



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

8/20/2013 Board Meeting

7-5

Subject

Appropriate \$350,000; and authorize paving projects at the Temescal Power Plant and Skinner area facilities (Approp. 15441).

Executive Summary

This action authorizes two paving projects: (1) construction of new asphalt pavement for the access road to the Temescal Power Plant; and (2) preliminary design to repair deteriorated asphalt pavement at Lake Skinner Dam and the Robert A. Skinner Water Treatment Plant.

Timing and Urgency

Improved access to the Temescal Power Plant is needed to perform routine patrols and maintenance of the facility under all weather conditions. The power plant is located at the top of a steep hill and is reached via an unpaved 940-foot-long road. The steep grade makes access by maintenance equipment difficult, particularly during the winter rainy season. This project will install new pavement to enable patrol and maintenance activities to proceed year-round.

Over the past 40 years, the service roads and paved areas at Lake Skinner Dam and around the treatment plant have received heavy use by Metropolitan forces and construction contractors. As a result, portions of these paved areas exhibit extensive surface and sub-base deterioration. Staff recommends repairing approximately 590,000 square feet of existing deteriorated asphalt pavement to provide all-weather, safe paved surfaces throughout the Skinner area facilities.

These projects have been reviewed with Metropolitan's Capital Investment Plan (CIP) prioritization criteria, and are categorized as Infrastructure Rehabilitation projects. Funds for this action are available within Metropolitan's capital expenditure plan for fiscal year 2013/14.

Details

Background

The Temescal Power Plant is located along the Lower Feeder near the city of Corona. The facility was constructed in 1982, and includes a hydraulic control tower which is multi-functional. The tower serves to adjust flow rates into the power plant, to divert flow back to the Lower Feeder in the event of a tripped generator, to suppress surges in the Lower Feeder, to keep the Lower Feeder pressurized upstream of the tower, and to bypass flows when the turbines are not in operation.

Temescal Power Plant sits at the top of a steep hill. The plant is accessed via a 940-foot-long dirt access road which is approximately 18 feet wide. The unpaved access road often becomes impassable during inclement weather due to slick soil and ruts. During the rainy season, vehicles and maintenance equipment have difficulty accessing the site to perform routine operation and maintenance activities. The road needs to be paved to provide all-weather access to the power plant. Metropolitan's Board previously authorized final design to pave the 17,000 square-foot road. Final design has now been completed, and construction is recommended to proceed at this time.

Following 40 years of service, the paved roads around and on top of Lake Skinner Dam have begun to deteriorate due to aging and surface wear. The roads are used to perform dam surveillance; monitor dam safety instrumentation such as seismic accelerometers, settlement monuments, seepage weirs, piezometers, and groundwater wells; and perform routine operation and maintenance activities such as collection of water quality samples. In addition, roads throughout the dam and treatment plant area have begun to deteriorate. The deteriorated pavement exhibits raveling caused by wear and tear under traffic loads; surface deterioration; and fatigue and edge cracking caused by saturated subgrades from poor drainage and standing water. Staff recommends that the existing deteriorated paving be removed, grading be performed to improve drainage, and asphalt paving be installed to provide all-weather paved surfaces for the Skinner area facilities.

The recommended improvements include resurfacing approximately 2.2 miles of roadway and 120,000 square feet of paving adjacent to structures; removal and replacement of a 0.75 mile of roadway and approximately 65,000 square feet of paving; regrading 30,000 square feet of earthen areas to improve drainage; and providing 115,000 square feet of new paving.

Preliminary design is recommended to proceed at this time to rehabilitate approximately 590,000 square feet of asphalt paving at the Lake Skinner area facilities.

Project No. 1 - Temescal Power Plant Pavement Repairs- Construction (\$140,000)

Specifications No. 1612 for the Temescal Power Plant Access Road Repairs was advertised for bids on May 5, 2013. As shown in **Attachment 2**, five bids were received and opened on June 4, 2013. The apparent low bidder requested to be released from its bid in accordance with the California Public Contract Code, due to an inadvertent clerical error made during the bid process which materially changed its bid. Upon review of the request and documentation submitted, the apparent low bidder was released from its bid. The second low bid from A & Y Asphalt Contractors, Inc., in the amount of \$97,777, complies with the requirements of the specifications. The three higher bids ranged from \$113,110 to \$139,064, while the engineer's estimate was \$110,000. The contract is planned to be awarded under the General Manager's Administrative Code authority to award contracts of \$250,000 or less. For this contract, Metropolitan established a Small Business Enterprise (SBE) participation level of at least 20 percent of the bid amount. A & Y Asphalt Contractors, Inc. is an SBE firm and thus achieves 100 percent participation.

This action appropriates \$140,000 and authorizes construction of pavement repairs at Temescal Power Plant. In addition to the \$97,777 contract, the requested funds include \$15,000 for construction inspection; \$10,000 for submittal reviews and preparation of record drawings by Metropolitan design staff; and \$17,223 for environmental monitoring and project management.

Metropolitan staff will perform construction inspection. For this project, the anticipated cost of inspection and support is approximately 15 percent of the total construction cost. Engineering Services' goal for inspection of contracts less than \$3 million is 9 to 15 percent.

The total estimated cost to complete this project, including the amount expended to date and the current funds requested, is \$252,000.

Project 2 - Pavement Repairs at Skinner Area Facilities– Preliminary Design Phase (\$210,000)

Planned preliminary design activities include conducting site surveys; mapping; preparation of layout drawings; development of final design criteria; preparation of environmental documentation; and development of a construction cost estimate.

This action appropriates \$210,000 and authorizes preliminary design phase activities to rehabilitate paving at Lake Skinner Dam and the Skinner plant. Requested funds include \$162,000 for technical analyses, field surveys, mapping, and drawing preparations; \$42,000 for project management and preparation of environmental documentation; and \$6,000 for remaining budget. All work will be performed by Metropolitan staff.

The total estimated cost to complete the pavement upgrades at the Skinner area facilities is anticipated to range from \$1.3 million to \$1.6 million.

Summary

This action appropriates \$350,000, authorizes installation of pavement at Temescal Power Plant, and authorizes preliminary design to repair pavement at the Skinner area facilities. All work has been evaluated and recommended by Metropolitan's CIP Evaluation Team, and funds are available within the fiscal year 2013/14 capital expenditure plan. See [Attachment 1](#) for the Financial Statement, [Attachment 2](#) for the Abstract of Bids, and [Attachment 3](#) for the Location Map.

Both projects will be performed under the Conveyance and Distribution System Rehabilitation Program - Phase 2 (Appropriation No. 15441), which was initiated in fiscal year 2001/02. With the present action, the total appropriated amount for this program will increase from \$45,954,000 to \$46,304,000.

Project Milestones

November 2013 – Completion of installation of pavement at Temescal Power Plant

January 2014 – Completion of preliminary design of pavement repairs for the Skinner area facilities

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)

Project No. 1 – Temescal Power Plant Pavement Repairs - Construction

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 funding, minor alterations, and replacement of existing public facilities, and minor modifications in the condition of land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees. In addition, these activities involve 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, and Class 4 Categorical Exemptions (Sections 15301, 15302, 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; and Class 4, Section 15304 of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Project No. 2 – Pavement Repairs at Skinner Area Facilities – Preliminary Design Phase

CEQA determination for Option #1:

The proposed action is categorically exempt under the provisions of CEQA and the State CEQA Guidelines. The proposed action 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 a part of a study leading to an action which a public agency has not yet approved, adopted, or funded. Accordingly, the proposed action qualifies as a Class 6 Categorical Exemption (Section 15306 of the State CEQA Guidelines).

The CEQA determination is: Determine that pursuant to CEQA, the proposed action qualifies under a Categorical Exemption (Class 6, Section 15306 of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

Adopt the CEQA determinations that the proposed action is categorically exempt and

- a. Appropriate \$350,000;
- b. Authorize installation of pavement at Temescal Power Plant; and
- c. Authorize preliminary design of pavement repairs at the Skinner area facilities.

Fiscal Impact: \$350,000 in capital funds under Approp. 15441

Business Analysis: This option will protect Metropolitan's assets, enhance employee safety, and enable patrol and maintenance activities to proceed under all weather conditions.

Option #2

Do not proceed with the paving projects at this time.

Fiscal Impact: None

Business Analysis: Under this option, access to Temescal Power Plant and portions of the Skinner area facilities may be restricted during inclement weather, resulting in the inability to perform needed operations and maintenance activities and required dam monitoring.

Staff Recommendation

Option #1


 _____ 7/29/2013
 Gordon Johnson Date
 Manager/Chief Engineer,
 Engineering Services


 _____ 7/31/2013
 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 Program – FY 2006/07 Through FY 2011/12

A breakdown of Board Action No. 56 for Appropriation No. 15441 for paving repairs at the Temescal Power Plant¹ and Skinner area facilities² is as follows:

	Previous Total Appropriated Amount (July 2013)	Current Board Action No. 56 (Aug. 2013)	New Total Appropriated Amount
Labor			
Studies & Investigations	\$ 2,880,000	\$ 162,000	\$ 3,042,000
Final Design	4,286,293	-	4,286,293
Owner Costs (Program mgmt., permitting)	5,474,400	59,223	5,533,623
Submittals Review & Record Drwgs	340,670	10,000	350,670
Construction Inspection & Support	2,176,550	15,000	2,191,550
Metropolitan Force Construction	9,136,710	-	9,136,710
Materials & Supplies	2,330,400	-	2,330,400
Incidental Expenses	941,900	-	941,900
Professional/Technical Services	2,551,000	-	2,551,000
Right-of-Way	550,000	-	550,000
Equipment Use	325,200	-	325,200
Contracts	12,860,024	97,777	12,957,801
Remaining Budget	2,100,853	6,000	2,106,853
Total	\$ 45,954,000	\$ 350,000	\$ 46,304,000

Funding Request

Program Name:	Conveyance and Distribution System Rehabilitation Program – FY 2006/07 Through FY 2011/12		
Source of Funds:	Revenue Bonds, Replacement and Refurbishment or General Funds		
Appropriation No.:	15441	Board Action No.:	56
Requested Amount:	\$ 350,000	Budget Page No.:	284
Total Appropriated Amount:	\$ 46,304,000	Total Program Estimate:	\$ 106,335,000

¹ The total amount expended to date on the Temescal Power Plant Access Road Repair is approximately \$112,000. The total estimated cost to complete this project, including the amount expended to date and the current funds requested, is \$252,000.

² This is the initial appropriation for the Skinner Paving Repairs project. The total estimated cost to complete the pavement upgrades at the Skinner area facilities is anticipated to range from \$1.3 million to \$1.6 million.

The Metropolitan Water District of Southern California

Abstract of Bids Received on June 4, 2013 at 2:00 P.M.

**Specifications No. 1612
Temescal Power Plant Access Road Repair**

The project consists of installing approximately 17,000 square feet of asphalt concrete over a 940-foot-long by 18-foot-wide unpaved access road at the Temescal Power Plant.

Engineer's Estimate: \$110,000

Bidder and Location	Total	SBE \$	SBE %	Met SBE¹
Haitbrink Asphalt Paving, Inc. Corona, CA	\$80,500 ²	-	-	-
A & Y Asphalt Contractors, Inc. Norco, CA	\$97,777	\$97,777	100	Yes
A to Z Building, Inc. Torrance, CA	\$113,110	-	-	-
Team West Contracting Corporation Corona, CA	\$119,452	-	-	-
Roadway Engineering & Contracting, Inc. Mira Loma, CA	\$139,064	-	-	-

¹ SBE (Small Business Enterprise) participation level established at 20% for this contract.

² Haitbrink Asphalt Paving, Inc., requested to be released from its bid in accordance with the California Public Contract Code due to an inadvertent clerical error made during the bid process, which materially changed its bid. Upon review of the request and documentation submitted, Metropolitan released Haitbrink Asphalt Paving, Inc. from its bid.

Distribution System

