

**Metropolitan Domestic Water Improvement District
Board of Directors Meeting**

February 12, 2024

**Approval of Sole Source Procurement for Itron
Advanced Metering Infrastructure (AMI) Fixed Network Components**

Synopsis

The Board is being requested to approve a Sole Source Procurement for Itron Advanced Metering Infrastructure (AMI) Fixed Network Components from Mountain States Pipe and Supply for the Metro Main AMI and WaterSmart Customer Portal. The AMI fixed network components are meter endpoints, fixed network collectors, fixed network repeaters, and endpoint antennas. All are utilized to bring the meter data back to the office and made available for the WaterSmart Customer Portal.

Background

The District received two grants for the Metro Main AMI Project and WaterSmart Customer Portal: \$2 million from the Bureau of Reclamation (BOR) and \$3 million from the Water Infrastructure Finance Authority of Arizona (WIFA). The AMI project consists of multiple items and purchases including water meters, meter endpoints, collectors / repeaters, antenna poles, solar components, endpoint antennas, customer portal software, meter installations services, and polymer meter box lids.

Issues

The AMI project consists of replacing 11,407 meters and 9,058 will require the installation of a new meter endpoint, which is an Encoder Receiver Transmitter (ERT). The difference between the number of meters and the ERTs is that there are existing meters where the AMI component of the meter has failed, not allowing the propagation of the meter reads, but the existing ERT can still be reused. The ERT communicates the meter readings to the nearest Itron Collector or Repeater for backhaul to the office.

The AMI project requires the installation of the fixed network system, which consists of the Itron Collectors and Itron Repeaters. Based on the propagation study, the Metro Main service areas will require five Itron Collectors and 32 Itron Repeaters. The repeaters report to the collectors it can hear and the collectors backhaul back to the office. Collectors are planned to be located in different parts of the main service area for wider coverage and the repeaters should be able to hear multiple collectors.

Other Itron components may be required as the fixed network is implemented. These components include ERT antennas for locations where the steel lid cannot be replaced or other areas that may need the signal boosted. Pending the location and method of installation of the collectors and repeaters, different mounting hardware and remote antennas will be needed. Actual quantities of these materials are unknown at this time. Due to the uncertainty, staff is recommending a 5% contingency to the current costs.

Below is a table showing the costs of the endpoints, collectors, and repeaters. This pricing is good until July 2024 when Itron will be issuing its next price increase.

MATERIAL COSTS	QTY	UNIT COST	TAX % MULTIPLIER	COST
Itron ERTS	9,058	\$105.00	1.061	\$1,009,106.49
Itron Collectors	5	\$8,836.76	1.061	\$46,879.01
Itron Repeater	32	\$6,550.00	1.061	\$222,385.60
				\$1,278,371.10

The Grant funds from both BOR and WIFA have language and contract requirements that must be included in any procurement or subcontracts. Staff is finalizing this contract language in an agreement to be executed before purchasing the meters for the project. The majority of the language is in compliance with existing federal laws.

One of the requirements of the Grants is to comply with the Buy America Build America Act (BABA), which requires that at least 55% of the product be from American material sources and assembled in the United States. At present, the Itron ERTs, Collectors, Repeater, and other AMI accessories do not meet the BABA requirements.

The District has been installing Itron components in all its service areas since 2010. All the District's outlying facilities are on an Itron AMI fixed network. The communications between the fixed network components are proprietary and no other AMI manufacturer is compatible or could successfully integrate with the Itron system. Staff submitted a BABA waiver request to BOR for use of the Itron fixed network components. The waiver request is still in process with BOR, but pending the approval, staff would like to be ready to order the fixed network components if the waiver is approved due to lead times for procurement. The collectors and repeaters have a 26-week lead time. BOR has previously approved similar waivers for meter replacement projects.

As with the District, BOR and WIFA require competitive procurement. The challenge with the Itron components is that Itron also uses a distributor model to sell their products in a given area. Mountain States Pipe and Supply is the authorized distributor in the District's service areas. Staff recommends that the District utilize an authorized distributor for purchases so warranty and technical issues are supported. Additionally, all the software on the back end collecting all the meter data is Itron products. The technical support and warranty repairs are critical in maintaining the fixed network system.

The current projection for the total AMI project cost is near \$5.7 million. Costs fluctuate as the quantities are continually shifting. The two grants total \$5 million: \$2 million from BOR and \$3 million from WIFA. BOR has a cost match requirement of 50% that the WIFA funds can be counted towards. WIFA has a cost match requirement of 25% that will come from the District's funds (\$750,000). Any escalation in project costs will also be from District funds.

Staff Recommendation

It is recommended by staff that the Board approve the purchase of the Itron fixed network components for the Metro Main Advanced Metering Infrastructure (AMI) and WaterSmart Customer Portal project from Mountain States Pipe and Supply, as the sole source authorized distributor, in the amount not-to-exceed \$1,350,000, and to authorize the General Manger to sign the agreement with the required terms and conditions.

Suggested Motion

I move to approve the purchase of the Itron fixed network components for the Metro Main Advanced Metering Infrastructure (AMI) and WaterSmart Customer Portal project from Mountain States Pipe and Supply, as the sole source authorized distributor, in the amount not-to-exceed \$1,350,000, and to authorize the General Manger to sign the agreement with the required terms and conditions.

Respectfully submitted,

Steven D. Shepard
Utility Superintendent

I concur with the above-noted recommendation.
Respectfully submitted,

Joseph Olsen, P.E.
General Manager