



MWD

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

MAY - 9 1995

David E. Duff
EXECUTIVE SECRETARY

April 25, 1995

To: Board of Directors (Information Systems Ad Hoc Committee--Action)
(Engineering and Operations Committee--Action)
(Finance and Insurance Committee--Action)

From: General Manager

Subject: Authorization No. 7 to Appropriation No. 584 to Increase Funding from \$5,669,000 to \$6,791,000 to Finance Additional Costs in the Local Area Network (LAN) Installation in the Field Facilities (Total Project Cost: \$11,389,000)

RECOMMENDATION:

It is recommended that your Board authorize an increase in the amount of \$1,122,000 to Appropriation No. 584 from the Pay-As-You-Go-Fund to Increase Funding from \$5,669,000 to \$6,791,000 to Finance Additional Costs in the Communications Upgrade - Expansion of Local Area Networks (LANs) to the Field Facilities

John R. Wodraska
General Manager

Submitted by:

Janet E. Marott

Janet E. Marott
Director, Information Systems

Concur:

John R. Wodraska

John R. Wodraska
General Manager



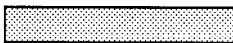

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CAPITAL FUNDING REQUEST															
PROJECT NAME: COMMUNICATIONS UPGRADE - LOCAL AREA NETWORK (LAN) INSTALLATION IN FIELD FACILITIES															
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">APPROPRIATION NO.: 584</td> <td style="width: 33%;">FUNDING REQUEST NO.: 7</td> <td style="width: 33%;">AMOUNT: \$1,122,000</td> </tr> <tr> <td colspan="3">SOURCE OF FUNDS: PAY-AS-YOU-GO</td> </tr> <tr> <td colspan="2">FY 94/95 BUDGET: NO <input type="checkbox"/> YES <input checked="" type="checkbox"/> @ \$ 4,133,800</td> <td>CAPITAL PROGRAM PAGE NO. REFERENCE: 65</td> </tr> </table>	APPROPRIATION NO.: 584	FUNDING REQUEST NO.: 7	AMOUNT: \$1,122,000	SOURCE OF FUNDS: PAY-AS-YOU-GO			FY 94/95 BUDGET: NO <input type="checkbox"/> YES <input checked="" type="checkbox"/> @ \$ 4,133,800		CAPITAL PROGRAM PAGE NO. REFERENCE: 65						
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<p>PROJECT DESCRIPTION: (INCLUDE CLASSIFICATION AND PURPOSE)</p> <p>In February 1994, your Board approved Revision No. 6 to Appropriation No. 584 to increase funding by \$2,519,000 to finance the expansion of Local Area Network (LAN) Services to the Field Facilities.</p> <p>Authorization No. 7 to Appropriation No. 584 is a request to increase funding for the Field Office Local Area Network (LAN) Expansion project. This increase is to cover additional LAN requirements and cost increases as follow:</p> <p>Site preparation costs. Nine facilities (San Dimas, Weymouth, Gene, Diemer, Jensen, Mills, Lake Skinner, Lake Mathews and Soto St.) required the installation of conduit and/or cable trays because expected pathways were not available between or within buildings. One of the project assumptions had been the availability of adequate as-built drawings, equipment rooms, and pathways in all facilities. The LAN cable plants required installation of over 70,000 feet of conduit/cable trays and 9,000 feet of trenching, along with materials, District labor costs, and equipment usage. The production of as-builts and contractor specification costs are a part of this cost. Original estimate: \$ 0. Total cost: \$ 725,000.</p> <p>Additional LAN requirements in existing sites. Connectivity requirements increased to include 25 buildings and 196 additional connections in Weymouth and Gene Headquarters. These connections will allow staff in all buildings to fully participate in local and District-wide automated business systems. Original estimate: \$50,000. Total cost: \$ 276,000.</p> <p>LAN equipment room construction. Due to space limitations in the San Dimas, Lake Mathews, and Weymouth facilities, construction of lockable rooms is required to secure LAN equipment and backup media from unauthorized access. Original estimate: \$ 0. Total cost: \$ 120,000.</p> <p>Additional LAN sites. Connectivity to District-wide applications, such as legislative tracking and document retrieval, is now required for the Washington office. Upgrades are required for the new Sacramento office to accommodate additional staff. Original estimate: \$ 6,000. Total cost: \$ 50,000.</p> <p>Cost increases. The cost of copper cable, fiber-optic cable and WAN equipment has increased since January 1994 when the estimates were completed. Original estimate: \$ 0. Total cost: \$ 17,000.</p> <p>Class: -- Three</p>															

BENEFIT: (NARRATIVE FOR DIRECT AND OTHER BENEFITS)

The cabling and LAN equipment installed by this project will accommodate the communications requirements of core business systems, such as Materials Management, Fixed Assets, and Human Resources systems, as well as Material Safety Data Sheets (MSDS) and Incident Reporting. The systems will also handle additional planned applications such as Electronic Messaging and Operations' Maintenance Management. Capacity may be increased in modular components, such as additional router and hub ports or servers.

PROJECT PLAN: FIELD LAN INSTALLATION PROJECT (ESTIMATES IN REVISION 6 VS. PROJECTED TO COMPLETE)

PHASE	ORIGINAL EST.	% COMPLETE	PROJ. TOTAL	1994	1995	1996
DESIGN	\$ 56,875	80%	\$ 247,559			
SITE PREPARATION	\$ 0	45%	\$ 725,356			
CABLE PLANT	\$ 611,000	35%	\$ 1,224,521			
IMPLEMENTATION	\$ 1,598,125	33%	\$ 1,443,564			
CONTINGENCY	\$ 253,000		\$ 0			
TOTAL REV. 6	\$ 2,519,000		TOTAL TO COMPLETE \$ 3,641,000	TOTAL AUTH. 7	\$ 1,122,000 *	
				TOTAL APPROP. 584	\$ 6,791,000	

* The majority of funds requested will be used in F/Y 1994-95

ALTERNATIVES TO PROPOSED ACTION:

The alternative to full LAN connectivity is the present interim method of using slow-speed modems to dial into remote LAN equipment. Modem connections are unreliable and not rated for the expected transaction volume. Using modems would lead to increased downtime and lowered productivity among the field staff and is therefore not considered a reasonable alternative.

CEQA COMPLIANCE / ENVIRONMENTAL DOCUMENTATION:

The proposed action is exempt from the provisions of the California Environmental Quality Act (CEQA), as it involves the minor alteration of existing facilities with no expansion of use beyond previously existing.

FINANCIAL STATEMENT

The breakdown of the total estimated cost to include Authorization No. 7 to Appropriation No. 584 for Microwave/Communications and Field Office Local Area Network (LAN) Installation is shown below:

Appropriation No. 584 Summary:

	<u>Approved Revision No. 6</u>	<u>Proposed Authorization No. 7</u>
Labor		
Engineering	\$ 65,000	\$ 77,300
District Forces Construction	<u>327,000</u>	<u>882,800</u>
Total Labor	\$ 392,000	960,100
Materials	0	1,612,200
Incidentals	0	1,000
Professional and Technical Services	65,000	193,600
Operating Equipment	0	5,800
Administrative Overhead	179,000	158,200
Contracts	4,806,423	3,764,233
Contingencies	<u>226,577</u>	<u>95,877</u>
Total	\$ 5,669,000	\$ 6,791,000

Fiscal Impact Statement

Estimated Funds Required:

Initial	231,000
Revision No. 1	440,000
Revision No. 2	714,000
Revision No. 3	350,000
Revision No. 4	794,000
Revision No. 5	621,000
Revision No. 6	2,519,000
Authorization No. 7	1,122,000
Projected Additional Funds for Comm. Project Completion **	4,598,000
Total	11,389,000

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

Projected Expenditures of Funds:

Through	Fiscal Year 1992-93	3,129,500
	Fiscal Year 1993-94	0
	Fiscal Year 1994-95	3,274,200
	Fiscal Year 1995-96	4,985,300
	Total	11,389,000

Capital Projects Program Fiscal Year 1994-95:

Estimated Total Program Cost	11,389,000
1994-95 Capital Program	4,133,000
Project Class: Three	

Projects that do not directly affect the delivery of water but demonstrate that economic savings outweigh project costs.

** Additional estimated funds for completion of Communications Upgrade Project, including microwave-related upgrades