

National Aeronautics and Space Administration



Ames Research Center
Moffett Field, California 94035

April 5, 2023

Ms. Julianne Polanco
State Historic Preservation Officer
Office of Historic Preservation
Department of Parks & Recreation
1725 23rd Street, Suite 100
Sacramento, CA 95816

Attn: Mr. Mark Beason

Subject: Section 106 Consultation for Moffett Field Site 28 Vapor Intrusion Project at Ames Research Center, Moffett Field, California (NASA_2021_1213_001)

Dear Ms. Polanco:

The National Aeronautics and Space Administration Ames Research Center (NASA ARC) requests continued consultation under Section 106 of the National Historic Preservation Act (NHPA) for the Moffett Field Site 28 Vapor Intrusion Project (project or undertaking) located at ARC at Moffett Field, California. As the lead Federal agency, NASA ARC has determined that this project constitutes an undertaking under Section 106 of the National Historic Preservation Act of 1966 (54 United States Code §306108), as amended. NASA ARC previously initiated consultation with the State Historic Preservation Officer (SHPO) on this project in December 2021. The original project addressed vapor intrusion remediation at Buildings 3, 10, 45, 126, N239, and N239A. The SHPO concurred with NASA ARC's Finding of No Adverse Effect in a letter dated January 26, 2022 (NASA_2021_1213_001). Naval Facilities Engineering Command – Southwest (NAVFAC) proposes additional vapor intrusion remediation at Buildings 15, 16, and 567.

NAVFAC retained Harris Environmental Group, Inc. to conduct a technical study for this project. The study was conducted by cultural resources professionals who meet the Secretary of the Interior's Professional Qualifications Standards (36 Code of Federal Regulations [C.F.R.] Part 61; 48 Federal Register 44738). The technical memorandum prepared by Harris Environmental Group, Inc. dated June 30, 2022, which includes a discussion of the undertaking, the Area of Potential

Effects (APE), identification efforts, the affected historic properties, and the potential effects resulting from the undertaking, is enclosed for your review.

Description of the Undertaking

Vapor intrusion (VI) occurs when aerated chemical compounds enter buildings through preferential pathways, such as floor drains and utility trenches or tunnels. Most of the VI mitigation is planned for interior spaces and minimal changes are planned for exterior elements. No excavation is anticipated to go deeper than 12 inches below any slab.

Building 15

NAVFAC proposes to seal preferential pathways of VI in the slab and subfloor from air flow and install a sub-slab depressurization (SSD) system below the slab foundation. Part of the VI mitigation will be accomplished by sealing floor drains in kitchen and bathroom areas. Vent piping will be installed at the blowers and away from HVAC inlets and windows to prevent VI back into the building. As part of the diagnostic testing, 6-inch holes were drilled in the slab and 1 cubic foot of soil excavated near the perimeter footings. During installation of the SSD, fans will be mounted just below the ceiling and secured to an interior wall using a mounting kit. Four (4)-in schedule 40 PVC piping will be attached to the outlet of each fan and extend through a penetration in the roof so that the exhaust is expelled outdoors. The PVC piping will be secured to the interior walls using strut channel and pipe clamps. Where applicable, the strut channel will be fastened to the walls using anchor bolts or drywall screws.

Building 16

NAVFAC proposes to seal preferential pathways by crack sealing along concrete seam lines and cracks and installing an SSD system. The SSD system will be similar to the SSD systems described for Building 15. The PVC risers will be installed in the interior and extend above the roof line and away from HVAC units. The SSD will be exhausted through the roof via 3-inch PVC pipe, 6 inches tall. Room 118 has a separate HVAC system not connected to the HVAC in the rest of the building. A gravity relief damper will be installed as part of modifications made to this HVAC system in order to provide fresh air intakes to prevent the buildup of negative pressures in Room 118.

Building 567

NAVFAC proposes to seal preferential pathways by crack sealing along concrete seam lines and cracks and installing an SSD system. The SSD system will be similar to the SSD systems described for Buildings 15 and 16. The PVC risers will be installed in the interior and extend above the roof line and away from HVAC units. The SSD will be exhausted through the roof via 3-inch PVC pipe, 6 inches tall.

Area of Potential Effects

Due to the visual scale of the exterior work included in the project, the APE is limited to the building footprints of Buildings 15, 16, and 567 (see enclosed memorandum, Figure 2). The vertical APE extends up to 12 inches below the surface of the buildings' foundations where limited ground disturbance is expected.

Identification Efforts

Harris Environmental conducted a records search at the Northwest Information Center (NWIC) on February 23, 2022, for the project area and a 0.25-mile radius. The records search identified two resources in the APE, Building 567 (P-43-002474) and the Naval Air Station Sunnyvale, California

(NAS Sunnyvale) Historic District (P-43-003511) (NRIS #94000045). No archaeological resources were identified in the APE.

Harris Environmental archaeologist Robert Patterson, M.A., RPA performed the fieldwork within the APE on May 3, 2022. Three resources in the APE, Buildings 15, 16, and 567, were visited.

Affected Historic Properties

A comprehensive investigation of previous archaeological studies at ARC was completed in 2017 (*NASA Ames Research Center Archaeological Resources Study* prepared by AECOM, dated February 2017). This investigation involved a desktop survey of archival resources and a geoarchaeological assessment of the entire ARC site and included an assessment of archaeological sensitivity and the potential for buried archaeological resources. The study concluded that there is low potential for more deeply buried prehistoric archaeological resources in the APE. The APE is entirely disturbed, and further archaeological survey or testing related to the undertaking is not necessary.

The APE for the undertaking is within the NAS Sunnyvale Historic District; therefore, the entire district was considered as a historic property within the APE. However, due to the scale and location of the project, only the buildings in the APE, including Buildings 15, 16, and 567, were specifically assessed for potential effects related to the district. Buildings 15 and 16 were listed in the NRHP as contributing to the NAS Sunnyvale Historic District. The APE also includes Building 567, which is less than 50 years old and was previously evaluated as not eligible for listing in the NRHP.

Name	Date	Eligibility Status
Building 15	1933	NRHP Listed – contributing to NAS Sunnyvale Historic District
Building 16	1933	NRHP Listed – contributing to NAS Sunnyvale Historic District
Building 567	1978	Not eligible (DOE-43-99-0279-0000)

Effects Assessment

For archaeological resources, minor ground disturbance will be necessary to seal preferential pathways of VI in slabs and subfloors. A review of the 2017 investigation indicates that the proposed work is not located in an area of heightened prehistoric or historic archaeological sensitivity, and the work will be limited to previously disturbed areas with low potential for deeply buried prehistoric sites. Therefore, it is not anticipated that archaeological resources will be encountered as a result of this undertaking. No potential effects on archaeological resources are anticipated.

For architectural resources, the project will minimally alter Buildings 15 and 16. The majority of the project work will be limited to interior and utilitarian/mechanical areas of the buildings, which do not contribute to the significance of the NAS Sunnyvale Historic District. Exterior work will be limited to installation of PVC piping with struts and/or clamps on exterior walls and dampers in discreet existing wall openings. The project will not alter, directly or indirectly, any of the characteristics of the historic properties in the APE that may qualify them for inclusion in the NRHP in a manner that would diminish the integrity of the properties' location, design, setting,

materials, workmanship, feeling, or association. The project will not result in any adverse effects, including cumulative, to the NAS Sunnyvale Historic District (specifically Buildings 15 and 16).

Finding of Effect

Based on the assessment conducted by qualified cultural resources professionals, NASA ARC has made a finding of No Adverse Effect for this undertaking.

Consultation Efforts

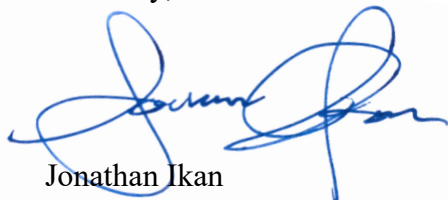
No Federally Recognized Tribes are associated with the geographical boundaries of NASA ARC or this undertaking. In the event that an inadvertent discovery of prehistoric archaeological resources or human remains of Native American origin are encountered, NASA ARC will consult with non-federally recognized representatives identified by the Native American Heritage Commission.

NASA ARC has not identified additional consulting parties for this Section 106 review but is making these findings available to the public via the NASA ARC Historic Preservation Office website (<https://historicproperties.arc.nasa.gov/section106.html>).

The purpose of this letter is to request the SHPO's concurrence on the supplemental APE, NASA ARC's determinations of eligibility pursuant 36 C.F.R. 800.4(c)(2), and NASA ARC's finding of No Adverse Effect for this undertaking pursuant to 36 C.F.R. 800.5(b). NASA ARC requests the SHPO's response within 30 days of receipt of this letter, as specified in 36 C.F.R. 800.5(c).

Please contact me at jonathan.d.ikan@nasa.gov or at (650) 604-6859 with your comments or questions.

Sincerely,



Jonathan Ikan
Center Cultural Resources Manager



Ames Research Center, MS 213-8
Moffett Field, California 94035

cc:

HQ/EMD/Ms. Klein, Ph.D., RPA

Enclosure

Memorandum, prepared by Harris Environmental, Inc., dated June 2022.