



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

7/13/2010 Board Meeting

7-2

Subject

Appropriate \$1.7 million; and award \$1,236,627 contract to Adams Mallory Construction Co., Inc. for the La Verne Shops buildings at the Weymouth plant (Approp. 15395)

Description

This action awards a construction contract for rehabilitation work at the La Verne Shops, located on the site of the F. E. Weymouth Water Treatment Plant. This project represents the second phase of a four-phase program to upgrade these important support facilities.

Timing and Urgency

The La Verne Shops consist of the machine shop, fabrication shop, and two coating shops. These shops provide support for all major refurbishment and emergency response projects that occur within Metropolitan's conveyance and distribution system, and within its treatment plants. In addition, the shops refurbish critical conveyance facilities for the State Water Project under a service agreement with the California Department of Water Resources. Three elements of work are included under Phase 2 of the La Verne Shops Upgrade Program: replacement of the machine shop roof, seismic retrofit of the fabrication shop, and upgrade of the bridge cranes in the machine and fabrication shops.

Replacement of the 25-year-old machine shop roof is needed because it leaks excessively during rainstorms and has deteriorated beyond repair. The fabrication shop needs to be seismically upgraded to withstand a major seismic event. The Sierra Madre Fault is located less than 1.5 miles from the Weymouth plant and has the capability of generating a 7.0-magnitude earthquake. Refurbishment of the machine/fabrication bridge shop cranes is needed to improve safety and to handle steel plate and equipment in the shops. The cranes are 25 to 40 years old. The electric motors, instrument and control relays, and power system are no longer supported by the crane industry. The cranes are often out of service for several weeks because replacement parts are difficult to obtain due to their age.

Staff recommends award of a construction contract at this time to enhance Metropolitan's ability to respond to emergencies, and to complete the work before the next rainy season.

This project has been reviewed with Metropolitan's updated Capital Investment Plan (CIP) prioritization criteria and is categorized as an Infrastructure Project. This project is budgeted within Metropolitan's CIP for fiscal year 2010/11.

Background

The Weymouth plant, which is located in the city of La Verne, was placed into service in 1941. Specialized shops have been located at the Weymouth plant since that time. These specialized shops are involved in major refurbishment and emergency response projects that occur within Metropolitan's conveyance and distribution system and its treatment plants. The shops were expanded in the 1960s when larger facilities were built, and expanded again in the 1980s to support a major rehabilitation of the Colorado River Aqueduct pumps. The

La Verne Shops are housed in four buildings: the fabrication shop, machine shop, and coatings shops east and west. See [Attachment 2](#) for the Location Map.

The La Verne Shops provide full-time support for Metropolitan's rehabilitation work, maintenance activities, and capital projects; equipment rehabilitation services for the Department of Water Resources (DWR); and emergency fabrication support to Metropolitan and its member agencies. On an annual basis, the shops take on over 120 projects with a total value between \$7.5 million and \$10 million. In assessing requests for outside support, Metropolitan's needs are prioritized before providing assistance to other agencies. Support to member agencies typically includes agency-requested service connections, which involves fabrication, coating, and lining of turnout components. Metropolitan has had a formal agreement with DWR since the 1980s to provide shop services that support maintenance activities along the State Water Project. Recent examples of this support include repairing a pump shaft for the Pearblossom facility, and repairing impellers for the Edmonston and Oso facilities. This work is performed on a fee-for-service basis that recovers machine rates, raw materials, and fully burdened labor rates, including additives and overhead.

Retaining the in-house capability to perform the functions provided by the La Verne Shops is critical to Metropolitan, as there are few firms in the western U.S. with similar capabilities. The shops have the capability to perform critical rehabilitation of valves and pipelines within the expedited time frame needed to respond to emergencies and outages. In recent years, private firms with machine and fabrication shop capabilities have tended to increase the amount of work outsourced to off-shore facilities, instead of retaining such expertise locally. These firms have little ability to respond expeditiously to Metropolitan's emergency needs.

The La Verne Shops Upgrade Program was initiated in 2002, with the objective of refurbishing and replacing the machine shop equipment. In March 2008, Metropolitan's Board authorized final design activities. The scope of work for the La Verne Shops Upgrade Program includes the following:

- Refurbish and replace outdated fabrication, machine and coating shop equipment.
- Expand the machine shop building to permit larger and safer work areas around each piece of equipment and to provide adequate areas for staging parts near each machine, while maintaining clear walkways throughout the building.
- Expand the fabrication shop to permit a more efficient layout of existing and proposed new equipment, material handling and staging, and to provide safer equipment work areas.
- Consolidate the two coatings shop buildings into one shop with adequate work area for new coating shop equipment, material staging areas, workbenches, and post-painting handling operations.

This work will be prioritized and executed in four phases. Phase 1 includes the refurbishment and replacement of 38 pieces of equipment in the machine and fabrication shops, and is currently 50 percent complete. Under Phase 2, which is the subject of this action, the machine shop roof will be replaced, the fabrication shop building will be retrofitted to meet current seismic codes, and the bridge cranes in the fabrication and machine shops will be upgraded to improve safety and handling of materials, equipment and components. Under Phase 3, the two existing coating shop buildings will be consolidated and expanded. Under Phase 4, the existing fabrication and machine shop buildings will be expanded. Phases 3 and 4 are planned to move forward following completion of the new Weymouth inlet conduit, which is currently 30 percent complete.

The scope of Phase 2 work includes the following:

- Replacement of the machine shop building's existing coal-tar flat roof with a single-ply composite roof and drainage collection system;
- Seismic retrofit of the existing fabrication shop with a roof and wall connection system, capable of withstanding a major earthquake on the Sierra Madre fault. The Sierra Madre fault is located 1.5 miles from the Weymouth plant and is capable of generating a 7.0-magnitude earthquake.

- Upgrade of five bridge cranes in the fabrication and machine shop buildings. The existing cranes are over 25 years old and frequently break down. Replacement parts for the motors and controls are difficult to obtain. The upgraded cranes will improve safety and handling of materials, equipment, and components throughout both the fabrication and machine shops.

La Verne Shops Upgrade, Phase 2 - Construction (\$1,700,000)

Specifications No. 1675 for La Verne Shops Upgrade, Phase 2, were advertised for bids on April 29, 2010. As shown in [Attachment 3](#), four bids were received and opened on June 10, 2010. The low bid from Adams Mallory Construction Co., Inc. in the amount of \$1,236,627, complies with the requirements of the specifications. The three higher bids ranged from approximately \$1.34 million to \$1.4 million. The engineer's estimate was \$1.03 million. Staff has determined that the group of bids was higher than the engineer's estimate because of higher contractor costs for removal and abatement of existing hazardous materials, and for removal and installation of major electrical/mechanical equipment. For this contract, Metropolitan has established a Small Business Enterprise (SBE) participation level of at least 25 percent of the bid amount. Adams Mallory Construction Co., Inc. is an SBE firm and thus achieves 100 percent participation.

Construction inspection will be performed by Metropolitan staff. The anticipated cost of inspection as a percentage of the total construction cost is approximately 13 percent. Engineering Services' goal for inspection of contracts with construction costs less than \$3 million is 9 to 15 percent.

This action appropriates \$1.7 million in budgeted funds and awards a \$1,236,627 contract to Adams Mallory Construction Co., Inc. In addition to the amount of the contract, the requested funds include \$15,000 for construction support by Metropolitan forces; \$10,000 for regulatory compliance testing and monitoring of waste disposal manifests by a specialty firm; \$159,000 for construction inspection; \$58,000 for project management; \$87,000 for submittals review and preparation of record drawings; and \$134,373 for remaining budget.

This project is consistent with Metropolitan's goals for sustainability by improving shop efficiency and product quality, which lead to lower power consumption, less material waste, and more efficient operation. This project has been evaluated and recommended by Metropolitan's CIP Evaluation Team and funds have been included in the fiscal year 2010/11 capital budget. See [Attachment 1](#) for the Financial Statement, and [Attachment 2](#) for the Location Map.

Project Milestone

March 2011 – 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 determinations for Option #1:

Bridge Crane Upgrades for Fabrication and Machine Shops

The environmental effects from the Bridge Crane Upgrade project were evaluated in the F. E. Weymouth Filtration Plant Ozonation Facilities and Site Improvements Program Final Environmental Impact Report (Final EIR), which was certified by the Board on April 12, 2005. The Board also approved the Findings of Fact (Findings), the Statement of Overriding Considerations, the Mitigation Monitoring and Reporting Program (MMRP), and the projects themselves. Addendum No. 1 to the Final EIR was certified by the Board on January 9, 2007. The current board action is solely based on authorizing award of a construction contract for the Bridge Crane Upgrade project, and not on any changes to the approved program itself. Hence, the previous environmental documentation acted on by the Board in conjunction with the proposed actions fully complies with

CEQA and the State CEQA Guidelines. Accordingly, no further CEQA documentation is necessary for the Board to act on the proposed actions.

The CEQA determination is: Determine that the proposed actions have been previously addressed in the certified 2005 Final EIR, findings, SOC, and MMRP, and that no further environmental analysis or documentation is required.

Machine Shop Roof Replacement

The project was previously determined to be categorically exempt under the provisions of CEQA and 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 November 12, 2008. A Notice of Exemption (NOE) was filed on the project at that time and the statute of limitations has ended. With the current board actions, there are no substantial changes proposed to the project since the original NOE was filed. Hence, the previous environmental documentation 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 regards to the proposed actions.

The CEQA determination is: Determine that the proposed actions have been previously addressed in the 2008 NOE (Class 1, Section 15301 and Class 2, Section 15302 of the State CEQA Guidelines) and that no further environmental analysis or documentation is required.

Seismic Retrofit of Fabrication Shop

The project was previously determined to be categorically exempt under the provisions of CEQA and State CEQA Guidelines. The Board found this project to be exempt under Class 1, Section 15301; Class 2, Section 15302; and Class 3, Section 15303 of the State CEQA Guidelines on August 17, 2009. A Notice of Exemption (NOE) was filed on the project at that time and the statute of limitations has ended. With the current board actions, there are no substantial changes proposed to the project since the original NOE was filed. Hence, the previous environmental documentation 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 regards to the proposed actions.

The CEQA determination is: Determine that the proposed actions have been previously addressed in the 2009 NOE (Class 1, Section 15301; Class 2, Section 15302; and Class 3, Section 15303 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 determinations and

- a. Appropriate \$1.7 million in budgeted funds; and
- b. Award \$1,236,627 contract to Adams Mallory Construction Co., Inc. for the La Verne Shops Upgrade, Phase 2.

Fiscal Impact: \$1.7 million of budgeted funds under Approp. 15395

Business Analysis: This option will enhance reliability and continued operation of the La Verne machine shop during rainstorms and the fabrication shop in the event of a significant earthquake. Upgrade of the bridge cranes will enhance the plant's operational flexibility in the event of emergencies, maintenance or rehabilitation work.

Option #2

Do not award the construction contract and readvertise in an attempt to receive more favorable bids.

Fiscal Impact: None

Business Analysis: This option would delay completion of the upgrades and may or may not result in more favorable bids. Further, this option would delay completion of the roof replacement before the next winter rains and would not upgrade the fabrication shop to comply with the current seismic and safety requirements.

Staff Recommendation

Option #1



Roy L. Wolfe
Manager, Corporate Resources

6/25/2010
Date



Jeffrey Kightlinger
General Manager

6/28/2010
Date

Attachment 1 – Financial Statement

Attachment 2 – Location Map

Attachment 3 – Abstract of Bids

Ref# cr12605670

Financial Statement for La Verne Shops Upgrade Program, Phase 2

A breakdown of Board Action No. 4 for Appropriation No. 15395 for the La Verne Shops Upgrade Program, Phase 2 * is as follows:

	Previous Total Appropriated Amount (March 2008)	Current Board Action No. 4 (July 2010)	New Total Appropriated Amount
Labor			
Studies & Investigations	\$ 197,000	\$ -	\$ 197,000
Final Design	840,108 **	-	840,108
Owner Costs (Program mgmt)	776,000	58,000	834,000
Submittals Review & As-Builts	-	87,000	87,000
Construction Inspection & Support	-	159,000	159,000
Metropolitan Force Construction	-	15,000	15,000
Materials and Supplies	1,194,673	-	1,194,673
Incidental Expenses	18,300	-	18,300
Professional/Technical Services	2,454,900	-	2,454,900
Hazardous Materials Firm	-	10,000	10,000
Equipment Use	-	-	-
Contracts	389,000	1,236,627	1,625,627
Remaining Budget	600,019 **	134,373	734,392
Total	\$ 6,470,000	\$ 1,700,000	\$ 8,170,000

Funding Request

Program Name:	La Verne Shops Upgrade Program		
Source of Funds:	Revenue Bonds, Replacement and Refurbishment or General Funds		
Appropriation No.:	15395	Board Action No.:	4
Requested Amount:	\$ 1,700,000	Capital Program No.:	15395
Total Appropriated Amount:	\$ 8,170,000	Capital Program Page No.:	304
Total Program Estimate:	\$ 39,567,000	Program Goal:	Infrastructure Reliability

* The total amount expended to date on the La Verne Shops Upgrade Program is approximately \$4,305,288.

** Includes reallocation of \$158,208 from Remaining Budget to Final Design for fire protection system upgrades and additional geotechnical site investigations for the machine and fabrication shop foundation designs.

F.E. Weymouth Water Treatment Plant



The Metropolitan Water District of Southern California**Abstract of Bids Received on June 10, 2010 at 2:00 P.M.****Specifications No. 1675****La Verne Shops Upgrade Program, Phase 2**

The work consists of replacing the machine shop roof, seismically upgrading the fabrication shop roof/wall connections, and upgrading the machine and fabrication shop bridge cranes.

Engineer's Estimate: \$1,030,000

Bidder and Location	Total Bid	SBE \$	SBE %	Met SBE*
Adams Mallory Construction Co., Inc., Placentia, CA	\$1,236,627	1,236,627	100	yes
Orion Construction Corp., Vista, CA	\$1,337,000	-	-	-
J.F. Shea Construction, Inc., Walnut, CA	\$1,366,000	-	-	-
AVI-CON, Inc. dba CA Construction, Riverside, CA	\$1,393,000	-	-	-

*SBE (Small Business Enterprise) participation set at 25 percent