



- Board of Directors  
*Engineering and Operations Committee*

8/19/2014 Board Meeting

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**7-3**

## **Subject**

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Appropriate \$1.6 million; and award \$858,000 contract to Kiewit Infrastructure West Co. to rehabilitate Service Connection G-01 on the Santa Monica Feeder (Approp. 15441)

## **Executive Summary**

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This action awards a construction contract to rehabilitate Service Connection G-01 on the Santa Monica Feeder within the city of Glendale. This project will replace a deteriorating Venturi meter and piping, along with the vault structure. These improvements will enhance delivery reliability of the service connection.

### **Timing and Urgency**

Service Connection G-01 on the Santa Monica Feeder has been in service for over 73 years. While staff performs regular maintenance on the facility, the piping and equipment have deteriorated gradually over time and need to be refurbished. Since Metropolitan owns and maintains the service connection, Metropolitan is responsible for the cost of the repairs pursuant to Administrative Code Section 4700. Given the importance of Service Connection G-01 in delivering treated water to the city of Glendale, staff recommends moving forward with construction at this time.

This project has been reviewed with Metropolitan's Capital Investment Plan (CIP) prioritization criteria. The work falls into two categories of the CIP: Infrastructure Rehabilitation and Supply Reliability/System Expansion. Funds for this action are available within Metropolitan's capital expenditure plan for fiscal year 2014/15.

## **Details**

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### **Background**

The Santa Monica Feeder was constructed in 1941 as part of Metropolitan's original distribution system. The feeder is approximately 25 miles long, with a diameter ranging from 28 inches to 120 inches. The feeder has various reaches comprised of cast iron, welded steel, and reinforced concrete pipe. The Santa Monica Feeder delivers treated water from the Eagle Rock Control Facility in the city of Los Angeles to four member agency service connections before reaching its terminus in the city of Santa Monica.

Service Connection G-01 consists of a 30-inch Venturi meter located partially within a concrete meter vault structure, and check and isolation valves located within a nearby concrete turnout structure. Gradual corrosion over 73 years of operation has led to deterioration of the Venturi meter and the adjacent piping and valves. In 2003, six leaks developed on the Venturi meter. Since that time, staff has attempted to repair the meter using localized welding and fiberglass wraps with limited success. The leakage has progressively increased. Further deterioration of the service connection could negatively impact deliveries to the city of Glendale and potentially damage surrounding properties.

In March 2013, Metropolitan's Board authorized final design to rehabilitate the facility. Design has been completed, and staff recommends award of the construction contract at this time.

**Service Connection G-01 Rehabilitation – Construction (\$1,600,000)**

Planned work includes removal of the existing Venturi meter and piping, construction of a new meter vault, and installation of a new magnetic flow meter and associated piping and valves. Open excavations with tight-sheet shoring will be required due to the vault's location within a public street. The work is planned to take place during a seven-day shutdown of the service connection scheduled for February 2015. The valves will be installed during a future shutdown of the Santa Monica Feeder.

Specifications No. 1762 to rehabilitate Service Connection G-01 was advertised for bids on May 22, 2014. As shown in [Attachment 2](#), four bids were received and opened on July 9, 2014. The low bid from Kiewit Infrastructure West Co. (Kiewit) in the amount of \$858,000 complies with the requirements of the specifications. The three higher bids ranged from approximately \$1.08 million to \$1.55 million. The engineer's estimate was \$940,000. For this contract, Metropolitan established a Small Business Enterprise (SBE) participation level of at least 8 percent of the bid amount.

This action appropriates \$1.6 million and awards a \$858,000 contract to Kiewit to rehabilitate Service Connection G-01 on the Santa Monica Feeder. In addition to the amount of the contract, the requested funds include \$287,000 for Metropolitan force activities, which include installation of the valves, establishing clearances, dewatering, and start-up and testing of the meter. The requested funds also include \$35,000 for materials and supplies; \$140,000 for construction inspection; \$107,000 for submittals review, technical support, and preparation of record drawings by Metropolitan staff; \$70,000 for permitting, public outreach, and project management; and \$103,000 for remaining budget.

Metropolitan staff will perform inspection of the construction contract. For this project, the anticipated cost of inspection is approximately 11.9 percent of the total construction cost. Engineering Services' goal for inspection of projects with construction cost less than \$3 million is 9 to 15 percent. For this project, the total cost of construction is \$1.2 million. This amount includes \$20,000 for a previously procured Metropolitan-furnished magnetic flow meter.

The total estimated cost to complete the rehabilitation, including the amount expended to date and the current funds requested, is \$2 million.

This project is included within capital Appropriation No. 15441, the Conveyance and Distribution System Rehabilitation Appropriation – FY 2006/07 Through FY 2011/12, which was initiated in fiscal year 2006/07. With the present action, the total funding for Appropriation No. 15441 will increase from \$58,697,500 to \$60,297,500.

This project has been evaluated and recommended by Metropolitan's CIP Evaluation Team, and funds are available within the fiscal year 2014/15 capital expenditure plan. See [Attachment 1](#) for the Financial Statement, [Attachment 2](#) for the Abstract of Bids, and [Attachment 3](#) for the Location Map.

**Project Milestone**

April 2015 – Completion of construction to rehabilitate Service Connection G-01

**Policy**

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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)**

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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.

Accordingly, the proposed action qualifies under Class 1 and Class 2 Categorical Exemptions (Sections 15301 and 15302 of the State CEQA Guidelines).

The CEQA determination is: Determine that pursuant to CEQA, the proposed action qualifies under two Categorical Exemptions (Class 1, Section 15301 and Class 2, Section 15302 of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

**Board Options**

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**Option #1**

Adopt the CEQA determination that the project is categorically exempt from CEQA, and

- a. Appropriate \$1.6 million; and
- b. Award \$858,000 contract to Kiewit Infrastructure West Co. to rehabilitate Service Connection G-01 on the Santa Monica Feeder.

**Fiscal Impact:** \$1.6 million in capital funds under Approp. 15441

**Business Analysis:** This option will protect Metropolitan’s assets, maintain service reliability to a member agency, and reduce the risk of costly emergency repairs.

**Option #2**

Do not authorize the rehabilitation project at this time.

**Fiscal Impact:** None

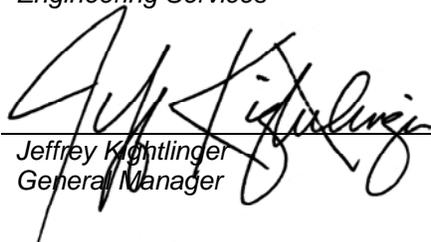
**Business Analysis:** Under this option, staff will continue to monitor the condition of Service Connection G-01. This option would forgo an opportunity to enhance reliability, and could lead to higher repair costs and unplanned shutdowns.

**Staff Recommendation**

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Option #1

  
 \_\_\_\_\_ 7/25/2014  
 Gordon Johnson Date  
 Manager/Chief Engineer,  
 Engineering Services

  
 \_\_\_\_\_ 8/5/2014  
 Jeffrey Kightlinger Date  
 General Manager

**Attachment 1 – Financial Statement**

**Attachment 2 – Abstract of Bids**

**Attachment 3 – Location Map**

**Financial Statement for Conveyance and Distribution System Rehabilitation Appropriation – FY 2006/07 Through FY 2011/12**

A breakdown of Board Action No. 65 for Appropriation No. 15441 to rehabilitate Service Connection G-01<sup>1</sup> is as follows:

	<b>Previous Total Appropriated Amount (May 2014)</b>	<b>Current Board Action No. 64 (Aug. 2014)</b>	<b>New Total Appropriated Amount</b>
Labor			
Studies & Investigations	\$ 4,305,000	\$ -	\$ 4,305,000
Final Design	4,747,293	-	4,747,293
Owner Costs (Program mgmt., permitting)	6,229,623	70,000	6,299,623
Submittals Review & Record Drwgs	548,670	107,000	655,670
Construction Inspection & Support	3,262,550	140,000	3,402,550
Metropolitan Force Construction	10,470,710	287,000	10,757,710
Materials & Supplies	2,340,400	35,000	2,375,400
Incidental Expenses	945,900	-	945,900
Professional/Technical Services	2,736,000	-	2,736,000
Right-of-Way	550,000	-	550,000
Equipment Use	330,200	-	330,200
Contracts	19,793,254	858,000	20,651,254
Remaining Budget	2,437,900 <sup>2</sup>	103,000	2,540,900
<b>Total</b>	<b>\$ 58,697,500</b>	<b>\$ 1,600,000</b>	<b>\$ 60,297,500</b>

**Funding Request**

<b>Appropriation Name:</b>	Conveyance and Distribution System Rehabilitation Appropriation – FY 2006/07 Through FY 2011/12		
<b>Source of Funds:</b>	Revenue Bonds, Replacement and Refurbishment or General Funds		
<b>Appropriation No.:</b>	15441	<b>Board Action No.:</b>	65
<b>Requested Amount:</b>	\$ 1,600,000	<b>Budget Page No.:</b>	284
<b>Total Appropriated Amount:</b>	\$ 60,297,500	<b>Total Appropriation Estimate:</b>	\$ 114,849,000

<sup>1</sup> The total amount expended to date on the Service Connection G-01 Rehabilitation project is approximately \$396,500. The total estimated cost to complete this project, including the amount authorized to date and current funds requested, is \$2 million.

<sup>2</sup> Includes reallocation of \$60,000 to Skinner Area Pavement Repairs for topographic maps of newly constructed areas; \$16,500 to Orange County Feeder Cathodic Protection to address unanticipated right-of-way issues; and \$65,000 to Santiago Lateral Sectionalizing Valve Replacement for hydraulic modeling to develop piping options as a result of hydraulic constraints.

**The Metropolitan Water District of Southern California**

**Abstract of Bids Received on July 9, 2014 at 2:00 P.M.**

**Specifications No. 1762  
Glendale-01 Service Connection Rehabilitation and Upgrade**

The work consists of replacing a vault; replacing a 30-inch venturi meter with a Metropolitan-furnished magnetic meter; and installing piping and couplings, air release and vacuum valve, electrical conduits, cables and panel board; and installing a lighting and ventilation system.

**Engineer's Estimate: \$940,000**

<b>Bidder and Location</b>	<b>Total</b>	<b>SBE \$</b>	<b>SBE %</b>	<b>Met SBE<sup>1</sup></b>
<b>Kiewit Infrastructure West Co., Santa Fe Springs, CA</b>	<b>\$858,000</b>	<b>\$70,278</b>	<b>8.19%</b>	<b>Yes</b>
Steve P. Rados, Inc., Santa Ana, CA	\$1,084,000	-	-	-
L. H. Woods & Sons, Inc, Vista, CA	\$1,488,000	-	-	-
Mladen Buntich Construction Co., Inc., Upland, CA	\$1,548,000	-	-	-

<sup>1</sup> SBE (Small Business Enterprise) participation level of 8 percent was established for this contract.

# Distribution System

