



- Board of Directors
Engineering and Operations Committee

10/10/2017 Board Meeting

7-4

Subject

Adopt CEQA determination and appropriate \$1.4 million; and award \$787,906 contract to Environmental Construction, Inc. to relocate the turnout for Service Connection OC-76 on the Allen-McColloch Pipeline (Appropriation No. 15480)

Executive Summary

This action awards a construction contract to relocate the point of connection of Service Connection OC-76 to the Allen-McColloch Pipeline (AMP). The 24-inch-diameter pipe extending from the AMP to the service connection has been exposed as it crosses Serrano Creek, increasing the risk of damage from erosion.

Timing and Urgency

Metropolitan's delivery line to Service Connection OC-76 extends approximately two miles from the AMP to the service connection. The pipeline passes below Serrano Creek, where it has been exposed by stormflow erosion and is at risk of damage during future storms. Failure of this line would interrupt treated water deliveries to the Municipal Water District of Orange County (MWDOC). This project will relocate the turnout from the AMP and eliminate over one mile of pipeline. The work will take place during a shutdown of the AMP scheduled for March 2018.

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

Details

Background

The AMP delivers treated water from the Robert B. Diemer Water Treatment Plant in Yorba Linda to southern Orange County. Metropolitan acquired the AMP, including Service Connection OC-76, from MWDOC in the mid-1990s. OC-76 is unique in that it features a nearly two-mile-long connecting pipeline between the AMP turnout and the service connection meter. For much of its length, this 24-inch connecting pipeline parallels the AMP along Trabuco Road in southern Orange County. The relocated turnout will be in the city of Lake Forest.

During a recent detailed inspection of the AMP, staff identified a section of the connecting pipeline that had become exposed due to erosion in Serrano Creek. While the line is currently intact, it could be undermined by continued erosion or could be damaged by debris flows in the creek.

The planned project will bypass the exposed portion of the connecting pipeline by relocating the AMP turnout from the north side of Serrano Creek to the south side. This relocation will eliminate approximately 6,850 feet of pipeline, including the exposed section in the creek. It will also eliminate several aging structures and valve appurtenances. An isolation butterfly valve will be installed at the new turnout location, and two air release/vacuum valve assemblies will be installed above grade. No modifications are required for the existing meter structure.

In June 2016, Metropolitan's Board authorized procurement of new valves and final design to relocate the turnout to Service Connection OC-76. The valves have been manufactured and delivered, and final design has now been completed. Staff recommends moving forward with construction at this time.

Relocation of Piping for Service Connection OC-76 – Construction (\$1,400,000)

The scope of the contract includes: (1) excavation; (2) installation of 24-inch-diameter piping and a concrete valve vault; (3) installation of Metropolitan-furnished valves; (4) street closures and traffic control; and (5) street surface and landscape restoration. Some of the work will be performed continuously on a round-the-clock basis during a seven-day shutdown of the AMP scheduled for March 2018. Metropolitan force activities will include shutdown of a portion of the AMP; final disinfection and water quality testing; and return of the pipeline to service. The turnout excavation site is located in public right-of-way (Trabuco Road) where shoring will be necessary, requiring close coordination with local agencies and the surrounding community.

Specifications No. 1889 for the relocation of piping for Service Connection OC-76 on the AMP was advertised for bids on August 14, 2017. As shown in **Attachment 2**, six bids were received and opened on September 12, 2017. The low bid from Environmental Construction, Inc. in the amount of \$787,906 complies with the requirements of the specifications. The other bids ranged from \$809,829 to \$1,240,600, while the engineer's estimate was \$800,000. For this contract, Metropolitan established a Small Business Enterprise (SBE) participation level of at least 15 percent of the bid amount. Environmental Construction, Inc. is an SBE firm and thus achieves 100 percent participation. The subcontractor for this contract is listed in **Attachment 3**.

This action appropriates \$1.4 million and awards a \$787,906 contract to Environmental Construction, Inc. for the relocation of turnout piping for Service Connection OC-76. In addition to the amount of the contract, the requested funds include \$225,000 for the Metropolitan force activities described above; \$152,000 for construction inspection; \$72,000 for submittals review, responding to contractor requests for information, and preparation of record drawings; \$75,500 for permitting, public outreach, project management, and environmental monitoring; and \$87,594 for remaining budget.

Construction inspection will be performed by Metropolitan staff. For this project, the anticipated cost of inspection is approximately 14.4 percent of the total construction cost. Engineering Services' goal for inspection of projects with construction less than \$3 million is 9 to 15 percent. For this project, the total cost of construction is \$1.06 million, which includes the amount of the contract; Metropolitan force activities (\$225,000); and the previously procured butterfly valve and air release/vacuum valve assemblies (\$43,000).

The total estimated cost to relocate the OC-76 turnout, including the amount appropriated to date and current funds requested, is approximately \$1.67 million.

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, **Attachment 2** for the Abstract of Bids, **Attachment 3** for the listing of Subcontractors for Low Bidder, and **Attachment 4** for the Location Map.

This work is included within capital Appropriation No. 15480, the Conveyance and Distribution System Rehabilitation Appropriation – FY 2012/13 Through 2017/18. With the present action, the total funding for Appropriation No. 15480 will increase from \$49.33 million to \$50.73 million.

Project Milestone

May 2018 – Completion of construction

Policy

Metropolitan Water District Administrative Code Section 5108: Appropriations

Metropolitan Water District Administrative Code Section 8121: General Authority of the General Manager to Enter 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 overall activities involve repair and replacement of existing facilities, construction of new facilities, and minor alteration of land, with negligible or no expansion of use and no possibility of significantly impacting the physical environment. 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 three Categorical Exemptions (Class 1, Section 15301; Class 2, Section 15302; Class 3, Section 15303; and 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 exempt, and

- a. Appropriate \$1.4 million; and
- b. Award \$787,906 contract to Environmental Construction, Inc. to relocate the turnout for Service Connection OC-76 on the Allen-McColloch Pipeline.

Fiscal Impact: \$1.4 million of capital funds under Appropriation No. 15480

Business Analysis: This option will help maintain delivery reliability to a member agency and reduce the risk of urgent repairs.

Option #2

Do not proceed with the project at this time.

Fiscal Impact: None

Business Analysis: This option would forego an opportunity to reduce the risk of unplanned shutdowns, and could lead to higher repair costs.

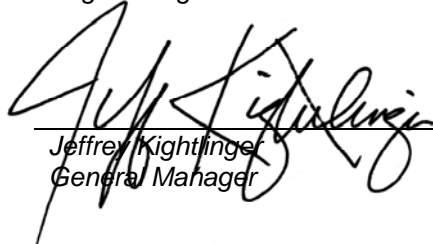
Staff Recommendation

Option # 1


 Gordon Johnson
 Manager/Chief Engineer
 Engineering Services

9/25/2017

Date


 Jeffrey Kightlinger
 General Manager

9/25/2017

Date

Attachment 1 – Financial Statement

Attachment 2 – Abstract of Bids

Attachment 3 – Subcontractor for Low Bidder

Attachment 4 – Location Map

Financial Statement for Conveyance and Distribution System Rehabilitation Appropriation – FY 2012/13 Through FY 2017/18

A breakdown of Board Action No. 33 for Appropriation No. 15480¹ is as follows:

	Previous Total Appropriated Amount (Oct. 2017)	Current Board Action No. 33 (Oct. 2017)	New Total Appropriated Amount
Labor			
Studies & Investigations	\$ 3,347,504	\$ -	\$ 3,347,504
Final Design	8,192,915	-	8,192,915
Owner Costs (Project mgmt., permitting, outreach)	4,471,779	75,500	4,547,279
Submittals Review & Record Drwgs.	914,000	72,000	986,000
Construction Inspection & Support	2,759,000	152,000	2,911,000
Metropolitan Force Construction	4,354,000	225,000	4,579,000
Materials & Supplies	2,390,000	-	2,390,000
Incidental Expenses	162,000	-	162,000
Professional/Technical Services	2,620,000	-	2,620,000
Right-of-Way	330,000	-	330,000
Equipment Use	5,000	-	5,000
Contracts	16,564,705	787,906	17,352,611
Remaining Budget	3,219,097	87,594	3,306,691
Total	\$ 49,330,000	\$ 1,400,000	\$ 50,730,000

Funding Request

Appropriation Name:	Conveyance and Distribution System Rehabilitation Appropriation – FY 2012/13 Through FY 2017/18		
Source of Funds:	Revenue Bonds, Replacement and Refurbishment or General Funds		
Appropriation No.:	15480	Board Action No.:	33
Requested Amount:	\$ 1,400,000	Budget Page No.:	214
Total Appropriated Amount:	\$ 50,730,000	Total Appropriation Estimate:	\$ 332,500,000

¹ The total amount expended to date to rehabilitate service connection OC-76 on the Allen-McColloch Pipeline is \$270,000. The total estimated cost to complete this project, including the amount appropriated to date and current funds requested, is approximately \$1.67 million.

The Metropolitan Water District of Southern California
Abstract of Bids Received on September 12, 2017 at 2:00 P.M.
Specifications No. 1889
Allen-McColloch Pipeline OC-76 Turnout Relocation

The project consists of the installation of a new 24-inch pipeline, Metropolitan-furnished valves, and reinforced concrete valve vault.

Engineer's estimate: \$800,000

Bidder and Location	Total	SBE \$	SBE %	Met SBE¹
Environmental Construction, Inc. Woodland Hills, CA	\$787,906	\$787,906	100	Yes
Kana Subsurface Engineering Riverside, CA	\$809,829	-	-	-
GRFCO, Inc. Brea, CA	\$819,000	-	-	-
T. E. Roberts, Inc. Orange, CA	\$855,000	-	-	-
Steve P. Rados, Inc Santa Ana, CA	\$943,271	-	-	-
J. F. Shea Construction, Inc. Walnut, CA	\$1,240,600	-	-	-

¹ SBE (Small Business Enterprise) participation level was established at 15 percent for this contract.

The Metropolitan Water District of Southern California

Subcontractor for Low Bidder

Specifications No. 1889

Allen-McColloch Pipeline OC-76 Turnout Relocation

Low Bidder: Environmental Construction, Inc.

Subcontractor and Location
Performance Abatement Services, Anaheim, CA

Distribution System

