



• **Board of Directors**
Real Property and Asset Management Committee

9/13/2022 Board Meeting

REVISED 7-11

Subject

Authorize an increase of \$8.5 million to an agreement with Roesling Nakamura Terada Architects for a new not-to-exceed total of \$13.5 million for final design and architectural services in support of the District Housing and Property Improvement Program; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

Metropolitan maintains employee housing, kitchens, and short-term lodging facilities at the Colorado River Aqueduct (CRA) pumping plant villages. These facilities have exceeded their design life, are showing signs of deterioration, and require replacement. In July 2021, the Board authorized the preliminary design activities to: (1) replace kitchens and guest lodges at the Eagle and Iron Mountain Villages; (2) replace houses at Hinds, Eagle, Iron, Gene Pumping Plants, and Copper Basin Reservoir; and (3) village enhancements at four pumping plants. This action authorizes an amendment to an existing agreement for final design and architectural services in support of the District Housing and Property Improvements Program.

Details

Background

The CRA is a 242-mile-long conveyance system that transports water from the Colorado River to Lake Mathews in Riverside County. The CRA includes five pumping plants that are located in remote, isolated areas of the California desert. The aqueduct system was constructed in the late 1930s and was placed into service in 1941. Since the CRA's inception, Metropolitan has provided lodging or housing to employees involved in the construction, operation, and maintenance of the aqueduct system. Due to the remoteness of the pumping plants, the provision of housing ensures that staff can respond to emergency events in a timely manner.

Houses, kitchens, and short-term lodging were initially constructed at the CRA pumping plants in the early 1940s. The expansion of the CRA's capacity in the 1950s led to the construction of additional houses. Metropolitan has performed routine maintenance on each of these facilities since they were built, but following decades of continuous use and exposure to the harsh desert environment, the houses have deteriorated and are in need of replacement. Replacement of these houses, coupled with the development of multiple enhancement features across Metropolitan's CRA pumping plants villages, will provide for employee retention, create an attraction for future employees, and help create a vibrant, healthy, and sustainable community. Enhancements to the villages include perimeter trails, shade structures, a welcoming and sustainable landscape, and family-friendly community centers.

In 2019, Metropolitan's Board authorized the District Housing and Property Improvement Program across Metropolitan's CRA pumping plants. Planned improvements include:

- (1) Housing Improvements – Replacement of 96 CRA houses at Hinds, Eagle Mountain, Iron Mountain and Gene pumping plants, and Copper Basin Reservoir. The new houses will comply with Title 24 provisions for energy-efficient, cost-effective buildings.
- (2) Village Enhancements – Enhancements to these villages include perimeter trails, shade structures, a welcoming and sustainable landscape, and family-friendly community centers. Elements of this

community will also include renewable energy, water conservation, a recycling center, and four storage buildings that will store replacement parts and facilitate future maintenance at the villages.

- (3) Kitchen and Lodging Facilities Improvements – Replacement of the kitchens and short-term lodging at Eagle and Iron Mountain pumping plants. These pumping plants have kitchens and guest lodges that are used by staff during shutdowns and construction projects, and during extended periods of condition assessments and design of rehabilitation work. Frequent use of these facilities will continue over the next decade as the planned rehabilitation of the 45 main CRA pumps moves forward.

In accordance with the April 2022 action on the biennial budget for Fiscal Years 2022/23 and 2023/24, the General Manager will authorize staff to proceed with improvements to Metropolitan housing and property, pending board authorization as described below. Based on the current Capital Investment Plan (CIP) expenditure forecast, funds for the work to be performed pursuant to this action during the current biennium are available within the Appropriation for Fiscal Years 2022/23 and 2023/24. This project has been reviewed in accordance with Metropolitan's CIP prioritization criteria and was approved by Metropolitan's CIP evaluation team to be included in the District Housing and Property Improvement Program.

District Housing and Property Improvements Program – Final Design

Staff recommends the commencement of final design activities at this time. Final design phase activities include: (1) preparation of drawings and specifications; (2) development of a construction estimate; (3) development of an employee relocation plan during construction; and (4) advertisement and receipt of competitive bids. Consultants' work includes preparing two final design bid packages for construction contracts, and other activities as described below. Bid Package No. 1 will include all improvements at the Hinds and Eagle Mountain Pumping Plants, while Package No. 2 will include the improvements at the Iron Mountain and Gene Pumping Plants and Copper Basin Reservoir. Metropolitan staff will provide technical oversight to the consultants, coordinate, prepare, and submit permit packages to Riverside and San Bernardino Counties, perform overall project management, and administer the consultant agreement. In addition, during the final design phase, Metropolitan forces will relocate several existing electrical poles that conflict with the proposed housing and road layouts.

A constructability review will also be performed to review the construction sequencing and logistics to minimize relocation disruptions to employee staff and their families during construction, and review the construction costs to ensure cost optimization. The constructability review will be performed by a specialty firm under a contract planned to be executed under the General Manager's Administrative Code authority to award construction contracts of \$250,000 or less.

A total of \$13.3 million is required for this work. Allocated funds include \$8.5 million for final design and architectural support by RNT Architects, as described below, and \$175,000 for constructability review. Allocated funds for Metropolitan staff activities include \$1,378,000 for Metropolitan forces to relocate the existing overhead electrical service lines; \$750,000 for technical oversight to support the final design and constructability review activities; \$1,475,000 for permitting and fees, agreement administration, receipt of multiple bids and project management. Allocated funds also include \$1,022,000 for remaining budget. The final design cost as a percentage of the estimated construction cost is approximately 4.8 percent. Engineering Services' goal for design of projects with construction costs greater than \$3 million is 9 to 12 percent. The estimated construction cost for this project is anticipated to range from \$190 million to \$210 million. **Attachment 1** provides the allocation of the required funds. Staff will return to the Board at a later date for award of construction contracts.

The total cost for the District Housing and Property Improvement Program is currently estimated to range from \$250 million to \$260 million. To date, \$6.6 million has been expended on this project.

Engineering & Architectural Design Services (Roesling Nakamura Terada Architects) – Amendment to Agreement

Roesling Nakamura Terada Architects will provide final design and architectural support services under an existing board-authorized agreement for the Desert Housing and Property Improvements Program. The planned activities for RNT Architects include: (1) development of final design drawings and specifications for replacement of the houses, kitchen, lodge and storage buildings, and various village enhancements; (2) preparation of an engineer's cost estimate; (3) preparation of fire and health department submittal packages for Riverside and San Bernardino Counties; and (4) technical assistance through bidding. In addition, RNT

Architects will evaluate supplementary housing alternatives to ensure the most optimum and cost-effective option is constructed. The estimated cost for these services is \$8,500,000.

RNT Architects was originally prequalified to provide architecture and engineering support services via Request for Qualifications No. 1198, and previously completed property assessments, master planning, and preliminary design for the Desert Housing and Property Improvements Program.

This action authorizes an increase of \$8.5 million to the existing agreement with RNT Architects for a new not-to-exceed total of \$13.5 million for final design and architectural support of the housing, village enhancements and support buildings, and the kitchen and lodge buildings. For this agreement, Metropolitan has established a Small Business Enterprise goal level of 25 percent. RNT Architects has agreed to meet this level of participation. The planned subconsultants for this work are Fuscoe Engineering, Inc., Spurlock Landscape Architects, KPFF Consulting Engineers, IMEG Corporation, Webb Foodservice Design, S.L. Leonard & Associates, Aquatic Design Group, Inc., TOV Architectural Consulting, and WSP USA, Inc.

Short Term Improvements (No Capital Funds Required)

In the interim, prior to the program's completion, some short-term enhancements are being implemented to improve living conditions at the desert facilities. Improvements include: (1) shade structures for ~~parked vehicles,~~ ~~and~~ playgrounds; (2) fencing at homes to improve privacy; (3) insulation of garages and installation of air conditioning units for garages; (4) stand-alone freezers for houses to store food for the residents and their families; and (5) pool heaters and shade structures will be added to the existing pools so the residents can enjoy these amenities year-round.

In accordance with Governmental Accounting Standards Board provisions, the short-term improvements will be paid from operations and maintenance funds to the extent that a favorable variance from budget is available. The cost of these improvements is estimated to be \$3.~~3~~7 million.

Staff will return to the Board at a later date for award of construction contracts as needed.

Alternatives Considered

Alternatives considered for completing final design of the District Housing and Property Improvements Program included assessing the availability and capability of 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) for long-term rehabilitation projects, when resource needs exceed available in-house staffing or require specialized technical expertise.

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 relative priority of this project, staff recommends the use of a professional services agreement for the housing and property improvements using consultants with expertise in this area. This approach will allow for the completion of not only this program, but also other budgeted capital projects within their current schedules.

Summary

This action authorizes an increase of \$8.5 million to the existing agreement with RNT Architects for a new not-to-exceed total of \$13.5 million for final design and architectural support services for housing and property improvements at four CRA pumping plants.

See **Attachment 1** for the Allocation of Funds and **Attachment 2** for the Location Map.

Project Milestones

August 2023 – Completion of final design for Hinds and Eagle Mountain Pumping Plants

December 2023 – Completion of final design for Iron Mountain and Gene Pumping Plants and Copper Basin Reservoir

Policy

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

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

By Minute Item 52179, dated November 10, 2020, the Board authorized preparation of conceptual master plan and to conduct property assessments for District housing.

By Minute Item 52381, dated May 11, 2021, the Board authorized two new agreements for environmental documentation and geotechnical services in support of the District Housing and Property Improvements.

By Minute Item 52448, dated July 13, 2021, the Board authorized an increase to an agreement with Roesling Nakamura Terada Architects for preliminary design and architectural services in support of the District Housing and Property Improvements.

By Minute Item 52790, dated April 12, 2022, the Board appropriated a total of \$600 million for projects identified in the Capital Investment Plan for Fiscal Years 2022/23 and 2023/24.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is not defined as a project under CEQA because it involves only feasibility or planning studies for possible future actions which the Board has not approved, adopted or funded (Section 15262 of the State CEQA Guidelines). In addition, the proposed action is categorically exempt under the provisions of CEQA and the State CEQA Guidelines because the proposed action involves 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 (Class 6, Section 15306 of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

Authorize an increase of \$8.5 million to an agreement with Roesling Nakamura Terada Architects for a new not-to exceed amount of \$13.5 million for final design and architectural support services for the housing and property improvements at Metropolitan's desert facilities

Fiscal Impact: \$13.3 million in Capital Funds and \$3.~~3~~⁷ million in O&M funds. All costs will be incurred in the current biennium and capital funds have been previously authorized.

Business Analysis: This option will preserve Metropolitan assets and maintain an appropriate standard of living for staff stationed at Metropolitan's desert facilities.

Option #2


Do not proceed with the project at this time.

Fiscal Impact: None

Business Analysis: This option would forgo an opportunity to preserve Metropolitan assets at the desert facilities.

Staff Recommendation

Option #1



Lilly L. Shraibati
Group Manager
Real Property Group

9/8/2022

Date

Adel Hagekhalil
General Manager

9/8/2022

Date**Attachment 1 – Allocation of Budgeted Funds****Attachment 2 – Location Map**

Ref# rpd12686328

Allocation of Funds for the District Housing and Property Improvement Program

	Current Board Action (Sept. 2022)
Labor	
Studies & Investigations	\$ -
Final Design	750,000
Owner Costs (Program mgmt., Proj. controls, envir. doc., survey)	940,000
Submittals Review & Record Drwgs.	-
Construction Inspection & Support	-
Metropolitan Force Construction	978,000
Materials & Supplies	400,000
Incidental Expenses (Permit fees)	610,000
Professional/Technical Services	-
RNT Architects	8,500,000
Constructability Review	100,000
Right-of-Way	-
Equipment Use	-
Contracts	-
Remaining Budget	1,022,000
Total	\$ 13,300,000

The total amount expended to date for the District Housing and Property Improvement Program is approximately \$6.6 million. The total estimated cost to complete this project, including the amount appropriated to date, funds allocated for the work described in this action, and future construction costs, is anticipated to range from \$250 million to \$260 million.

Location Map

