

Integrity . Unity . Pride

Christopher J. Clark, Mayor CITY OF HARVEY

REQUEST FOR BIDS WATER METER REPLACEMENT PROJECT

Bid Number: 2025-03-01

BID NUMBER: 2025-03-01

BID ISSUE DATE: Monday, March 24, 2025

QUESTIONS DUE: Wednesday, April 2, 2025, by 5:00 p.m. (CST)

BID DUE: Monday, April 7, 2025, by 10:00 a.m. (CST)

BID OPENING DATE: Monday, April 7, 2025, at 10:01 a.m. (CST)

AWARD OF BID: The City anticipates awarding the bid in April 2025

INVITATION TO BID WATER METER REPLACEMENT PROJECT

NOTICE IS HEREBY GIVEN by the Mayor and the City Council of the City of Harvey, Cook County, Illinois, that sealed bids will be received for the project described in this advertisement.

Bids will be accepted until 10:00 a.m. CST on Monday, April 7, 2025. Bids must be delivered to 15320 Broadway Ave, Harvey, IL 60426, ATTN: City Clerk, in a sealed envelope with "Harvey Water Meter Replacement Project – [COMPANY NAME]" clearly labeled on the front of the envelope. Bids will be opened and publicly read at 10:01 a.m. CST on Monday, April 7, 2025, at City Hall.

The bidding forms and documents are available at City Hall located at 15320 Broadway Ave, Harvey, IL 60426, by emailing procurement@cityofharveyil.gov, or going to https://www.cityofharveyil.gov/bids-proposals/. Proposals must be submitted on the forms provided. All proposals or bids offered must be accompanied by a bid bond, cash, or certified check made payable to the City in the amount of not less than 5 percent (5%) of the total amount of the proposal as a guarantee that if the proposal is accepted a contract will be entered into.

The bidder is specifically advised that the City is the recipient of grant 22-203691 pursuant to an agreement entered into between the Illinois Department of Commerce & Economic Opportunity (DCEO) and the City. Payments to the contractor will be made by the City and reimbursed by DCEO in accordance with the terms of the aforesaid agreement. Further, the (estimated/actual) percentage of the total cost of this Project to be funded with state and federal dollars is one hundred (100%) and the exact dollar amount of state and federal funds which will be set aside for this project will be based on the contract amount awarded under this offering. The agreement follows guidance from the Grant Accountability and Transparency Act (GATA) (44 Ill. Admin Code Part 7000) and federal uniform guidance (2CFR 200 Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Fedal Awards).

APPLICABLE FEDERAL REQUIREMENTS

All laborers and mechanics employed by the Contractor or Subcontractor(s) on construction work for this Project shall be paid wages at rates not less than those prevailing on similar construction in the locality as determined by the Secretary of Labor in accordance with the Davis-Bacon Act, as amended, (U.S.C. Sections 76-276a-5), and shall receive overtime compensation in accordance with and subject to the provisions of the Contract Work Hours and Safety Standards Act (40 U.S.C. Sections327-333), and the Contractor and Subcontractor(s) shall comply with all regulations issued pursuant to these Acts and other applicable Federal laws and regulations pertaining to labor standards. The Secretary of Labor has, with respect to the labor standards specified in this Section, the authority and functions set forth in Reorganization Plan Number 14 of 1950 (5 U.S.C. Section 133z-15) and Section 2 of the Act of June 13, 1934, as amended, (40 U.S.C. Section 276c).

All contracts and Subrecipients for the construction or repair shall include a provision for compliance with the Copeland "Anti-Kickback Act" (18 U.S.C. Section 874) as supplemented in Department of Labor Regulations (29 CFR Part 3).

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An overall Business Enterprise Program (BEP) Goal of 28% has been determined with 18% to minority-owned business enterprises (MBEs and WMBEs), and 10% going to women-owned business enterprises (WBEs and WMBEs). Only contractors, subcontractors, and suppliers certified through the State of Illinois' Commission on Equity and Inclusion (CE) Business Enterprise Program will count toward meeting the BEP Goal for this project.

This project must comply with the Illinois Works Apprenticeship Initiative (30 ILCS 559/20-20 to 20-25) and the applicable administrative rules at 14 III. Admin. Code Part 680. The goal of the Illinois Apprenticeship Initiative is that apprentices will perform either 10% of the total labor hours actually worked in each prevailing wage classification or 10% of the estimated labor hours in each prevailing wage classification, whichever is less.

The successful bidder for this project will be required to file a performance bond equal to one hundred percent (100%) of the bid, with sureties to be approved by the Mayor and the Board of Trustees, which performance bonds shall be conditioned upon proper and faithful performance by the Contractor of the work specified in accordance with the plans and specifications therefore, according to the time and terms and conditions of the contract; and also that the bidder and contractor shall properly pay all debts incurred by the Contractor in the execution of the work, including those for labor and materials furnished.

The Contractor shall be required to furnish sufficient insurance or guaranty of indemnity to the City of Harvey, Illinois, and the Illinois DCEO, against any and all claims which might arise for damages to persons or property due to the negligence of the Contractor or Subcontractor(s), or their officers, agents, employees or servants, during the construction/demolition of said improvement and until the said improvement has been finally accepted as complete by the Mayor and the Board of Trustees of the City of Harvey, the right to reject any and all proposals or bids is reserved.



GENERAL INFORMATION FOR THE BIDDER

INTRODUCTION

The City of Harvey ("City") received funding through the Illinois Department of Commerce and Economic Opportunity to replace water meters throughout the City. The Project is for replacing water meters for residential homes with smart water meters for the City to better monitor water usage.

SCOPE OF WORK

The Scope of Work as part of this Request for Bids (RFB) will be the removal of existing water meters, located either in the valve box or valve vault in City right-of-way or the resident's home, and replacement with smart water meters. The City has the right-of-entry into residents' homes to perform this work.

The addresses of these replacements are shown in **Appendix A**. An online map with all the addresses and water meter sizes can be found at: https://arcg.is/lav8yj

Instructions for water meter replacement based on its location in either the right-of-way or resident's home are in **Appendix B.** The City does not have record of the location of the water meters, whether in the right-of-way or resident's home.

Specifications of the smart water meters to be installed is located in **Appendix C.**

BID REQUIREMENTS

Bidders are to follow the following bid requirements when submitting proposals:

- Bids will be accepted until 10:00 a.m. CST on Monday, April 7, 2025. Bids must be delivered to 15320 Broadway Ave, Harvey, IL 60426, ATTN: City Clerk, in a sealed envelope with "Harvey Water Meter Replacement Project – [COMPANY NAME]".
- 2. Diversity requirements:
 - a. 18% minority-owned business enterprises (MBEs and WMBEs)
 - b. 10% women-owned business enterprises (WBEs and WMBEs)
 - c. 10% Illinois Apprenticeship Initiative
- 3. A 5% bid bond shall be submitted with each bid, as a guarantee that, if the bid is accepted, a contract will be entered into.
- 4. A response to this RFB must outline in detail the manner in which they would work with the City to fulfill City's needs. A complete proposal will include the following:
 - a. **Cover Letter.** Cover letter include a brief summary of the qualifications of the contractor

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- b. **Professional License.** Copies of current professional licenses, including any minority owned business forms.
- c. **Certifications.** Copies of any certifications achieved relevant to the services requested.



- d. **Statement of Qualifications.** The bidders shall include a brief work history, titles of employees, and list experience.
- e. **Additional Information.** Other such information that is required for the City to evaluate the quality and completeness of the proposed project:
 - i. Legal Actions: Please provide a list of any pending litigation in which the bidder may experience significant financial settlement and include a brief description of the reason for legal action. If no legal action is pending, include a section in the proposal marked "Legal Actions – None."
 - ii. Conflict of Interest: Provide information regarding any potential conflict of interest. Failure to reveal any potential conflict of interest at the time of proposal may represent a breach of contract, subject to penalties as appropriate.
- 5. Completed Bid Form provided in Appendix D

RESPONSE TO BIDDER QUESTIONS

Explanations desired by a prospective bidder shall be requested of the City by email, and if explanations are necessary, a reply shall be made in the form of an addendum, a copy of which will be forwarded to known bidders. Every request for such explanation shall be submitted by email to procurement@cityofharveyil.gov by Wednesday, April 2, 2025 at 5:00 p.m. (CST). No inquiry or request received after this deadline will be given consideration.

OTHER INFORMATION

The right is reserved to reject any or all proposals, to waive technicalities, to postpone the bid opening, or to advertise for new proposals, if in the judgment of the mayor and Board of Trustees their best interests will be promoted thereby. The City also reserves the right to rescind any awarded contract if grant funding is no longer available to support this project.

The contractor will be required to pay not less than the Cook County prevailing wage rates on this project as established by the Illinois Department of Labor. The prevailing wage rates are available on the Illinois Department of Labor's official website. It is the responsibility of the contractor to obtain and comply with any revisions to the rates should they change throughout the duration of this Agreement.

Both a performance bond and payment bond in a sum equal to one hundred percent (100%) of the amount of the bid, with suretiesto be approved by the Mayor and Board of Trustees for the faithful performance of the contract, must each be furnished by the successful bidder. All bids or proposals shall contain an offer to furnish bond upon acceptance of such bid or proposal.

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METER SIZE	SERVICE ADDRESS
5/8"	15314 PAGE AVE
5/8"	15030 MAPLEWOOD AVE
5/8"	14910 ARTESIAN AVE
5/8"	14716 WOOD ST
5/8"	14717 WOOD ST
5/8"	14721 WOOD ST
5/8"	14727 WOOD ST
5/8"	14730 WOOD ST
5/8"	14731 WOOD ST
5/8"	14734 WOOD ST
5/8"	14735 WOOD ST
5/8"	14738 WOOD ST
5/8"	14807 WOOD ST
5/8"	14809 WOOD ST
5/8"	14817 WOOD ST
5/8"	14818 WOOD ST
5/8"	14826 WOOD ST
5/8"	14840 WOOD ST
5/8"	14900 WOOD ST
1"	14906 WOOD ST
5/8" 5/8"	14910 WOOD ST
5/8"	14923 WOOD ST 15014 WOOD ST
5/8"	15018 WOOD ST
1"	15019 WOOD ST
5/8"	15024 WOOD ST
5/8"	15025 WOOD ST
5/8"	15034 WOOD ST
5/8"	15038 WOOD ST
5/8"	15042 WOOD ST
5/8"	15114 WOOD ST
5/8"	15122 WOOD ST
5/8"	15124 WOOD ST
5/8"	15131 WOOD ST
5/8"	15133 WOOD ST
5/8"	15137 WOOD ST
5/8"	15210 WOOD ST
5/8" 5/8"	15211 WOOD ST 15232 WOOD ST
5/8"	15232 WOOD ST
1"	15249 WOOD ST
1"	15306 WOOD ST
5/8"	15311 WOOD ST
5/8"	15315 WOOD ST
5/8"	15331 WOOD ST
1"	15418 WOOD ST
1"	15422 WOOD ST
5/8"	15809 WOOD ST
5/8"	15812 WOOD ST
5/8"	15817 WOOD ST
1"	15821 WOOD ST
5/8"	15825 WOOD ST
5/8"	15830 WOOD ST
5/8"	15834 WOOD ST
5/8" 1"	15921 WOOD ST 16013 WOOD ST
5/8"	16017 WOOD ST
5/8"	16029 WOOD ST
1"	16021 WOOD ST
5/8"	16033 WOOD ST
5/8"	16037 WOOD ST
5/8"	16041 WOOD ST
1 1/2"	14720 PAGE AVE
5/8"	14724 PAGE AVE
5/8"	14822 PAGE AVE
5/8"	14911 PAGE AVE
5/8"	14915 PAGE AVE
5/8"	15017 PAGE AVE
1"	15021 PAGE AVE
1"	15100 PAGE AVE
1 1/2"	15140 PAGE AVE

METER	<u> </u>
SIZE	SERVICE ADDRESS
1 1/2"	15209 PAGE AVE
5/8"	15228 PAGE AVE
1"	15400 PAGE AVE
1"	15630 PAGE AVE
5/8" 5/8"	15701 PAGE AVE 15705 PAGE AVE
5/8"	15709 PAGE AVE
5/8"	15717 PAGE AVE
5/8"	15727 PAGE AVE
5/8"	15735 PAGE AVE
5/8"	15800 PAGE AVE
5/8"	15801 PAGE AVE
5/8" 5/8"	15814 PAGE AVE 15816 PAGE AVE
5/8"	15817 PAGE AVE
5/8"	15819 PAGE AVE
5/8"	15820 PAGE AVE
5/8"	15823 PAGE AVE
1"	15914 PAGE AVE
5/8"	15917 PAGE AVE
5/8" 5/8"	16038 PAGE AVE 14542 SPAULDING AVE
5/8"	14554 SPAULDING AVE
5/8"	14560 SPAULDING AVE
5/8"	14562 SPAULDING AVE
1"	14628 SPAULDING AVE
5/8"	14908 DIXIE HWY
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5/8"	14901 WESTERN AVE
5/8"	14902 WESTERN AVE
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5/8"	15120 WESTERN AVE
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5/8"	15310 WESTERN AVE
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SIZE	SERVICE ADDRESS
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5/8"	14736 ARTESIAN AVE
5/8"	14739 ARTESIAN AVE
5/8"	14740 ARTESIAN AVE
5/8"	14803 ARTESIAN AVE
5/8"	14807 ARTESIAN AVE
5/8"	14808 ARTESIAN AVE
5/8"	14811 ARTESIAN AVE
5/8"	14812 ARTESIAN AVE
5/8"	14815 ARTESIAN AVE
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5/8"	14905 ARTESIAN AVE
5/8"	14907 ARTESIAN AVE
5/8"	14911 ARTESIAN AVE
5/8"	14912 ARTESIAN AVE
5/8"	14913 ARTESIAN AVE
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5/8"	15026 ARTESIAN AVE
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5/8"	309 W 149TH PL
5/8"	310 W 149TH PL
5/8"	300 W 150TH ST
5/8"	301 W 150TH ST
5/8"	307 W 150TH ST
5/8" 5/8"	309 W 150TH ST 311 W 150TH ST
5/8"	347 W 150TH ST
5/8"	348 W 150TH ST
5/8"	349 W 150TH ST
5/8"	350 W 150TH ST
5/8"	354 W 150TH ST
5/8"	359 W 150TH ST
5/8"	364 W 150TH ST
5/8"	367 W 150TH ST
5/8"	368 W 150TH ST
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5/8"	378 W 150TH ST
5/8"	390 W 150TH ST
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5/8" 5/8"	394 W 150TH ST 395 W 150TH ST
5/8"	395 W 150TH ST
5/8"	401 W 150TH ST
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METER	
SIZE	SERVICE ADDRESS
5/8"	409 W 150TH ST
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5/8"	427 W 150TH ST
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5/8"	435 W 150TH ST
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5/8"	457 W 150TH ST
5/8"	459 W 150TH ST
5/8"	461 W 150TH ST
5/8" 1"	465 W 150TH ST
5/8"	468 W 150TH ST 469 W 150TH ST
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5/8"	473 W 150TH ST
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5/8"	476 W 150TH ST
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5/8"	297 W 150TH PL
5/8"	298 W 150TH PL
5/8"	301 W 150TH PL
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5/8"	14719 MAPLEWOOD AVE
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METER SIZE	SERVICE ADDRESS
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5/8"	14817 MAPLEWOOD AVE
5/8"	14819 MAPLEWOOD AVE
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5/8"	14821 MAPLEWOOD AVE
5/8"	14827 MAPLEWOOD AVE
5/8"	14829 MAPLEWOOD AVE
5/8"	14832 MAPLEWOOD AVE
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5/8"	14842 MAPLEWOOD AVE
5/8" 5/8"	14843 MAPLEWOOD AVE
5/8"	14845 MAPLEWOOD AVE
5/8"	14901 MAPLEWOOD AVE
5/8"	14904 MAPLEWOOD AVE
5/8"	14905 MAPLEWOOD AVE
5/8"	14907 MAPLEWOOD AVE
5/8"	14912 MAPLEWOOD AVE
5/8"	14920 MAPLEWOOD AVE
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5/8"	14901 ROCKWELLAVE
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5/8"	14906 ROCKWELL AVE
5/8"	14910 ROCKWELL AVE
5/8"	14911 ROCKWELL AVE
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5/8"	15019 ROCKWELL AVE
5/8"	15020 ROCKWELL AVE
5/8"	15030 ROCKWELL AVE
5/8"	15027 ROCKWELL AVE
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5/8"	15033 ROCKWELL AVE
5/8"	15037 ROCKWELL AVE
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1"	14905 TALMAN AVE
1" 5/8"	14906 TALMAN AVE
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METER	
SIZE	SERVICE ADDRESS
5/8"	14914 TALMAN AVE
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5/8"	14926 TALMAN AVE
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5/8"	14932 TALMAN AVE
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5/8"	15036 TALMAN AVE
5/8"	15038 TALMAN AVE
5/8"	15035 TALMAN AVE
5/8"	15039 TALMAN AVE
5/8" 5/8"	419 W 149TH ST 419 W 149TH ST
5/8"	425 W 152nd ST
5/8"	427 W 153rd ST
5/8"	435 W 154th ST
5/8"	437 W 155th ST
5/8"	439 W 156th ST
5/8"	449 W 149TH ST
5/8"	453 W 149TH ST
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5/8" 5/8"	459 W 149TH ST 461 W 149TH ST
5/8"	463 W 149TH ST
5/8"	14900 WASHTENAW AVE
5/8"	14901 WASHTENAW AVE
5/8"	14904 WASHTENAW AVE
5/8"	14906 WASHTENAW AVE
5/8"	14907 WASHTENAW AVE
5/8"	14911 WASHTENAW AVE
5/8"	14912 WASHTENAW AVE
5/8"	14913 WASHTENAW AVE
5/8" 5/8"	14915 WASHTENAW AVE
5/8"	14919 WASHTENAW AVE
5/8"	14927 WASHTENAW AVE
5/8"	14928 WASHTENAW AVE
5/8"	14929 WASHTENAW AVE
5/8"	14931 WASHTENAW AVE
5/8"	14932 WASHTENAW AVE
5/8"	14935 WASHTENAW AVE
5/8"	15010 WASHTENAW AVE
5/8" 5/8"	15011 WASHTENAW AVE
5/8"	15014 WASHTENAW AVE
5/8"	15018 WASHTENAW AVE
5/8"	15019 WASHTENAW AVE
5/8"	15021 WASHTENAW AVE
5/8"	15026 WASHTENAW AVE
5/8"	15027 WASHTENAW AVE
5/8"	15030 WASHTENAW AVE
5/8"	14935 FAIRFIELD AVE
5/8" 5/8"	15035 WASHTENAW AVE 15037 WASHTENAW AVE
5/8"	15037 WASHTENAW AVE
	15039 WASHTENAW AVE
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5/8" 5/8"	14847 FAIRFIELD AVE

METER	I
SIZE	SERVICE ADDRESS
5/8"	14848 FAIRFIELD AVE
5/8"	14900 FAIRFIELD AVE
5/8"	14901 FAIRFIELD AVE
5/8"	14905 FAIRFIELD AVE
5/8"	14906 FAIRFIELD AVE
5/8"	14907 FAIRFIELD AVE
5/8"	14914 FAIRFIELD AVE
5/8"	14915 FAIRFIELD AVE
5/8"	14919 FAIRFIELD AVE
5/8"	14921 FAIRFIELD AVE
5/8" 5/8"	14923 FAIRFIELD AVE
5/8"	14927 FAIRFIELD AVE
5/8"	14930 FAIRFIELD AVE
5/8"	14933 FAIRFIELD AVE
5/8"	15011 FAIRFIELD AVE
5/8"	15012 FAIRFIELD AVE
5/8"	15014 FAIRFIELD AVE
5/8"	15015 FAIRFIELD AVE
5/8"	15019 FAIRFIELD AVE
5/8"	15022 FAIRFIELD AVE
5/8"	15026 FAIRFIELD AVE
5/8"	15027 FAIRFIELD AVE
5/8"	15031 FAIRFIELD AVE
5/8" 5/8"	15034 FAIRFIELD AVE 15038 FAIRFIELD AVE
5/8"	15035 FAIRFIELD AVE
5/8"	15039 FAIRFIELD AVE
5/8"	14847 CALIFORNIA AVE
5/8"	14907 CALIFORNIA AVE
5/8"	14911 CALIFORNIA AVE
5/8"	14919 CALIFORNIA AVE
5/8"	14929 CALIFORNIA AVE
5/8"	14935 CALIFORNIA AVE
5/8"	481 W 150TH ST
5/8"	483 W 150TH ST
5/8"	485 W 150TH ST
5/8" 5/8"	15011 CALIFORNIA AVE 15015 CALIFORNIA AVE
5/8"	15031 CALIFORNIA AVE
5/8"	489 W 151ST ST
5/8"	302 W 151ST PL
5/8"	15250 WESTERN AVE
5/8"	15648 WESTERN AVE
5/8"	15732 WESTERN AVE
5/8" 5/8"	15301 CAMPBELL AVE 15603 CAMPBELL AVE
5/8"	15650 CAMPBELL AVE
5/8"	15802 CAMPBELL AVE
5/8"	15827 CAMPBELL AVE
5/8"	15832 CAMPBELL AVE
5/8"	14831 ARTESIAN AVE
5/8"	14832 ARTESIAN AVE
5/8"	14835 ARTESIAN AVE
5/8"	14711 CAMPBELL AVE
5/8"	14712 CAMPBELL AVE
5/8"	14715 CAMPBELL AVE
5/8"	14720 CAMPBELL AVE
5/8" 5/8"	14723 CAMPBELL AVE 14727 CAMPBELL AVE
5/8"	14727 CAMPBELL AVE
5/8"	14731 CAMPBELL AVE
5/8"	14732 CAMPBELL AVE
5/8"	14735 CAMPBELL AVE
5/8"	14736 CAMPBELL AVE
5/8"	14740 CAMPBELL AVE

SIZE SERVICE ADDRESS 5/8" 14805 CAMPBELL AVE 5/8" 14809 CAMPBELL AVE 5/8" 14810 CAMPBELL AVE 5/8" 14813 CAMPBELL AVE 5/8" 14814 CAMPBELL AVE 5/8" 14817 CAMPBELL AVE 5/8" 14818 CAMPBELL AVE 5/8" 14821 CAMPBELL AVE 5/8" 14822 CAMPBELL AVE 5/8" 14829 CAMPBELL AVE 5/8" 14830 CAMPBELL AVE 5/8" 14834 CAMPBELL AVE 5/8" 14834 CAMPBELL AVE 5/8" 14838 CAMPBELL AVE 5/8" 14841 CAMPBELL AVE 5/8" 14842 CAMPBELL AVE 5/8" 14915 ROCKWELL AVE 5/8" 14918 FAIRFIELD AVE 5/8" 14918 FAIRFIELD AVE	
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5/8" 14910 FAIRFIELD AVE	
5/8" 14814 WOOD ST	
5/8" 15323 WOOD ST	
5/8" 15027 PAGE AVE	
5/8" 14927 WESTERN AVE	
5/8" 304 W 150TH ST	
5/8" 14910 MAPLEWOOD AVE	
5/8" 15011 ROCKWELL AVE	
5/8" 451 W 149TH ST	
5/8" 419 W 151ST ST	
5/8" 14816 PAGE AVE	
5/8" 14804 WOOD ST	
5/8" 14826 CAMPBELL AVE	

	Total Meters	
5/8"		510
1"		19
1 1/2"		4

5/8"

14740 CAMPBELL AVE

METER INSTALLATION IN RIGHT-OF-WAY INSTRUCTIONS

Determine if there is a water box or water vault within the right-of-way by looking for the structure in front of the address. Once found, knock on the door of the resident to inform them that you will be temporarily turning the water off to their home. Proceed to turn the water off. Take out the old meter and washers. Remove the card attached to the new meter and put it in a safe place, you will have to record information on this card later. Put in new washers and connectors and attach the new meter. Turn the water on and make sure the meter is not leaking. Take the TX ID: sticker off the MXU and again place it in a safe place you will need this later. Hook the MXU to the meter, set the Bluetooth device on the MXU, and use the handheld device to hook this meter to the tower. Resecure the box or vault. Document all the information needed from both the old and new meter on the card that you saved. Keep the MXU sticker and new card for the City's records.

METER INSTALLATION IN RESIDENT INSTRUCTIONS

Knock on the door to see if the resident is home. If someone is home, explain to them what you will be doing and check the meter. After checking the meter go outside and turn the water off on the City side because you are not to touch anything in a resident's home other than our equipment. Go back into the home. If possible, place a bucket under the meter to catch water while loosening the connectors. Take out the old meter and washers. Remove the card attached to the new meter and put it in a safe place, you will have to record information on this card later. Put in new washers and connectors and attach the new meter. Go outside and turn the water on. Go back into the house to make sure the meter is not leaking. Take the TX ID: sticker off the MXU and again place it in a safe place you will need this later. Hook the MXU to the meter, set the Bluetooth device on the MXU and use the handheld device to hook this meter to the tower. Clean up any mess. Document all the information needed from both the old and new meter on the card that you saved. Keep the MXU sticker and new card for the City's records.



CAPABILITIES

- The iPERL meter has an operating range of 0.11 gpm (0.025 m³/hr) to 55 gpm (12.5 m³/hr)—it even starts to register flow as low as 0.03 gpm (0.007 m³/hr).
- Sizes include: 5/8" (DN 15mm), 3/4" (DN 20mm) and 1" (DN 25mm)
- iPERL can be installed horizontally, vertically or diagonally.

BENEFITS

- Maximize investment with iPERL's magnetic technology, which delivers a 20-year accuracy warranty, with no repairs
- Get smart water alarms to detect issues such as leaks, reverse flow, empty pipe, etc.
- Improve low flow accuracy to drive additional revenue

iPERL Smart Water Meter

Electromagnetic Flow Measurement System

Sensus iPERL® smart water meters are designed to capture both lost water and lost revenue. The innovative magnetic technology delivers unmatched low flow registration and minimal pressure loss. With no moving parts, iPERL maintains its accuracy over a 20 year lifetime and is equipped with smart water alarms – delivering the intelligence you need to quickly resolve issues in the field.

Industry Leading Performance

The patented measurement technology of the iPERL water meter provides enhanced accuracy at both low and high flows. Over a 20-year lifespan, your iPERL will measure just as accurately as the day it was installed.

Solid State Magnetic Technology

By avoiding the use of a mechanical measuring element inside the flow tube, metering performance is linear over the entire flow range – ensuring no reduction in accuracy at any flow rate over the life of the meter. The iPERL meter uses our patented remanent magnetic field technology – requiring far less energy and delivering superior accuracy.

Alarms

Quick resolution of field issues is made possible with smart water alarms including leak detection, reverse flow, empty pipe, magnetic tamper and low battery. When integrated with our FlexNet® communication network, remotely gathering and transmitting data has never been more reliable or profitable.

Construction

The iPERL meter body is made of composite alloy and contains no metal material. Inside the meter body is an electronic register and a measuring device that is comprised of a composite alloy flow tube. Embedded in the flow tube are coated silver electrodes. iPERL utilizes these to measure the fluid velocity through the flow tube – enabling less power consumption and predictable meter performance. The iPERL meter has a 20-year accuracy warranty and a 20-year battery life guarantee.



iPERL Smart Water Meter

Electronic Register

The 9-digit hermetically-sealed electronic register with LCD display was designed to eliminate dirt, fog and moisture contamination in pit settings. The large, easy-to-read display includes AMR digits, direction of flow, units of measure and smart water alarms. The AMR digits and units of measure are fully programmable. The register also provides integrated customer data logging.

AMI / AMR Compatibility

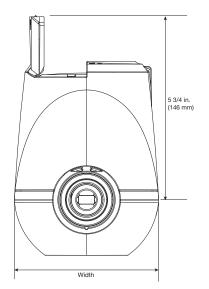
Sensus iPERL meters are compatible with common AMR/AMI systems, including the Sensus FlexNet® communication network.

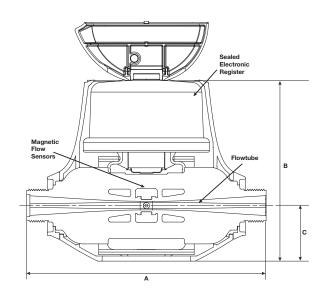
Conformance to Standards

The iPERL meter far exceeds the most recent revision of ANSI/AWWA Standard C-700 and C-710 for accuracy and pressure loss requirements. All iPERL meters are NSF/ANSI Standard 61 Annex F and G compliant and tested to AWWA standards.

Tamper Resistant

The integrated construction of the iPERL water meter prevents removal of the register to obtain free water. The magnetic tamper and low field alarms will both indicate any attempt to tamper with the magnetic field of the iPERL meter.





Dimensions and Net Weights

Size	A (lay length)	В	С	Spud Ends	NPSM Thread Size	Width	Net Weight
5/8"	7-1/2"	6-1/10"	1-3/4"	5/8"	3/4"	4-1/2"	3.1 lb.
(DN 15 mm)	(190 mm)	(155 mm)	(44 mm)	(15 mm)	(19 mm)	(114 mm)	(1.4 kg)
3/4"S (5/8" x 3/4") (DN 20 mm)	7-1/2" (190 mm)	6-1/10" (155 mm)	1-3/4" (44 mm)	3/4" (20 mm)	1" (25 mm)	4-1/2" (114 mm)	3.1 lb. (1.4 kg)
3/4"	9"	6-1/10"	1-3/4"	3/4"	1"	4-1/2"	3.2 lb.
(DN 20 mm)	(229 mm)	(155 mm)	(44 mm)	(20 mm)	(25 mm)	(114 mm)	(1.5 kg)
1"	10-3/4"	6-1/10"	1-3/4"	1"	1-1/4"	4-1/2"	3.3 lb.
(DN 25 mm)	(273 mm)	(155 mm)	(44 mm)	(25 mm)	(32 mm)	(114 mm)	(1.6 kg)



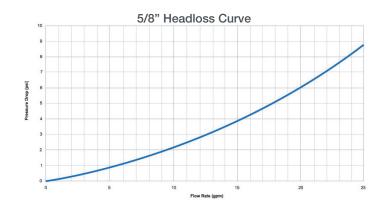
iPERL Smart Water Meter

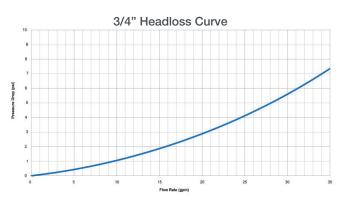


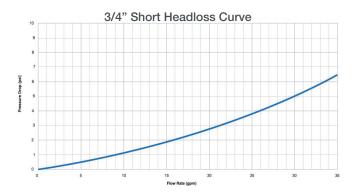
Specifications

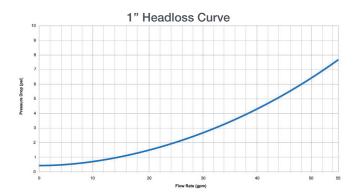
Service	Measurement of potable and reclaimed water. Water operating temperature range of 33°F (0.56°C) -80°F (26.7°C)
Starting Flow	5/8" (DN 15mm) size: 0.03 gpm (0.007 m³/h) 3/4" (DN 20mm) size: 0.03 gpm (0.007 m³/h) 1" (DN 25mm) size: 0.11 gpm (0.025 m³/h)
Low Flow Range (±3%)	5/8" (DN 15mm) size: >0.11 gpm (0.025 m³/hr) to <0.18 gpm (0.041 m³/hr) 3/4" (DN 20mm) size: >0.11 gpm (0.025 m³/hr) to <0.18 gpm (0.041 m³/hr) 1" (DN 25mm) size: >0.3 gpm (0.068 m³/hr) to <0.4 gpm (0.09 m³/hr)
Normal Water Operating Flow Range (±1.5%)	5/8" (DN 15mm) size: 0.18 to 25 gpm (0.04 to 5.7 m³/hr) 3/4" (DN 20mm) size: 0.18 to 35 gpm (0.04 to 8.0 m³/hr) 1" (DN 25mm) size: 0.4 to 55 gpm (0.09 to 12.5 m³/hr)
Maximum Operating Pressure	5/8" and 3/4" size: 200 psi (13.8 bar) 1" size: 175 psi (12.1 bar)
Measurement Technology	Solid state electromagnetic flow
Register	Hermetically sealed, 9-digit programmable electronic register; AMR/AMI compatible; iPERL register programmable using the UniPro® communicator and FieldLogic™ software
Materials	External housing – Thermal plastic; Flowtube – Polyphenylene sulfide alloy; Electrode – Silver/silver chloride; Register cover – Tempered glass
Alarm Defaults	Alarm Duration – 90 days; Leak Duration before alarm is triggered – 24 hours; Datalog Interval – 1 hour; Alarm Mask

Headloss Curves















8601 Six Forks Rd, Ste 700 Raleigh, NC 27615 1-800-638-3748 sensus.com





OMNI™+ REGISTER DISPLAY





Segment Test View

Totalizer View





Notification View

Flow Rate View

Conformance to Standards

The OMNI+ R² meter meets and far exceeds the most recent revision of ANSI/AWWA Standard C701 class II standards and exceeds performance criteria for ANSI/AWWA C700 Residential Standard using Sensus Turbo technology. Each meter is performance tested to ensure compliance. All OMNI meters are NSF/ANSI Standard 61, Annex F and G approved.

OMNI+ (R²) Water Meter

1-1/2" and 2"

The OMNI™+ R² Water Water Meter operation is based on advanced Floating Ball Technology (FBT).

Performance

The patented measurement principles of the OMNI+ R^2 meter ensure greater accuracy, expanded accuracy range and longer service life than any other comparable class meter. The OMNI+ R^2 meter has no restrictions on sustained flow rates within its continuous range. The floating ball measurement technology allows installation in any orientation and flows up to maximum rated capacity without undue wear or accuracy degradation.

Construction

The OMNI+ R² meter consists of two basic assemblies; the maincase and the measuring chamber. The measuring chamber assembly includes the "floating ball" impeller with a coated titanium shaft, hybrid axial bearings, integral flow straightener and an all electronic programmable register with protective bonnet. The maincase is made from industry proven Ductile Iron with an approved NSF epoxy coating. Maincase features are; easily removable measuring chamber, unique chamber seal to the maincase using a high pressure o-ring, testing port and a convenient integral strainer.

OMNI+ Electronic Register

The OMNI+ electronic register is hermetically sealed with an electronic pickup containing no mechanical gearing. The OMNI+ register features a programmable totalizer registration, AMI/ AMR reading digits, and a resettable test totalizer. The large, easy-to-read LCD also displays both forward and reverse flow directions. The OMNI+ tamper-proof security cover can be positioned in any of 270 degrees of rotation, with indexing points at each of the 90-degree customary register viewing positions.

Magnetic Drive

Meter registration is achieved by utilizing a fully magnetic pickup system. This is accomplished by the magnetic actions of the embedded rotor magnets and the ultra sensitive register pickup probe. The only moving component in water is the "floating ball" impeller.

Measuring Element

The hydro-dynamically balanced impeller floats between the bearings. The Floating Ball Technology (FBT) allows the measuring element to operate virtually without friction or wear, thus creating the extended upper and lower flow ranges capable on only the OMNI+ R² meter.



OMNI+ (R²) Water Meter

1-1/2" and 2"

Strainer

The OMNI+ R² with the "V" shaped strainer uses a stainless steel screen along with Floating Ball Technology (FBT). This creates a design that greatly improves accuracy, even in difficult settings. A removable strainer cover permits easy access to the screen for routine maintenance.

AMR/AMI Systems

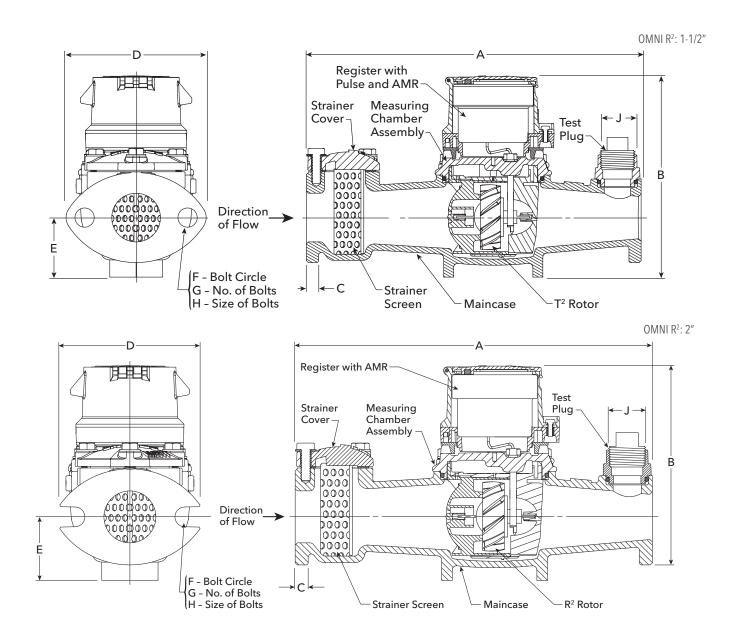
Meters and Electronic Registers are compatible with current Sensus AMR/AMI systems and other AMI communication systems that use the Sensus UI1203 protocol.

Maintenance

The OMNI+ R^2 meter is designed for easy maintenance. Should any maintenance be required, the measuring chamber and/ or strainer cover can be removed independently. Replacement parts or complete measuring chambers are available for repairs. OMNI+ R^2 replacement measuring chambers may also be utilized to upgrade some third-party meters to achieve increased accuracy and extended service life.

Data Logging

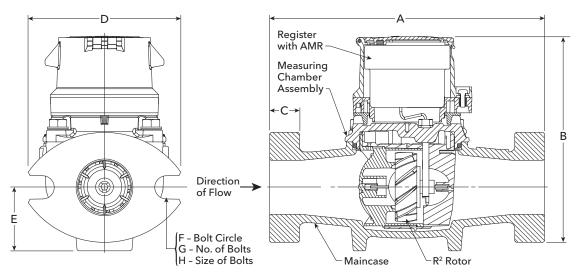
The OMNI+ R² meter logs 180 days of hourly consumption data.



OMNI+ (R²) Water Meter

1-1/2" and 2"

OMNI R²: 2" Without Strainer



DIMENSIONS AND NET WEIGHTS

Meter and Pipe Size	Norr Operating		Connections	А	В	С	D	Е	F	G	Н	J	Net Weight	Shipping Weight
1-1/2" DN 40 mm	2 gpm 0.45 m³/hr	150 gpm 34 m³/hr	Flanged	13" 330 mm	8-1/2" 216 mm	15/16" 24mm	5-7/16" 138 mm	2-5/16" 59 mm	4" 102 mm	2	5/8" 16 mm	1" 25 mm	18.8 lb 8.53 kg	22.5 lb 10.2 kg
2" DN 50 mm	2.5 gpm 0.57 m³/hr	200 gpm 45 m³/hr	Flanged	17" 432 mm	8-1/2" 216 mm	1" 25 mm	5-3/4" 146 mm	2-5/16" 59 mm	4-1/2" 114 mm	2	5/8" 16 mm	1-1/2" 38 mm	27.4 lb 12.4 kg	34.5 lb 15.6 kg
2" without Strainer DN 80 mm	2.5 gpm 0.57 m³/hr	250 gpm 57 m³/hr	Flanged	10" 254 mm	8-1/2" 216 mm	1″ 25 mm	5-3/4" 146 mm	2-5/16" 59 mm	4-1/2" 114 mm	2	5/8" 16 mm	N/A	17 lb 7.9 kg	24.5 lb 11.1 kg

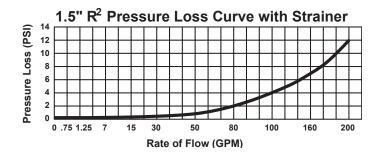
SPECIFICATIONS

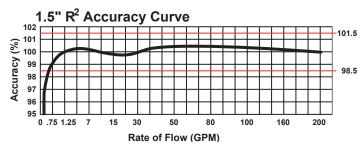
Service	Measurement of potable and reclaim water. IP68 Rated. Storage temperature: -22 °F (-30 °C) to 155 °F (68.3 °C)	Operating temperatures: Air: -22 °F (-30 °C) to 150 °F (65.6 °C) Water: 33 °F (0.6 °C) to 80 °F (26.7 °C)			
Operating Range (100% ± 1.5%)	1-1/2": 2 - 150 gpm (0.45 - 34 m³/hr)	2": 2.5 - 200 gpm (0.56 - 45 m³/hr) 2" without strainer: 2.5 - 200 gpm (0.56 - 45 m³/hr)			
Low flow (95% - 101.5%)	1-1/2": 0.75 gpm (0.17 m³/hr)	2": 1.0 gpm (0.23 m³/hr) 2" without strainer: 1.0 gpm (0.23 m³/hr)			
Maximum Continuous Operation	1-1/2": 120 gpm (27 m³/hr)	2": 160 gpm (36 m³/hr) 2" without strainer: 200 gpm (45 m³/hr)			
Maximum Intermittent Operation	1-1/2": 200 gpm (45 m³/hr)	2": 250 gpm (57 m³/hr)			
Pressure Loss	1-1/2": 6.9 psi @ 160 gpm (0.48 bar @ 36 m³/hr)	2": 7.0 psi @ 200 gpm (0.48 bar @ 45 m³/hr)			
Maximum Operating Pressure	200 psi (13.8 bar)				
Flange Connections	U.S. ANSI B16.1 / AWWA Class 125				
Register	Fully electronic sealed register with programmable registration (Gal. / Cu. Ft. / Cu. Mtr. / Imp. Gal. / Acre Ft.)	Programmable AMR/AMI reading Guaranteed 10-year battery life			
NSF Approved Materials	Maincase: Coated Ductile Iron Measuring Chamber: Thermoplastic Rotor "Floating Ball": Thermoplastic Radial Bearings: Hybrid Thermoplastic	Thrust Bearings: Sapphire/Ceramic Jewel Magnets: Ceramic Strainer Screen: Stainless Steel Strainer Cover: Coated Ductile Iron			

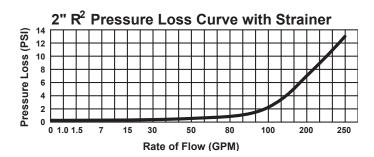
OMNI+ (R2) Water Meter

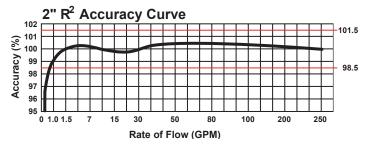
1-1/2" and 2"

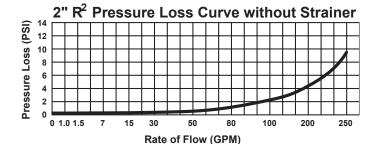
Headloss Curves













APPENDIX D. BID FORM

Description	Unit	Quantity	Unit Cost of Installation in Right-of-Way	Unit Cost of Installation in Resident Home
5/8" Water Meter Material				
& Installation	EA	510		
1" Water Meter Material & Installation	EA	19		
1 1/2" Water Meter Material & Installation	EA	4		
Total:		Total:		