earners for Chicago, Illinois - Gary, Indiana - Kenosha, Wisconsin (all items, 1982-84 = 100). Notwithstanding anything contained herein to the contrary, the annual adjustment shall not be greater than five percent (5%) of the previous year's rates for services provided under this Contract in any year. If the Contractor fails to justify the requested increase, the Village reserves the right to reject the request and terminate the remaining term of this Contract.

## **6. PAYMENT SCHEDULE**

The Contractor shall, as a condition precedent to its right to receive any payment, submit to the Village an application for payment and such receipts, vouchers, and other documents as may be necessary to establish the Contractor's payment for all labor and material and the absence of any interest whether in the nature of a lien or otherwise of any party in any property, work, or fund with respect to the Work performed hereunder. Such documents shall include, where relevant, the following forms, copies of which are attached hereto:

- (i) Contractor's sworn statement;
- (ii) Contractor's partial or final waiver of lien;
- (iii) Subcontractor's sworn statement(s); and
- (iv) Subcontractor's partial or final waiver of lien.

Payment by the Village shall be conditioned upon an inspection by the Village of the work completed and submission of required waivers by the Contractor. Payment by the Village shall in no way constitute a waiver of, or relieve the Contractor from, any defects in the work. All payments shall be made in accordance with the Illinois Local Government Prompt Payment Act, 50 ILCS 505/1 *et seq.* Final payment for any Work performed by the Contractor pursuant to an invoice by the Contractor shall be made by the Village to the Contractor when the Contractor has fully performed the work and the work has been approved by the Village and submission of required waivers and paperwork by Contractor. Approval of the work and issuance of the final payment by the Village shall not constitute a waiver of, or release the Contractor from any defects in the work.

The Village shall have the right to withhold from any payment due hereunder such amount as may reasonably appear necessary to compensate the Village for any actual or prospective loss due to Work which is defective or does not conform to the Contract Documents; damage for which the Contractor is liable hereunder; liens or claims of liens; claims of third parties, subcontractors, or material men; or any failure of the Contractor to perform any of its obligations under this Contract. The Village may apply any money withheld or due Contractor hereunder to reimburse itself for any and all costs, expenses, losses, damages, liabilities, suits, judgments, awards, and attorney's fees incurred, suffered, or sustained by the Village and chargeable to the Contractor.

## **7. TERMINATION**

The Village may terminate this Contract for cause, which includes but is not necessarily limited to, the Contractor's failure to perform the Work and is otherwise in default pursuant to this Contract. The Village shall provide the Contractor with five (5) days' written notice of a termination for cause pursuant to the provisions of Section 12 below. The Village may also terminate this Contract when it determines the same to be in its best interests by giving fourteen (14) days' written notice to the Contractor pursuant to the

provisions of Section 12 below. In such event, the Village shall pay to the Contractor all amounts due for the work performed up to the date of termination.

## **8. DEFAULT/THE VILLAGE'S REMEDIES.**

If it should appear at any time prior to payment for the Work provided pursuant to this Contract that the Contractor has failed or refused to prosecute, and is in default, or has delayed in the prosecution of, the Work to be provided pursuant to this Contract with diligence at a rate that assures completion of the Work in full compliance with the requirements of this Contract, or has attempted to assign this Contract or the Contractor's rights under this Contract, either in whole or in part, or has falsely made any representation or warranty, or has otherwise failed, refused, or delayed to perform or satisfy any other requirement of this Contract or has failed to pay its debts as they come due ("Event of Default"), and has failed to cure, or has reasonably commenced to cure any such Event of Default within fifteen (15) business days after Contractor's receipt of written notice of such Event of Default, then the Village shall have the right, at its election and without prejudice to any other remedies provided by law or equity, to pursue any one or more of the following remedies:

(A) The Village may require Contractor, within such reasonable time as may be fixed by the Village, to complete or correct all or any part of the Work that are defective, damaged, flawed, unsuitable, nonconforming, or incomplete and to take any or all other action necessary to bring Contractor and the Work into compliance with this Contract;

(B) The Village may accept the defective, damaged, flawed, unsuitable, nonconforming, incomplete, or dilatory Work or part thereof and make an equitable reduction;

(C) The Village may terminate this Contract without liability for further payment of amounts due or to become due under this Contract except for amounts due for Services properly performed prior to termination;

(D) The Village may withhold any payment from Contractor, whether or not previously approved, or may recover from Contractor any and all costs, including attorneys' fees and administrative expenses, incurred by the Village as the result of any Event of Default or as a result of actions taken by the Village in response to any Event of Default; or

(E) The Village may recover any damages suffered by the Village as a result of Contractor's Event of Default.

(F) In addition to the above, if Contractor fails to complete any required Work pursuant to this Contract, the Village shall be entitled to liquidated damages in the amount of five hundred dollars (\$500.00) per day for each day the Services remains uncompleted. This amount is not a penalty, and the parties agree to said amount given the difficulties associated with determining or calculating damages to the Village in the event the required Work is not completed on time.

## **9. COMPLIANCE WITH APPLICABLE LAWS**

The Contractor shall comply with all applicable laws, regulations, and rules promulgated by any federal, state, county, municipal and/or other governmental unit or regulatory body now in effect during the performance of the work. By way of example only and not as a limitation, the following are included within the scope of the laws, regulations and rules with which the Contractor must comply: all forms of Workers Compensation Laws, all terms of the equal employment opportunity rules and regulations of the Illinois Department of Human Rights, statutes relating to contracts let by units of government, and all applicable civil rights and anti-discrimination laws and regulations.

## **10. INDEMNIFICATION**

To the fullest extent permitted by law, the Contractor shall waive any right of contribution against the Village and shall indemnify and hold harmless the Village and its officers, officials, employees, volunteers and agents from and against all claims, damages, losses and expenses, including, but not limited to, legal fees (attorney's and paralegal's fees, expert fees and court costs) arising out of or resulting from the performance of the Contractor's work, provided that any such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or injury to or destruction of property, other than the work itself, including the loss of use resulting therefrom, or is attributable to misuse or improper use of trademark or copyright-protected material or otherwise protected intellectual property, to the extent it is caused in whole or in part by any wrongful or negligent act or omission of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable. Such obligation shall not be construed to negate, abridge or otherwise reduce any other right to indemnity which the Village and its officers, officials, employees, volunteers and agents would otherwise have. The Contractor shall similarly protect, indemnify and hold and save harmless, the Village and its officers, officials, employees, volunteers and agents against and from any and all claims, costs, causes, actions and expenses, including, but not limited to, legal fees incurred by reason of the Contractor's breach of any of its obligations under, or the Contractor's default of, any provisions of this Contract. The indemnification obligations under this Section shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the Contractor or any subcontractor under workers' compensation or disability benefit acts or employee benefit acts.

**11. INSURANCE**

The Contractor shall, at the Contractor's expense, secure and maintain in effect throughout the duration of this Contract, insurance of the following kinds and limits set forth in this Section. The Contractor shall furnish "Certificates of Insurance" to the Village before beginning Work on the Project pursuant to this Contract. All insurance policies shall be written with insurance companies licensed to do business in the State of Illinois and having a rating of at least A according to the latest edition of the Best's Key Rating Guide; and shall include a provision preventing cancellation of the insurance policy unless thirty (30) days prior written notice is given to the Village. This provision shall also be stated on each Certificate of Insurance: "Should any of the above described policies be canceled before the expiration date, the issuing company shall mail fifteen thirty (30) days written notice to the certificate holder named to the left."

The limits of liability for the insurance required shall provide coverage for not less than the following amounts, or greater where required by law:

- (A) **Commercial General Liability:**
  - i. Coverage to include Broad Form Property Damage, Contractual and Personal Injury.
  - ii. Limits:

General Aggregate	\$ 2,000,000.00
Each Occurrence	\$ 1,000,000.00
Personal Injury	\$ 1,000,000.00
  - iii. Coverage for all claims arising out of the Contractor's operations or premises and anyone directly or indirectly employed by the Contractor.
  
- (B) **Workers' Compensation:**
  - i. Workers' Compensation insurance shall be provided in accordance with the provisions of the laws of the State of Illinois, including occupational disease provisions, for all employees who perform the Work pursuant to this Contract, and if work is subcontracted pursuant to the provisions of this Contract, the Contractor shall require each subcontractor similarly to provide workers' compensation insurance. In case employees engaged in hazardous work under this Contract are not protected under the Workers' Compensation Act, the Contractor shall provide, and shall cause each subcontractor to provide, adequate and suitable insurance for the protection of employees not otherwise provided.

(C) **Comprehensive Automobile Liability:**

i. Comprehensive Automobile Liability coverage shall include all owned, hired, non-owned vehicles, and/or trailers and other equipment required to be licensed, covering personal injury, bodily injury and property damage.

ii. Limits:

Combined Single Limit	\$1,000,000.00
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(D) **Umbrella:**

i. Limits:

Each Occurrence/Aggregate	\$ 5,000,000.00
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(E) The Village, its officers, employees, agents and volunteers shall be named as additional insureds on all insurance policies set forth herein except Workers' Compensation. The Contractor shall be responsible for the payment of any deductibles for said insurance policies. The coverage shall contain no special limitations on the scope of protection afforded to the Village, its officers, employees, agents, and volunteers.

(F) The Contractor understands and agrees that any insurance protection required by this Contract or otherwise provided by the Contractor, shall in no way limit the responsibility to indemnify, keep and save harmless, and defend the Village, its officers, employees, agents and volunteers as herein provided. The Contractor waives and agrees to require its insurers to waive its rights of subrogation against the Village and its officers, officials, employees, agents and volunteers.

**12. GUARANTY**

The Contractor warrants and guarantees that its Work performed under this Contract, and all workmanship, materials, equipment, and supplies performed, furnished, used, or installed under this Contract, shall be free from defects and flaws in workmanship or design; shall strictly conform to the requirements of this Contract; and shall be fit and sufficient for the purposes expressed in, or reasonably inferred from, this Contract. The Contractor further warrants and guarantees that the strength of all parts of all manufactured materials, equipment, and supplies shall be adequate and as specified and that the performance requirements of this Contract shall be fulfilled.

The Contractor shall, at no expense to the Village, correct any failure to fulfill the above guaranty that may appear at any time. In any event, the guaranty herein expressed shall not be sole and exclusive, and is additional to any other guaranty or warranty expressed or implied.

**13. STANDARD OF CARE.**

The Contractor shall endeavor to perform the Work pursuant to this Agreement Services with the same skill and judgment which can be reasonably expected from similarly situated contractors.

**14. AFFIDAVIT OR CERTIFICATE**

The Contractor shall furnish any affidavit or certificate in connection with the work covered by this Contract as required by law.

**15. NOTICES**

Any notice required to be given by this Contract shall be deemed sufficient if made in writing and sent by certified mail, return receipt requested, or personal service, or by facsimile or email transmission to the persons and addresses indicated below or to such addresses and persons as either party hereto shall notify the other party of in writing pursuant to the provisions of this Section:

**To the Village:**

Village Manager  
Village of Oak Park  
123 Madison Street  
Oak Park, Illinois 60302-4272  
Facsimile: (708) 358-5101  
Email: [villagemanger@oak-park.us](mailto:villagemanger@oak-park.us)

**To the Contractor:**

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

Mailing of such notice as and when above provided shall be equivalent to personal notice and shall be deemed to have been given at the time of mailing.

Notice of facsimile or email transmission shall be effective as of date and time of facsimile transmission, provided that the notice transmitted shall be sent on business days during business hours (9:00 a.m. to 5:00 p.m. Chicago time). In the event facsimile or email notice transmitted during non-business hours, the effective date and time of notice is the first hour of the first business day after transmission.

**16. AUTHORITY TO EXECUTE**

The individuals executing this Contract on behalf of the Contractor and the Village represent that they have the legal power, right, and actual authority to bind their respective parties to the terms and conditions of this Contract.

**17. EFFECTIVE DATE**

The effective date of this Contract reflected above and below shall be the last date of its execution by one of the parties set forth below.

**18. ENTIRE CONTRACT; APPROVAL OF SUBCONTRACTORS**

This Contract, including the documents incorporated by reference herein, sets forth the entire Contract of the parties with respect to the accomplishment of the Work. No right or interest in this Contract shall be assigned, in whole or in part, by either party without the prior written consent of the other party. The Village reserves the right to approve the use of subcontractors to complete any portion of the Work and to approve any applicable contract between the Contractor and a proposed subcontractor to perform any of the Work. This Contract shall be binding upon the parties and upon their respective heirs, executors, administrators, personal representatives, successors, and assigns, except as herein provided.

**19. INDEPENDENT CONTRACTOR**

The Contractor shall have the full control of the ways and means of performing the work referred to above and that the Contractor and its employees, representatives or subcontractors are not employees of the Village, it being specifically agreed that the Contractor bears the relationship of an independent contractor to the Village. The Contractor shall solely be responsible for the payment of all salaries, benefits and costs of supplying personnel for the Work.

**20. CONTRACT BOND**

The Contractor, before commencing the work under this Contract, shall furnish a Contract Bond. The Contract Bond shall remain in effect during the term of this Agreement. The Contract Bond shall be in the amount of twenty five thousand dollars (\$25,000.00) as security for the faithful performance of its obligations pursuant to the Contract Documents and as security for the payment of all persons performing labor and furnishing materials in connection with the Contract Documents. Such bond shall be on standard AIA Documents, shall be issued by a surety satisfactory to the Village, and shall name the Village as a primary co-obligee. The Contract Bond shall become a part of the Contract Documents. The failure of Contractor to supply the required Contract Bond within ten (10) days after the Notice of Award or within such extended period as the Village may grant if the Contract Bond does not meet its approval shall constitute a default, and the Village may either award the Contract to the next lowest responsible proposer or re-advertise for proposals. A charge against the defaulting Contractor may be made for the difference between the amount of the Contractor's Proposal and the amount for which a contract for the work is subsequently executed, irrespective of whether the amount thus due exceeds the amount of the proposal guarantee.



**21. GOVERNING LAW AND VENUE**

This Contract shall be governed by the laws of the State of Illinois both as to interpretation and performance. Venue for any action pursuant to this Contract shall be in the Circuit Court of Cook County, Illinois.

**22. AMENDMENTS AND MODIFICATIONS**

This Contract may be modified or amended from time-to-time provided, however, that no such amendment or modification shall be effective unless reduced to writing and duly authorized and signed by the authorized representative of the Village and the authorized representative of the Contractor.

**23. NON-WAIVER OF RIGHTS**

No failure of either party to exercise any power given to it hereunder or to insist upon strict compliance by the other party with its obligations hereunder, and no custom or practice of the parties at variance with the terms hereof, nor any payment under this Contract shall constitute a waiver of either party's right to demand exact compliance with the terms hereof.

**24. CONFLICT**

In case of a conflict between any provision(s) of the Village's Request for Proposals or the Contractor's Proposal and this Contract, this Contract and the Village's Request for Proposals shall control to the extent of such conflict.

**25. HEADINGS AND TITLES**

The headings and titles provided in this Contract are for convenience only and shall not be deemed a part of this Contract.

**26. COOPERATION OF THE PARTIES**

The Village and the Contractor shall cooperate in the provision of the Work to be provided by Contractor pursuant to this Contract and in compliance with applicable laws, including, but not limited to, the Illinois Freedom of Information Act, 5 ILCS 140/1 *et seq.* ("FOIA"), and the provision of any documents and information pursuant to a FOIA request. The Contractor shall provide any and all documents to the Village pursuant to a FOIA request at no cost to the Village.

**27. COUNTERPARTS; FACSIMILE OR PDF SIGNATURES**

This Contract may be executed in counterparts, each of which shall be considered an original and together shall be one and the same Contract. A facsimile or pdf copy of this Agreement and any signature(s) thereon will be considered for all purposes as an original.

**28. CERTIFIED PAYROLL**

Contractor shall be solely responsible to maintain accurate records reflecting its payroll for its employees who perform any of the Work for the Village pursuant to this Contract and shall submit certified payroll records to the Village's Director of Public Works at any time during the term of this Contract. Contractor shall provide said certified payroll records within seven (7) days upon the request of the Director of Public Works.

**29. LIVING WAGE/MINIMUM WAGE**

The Contractor shall comply with the Village's living wage requirements as set forth in Section 2-6-20 ("Living Wage") of the Oak Park Village Code, as amended. The Contractor shall further comply with the Cook County Minimum Wage Ordinance, codified as Sections 42-7 through 42-19 of the Cook County Code, as amended, and the minimum wage requirements of the State of Illinois set forth in 820 ILCS 105/4, as amended. The Contractor shall pay its employees the greater of the Village's living wage, the minimum wage set forth in the Cook County Minimum Wage Ordinance or the minimum wage set forth in 820 ILCS 150/4 as applicable during the term of this Contract. The Contractor shall provide any and all certified payroll records pursuant to Section 28 of this Contract above in order to determine whether the Contractor is meeting said requirement.

**IN WITNESS WHEREOF**, the parties hereto have caused this Contract to be signed by their duly authorized representatives on the days and dates set forth below.

**VILLAGE OF OAK PARK**

**CONTRACTOR**

\_\_\_\_\_  
By: Lisa Shelley  
Its: Interim Village Manager

\_\_\_\_\_  
By:  
Its:

Date: \_\_\_\_\_, 2021

Date: \_\_\_\_\_, 2021

**ATTEST**

**ATTEST**

\_\_\_\_\_  
By: Christina Waters  
Its: Village Clerk

\_\_\_\_\_  
By:  
Its:

Date: \_\_\_\_\_, 2021

Date: \_\_\_\_\_, 2021

## APPENDIX A

### METERING EQUIPMENT

A PRODUCT SHEET OF NEPTUNE TECHNOLOGY GROUP

# T-10 Meter

SIZES  $\frac{5}{8}$ ",  $\frac{3}{4}$ ", AND 1"

Every T-10® water meter meets or exceeds the latest AWWA C700 Standard. Its nutating disc, positive displacement principle has been time-proven for accuracy and dependability since 1892, ensuring maximum utility revenue.

## Construction

The T-10 water meter consists of three major assemblies: a register, a lead free, high-copper alloy maincase, and a nutating disc measuring chamber.

The T-10 meter is available with a variety of register types. For reading convenience, the register can be mounted in one of four positions on the meter.

The corrosion-resistant, lead-free, high-copper alloy maincase will withstand most service conditions; internal water pressure, rough handling, and in-line piping stress.

The innovative floating chamber design of the nutating disc measuring element is unaffected by meter position or in-line piping stresses while the unique chamber seal extends the low-flow accuracy by sealing the chamber outlet port to the maincase outlet port. The nutating disc measuring element utilizes corrosion-resistant materials throughout and a thrust roller to minimize wear.

## Warranty

Neptune® provides a limited warranty for performance, materials, and workmanship. See warranty statement for details.

## Guaranteed Systems Compatibility

All T-10 water meters are guaranteed adaptable to our ARB®V, ProRead™ (ARB VI) AutoDetect, ProCoder™, E-CODER® (ARB VII), E-CODER®)R900i™, E-CODER®)R450i™, ProCoder™)R900i™, TRICON®/S, TRICON/E®3, and Neptune meter reading systems without removing the meter from service.

## Systems Compatibility

Adaptability to all present and future systems for flexibility is available only with Neptune's ARB® Utility Management Systems™.



## KEY FEATURES

### REGISTER

Magnetic-driven, low-torque registration ensures accuracy

Impact-resistant register

High-resolution, low-flow leak detection

Bayonet-style register mount allows in-line serviceability

Tamperproof seal pin deters theft

Date of manufacture, size, and model stamped on dial face

### LEAD FREE MAINCASE

Made from lead free, high-copper alloy

NSF/ANSI 372, NSF/ANSI 61

Lifetime guarantee

Resists internal pressure stresses and external damage

Handles in-line piping variations and stresses

Lead free, high-copper alloy provides residual value vs. plastic or composite

Electrical grounding continuity

### NUTATING DISC MEASURING CHAMBER

Positive displacement

Widest effective flow range for maximum revenue

Proprietary polymer materials maximize long-term accuracy

Floating chamber design is unaffected by meter position or in-line piping stresses

## Specifications

- NSF/ANSI 372, NSF/ANSI 61
- National Type Evaluation Program (NTEP) certification

### Application

- Cold water measurement of flow in one direction in residential service applications

### Maximum Operating Water Pressure

- 150 psi (1034 kPa)

### Maximum Operating Water Temperature

- 80°F

### Measuring Chamber

- Nutating disc technology design made from proprietary synthetic polymer

## Options

### Sizes

- $\frac{5}{8}$ ",  $\frac{3}{4}$ " x  $\frac{3}{4}$ "
- $\frac{3}{4}$ ",  $\frac{1}{2}$ " SL,  $\frac{3}{4}$ " x 1"
- 1", 1" x 1 $\frac{1}{4}$ "

### Units of Measure:

- U.S. gallons, imperial gallons, cubic feet, cubic metres

### Register Types

- Direct reading: bronze box and cover (standard)

### Remote Reading:

- ProRead, ProCoder, E-CODER, E-CODER)R900i, E-CODER)R450i, ProCoder™)R900i™, TRICON/S, TRICON/E3

- Reclaim

### Bottom Caps

- Synthetic polymer ( $\frac{5}{8}$ " only)
- Cast iron
- Lead free, high-copper alloy

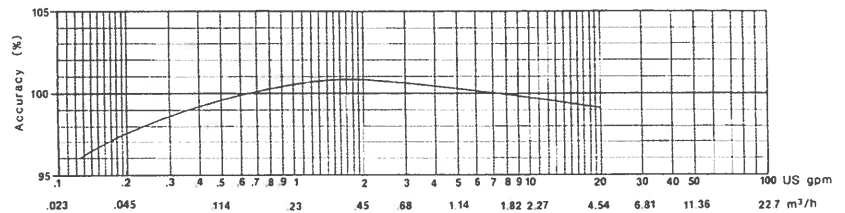
### Connections

- Lead free, high-copper alloy, straight or bent

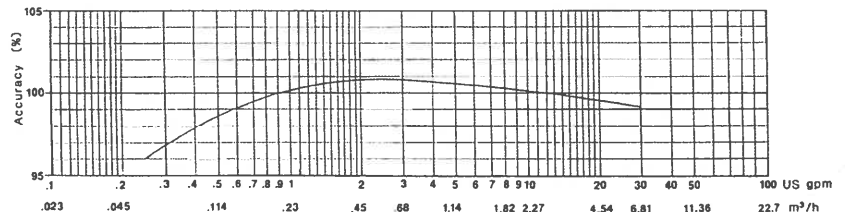
### Environmental Conditions

- Operating temperature: +33° F to +149° F (0° C to +65° C)
- Storage temperature: +33° F to +158° F (0° C to +70° C)

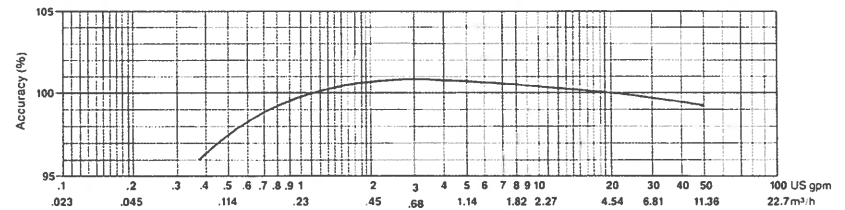
## $\frac{5}{8}$ " ACCURACY



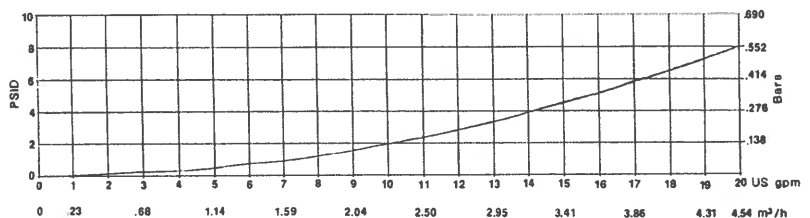
## $\frac{3}{4}$ " ACCURACY



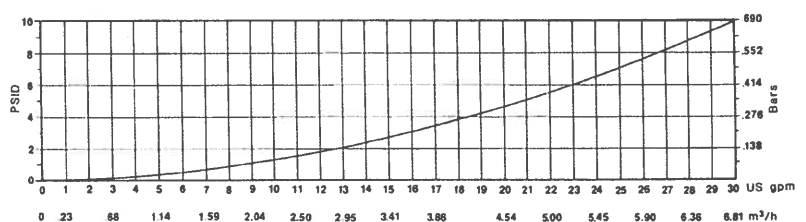
## 1" ACCURACY



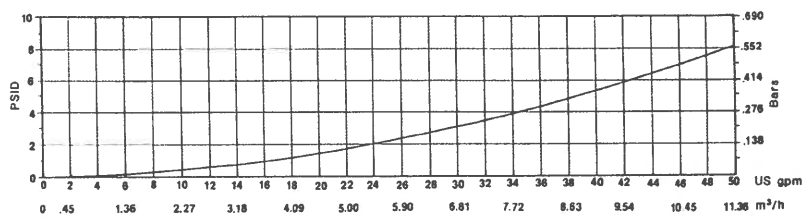
## $\frac{5}{8}$ " PRESSURE LOSS



## $\frac{3}{4}$ " PRESSURE LOSS



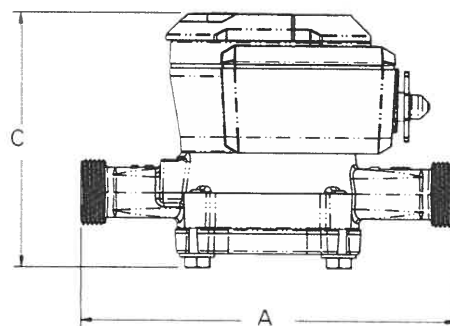
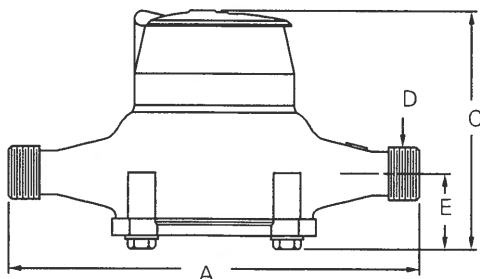
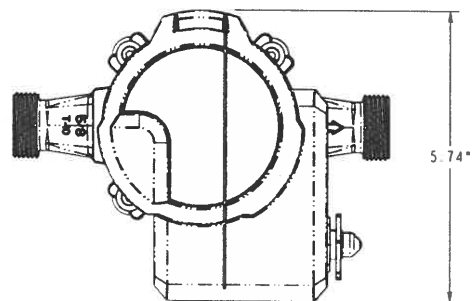
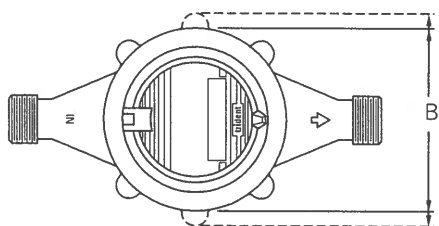
## 1" PRESSURE LOSS



These charts show typical meter performance. Individual results may vary.

## Dimensions

Meter Size	A	B	C					D-	E-	Weight lbs/kg
	in/ mm	in/ mm	Std. in/mm	ARB in/mm	ProCoder™ or E-CODER®	ProCoder™) R900i™ or ProCoder™) R450i™	E-CODER®) R900i™ or E-CODER®) R450i™	NPSM Thread	in/ mm	
½"	7½ 191	3⅝ 92	4½ 111	5¼ 133	5¼ 133	5¼ 133	5¼ 133	¾" - 14"	1½ 38	3¼ 1.4
½" x ¾"	7½ 191	3⅝ 92	4½ 111	5¼ 133	5¼ 133	5¼ 133	5¼ 133	1" - 11½"	1½ 38	3⅝ 1.5
Pre 2011 ¾"	7½ 191	3⅝ 92	4⅞ 124	5½ 146	5½ 139	5½ 139	5½ 139	¾" - 14"	1⅞ 41	3¾ 1.7
Pre 2011 ¾" x ¾"	7½ 191	3⅝ 92	4⅞ 124	5½ 146	5½ 139	5½ 139	5½ 139	1" - 11½"	1⅞ 41	4 1.8
¾"	9 229	4⅝ 111	5½ 140	6¼ 159	6¼ 159	6¼ 159	6¼ 159	1" - 11½"	1⅞ 48	6 2.7
¾" SL	7½ 191	4⅝ 111	5½ 140	6¼ 159	6¼ 159	6¼ 159	6¼ 159	1" - 11½"	1⅞ 48	5½ 2.5
¾" x 1"	9 229	4⅝ 111	5½ 140	6¼ 159	6¼ 159	6¼ 159	6¼ 159	1¼" - 11½"	1⅞ 48	6½ 2.9
1"	10¾ 273	6½ 165	6⅝ 162	7 178	7 178	7 178	7 178	1¼" - 11½"	2⅞ 54	9¾ 4.4
1" x 1¼"	10¾ 273	6½ 165	6⅝ 162	7 178	7 178	7 178	7 178	1½" - 11½"	2⅞ 54	10¼ 4.6



## Operating Characteristics

Meter Size	Normal Operating Range @ 100% Accuracy (+/- 1.5%)	AWWA Standard	Low Flow @ 95% Accuracy
5/8"	1/2 to 20 US gpm 0.11 to 4.55 m <sup>3</sup> /h	1 to 20 US gpm 0.23 to 4.5 m <sup>3</sup> /h	1/8 US gpm 0.03 m <sup>3</sup> /h
3/4"	3/4 to 30 US gpm 0.17 to 6.82 m <sup>3</sup> /h	2 to 30 US gpm 0.45 to 6.8 m <sup>3</sup> /h	1/4 US gpm 0.06 m <sup>3</sup> /h
1"	1 to 50 US gpm 0.23 to 11.36 m <sup>3</sup> /h	3 to 50 US gpm 0.68 to 11.4 m <sup>3</sup> /h	3/8 US gpm 0.09 m <sup>3</sup> /h

## Registration

ProRead Registration (per sweep hand revolution)		5/8"	3/4" & 1"
10	US Gallons	✓	✓
10	Imperial Gallons	✓	✓
1	Cubic Foot	✓	✓
0.1	Cubic Metre	✓	✓
Register Capacity ProRead, ProCoder, and E-CODER		5/8"	3/4" & 1"
10,000,000	US Gallons	✓	✓
10,000,000	Imperial Gallons	✓	✓
1,000,000	Cubic Feet	✓	✓
100,000	Cubic Metres	✓	✓
ProCoder and E-CODER High Resolution (8-digit reading)		5/8"	3/4" & 1"
0.1	US Gallons	✓	✓
0.1	Imperial Gallons	✓	✓
0.01	Cubic Feet	✓	✓
0.001	Cubic Metres	✓	✓

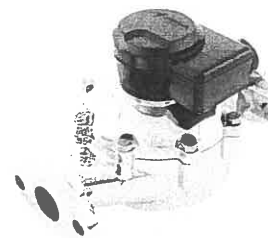




A PRODUCT SHEET OF NEPTUNE TECHNOLOGY GROUP

# T-10<sup>®</sup> METER

SIZES: 1 1/2" and 2"



## Construction

Every Neptune<sup>®</sup> T-10<sup>®</sup> water meter meets or exceeds the latest AWWA C700 Standard. Its nutating disc, positive displacement principle has been time-proven for accuracy and dependability since 1892, ensuring maximum utility revenue.

The T-10 water meter consists of three major assemblies: a register, a lead free, high-copper alloy maincase, and a nutating disc measuring chamber.

The T-10 meter is available with a variety of register types. For reading convenience, the register can be mounted in one of four positions on the meter.

The corrosion-resistant, lead-free, high-copper alloy maincase will withstand most service conditions: internal water pressure, rough handling, and in-line piping stress.

The innovative floating chamber design of the nutating disc measuring element protects the chamber from frost damage while the unique chamber seal extends the low-flow accuracy by sealing the chamber outlet port to the maincase outlet port. The nutating disc measuring element utilizes corrosion-resistant materials throughout and a thrust roller to minimize wear.

## Warranty

Neptune provides a limited warranty for performance, materials and workmanship. See warranty statement for details.

## KEY FEATURES

### Register

- Magnetic-driven, low-torque registration ensures accuracy
- Impact-resistant register
- High-resolution, low-flow leak detection
- Bayonet-style register mount allows in-line serviceability
- Tamperproof seal pin deters theft
- Date of manufacture, size, and model stamped on dial face

### Lead Free Maincase

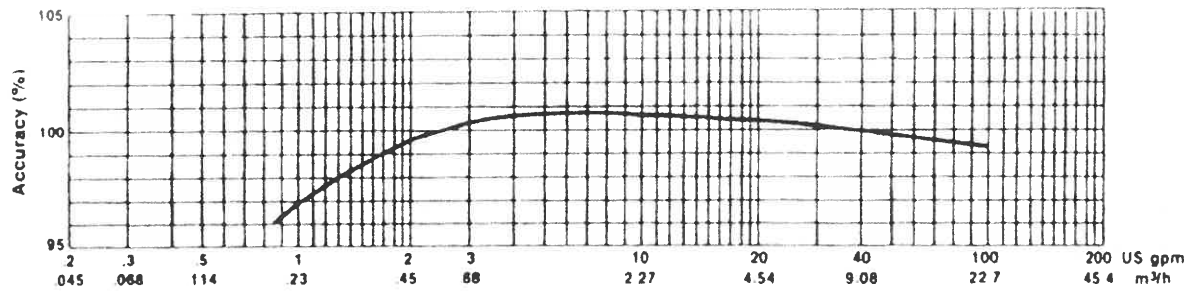
- Made from lead free, high-copper alloy
- NSF/ANSI 61 Certified
- NSF/ANSI 372 Certified
- Lifetime guarantee
- Resists internal pressure stresses and external damage
- Handles in-line piping variations and stresses
- Lead free, high-copper alloy provides residual value vs. plastic

### Electrical grounding continuity

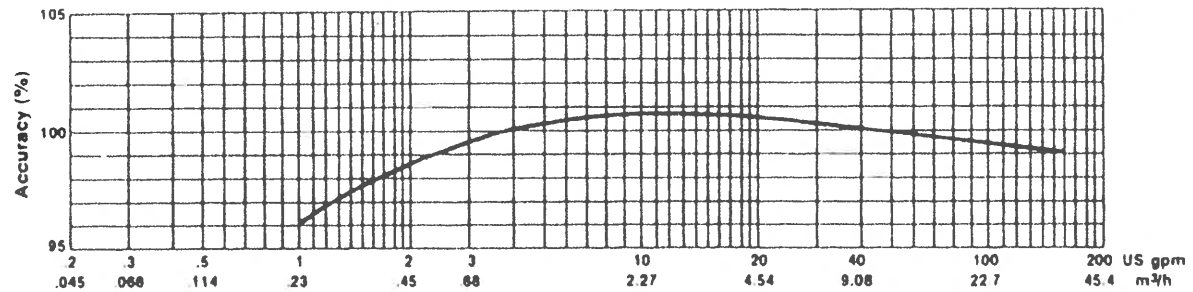
### Nutating Disc Measuring Chamber

- Positive displacement
- Widest effective flow range for maximum revenue
- Proprietary polymer materials maximize long-term accuracy
- Floating chamber design is unaffected by meter position or in-line piping stresses

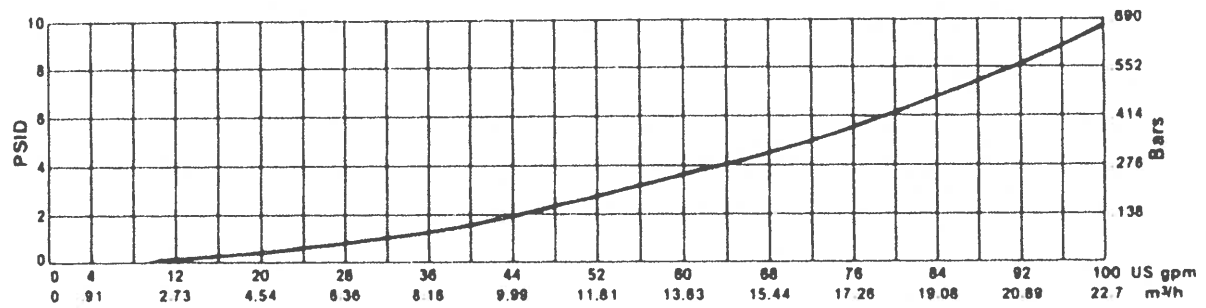
### 1 1/2" Accuracy



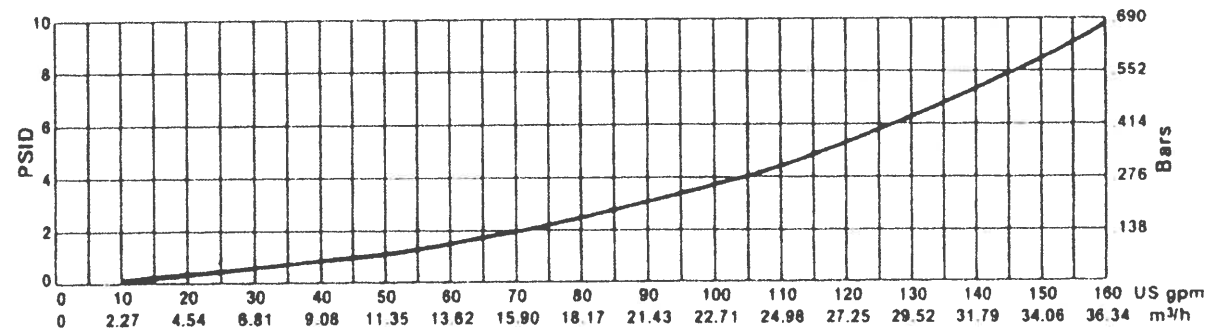
### 2" Accuracy



### 1 1/2" Pressure Loss



### 2" Pressure Loss



These charts show typical meter performance. Individual results may vary.

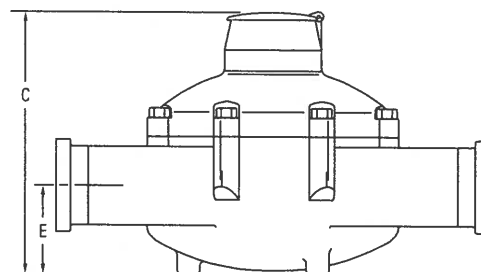
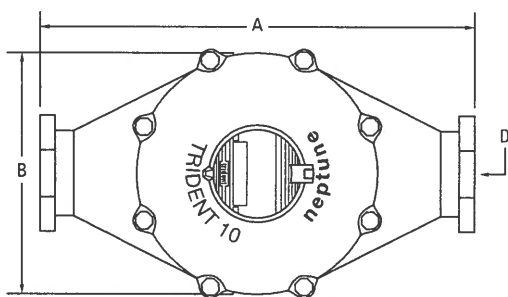
## Operating Characteristics

Meter Size	Normal Operating Range @100% Accuracy (±1.5%)	AWWA Standard	Low Flow @ 95% Accuracy
1 1/2"	2 to 100 US gpm 0.46 to 22.73 m³/h	5 to 100 US gpm 1.1 to 22.7 m³/h	3/4 US gpm 0.17 m³/h
2"	2 1/2 to 160 US gpm 0.57 to 36.36 m³/h	8 to 160 US gpm 1.8 to 36.3 m³/h	1 US gpm 0.23 m³/h

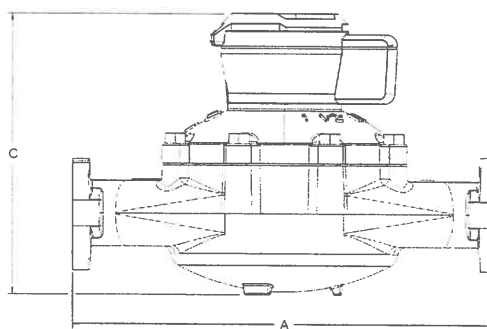
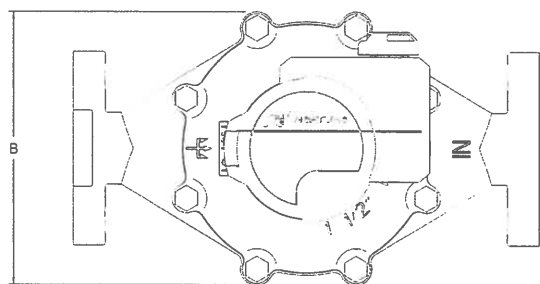
## Dimensions

Meter Size	A in/mm	B in/mm	C-Std. in/mm	C-ARB in/mm	C- E-CODER®) R900i™ or ProCoder™) R900i™	D- Threads per inch	D- Thread Type	E in/mm	Weight lbs/kg
1 1/2" Screw End	12 5/8 321	8 1/16 205	8 1/8 206	8 13/16 220.3	8 3/8 213	11 1/2	1 1/2 NPT	2 9/16 65	31 14.1
1 1/2" Flanged End	13 330	8 1/16 205	8 1/8 206	8 13/16 220.3	8 3/8 213	—	—	2 9/16 65	35 15.9
2" Screw End	15 1/4 387	9 7/16 240	9 5/16 237	9 15/16 248.4	9 1/2 241	11 1/2	2" NPT	3 1/8 79	40 18.1
2" Flanged End	17 432	9 7/16 240	9 5/16 237	9 15/16 248.4	9 1/2 241	—	—	3 1/8 79	44 20.0

T-10 With Standard Register



T-10 With E-CODER®)R900i™ or ProCoder™)R900i™ Pit Register



## Guaranteed Systems Compatibility

All T-10 meters are guaranteed adaptable to our ARB<sup>®</sup>V, ProRead<sup>™</sup> (ARB VI), ProCoder<sup>™</sup>, E-CODER<sup>®</sup> (ARB VII), E-CODER<sup>®</sup>)R900i<sup>™</sup>, E-CODER<sup>®</sup>)R450i<sup>™</sup>, ProCoder<sup>™</sup>)R900i<sup>™</sup>, TRICON<sup>®</sup>/S, TRICON/E<sup>3</sup>, and Neptune ARB<sup>®</sup> Utility Systems<sup>™</sup> without removing the meter from service.

## Specifications

### Certification

- NSF/ANSI 61, NSF/ANSI 372

### Application

- Cold water measurement of flow in one direction

### Maximum Operating Water Pressure

- 150 psi (1,034 kPa)

### Maximum Operating Water Temperature

- 80°F

### Measuring Chamber

- Nutating disc technology design made from proprietary synthetic polymer

## Options

### Sizes

- 1 1/2" flanged or threaded end
- 2" flanged or threaded end

### Units of Measure

- U.S. gallons, imperial gallons, cubic feet, cubic metres

### Register Types

- Direct reading: Bronze box and cover
- Remote reading: ProRead Absolute Encoder, ProCoder, E-CODER, E-CODER)R900i, E-CODER)R450i, ProCoder<sup>™</sup>)R900i<sup>™</sup>, TRICON/S, TRICON/E3

- Reclaim

### Measuring Chamber

- Synthetic polymer

### Companion Flanges

- Lead free, high-copper alloy

### Environmental Conditions

- Operating temperature: +33°F to +149°F (0°C to +65°C)
- Storage temperature: +33°F to +158°F (0°C to +70°C)

### Test Ports

- 1" (optional)

## Registration

ProRead Registration (per sweep hand revolution)		1 1/2"	2"
100	US Gallons	✓	✓
100	Imperial Gallons	✓	✓
10	Cubic Feet	✓	✓
1	Cubic Metre		✓
.01	Cubic Metre	✓	
Register Capacity ProRead, ProCoder, and E-CODER		1 1/2"	2"
100,000,000	US Gallons	✓	✓
100,000,000	Imperial Gallons	✓	✓
10,000,000	Cubic Feet	✓	✓
100,000	Cubic Metres	✓*	
1,000,000	Cubic Metres	✓**	✓
E-CODER High Resolution (8-digit reading)		1 1/2"	2"
1	US Gallons	✓	✓
1	Imperial Gallons	✓	✓
0.1	Cubic Feet	✓	✓
0.01	Cubic Metres		✓
0.001	Cubic Metres	✓	
ProCoder High Resolution (8-digit reading)		1 1/2"	2"
1	US Gallons	✓	✓
1	Imperial Gallons	✓	✓
0.1	Cubic Feet	✓	✓
0.01	Cubic Metres	✓	✓

\*ProRead and E-CODER only \*\*ProCoder only



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A PRODUCT SHEET OF NEPTUNE TECHNOLOGY GROUP

# E-CODER® Solid State Absolute Encoder



The E-CODER® is Neptune's high-resolution solid state absolute encoder register. The E-CODER features a custom integrated-circuit design that digitally encodes the rotation of the measuring chamber, providing "absolute" registration with no internal battery requirement. The E-CODER functions in two modes: E-CODER BASIC and E-CoderPLUS. The E-CODER BASIC mode functionality is the same as ProRead™ (ARB® VI), featuring programmability up to a 10-digit ID number, three user characters, and 3-6 digit meter reading. In addition to the meter reading, the E-CODER provides a visual readout on rate of flow every twelve seconds when the LCD display is activated. When connected to Neptune® R900®, R450™, or cellular MIU (CMIU™), the E-CODER automatically operates in E-CoderPLUS mode, providing a high-resolution, 8-digit remote meter reading, and value-added features including leak, tamper, and reverse flow detection. True point-of-use leak detection is provided by monitoring a 24-hour period in fifteen-minute intervals. Tamper detection is provided by reverse flow detection and monitoring the number of days of zero flow over the previous 35 days.

The E-CoderPLUS features are communicated through the E-CODER protocol, allowing host software platforms to interpret the data and pass the information directly to billing packages, CIS screens, and operational and maintenance reports. The E-CoderPLUS features enhance customer service and improve operational efficiencies for water utilities.

The E-CODER is available in two different configurations – inside set meters and pit set meters. For inside set applications, the E-CODER is housed in our plastic encoder register housing with terminal screws. For pit set applications, the E-CODER is housed in a glass lens and copper can enclosure with factory-potted wire connections.

## Warranty

Neptune provides a 10-year limited warranty with respect to its E-CODER solid state absolute encoder register for performance, materials, and workmanship.

## KEY FEATURES

- "Absolute" 9-digit meter reading on display
- Up to 8-digit remote meter reading
- Battery-free functionality
- Pit set version: roll-sealed copper shell and glass lens
- Inside set version: plastic enclosure
- True point-of-use leak detection\*
- Tamper detection\*
- Reverse flow detection\*
- LCD leak indicators
- Directional flow indicator
- Rate of flow on LCD displays unaffected by meter position or in-line piping stresses

## KEY BENEFITS

- Enhanced "customer care"
- Leak history/diagnostics
- Proactive leak notification
- Increased operational efficiencies
- Work order reduction for high water bill inquiries
- Prioritization of meter maintenance
- Drought management
- Reduction of water loss through proactive notification of water leaks
- Tamper management
- Identification and prioritization of potential tamper situations

\* When connected to Neptune R900 or R450 RF MIUs.

## Options

### Sizes

- Available for all sizes and makes of current Neptune meters

### Electronic Accessory Equipment

- R900 Wall and Pit RF MIUs
- R450 Wall and Pit RF MIUs
- Cellular Wall and Pit MIUs

### Data Collection Systems

- Pocket ProReader
- Advantage
- CE5320
- MRX920™
- R900® Gateways

### Units of Measure

- US Gallons, Cubic Feet, Imperial Gallons, Cubic Metres

9-digit local registration

8-digit remote registration

4-8 digits can be communicated for billing

## Technical Specifications

### Materials

- Inside Set Housing: polycarbonate
- Pit Set Housing: copper shell and glass lens
- Connecting wire: 3-lead #22 AWG
- Remote receptacles: ABS, nylon, and polycarbonate

### Distance

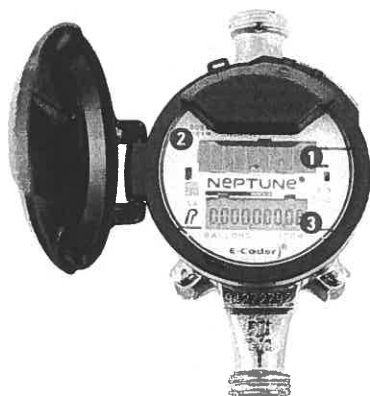
- A single register may be located with up to 500 feet (152 m) of wire from receptacle or MIU.
- Two networked registers can be located with up to 300 feet (91 m) of wire from receptacle or MIU.

### Environmental Conditions

- Operating temperature: 15°F to 149°F (-10°C to 65°C)
- Storage temperature: -40°F to +158°F (-40°C to +70°C)
- Operating humidity: 0 to 100% (pit version)

### Register

- Warranty: 10 years



- 1 Solar Panel
- 2 Date of Manufacture
- 3 LCD Display

	<b>FLOW INDICATOR</b> Shows the direction of flow through the meter: ON Water in use. OFF Water not in use. Flashing Water is running slowly. (-) Reverse flow. (+) Forward flow.
	<b>LEAK INDICATOR</b> Displays a possible leak: OFF No leak indicated. Flashing Intermittent leak indicates that water has been used for at least 50 of the 96 15-minute intervals during the previous 24-hour period. On Continuously Indicates water use for all 96 15-minute intervals during the previous 24-hour period.
<b>RATE</b>	<b>RATE OF FLOW</b> Average flow rate is displayed every twelve (12) seconds on LCD display.
	<b>LCD DISPLAY</b> Nine-digit LCD displays the meter reading in billing units of measure: U.S. gallons, cubic feet, Imperial gallons, or cubic metres. 1 E-CODER Basic Reading/Customary 6-digit remote reading 2 Customary sweep hand digits 3 E-CoderPLUS Reading (8-digit remote reading)



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# Capture Ultra-Low Flows and Monitor Flow Direction

Neptune® ProCoder™)R900i™



The Neptune® ProCoder™)R900i™ combination absolute encoder register/radio frequency meter interface unit (RF MIU) makes it simple to collect metering data using multiple modes simultaneously and features a high-resolution, mechanical sweep hand to detect ultra-low flows as well as monitor direction of flow. Its interleaved mobile and high-power fixed network messages allow for simple migration from walk-by to mobile to fixed network reading – and back again – without site visits or reprogramming. Your utility can also review an account's consumption by the hour with 96 days of profile information, along with alerts for leak or backflow. Proactively identify and resolve customer issues – heading off high bill complaints, reducing delinquent payments, and eliminating write-offs.

- Easy to install/no programming required
- Interleaved mobile and high-power fixed network messages
- Read in walk-by, mobile, fixed modes simultaneously
- 96 days of hourly account history
- Leak, tamper, reverse flow detection

## Specifications

### Electrical Specifications

- MIU Power: Lithium battery with capacitor

### Transmitter Specifications:

- Two-way MIU
- Transmit Period (interleaved mobile and fixed network messages):
  - Standard mobile message every 14 seconds at 100 mW
  - Standard fixed network message every 7½ minutes at 1 Watt
- FCC Verification: Part 15.247
  - Transmitter Channels: 50 frequency-hopping, spread-spectrum
  - Channel Frequency: 910 to 920 MHz
- Encoder Register Reading Interval:
  - Every 15 minutes
- Data Logging Interval:
  - 96 days of hourly data

### Environmental Conditions

- Operating Temperature: -22°F to +149°F (-30°C to +65°C)
- Storage Temperature: -40°F to +158°F (-40°C to +70°C)
- Operating Humidity:
  - Inside Set: 0 to 95%, condensing
  - Pit Set: 100% submersible

### Materials

- Register Housing:
  - Inside Set: plastic polycarbonate
  - Pit Set: roll-sealed copper shell
- Lens:
  - Inside Set: plastic
  - Pit Set: glass

### Antennas

- Standard internal antenna
- Optional through-the-lid antenna
- 18" coax
- 6' coax
- 20' coax

## Resolution

### Register Capacity

	Size	G	ft³	m³
T-10 <sup>3</sup> (Includes disc side of TRU/FLO <sup>4</sup> )	⅝", ¾", 1"	10,000,000	1,000,000	100,000
T-10 (Includes disc side of HPPIII)	1.5", 2"	100,000,000	10,000,000	1,000,000
HP Turbine (Includes FS Turbine, HPPIII, Turbine Side of TRU/FLO)	1.5", 2", 3", 4"	100,000,000	10,000,000	1,000,000
HP Turbine (Includes FS Turbine, HPPIII, Turbine Side of TRU/FLO)	6", 8", 10"	1,000,000,000	100,000,000	10,000,000

### High Resolution (8-digit reading)

	Size	G	ft³	m³
T-10 (Includes disc side of TRU/FLO)	⅝", ¾", 1"	0.1	0.01	0.001
T-10 (Includes disc side of HPPIII)	1.5", 2"	1	0.1	0.01
HP Turbine (Includes FS Turbine, HPPIII, Turbine Side of TRU/FLO)	1.5", 2", 3", 4"	1	0.1	0.01
HP Turbine (Includes FS Turbine, HPPIII, Turbine Side of TRU/FLO)	6", 8", 10"	10	1	0.1

### ProCoder Registration (Per Sweep Hand Revolution)

Type	Size	G	ft³	m³
T-10	⅝", ¾", 1"	0.1	0.01	0.001
T-10 (Includes disc side of HPPIII)	1.5", 2"	1	0.1	0.01
HP Turbine (Includes FS Turbine, HPPIII, Turbine Side of TRU/FLO)	1.5", 2", 3", 4"	10	1	0.1
HP Turbine (Includes FS Turbine, HPPIII, Turbine Side of TRU/FLO)	6", 8", 10"	100	10	1

## Options

### Compatibility

- Available for ⅝"-2" T-10<sup>3</sup> water meters
- Handhelds with R900<sup>4</sup> Belt Clip Transceiver - mobile RF
- MRX920™ - mobile RF
- R900<sup>2</sup> Gateways - fixed network RF

### Units of Measure

- U.S. Gallons, Cubic Feet, Imperial Gallons, Cubic Metres

## Warranty

- Neptune provides a limited warranty for performance, materials, and workmanship. See warranty statement for details.



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A PRODUCT SHEET OF NEPTUNE TECHNOLOGY GROUP

## E-CODER®)R900i™

### Protect And Expand Your Technology Investments

Neptune® designed the R900® System to make it easy for your utility – installation, everyday use, and expansion for the future without stranded assets. The E-CODER®)R900i™ combination absolute encoder register/radio frequency meter interface unit (RF MIU) is a perfect example of all of the above. Not only does it work with past generations of meters and meter reading systems, but seamless integration is built into this single-unit endpoint itself, providing two-way communications of advanced metering data. The E-CODER)R900i's interleaved mobile and high-power fixed network messages allow for simple migration from mobile to fixed network reading without site visits or reprogramming.

### Streamline Operations And Manage Resources

In addition to eliminating the need for programming, the E-CODER)R900i has no external wires, making installation easier, faster, and less costly; plus it reduces potential vandalism or tamper. As with the rest of the R900 System, the design of the unit is intuitive and user-friendly so that minimal training is required for operation. It's designed to help manage time, labor, and other resources. The radio frequency transmission of the E-CODER)R900i can save your utility significant amounts of time in terms of both meter reading and billing, and provide flexibility to reallocate personnel to different tasks or departments depending on your changing workforce needs.

### Do More With Detailed, Actionable Data

The types of data your utility can generate through the E-CODER)R900i can take you far beyond a simple meter reading for a monthly bill. Hourly consumption profile information over an account's last 96 days, along with alerts for leak or backflow, help to proactively identify and resolve customer issues – heading off high bill complaints, reducing delinquent payments, and eliminating write-offs. Using Neptune® 360™ host software, your utility can leverage detailed data from the E-CODER)R900i to balance water produced versus water consumed, group accounts for District Metered Area analysis, and track and manage Non-Revenue Water. From increasing efficiencies to pinpointing possible tamper or water theft to aiding customer service, the data supplied by the E-CODER)R900i can help your utility make better, more confident decisions.



### KEY BENEFITS

#### Facilitates Migration to AMI

- 1 Watt fixed network message reduces infrastructure costs
- Interleaved mobile and fixed network messages facilitate migration without changing the "modes" in the MIU

#### Reduces Non-Revenue Water

- Provides leak history/diagnostics
- Enables proactive leak notification
- Provides hourly consumption data
- Improves meter reading accuracy
- Eliminates estimated reads

#### Identifies Potential Theft

- Tamper detection
- Reverse flow detection
- Identifies significant periods of zero consumption

#### Simplifies Installation Process

- Easy to install/no programming required
- No external wires
- Reduces labor cost
- Reduces potential wire vandalism and damage

## Technical Specifications

### Electrical Specifications

- MIU power: Lithium battery with capacitor

### Transmitter Specifications

- Two-way MIU
- Transmit period (interleaved mobile and fixed network messages):
  - Standard mobile message every 14 seconds at 100 mW
  - Standard fixed network message every 7½ minutes at 1 Watt
- FCC verification: Part 15.247:
  - Transmitter channels: 50; frequency-hopping, spread-spectrum
  - Channel frequency: 910 to 920 MHz

- Encoder register reading interval:
  - Every 15 minutes
- Data logging interval:
  - 96 days of hourly data

### Environmental Conditions

- Operating temperature:
  - 22°F to +149°F (-30°C to +65°C)
- Storage temperature:
  - 40°F to +158°F (-40°C to +70°C)
- Operating humidity:
  - Inside set - 0 to 95%, condensing
  - Pit set - 100% submersible

### Materials

- Register housing:
  - Inside set: plastic polycarbonate
  - Pit set: roll-sealed copper shell

- Lens:
  - Inside set: plastic
  - Pit set: glass

### Antennas

- Standard internal antenna
- Optional through-the-lid antenna:
  - 18" Coax
  - 6' Coax
  - 20' Coax

## Options

### Compatibility

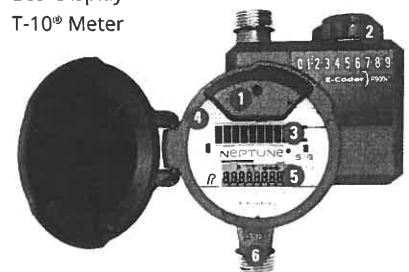
- Available for all sizes and makes of current Neptune meters
- Handhelds with R900<sup>+</sup> Belt Clip Transceiver - mobile RF
- MRX920™ - mobile RF
- R900<sup>+</sup> Gateways - fixed network RF

Units of Measure: U.S. Gallons, Cubic Feet, Imperial Gallons, Cubic Metres

## Warranty

- 20 years (10/10); Neptune provides a limited warranty for performance, materials, and workmanship. See warranty statement for details.

- 1 Internal Antenna
- 2 Optional Antenna Port
- 3 Solar Panel
- 4 Date of Manufacture
- 5 LCD Display
- 6 T-10<sup>®</sup> Meter



	<b>FLOW INDICATOR</b> Shows the direction of flow through the meter: ON Water in use. OFF Water not in use. Flashing Water is running slowly. (-) Reverse flow. (+) Forward flow.
	<b>LEAK INDICATOR</b> Displays a possible leak: OFF No leak indicated. Flashing Intermittent leak indicates that water has been used for at least 50 of the 96 15-minute intervals during a 24-hour period. On Continuously Indicates water use for all 96 15-minute intervals during a 24-hour period.
<b>RATE</b>	<b>RATE OF FLOW</b> Average flow rate is displayed every twelve seconds on LCD display.
	<b>LCD DISPLAY</b> Nine-digit LCD displays the meter reading in billing units of measure: U.S. gallons, cubic feet, Imperial gallons, or cubic metres. 1 E-CODER basic reading/customary 6-digit remote reading 2 Customary sweep hand digits 3 E-CoderPLUS reading (8-digit remote reading) 4 Testing units used for diagnostics 5 Extended reading units 6 Customary billing units



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# NGO™ App

## Analyze and Present Data at the Source

Simplify the collection of meter reading data and turn it into actionable information with the NGO™ app, available for your Android or iOS phone or tablet. Available in the Google Play or Apple Store, this app enables your personnel to make the most of their time while in the field, providing on-the-spot analysis and presentment capabilities. Part of the enhanced R900® System, NGO leverages the detailed, accurate metering data from the E-CODER® absolute encoder register. Analyze that metering data at the source to improve your customer service as well as identify leaks and reverse flow.

## Automate and Optimize Your Field Operations

Neptune makes it easy for your utility to optimize workforce and operational efficiency. Running on any common Android or iOS phone or tablet, NGO enables your field techs to collect detailed data logging information when needed during on-site customer visits. They can immediately generate graphs of a customer's water usage patterns to show exactly when they used more water than usual or when a probable continuous leak began somewhere in their house. The graphs also provide all E-CODER alerts to further aid in troubleshooting usage anomalies. Our NGO app is easy to install and use, and immediately puts AMI functionality literally in the palm of your hand – including 96 days of hourly interval data as well as flags for leaks, tamper, and reverse flow straight from the meter.

## Provide Proactive, Confident Customer Service

The NGO app helps your utility save time and money, especially when it comes to saving truck rolls by allowing faster response in the field. It puts the power of Neptune's E-CODER technology and advanced analysis into more of your utility personnel's hands.

With simplified access through the app to accurate, timely information, your personnel can take care of a customer's water-related issue or answer a question then and there, in a single site visit. Quickly, easily, and confidently, they can inform customers of high water consumption and identify leaks and other problems much earlier, cutting weeks, and possibly months, in the discovery, customers a great deal of money in the process. All this proactivity can head off high bill complaints, reduce delinquent payments, and eliminate write-offs.

## KEY BENEFITS

Analyze data at the source and improve customer service

- View data logging graphs and data in the field
- Share data logging graphs and data with the homeowner to address high bill complaints
- Test read R900s in the field or before installation to obtain reading and E-CODER flag events

Increased Efficiency

- Address high bill complaints and provide customer service while on site
- Obtain off-cycle reads
- Easy-to-use and intuitive app



## Technical Specifications

### Required Components

- Android phone or tablet running version 4.1 to 7.1.1. iPhone or iPad running version 8.0 or later
- Google Play account or Apple ID
- R900® Belt Clip Transceiver

### Functions

#### RF Test (free)

- Allows the user to read either all R900s in range or a specific R900 MIU ID



From here the user can select one of the three different functions of the app – RF Test, Data Log, or Off Cycle.

#### Data Logging (in app purchase)

- Retrieve 96 days of hourly consumption interval data
- Graph/analyze the data logging interval data
- Share the graph and/or data with the homeowner via email

#### Off-Cycle Reads (in app purchase)

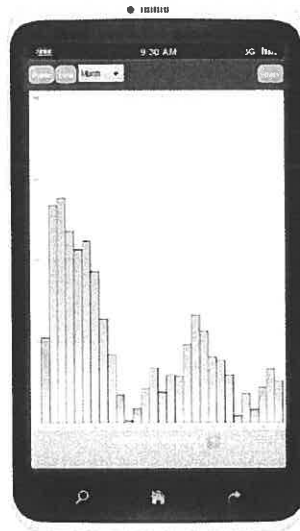
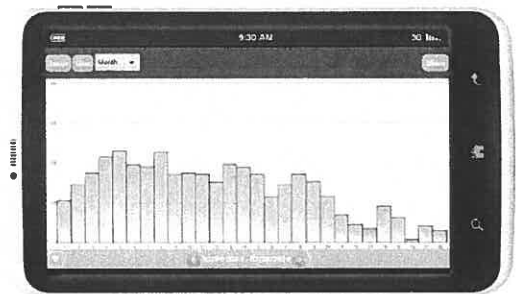
- Obtain a meter read from a specific calendar date within the past 96 days

#### Pressure Logging (in app purchase)

- Receive current pressure reading
- Track pressure over time
- Graph history and identify periods of high/low pressure

Requires NGO 1.7 or later

Requires Vivax-Metrotech Pressure Monitor



From here the user can analyze usage by month, week, and day as well as share the graph via email with the homeowner.



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# R900® Belt Clip Transceiver

## Automate Measurement to Activate Operational Efficiency

As part of the Neptune® R900® System, the R900<sup>3</sup> Belt Clip Transceiver (R900 BCT) is your utility personnel's partner in mobile meter reading and in-field customer support and is now iOS compatible.

The R900 BCT's two-way communications to the R900<sup>+</sup> MIU eliminate meter access issues and speed up retrieval of valuable data logging information – up to 96 days of historical hourly consumption data from an individual account. In addition, its exceptional radio frequency (RF) throughput reduces meter reading time, especially in high-density environments. Field personnel can even read R900s while performing maintenance or other tasks when taking advantage of the R900 BCT's unattended operations mode. These automated features ensure you collect accurate data that can be turned into meaningful information – to help improve accuracy, identify hidden causes of loss, and optimize the efficiency of your operations.

## Move Ahead with Backward Compatibility and Forward Innovation

The R900 BCT, as with the rest of the Neptune R900 System, works with past generations of equipment while remaining flexible to incorporate innovations as needed. The R900 BCT maintains support to read previous generations of R900 MIUs yet introduces powerful software-defined radio (SDR) technology to support the new advanced two-way features of the R900 System. Now, the R900 BCT is capable of reading electric, bubble-up ERT® devices and processing SCM or SCM+ message files that these ERT devices transmit. This gives utilities the freedom of equipping with just the R900 BCT to read both water and electric meters.

So, go ahead and phase in new features and equipment at your own pace with confidence that Neptune will support your future needs without leaving you with stranded assets.

**Present Consumption Data in the Field for Proactive Customer Service**  
Simplified access to critical information means your utility can provide even more proactive customer service. Pairing the R900 BCT with a handheld device or a mobile device running Neptune software, your personnel can maximize their efficiency in the field, with the flexibility to perform impromptu service calls and address customer service issues on-site without a separate truck roll<sup>1</sup>. With the data literally in hand, they can share data logging graph information with homeowners. This on-the-spot, on-site presentment of how much water they used and when, helps head off customer complaints regarding high water bills, reduce delinquencies, and avoid write-offs.



## KEY BENEFITS

Increases meter reading efficiency

- Increased RF throughput capabilities which reduce reading time in high-density R900 environments
- Two-way communications to R900 MIU which reduces time required to retrieve data logging information
- Unattended operations mode allows utility personnel to read R900s while performing other non-meter-reading-related job functions

No stranded assets

- Compatible with all generations of R900 MIUs
- Probe compatibility with Advantage and Pocket ProReader
- Connects via Bluetooth to Trimble Nomad or Trimble Ranger for meter reading
- Connects via Bluetooth to Android or iOS mobile devices for in-field customer support
- Software-defined radio technology enables the R900 BCT to be updated for compatibility with future products

## KEY BENEFITS CONTINUED

Reads ERT devices

- Compatible with Itron electric ERT technology (bubble-up ERTs only)
- Processes SCM and SCM+ message format

Analyze data at the source with either a smart phone or tablet

- Test-read R900s in the field or before installation to obtain reading and E-CODER<sup>®</sup> flag events
- Retrieve 96 days of hourly interval data logging information
- View graph of data logging intervals in the field
- Share data logging graph information with homeowner to address high bill complaints

## Specifications

Communication

- Bluetooth 2.1 or later and USB handheld software compatibility with N\_SIGHT<sup>™</sup> version 4.7 or later

Power Supply

- Rechargeable lithium-ion battery pack – 5000 mAh capacity
- Field-replaceable, recommended replacement every 2 years

Memory

- 4GB SD card

Device Compatibility

- Trimble Nomad 900B/900LE/1050B/1050LE, Trimble Ranger 3, and Android/iOS mobile devices<sup>1</sup>

Indicators

- Four LEDs identify Bluetooth communication, RF status, mode status, and battery status

Dimensions

- Height: 3.58" (9.1 cm)
- Width: 1.66" (4.22 cm)
- Length: 5.75" (14.6 cm)

Weight

- 1.1 lbs. (499g) including rechargeable battery

Temperature Range

- Operating: -4°F to +122°F (-20°C to +50°C)
- Storage: -40°F to +185°F (-40°C to +85°C)

Accessories

- Spare battery
- Spare battery charger
- Belt clip
- SD card
- 12V USB vehicle power cable

Warranty

- One-year comprehensive warranty
- Hardware maintenance contracts available

Receiver Channels: 50

Number of Simultaneous Channels: 8

Approvals

- FCC Class B
- IC

<b>Mode Overview</b>	<b>Normal</b>	<b>Unattended Operations</b>	<b>USB Mass Storage</b>
Bluetooth Pairing to Devices	Required	N/A	No. Used for firmware updates and transfer of data via USB from SD card to Neptune software
Trimble Nomad 900B/900LE/ 1050B/1050LE Compatible	Yes	N/A	
iOS App Compatible	Yes <sup>1</sup>	N/A	
Android App Compatible	Yes <sup>1</sup>	N/A	
R900 Compatible	Yes	Yes	
Advantage / Pocket ProReader Compatible	Yes	No	
Data Logging Compatible	Yes	No	
SD Card Data Storage	Yes	Yes	

<sup>1</sup>Contact Neptune Customer Support for the latest device and operating system compatibilities.



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## APPENDIX B

### DATA TRANSFER FORMAT

## BS&A Software Utility Billing System® Meter Exchange Import Guide

Last Modified: 1/8/2015

Telephone: (517) 641-8900

### File Layout:

- 1) The preferred file layout is a TAB delimited text file. Other layouts can be accommodated as well - please coordinate with BS&A first.
- 2) The first line should contain a list of the column names used - separated by a delimiter.

### Notes:

- 1) Any meter data that needs to be hard-wired/set during the import must be conveyed to BS&A during the initial stages of development.
  - a) Ex: Meter multiplier(s), manufacturer, model, any auto reader specific parameters [ e.g. device code, read type code, status code, etc. ] ).
- 2) Special logic or actions that need to be performed during the import must be conveyed during the initial stages of development.
- 3) Test meter exchange import file(s) must be provided by the vendor before any programming is started.
- 4) Programming changes to the import after it's been finalized may incur additional programming charges.
- 5) The standard fee for this customization is \$5000. This includes programming, testing, and support of the import.

**Required fields are in bold and must be included in the import file.**

*Recommended fields are in italics and should be included if possible*

Field Name	Type	Comments
<i>Account ID</i>	Numeric	Unique id of the account # used by the billing system
<b>Account #</b>	A/N	Account # used in the billing system. If this # is not unique, the Account ID also be used
<i>Service Name</i>	A/N	Name of the meters associated service used in the billing system.
<b>Old Meter #</b>	A/N	Unique meter ID / meter # of the meter being replaced
<i>Old Meter Serial #</i>	A/N	Unique serial # meter being replaced
<b>Change out Reading</b>	Numeric	Reading of the old meter when it was removed
<b>Change out Read Date</b>	Numeric	Reading Date of the old meter when it was replaced
<i>New Meter Install Date</i>	Date	Date of the new meter when it was installed. This can also be the change out read date
<b>New Meter Initial Reading</b>	Numeric	Initial/start read of the new meter
<i>New Meter Initial Read Date</i>	Date	Reading Date of the new meter when it was installed
<b>New Meter ID / #</b>	A/N	Unique identifier of the meter
<i>New Meter Serial #</i>	A/N	Stamped serial # on the meter
<i>New Meter Radio ID</i>	A/N	Unique Radio or ERT Id if applicable
<i>New Meter Type</i>	A/N	Ex. Sensus, Neptune, Badger, Itron, etc.
<i>New Meter Model</i>	A/N	Ex. R900, M2, etc.
<i>New Meter Size</i>	A/N	Ex. 5/8", 1", etc.
<i>New Meter Dials</i>	Numeric	Ex. 5, 6, etc.
<i>New Meter Multiplier</i>	Numeric	Read or usage multiplier if applicable
<i>Latitude</i>	Numeric	Ex. 30.36748697
<i>Longitude</i>	Numeric	Ex. -87.17025700
<i>Install Type</i>	A/N	Ex. Radio only, Retrofit, etc. The name used can trigger specific meter change logic



## Equalizer Utility Billing System® Generic Meter Exchange Export

Last Modified: 1/8/2015

Programmer: Matt Harris

Telephone: (517) 641-8900

E-Mail: mharris@bsasoftware.com

### Export Information:

- 1) All fields are left justified and space filled to the right.
- 2) Unused fields will be padded with spaces.
- 3) Field Types: AN ( alpha numeric ); N ( numeric ); D ( decimal ); DT ( date: mm/dd/yyyy )

Field Name	Offset	Length	Type; Comments
Account ID	1	6	N; Pass back field required by the Utility System
Account #	7	25	AN; Pass back field required by the Utility System
Service Name	32	20	AN; Pass back field required by the Utility System
Service Category	52	10	AN; Commodity type ( water, sewer, gas, electric, demand, etc. )
Service ID	62	6	N; Unique ID for the service
Account Status	68	20	AN; Status of the account ( Active, Inactive, Final Bill, First Bill )
Billing Cycle	88	20	AN
Zone/Section	108	20	AN
Route	128	10	AN
Sequence #	138	10	AN; Read sequence for the meter
Account Class	148	20	AN; Residential, Commercial, etc.
Customer ID	168	6	N; Unique ID for the customer
Customer Name	174	35	AN
Customer Phone #	209	14	AN
Owner ID	223	6	N; Unique ID for the owner ( may be blank or same as the customer )
Owner Name	229	35	AN
Owner Phone #	264	14	AN
Service Address	278	62	AN; Physical address of the property
Service Address City	340	25	AN
Service Address State	365	2	AN
Service Address Zip	367	10	AN
Service Address Latitude	377	15	D; Latitude of the service address if applicable
Service Address Longitude	392	15	D; Longitude of the service address if applicable
Last Meter Read	407	15	D; Last meter read
Last Meter Read Date	422	10	DT; Last meter read date mm/dd/yyyy
High Usage Read	432	15	D; High reading limit
Low Usage Read	447	15	D; Low reading limit
Usage Multiplier	462	10	D; Multiplier for meter usage
Read Multiplier	472	10	D; Multiplier for meter read
Meter Serial #	482	15	AN
Meter ID / Register ID / Meter #	497	15	AN
Sensus Flexnet ID	512	20	AN
Meter Type	532	20	AN; Meter type / model / manufacturer
Meter Size	552	20	AN
Meter Location	572	100	AN
Hazard Note	672	50	AN
CR + LF	722		Carriage return + line feed

## APPENDIX C

### METER ERRORS

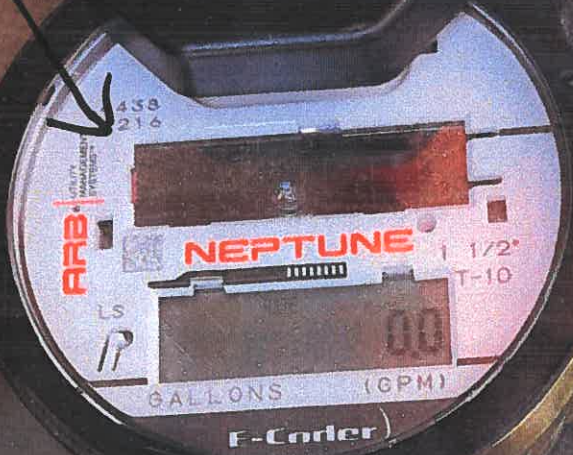


WRONG  
HEAD

1544984412

E-Coder) R900

ONLY  
COUNTS  
56% OF  
THE  
WATER



NEPTUNE

T-10



PIPE UNION USED  
AS METER  
CONNECTOR



**END OF BID PACKAGE**