

- **Board of Directors**
Engineering and Operations Committee

November 14, 2006 Board Meeting

8-2

Subject

Appropriate \$8.557 million for the Cross Connection Prevention Program; award construction contracts to: Steve P. Rados, Inc. for \$2,806,400; PPC Construction, Inc. for \$1,195,115; and Abhe & Svoboda, Inc. for \$1,678,240; and authorize: (1) an agreement with Power Tech, Inc. for construction inspection services; and (2) amendments to existing agreements with KEC Engineers, Inc., Orsa Consulting Engineers, Inc. and VA Consulting, Inc. (Approp. 15171)

Description

Background

The California Code of Regulations requires that all treated water supply systems be protected from potential contamination through blow-offs, vacuum/air release valves, and other vulnerable piping configurations. Metropolitan has surveyed its distribution system for potential cross-connections and has completed modifications to 160 of the highest priority sites to date.

In January 2002, Metropolitan's Board authorized field surveys, detailed site investigations, preliminary design, and preparation of environmental documentation for all remaining locations with potential cross-connections. A detailed assessment of the 1,270 potential sites was conducted to distinguish those which pose a potential hazard versus those that pose little or no risk under normal or special operating conditions. This assessment recommended that relocation/modification proceed for approximately 300 sites. This significantly reduced scope has been discussed with the California Department of Health Services (CDHS), which recognized that the remaining 970 sites present much lower risk and do not need to be modified at this time. The planned relocation/modification for the identified 300 sites will bring Metropolitan into compliance with CDHS regulations.

Plan for Construction

In September 2004, Metropolitan's Board authorized final design of modifications to eliminate potential cross-connections at the identified 300 sites. See [Attachment 3](#) for site locations. Modifications are planned to be constructed under 12 construction contracts. The initial three contracts, which are the subject of this action, include modifications at 74 sites along with procurement of all vacuum/air release valves and surge check valves required for these three and the remaining nine contracts. Procurement of valves in advance of award of the remaining contracts is recommended so that the valves' long delivery time does not impact construction schedules for the subsequent contracts, and to standardize installations.

The Cross-Connection Prevention Program has been planned to utilize multiple construction contracts, each with a moderate number of sites (approximately 25 sites per contract), to achieve the twin goals of: (1) Increasing competition by sizing the contracts to attract a large number of potential bidders, and (2) Increasing opportunities for participation by Small Business Enterprise (SBE) firms. The 12 construction contracts will be phased to minimize operational disruptions to Metropolitan's distribution system, to effectively manage the geographically diverse projects, and to resolve local agency permitting issues on a case-by-case basis. In order to minimize change orders and avoid construction delays, extensive coordination and permitting have been performed with local agencies prior to the award of construction contracts.

For the initial three contracts, which address a total of 74 sites, the construction inspection is recommended to be performed by a consultant. Use of consultants to supplement staff's capabilities on capital projects is consistent with the Corporate Resources Group's budget and business plan for fiscal year 2006/07. Staff recommends that a single consulting firm perform construction inspection of these three contracts to maximize efficiency.

Metropolitan staff will perform program management, coordination with Water System Operations, and will resolve challenging local agency permitting issues. Based on the actual efficiencies and benefits resulting from this planned approach for the three initial contracts, staff will reassess the plan for execution of the remaining nine construction contracts and may recommend adjustments to this plan in the future.

All work for the initial three contracts is scheduled to be completed by December 2007.

Construction of Initial 74 Sites (\$7,960,000)

Award of Construction Contracts - Specifications No. 1542 for the Air Release and Vacuum Valve Relocation for Treated Water Pipelines, Construction Package No. 1, was advertised for bids on July 17, 2006. As shown in [Attachment 2](#), six bids were received and opened on September 6, 2006. The low bid did not comply with the requirements of the specifications and was therefore considered non-responsive. The second low bid from Steve P. Rados, Inc. in the amount of \$2,806,400 complies with the requirements of the specifications. The bids ranged from \$2.8 million to \$4.2 million. The engineer's estimate was \$4.6 million. Staff has investigated the difference between the low bid and the engineer's estimate and attributes the difference of approximately \$1.1 million due to lower-than-expected costs for valve procurement and fabrication. The purchase of approximately 658 valves created a competitive environment among valve manufacturers that generated significant savings. For this contract, Metropolitan established an SBE participation level of at least 25 percent of the bid amount. Steve P. Rados, Inc. has committed to meet this requirement.

Specifications No. 1543 for the Air Release and Vacuum Valve Relocation for Treated Water Pipelines, Construction Package No. 2, was advertised for bids on August 24, 2006. As shown in [Attachment 2](#), seven bids were received and opened on October 3, 2006. The low bid from PPC Construction, Inc., in the amount of \$1,195,115, complies with the requirements of the specifications. The bids ranged from approximately \$1.2 million to \$2 million. The engineer's estimate was \$1.5 million. For this contract, Metropolitan established an SBE participation level of at least 20 percent of the bid amount. PPC Construction, Inc. is an SBE firm. Therefore, 100 percent participation will be achieved.

Specifications No. 1544 for the Air Release and Vacuum Valve Relocation for Treated Water Pipelines, Construction Package No. 3, was advertised for bids on September 7, 2006. As shown in [Attachment 2](#), three bids were received and opened on October 5, 2006. The low bid from Abhe & Svoboda, Inc., in the amount of \$1,678,240, complies with the requirements of the specifications. The bids ranged from approximately \$1.7 million to \$2.1 million. The engineer's estimate was \$2 million. For this contract, Metropolitan established an SBE participation level of at least 22 percent of the bid amount. Abhe & Svoboda, Inc. has committed to meet this requirement.

This action appropriates \$7,960,000 in budgeted funds; awards a \$2,806,400 construction contract to Steve P. Rados, Inc.; awards a \$1,195,115 construction contract to PPC Construction, Inc. and awards a \$1,678,240 construction contract to Abhe & Svoboda, Inc. In addition to the amount of the contracts, the appropriated funds include \$166,000 for Metropolitan force construction; \$1,020,000 for construction management and inspection; \$533,000 for all other staff and consultant support; and \$561,245 for remaining budget. Support activities include project management, coordination with cities and other local agencies, and environmental monitoring. The cost of inspection as a percentage of the total construction cost is approximately 17 percent. Engineering Services' goal for inspection of construction contracts of less than \$3 million is 9 to 15 percent. The inspection budget is higher than the goal due to the multiple construction sites located over a wide area, the large number of agencies requiring coordination, and to address local neighbor concerns.

New Agreement for Construction Inspection - Staff recommends that a consulting firm perform construction inspection of the initial three contracts under the Cross-Connection Prevention Program. Selection of a consultant to provide these services followed a competitive process. In response to Request for Qualifications No. 550, statements of qualifications were submitted by 19 firms, of which nine firms were short-listed. Project Proposal Request No. 103570 was issued to the nine short-listed firms and six proposals were received and evaluated by staff.

Staff recommends that an agreement be authorized with Power Tech, Inc., to perform construction inspection for the three contracts included in this action. Power Tech, Inc. is recommended based on the firm's expertise and ability to provide the necessary skills and resources to support this diverse project. The planned scope of work for this agreement includes field inspection of pipelines and structures; fabrication and welding inspection; and specialized support in areas such as surveying and materials testing.

This action authorizes a professional services agreement with Power Tech, Inc. in an amount not to exceed \$820,000, to provide construction inspection services. Metropolitan has established an SBE participation goal of 20 percent for this agreement. Power Tech, Inc. is an SBE firm. Therefore, 100 percent participation will be achieved.

Amendment to Existing Agreement for Technical Support during Construction - VA Consulting, Inc. performed design of the three initial construction packages. As the engineer of record, VA Consulting, Inc. is recommended to provide technical support during construction of the three contracts. The consultant will review submittals received from the contractors, respond to requests for information, and advise the inspectors on technical issues as they may arise. VA Consulting, Inc. was selected through a competitive process (Request for Qualifications No. 654) to perform design services, and an agreement was authorized by the Board in September 2004.

This action authorizes an increase of \$320,000 to the existing agreement with VA Consulting, Inc., for a new not-to-exceed total of \$1.4 million, to provide technical support during construction. The SBE participation level established for this agreement is 25 percent.

Local Agency Permitting and Design Issues (\$597,000)

Design of modifications to the identified 300 potential cross-connection sites is being conducted in phases, consistent with the phased construction contracts. During design of the initial 74 sites, an extremely high level of coordination was required with several dozen local agencies to address issues such as siting of the relocated above-ground valve enclosures, traffic control, design review and plan check, aesthetics and options for customized valve enclosures, and local neighborhood issues. Staff and consultants attended from three to 12 meetings with each agency. Typically, agencies do not review design drawings until they are 100 percent complete. While initial submittals to the agencies were based on actual input provided by those agencies during coordination meetings, staff found that many agencies modified their requirements several times during the approval process. As a result, multiple design revisions and submittals were generally required in order to secure permits. Based on this experience, staff will modify the approach for addressing local agency permits and coordination for the remaining sites, in an attempt to streamline the permitting process.

In addition to the permitting issues, additional design issues relating to the potential presence of hazardous wastes were encountered during design of the initial 74 sites. As a result, plans were developed to test, handle, and remove asbestos, lead, and polychlorinated biphenyls from existing Metropolitan structures, which will expand the design effort for remaining sites.

Based on the experience gained in obtaining permits and resolving hazardous materials issues for the initial 74 sites, staff recommends that additional funds be budgeted to address these issues for the remaining 226 sites. Use of these additional funds is intended to be minimized as much as possible. This action appropriates \$597,000 in budgeted funds to address local agency permitting issues and complete the design of modifications to the remaining 226 sites. The appropriated funds include \$375,000 for consultant support (\$100,000 for KEC

Engineers, Inc. and \$275,000 for Orsa Consulting Engineers, Inc., as discussed below) and \$222,000 for Metropolitan staff support.

Amendment to Existing Agreement for Local Agency Permitting/Coordination - KEC Engineers, Inc. has provided permit application and processing support with local agencies for the initial three contracts in the Cross-Connection Prevention Program. KEC Engineers, Inc. was selected through a competitive process (Request for Qualifications No. 654) and a professional services agreement in the amount of \$250,000 was authorized by the General Manager in September 2004. This action authorizes an increase of \$100,000 to the existing agreement with KEC Engineers, Inc. for a new not-to-exceed total of \$350,000, to provide permit application and processing support with local agencies for the remaining construction contracts. The SBE participation level established for this agreement is 25 percent.

Amendment to Existing Agreement for Design Services - Orsa Consulting Engineers, Inc. was selected through a competitive process (Request for Qualifications No. 654) to perform design services for the Cross-Connection Prevention Program, and a professional services agreement was authorized by the Board in September 2004. This action authorizes an increase of \$275,000 to the existing agreement with Orsa Consulting Engineers, Inc. for a new not-to-exceed total of \$1.37 million, to perform design of the remaining sites. The SBE participation level established for this agreement is 25 percent.

This project has been evaluated and recommended by Metropolitan's Capital Investment Plan Evaluation Team, and funds have been included in the fiscal year 2006/07 capital budget. See [Attachment 1](#) for the financial statement.

Policy

Metropolitan Water District Administrative Code Section 5108: Appropriations

Metropolitan Water District Administrative Code Section 8121: General Authority of the General Manager to Enter Contracts

California Environmental Quality Act (CEQA)

Construction of Initial 74 Sites

CEQA determination for Options #1 and #3:

To comply with CEQA and the State CEQA Guidelines, Metropolitan as the Lead Agency prepared a Mitigated Negative Declaration (MND) for the Cross-Connection Prevention Program. The MND was distributed for a 30-day public review period that began on November 3, 2003. The Board later adopted the MND and the Mitigation Monitoring and Reporting Program (MMRP) on September 14, 2004. The present board action is solely based on authorizing construction and not on any changes to the approved project itself. Hence, the previously adopted environmental documentation in conjunction with the current action fully complies with CEQA and the State CEQA Guidelines. Accordingly, no further environmental documentation is necessary for the Board to act on with respect to the proposed action.

The CEQA determination is: Determine that the proposed action has been previously addressed in the adopted 2004 MND and the MMRP and that no further environmental analysis or documentation is required.

CEQA determination for Option #2:

None required

Technical Engineering Support – Professional Services Agreements

CEQA determination for Options #1, #2 and #3:

The proposed actions are not defined as a project under CEQA because they involve continuing administrative activities, such as general policy and procedure making (Section 15378(b)(2) of the State CEQA Guidelines). In addition, the proposed actions are not subject to CEQA because they involve other government fiscal activities which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment (Section 15378(b)(4) of the State CEQA Guidelines).

The CEQA determination is: Determine that the proposed actions are not subject to CEQA pursuant to Sections 15378(b)(2) and 15378(b)(4) of the State CEQA Guidelines.

Board Options

Option #1

Adopt the CEQA determinations and

- a. Appropriate \$8.557 million in budgeted funds;
- b. Award construction contracts to: Steve P. Rados, Inc. for \$2,806,400; PPC Construction, Inc. for \$1,195,115; and Abhe & Svoboda, Inc. for \$1,678,240;
- c. Authorize an agreement with Power Tech, Inc. in an amount not to exceed \$820,000; and
- d. Authorize increases to the existing agreements with VA Consulting, Inc. for \$320,000; Orsa Consulting Engineers, Inc. for \$275,000; and KEC Engineers, Inc. for \$100,000.

Fiscal Impact: \$8.557 million of budgeted funds under Approp. 15171

Business Analysis: This option would continue Metropolitan's progress to achieve compliance with CDHS requirements for cross-connection prevention.

Option #2

Adopt the CEQA determinations and

- a. Appropriate \$2.877 million in budgeted funds;
- b. Do not award construction contracts and re-advertise in an attempt to receive more favorable bids;
- c. Authorize an agreement with Power Tech, Inc. in an amount not to exceed \$820,000; and
- d. Authorize increases to the existing agreements with VA Consulting, Inc for \$320,000; Orsa Consulting Engineers, Inc. for \$275,000; and KEC Engineers, Inc. for \$100,000.

Fiscal Impact: \$2,877,000 of budgeted funds under Approp. 15171

Business Analysis: Under this option, full compliance with CDHS requirements for cross-connection prevention would be deferred beyond the current project schedule due to re-advertisement of the construction contracts.

Option #3

Adopt the CEQA determinations and

- a. Appropriate \$8.557 million in budgeted funds;
- b. Award construction contracts to: Steve P. Rados, Inc. for \$2,806,400; PPC Construction, Inc. for \$1,195,115 ; and Abhe & Svoboda, Inc. for \$1,678,240;
- c. Do not award an agreement with Power Tech, Inc. for construction inspection services; and
- d. Authorize increases to the existing agreements with VA Consulting, Inc for \$320,000; Orsa Consulting Engineers, Inc. for \$275,000; and KEC Engineers, Inc. for \$100,000.

Fiscal Impact: \$8.557 million of budgeted funds under Approp. 15171

Business Analysis: Under this option, construction management, inspection, and permit acquisition would be performed by Metropolitan staff by shifting resources from other projects. There is an increased risk that board-adopted schedules will be delayed under this option.

Staff Recommendation

Option #1



Roy L. Wolfe
Manager, Corporate Resources

10/23/2006
Date



Jeffrey Kightlinger
General Manager

10/24/2006
Date

Attachment 1 – Financial Statement

Attachment 2 – Abstract of Bids

Attachment 3 – Location Map

BLA #4637