



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

8/18/2015 Board Meeting

7-1

Subject

Appropriate \$480,000; and award \$345,305 contract to F. M. Thomas Air Conditioning, Inc. to replace the Administration Building HVAC system at the Robert A. Skinner Water Treatment Plant (Approp. 15485)

Executive Summary

This action awards a construction contract to replace the heating, ventilating, and air conditioning (HVAC) system at the Skinner plant's Administration Building. Following nearly 40 years of continuous operation, major components of the existing HVAC system have begun to fail and need to be replaced. A functional HVAC system is required to maintain environmental control within the building for compliance with laboratory safety standards, and to enable continued occupancy of the building.

Timing and Urgency

The existing HVAC system in the Skinner plant's Administration Building was installed in 1976 during the original plant construction. The system has deteriorated over time, is obsolete, and needs to be replaced. This project will provide a modern, energy-efficient HVAC system that will minimize the risk of future system failures.

This project has been reviewed with Metropolitan's Capital Investment Plan (CIP) prioritization criteria and is included within the Treatment Plant Reliability Program. Funds for this action are available within Metropolitan's capital expenditure plan for fiscal year 2015/16.

Details

Background

The Skinner plant commenced service in 1976 with an initial capacity of 150 million gallons per day (mgd), and has been expanded several times to its present capacity of 630 mgd. It delivers a blend of waters from the Colorado River and State Water Project to Eastern Municipal Water District, Western Municipal Water District of Riverside County, and the San Diego County Water Authority. The plant is located north of Temecula in Riverside County.

The Skinner plant's Administration Building houses many essential functions including the plant's water quality laboratory, control room, supervisory control and data acquisition (SCADA) servers, staff offices, and administrative support. A properly functioning HVAC system is needed to control the working environment for staff, to maintain samples and calibrated laboratory equipment at appropriate temperatures, and to provide ventilation air to fume hoods used by laboratory technicians. The frequency of needed repairs to the building's HVAC system has increased over time, with more than ten repairs needed per year currently to maintain the system in operating condition. The HVAC system features two roof-mounted units of 30-ton and 15-ton capacity, both of which experience frequent breakdowns. This 39-year-old multi-zone system is of a type that is considered obsolete and cannot be refurbished. Only smaller replacement parts are available.

The new HVAC system will comply with current energy efficiency standards and building codes, and will employ commercial off-the-shelf equipment. The planned improvements include: (1) replacement of the two

roof-mounted HVAC units; (2) modification of the power and control systems; (3) modification of existing ductwork; (4) local reinforcement of the roof structure which supports the HVAC units; and (5) repair of flashing and building finishes.

In October 2014, Metropolitan's Board authorized design to replace the HVAC system at the Skinner plant's Administration Building. Design has been completed, and staff recommends moving forward with construction at this time.

Skinner Administration Building HVAC System Replacement – Construction (\$480,000)

Specifications No. 1838 to replace the HVAC system at the Skinner plant's Administration Building was advertised for bids on May 26, 2015. As shown in [Attachment 2](#), three bids were received and opened on June 25, 2015. The low bid from F. M. Thomas Air Conditioning, Inc. in the amount of \$345,305 complies with the requirements of the specifications. The two higher bids were \$445,000 and \$483,859, while the engineer's estimate was \$300,000. Staff investigated the difference between the engineer's estimate and the low bid, and attributes the difference to the contractor's anticipated effort to provide temporary HVAC service while the main system components are being replaced. For this contract, Metropolitan established a Small Business Enterprise (SBE) participation level of at least 23 percent of the bid amount. F. M. Thomas Air Conditioning, Inc. is an SBE firm, and thus achieves 100 percent participation. The subcontractors for this contract are listed in [Attachment 3](#).

This action appropriates \$480,000 and awards a \$345,305 contract to F. M. Thomas Air Conditioning, Inc. to replace the Skinner Administration Building HVAC system. In addition to the amount of the contract, the requested funds include \$10,000 for support by Metropolitan forces, which includes electrical modifications within the Administration Building, and start-up and testing of the new HVAC system. The requested funds also include: \$52,000 for construction inspection; \$24,000 for submittals review, technical support and record drawing preparation; \$16,000 for project management and contract administration; and \$32,695 for remaining budget.

Construction inspection will be performed by Metropolitan staff. For this project, the anticipated cost of inspection is approximately 14.6 percent of the total construction cost. Engineering Services' goal for inspection of construction contracts less than \$3 million is 9 to 15 percent. The total cost of construction for this project, which includes the construction contract and Metropolitan force activities, is \$355,305.

This project has been evaluated and recommended by Metropolitan's CIP Evaluation Team, and funds are available within the fiscal year 2015/16 capital expenditure plan. See [Attachment 1](#) for the Financial Statement, [Attachment 2](#) for the Abstract of Bids, [Attachment 3](#) for the List of Subcontractors, and [Attachment 4](#) for the Location Map.

The total estimated cost to complete the Skinner Administration Building HVAC System Replacement, including the amount appropriated to date and current funds requested, is approximately \$540,000. This project is included within capital Appropriation No. 15485, the Skinner Improvements Appropriation – FY 2012/13 Through FY 2017/18, which was initiated in fiscal year 2012/13. With the present action, the total funding for Appropriation No. 15485 will increase from \$1.51 million to \$1.99 million.

Project Milestone

March 2016 – 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:

This project was previously determined to be categorically exempt under the provisions of CEQA and the State CEQA Guidelines. The Board found this project to be exempt under Class 1, Section 15301, and Class 2, Section 15302, of the State CEQA Guidelines on October 14, 2014. With the current action, no substantial changes to the project are proposed since the 2014 determination. Hence, the previous environmental documentation prepared in conjunction with the project fully complies with CEQA and the State CEQA Guidelines. Accordingly, no further CEQA documentation is necessary for the Board to act with regard to the proposed action.

The CEQA determination is: Determine that the proposed action has been previously addressed in the 2014 categorical exemptions (Classes 1, Section 15301, and Class 2, Section 15302 of the State CEQA Guidelines), and that no further environmental analysis or documentation is required.

CEQA determination for Option #2:

None required

Board Options

Option #1

Adopt the CEQA determination that the proposed action was previously determined to be categorically exempt and that no further environmental analysis or documentation is required, and

- a. Appropriate \$480,000; and
- b. Award \$345,305 contract to F. M. Thomas Air Conditioning, Inc. to replace the Skinner Administration Building's HVAC system.

Fiscal Impact: \$480,000 in capital funds under Approp. No. 15485

Business Analysis: Replacement of the Administration Building HVAC system will maintain environmental controls to enable continued occupancy, and maintain compliance with laboratory testing and safety standards. In addition, this option will reduce the HVAC system's operating costs and improve its reliability.

Option #2

Do not proceed with the project at this time and continue to replace components of the existing HVAC system as they fail.

Fiscal Impact: None

Business Analysis: This option would forgo an opportunity to improve reliability of the Administration Building HVAC system in a planned, efficient manner. At some future time, continued repair of the existing equipment will be infeasible and/or cost-prohibitive.

Staff Recommendation

Option #1


Gordon Johnson
Manager/Chief Engineer
Engineering Services

7/24/2015

Date


Jeffrey Kightlinger
General Manager

8/3/2015

Date

- Attachment 1 – Financial Statement**
- Attachment 2 – Abstract of Bids**
- Attachment 3 – List of Subcontractors**
- Attachment 4 – Location Map**

Ref# es12637617

Financial Statement for Skinner Improvements Appropriation – FY 2012/13 Through FY 2017/18

A breakdown of Board Action No. 3 for Appropriation No. 15485 to replace the Administration Building HVAC system at the Skinner plant¹ is as follows:

	Previous Total Appropriated Amount (Oct. 2014)	Current Board Action No. 3 (Aug. 2015)	New Total Appropriated Amount
Labor			
Studies & Investigations	\$ 39,000	\$ -	\$ 39,000
Final Design	114,000	-	114,000
Owner Costs (Program mgmt., project controls)	99,000	16,000	115,000
Submittals Review & Record Drawings	47,000	24,000	71,000
Construction Inspection & Support	43,000	52,000	95,000
Metropolitan Force Construction	598,000	10,000	608,000
Materials & Supplies	335,000	-	335,000
Incidental Expenses	10,000	-	10,000
Professional/Technical Services	-	-	-
Equipment Use	-	-	-
Contracts	-	345,305	345,305
Remaining Budget	225,000	32,695	257,695
Total	\$ 1,510,000	\$ 480,000	\$ 1,990,000

Funding Request

Appropriation Name:	Skinner Improvements Appropriation – FY 2012/13 Through FY 2017/18		
Source of Funds:	Revenue Bonds, Replacement and Refurbishment or General Funds		
Appropriation No.:	15485	Board Action No.:	3
Requested Amount:	\$ 480,000	Budget Page No.:	317
Total Appropriated Amount:	\$ 1,990,000	Total Appropriation Estimate:	\$43,800,000

¹The total amount expended to date on the Skinner Administration Building HVAC System Replacement project is approximately \$60,000. The total estimated cost to complete this project, including the amount appropriated to date and current funds requested, is approximately \$540,000.

The Metropolitan Water District of Southern California

Abstract of Bids Received on June 25, 2015 at 2:00 P.M.

**Specifications No. 1838
Skinner Administration Building HVAC System Replacement**

The project consists of replacing the HVAC system at the Skinner plant's Administration Building. The work also includes modification of the HVAC controls and existing electrical system; replacement of ductwork; local reinforcement of the roof structure which supports the HVAC units; and repair of flashing and building finishes.

Engineer's Estimate: \$300,000

Bidder and Location	Total	SBE \$	SBE %	Met SBE¹
F. M. Thomas Air Conditioning, Inc. Brea, CA	\$345,305	\$345,305	100	Yes
AP Construction Group, Inc. Van Nuys, CA	\$445,000	-	-	-
DuWright Construction, Inc. San Diego, CA	\$483,859	-	-	-

¹ SBE (Small Business Enterprise) participation level established at 23% for this contract.

The Metropolitan Water District of Southern California
Subcontractors for Low Bidder
Specifications No. 1838
Skinner Administration Building HVAC System Replacement

Low Bidder: F. M. Thomas Air Conditioning, Inc., Brea, CA

Subcontractor and Location
Best Contracting Services, Inc., Gardena, CA
SMC Contracting, Inc., Reno, NV
The Crane Guys, Santa Fe Springs, CA
Electrical Service and Installation Co., Huntington Beach, CA

Distribution System

