41257

MWD
Metropolitan Water District of Southern California

APPROVED
By the Board of Directors of
The Metropolitan Water District
of Southern California
at its meeting held

FEB 14 1995

7-3

EXECUTIVE SECRETARY

January 27, 1995

To: Board of Directors (Engineering and Operations Committee--Action)
(Finance and Insurance Committee--Action)

From: General Manager

Subject: Approve Appropriation No. 704 in the Amount of $340,000 and Award Contract to Orange Coast Rebuilding, Inc., for New Replacement Control System and Mechanical Repairs to the Horizontal Boring Mill

RECOMMENDATION

It is recommended that your Board approve Appropriation No. 704 for $340,000 to cover all costs for repairing and upgrading a Carlton Horizontal Boring Mill.

It is also recommended that a $329, 440 contract be awarded to Orange Coast Rebuilding, Inc. for the purchase and installation of a new electronic control system and for mechanical repairs to the Carlton Horizontal Boring Mill.

Approval of Request

John R. Wodraska
General Manager

Submitted by:

Edward G. Means
Chief of Operations

Concur:

John R. Wodraska
General Manager

BRIEF DESCRIPTION

Bids were solicited for repairing the horizontal boring mill in the Special Services machine shop and for replacing the mill's control system. Four prospective bidders attended the mandatory pre-bid inspection, but only one bidder submitted a bid.

Monies were included in the 1993-94 Program No. 5-0300-61, Capital Projects under $250,000, approved by your Board June 15, 1993, to cover costs of replacing the control system in the horizontal boring mill used to machine larger pumps and generating equipment. During initial inspection by prospective bidders, however, it was determined that the equipment would require repairs in addition to a new control system.

The bid submitted by Orange Coast Rebuilding, Inc. for $329,440 was $145,000 greater than the budgeted amount and the original engineers' estimate. Review of their bid revealed that the additional cost, above the engineer's estimate, was for the mechanical repairs to the Carlton and is reasonable.

CONTRACT TYPE	FUNDING	TYPE OF COMPETITION
X NEW	X CAPITAL	☐ RFQ
☐ AMENDED	☐ O & M	☐ RFP No. _____
CONTRACT FORM	BUDGET STATUS	☐ INFORMAL RFP
☐ LEASE	☐ FY 94/95 AMT_____	X OTHER COMPETITION Bid No. S0000353
X PROFESSIONAL SERVICES	X OUT-YEAR AMT $ 195,000	☐ SOLE SOURCE
	X NON-BUDGET AMT $ 145,000	

PURPOSE/BACKGROUND

In 1990, the District purchased a used 1977 Carlton 6-inch floor type horizontal boring mill for use in the Special Services Branch machine shop (shop) to enable the mechanics to machine larger pumps and generating equipment. The Carlton Mill became operational in early 1991 and has been in continuous use since that time.

With this continuous use, the Carlton Mill can no longer provide the necessary machining tolerances for Metropolitan and Department of Water Resources (DWR) major parts. Investigation of the problem determined the cause to be mechanical wear in the control system. Two industrial electronic and numerical control specialists were asked to provide Metropolitan with estimates for replacing the original controls with a GE Fanuc control system, the same system installed on other numerically-controlled machines in the shop, and which would standardize the programming languages. The specialists concurred that a new control system would correct the loss-in-accuracy problem. It would also provide easy configuration and diagnostic check of the hardware and repair of the equipment.

Prior to bidding the new control system, additional vendors were contacted in order to obtain a more competitive bid. Several machine rebuilders, who also have experience in electronic control systems, were contacted. During their inspection of the Carlton Mill, they

(Cont.)

identified mechanical repairs that would be required and without which the Carlton would still not be able to perform the precision machining required for the large pumps and generating equipment. Therefore, a requisition was prepared to both replace the electronic control system and to make repairs to the Carlton. A mandatory pre-bid inspection was completed by four prospective bidders.

Currently, there is a backlog of DWR and MWD precision work for the Carlton. Therefore, it is critical that the work be done in a timely manner in order for the machined parts to be returned to DWR without effecting their pumping and generating schedules. The proposed mechanical repairs and electronic control system replacement will return the Carlton to like-new condition; a new horizontal boring mill would cost about $1.5 million, plus installation.

CEQA Compliance / Environmental Documentation

The proposed project is exempt from the provisions of the California Environmental Quality Act as it consists of modifications of an existing facility involving no expansion of use beyond that previously existing.

MBE/WBE

Orange Coast Rebuilding, Inc. is not a minority-owned business, but was the only bid received on materials and services of a highly specialized nature.

Fiscal Statement

The total estimated cost breakdown is as follows:

Labor	
Specifications Preparation and Inspection	$ 4,889
Administrative Overhead	$ 5,671
Contracts	$329,440
Total	$340,000

Source of Funds: Pay-As-You-Go Fund

Project Benefit:

The Special Services Branch of the Operations Division provides precision machining for large pumps and generating equipment located throughout the District and for the State of California Department of Water Resources. The proposed repairs and replacement control system will return the horizontal boring mill to like new condition and allow Special Services Branch mechanics to provide the quick turn-around time and not adversely effect pumping and generating schedules.