

April 16, 1999

To: Board of Directors (Engineering and Operations Committee—Action)

From: General Manager _____

Submitted by Gary M. Sryder
Chief Engineer _____

Subject Appropriate \$8,220,000 and Award a Contract for Construction of Vehicle Maintenance and Service Center Buildings at the Joseph Jensen Filtration Plant

Reference Appropriation No. 15173

RECOMMENDATION(S)

To construct Vehicle Maintenance and Service Center Buildings and a Firewater Pump Station at the Joseph Jensen Filtration Plant (Jensen plant), it is recommended that your Board:

1. Appropriate \$8,220,000 to finance all budgeted costs; and
2. Award a lump-sum construction contract, in form approved by the General Counsel, to Merco Construction Engineers, Inc., in the amount of \$6,381,000; with an option for a two-year fire alarm system maintenance contract in an amount not to exceed \$2,000.

EXECUTIVE SUMMARY

Approval of these recommendations will authorize the award of a contract in the amount of \$6,381,000 to Merco Construction Engineers, Inc., the low bidder for Specifications No. 1352A, as amended, for the construction of vehicle maintenance and service center (VM/SC) buildings and a firewater pump station at the Jensen plant. In addition, Metropolitan will have an option for a two-year fire alarm system maintenance contract in an amount not to exceed \$2,000. Funding for this project has been previously budgeted under the Jensen and Mills filtration plants Oxidation Retrofit Program (Jensen and Mills ORP). The ORP work is proceeding on schedule and within budget, and the total estimated cost of the program remains unchanged at \$263,000,000.

JUSTIFICATION

The proposed actions will allow Metropolitan to construct new VM/SC buildings at the Jensen plant so that the existing facilities may be demolished. The existing VM/SC facilities interfere with proposed ORP facilities, including the future ozone contactors, the relocated plant influent conduit, and the ORP general contractor's work area. Construction of ORP facilities at the

Jensen plant has been staged to minimize interferences between contractors, yet allow uninterrupted use of the VM/SC buildings by Operations Division personnel. In order to avoid delay in the on-line date of the ozonation facilities, the work in this contract must proceed expeditiously. As part of the Jensen and Mills ORP, a site preparation construction contract in the amount of \$6.6 million for future Jensen plant ORP facilities was awarded by your Board in April 1995. Site preparation construction activities were completed on March 20, 1997. The Jensen site is now ready for construction of ORP-related facilities including the VM/SC and the firewater pump station.

ALTERNATIVE TO PROPOSED ACTION

Do Not Relocate the Vehicle Maintenance and Service Center Buildings at the Jensen Plant

The Jensen plant can continue to use the existing VM/SC building; however, the Jensen plant ORP facilities would have to be significantly redesigned to address the continued utilization of the existing VM/SC facility. This would result in a less efficient use of the plant site and increased design and construction costs, and would cause a delay in implementation of the ORP at the Jensen plant.

FUNDING REQUEST

| | | | |
|--|---------------------------|----------------------------------|---------------|
| Program Name: Jensen and Mills Filtration Plants - Oxidation Retrofit Program | | | |
| Source of Funds: Revenue Bond Construction/Pay-As-You-Go Funds | | | |
| Appropriation No.: 15173 | Board Action No. 6 | Budget: | \$10,519,700 |
| Requested Amount: | \$8,220,000 | Capital Program No.: | 15173-W |
| Total Appropriated Amount: | \$86,920,000 | Capital Program Page No.: | E-44 |
| Total Program Estimate: | \$263,000,000 | Program Category: | Water Quality |

MBE / WBE

The specifications, as amended, established mandatory subcontracting requirements (MSR) and required the bidder to conduct a good-faith effort to encourage participation of minority- and women-owned business enterprises (MBE/WBE). The MSR for this project was 30 percent and 52.9 percent of the work will be subcontracted. The Anticipated Levels of Participation for MBE/WBE firms were established at 17 percent and 6 percent respectively. The contractor's proposed MBE participation was 6.4 percent with 13.2 percent submitted for WBE. The Business Outreach Office has reviewed the good-faith effort submitted by Merco Construction Engineers, Inc., and has deemed it acceptable in meeting the criteria set forth in the specifications. The MBE subcontractors are listed on Attachment A.

ACTIONS AND MILESTONES

- September 1990 - Appropriated \$5,000,000 for preliminary engineering and environmental investigations for the retrofit of all filtration plants with oxidation facilities (Initial Board Action)
- November 1993 - Appropriated \$5,000,000 for preliminary design, and environmental documentation for the ORP at the Jensen plant (Board Action No. 2)
- September 1994 - Appropriated \$24,000,000 for all estimated costs in advance of award of construction contracts for the ORP at the Jensen and Mills plants (Board Action No. 3)
- April 1995 - Appropriated \$10,000,000 and awarded a construction contract for site preparation for the ORP at the Jensen plant (Board Action No. 4)
- March 1997 - Directed the General Manager to proceed with final design of the ORP at the Jensen and Mills plants
- February 1999 - Appropriated \$34,700,000 and awarded a procurement contract for oxygen/ozone system equipment for the ORP at the Jensen and Mills plants (Board Action No. 5)
- November 2000 - Complete construction of vehicle maintenance and service center buildings

CEQA COMPLIANCE / ENVIRONMENTAL DOCUMENTATION

A Mitigated Negative Declaration (MND) and a Mitigation Monitoring Program (MMP) were prepared under the requirements of the California Environmental Quality Act (CEQA) for the Oxidation Retrofit Program (ORP) at the Jensen plant. In August 1994, your Board approved the MND and adopted the MMP for the Oxidation Retrofit Program at the Jensen plant. The relocation of the VM/SC Facility was included in the Jensen ORP MND. No further environmental documentation is required for this project.

CONTRACT SUMMARY

| | |
|--|--|
| Contract Status: New | Type of Selection: Competitive Bid, Specifications No. 1352A |
| Contract Form: Construction | Contractors Requesting Plans: 28 |
| Contract Type: Lump sum | Proposals Submitted: 8 |
| Evaluation Criteria: Low bid that meets the requirements of the specifications. | |

DETAILED REPORT

The ORP consists of retrofitting Metropolitan's filtration plants with an ozonation process so that ozone will replace chlorine as the primary disinfectant at the plants. This process will allow Metropolitan and its member agencies to comply with the recently promulgated Disinfectants/Disinfection By-Products (D/DBP) Rule. In March 1997, your Board directed the General Manager to proceed with the final design of ozone facilities at the Mills and Jensen plants, with scheduled on-line dates of early 2002 and late 2003, respectively, consistent with the Board's continuing commitment to public health and water quality. In February 1999, your Board approved Action No. 5 to Appropriation No. 15173 to increase funding to \$78.7 million to finance procurement of oxygen/ozone system equipment for the ORP at the Jensen and Mills plants.

Construction of ORP facilities at the Jensen plant has been staged to minimize interferences between contractors, yet allow uninterrupted use of the VM/SC buildings by Operations Division personnel. In order to avoid delay in the on-line date of the ozonation facilities, the work in this contract must proceed expeditiously. Work under this contract consists of construction of a vehicle maintenance building of approximately 13,157 square feet and a service center building of approximately 14,140 square feet; a firewater pump station; supply and installation of equipment, including communications equipment and Metropolitan furnished equipment; grading and paving of perimeter access roads and parking areas; supply and installation of facility appurtenances; and supply and planting of local perimeter landscaping.

Eight bids were received and opened under Specifications No. 1352A, as amended, for construction of VM/SC buildings at the Jensen plant. These bids are shown on the attached Abstract of Bids (Attachment B). The low bid from Merco Construction Engineers, Inc., in the amount of \$6,381,000 for Bid Items 1-3 complies with requirements of the specifications, is \$37,000 below the next lowest bid, and is \$419,000 below the Engineer's Estimate. It is also recommended that Metropolitan retain the option to include Bid Item 4 in the amount of \$2,000 for a fire alarm system maintenance contract at a later date. Merco Construction Engineers, Inc., will construct the VM/SC buildings and perform appurtenant work. Metropolitan forces will perform construction management, contract administration and field inspection. A breakdown of the total estimated project costs is shown on Attachment C.

JIM\mg:rev2
(Jensen VMSC)

Attachment 9-1A

Attachment 9-1B

Attachment 9-1C

Attachment 9-1A

Attachment A

MBE/WBE PARTICIPATION

Specifications No. 1352A, as Amended

Name of Bidder: Merco Construction Engineers, Inc.

MBE/WBE Participation Levels: 17% MBE and 6% WBE

| Name of Certified MBE/WBE Subcontractor/Supplier | Work to Be Performed or Materials To Be Supplied | Participation | |
|--|--|---------------|---------------|
| | | MBE% | WBE% |
| Sharma General Engineering Santa Monica, CA | Earthwork | 1.00% | |
| Franklin Reinforcing Steel Santa Fe Springs, CA | Reinforcing Steel | 1.84% | |
| Air Flow Mechanical Walnut, CA | HVAC | 3.45% | |
| MD Insulation El Monte, CA | Insulation | 0.09% | |
| Comet Electric Canoga Park, CA | Electrical | | 13.15% |
| | Total Committed Participation | 6.38% | 13.15% |

Attachment 9-1B

Attachment B

The Metropolitan Water District of Southern California

Abstract of Bids Received March 25, 1999, at 2:00 p.m.

Specifications No. 1352A, as Amended

Joseph Jensen Filtration Plant Vehicle Maintenance and Service Center Building

The work involves the construction of a Vehicle Maintenance Building of approximately 13,157 square feet and a Service Center Building of approximately 14,140 square feet, including the supply and installation of equipment, installation of Metropolitan furnished equipment (MFE), supply and installation of communications equipment, performing grading and paving of perimeter access roads and parking areas, supply and installation of facility appurtenances, and supply and planting of local perimeter landscaping. The landscape maintenance service work shall be paid under a separate blanket order agreement. Also included in the work is the supply and installation of two electric driven main firewater pumps, the firewater system jockey pump, start/stop control systems for the three pumps, and installation of yard piping.

Engineer's Estimate: **\$6,800,000**

| Bidder & Location | Item 1 Mobilization | Item 2 Construction | Item 3 Landscape | Total of Items 1 through 3 | Fire Alarm System Maintenance Contract (optional) |
|--|------------------------|------------------------|---------------------|----------------------------------|---|
| Merco Construction Engineers, Inc. - Camarillo, CA | \$300,000 | \$6,076,000 | \$5,000 | \$6,381,000 | \$2,000 |
| S. J. Amoroso Construction Company, Inc. - Costa Mesa, CA | \$300,000 | \$6,113,000 | \$5,000 | \$6,418,000 | \$4,000 |
| EMMA Corporation - Santa Monica, CA | \$300,000 | \$6,180,000 | \$10,000 | \$6,490,000 | \$15,000 |
| FTR International - Irvine, CA | \$300,000 | \$6,190,000 | \$6,000 | \$6,496,000 | \$2,000 |
| Arctic Slope Construction, Inc. - Pasadena, CA | \$300,000 | \$6,233,000 | \$26,000 | \$6,559,000 | \$35,000 |
| Mallcraft, Inc. - Altadena, CA | \$300,000 | \$6,604,000 | \$10,000 | \$6,914,000 | \$2,000 |
| Bernards Brothers, Inc. - San Fernando, CA | \$300,000 | \$6,687,000 | \$6,000 | \$6,993,000 | \$3,000 |
| *C-DAD, Inc. - Los Angeles, CA | \$300,000 | \$7,380,000 | \$10,000 | \$7,690,000 | \$5,000 |

**Bidder No. 8, C-DAD, Inc., was deemed nonresponsive due to failure to list subcontract amounts on Document 00430 Subcontractor List, and therefore, did not meet the mandatory minimum subcontracting requirement of 30 percent.*

Attachment 9-1C

Attachment C

FINANCIAL STATEMENT

(Capital Program No. 15173-W)

The breakdown of the total estimated cost for Board Action Nos. 5 and 6 for construction of Vehicle Maintenance and Service Center Buildings for the Jensen filtration plant is shown below:

| | BOARD ACTION NO. 5 <u>(February 1999)</u> | BOARD ACTION NO. 6 <u>(May 1999)</u> |
|---|--|---|
| Contract - Specifications No. 1321 Low Bid Received March 14, 1995 | \$ 6,584,700 | \$ 6,584,700 |
| Extra Work - Specifications No. 1321 | 219,634 | 219,634 |
| Equipment- Specifications No. 1346A Low Bid Received November 10, 1998 | \$ 18,638,500 | \$ 18,638,500 |
| Contract - Specifications No. 1352A Low Bid Received March 25, 1999 | 0 | \$ 6,381,000 |
| Subtotal Contracts | \$25,442,834 | \$31,823,834 |
| Labor: | | |
| Research/Preliminary Design | \$ 7,660,000 | \$ 7,660,000 |
| Final Design/Specification Preparation | 10,889,000 | 10,889,000 |
| Construction Services | 2,872,000 | 3,613,800 |
| Environmental/Permitting/Operations/Other | <u>850,000</u> | <u>866,100</u> |
| Subtotal Labor | \$22,271,000 | \$23,028,900 |
| Material and Supplies | 250,000 | 250,000 |
| Incidental Expenses | 567,000 | 567,000 |
| Professional/Technical Services: | | |
| Camp Dresser & McKee Inc | 1,200,000 | 1,200,000 |
| Black and Veatch | 700,000 | 700,000 |
| Montgomery/Watson | 351,000 | 351,000 |
| CH2M Hill | 235,000 | 235,000 |
| Process Applications, Inc. | 260,000 | 260,000 |
| Architectural Consultants: | | |
| Michael Willis & Associates | 710,000 | 710,000 |
| Tectonics | 425,000 | 425,000 |
| Tetra Design, Inc. | 500,000 | 550,000 |
| Geotechnical Consultants: | | |
| Woodward Clyde | 640,000 | 640,000 |
| Geomatrix | 125,000 | 125,000 |
| Fugro-McClelland | 170,000 | 170,000 |

| | | |
|----------------------------|-----------------------------|-----------------------------|
| John Carollo Engineers | 180,000 | 180,000 |
| Operation Technology. Inc. | 210,000 | 210,000 |
| Environmental Consultants | 150,000 | 150,000 |
| LADWP | 2,100,000 | 2,100,000 |
| Ralph M. Parsons | 2,900,000 | 2,900,000 |
| Others | 255,000 | 255,000 |
| Subtotal P/T | \$ 11,111,000 | \$ 11,161,000 |
| Office Space | 2,300,000 | 2,300,000 |
| Operating Equipment | 150,000 | 150,000 |
| Contingencies | <u>6,383,166</u> | <u>7,005,066</u> |
| Subtotal Direct | \$ 68,475,000 | \$ 77,365,800 |
| Administrative Overhead | <u>10,225,000</u> | <u>10,634,200</u> |
| Total | <u>\$ 78,700,000</u> | <u>\$ 86,920,000</u> |

Estimated Funds Required:

| | |
|--------------------|------------------------------|
| Initial | \$ 5,000,000 |
| Board Action No. 2 | 5,000,000 |
| Board Action No. 3 | 24,000,000 |
| Board Action No. 4 | 10,000,000 |
| Board Action No. 5 | 34,700,000 |
| Board Action No. 6 | 8,220,000 |
| Additional | <u>176,080,000</u> |
| Total | <u>\$ 263,000,000</u> |

Source of Funds: Revenue Bond Construction/
Pay-As-You-Go Funds

Projected Expenditures of Funds :

| | |
|-----------------------------|-----------------------------|
| Through Fiscal Year 1997/98 | 39,524,500 |
| Fiscal Year 1998/99 | 10,155,500 |
| Fiscal Year 1999/00 | 27,684,500 |
| Fiscal Year 2000/01 | 25,117,500 |
| Fiscal Year 2001/02 | 46,236,000 |
| Fiscal Year 2002/03 | 41,388,000 |
| Fiscal Year 2003/04 | 42,341,000 |
| Fiscal Year 2004/05 | 9,753,000 |
| Contingencies | <u>20,800,000</u> |
| Total | <u>\$263,000,000</u> |

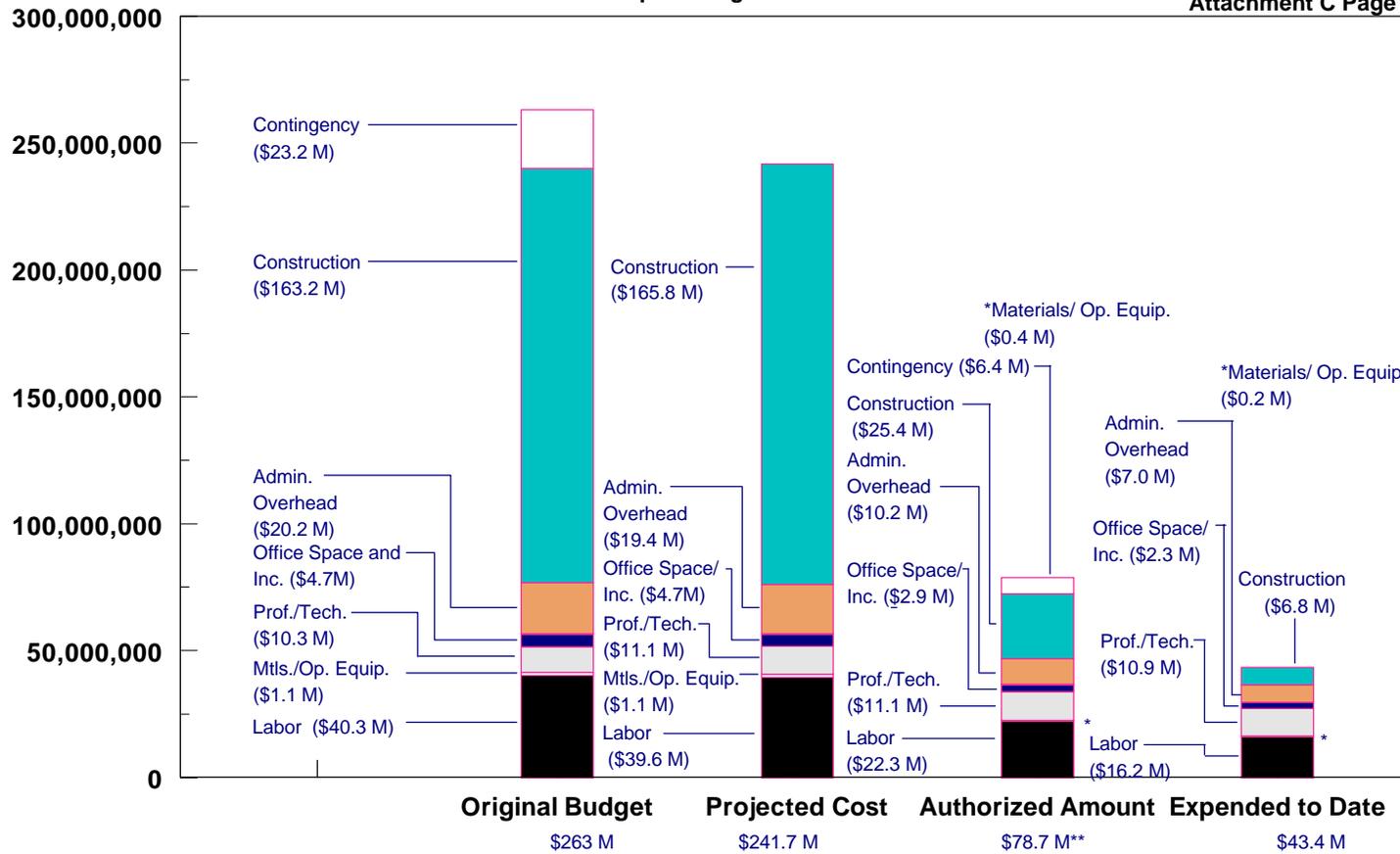
Capital Program for Fiscal Year 1998/99:

| | |
|---------------------------------|---------------|
| Total Budget | \$263,000,000 |
| Program Estimate for FY 1998/99 | \$ 10,519,700 |

Jensen and Mills ORP

Capital Program No. 15173-W

Engineering Division
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 Attachment C Page 3



**Per Board Action No. 5

Jensen and Mills ORP

Capital Program No. 15173-W

Engineering Division

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Attachment C Page 4

