

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

July 8, 2003 Board Meeting

8-3

Subject

Award a \$5.965 million construction contract to Traylor Bros., Inc., for modification of existing Outlet Tower No. 1 at Lake Mathews; and enter into a professional services agreement with Han-Padron Associates in an amount not to exceed \$450,000 to provide inspection and professional services (Approp. 15277)

Description

The Lake Mathews Outlet Facilities program consists of two phases of work. The first phase, the construction of a new outlet tower (Tower No. 2), tunnels, and junction shaft is essentially complete. The second phase is the modification of the existing outlet tower (Tower No. 1) to reduce seismic vulnerability and provide flexibility at Lake Mathews to meet water quality and demand requirements. The modified and new towers are designed to work together to provide the operational flexibility to withdraw water from all levels of the lake. The layout of the facilities is shown on [Attachment 1](#). The new outlet tower and junction shaft have been operating successfully since April 2003, nine months ahead of schedule.

In September 2000, Metropolitan's Board appropriated full funding for this program; hence this action does not appropriate funds.

Project Description & Staffing Strategy

The construction work at Tower No. 1 includes extensive modifications to reduce the lateral seismic load on the tower, thereby enhancing the tower's ability to withstand a maximum credible earthquake generated by a nearby fault. The upper 123 feet of Tower No. 1 will be removed along with all the internal valves and valve actuating systems. The remaining 53 feet of the truncated tower will be completely submerged. A new concrete cap will be constructed to cover the exposed opening. The modifications will provide the capability of water withdrawal from deep elevations in the lake. Twenty-three ports will remain on the tower after the modification. Eighteen of the twenty-three ports will receive flap gates, which provide the ability to manually open or close the ports. The remaining five ports, located at the bottom tier of the tower, will be permanently closed to avoid disturbing the sixty-plus years of silt build up, which may increase levels of turbidity in water deliveries.

Construction management of the Tower No. 1 contract will be performed by Metropolitan staff, with specialized inspection support provided by consultants. The construction management as a percentage of the total construction cost is approximately 11 percent. Use of consultants is the most effective option for supplementing in-house inspection staff due to the need for specialized underwater inspection capabilities, which are not typically required on Metropolitan projects.

This action authorizes the final work for the Lake Mathews Outlet Facilities Program, originally scheduled for completion by May 2005. Since all funds for this program have been previously appropriated, no further authorization of funds is required. It is anticipated that the Tower No. 1 modification contract will be concluded by June 2004.

Bid Results & Business Outreach

As shown in **Attachment 2**, the Abstract of Bids, 3 bids were received and opened under Specification No. 1390 for the Lake Mathews Outlet Tower No. 1 Modification. The low bid from Traylor Bros., Inc. in the amount of \$5.965 million, complies with the requirements of the specifications. The engineer's estimate was \$6.9 million. For this project, Metropolitan requires Small Business Enterprise (SBE) participation of at least 23 percent of the total construction bid. Traylor Bros., Inc. has committed to achieving this requirement.

Request for Proposals (RFP) No. 620 for underwater inspection services, general inspection and project management support was issued in May 2003 and one proposal from Han-Padron Associates was received. Based on the firm's qualifications, experience, and demonstrated performance, the evaluation committee concluded that Han-Padron is qualified to perform the specialized underwater inspection work required for this project. While receiving a single proposal is undesirable, staff verified that other underwater firms, which may have been qualified to perform this work, elected to participate in the bid process for this project as subcontractors to the bidding firms. For this work, Metropolitan requires SBE participation of at least 20 percent of the agreement. Han-Padron Associates has committed to achieving this requirement.

Actions and Milestones

September 2003 – Commence construction of Tower No. 1 modification.

June 2004 – Completion of construction.

Policy

Metropolitan Water District Administrative Code § 5108: Capital Project Appropriation

Metropolitan Water District Administrative Code § 8113: Construction Contract Award

Metropolitan Water District Administrative Code § 8117: Professional and Technical Consultants

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The environmental effects from the construction of the proposed modifications to the existing outlet tower at Lake Mathews were evaluated in Addendum No. 1 to the certified 1995 Final Environmental Impact Report (Final EIR) for the Central Pool Augmentation Project (CPA). The addendum was certified and the proposed modifications were approved by Metropolitan on November 23, 1998. The present proposed board actions are solely based on entering into a construction contract and a professional services agreement and not on any changes to the approved project modifications. Hence, the previous environmental documentation taken by the Board in conjunction with the proposed actions fully complies with CEQA and the State CEQA Guidelines. As such, 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 1998 certified Addendum No. 1 to the CPA Final EIR and that no further environmental analysis or documentation is required.

CEQA determination for Option #2:

None required

Board Options/Fiscal Impacts

Option #1

Adopt the CEQA determination and

- a. Award a \$5.965 million construction contract to Traylor Bros Inc., to perform the Lake Mathews Outlet Tower No. 1 modifications; and
- b. Authorize a professional services agreement with Han-Padron Associates in an amount not to exceed \$450,000 to provide underwater inspection services, general inspection services, and project management support services.

Fiscal Impact: \$6.415 million of previously appropriated and budgeted funds

Option #2

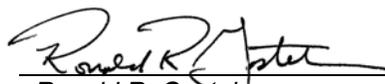
Reject all bids and re-advertise in order to obtain a more favorable bid. Do not authorize the professional services agreement at this time. This approach would delay completion of the project and may or may not result in a lower bid. In addition, the current construction schedule has been coordinated with the operation of the lake so that construction costs are minimized. Postponing the award would result in performing the modification work during higher lake levels and would cause the schedule to be accelerated to meet fixed shutdown dates.

Fiscal Impact: Increased cost

Staff Recommendation

Option #1

 _____ Roy L. Wolfe Manager, Corporate Resources	6/20/2003 Date
--	-------------------

 _____ Ronald R. Gastelum Chief Executive Officer	6/24/2003 Date
--	-------------------

Attachment 1 – Facility Layout

Attachment 2 – Abstract of Bids

BLA #2346



The Metropolitan Water District of Southern California
Abstract of Bids Received June 10, 2003, at 2:00 p.m.
Specification No. 1390
Lake Mathews Outlet Tower No. 1 Modification

The contract consists of performing all necessary work to modify the existing 20-foot-inside-diameter, 176-foot-tall, freestanding reinforced-concrete Outlet Tower No. 1. The modification consists of above-and-below water activities including removal of the top 123 feet of the tower, construction of a concrete bulkhead for the modified tower including edge ring beam with seal, removal of 23 thirty-inch diameter gate valves, removal of 23 metal fish screens, installation of 18 Metropolitan-furnished stainless steel hinged gates and 5 Metropolitan-furnished blind flanges, installation of 18 trash racks, installation of a 30-inch diameter stainless steel vent pipe, and removal of a 340-foot long pedestrian bridge and abutment. Additional work consists of demolition of a water tank and associated piping system; removal of overhead electrical lines and power poles; disposal of demolition materials; installation of a hydro-pneumatic tank and associated piping; construction of a parking lot, furnishing an underground ventilation system; general site paving; and minor landscaping.

Engineer's Estimate: \$6.9 million

Bidder and Location	Total	SBE % Participation	Met SBE (23% Minimum)
Traylor Bros., Inc., dba Traylor Pacific Irvine, CA	\$5,965,000	23.09%	Yes
J. F. Shea Construction, Inc. Walnut, CA	\$6,759,946	N/A	N/A
Kiewit Pacific Co. Santa Fe Springs, CA	\$8,280,000	N/A	N/A

N/A – Not applicable