



# STAFF REPORT

AGENDA NO: 9f

MEETING DATE: January 21, 2025

**To: Honorable Mayor and City Council**

**Date: January 21, 2025**

**From: Syed Murtuza, Director of Public Works – (650) 558-7230  
Weizhi Cheng, Associate Engineer – (650) 558-7258**

**Subject: Adoption of a Resolution Approving a \$297,848 Professional Services Agreement with Thirkettle Corporation dba Aqua-Metric Sales Company for the Advanced Meter Infrastructure Upgrade and Customer Engagement Project, City Project No. 86700, and Authorizing the City Manager to Execute the Agreement**

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## **RECOMMENDATION**

Staff recommends that the City Council adopt the attached resolution approving a professional services agreement with Thirkettle Corporation dba Aqua-Metric Sales Company for work related to the Advanced Metering Infrastructure (AMI) Upgrade and Customer Engagement Project in the amount of \$297,848 and authorizing the City Manager to execute the agreement.

## **BACKGROUND**

The City of Burlingame supplies potable water to the City's residences and businesses through approximately 9,280 water service connections. The meters are read bimonthly using an existing Advanced Meter Reading (AMR) drive-by system from Sensus. Staff drives a vehicle around the city every other month, and the system picks up reads locally via radio signal emitted by endpoint, which is a device that transmits the meter register read to the drive-by vehicle. Approximately 98 percent of Burlingame's meters have been installed with endpoint technology, which is now being discontinued. New service installations or failed existing units are being replaced with the latest Sensus AMI-compatible endpoint technology.

## **DISCUSSION**

The City will replace the outdated AMR system with the latest AMI technology. The AMI system will include two radio base stations to achieve 100% signal coverage within the City's water service area. Each AMI endpoint transmits hourly water meter reads via the base stations to an AMI server from which hourly water consumption data can be provided to customers and be used for billing and for water system operations. The AMI system will reduce staff time for meter data collection, improve billing operation efficiency, reduce water demands by proactively alerting customers of potential leaks or high-water usage, reduce energy consumption and greenhouse gas emissions, improve operational efficiency, as well as engage with customers and encourage conservation through an AMI-powered customer engagement portal to be implemented after the implementation

of the AMI system. Many Bay Area Water suppliers, such as Foster City, Hillsborough, Menlo Park, Palo Alto, Redwood City, San Bruno, the California Water Service, and the Mid-Peninsula Water District have already implemented or in the process of implementing AMI systems.

In 2022, the City conducted a study to identify a suitable AMI technology to replace the outdated AMR endpoints. Six AMI technology suppliers were included in the study, and Sensus was recommended due to its compatibility with the City's existing Sensus water meters, private FCC licensed radio network, water meter box compatibility, billing system computability, and superior network design and maintenance features. The study also identified external grant funding opportunities and implementation scenarios due to limited funding and constraints. In January 2024, the State awarded the City \$1,009,232 for the AMI Project via a competitive grant program under the Integrated Regional Water Management Program (IRWM).

Based on the available grant funding, the City issued an RFP on August 7, 2024, to a list of qualified AMI vendors for the implementation of Sensus FlexNet AMI network infrastructure and related system integration work. (Upon completion of the AMI network and billing integration work, the City's internal staff will then follow up separately to install the AMI endpoints.) The City received one proposal from a qualified firm, the sole representative of Sensus technology in Northern California. After a comprehensive review, Thirkettle Corporation dba Aqua-Metric Sales Company was selected for this project due to their expertise in Sensus AMI technology, their high understanding of the overall project, and quality of their proposal.

Staff negotiated the scope of professional services for the project with Thirkettle Corporation dba Aqua-Metric Sales Company in the amount of \$297,848. The following is a brief outline of the scope of services, which is described in detail in Exhibit A of the Professional Services Agreement.

- AMI Implementation
  - Procurement of the AMI network and software
  - AMI system planning and design in collaboration with the City
- Design, installation, and acceptance of the AMI Network
- Installation, configuration, integration, and training of the AMI software
  - Sensus FlexNet RNI
  - Sensus Analytics MDMS
  - Sensus FieldLogic Tools
- Project Closeout

The project is anticipated to begin in spring 2025 and be completed in approximately one year.

### **FISCAL IMPACT**

The following is the estimated expenditures pertaining to the project development.

Professional Services	\$ 297,848
Contingency (15%)	\$44,677
Engineering Design & Administration	\$40,925
<b>Total</b>	<b>\$383,450</b>

There is adequate funding available in the FY24-25 Water Capital Improvement Program to complete the project. The cost of the project will be reimbursed by the IRWM Grant.

Exhibits:

- Resolution
- Professional Services Agreement