



MWD

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

7-3

February 18, 1997

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

From: General Manager 

Submitted by: Gary M. Snyder
Chief Engineer 

Subject: Appropriate \$970,000 to Finance All Estimated Costs to Purchase and Install Flocculators at the R. A. Skinner Filtration Plant and Award an Equipment Contract

Reference: Appropriation 15274 / Authorization No. 1

RECOMMENDATIONS

It is recommended that an equipment contract in the amount of \$318,385 be awarded to Eimco Process Equipment Company (Eimco) for the purchase of 24 flocculators, in accordance with Purchase Requisition No. 5444, as amended, and that conditioned upon execution of the contract, all other bids be rejected.

It is recommended that funding for Appropriation No. 15274 be increased by \$970,000 from \$190,000 to \$1,160,000, from the Pay-As-You-Go Fund, to expend budgeted funds to finance all costs associated with the purchase and installation of 24 flocculators at the R. A. Skinner Filtration Plant.

EXECUTIVE SUMMARY

The existing 24 flocculators are nearly 25 years old, expensive to maintain, and difficult to repair due to lack of available replacement parts. Replacement of the flocculators will provide better flocculation as well as savings in energy and maintenance costs. The total estimated cost of this program is \$1,160,000.

DETAILED REPORT

The R. A. Skinner Filtration Plant Modules 1 and 2, were originally constructed with vertical flocculators. The flocculator units currently in use were installed in 1973. Over the

years, replacement parts for these units have become difficult to obtain. In addition, the existing 15 horsepower drive motors are not energy efficient. A study determined that modern equipment with half the horsepower of the current equipment could provide better flocculation at much lower costs. Replacement of these flocculators would save approximately \$8,700 per month in energy and maintenance costs.

In September 1995, your Board approved Appropriation No. 15275 (formerly Appropriation No. 717) to finance all costs associated with project design. Design has been completed and a specification for new flocculators was advertised. Two bids were received and opened under Purchase Requisition No. 5444, as amended, for purchase of 24 flocculators. These bids are shown on the attached Abstract of Bids (Attachment B). The low bid from Eimco, in the amount of \$318,385, complies with requirements of the purchase requisition, is \$112,815 below the next lowest bid, and \$306,615 below the Engineer's Estimate. All of the equipment will be installed by District forces.

A \$970,000 increase in Appropriation No. 15274 is required to finance all remaining costs. The total estimated project is \$1,160,000 (Attachment A).

The alternative to this proposed project is to continue using the existing equipment and contend with higher operating and maintenance costs associated with the continued use of the old flocculator units.

<p>Contract Type <input checked="" type="checkbox"/> New <input type="checkbox"/> Amended</p> <p>Contract Form <input checked="" type="checkbox"/> Equipment <input type="checkbox"/> Professional Services <input type="checkbox"/> Construction</p>	<p>Funding <input checked="" type="checkbox"/> Capital-Appropriation No. 15274 <input type="checkbox"/> O & M</p> <p>Budget Status <input checked="" type="checkbox"/> FY 96/97 Amount \$1,188,300 <input type="checkbox"/> Out-Year Amount \$ 0 <input type="checkbox"/> Non-Budget Amount _____</p>	<p>Type of Competition <input checked="" type="checkbox"/> Competitive Bidding Purchase Req. No. 5444 <input type="checkbox"/> Negotiated Contract <input type="checkbox"/> Sole Source</p> <p>Contract Type <input type="checkbox"/> Unit Price <input type="checkbox"/> Cost Plus <input checked="" type="checkbox"/> Lump Sum</p>
--	--	---

ACTION AND MILESTONE

Design for this project was completed in December 1996. The construction would be accomplished by Metropolitan during the winter of fiscal year 1997/98, with all work to be completed by April 1998.

MBE/WBE

This project has been reviewed by the Business Outreach Office which has waived the MBE/WBE goals due to a lack of subcontracting opportunities.

CEQA COMPLIANCE/ENVIRONMENTAL DOCUMENTATION

The proposed project is categorically exempted from the provisions of the California Environmental Quality Act (CEQA) because it involves minor modifications of existing facilities (CEQA Guidelines Section 15301).

Plan and Bid Statistics <u>12</u> Contractors Requested Plans <u>2</u> Bids Submitted	Evaluation Criteria Low bid that meets the requirements of the specifications. Contractual Details <input checked="" type="checkbox"/> Anticipated Duration 230 Work Days <input type="checkbox"/> Hourly Rates <input type="checkbox"/> Prevailing Wage Rates Will Apply
--	--

GDB\aj:rev11
(SKINBD.doc)

Financial Statement
(Program No. 5-7180-31)

The total estimated costs breakdown for installation of flocculators at the Skinner Filtration Plant is as follows:

	<u>Initial Funding</u>	<u>Authorization No. 1</u>
Purchase Requisition No. 5444, Bid Received February 19, 1997	\$ 0	\$ 318,385
Labor:		
Engineering		
Study / Prelim Design	\$ 20,000	\$ 20,000
Final Design	65,500	65,500
Post Design		61,500
Inspection		3,000
Operations (Equipment Installation)	7,400	157,000
Environmental Planning	700	1,000
Water Quality	<u>4,800</u>	<u>5,000</u>
Total Labor	<u>\$ 98,400</u>	<u>\$ 313,000</u>
Materials and Supplies	\$ 7,400	\$ 216,000
Incidental Expenses	5,000	5,000
Operating Equipment	1,000	21,000
Administrative Overhead	50,900	169,000
Contingency	<u>27,300</u>	<u>117,615</u>
Total	<u>\$ 190,000</u>	<u>\$1,160,000</u>
Projected Expenditure of Funds:		
Through Fiscal Year 1995/96		\$ 117,000
Fiscal Year 1996/97		296,000
Fiscal Year 1997/98		629,000
Contingency		<u>118,000</u>
Total		<u>\$1,160,000</u>

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

Capital Program for Fiscal Year 1996/97
(Program No. 5-7180-31)

Total Program Estimate \$1,600,000

Program Estimate for FY 1996/97 \$1,188,300

Class: One--Projects directly related to delivery of water, required for health and safety, or mandated by governmental requirements.

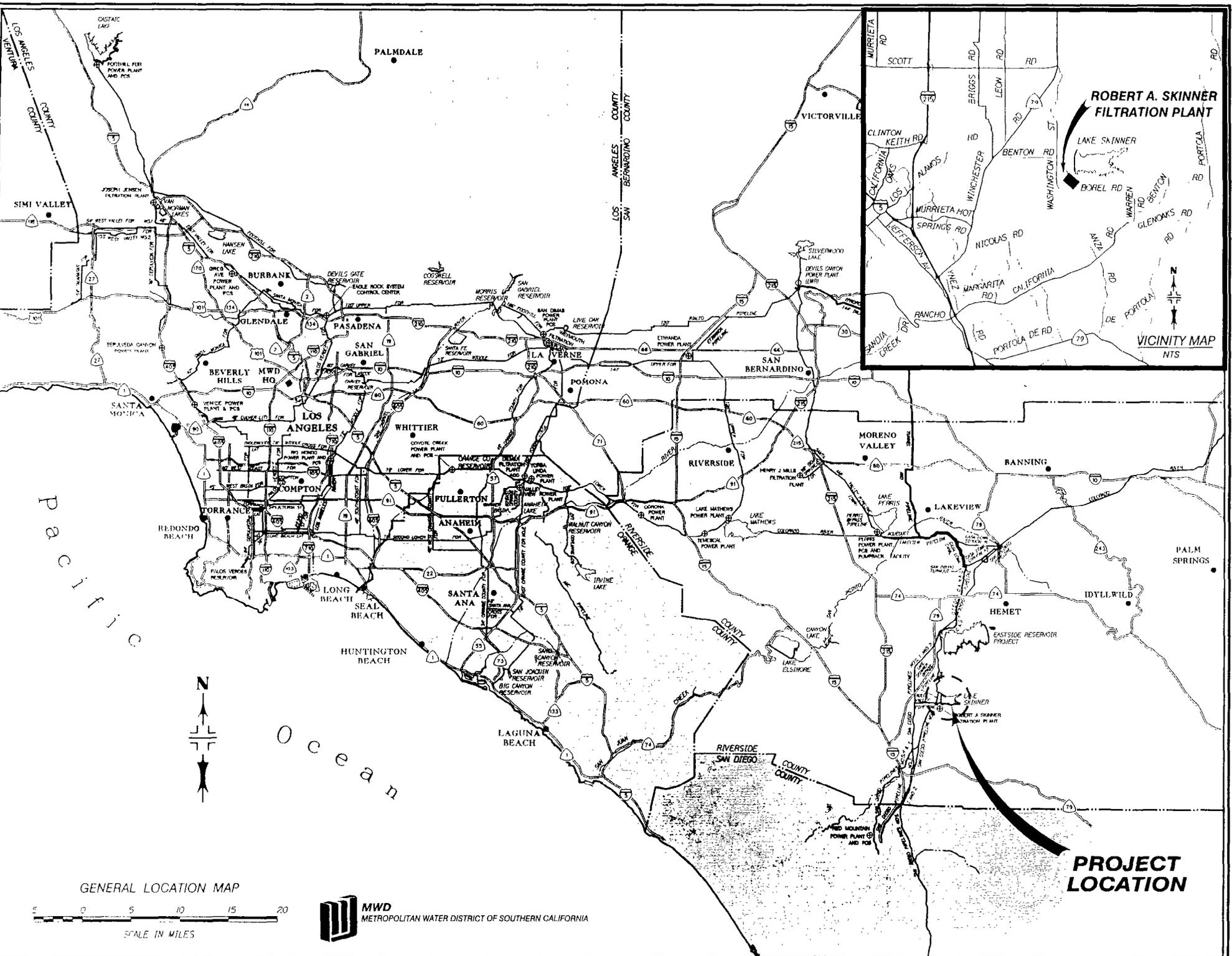
The Metropolitan Water District of Southern California

BIDDING SHEET--SCHEDULE OF BID ITEMS

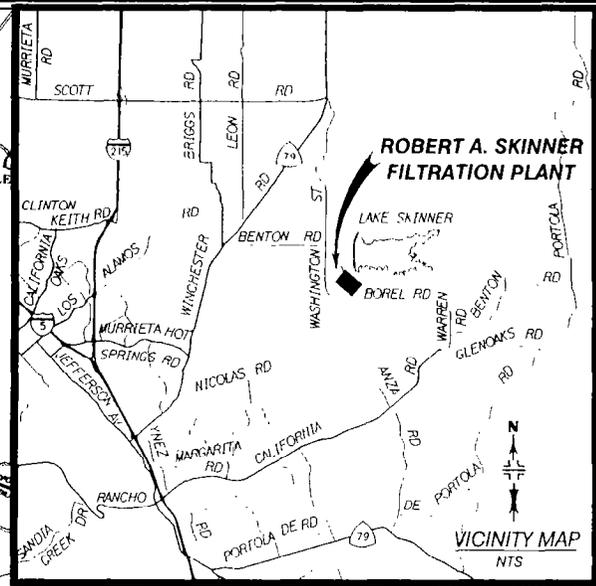
Purchase Requisition No. 5444 (Request for Bid No. 455-A)

Purchase of Flocculators for Skinner F/P Modules No. 1 and 2

Bidder & Location	Item 1	Item 2	Total 1 & 2 & Tax
Eimco, Salt Lake City, Utah	\$288,240	5,880	\$318,385
Philadelphia Mixers, Palmyra, PA	\$398,280	included	\$431,138



GENERAL LOCATION MAP
 SCALE IN MILES
 0 5 10 15 20



**ROBERT A. SKINNER
 FILTRATION PLANT**

VICINITY MAP
 NTS

**PROJECT
 LOCATION**