

CITY OF YUBA CITY
STAFF REPORT

Date: January 18, 2022
To: Honorable Mayor & Members of the City Council
From: Public Works Department
Presentation By: Diana Langley, City Manager

Summary

Subject: Cellular Water Meter Replacement Project (18-14) – Purchase Order Increase
Recommendation: Adopt a Resolution authorizing an increase of \$165,000 to the Badger Meter, Inc. Purchase Order, with a finding that it is in the best interest of the City
Fiscal Impact: \$165,000 – CIP Account No. 951094 (Replace Water Service or Water Meter)

Purpose:

To improve water distribution customer service, labor efficiency, and water-loss prevention by replacing aging radio-read meters with cellular-read meters.

Council's Strategic Goal:

This project addresses the City Council's Strategic Goal of improving the City's infrastructure.

Background:

The State Water Resources Control Board provides grant funding to local public agencies for water and wastewater infrastructure projects, including projects to conserve water and energy. On January 17, 2017, City Council authorized the Public Works Director to file a Financial Assistance Application with the State for the State Revolving Fund program to fund the Cellular Water Meter Replacement Project. The project proposes to replace all of the City's radio-read meters with cellular-read meters and components. The project aims to provide a higher level of service for our customers, while reducing costs associated with labor and equipment required to read the meters. Cellular-read meters provide faster, more accurate information about water usage, leaks, and potential maintenance issues by providing real-time data, which customers may access through a website and smartphone/tablet application. Additionally, the City's Finance Department can quickly download the information for billing and maintenance purposes.

The Cellular Water Meter Replacement Project includes the replacement of approximately 16,808 radio-read transmitters with new cellular-read transmitters (endpoints), 16,808 meter registers (encoders), and 5,000 meter bodies (bare meters).

On April 10, 2018, City Council approved the Construction Installment Sale Agreement. The City entered into the agreement with the State Water Resources Control Board on April 18, 2018. The agreement is for \$8 million, which includes \$4 million in principal forgiveness and \$4 million in low

interest loans. Funding will be through the Clean Water State Revolving Fund (SRF) with a principal forgiveness in the amount of 50% of the total project cost. The City's remaining share of 50% will be funded through a low interest loan at 1.8% interest rate.

On December 17, 2019, City Council approved the project's plans and specifications and authorized staff to advertise for bids. On March 3, 2020, the project was advertised for bids and on May 5, 2020, City Council approved the following:

1. Award of the sole source purchase of Badger Meter Inc. (Badger) equipment for installation on the Cellular Water Meter Replacement Project in the amounts of:

A. \$3,532,750 for 16,808 Orion Cellular LTE Endpoints (endpoints) with Twist Tight Connectors, 16,808 Badger HR-E LCD Encoders (encoders), and Training; and

B. \$620,000 for 5,000 Badger M70 Bronze Meter Bodies (meters)

2. Amend the Professional Services Agreement with Coastland Civil Engineering (City's engineering consultant) of Auburn, CA in the amount of \$255,500 for a total of \$377,500, to provide construction management and engineering services during construction for the Cellular Water Meter Replacement Project.

3. Award the construction contract to Professional Meters, Inc. (PMI) in the amount of their total bid \$1,384,889 for installation of Badger Meter, Inc. equipment.

On May 24, 2021, the agreement was amended and executed by the City Manager to reflect bids and actual equipment prices for a total project cost of \$6,489,864.00. On November 20, 2021, construction started on the Cellular Water Meter Replacement Project. To date, construction of the project is substantially complete with punch list items and warranty items remaining.

Analysis:

The project specifications require the contractor to perform meter box audits to determine meter/encoder conditions prior to replacements. Additionally, the project specifications call for the replacement of the existing radio read meter endpoint with a new Orion Cellular LTE-M Endpoint where the existing endpoint has an identification code which does not start with a 1 or 2. Additionally, the project specifications call for the replacement of an existing meter over approximately 12-15 years of age that is not a Badger Meter brand.

During construction, PMI discovered additional meter equipment not included in the original purchase order contract requiring replacement per the project specifications highlighted above and as detailed below.

Orion Cellular LTE-M Endpoints

In accordance with the project specifications described above, PMI discovered and replaced approximately 350 additional radio read endpoints not accounted for in the original purchase order.

On recommendation from City's engineering consultant, an additional 418 endpoints were ordered and left as yard stock for City maintenance staff to replace as older units fail in the future. The additional cost to purchase a total of 768 endpoints is \$123,126.91. Securing additional units for yard stock avoids potential service disruptions to water customers by allowing City maintenance crews to respond to failed units quickly.

Meters

In accordance with the project specifications, PMI discovered and replaced eight (8) additional 3" Fire Hydrant meters not accounted for in the original purchase order. The additional cost to purchase the 3" Fire Hydrant M70 Bronze meters from Badger is \$8,015.39.

Reserve

To date, there are several invoices for additional equipment and services Badger Meter, Inc. has not yet submitted to the City for review including an additional Ranger 7HH Data Collector, training costs, and service unit packages required to complete the project that were not included in the original purchase order. Staff estimates these costs not yet invoiced to total approximately \$33,857.70.

Fiscal Impact:

With the construction and sole source purchase contract awarded on May 5, 2020, Council authorized a total construction cost for the project of \$6,489,864.00, which consists of the following components:

Sole Source Meter Purchase	\$ 4,152,750
Construction Contract	\$ 1,384,889
Construction Change Order Contingency (25%)	\$ 346,220
Construction Management / Inspection (18.5%)	\$ 255,500
City Administration & O&M Costs (16.5%)	\$ 228,505
Project Management	\$ 122,000

Total **\$ 6,489,864**

With the unforeseen discoveries of additional endpoints and meters requiring replacement and remaining Badger Meter, Inc. invoices requiring review and payment, staff is requesting the following contingency funding authorization:

\$ 123,126.91 – HR-E LCD Encoders
\$ 8,015.39 – 3" Hydrant Meters & Hardware/Couplings
\$ 33,857.70 – Reserve (Training, Add'l Hand Held Readers, Service Packages)
\$ 165,000.00 – Total additional authorization requested

Staff does not foresee utilizing the full \$165,000. However, to ensure construction completion by the SRF deadline of May 31, 2022 and to avoid returning to Council for future unforeseen purchasing needs as staff reviews the final invoices from Badger Meter, Inc., staff recommends to reserve the additional \$33,857.70. Staff has confirmed additional costs are acceptable under the terms of the grant agreement.

Capital Improvement Program (CIP) Account No. 951094 (Replace Water Service or Water Meter) has a current cumulative balance of approximately \$1,738,340. Staff recommends retaining \$165,000 of this balance for Badger Meter, Inc. purchases and reserves as described above.

Alternatives:

There is no reasonable alternative to authorizing a purchase order increase as described in this staff report. Additional items were required to complete the project per the contract specifications.

Recommendation:

Adopt a Resolution authorizing an increase of \$165,000 to the Badger Meter, Inc. Purchase Order, with a finding that it is in the best interest of the City.

Attachments:

1. Resolution - Authorizing an increase to the Badger, Inc. Purchase Order

Prepared By:

Nick Menezes
Assistant Engineer

Submitted By:

Diana Langley
City Manager

ATTACHMENT 1

RESOLUTION NO. _____

**RESOLUTION OF THE CITY COUNCIL OF THE CITY OF YUBA CITY
AUTHORIZING AN INCREASE OF \$165,000 TO THE BADGER METER, INC. PURCHASE
ORDER 220094-2 WITH A FINDING THAT IT IS IN THE BEST INTEREST OF THE CITY, OF
THE CELLULAR WATER METER REPLACEMENT PROJECT (18-14)**

WHEREAS, on May 5, 2020, the City of Yuba City (City) awarded a sole source purchase contract to Badger Meter, Inc., in the total amount of \$4,152,750.00 for the purchase of the following:

- a. \$3,532,750 for 16,808 Orion Cellular LTE Endpoints with Twist Tight Connectors, 16,808 Badger HR-E LCD Encoders, and Training; and
- b. \$620,000 for 5,000 Badger M70 Bronze Meter Bodies

WHEREAS, the purchase of said equipment was for the Cellular Water Meter Replacement Project (18-14); and

WHEREAS, the award of said sole source purchase contract did not include a contingency amount; and

WHEREAS, upon commencing construction activities it was discovered that 350 additional endpoints required replacement for \$56,112.52; and

WHEREAS, upon commencing construction activities it was discovered 8 additional fire hydrant meters required replacement for \$8,015.39; and

WHEREAS, on recommendation by the City's engineering consultant, 418 additional endpoints were ordered for City reserves for \$67,014.39; and

WHEREAS, staff anticipates Badger Meter, Inc. will submit invoices totaling an estimated \$33,857.70 to the City for additional equipment and services required to complete the project that were not included in the original purchase order; and

WHEREAS, the City's engineering consultant determined that proposed costs for the additional equipment cited above are reasonable and consistent with industry standards.

NOW, THEREFORE, be it resolved by the City Council of the City of Yuba City as follows:

1. The City Council finds that all of the facts set forth in the recitals above are true and correct and incorporated herein.
2. The City Council hereby authorizes a purchase contingency of \$165,000, with a finding that it is in the best interest of the City.
3. This Resolution shall become effective immediately.

The foregoing resolution was duly and regularly introduced, passed, and adopted by the City Council of the City of Yuba City at a regular meeting thereof held on the 18th day of January, 2022.

AYES:

NOES:

ABSENT:

David Shaw, Mayor

Ciara Wakefield, Deputy City Clerk

APPROVED AS TO FORM
COUNSEL FOR YUBA CITY:

Shannon Chaffin, City Attorney
Aleshire & Wynder, LLP