THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

# Board Action

- **Board of Directors**
  ***Engineering, Operations, and Technology Committee***

1/9/2024 Board Meeting

**7-4**

## Subject

Award a $549,592.04 contract to Caasi Flow Control for procurement of plug valves to be installed on the Foothill Feeder and Rialto Pipeline; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

## Executive Summary

The Foothill Feeder conveys untreated water from the West Branch of the State Water Project into the western portion of Metropolitan's service area, while the Rialto Pipeline conveys untreated water from the East Branch of the State Water Project into the eastern part of Metropolitan's service area. Several blowoff structures along the pipeline alignments are used to dewater the pipelines. Each blowoff structure has two plug valves: one for isolation and the other to control flows during dewatering episodes. Twenty 16-inch-diameter plug valves, located on Foothill Feeder and Rialto Pipeline, are from each pipeline's original construction. These valves have been in service for more than 50 years and require replacement.

This action awards a $549,592.04 procurement contract to Caasi Flow Control for 20 plug valves to be installed on the Foothill Feeder and Rialto Pipeline. See **Attachment 1** for the Allocation of Funds, **Attachment 2** for the Abstract of Bids, and **Attachment 3** for the Location Map.

## Proposed Action/Recommendation and Options

**Staff Recommendation: Option #1**

**Option #1**

Award a $549,592.04 procurement contract to Caasi Flow Control for 20 plug valves.

**Fiscal Impact:** Expenditure of $725,000 in capital funds. $19,000 will be incurred in the current biennium and has been previously authorized. The remaining funds from this action will be accounted for in the next biennial budget.

**Business Analysis:** This option will improve the operational reliability of two major pipelines within the distribution system.

**Option #2**

Do not proceed with the project at this time.

**Fiscal Impact:** None

**Business Analysis:** This option would forego the opportunity to improve the operational reliability of the two pipelines.

## Alternatives Considered

Staff considered refurbishing the existing valves, but refurbishment was deemed unviable based on the current deteriorated condition of the valves. Staff also considered substituting butterfly valves for the deteriorated plug valves. Butterfly valves are less expensive but are not as robust as plug valves. Butterfly valves are also susceptible to damage from cavitation when used in this particular dewatering application. Since the valves are

used for isolation and energy dissipation during dewatering, failure of a valve would require an unplanned shutdown of the pipeline for replacement. Replacement of the existing plug valves in kind was selected for its superior performance in this application and to maintain water delivery reliability.

## Applicable Policy

Metropolitan Water District Administrative Code Section 8121: General Authority of the General Manager to Enter Contracts

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

## Related Board Action(s)/Future Action(s)

By Minute Item 52778, dated April 12, 2022, the Board appropriated a total of $600 million for projects identified in the Capital Investment Plan for Fiscal Years 2022/2023 and 2023/2024.

## California Environmental Quality Act (CEQA)

**CEQA determination for Option #1:**

The proposed action is exempt from CEQA because it involves the repair and maintenance of existing public structures, facilities, and mechanical equipment involving negligible or no expansion of existing or former use and no possibility of significantly impacting the physical environment. (State CEQA Guidelines Section 15301.).

**CEQA determination for Option #2:**

None required

## Details and Background

**Background**

The Foothill Feeder conveys untreated water from the West Branch of the State Water Project into the western portion of Metropolitan's service area. The feeder extends south from Castaic Lake, crosses under the Santa Clara River and several of its tributaries, and terminates at the Joseph Jensen Water Treatment Plant. The member agencies that rely on this supply include Calleguas Municipal Water District, Central Basin Municipal Water District, Las Virgenes Municipal Water District, West Basin Municipal Water District, and the cities of Beverly Hills, Burbank, Compton, Glendale, Long Beach, Los Angeles, San Fernando, Santa Monica, and Torrance.

Similarly, the Rialto Pipeline conveys untreated water from the East Branch of the State Water Project into the eastern part of Metropolitan's service area. The pipeline extends east from the Department of Water Resources' Devil Canyon Afterbay and terminates at the San Dimas Control Facility. In addition to serving the Weymouth plant, the Rialto Pipeline directly serves Three Valleys Municipal Water District and the Inland Empire Utilities Agency.

Dewatering of the pipelines utilizes several blowoff structures. Each blowoff structure has two plug valves: one for isolation and the other to control flow. The existing 16-inch-diameter valves on the Foothill Feeder and Rialto Pipeline are from the original construction and have been in service for more than 50 years. Although the valves have been maintained, they have deteriorated to the point that they leak and are no longer repairable.

Procurement specifications for the replacement of plug valves are complete, and bids have been received. Staff recommends proceeding with the procurement of replacement plug valves at this time. The valves will be installed by Metropolitan forces during planned pipeline shutdowns in 2025.

**Foothill Feeder and Rialto Pipeline Blowoff Valve Replacements – Procurement**

The scope of the work includes furnishing 20 16-inch-diameter lubricated plug valves, submittal review, fabrication inspection, and contract administration. Plug valves are the primary isolation and flow control valve types used at Metropolitan's blowoff facilities throughout the distribution system. Replacement of failed valves is critical for dewatering of the facilities and for maintenance of the distribution system as a whole. Installation of

the valves will be completed by Metropolitan forces during planned shutdowns of each pipeline, and funds for that work have been previously allocated.

A total of $725,000 is required for this work. In addition to the amount of the procurement contract described below, allocated funds for Metropolitan staff include $14,000 for submittal review; $59,000 for contract administration and fabrication inspections; $35,000 for project management; and $67,407.96 for remaining budget. **Attachment 1** provides the allocation of the required funds. The total estimated cost to complete the work, including the amount appropriated to date, funds allocated for the work described in this action, and future construction costs, is anticipated to range from $3.0 million to $3.25 million.

***Award of Procurement Contract (Caasi Flow Control)***

Request for bids No. RFB-KK-423868 for procurement of 20 plug valves was advertised on October 20, 2023. As shown in **Attachment 2**, three bids were received and opened on November 13, 2023. The low bid from Caasi Flow Control, in the amount of $549,592.04, complies with the requirements of the specifications. This amount includes all sales and use taxes imposed by the State of California. The budgetary estimate for this material, based on previous procurements, ranged from $575,00 to $625,000. As a procurement contract, there are no subcontracting opportunities, and a Small Business Enterprise participation level was not established for this contract.

***Project Milestone***

February 2025 – Complete installation of the valves during upcoming planned shutdowns

12/14/2023

*John V. Bednarski* *Date*
*Manager/Chief Engineer*
*Engineering Services*

12/19/2023

*Adel Hagekhalil* *Date*
*General Manager*

**Attachment 1 – Allocation of Funds**

**Attachment 2 – Abstract of Bids**

**Attachment 3 – Location Map**

Ref# es12697418

## Allocation of Funds for Plug Valve Replacements for Foothill Feeder and Rialto Pipeline

| | Current Board Action Jan. 2024 |
|---|---|
| Labor | |
| Studies & Investigations | $ - |
| Final Design | - |
| Owner Costs (Program mgmt.) | 35,000 |
| Submittals Review & Record Drwgs. | 14,000 |
| Fabrication Inspection & Support | 59,000 |
| Metropolitan Force Construction | - |
| Materials & Supplies | - |
| Incidental Expenses | - |
| Professional/Technical Services | - |
| Right-of-Way | - |
| Equipment Use | - |
| Contracts | - |
| Caasi Flow Control | 549,592.04 |
| Remaining Budget | 67,407.96 |
| **Total** | **$ 725,000** |

The expended amount for replacement of the 20 plug valves for the Foothill Feeder and Rialto Pipelines is $128,000. The total estimated cost to complete the valve replacement, including the amount appropriated to date, funds allocated for the work described in this action, and future construction costs, is anticipated to range from $3,000,000 to $3,250,000.

**The Metropolitan Water District of Southern California**

**Abstract of Bids Received on November 13, 2023 at 11:00 A.M.**

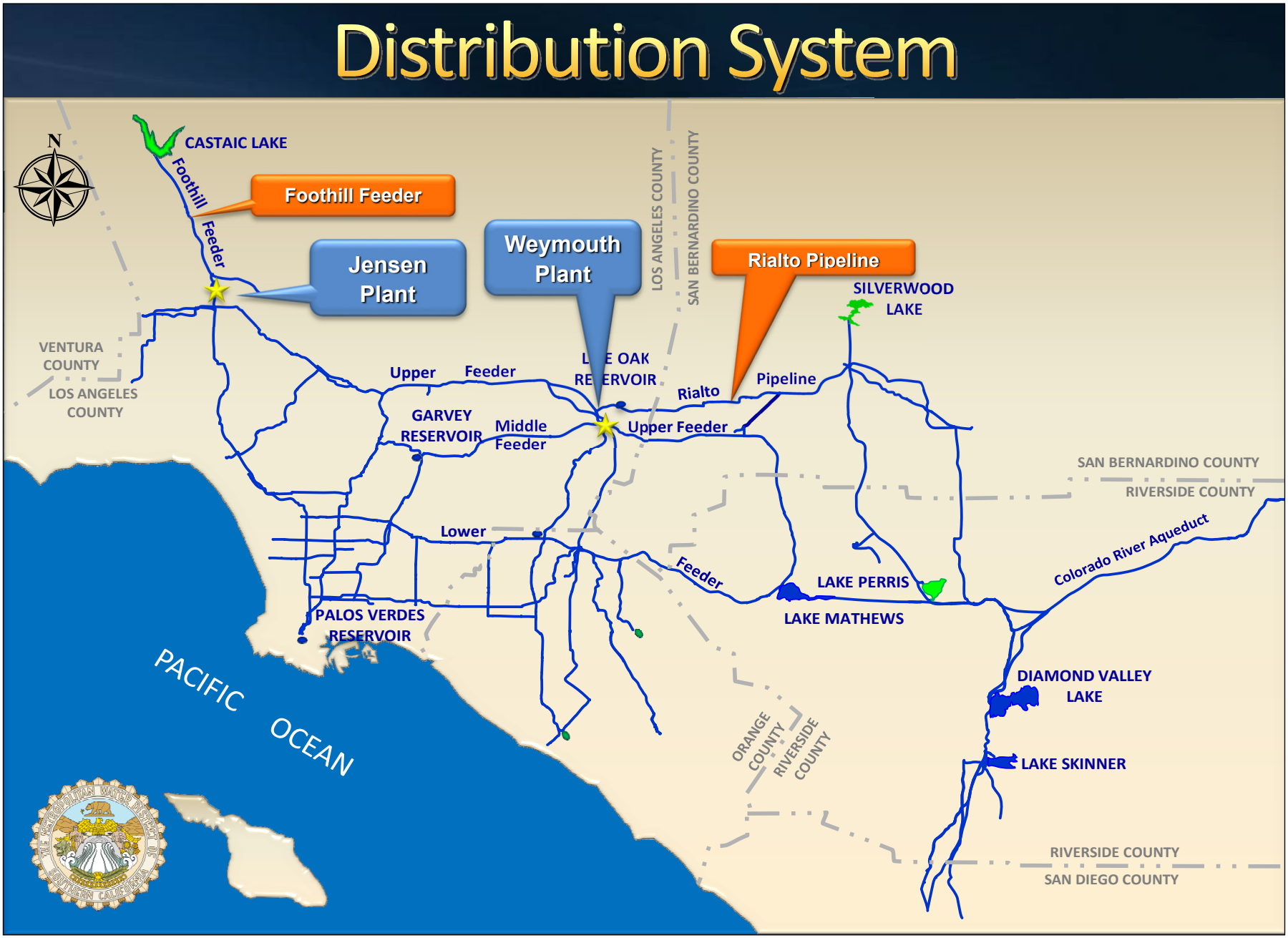
**RFB No. RFB-KK-423868**
**Lubricated Plug Valves for Distribution System**

The work includes procurement of 20 plug valves.

**Budgetary estimate: $575,000 to $625,000**

| Bidder and Location | Total |
|---|---|
| **Caasi Flow Control**<br>**San Ramon, CA** | **$549,592.04** |
| B&K Valves & Equipment Inc.<br>Carlsbad, CA | $576,000 |
| Southwest Valve & Equipment<br>Irvine, CA | $649,026 |

[1] As a procurement contract, there are no subcontracting opportunities.
[2] Includes sales and use taxes of 7.75 percent imposed by the state of California


Distribution System
N
CASTAIC LAKE
Foothill Feeder
Foothill Feeder
Jensen Plant
Weymouth Plant
Rialto Pipeline
LOS ANGELES COUNTY
SAN BERNARDINO COUNTY
SILVERWOOD LAKE
VENTURA COUNTY
LOS ANGELES COUNTY
Upper Feeder
E OAK RESERVOIR
Rialto Pipeline
GARVEY RESERVOIR
Middle Feeder
Upper Feeder
SAN BERNARDINO COUNTY
RIVERSIDE COUNTY
Lower Feeder
Colorado River Aqueduct
LAKE PERRIS
LAKE MATHEWS
PALOS VERDES RESERVOIR
PACIFIC OCEAN
DIAMOND VALLEY LAKE
ORANGE COUNTY
RIVERSIDE COUNTY
LAKE SKINNER
RIVERSIDE COUNTY
SAN DIEGO COUNTY