

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA



Board of Directors Engineering and Operations Committee

8/16/2022 Board Meeting

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Subject

Award a \$5,647,405 procurement contract to Sojitz Machinery Corporation of America for three 84-inch diameter butterfly valves to be installed as part of water supply reliability improvements in the Rialto Pipeline service area; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA (This action is part of a series of projects that are being undertaken to improve the supply reliability for State Water Project dependent member agencies)

Executive Summary

The current state-wide drought and resulting low allocation of State Water Project (SWP) supplies by the California Department of Water Resources (DWR) have a direct impact on Metropolitan's ability to deliver these supplies to the Rialto Pipeline service area. The provision of infrastructure additions to Metropolitan's system in this region will expand the potential to deliver alternative supplies from Diamond Valley Lake (DVL), and possibly the Colorado River Aqueduct (CRA), into the Rialto Pipeline. This alternative supply delivery approach will directly benefit this portion of the service area and will allow limited SWP supplies to be reallocated to West Branch SWP member agencies. This action awards a procurement contract for large-diameter butterfly valves. These valves will be installed in support of planned infrastructure improvements at multiple locations on the Inland Feeder and at DVL as part of upcoming construction contracts to enhance operational flexibility to deliver water from DVL, and potentially the CRA, to member agencies that are currently dependent on supplies from the SWP.

Details

Background

The Rialto Pipeline, constructed in 1972, is approximately 30 miles long with a diameter ranging from 96 inches to 144 inches. It conveys untreated water from DWR's Lake Silverwood to Metropolitan's Live Oak Reservoir in La Verne. Under normal conditions, the Rialto Pipeline relies on raw water deliveries from the East Branch of the SWP via DWR's Devil Canyon Afterbay. Member agencies with service connections on the Rialto Pipeline include the Inland Empire Utilities Agency, Three Valleys Municipal Water District, and the Upper San Gabriel Valley Municipal Water District.

Metropolitan's DVL provides emergency storage in the event of a major earthquake, carryover storage as a reserve for drought conditions, and seasonal storage to meet annual member agency demands. DVL is Metropolitan's largest reservoir, with a maximum storage capacity of 810,000 acre-feet. At this time, the Rialto Pipeline is unable to access the water stored in DVL due to infrastructure and operational constraints and hydraulic limitations.

In December 2021, the Board authorized amending the Capital Investment Plan (CIP) to include the water supply reliability improvements in the Rialto Pipeline service area. The improvements are being implemented in a staged approach. Stage 1 includes the Wadsworth Pumping Plant bypass pipeline, the Inland Feeder/Rialto Pipeline intertie, and the Inland Feeder Badlands Tunnel Surge Protection Facility. These infrastructure modifications will allow for the delivery of up to 60 cubic feet per second (cfs) from DVL to the Rialto Pipeline service area. Stage 2 of the improvements program includes making connections between the Inland Feeder and a San Bernardino Valley Municipal Water District pump station near the city of Highland. When both phases of the

Rialto Pipeline Water Supply Reliability Improvements are completed, up to 120 cfs of DVL water can be delivered to the Rialto Pipeline. These incremental infrastructure improvements, coupled with existing infrastructure, would significantly increase operational flexibility and enhance the water supply availability to member agencies with service connections on the Rialto Pipeline. This alternative supply delivery approach will directly benefit West Branch SWP member agencies by allowing limited SWP supplies to be reallocated to the West Branch of the SWP.

The implementation of the Stage 1 projects consists of pipe connections between existing Metropolitan pipelines, with bulkheads and spool pieces to isolate and direct flows. Design activities for these improvements are currently underway and are scheduled to be completed by the end of 2022. Construction of the new infrastructure is anticipated to be completed by late 2023. Large-diameter butterfly valves, which are the subject of this action, are included in these three projects to improve operational flexibility. Staff recommends moving forward with valve procurement at this time since the valves have a long fabrication and delivery cycle. Staff will return to the Board at a later date to award construction contracts for installation of these valves.

In accordance with the April 2022 action on the biennial budget for fiscal years 2022/23 and 2023/24, the General Manager will authorize staff to proceed with the procurement of the valves to improve the water supply reliability of the Rialto Pipeline, pending board award of the procurement contract described below. Based on the current CIP expenditure forecast, funds for the work to be performed pursuant to the subject contracts during the current biennium are available within the CIP Appropriation for Fiscal Years 2022/23 and 2023/24 (Appropriation No. 15488). This project has been reviewed in accordance with Metropolitan's CIP prioritization criteria and was approved by Metropolitan's CIP evaluation team to be included in the Supply Reliability Program.

Rialto Pipeline Water Supply Improvements – Procurement

The scope of the procurement contract includes furnishing three 84-inch diameter butterfly valves, associated fittings, and accessories. Metropolitan forces will receive, offload, and place the valves in storage at the Wadsworth Pumping Plant.

A total of \$6,200,000 is required to perform this work. In addition to the amount of the contract, the allocated funds include \$132,000 for factory fabrication inspection and functional testing; \$33,000 for Metropolitan forces for activities described above; \$63,000 for submittals review, technical support, and responding to manufacturer requests for information; \$90,000 for contract administration and project management; and \$234,595 for remaining budget.

Attachment 1 provides the allocation of required funds. The total estimated cost to complete the Rialto Pipeline Water Supply Improvement Project, including the amount appropriated to date, funds allocated for the work described in this action, and all future actions, is expected to range between \$41 million and \$45 million.

Award of Procurement Contract (Sojitz Machinery Corporation of America)

Specifications No. 2022 for furnishing butterfly valves for Rialto Pipeline Water Supply Improvement projects was advertised for bids on April 5, 2022. As shown in **Attachment 2**, two bids were received and opened on June 28, 2022. The bid from Anderson Supply Co. was deemed to be non-responsive due to exceptions taken by the bidder. The bid from Sojitz Machinery Corporation of America in the amount of \$5,647,405 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 a survey of vendors, ranged from \$5 million to \$5.5 million. As a procurement contract, there are no subcontracting opportunities.

This action awards a \$5,647,405 procurement contract to Sojitz Machinery Corporation of America to furnish three 84-inch diameter butterfly valves to improve the water supply reliability of the Rialto Pipeline.

Alternatives Considered

During the planning phase of this project, staff considered using different types of valves for isolation, such as conical plug and spherical ball valves. These valves are robust and have a full port opening, thereby reducing pressure losses. However, these valves are larger, expensive, and take longer to fabricate. The much larger size of either the conical plug or spherical ball valve, and the actuator needed to operate the valve, would also result in a significantly larger structure to house the valve, increasing construction costs. These types of valves are utilized in situations where the valve controls the flow, or loss of pressure across the valve is an issue. In the current

application, where the valve is used solely for isolation, open or closed, and pressure losses are not an issue, butterfly valves are more appropriate and cost-effective. The recommended action allows Metropolitan to procure the valves needed for isolation in a timely and cost-effective manner.

Summary

This action awards a \$5,647,405 procurement contract to Sojitz Machinery Corporation of America to furnish three 84-inch diameter butterfly valves to improve the water supply reliability of the Rialto Pipeline. See **Attachment 1** for the Allocation of Funds, **Attachment 2** for the Abstract of Bids, and **Attachment 3** for the Location Map.

Project Milestone

June 2024 - Completion of valve fabrication and delivery

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

Metropolitan Water District Administrative Code Section 8140: Competitive Procurement

By Minute Item 52626, dated December 14, 2021, the Board amended the CIP to include projects to improve water supply reliability in the Rialto Pipeline service area.

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 2022/23 and 2023/24.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is categorically exempt under the provisions of CEQA and the State CEQA Guidelines because it involves the funding, design, minor alterations, and replacement of existing public facilities with negligible or no expansion of use and no possibility of significantly impacting the physical environment. Accordingly, the proposed action qualifies under Class 1 and Class 2 Categorical Exemptions (Sections 15301 and 15302 of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

Award a \$5,647,405 contract to Sojitz Machinery Corporation of America to furnish three 84-inch diameter butterfly valves to improve the water supply reliability of the Rialto Pipeline.

Fiscal Impact: Expenditure of \$5.97 million in capital funds. Approximately \$275,000 will be incurred in the current fiscal biennium and has been previously authorized.

Business Analysis: This option will improve the operational reliability of water deliveries to member agencies with connections to the Rialto Pipeline.

Option #2

Do not proceed with this project at this time.

Fiscal Impact: None

Business Analysis: This option would forego improving the reliability of service to those member agencies with connections to the Rialto Pipeline.

Option #1

l. 7/21/2022 John V. Bednarski Manager/Chief Engineer Engineering Services Date 7/27/2022 Adel Hagekhalil Date General Manager

Attachment 1 – Allocation of Funds Attachment 2 – Abstract of Bids

Attachment 3 – Location Map

Ref# es12686329

Allocation of Funds for Rialto Pipeline Water Supply Improvements

	Current Board Action (Aug. 2022)	
Labor		
Studies & Investigations	\$	-
Final Design		-
Owner Costs (Program mgmt.)		90,000
Support during construction & testing		-
Submittals Review & Record Drwgs.		63,000
Construction Inspection & Support		132,000
Force Construction		33,000
Materials & Supplies		-
Incidental Expenses		-
Professional/Technical Services		-
Right-of-Way		-
Equipment Use		-
Contracts		
Sojitz Machinery Corporation of America		5,647,405
Remaining Budget		234,595
Total	\$	6,200,000

The total amount expended to date on the Rialto Pipeline Water Supply Improvement project is approximately \$2,700,000. The total estimated cost to complete this project, including the amount appropriated to date, funds allocated for the work described in this action, and all future actions, is expected to range between \$41 million and \$45 million.

The Metropolitan Water District of Southern California

Abstract of Bids Received on June 28, 2022 at 2:00 P.M.

Specifications No. 2022 Rialto Pipeline Water Supply Improvements

The work consists of procuring three 84-inch diameter butterfly valves to be installed as part of water supply reliability improvements in the Rialto Pipeline service area.

Estimated range of costs: \$5,000,000 - \$5,500,000

Bidder and Location	Base Bid Price Total ^{1, 2}
Anderson Supply Co. Gulfport, Mississippi	\$2,087,603 ³
Sojitz Machinery Corporation of America Farmington Hills, Michigan	\$5,647,405

¹As a procurement contract, there are no subcontracting opportunities. For bid evaluation purposes, bidders who qualify as a small business enterprise, disabled veteran business enterprise, or regional business enterprise receive a bid-price reduction credit.

² Includes sales and use taxes of 7.75 percent imposed by the state of California

³ Non-responsive bid



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