



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

5/9/2017 Board Meeting

7-4

Subject

Adopt CEQA determination and appropriate \$1.2 million; and authorize design and procurement to rehabilitate Service Connection A-06 on the East Orange County Feeder No. 2 (Appropriation No. 15480)

Executive Summary

This action authorizes design to rehabilitate a service connection on the East Orange County Feeder No. 2 that serves the city of Anaheim. The flow meter, valve, and adjacent piping have deteriorated and need to be replaced.

Timing and Urgency

The piping and equipment at Service Connection A-06 have deteriorated gradually following more than 50 years of continuous service. The service connection is housed in two vaults that are located within a public street. Metropolitan owns and maintains the service connection, and is therefore responsible for needed repairs pursuant to Administrative Code Section 4700(b). Given the importance of Service Connection A-06 in delivering treated water to the city of Anaheim, staff recommends moving forward with design of the upgrades at this time.

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 2016/17.

Details

Background

The East Orange County Feeder No. 2 was constructed in 1964 under a joint powers agreement between Metropolitan, the cities of Anaheim and Santa Ana, and the Municipal Water District of Orange County. The East Orange County Feeder No. 2 originates at the Robert B. Diemer Water Treatment Plant in Yorba Linda and extends south for 25 miles through the cities of Anaheim, Orange, Santa Ana, and Irvine.

Service Connection A-06 includes a turnout vault and a separate meter vault. Both structures are located beneath the northbound lanes of Tustin Avenue in the city of Anaheim. The structures contain an 18-inch conical plug valve, 24-inch venturi meter, 24-inch check valve, and associated piping and electrical systems. Gradual corrosion from over 50 years of operation in a damp underground environment has led to deterioration of the valves, venturi meter, and associated equipment.

In 2014, a leak was discovered and repaired on the venturi meter. Since that time, leaks have reappeared at an increasing frequency. Failure of piping at the service connection could affect treated water deliveries to the city of Anaheim and could potentially cause local surface impacts. Staff recommends moving forward to rehabilitate the service connection at this time.

Service Connection A-06 Rehabilitation – Design Phase and Procurement (\$1,200,000)

The rehabilitation work will include excavation; replacement of the meter, valves, and associated piping; upgrade of the vaults' electrical system; street closure and traffic control; abatement of hazardous materials; and site restoration. The roof slabs of the existing vaults will need to be removed in order to replace the meter and valves. The new roofs will employ segmented lids to improve access for future work.

Planned design phase activities include: field surveys and potholing to identify substructures; procurement of the new meter and valves; preparation of drawings and specifications for the upgrades; preparation of environmental documentation; development of a construction cost estimate; local agency permitting; and receipt of competitive bids for the construction. The procurement contracts for the meter and valves are planned to be awarded under the General Manager's Administrative Code Authority to award contracts of \$250,000 or less.

This action appropriates \$1.2 million and authorizes design to rehabilitate Service Connection A-06. Requested funds include: \$63,000 for permitting and field inspections; \$275,000 for procurement of the valves and meter, and for calibration of the meter; \$65,000 for consultant support for value engineering and traffic control; \$432,000 for preparation of drawings and specifications; \$160,000 for project management and preparation of environmental documentation; \$50,000 for acquisition of temporary right-of-way; and \$155,000 for remaining budget. The value engineering, traffic control, and meter calibration will be performed by specialized firms via agreements executed under the General Manager's Administrative Code authority. All other activities will be performed by Metropolitan staff.

The final design cost as a percentage of the total estimated construction cost is approximately 12 percent. Engineering Services' goal for design of projects with construction greater than \$3 million is 9 to 12 percent. The total construction cost for this project is anticipated to range from \$3.5 million to \$4 million.

This project is included within capital Appropriation No. 15480, the Conveyance and Distribution System Rehabilitation Appropriation – FY 2012/2013 through FY 2017/18. With the present action, the total funding for Appropriation No. 15480 will increase from \$46.08 million to \$47.28 million.

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 Financial Statement and [Attachment 2](#) for the Location Map.

Project Milestones

September 2017 – Completion of design

March 2018 – Delivery of valves and meter

Policy

Metropolitan Water District Administrative Code Section 4700(b): General Authorizations (Service Connections)

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 the funding, design, minor alterations and replacement of existing public facilities with negligible or no expansion of use and no possibility of significantly impacting the physical environment. The proposed action also consists of basic data collection and resource evaluation activities, which do not result in a serious or major disturbance to an environmental resource. This may be strictly for information gathering purposes, or as part of a study leading to an action, which a public agency has not yet approved, adopted, or funded. Accordingly, the proposed action qualifies under Class 1, 2 and 6 Categorical Exemptions (Class 1, Sections 15301, Class 2, Section 15302, and Class 6, Section 15306, 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, and Class 6, Section 15306, 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 \$1.2 million; and
- b. Authorize design to rehabilitate Service Connection A-06 on the East Orange County Feeder No. 2.

Fiscal Impact: \$1.2 million of capital funds under Appropriation No. 15480

Business Analysis: This project will maintain delivery reliability to a member agency and reduce the risk of costly emergency repairs.

Option #2

Do not proceed to rehabilitate Service Connection A-06 at this time.

Fiscal Impact: None


Business Analysis: This option would forego an opportunity to reduce the risk of service interruptions to a member agency, and to reduce the risk of costly urgent repairs.

Staff Recommendation

Option #1


 _____ 4/20/2017
 Date

Gordon Johnson
Manager/Chief Engineer
Engineering Services


 _____ 4/24/2017
 Date

Jeffrey Kightlinger
General Manager

Attachment 1 – Financial Statement

Attachment 2 – Location Map

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

A breakdown of Board Action No. 30 for Appropriation No. 15480 to rehabilitate Service Connection A-06¹ is as follows:

	Previous Total Appropriated Amount (Mar. 2017)	Current Board Action No. 30 (May 2017)	New Total Appropriated Amount
Labor			
Studies & Investigations	\$ 2,777,000	\$ 63,000	\$ 2,840,000
Final Design	7,440,000	432,000	7,872,000
Owner Costs (Permitting & program mgmt.)	4,115,779	160,000	4,275,779
Submittals Review & Record Drwgs	900,000	-	900,000
Construction Inspection & Support	2,759,000	-	2,759,000
Metropolitan Force Construction	3,858,000	-	3,858,000
Materials & Supplies	1,711,000	-	1,711,000
Flow Meter	-	125,000	125,000
Valves	-	150,000	150,000
Incidental Expenses	162,000	-	162,000
Professional/Technical Services	2,555,000	-	2,555,000
Traffic control consultant	-	35,000	35,000
Value Engineering firm	-	30,000	30,000
Right-of-Way	280,000	50,000	330,000
Equipment Use	5,000	-	5,000
Contracts	16,564,705	-	16,564,705
Remaining Budget	2,952,516 ²	155,000	3,107,516
Total	\$ 46,080,000	\$ 1,200,000	\$ 47,280,000

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.:	30
Requested Amount:	\$ 1,200,000	Budget Page No.:	214
Total Appropriated Amount:	\$ 47,280,000	Total Appropriation Estimate:	\$ 332,500,000

¹This is the initial action to rehabilitate Service Connection A-06.

²Includes previous reallocation of \$617,000 from Remaining Budget for the Sepulveda Canyon Control Facility to combine design efforts for multiple projects at the facility, providing greater construction efficiencies.

Distribution System

