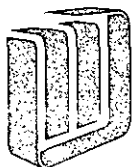


JAN 14 1992



MWD

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Daniel E. Duff
EXECUTIVE SECRETARY
December 13, 1991

To: Board of Directors (Engineering & Operations Committee--Action)
(Finance & Insurance Committee--Action)
From: General Manager (Organization & Personnel Committee--Action)

Subject: Revision No. 3 to Appropriation No. 603 to Increase Funding to a Total of \$39 Million for the Chemical Containment Program and Authorization to Amend Existing Agreements and Enter Into New Agreements.

Report

In July 1990, your Board authorized Appropriation No. 603 in the amount of \$3 million to identify potential problem areas and to start work on capital projects for the chemical containment program. In August 1990, your Board approved Revision No. 1 to the appropriation to increase the total amount to \$3.875 million and authorized the General Manager to enter into an agreement with a consultant for design of the relocation of the chemical storage and feed systems at the Diemer and Weymouth filtration plants. In July 1991, Revision No. 2 was approved to increase the appropriated amount to a total of \$4.115 million for additional costs for design of the chemical storage facilities at the Diemer and Weymouth filtration plants.

Metropolitan's chemical containment program consists of the design and construction of containment facilities for reducing, eliminating, or preventing chemical spill hazards at filtration plants, pumping plants, hydroelectric power plants, reservoirs, and maintenance areas where chemicals are handled and stored.

Preliminary design has been completed and final design has been initiated for all major projects. In order to complete construction of the chemical facilities at Diemer and Weymouth filtration plants and complete final design and construction of all long-term chemical containment projects at various facilities, an increase of \$34.885 million to Appropriation No. 603, to a total of \$39 million is now necessary. Award of construction contracts will be presented to your Board for consideration.

It is now proposed to amend two existing agreements and enter into two new agreements for consulting engineering services, as follows: Amend Agreement No. 2500 with John Carollo Engineers to increase the fee from \$620,000 to a total fee not to exceed \$2.920 million, including expenses, for final design of containment facilities at Skinner plant and the ammonia facilities at Jensen plant; amend Agreement No. 2552 with Lee and Ro Consulting Engineers to increase the fee from \$530,000 to a total fee not to exceed \$2.730 million, including expenses, for final design of containment facilities at Weymouth and Jensen plants; enter into an agreement with Boyle Engineering Corp. in an amount not to exceed \$750,000, including expenses, for final design of containment facilities at Diemer plant; and, enter into an agreement with Camp Dresser & McKee in an amount not to exceed \$560,000, including expenses, for final design of containment facilities at Mills plant. The proposed fee schedules for this work are contained in Attachment B. These four consultants have ongoing affirmative action plans which Metropolitan has on file.

Many, if not all, of the projects will be categorically exempt from the California Environmental Quality Act (CEQA) as minor modifications to existing facilities. Each project will be reviewed in advance of final design to verify its status under CEQA.

Board Committee Assignments

This letter is referred for action to:

The Engineering and Operations Committee because it has jurisdiction over the contracting of construction programs and the ordering of equipment or materials to be used pursuant to Administrative Code Section 2431(b);

The Finance and Insurance Committee because it has jurisdiction over appropriations pursuant to Administrative Code Section 2441(d).

The Organization and Personnel Committee because it has jurisdiction over the selection of management and personnel consultants and the determination of the scope of their assignments pursuant to Administrative Code Section 2471(f).

Recommendations**ENGINEERING AND OPERATIONS AND ORGANIZATION AND PERSONNEL COMMITTEES FOR ACTION**

It is recommended that the General Manager be authorized to have all work performed for the chemical containment program and to amend and enter into agreements for consulting services on the terms outlined in this letter and in form approved by the General Counsel, as follows:

Amend Agreement No. 2500 with John Carollo Engineers to increase the fee from \$620,000 to a total not to exceed \$2.920 million, including expenses, to provide additional engineering services;

Amend Agreement No. 2552 with Lee & Ro Consulting Engineers to increase the fee from \$530,000 to a total not to exceed \$2.730 million, including expenses, to provide additional engineering services;

Enter into an agreement with Boyle Engineering Corp. to provide engineering services. The fee for this work shall not exceed \$750,000, including expenses; and

Enter into an agreement with Camp Dresser & McKee to provide engineering services. The fee for this work shall not exceed \$560,000, including expenses.

FINANCE AND INSURANCE COMMITTEE FOR ACTION.

It is recommended that the Board authorize an increase of \$34.885 million to Appropriation No. 603 from the 1991 Construction Fund, to a total of \$39 million, for the chemical containment program.



Carl Boronkay

PWF/dc
(603-ba)

Attachments

ATTACHMENT "A"
Fiscal Impact Statement

The total cost breakdowns for Revision Nos. 2 and 3 are as follows:

	<u>Rev. No. 2</u>	<u>Rev. No. 3</u>
Labor:		
Engineering	\$ 872,000	\$ 2,832,000
Environmental	4,000	22,000
Purchasing	3,000	58,000
Water Quality	12,000	14,000
Controls Group	22,000	122,000
Field Construction	297,000	1,017,000
Contract Administration	0	90,000
Inspection	0	270,000
Soils/Concrete Lab	0	45,000
Corrosion Section	10,000	100,000
Survey	16,000	106,000
	-----	-----
Total Labor	\$ 1,236,000	\$ 4,676,000
Materials	140,000	4,340,000
Incidental Expenses	0	10,000

Professional and Technical

John Carollo Engineers #2500	620,000	2,920,000
John Carollo Engineers #2718	940,000	940,000
Lee & Ro Consulting Engineers	530,000	2,730,000
Boyle Engineering Corp.	0	750,000
Camp Dresser & McKee	0	560,000
	<hr/>	<hr/>
Total Professional & Technical	\$ 2,090,000	\$ 7,900,000
Equipment Use	10,000	110,000
Administrative Overhead	639,000	2,418,000
Contracts	0	16,000,000
Contingencies	0	3,546,000
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Totals	\$ 4,115,000	\$ 39,000,000

Estimated funds required:

Initial funds	\$ 3,000,000
Revision No. 1	875,000
Revision No. 2	240,000
Revision No. 3	34,885,000
	<hr/>
Total	\$ 39,000,000

Source of funds: 1991 Construction Fund

Class One: Projects not necessarily related to the delivery of water but which are required for health, safety, or governmental requirements.

Projected expenditure of funds:

Through Fiscal Year 1991-92	\$ 6,500,000
Fiscal Year 1992-93	\$ 9,500,000
Fiscal Year 1993-94	\$ 15,000,000
Fiscal Year 1994-95	\$ 8,000,000
	<hr/>
Total	\$ 39,000,000

1991-92 Capital Program (Program No. 5-6030-11):

Estimated program cost	\$ 32,000,000
Program estimate for Fiscal Year 1991-92	\$ 3,193,600

Project benefit:

Reduce, eliminate or prevent chemical spills at various Metropolitan facilities where chemicals are stored or handled, thereby reducing health and safety risks and possibly avoiding costly litigations.

CHEMICAL CONTAINMENT FINAL DESIGN

JOHN CAROLLO ENGINEERS

FEE SCHEDULE

	<u>Hourly Rate</u>
Partners (P)	
Partner	\$126.00
Engineers (E)	
Engineer VIII	122.85
Engineer VII	115.25
Engineer VI	106.05
Engineer V	96.85
Engineer IV	85.05
Engineer III	71.15
Engineer II	66.40
Engineer I	58.25
Engineering Aides (A)	
Aide VII	89.75
Aide VI	--
Supervisor V	74.55
Senior IV	73.25
Intermediate III	65.35
Aide II	60.35
Apprentice I	30.70
Engineering Technicians (T)	
Designer VII	75.05
Designer VI	73.75
Designer V	60.35
Designer IV	54.05
Designer III	49.85
Draftsperson II	39.35
Apprentice I	--
Support Staff (S)	
Clerical	32.80
Word Processor	42.80
Office Aides	24.90
Computer	
Computer Equipment (PC)	10.50
CAD (Processing Time)	15.75
Plotter (Per Plot)	12.60
Word Processor (Processing Time)	10.50
Travel and Subsistence	at cost
Subconsultant	Cost + 10%
Other Direct Costs	Cost + 10%

SECTION 5 - FEE SCHEDULE

FY 1992 BILLING RATE SCHEDULE

LEE & RO Consulting Engineers

Effective November 1, 1991*

<u>PERSONNEL CLASSIFICATION^{a,c}</u>		<u>BILLING RATE</u> <u>(\$/HOUR)</u>
Engineer (Scientist)	9	130
Engineer (Scientist)	8	120
Engineer (Scientist)	7	108
Engineer (Scientist)	6	96
Engineer (Scientist)	5	84
Engineer (Scientist)	4	74
Engineer (Scientist)	3	63
Engineer (Scientist)	2	54
Engineer (Scientist)	1	45
Engineer (Scientist)	0	38
Technician	7	84
Technician	6	74
Technician	5	63
Technician	4	54
Technician	3	45
Technician	2	38
Technician	1	33
Technician	0	28
Administrative	5	74
Administrative	4	54
Administrative	3	38
Administrative	2	33
Administrative	1	28
Administrative	0	23

* Rates are subject to change in accordance with established company procedure. Normally, the rates increase on November 1.

^b Engineer classification generally conforms to "ASCE Professional Grade Descriptions."

^c Personnel classifications for representative staff are given in Table 2-1 of Section 2.

STANDARD HOURLY RATE-SCHEDULE
Boyle Engineering Corporation
Effective March 1, 1991

Engineers, Planners, Architects, Landscape Architects, Geologists, Scientists:

Principal	\$130.00 per hour
Senior II	\$105.00 per hour
Senior I	\$ 92.00 per hour
Associate	\$ 75.00 per hour
Assistant II	\$ 68.00 per hour
Assistant I	\$ 60.00 per hour

Construction Administration Personnel:

Senior Resident Engineer	\$ 90.00 per hour
Senior Resident Project Representative	\$ 70.00 per hour
Resident Project Representative	\$ 60.00 per hour

Technical Support Staff:

Designer Supervisor	\$ 72.50 per hour
Senior Technician/Senior Designer	\$ 58.00 per hour
Engineering Technician/Designer	\$ 50.00 per hour
Senior Drafter	\$ 45.00 per hour
Drafter	\$ 35.00 per hour
Technical Typist/Word Processor	\$ 39.00 per hour
Programmer/Analyst	\$ 52.00 per hour
Paralegal/Editor	\$ 50.00 per hour
Administrative Specialist	\$ 45.00 per hour
Staff Accountant	\$ 40.00 per hour

Direct Project Expenses:

Photocopies - Color	\$ 2.00 per page
Photocopies - Black & White/Fax	\$ 0.16/1.60 per page
Long Distance Telephone	\$ 0.50 per minute
Plan Sheet Printing - In-house Bond/Mylar	\$0.40/2.80 per square foot
Travel - Automobile/Truck - Out of Town	\$0.50 per mile
Travel - Other Than Automobile	Actual Cost + 15%
Subcontracted Services/Reproduction	Actual Cost + 15%

Computer Services and Computer Aided Design

See Separate Schedule

If authorized by the client, an overtime premium multiplier of 1.5 will be applied to the billing rate of hourly personnel who work overtime in order to meet a deadline which cannot be met during normal hours. Applicable sales taxes, if any, will be added to these rates. Corporate officers, Managing Principals, and Consulting Engineers will be billed at 1.2 times the stated rate for Principal. Invoices will be rendered monthly. Payment is due upon presentation. A late payment finance charge of 1.5% per month (but not exceeding the maximum rate allowable by law) will be applied to any unpaid balance commencing 30 days after the date of the original invoice.

Rates subject to general revision 9/1/91.

OC/LA/ESD

bjt/OC44

**STANDARD RATE SCHEDULE
COMPUTER SERVICES
Boyle Engineering Corporation
Effective September 1, 1990**

39418

Intergraph VAX 751 Minicomputer and CADD System

Graphic Workstation (Dual Screen w/Large Digitizer Table)	\$19.00 per hour
Pen Plotter (HP 7585 B)	\$19.00 per hour
Terminal (CRT or Printer)	\$15.00 per hour
(Above rates include Intergraph Software)	

Hewlett Packard HP 3000/925 Super Minicomputer System

Terminal, Printer or Plotter	\$20.00 per hour
Resource Charge - SURGE analysis	\$ 6.00 per min.

Prime 4150 Super Minicomputer and CADD System

Graphics Workstation (includes Medusa Graphics Software)	\$25.00 per hour
Terminal (CRT or Printer)	\$15.00 per hour
Pen Plotter (HP 7585 B)	\$20.00 per hour
Resource Charge - CEDS Civil Engr Design System Software	\$15.00 per hour

Electrostatic Plotter - HP 7600	\$150.00 per hour
(Includes computer time to drive the plotter)	

Microcomputers (Personal Computers)

Word Processing System with Laser Printer	\$12.00 per hour
Engineering Computer System (AST 286, 386, 486)	\$17.00 per hour
Sun High-Speed Engineering Graphics Computer	\$29.00 per hour
(Includes Medusa Software)	

Resource Charges for Microcomputers

Resource charges are in addition to the above rates and cover the use of special purpose software and extra equipment such as pen plotters, high resolution monitors, and digitizers which are used with CADD software.

AutoCAD Computer Aided Design	\$ 5.00 per hour	STAAD III - Structural Design	\$ 20.00 per hour
MicroStation (Intergraph) CADD	\$ 5.00 per hour	Rand MICAS - Structural Design	\$ 20.00 per hour
Point Line Computer Aided Design	\$ 5.00 per hour	AES HYDRO - Hydrologic Analysis	\$24.00 per hour
DAPPER - Electrical Design	\$37.50 per hour	BoyleNet - Water Distrib Analysis	\$ 5.00 per hour
CAPTOR - Overcurrent Analysis	\$27.00 per hour	KYPIPE - Water Distrib Analysis	\$10.00 per hour
Trane TRACE - HVAC Design	\$29.25 per hour	BoyleCOGO - Coordinate Geometry	\$ 5.00 per hour
Carrier HVAC System Design	\$23.25 per hour	BDTM - Digital Terrain Model	\$ 5.00 per hour
ROUTE IV - Drainage Design	\$ 4.50 per hour	SWAN - Sanitary Sewer Analysis	\$10.00 per hour
GWFM - Groundwater Modeling	\$14.50 per hour	CONTOURS - Contour Plotting	\$10.00 per hour
LEGAL HOLIDAY - Legal Descrip.	\$10.00 per hour	LARSA - Structural Analysis	\$20.00 per hour

Other Notes

Charges for outside computer services will be billed at invoice cost plus twenty-five percent.

This rate schedule is subject to general revision annually. New equipment categories and resource charges may be added at any time.

CAMP DRESSER & MCKEE INC.
SCHEDULE OF HOURLY BILLING RATES

January 1, 1991

CATEGORIES		HOURLY RATE
Engineers and Scientists:	Grade 1	50
	Grade 2	55
	Grade 3	65
	Grade 4	80
	Grade 5	95
	Grade 6	105
	Grade 7	125
	Grade 8	135
	Grade 9	150
	Grade 10	165
Support Services:	Designer Drafter 1	35
	Designer Drafter 2	45
	Designer Drafter 3	55
	Designer Drafter 4	60
	Designer Drafter 4	65
	Designer Drafter 6	70
	Administrative Manager	70
	Administrative Assistant	50
	Office Clerk	30
	Word Processing	45
	Technical Writer	65
	Financial Manager	75
Accounting Clerk	45	
Miscellaneous Expense:	Auto Mileage	\$0.30/Mile
	Computer Time-Word Processor	\$6/Hour
	Computer Time - AUTOCAD	\$12/Hour
	Subconsultant/Consultant Services	Cost + 10%
	Material and Other Expenses	cost + 10%