



- **Board of Directors**

- Engineering, Operations, and Technology Committee***

1/9/2024 Board Meeting

7-3

Subject

Authorize agreements with (1) Jacobs Group Engineering Inc. in an amount not to exceed \$3.425 million; and (2) Brown and Caldwell in an amount not to exceed \$2.26 million for design of security system improvements at several facilities throughout Metropolitan's Distribution System; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA. [Consultation with Metropolitan Team Manager, Engineering Services, Sandip Budhia, or designated agents on threats to public services or facilities; may be heard in closed session pursuant to Gov. Code Section 54957(a)]

Executive Summary

Metropolitan safeguards critical infrastructure and personnel through a multi-layered combination of physical barriers, contracted security guard services, employee awareness, and a physical security system. The 2003 Homeland Security Presidential Directive and North American Electric Reliability Corporation Critical Infrastructure Protection Plans require Metropolitan to operate and maintain video surveillance and intrusion detection systems at critical facilities. A recent comprehensive assessment of Metropolitan's facilities has identified the need for enhancements to the existing security measures at multiple facilities. The planned work under this action will provide security improvements at 14 additional sites and will be consistent with Metropolitan's latest security and technology standards for essential facilities.

This action authorizes two new agreements to provide design services for improvements to the security features at multiple water treatment plants, hydroelectric plants (HEPs), and pressure control structures (PCSs) throughout Metropolitan's Distribution System. See **Attachment 1** for the Allocation of Funds and **Attachment 2** for the Listing of Subconsultants.

Proposed Action(s)/Recommendation(s) and Options

Staff Recommendation: Option #1

Option #1

- Authorize an agreement with Jacobs Engineering Group Inc. in an amount not to exceed \$3.425 million for design of security system improvements at three water treatment plants; and
- Authorize an agreement with Brown and Caldwell in an amount not to exceed \$2.26 million for design of security system improvements at one water treatment plant and several HEPs and PCSs.

Fiscal Impact: Expenditure of \$7.55 million in capital funds. Approximately \$1 million in capital funds will be incurred in the current biennium and have been previously authorized. The remaining capital expenditures will be funded from future Capital Investment Plan budgets following board approval of those budgets.

Business Analysis: This option will enhance safety and security throughout Metropolitan's system.

Option #2

Do not proceed with the project at this time.

Fiscal Impact: None

Business Analysis: Under this option, the treatment plants, HEPs, and PCSs will continue to experience security system equipment failures.

Alternatives Considered

Alternatives considered for design of the security system improvements included utilizing in-house Metropolitan staff to conduct this work. Metropolitan's staffing strategy for utilizing consultants and in-house Metropolitan staff has been: (1) to assess current work assignments for in-house staff to determine the potential availability of staff to conduct this work; and (2) to use project-specific professional services agreements when resource needs exceed available in-house staffing or require specialized technical expertise in order to provide a concentrated engineering effort over an extended duration.

This strategy relies on the assumption that in-house engineering staff will handle the baseload of work on capital projects, while professional services agreements are selectively utilized to handle projects above this baseload or where specialized needs are required. This strategy allows Metropolitan's staff to be strategically utilized on projects to best maintain key engineering competencies and to address projects with special needs or issues. After assessing the current workload for in-house staff and the nature of the design work, staff recommends utilizing a professional services agreement for this work. This approach will allow for completion of not only this project, but also other budgeted capital projects within their current schedules and ensure that the work is conducted in the most efficient manner possible.

Applicable 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

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

Related Board Action(s)/Future Action(s)

By Minute Item 52778, dated April 12, 2022, the Board appropriated a total of \$600 million for projects identified in the Capital Investment Plan for Fiscal Years 2022/2023 and 2023/2024.

Future board actions are planned for the award of construction contracts for security system improvements at the facilities identified in this action.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is exempt from CEQA because it involves only feasibility or planning studies for possible future actions which the Board has not approved, adopted or funded (Public Resources Code Section 21080.21; State CEQA Guidelines Section 15262.). In addition, the proposed action is categorically exempt from CEQA because it consists of basic data collection and research activities which do not result in a serious or major disturbance to an environmental resource, which may be strictly for information gathering purposes, or as part of a study leading to an action which a public agency has not yet approved, adopted, or funded (State CEQA Guidelines Section 15306.)

CEQA determination for Option #2:

None required

Details and Background

Background

Metropolitan's service area covers approximately 5,200 square miles, extending from Ventura County to the Mexican border. It includes the Colorado River Aqueduct system, five water treatment plants, 830 miles of pipelines, and approximately 5,400 conveyance and distribution system structures.

Metropolitan currently employs hundreds of security surveillance and intrusion detection systems throughout its service area. In recent years, staff has conducted comprehensive threat and physical security assessments of Metropolitan's facilities and identified locations requiring improvements. Following these findings, staff initiated preliminary design to upgrade the site security systems in accordance with Metropolitan's latest security and technology standards for essential facilities.

Metropolitan's security system is being improved through several projects. Metropolitan's Board previously authorized agreements for final design of security improvements at the Joseph Jensen Water Treatment Plant in July 2022 and Colorado River Aqueduct facilities in July 2023. Staff recommends proceeding with final design of security system replacement at the other four treatment plants and ten distribution system facilities under this action. Final design for the remaining facilities, including 28 HEPs and PCSs, five reservoirs, and two lakes, is being performed under two existing board-authorized, on-call agreements.

Security System Improvements – Final Design

Planned improvements include upgrades to the security surveillance and intrusion detection systems at the identified facilities. Planned design activities by the consultants include: (1) detailed field investigations; (2) evaluation of equipment alternatives; (3) development of design and equipment criteria; (4) preparation of final design drawings and specifications for installation; (5) development of construction cost estimates; and (6) design support during advertisement. These activities will be performed by Jacobs Engineering Group Inc. and Brown and Caldwell, as discussed below. Metropolitan staff will provide design oversight, perform overall project management, and agreement administration.

A total of \$7.55 million is required to perform this work. Allocated funds include \$3.425 million for design activities by Jacobs Engineering Group Inc. and \$2.26 million for design activities by Brown and Caldwell under new agreements for the facilities described below. Allocated funds for Metropolitan staff include \$581,000 for design review; \$1,007,000 for environmental support, project management, project control, security review, and preparation of multiple bid packages; and \$277,000 for remaining budget. Jacobs Engineering Group Inc. is preparing design packages for three water treatment plants, while Brown and Caldwell are preparing design packages for the Mills plant and ten HEP/PCS facilities. Metropolitan's treatment plant facilities are located on relatively large sites with extensive underground site utilities, so the security systems for the treatment plants are more extensive and complex than at the PCS or HEP facilities. As a result, the design costs are higher.

Attachment 1 provides the allocation of required funds.

As described above, design will be performed by Jacobs Engineering Group Inc. and Brown and Caldwell. Engineering Services' performance metric target range for final design with construction of more than \$3 million is 9 to 12 percent. For the security system improvements at the treatment plants (Jacobs Engineering Group Inc.), the performance metric for final design is 12.2 percent of the total construction cost. The estimated cost of final design is \$3,670,000, which includes \$3,425,000 for consultant design and \$245,000 for Metropolitan staff review. The estimated cost of construction is anticipated to range from \$30 million to \$32 million. The final design performance metric for the treatment plant security systems exceeds the metric target range due to the complexity described above and the need to prepare separate construction contract packages for each site. This will allow staff to issue multiple construction contracts based on facility needs and risks. For the security system improvements at the HEPs and the PCSs (Brown and Caldwell), the performance metric for final design is 9.3 percent of the total construction cost, which is within the metric target range. The estimated cost of final design is \$2,596,000, which includes \$2,260,000 for consultant design and \$336,000 for Metropolitan staff review. The estimated cost of construction is anticipated to range from \$28 million to \$30 million.

Security System Improvements (Treatment Plants)– New Design Services Agreement (Jacobs Engineering Group Inc.)

Jacobs Engineering Group Inc. (Jacobs) is recommended to perform design services for the security system improvements at the Diemer, Weymouth, and Skinner plants. Jacobs was prequalified through a competitive process via Request for Qualifications No. 1305. Jacobs was selected for these services based on the firm's knowledge of Metropolitan facilities and expertise in designing security systems. Jacobs performed preliminary design for the security system improvements.

This action authorizes an agreement with Jacobs for a not-to-exceed amount of \$3.425 million to provide design services for security system improvements. For this agreement, Metropolitan has established a Small Business Enterprise participation level of 25 percent. Jacobs has agreed to meet this level of participation. See **Attachment 2** for a listing of the subconsultants.

Security System Improvements (Hydroelectric Plants & Pressure Control Structures)– New Design Services Agreement (Brown and Caldwell)

Brown and Caldwell is recommended to perform design services for the security system improvements for the Mills plant and ten HEP/PCS facilities. Brown and Caldwell were prequalified through a competitive process via Request for Qualifications No. 1305. Brown and Caldwell was selected for these services based on the firm's knowledge of Metropolitan facilities and expertise in designing security systems. Brown and Caldwell performed preliminary design for the security system improvements at these facilities.

This action authorizes an agreement with Brown and Caldwell for a not-to-exceed amount of \$2.26 million to provide design services for security system improvements at the Mills plant and several HEPs and PCSs. For this agreement, Metropolitan has established a Small Business Enterprise participation level of 25 percent. Brown and Caldwell have agreed to meet this level of participation.

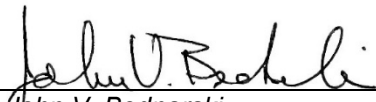
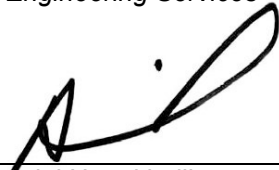
Summary

This action authorizes an agreement with Jacobs Engineering Group Inc. in an amount not to exceed \$3.425 million and with Brown and Caldwell in an amount not to exceed \$2.26 million to provide design services for the security system improvements at several water treatment plants, HEPs, and PCSs throughout Metropolitan's system.

Project Milestones

December 2024 – Completion of design for security system improvements at ten HEPs and PCSs and the Mills plants

April 2025 – Completion of design for security system improvements at three treatment plants

 _____ John V. Bednarski Manager/Chief Engineer Engineering Services	12/18/2023 _____ Date
 _____ Adel Hagekhalil General Manager	12/20/2023 _____ Date

Attachment 1 – Allocation of Funds

Attachment 2 – Listing of Subconsultants

Ref# es12696031

Allocation of Funds for the Security System Upgrades

	Current Board Action (Jan. 2024)
Labor	
Studies & Investigations	\$ -
Final Design	581,000
Owner Costs (Program mgmt., envir. support)	1,007,000
Submittals Review & Record Drwgs.	-
Construction Inspection & Support	-
Metropolitan Force Construction	-
Materials & Supplies	-
Incidental Expenses	-
Professional/Technical Services	-
Brown and Caldwell	2,260,000
Jacobs Engineering Group Inc.	3,425,000
Right-of-Way	-
Equipment Use	-
Contracts	-
Remaining Budget	277,000
Total	\$ 7,550,000

The total amount expended to date is approximately \$1.5 million. The total estimated cost for this project, including the amount appropriated to date, funds for the work described in this action, and future construction costs, is anticipated to range from \$67 million to \$79 million.

The Metropolitan Water District of Southern California
Subconsultants for Security System Upgrades Agreements

Consultant: Jacobs Engineering Group Inc.

Subconsultant and Location	Service Category; Specialty
DRP Engineering Inc. Monterey, California	Information Technology, Architectural, and Engineering

Consultant: Brown and Caldwell

Subconsultant and Location	Service Category; Specialty
Am-Tec Security Chino, California	Security
Projectline Technical Services Costa Mesa, California	Information Technology