

Memorandum

DATE: February 12, 2020

MEMO TO: MROSD Board of Directors

THROUGH: Ana M. Ruiz, General Manager

FROM: Zachary Alexander, Capital Project Manager III

SUBJECT: Radar Tower Roof Repair Peer Review

On November 20, 2019, the Board reviewed several radar tower repair options and selected the Long-Term Repair Option (R-19-155). At the same November 20, 2019 Board meeting, the Board raised questions about the roof repair recommendations and a desire to reconsider the use of a spray-on foam.

In response to this comment, on January 6, 2020, the District entered into a limited scope contract with Mesiti-Miller Engineering, Inc., (MME) to provide an independent review of the roof repair recommendations proposed by WJE in the Basis of Design (BOD). MME has over 30 years of general engineering experience, and has provided structural engineering and assessment services for multiple District projects, including preparing construction documents for the Mt. Umunhum Trail Steps, performing a seismic evaluation of the 5050 El Camino Administration Building, and completing a site assessment and peer-review of proposed upgrades to a District ranger residence.

In general, MME agrees with WJE's roof repair recommendations. MME deems the new roofing system as described in the BOD the best solution. The spray-foam roof would need extensive roof repairs to be functional given the extreme disrepair of the existing roof, with deteriorated and unravelling layers of roof materials, including multiple penetrations with unsound seals and rusted metal connections. Before a spray-foam can be applied and remain fully adhered to the roof, the roof itself needs to be repaired as recommended by WJE. Without these underlying roof repairs, the spray foam would not provide the desired level of weather proofing, proper drainage, and roof stability. Moreover, repairing the roof will also serve to extend the life of the other structural repairs that are part of the larger Repair Project (e.g. concrete walls).