



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

5/9/2023 Board Meeting

8-1

Subject

Award a \$2,601,437 procurement contract to Sojitz Machinery Corporation of America for two large-diameter butterfly valves to be installed at the Foothill Pump Station Intertie 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 areas)

Executive Summary

The recent statewide drought and resulting low allocation of State Water Project (SWP) supplies by the California Department of Water Resources (DWR) directly impacted Metropolitan's ability to deliver water to the Rialto Pipeline service area. Expanding the ability to deliver supplies from Diamond Valley Lake (DVL) benefits this area and preserves limited SWP supplies for the West Branch SWP member agencies. This project is one of four associated projects currently underway to provide the ability to directly deliver water from DVL to the Rialto Pipeline through the Inland Feeder. This action awards a procurement contract for two 54-inch diameter butterfly valves. Award of this procurement contract will ensure the timely fabrication and delivery of the valves for installation on this project during the 2024/2025 shutdown season.

Details

Background

The Rialto Pipeline, constructed in 1972, is approximately 30 miles long with a diameter ranging from 96 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.

DVL is Metropolitan's largest reservoir, with a maximum storage capacity of 810,000 acre-feet. It provides emergency storage in the event of a major earthquake, storage as a reserve for drought conditions, and seasonal storage to meet annual member agency demands. At this time, the Rialto Pipeline cannot access the water stored in DVL due to infrastructure and operational constraints.

Since December 2021, a series of drought mitigation projects were authorized by the Board to increase the ability of Metropolitan's conveyance system to deliver water to six member agencies that are entirely dependent on SWP supplies. The recent drought highlighted the potential supply vulnerabilities that these agencies can experience during periods of low SWP allocations from the state. The purpose of this first series of projects is to increase the flexibility of the eastern portion of Metropolitan's conveyance system to move water from DVL to SWP-dependent areas. Additional projects were approved by the Board in February 2022 to increase the flexibility of the existing conveyance system on the west side of Metropolitan's system to reliably supply water to additional SWP-dependent member agencies.

The Rialto Pipeline water supply reliability improvements were authorized by the Board in December 2021 and consist of four separate projects: Wadsworth Pumping Plant Bypass Pipeline, Inland Feeder/Rialto Pipeline Intertie, Inland Feeder – Badlands Tunnel Surge Protection, and Inland Feeder/San Bernardino Valley Municipal

Water District (SBVMWD) Foothill Pump Station Intertie. Together, these incremental infrastructure improvements will greatly increase operational flexibility and enhance the ability to move water from DVL, and potentially the Colorado River Aqueduct, into the Rialto Pipeline. In times of drought, operation of Metropolitan's system with these improvements will also provide regional benefits by allowing limited SWP supplies to be directed to West Branch SWP member agencies.

The Inland Feeder/SBVMWD Foothill Pump Station Intertie is an important component of this four-project effort. Without this project, the Rialto Pipeline water supply reliability benefits would be limited to a series of low-volume water exchanges between Metropolitan and SBVMWD. The Foothill Pump Station is in the city of Highland and is connected to SBVMWD's Foothill Pipeline, which usually delivers water for groundwater recharge during high SWP supplies and is therefore available in times of drought. This pump station will provide the lift needed to permit the direct delivery of approximately 107 cubic feet per second (cfs) from DVL to the Rialto Pipeline.

Final design of the Inland Feeder/SBVMWD Foothill Pump Station Intertie is currently underway. Due to the long lead-time needed to procure the valves, staff recommends award of a procurement contract for the new valves and appurtenant equipment at this time. Staff will return to the Board in fall 2023 to award another procurement contract for a 132-inch diameter butterfly valve and a construction contract for the Foothill Pump Station Intertie.

Budget Impact

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 butterfly valves to improve water reliability of the Rialto Pipeline, pending award of the procurement contract described below. Based on the current Capital Investment Plan (CIP) expenditure forecast, funds for the work to be performed pursuant to this action during the current biennium are available within the CIP Appropriation for Fiscal Years 2022/23 and 2023/24. This project anticipates an expenditure of \$3.28 million in capital funds. Approximately \$530,000 will be incurred in the current fiscal biennium and has been previously authorized. The remaining funds will be accounted for and appropriated under the next biennial budget.

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 System Flexibility and Supply Reliability Program.

Inland Feeder/Foothill Pump Station Intertie – Procurement

The scope of the procurement contract includes furnishing two 54-inch butterfly valves, associated fittings, and accessories. Metropolitan forces will receive, offload, and place the valves in storage at Metropolitan's Cone Camp Yard. The valves will be installed under a future construction contract.

A total of \$3.28 million is required to perform this work. In addition to the amount of the contract, the allocated funds include \$260,000 for factory fabrication inspection and functional testing; \$16,000 for Metropolitan force activities described above; \$94,000 for submittals review, technical support, and responding to manufacturer requests for information; \$125,000 for contract administration and project management; and \$183,563 for remaining budget.

Attachment 1 provides the allocation of required funds. The total estimated cost to complete the Inland Feeder/SBVMWD Foothill Pump Station Intertie 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 \$22 million and \$25 million.

Award of Procurement Contract (Sojitz Machinery Corporation of America)

Specifications No. 2048 for furnishing butterfly valves for the Inland Feeder/SBVMWD Foothill Pump Station Intertie was advertised for bids on January 17, 2023. As shown in **Attachment 2**, three bids were received and opened on March 15, 2023. The bids from Vogt Valves Inc. and Santa Fe Win Water did not meet the requirements detailed in the specifications and were deemed to be non-responsive. The bid from Sojitz Machinery Corporation of America in the amount of \$2,601,437 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 \$1.75 million to \$3.5 million.

Proceeding with a contract at this time will enable completion of improvements to the Inland Feeder/SBVMWD Foothill Pump Station Intertie with minimal operational impacts and allow for reliable water exchanges between Metropolitan and SBVMWD. As a procurement contract, there are no subcontracting opportunities, and no Small Business Enterprise participation level was established for this contract.

This action awards a \$2,601,437 procurement contract to Sojitz Machinery Corporation of America to furnish two large-diameter butterfly valves for the Inland Feeder/Foothill Pump Station Intertie.

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, more 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 and prolonging construction time. These types of valves are utilized in situations where the valve controls the flow, or the allowable loss of pressure across the valve is very limited. In the current application, where the valves are used solely for isolation and pressure losses are acceptable, 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 \$2,601,437 procurement contract to Sojitz Machinery Corporation of America to furnish two 54-inch diameter butterfly valves to be installed at the Inland Feeder/SBVMWD Foothill Pump Station Intertie 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 Milestones

March 2025 – Complete fabrication and delivery of butterfly valves

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 actions are exempt under the provisions of CEQA and the State CEQA Guidelines.

The procurement contract for purchasing activities of the Inland Feeder/SBVMWD Foothill Pump Station Intertie fall under Class 1 Existing Facilities, Class 3 New Construction (small facilities), Class 4 Minor Alterations to Land, Class 6 Information Collection, Statutory Exemption Section 21080.21, 15282(k) Installation of Pipeline. These exemptions have been chosen because construction will occur in an existing facility, and a minor amount of construction, reconstruction, and minor alterations will occur. As this intertie is a pipeline of less than a mile in length, the Rialto Pipeline service area facilities are a public right-of-way with respect to 21080.21. Accordingly, no further CEQA documentation is necessary for the Board to act on the proposed action.

CEQA determination for Option #2:

None required

Board Options

Option #1

Award a \$2,601,437 procurement contract to Sojitz Machinery Corporation of America to furnish two large diameter butterfly valves for the Inland Feeder/SBVMWD Foothill Pump Station Intertie project as part of water supply reliability improvements in the Rialto Pipeline service area.

Fiscal Impact: Expenditure of \$3.28 million in capital funds. Approximately \$530,000 will be incurred in the current fiscal biennium and has been previously authorized. The remaining funds will be accounted for and appropriated under the next biennial budget.

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

Option #2

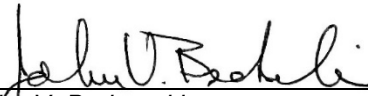

Do not proceed with this project at this time.

Fiscal Impact: None

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

Staff Recommendation

Option #1

 _____ John V. Bednarski Manager/Chief Engineer Engineering Services	4/19/2023 _____ Date
 _____ Adel Hagekhalil General Manager	4/25/2023 _____ Date

Attachment 1 – Allocation of Funds

Attachment 2 – Abstract of Bids

Attachment 3 – Location Map

Ref# es04112023

Allocation of Funds for Inland Feeder/SBVMWD Foothill Pump Station Intertie

	Current Board Action (May 2023)
Labor	
Studies & Investigations	\$ -
Final Design	-
Owner Costs (Program mgmt., contract admin.)	105,000
Submittals Review & Record Drwgs.	94,000
Construction Inspection & Support	260,000
Metropolitan Force Construction	16,000
Materials & Supplies	-
Incidental Expenses	20,000
Professional/Technical Services	-
Right-of-Way	-
Equipment Use	-
Contracts	
Sojitz Machinery Corporation of America	2,601,437
Remaining Budget	183,563
Total	\$ 3,280,000

The total amount expended to date for the Inland Feeder/SBVMWD Foothill Pump Station Intertie is approximately \$1.55 million. The total estimated cost to complete the project, including the amount appropriated to date, funds allocated for the work described in this action, and future construction costs, is anticipated to range from \$22 million to \$25 million.

The Metropolitan Water District of Southern California**Abstract of Bids Received on March 15, 2023, at 2:00 P.M.****Specifications No. 2048****Furnishing Butterfly Valves for the Inland Feeder/SBVMWD Foothill Pump Station Intertie**

The work consists of furnishing and delivering of two 54-inch diameter butterfly valves and all appurtenances.

Range of bids: \$1.75 million to \$3.5 million

Bidder and Location	Base Bid Price Total ^{1,2}
Santa Fe Win Water Santa Fe Springs, CA	\$928,131 ³
Vogt Valves Inc. Stafford, Texas	\$1,032,000 ³
Sojitz Machinery Corporation of America Farmington Hills, MI	\$2,601,437

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

³ Non-responsive bid

