



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

5/9/2017 Board Meeting

7-2

Subject

Adopt CEQA determination and authorize increase in change order authority for the contract to replace valves at the Collis Avenue Valve Structure (Appropriation No. 15441)

Executive Summary

This action authorizes an increase in the General Manager's authority to execute change orders on the construction contract currently underway to replace valves at the Collis Avenue Valve Structure on the Palos Verdes Feeder. During the course of the work, which primarily took place during a round-the-clock shutdown in February 2017, the contractor encountered several conditions that differed from the original record drawings or were not previously known. Staff has held discussions with the contractor regarding the cost impacts to the contract, and recommends that the change order authority be amended at this time so the remaining work may be completed without delay.

Timing and Urgency

Replacement of the deteriorated valves at the Collis Avenue Valve Structure will enable treated water flows within the Palos Verdes Feeder to be controlled accurately and reliably. During the course of construction, the contractor encountered several issues that caused additional labor and material costs to be incurred.

Metropolitan's construction contracts are typically completed with final change order amounts falling well within the General Manager's Administrative Code authority. On the subject project, the extent of required extra work will exceed the General Manager's authority. An increase in change order authority is requested at this time in order to complete the construction efficiently and at the lowest overall cost. No additional funds are requested in this action, as sufficient funds were previously appropriated and are available within the capital appropriation and within Metropolitan's capital expenditure plan for fiscal year 2016/17.

Details

Background

The Palos Verdes Feeder is a 54-inch-diameter welded steel pipeline that was constructed in 1941. This feeder is one of Metropolitan's primary supply lines serving the Central Pool portion of the distribution system. The Palos Verdes Feeder commences at Eagle Rock Control Tower, passes through the Collis Avenue, Washington Street, and 108th Street Valve Structures, and ends at Palos Verdes Reservoir. The feeder delivers treated water to eight member agencies through 34 service connections.

The Collis Avenue Valve Structure was constructed in 1962, and is located within a busy street near the intersection of Huntington Drive and Collis Avenue in the community of El Sereno. There are two underground vaults that house a 42-inch-diameter control valve, two 12-inch diameter bypass lines along with butterfly and plug isolation valves, a sump pump, and air vent piping.

This project is replacing a 42-inch spherical valve with a new 42-inch multi-orifice valve. In addition, two 12-inch diameter butterfly valves are being replaced with new plunger valves, while four plug valves are being replaced in kind.

In July 2016, Metropolitan's Board awarded a \$1,422,082 construction contract to PCL Construction, Inc. for the installation of seven Metropolitan-furnished valves on the Palos Verdes Feeder. Construction is currently approximately 95 percent complete and is scheduled to be completed by May 2017. The majority of the work was completed in a round-the-clock shutdown during February 2017.

Metropolitan's Administrative Code authorizes the General Manager to execute change orders on construction contracts in an aggregate amount not to exceed 5 percent of the initial amount of the contract or \$250,000, whichever is greater. If changes occur on a construction contract that will exceed this total, additional authorization from the Board is required. At this time, the subject contract has experienced changes that staff anticipates will exceed the General Manager's Administrative Code authority.

Collis Avenue Valve Replacement - Increase in Change Order Authority (No funds required)

The contractor encountered a number of previously unidentified issues that required the work procedures to be modified. These issues included deviations from record drawings, as well as deteriorated conditions that could not be detected in advance. Some examples of the unidentified issues include:

- Severe corrosion and deep pitting was discovered on an existing 54-inch by 42-inch reducer pipe once its cement mortar coating was removed. This spool piece could not be repaired, so a new spool piece was fabricated at Metropolitan's La Verne Shops under urgent conditions. Additional labor was required by the contractor to replace the deteriorated spool piece along with the air release/vacuum valve assembly mounted on the spool.
- During excavation to access the vaults and feeder, it was discovered that the concrete encasement on the existing pipe at both the north and south ends of the main structure was significantly wider than shown on the record drawings. As a result, shoring modifications were required that increased the limits of the work area, and the scope of site restoration.
- Due to the heavy traffic in the vicinity of the vaults and work area, additional street modifications were required beyond those that had been originally identified. This work included performance of a new traffic study; restriping of lanes; additional paving; relocation of a bus stop; and installation of new conduit and vehicle detection loops.

To accommodate these issues, the contractor was required to modify a number of its work procedures. This resulted in additional labor and material costs. Staff has held discussions with the contractor regarding these additional costs, and the appropriate compensation to address the unidentified issues.

Per Metropolitan's Administrative Code, the General Manager has the authority to execute change orders for this contract up to a maximum of \$250,000. To date, due to the fast pace of the job under shutdown conditions, no change orders have been executed. In order to fully resolve the issues described above, staff recommends that the change order authority be increased by \$120,000, for a new maximum amount of \$370,000. This increase will enable all remaining work to be performed expeditiously, without delaying contract completion.

This action authorizes an increase in the General Manager's authority to execute change orders from \$250,000 to an aggregate amount not to exceed \$370,000, for valve replacement at the Collis Avenue Valve Structure. No additional funds are requested, as sufficient funds were previously appropriated and are available within the capital appropriation.

This project has been evaluated and recommended by Metropolitan's CIP Evaluation Team, and funds are available within the fiscal year 2016/17 capital expenditure plan. See [Attachment 1](#) for the Location Map.

Project Milestone

May 2017 - Completion of valve replacement at the Collis Avenue Valve Structure

Policy

Metropolitan Water District Administrative Code Section 5108: Appropriations

Metropolitan Water District Administrative Code Section 8123: Authority of the General Manager to Amend Contracts

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The project was previously determined by the Board to be categorically exempt under Classes 1, 2, 3, and 4 (Sections 15301, 15302, 15303, and 15304 of the State CEQA Guidelines) on November 18, 2014. Since that time, the statute of limitations has ended. With the current action, there is no substantial change proposed since the original project was first approved in 2014. Hence, the previous environmental documentation prepared in conjunction with the project fully complies with CEQA and the State CEQA Guidelines. Accordingly, no further environmental analysis or documentation is necessary for the Board to act on with regard to the proposed action.

The CEQA determination is: Determine that pursuant to CEQA, the proposed action was addressed previously in the 2014 categorical exemptions (Classes 1, 2, 3, and 4; Sections 15301, 15302, 15303, and 15304 of the State CEQA Guidelines) and that no further environmental analysis or documentation is required.

CEQA determination for Option #2:

None required

Board Options

Option #1

Adopt the CEQA determination that the proposed action was addressed previously in the 2014 categorical exemptions and that no further environmental analysis or documentation is required, and

Authorize increase of \$120,000 in change order authority for the replacement of valves on the Palos Verdes Feeder, up to an aggregate amount not to exceed \$370,000.

Fiscal Impact: None. Sufficient funds were previously appropriated and are available within the remaining budget of Appropriation No. 15441.

Business Analysis: This option will allow timely completion of all remaining work at the Collis Avenue Valve Structure, while minimizing delays to the contractor.

Option #2

Do not authorize an increase in change order authority.

Fiscal Impact: Unknown

Business Analysis: This option is unlikely to result in lower costs for the extra work performed, and may delay project completion.

Staff Recommendation

Option #1



Gordon Johnson
Manager/Chief Engineer
Engineering Services

4/18/2017
Date



Jeffrey Kightlinger
General Manager

4/24/2017
Date

Attachment 1 – Location Map

Ref# es12653454

