



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

9/13/2022 Board Meeting

7-1

Subject

Determine that there is a need to continue the emergency action of executing a no-bid contract for the Upper Feeder expansion joint replacement (**Requires four-fifths vote of the Board**); the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

This action authorizes the continuation of an emergency contract executed by the General Manager to replace the damaged expansion joint on the Upper Feeder. A shutdown of the Upper Feeder is currently underway to replace the expansion joint at the Santa Ana River crossing and is scheduled to be complete this month. It is anticipated that staff will provide a final progress update to the Board on this work and obtain the necessary board approvals in October 2022.

Details

Background

The Upper Feeder was constructed in 1936 as part of Metropolitan's original water delivery system. The 116-inch-diameter welded-steel pipeline extends approximately 60 miles from Lake Mathews to the Eagle Rock Control Facility in Los Angeles. The feeder conveys untreated Colorado River Water (CRW) from Lake Mathews to the F. E. Weymouth Water Treatment plant, and then delivers treated water to the Central Pool portion of the distribution system.

The Upper Feeder crosses the Santa Ana River with a 1,010-foot-long steel truss bridge in the cities of Jurupa Valley and Riverside. The feeder previously had a bellows-type expansion joint at the bridge's mid-span that allows for the pipeline's thermal expansion and contraction. The bellows expansion joint was installed in January 2018.

On April 13, 2022, a leak was discovered at the bellows expansion joint. A steel bracket was installed as a temporary measure to stop the leak, and flow in the pipeline was reduced to approximately 525 cfs to decrease the pipeline's internal pressure. Staff regularly monitored the crack length and effectiveness of the short-term repair prior to the removal of the bellows joint. The bellows joint is now being replaced with a new slip-type expansion joint during the current shutdown on the Upper Feeder.

Due to the critical nature of the feeder, the location of the expansion joint above environmentally sensitive areas, and the historically low State Water Project (SWP) allocations, the General Manager executed an emergency contract with PCL Construction, Inc. in June 2022 for installation of the new joint consistent with Section 8122(b) of Metropolitan's Administrative Code. This section of the Administrative Code, which mirrors Sections 21567 and 22050 of the California Public Contract Code, allows for the General Manager to waive competitive bidding requirements and execute contracts over the amount of \$250,000 in response to an emergency condition.

An emergency is defined as a sudden, unexpected occurrence that requires immediate action to prevent or mitigate the loss or substantial impairment of life, health, property, or essential public services. Executing an emergency contract was necessary to allow adequate time for the contractor to plan, staff, and mobilize for construction so that the installation of the new expansion joint could take place during the current shutdown on the Upper Feeder. Prior to the shutdown, the Upper Feeder was operating at a reduced flow to reduce the risk of

pipe failure. After the joint is replaced, the feeder can be returned to full flow in support of drought actions and operational shifts that could save SWP supply use in 2022.

In July 2022, Metropolitan's board amended the Capital Investment Plan for fiscal years 2022/2023 and 2023/2024 to include replacement of an expansion joint on the Upper Feeder at the Santa Ana River Bridge; and authorized the emergency action to execute a no-bid contract for the expansion joint replacement. In August 2022, Metropolitan's board voted to continue the emergency contract actions. The Board must determine by a four-fifths vote at subsequent meetings whether there is a need to continue the action or ratify the construction contract.

Upper Feeder Expansion Joint Replacement – Construction

The construction contract includes removal of bridge structural members to access the pipe and joint; removal of the existing bellows expansion joint; installation of the new slip-type expansion joint; removal and reinstallation of the steel cage that provides lateral restraint at the joint; and minor adjustments to the bridge truss isolators. PCL Construction, Inc. was selected to perform the work on a time-and-materials contract to conduct this work. To date, the contractor has prepared contract submittals, developed a work plan, acquired key equipment, mobilized on-site, removed the bellows joint, and is currently installing the new slip joint. Metropolitan forces have completed the fabrication of the new slip joint; installation of a new 36-inch accessway; installation of a new 6-inch drain valve for improved dewatering of this pipe segment; grading, clearing, and grubbing of an area adjacent to the bridge for the contractor's crane pad and other construction activities.

Staff expects that the emergency contracting action will continue until the joint installation is completed and the contractor has restored the site and demobilized. The current shutdown on the Upper Feeder began on September 6, 2022, and is scheduled to end on September 20, 2022, at which time the Upper Feeder will return to service with full flow capacity. It is currently anticipated that staff will return to the Board again in October to request the board's ratification of the contract with PCL Construction, Inc. This action will require a four-fifths vote of the Board.

Alternatives Considered

Metropolitan's staff could terminate the current contract and direct Metropolitan forces to complete the installation of the new slip joint. Staff determined that this is not an acceptable alternative due to the work being completed by PCL Construction, Inc. during the current Upper Feeder shutdown; any change in scope for the contractor and Metropolitan forces would lengthen the duration of the current shutdown. Continuation of an emergency contract with PCL Construction, Inc. allows for timely completion of rehabilitation of a major pipeline that delivers Colorado River water into the central portion of Metropolitan's distribution system, with no delays to the current shutdown. Delaying completion of the shutdown would increase the use of limited SPW supplies.

Summary

This action authorizes the continuation of an emergency contract executed by the General Manager to replace the damaged expansion joint. See **Attachment 1** for the Location Map.

Project Milestone

September 2022 – Completion of the replacement of the compromised expansion joint

Policy

Metropolitan Water District Administrative Code Section 8122: Emergency Contracts

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is statutorily exempt under the provisions of CEQA and the State CEQA Guidelines because it involves the immediate emergency repair of an existing pipeline with the same purpose and capacity to maintain service essential to the public health, safety, or welfare. (Section 15269(b) of the State CEQA Guidelines). In addition, the proposed action is statutorily exempt under the provisions of CEQA and the State CEQA Guidelines because it involves the installation of a new pipeline or maintenance, repair, restoration, removal, or demolition of an existing pipeline that does not exceed one mile in length. (Section 15262(k) of the State CEQA Guidelines).

CEQA determination for Options #2:

None required

Board Options

Option #1

Determine that there is a need to continue the emergency action of executing a no-bid contract for construction of pipe joint repairs on the Upper Feeder. **(Requires four-fifths vote of the Board.)**

Fiscal Impact: Total cost for construction is currently unknown, as the emergency contract executed by the General Manager is based on time and materials. All funds will be incurred in the current biennium and have been previously authorized. It is not anticipated that the addition of the project listed above to the CIP will increase CIP expenditures in the current biennium beyond those which have been previously approved by the Board.

Business Analysis: This project enhances delivery reliability to member agencies and reduces the risk of unplanned shutdowns of the Upper Feeder.

Option #2



Do not determine that there is a need to continue the emergency action.

Fiscal Impact: Unknown costs for work performed by the contractor to date.

Business Analysis: This option would extend the duration of the current shutdown, increase the use of limited SPW supplies, and delay replacement of the expansion joint. The delay would limit flow on the Upper Feeder and expose Metropolitan to a greater risk of pipe rupture, which would severely disrupt water deliveries to member agencies.

Staff Recommendation

Option #1

 John V. Bednarski Manager/Chief Engineer Engineering Services	8/18/2022 Date
 Adel Hagekhalil General Manager	8/24/2022 Date

Attachment 1 – Location Map

Ref# es12691306

