AGENDA ITEM 6


GENERAL MANAGER’S RECOMMENDATION

Authorize a contract amendment in the amount of $12,500 with Wiss, Janney, Elstner Associates, Inc., of Emeryville, California to provide engineering and project closeout services for the Mount Umunhum Radar Tower Repair Project, bringing the contract to a not-to-exceed grand total amount of $226,330.

SUMMARY

Wiss, Janney, Elstner Associates, Inc., (WJE) was selected to complete a comprehensive radar tower assessment and develop short-term and long-term repair options in January 2019. The Board of Directors (Board) subsequently selected the Long-Term Repair option (R-19-155) and authorized the General Manager to amend the WJE contract to develop construction documents and assist with construction administration on February 12, 2020 (R-20-19). No contingency funds were requested as part of this contract amendment. On March 24, 2021, the Board authorized the General Manager to enter into a construction contract with George Bianchi Construction, Inc., (GBC) to complete the Mount Umunhum Radar Tower Repair Project (Project). During construction, GBC identified a number of unforeseen site conditions requiring an added level of engineering oversight from WJE not originally expected. The additional engineering oversight required more frequent site inspections and more detailed engineering review of the contractors’ change orders, submittals, and requests for information. As a result, WJE contract funds have been directed towards covering the costs of the additional engineering services, resulting in insufficient funds for final inspections and project closeout services. A minor contract amendment in the amount of $12,500 is required to offset the costs of the additional engineering oversight and allow for project closeout services. The General Manager recommends amending WJE’s contract in the amount of $12,500, for a total not-to-exceed contract amount of $226,330. There are sufficient funds in the Fiscal Year (FY) 2021-22 project budget to cover the recommended action and expenditures.

BACKGROUND

In 1986, the District acquired the former Almaden Air Force Station (Almaden AFS) and all of its remaining facilities on Mount Umunhum and Mount Thayer with the intent to restore the area and provide public access (R-86-20). From 2009 to 2014, the District worked to restore much of the natural mountaintop, leaving only the radar tower.
On June 8, 2016, the Board approved the Retain and Seal option for the radar tower (R-16-75) which effectively calls for the sealing and stabilization of the structure, with no visitor access to the interior.

On September 12, 2018 (R-18-105), the Board approved the following goals and criteria to guide the development of additional repairs for the Mount Umunhum Radar Tower Repair Project:

- Ensure public and worker safety around the radar tower
- Avoid future contamination concerns
- Reduce (or eliminate) future need to enter building
- Protect workers if/when ingress is needed
- Avoid wildlife trappings and other resource impacts
- Reopen a pathway to the east summit
- Supports the retain and seal option previously approved by the Board of Directors

WJE was selected through a Request for Proposals (RFP) process to complete a comprehensive radar tower assessment (structural, safety, and hazardous materials) and develop short-term and long-term repair options that meet the Board-approved goals and criteria. On January 23, 2019, the Board authorized the General Manager to enter into contract with WJE in the amount not to exceed $123,855 (R-19-09).

On November 20, 2019, the Board selected the Long-Term Repairs option to stabilize and extend the life span of the radar tower and directed the General Manager to return to the Board with a recommended contract to complete the construction documents and assist with construction administration for the selected Long-Term Repair option (R-19-155).

On February 12, 2020, the Board authorized the General Manager to amend the WJE contract to include construction document development and assistance with construction administration (R-20-19). The contract amendment was $89,975, bringing the total contract amount to $213,830. No contract contingency was requested as part of the contract amendment. The contract amendment scope of work includes:

- Preparation of architectural and structural drawings, and construction documents (plan, specifications, hazardous materials abatement plan) for the Board-selected Long-Term Repair Option.
- Assist in securing permits from Santa Clara County.
- Attend and support the construction bid walks and pre-construction meeting.
- Respond to contractor Requests for Information (RFIs).
- Review and respond to contractor submittals.
- Perform project site inspections and prepare reports.
- Prepare as-built drawings

The Board authorized the General Manager to enter into a contract with George Bianchi Construction, Inc., (GBC) on March 24, 2021, to complete the Mount Umunhum Radar Tower Repair Project (R-21-47). Construction began in May 2021 and is anticipated to be completed in spring 2022. Following completion of construction, the area immediately surrounding the radar tower, east summit, and summit access trail will be re-open to public access.
DISCUSSION

During construction, GBC and their sub-contractors identified several unforeseen site conditions affecting the exterior concrete repair work. There was an abundance of unconsolidated and inconsistent layers of concrete, indicating poor quality control during the original pouring of the radar tower exterior concrete walls. These layers were characterized by large sections of porous rock pockets, poor bonding to the rebar reinforcements, shallow set rebar that did not have proper concrete coverage, and many cold joints. The repairs were more complex than originally anticipated and required significant additional on-site inspections and sign-off by WJE. In addition to the added complexity, the concrete repair sub-contractor documented 521.49 square feet of damaged concrete and 115 embedded objects that were not included in the original project plans. This unanticipated discovery also required additional engineering review by WJE, so they could confirm whether the deep concrete repairs and removal of the embedded objects were required to complete the comprehensive concrete repair scope of work.

Additionally, the elastomeric application sub-contractor identified a number of locations on the exterior of the radar tower that did not provide a suitable surface to accept and bond with the elastomeric primer and coating. These areas contained many small holes and surface irregularities that WJE confirmed needed to be filled and smoothed prior to the application of the exterior coating. Without filling in these areas, the elastomeric coating would not have fully penetrated and covered the exterior concrete. It would have provided opportunities for water intrusion and potential future concrete damage. The change orders required additional engineering oversight from WJE, which included reviewing and responding to submittals and RFI's, completing site inspections, preparing reports, and completing final inspection and sign-off of the additional repairs.

With the additional support needed from WJE throughout construction, there are insufficient funds remaining in the contract to cover project closeout. Project closeout services include punch-list review and inspection, final inspection and project site-off, and the development of as-builds. As the contract amendment did not include contingency funds, the General Manager recommends amending WJE’s existing contract by an amount of $12,500 to offset the costs of the required additional engineering oversight and allow for project closeout services.

FISCAL IMPACT

The FY22 amended budget includes $1,818,000 for the *Mt. Umunhum - Radar Tower Repair project* VP23-003. There are sufficient funds in the project budget to cover the recommended action and expenditures. In January 2022 the Mount Umunhum Conservancy, a nonprofit organization dedicated to preserving the radar tower, provided $100,000 in financial support for the approved long-term repairs.

<table>
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<tr>
<th>Mt. Umunhum - Radar Tower Repair VP23-003</th>
<th>Prior Year Actuals</th>
<th>FY22 Amended</th>
<th>FY23 Projected</th>
<th>Estimated Future Years</th>
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The recommended action is not funded by Measure AA.

BOARD AND COMMITTEE REVIEW

This Project previously came before the full Board of Directors at the following public meetings:

- **September 12, 2018**: Board approved the project goals and scope of work for the Repair Project and authorized the General Manager to release a Request for Proposals to complete the assessment. ([R-18-105, meeting minutes](#))

- **January 23, 2019**: Board authorized the General Manager to enter into contract with WJE to prepare a Basis of Design. ([R-19-09, meeting minutes](#))

- **November 20, 2019**: Board reviewed Basis of Design and selected the Long-Term Repairs Option. ([R-19-155, meeting minutes](#))

- **February 12, 2020**: Board authorized the General Manager to amend WJE’s contract to include the development of construction documents for the Long-Term Repairs Option and assistance with construction administration. ([R-20-19, meeting minutes](#))

- **March 24, 2021**: The Board authorize the General Manager to enter into a contract with George Bianchi Construction, Inc. to complete the Mount Umunhum Radar Tower Repair Project ([R-21-47, meeting minutes](#)).

PUBLIC NOTICE

Public notice was provided as required by the Brown Act. Notices were also sent to interested parties on the Mount Umunhum mailing list.

CEQA COMPLIANCE

On August 30, 2010 the Board approved in the Initial Study/Mitigated Negative Declaration (IS/MND) for the Almaden AFS Structure Abatement Project, which included an evaluation of potential repairs and work on the exterior of the radar tower (R-10-102). In addition, on October 17, 2012, the Board adopted the Mount Umunhum Environmental Restoration and Public Access Project Environmental Impact Report, which included an analysis of the Retain and Seal option for the radar tower (R-12-104). The Basis of Design assessment and Long-Term Repairs of the radar tower are consistent with the project evaluated in the prior environmental review. No new significant environmental effects or substantial increase in the severity of previously identified effects would result from this project beyond what was analyzed in the prior CEQA documents.

NEXT STEPS

Pending Board approval, the General Manager will authorize WJE’s contract amendment to provide engineering services, construction oversight, and project closeout services.
Responsible Department Head:
Jason Lin, PE, Engineering and Construction Department Manager

Prepared by:
Zachary Alexander, Capital Project Manager III, Engineering and Construction Department