



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

7/11/2017 Board Meeting

7-5

Subject

Adopt CEQA determination and appropriate \$580,000; and authorize increase in change order authority for the construction contract to build houses at Iron Mountain Pumping Plant (Appropriation No. 15495)

Executive Summary

This action authorizes an increase in the General Manager's authority to execute change orders on the construction contract currently underway to build four new houses at Iron Mountain and Gene Pumping Plants. A change order is planned that will add two houses at Iron Mountain, providing a total of six new houses to be constructed under this contract.

Timing and Urgency

In May 2017, Metropolitan's Board awarded a contract to CopperTop Enterprises, Inc. for the construction of four houses at Iron Mountain and Gene Pumping Plants. The new houses will replace existing units that would not be cost-effective to renovate. By constructing the two additional houses through a change order to the construction contract, Metropolitan will take advantage of favorable pricing conditions and a window of opportunity to expedite the work.

This project has been reviewed with Metropolitan's Capital Investment Plan (CIP) prioritization criteria and is included in the System Reliability Program. Funds for this action are available within Metropolitan's capital expenditure plan for fiscal year 2017/18.

Details

Background

The Colorado River Aqueduct (CRA) is a 242-mile-long conveyance system that transports water from the Colorado River to Lake Mathews in Riverside County. The CRA includes five pumping plants that are located in remote, isolated areas of the California desert. Since the CRA's inception, Metropolitan has provided lodging or housing to employees involved in the construction, operation, and maintenance of the aqueduct system. Due to the remoteness of the pumping plants, the provision of housing ensures that staff is able to respond to emergency events in a timely manner.

Most of the houses located at the CRA pumping plants were constructed in the 1940s and 1950s. Following decades of continuous use and exposure to the harsh desert environment, deterioration has occurred. While most of the units can be renovated cost-effectively, several houses have deteriorated beyond repair and need to be replaced.

In May 2017, Metropolitan's Board awarded two contracts to construct a total of eight new houses at the CRA pumping plants. Work has commenced and the project is scheduled to be completed by March 2018. Based on an assessment of Metropolitan's long-term housing needs for the CRA, staff recommends that two additional houses be constructed at Iron Mountain Pumping Plant. In May 2017, the Board authorized design and site preparation for the two additional houses. Each unit will have three bedrooms, two bathrooms, and an area of

1,422 square feet, plus a detached garage. These units are intended to be similar to the other three-bedroom houses included in the two original contracts.

CRA Housing Improvements - Increase in Change Order Authority (\$580,000)

Staff investigated two project delivery approaches to construct the two additional houses at Iron Mountain Pumping Plant. The first approach would follow a traditional design/bid/build methodology. Under this approach, a bid package including drawings and specifications for the two houses would be prepared. Following receipt of bids and award by Metropolitan's Board, staff would administer the stand-alone construction contract. With this approach, the two additional houses would be completed by November 2018. The second project delivery approach would utilize a change order to one of the existing house construction contracts. This approach would complete the two units by early 2018. Use of the existing contract would also avoid the cost of additional mobilization for a new contractor, and would reduce or eliminate various costs for the design, bidding, and management of construction. This approach would also maintain uniformity of all 10 new houses along the CRA.

In May 2017, Metropolitan's Board awarded a \$1,219,809 contract (Contract No. 1908) to CopperTop Enterprises, Inc., to construct four houses at Iron Mountain and Gene Pumping Plants. Notice to Proceed was issued on June 6, 2017. To date, no change orders have been executed.

Staff approached the contractor to explore the feasibility of adding the two additional houses to the scope of Contract No. 1908 via a change order. CopperTop Enterprises, Inc. is amenable to the proposed change, and as a result, both parties have negotiated a not-to-exceed amount of \$580,000 to add the two new houses.

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 contract that will exceed this total, additional authorization from the Board is required. For Contract No. 1908, staff recommends that the original authority for change orders, \$250,000, be retained to address any unanticipated issues that may arise during the course of construction. As a result, an increase of \$580,000 to the General Manager's change order authority is recommended, for a new maximum amount of \$830,000.

This action appropriates \$580,000 and authorizes an increase in the General Manager's authority to execute change orders up to an aggregate amount not to exceed \$830,000, for the construction of two additional houses at Iron Mountain Pumping Plant. Funds that were previously appropriated for design and bidding (\$70,000) for the two new houses will be repurposed and used for construction inspection; submittals review and record drawing preparation; permitting; and project management.

The estimated cost of construction for the two houses with detached garages, excluding site work and utility extensions, is \$580,000. The average cost per house is \$290,000, which is lower than the unit cost of the three-bedroom houses (\$305,000) in the two original contracts.

This project has been evaluated and recommended by Metropolitan's CIP Evaluation Team, and funds are available within the fiscal year 2017/18 capital expenditure plan. See [Attachment 1](#) for the Financial Statement and [Attachment 2](#) for the Location Map.

This project is included within capital Appropriation No. 15495, the Operations Support Facility Improvements, which was initiated in fiscal year 2015/16. With the present action, the total funding for Appropriation No. 15495 will increase from \$11.24 million to \$11.82 million.

Project Milestone

May 2018 - Completion of construction

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 proposed action is categorically exempt under the provisions of CEQA and the State CEQA Guidelines. The proposed project involves the funding; final design; and minor alterations, reconstruction or replacement of existing public facilities along with the construction of minor appurtenant structures with no expansion of use and no possibility of significantly impacting the physical environment. In addition, the proposed project involves minor modifications in the condition of land, water, and/or vegetation which does not involve removal of healthy, mature, scenic trees. Accordingly, the proposed action qualifies under Class 1, Class 2, Class 3, and Class 4 Categorical Exemptions (Sections 15301, 15302, 15303, and 15304 of the State CEQA Guidelines).

The CEQA determination is: Determine that pursuant to CEQA, the proposed action qualifies under four Categorical Exemptions (Class 1, Section 15301; Class 2, Section 15302; Class 3, Section 15303; Class 4, Section 15304 of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

Adopt the CEQA determination that the proposed action is categorically exempt, and

- a. Appropriate \$580,000; and
- b. Authorize increase of \$580,000 in change order authority for the construction contract to build houses at Iron Mountain Pumping Plant, up to an aggregate amount not to exceed \$830,000, for the addition of two new houses.

Fiscal Impact: \$580,000 of capital funds under Appropriation No. 15495.

Business Analysis: This option will expedite completion of the two new houses at Iron Mountain Pumping Plant, and will reduce overall project costs versus a stand-alone contract.

Option #2

Do not authorize an increase in change order authority for the two new houses.

Fiscal Impact: None

Business Analysis: Under this option, construction of the two new houses would be accomplished through a separate construction contract. The houses would be completed in late 2018.

Staff Recommendation

Option #1


 _____ 6/20/2017
 Gordon Johnson Date
 Manager/Chief Engineer
 Engineering Services


 _____ 6/23/2017
 Jeffrey Kightlinger Date
 General Manager

[Attachment 1 – Financial Statement](#)

[Attachment 2 – Location Map](#)

Financial Statement for Operations Support Facilities Improvements Appropriation

A breakdown of Board Action No. 4 for Appropriation No. 15495 for the construction of two additional houses at Iron Mountain Pumping Plant¹ is as follows:

| | Previous Total Appropriated Amount (May 2017) | Current Board Action No. 4 (July 2017) | New Total Appropriated Amount |
|-----------------------------------|--|---|--|
| Labor | | | |
| Studies & Investigations | \$ 232,000 | \$ - | \$ 232,000 |
| Final Design | 526,500 | - | 526,500 |
| Owner Costs | 419,000 | - | 419,000 |
| Submittals Review & Record Drwgs. | 111,000 | - | 111,000 |
| Construction Inspection & Support | 240,000 | - | 240,000 |
| Metropolitan Force Construction | 1,733,000 | - | 1,733,000 |
| Materials & Supplies | - | - | - |
| Incidental Expenses | 2,000 | - | 2,000 |
| Professional/Technical Services | 350,000 | - | 350,000 |
| Equipment Use | - | - | - |
| Contracts | 4,200,000 | - | 4,200,000 |
| CopperTop Enterprises, Inc. | 2,439,618 | 580,000 | 3,019,618 |
| Remaining Budget | 986,882 | - | 986,882 |
| Total | \$ 11,240,000 | \$ 580,000 | \$ 11,820,000 |

Funding Request

| | | | |
|-----------------------------------|---|-------------------------------------|---------------|
| Appropriation Name: | Operations Support Facilities Improvements | | |
| Source of Funds: | Revenue Bonds, Replacement and Refurbishment or General Funds | | |
| Appropriation No.: | 15495 | Board Action No.: | 4 |
| Requested Amount: | \$ 580,000 | Budget Page No.: | 245 |
| Total Appropriated Amount: | \$ 11,820,000 | Total Appropriation Estimate | \$ 35,100,000 |

¹ The total amount expended to date on the CRA housing improvements is approximately \$500,000.

Location Map

