PALEONTOLOGICAL ASSESSMENT FOR THE GENERAL ATOMIC AERONAUTICAL SYSTEMS PROJECT

EL MIRAGE, SAN BERNARDINO COUNTY, CALIFORNIA

APN 0457-041-02

Prepared for:

Lilburn Corporation
1905 Business Center Drive
San Bernardino, California 92408

Submitted to:

County of San Bernardino
385 North Arrowhead Avenue
San Bernardino, California 92415

Prepared by:

BFSA Environmental Services,
a Perennial Company
14010 Poway Road, Suite A
Poway, California 92064

April 16, 2025

BFSA Environmental Services
A Perennial Company

Paleontological Database Information

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Consulting Firm:	BFSA Environmental Services, a Perennial Company 14010 Poway Road, Suite A Poway, California 92064 (858) 484-0915
Report Date:	April 16, 2025
Report Title:	Paleontological Assessment for the General Atomic Aeronautical Systems Project, El Mirage, San Bernardino County, California (APN 0457-041-02)
Prepared for:	Lilburn Corporation 1905 Business Center Drive San Bernardino, California 92408
Submitted to:	County of San Bernardino 385 North Arrowhead Avenue San Bernardino, California 92415
USGS Quadrangle:	Section 11, Township 6 North, Range 7 West of the *Shadow Mountains SE, California* (7.5-minute) USGS Topographic Quadrangle
Assessor's Parcel Number:	0457-041-02
Study Area:	76.92 acres
Key Words*:*	Paleontological assessment; Holocene alluvial deposits; low paleontological resource sensitivity; monitoring is not recommended.

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I. INTRODUCTION AND LOCATION

This paleontological resource assessment has been completed for the General Atomic Aeronautical Systems Project, located at 73 El Mirage Airport Road, northeast of the intersection of Linson Street and Tanner Road, within the unincorporated community of El Mirage in the Mojave Desert Region of unincorporated San Bernardino County, California (Figures 1 and 2). The 76.92-acre project (Assessor's Parcel Number [APN] 0457-041-02) includes a portion of the currently active El Mirage Field Adelanto Airport. The project is situated within Section 11, Township 6 North, Range 7 West, on the United States Geological Survey (USGS) *Shadow Mountains SE, California* (7.5-minute) Quadrangle (see Figure 2).

The proposed project, Phase 1.3 of upgrades being proposed at the facility, consists of the development of a new hangar building, ground control building, stockroom, and parking, along with associated infrastructure within the northern half of APN 0457-041-02, which was previously impacted by past grading and clearing (Figure 3). According to site plans by Parkway C&A LP, dated February 21, 2025, the proposed buildings are an extension of the El Mirage Airport master plan and will be constructed as pre-engineered metal structures on a slab-on-grade concrete foundation. Additional proposed work includes the installation of concrete pads for equipment staging. In building construction areas, Stone (2018) and Merrill and Burns (2024) recommended grading to a depth of 36 inches below planned footing bottoms.

As the lead agency, the County of San Bernardino has required the preparation of a paleontological assessment to evaluate the project's potential to yield paleontological resources. The paleontological assessment of the project included a review of paleontological literature and fossil locality records in the area, a review of the underlying geology, and recommendations to mitigate impacts to potential paleontological resources, if necessary.

II. REGULATORY SETTING

The California Environmental Quality Act (CEQA), which is patterned after the National Environmental Policy Act, is the overriding environmental policy that sets the requirement for protecting California's paleontological resources. CEQA mandates that governing permitting agencies (lead agencies) set their own guidelines for the protection of nonrenewable paleontological resources under their jurisdiction.

State of California

Under "Guidelines for Implementation of the California Environmental Quality Act," as amended in December 2018 (California Code of Regulations [CCR] Title 14, Division 6, Chapter 3, Sections 15000 et seq.), procedures define the types of activities, persons, and public agencies required to comply with CEQA. Section 15063 of the CCR provides a process by which a lead agency may review a project's potential impact to the environment, whether the impacts are significant, and provide recommendations, if necessary.

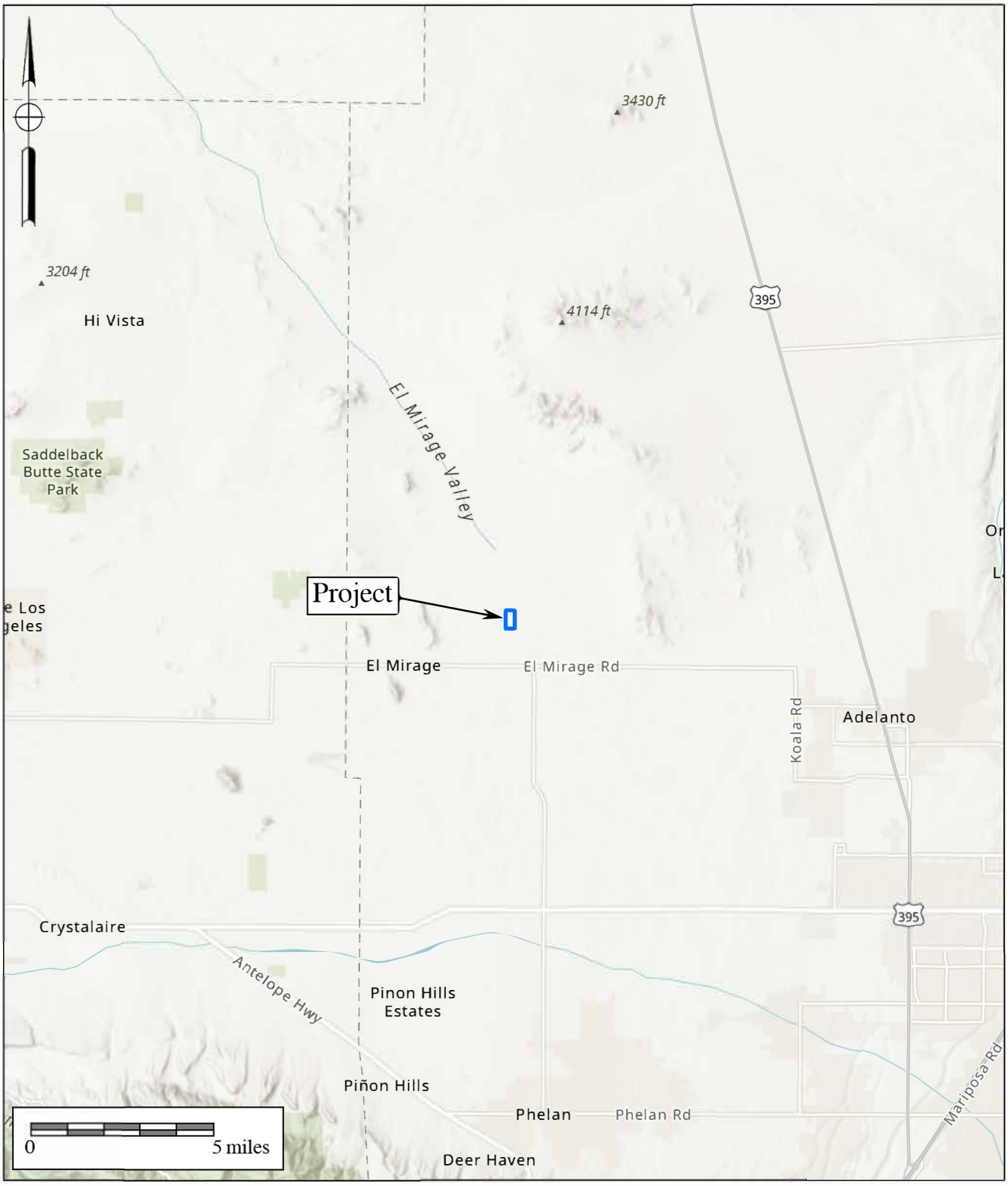

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Figure 1

General Location Map

The General Atomic Aeronautical Systems Project

Esri World Topographic Map

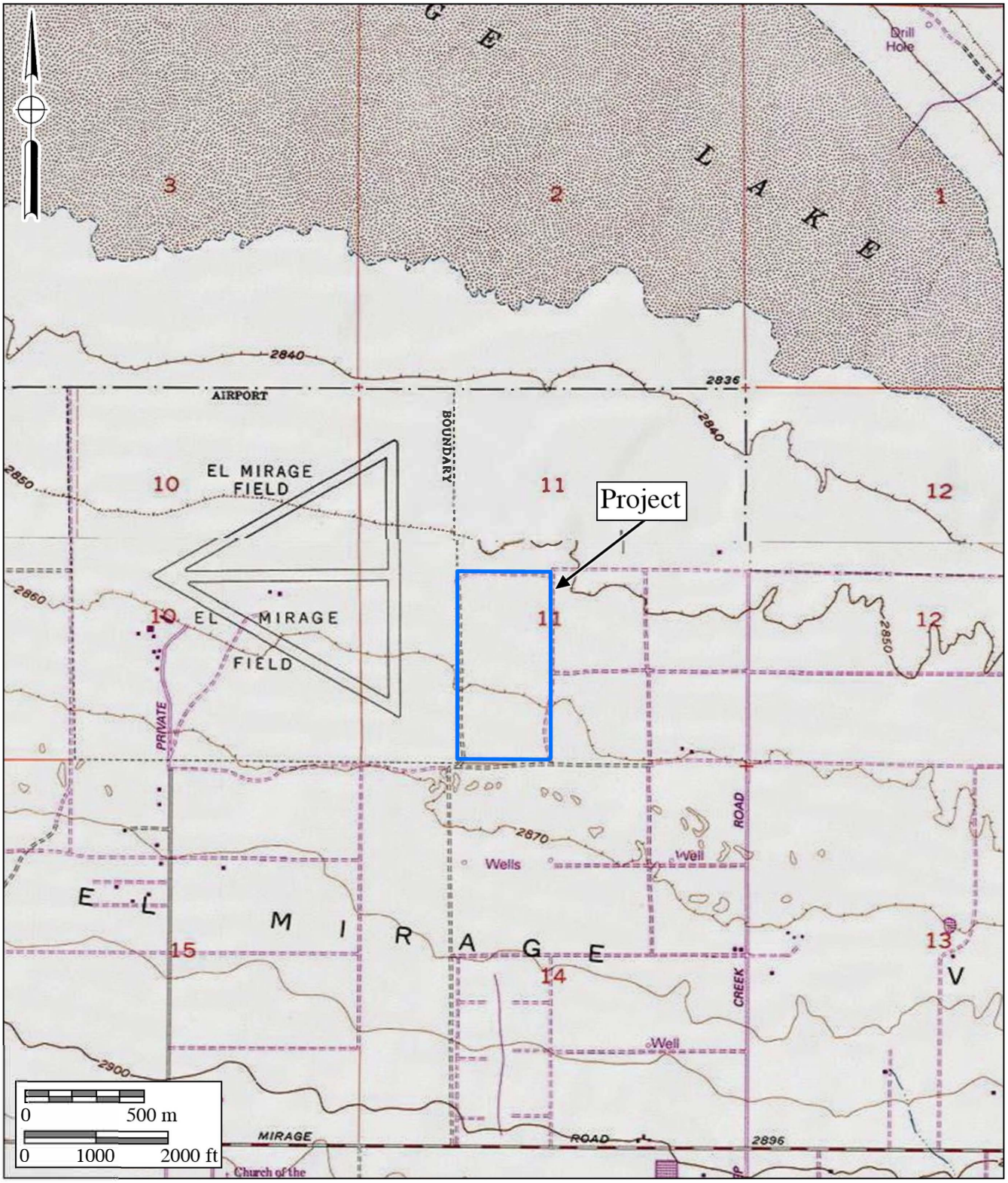

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Figure 2

Project Location Map

The General Atomic Aeronautical Systems Project

USGS *Shadow Mountains SE* and *Shadow Mountains* Quadrangles (7.5-minute series)

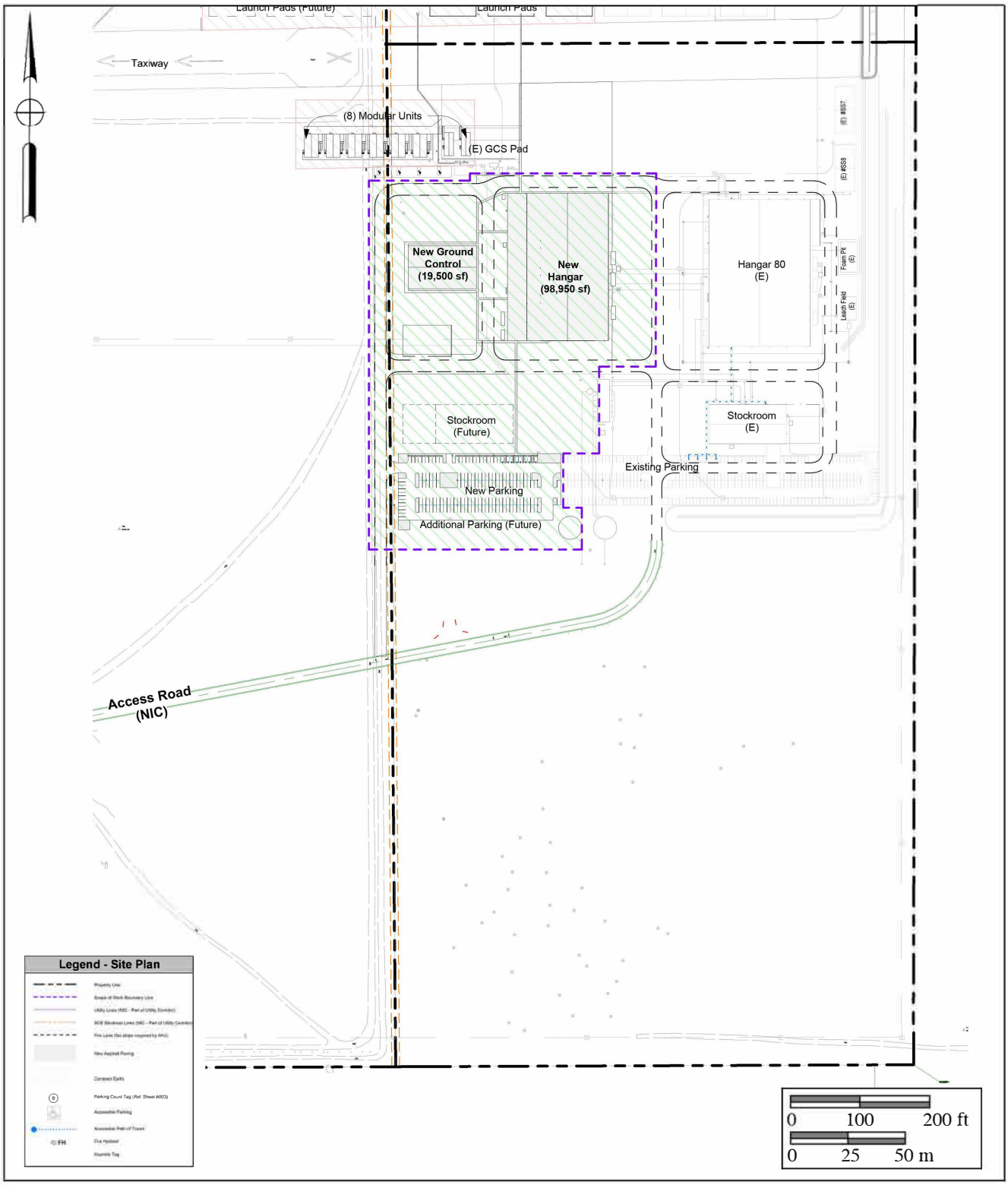

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Figure 3
Site Plan
The General Atomic Aeronautical Systems Project

In CEQA's Environmental Checklist Form, a question to respond to is, "Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?" (Appendix G, Section VII, Part f). This is to ensure compliance with California Public Resources Code Section 5097.5, the law that protects nonrenewable resources including fossils, which is paraphrased below:

a) A person shall not knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands.
b) As used in this section, "public lands" means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof.
c) A violation of this section is a misdemeanor.

County of San Bernardino

The County of San Bernardino 2007 Development Code has developed criteria for applying guidelines to preserve and protect nonrenewable paleontological resources (County of San Bernardino 2019). In Chapter 82.20, the "Paleontologic Resources (PR) Overlay" of the Development Code, purpose, location requirements, development standards, and paleontologist qualifications are described in Sections 82.20.010 through 82.20.040, respectively (County of San Bernardino 2019).

III. GEOLOGY

The General Atomic Aeronautical Systems Project is located in El Mirage Valley, part of the greater Victor Valley in the Mojave Desert Geomorphic Province of southern California. The project is situated south of the dry lakebed of El Mirage Lake (Figure 4). Miller and Bedford (2000) deduced that the timing of El Mirage Lake was restricted to the Holocene. The playa muds of the dry lake grade outward to other map units, as indicated by increasing eolian and alluvial materials. Lacustrine sediments of the lake, said to be 22 feet thick, overlie alluvial fan and valley axis sediments of the Sheep Creek fan and adjacent fans north of the playa.

Geologically, most of the project is mapped as Holocene-aged young eolian and alluvial fan deposits, described as eolian sand sheets and mounds with subordinate young alluvium, with a thickness of one to four meters (yellow areas labeled "Qyef" on Figure 4, after Miller and Bedford 2000). Holocene young alluvial fan and eolian deposits occupy the southwestern corner of the parcel (pale amber areas labeled "Qyfe"). These geologic units are considered as "hybrid"

mixtures of eolian and alluvial sediments.

The project lies at the distal margin of the Sheep Creek fan, a very large alluvial fan originating near Wrightwood in the San Gabriel Mountains, and is almost entirely composed of debris from the Pelona Schist. Eroded alluvial deposits of the Sheep Creek fan are widespread beneath the recently active eolian and alluvial deposits that cover the project. During the (early?) Holocene, transgressive alluvium from the Sheep Creek fan dammed the fluvial outlets that formerly drained El Mirage Valley (Miller and Bedford 2000).

In a geotechnical investigation for the facility, Stone (2018) indicated the surficial sediments at the project consist of five to 15 feet of silty and clayey sand and sandy silt. These deposits are mostly underlain by silty sand, poorly graded sand with silt, and poorly graded sand with clay to approximately 25 feet deep. Below that, within the groundwater aquifer, alternating layers of silty sand, poorly graded sand with silt, and occasional clay horizons to the maximum depth explored characterize the project. Merrill and Burns (2024) indicate deposits of artificial fill less than two feet thick are present in "localized" areas, but they do not describe where the artificial fill is located, nor are they indicated in any boring logs in that report or in Stone (2018).

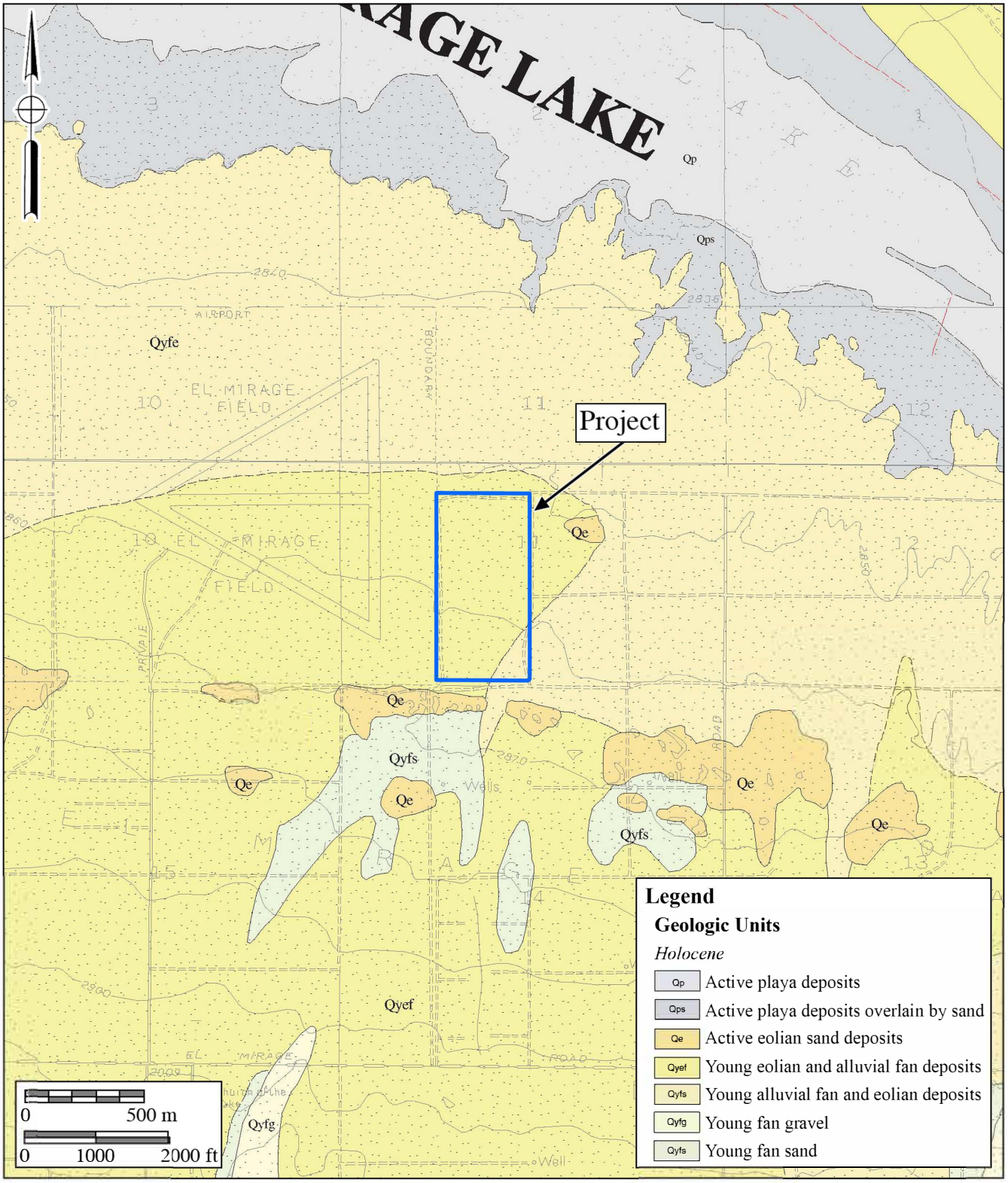

Figure 4

Geologic Map

The General Atomic Aeronautical Systems Project

Geology after Miller and Bedford (2000)

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IV. PALEONTOLOGICAL RESOURCES

Definition

Paleontological resources are the remains of prehistoric life that have been preserved in the geologic strata. These remains are called fossils and include bones, shells, teeth, and plant remains (including their impressions, casts, and molds) in the sedimentary matrix, as well as trace fossils such as footprints and burrows. Fossils are considered older than 5,000 years of age (Society of Vertebrate Paleontology 2010) but may include younger remains (subfossils) when viewed in the context of local extinction of the organism or habitat. Fossils are considered a nonrenewable resource under state and local guidelines (Section II of this report).

Fossil Locality Records Search

A paleontological literature review and collections and locality records search was conducted for the project by the Division of Geological Sciences at the San Bernardino County Museum (SBCM) (Kottkamp 2025; Appendix B), and solicited data from published and unpublished paleontological literature (Reynolds 1989; Jefferson 1991; Scott and Cox 2008). The resulting locality records search did not identify any previously recorded fossil localities within or near the project.

According to Kottkamp (2025), the closest-known fossil localities in a similar geologic setting as the project are located approximately eight miles east, near Adelanto, and are variably composed of the remains of Holocene and late Pleistocene-aged rodents, camels, horses, and other unidentified mammals (SBCM locality numbers (locs.) 1.121.30 – 32). Kottkamp (2025) indicates that the Holocene sediments mapped at the project are unlikely to yield fossils, although they may have the potential to contain subfossils. However, the Holocene deposits likely overlie Pleistocene deposits that are known to yield fossils in southern California.

Miller and Bedford (2000) reported on the presence of a deposit of dark brown mud containing abundant plant remains, apparently representing (early?) Holocene marshy deposits, along the northeast edge of Gray Mountain, just two miles west of the project, indicating possible remnant shorelines and lake deposits about 27 feet above the playa bed surface. However, alluvial and lacustrine clays in a two-meter-deep pit dug in the lake playa did not contain ostracodes (“water fleas”) or other lake fauna.

Project Survey

BFSA personnel, under the direction of Principal Investigator Todd A. Wirths, M.S., P.G., conducted a pedestrian survey of the project on March 18, 2025. The field methodology employed for the project included walking evenly spaced survey transects set approximately 20 meters apart while visually inspecting the ground surface. All potentially sensitive areas where paleontological resources might be located were closely inspected. Access was not granted to survey the tarmac, parking lot, or areas where the airport is actively operating in the northeast portion of the project. However, the majority of this area was developed between 2018 and 2020

and contains little exposed natural ground. This portion of the property contains a hangar, two office buildings, and several ancillary structures constructed between 2018 and 2020. Visibility within the remainder of the northern half of the project was characterized as moderate to good, though at times hindered by pockets of dense vegetation. Other noted impacts to the northern half of the property include the addition of a water tower and subsurface utilities between 2018 and 2020.

Visibility within the southern half of the project was considered moderate, also at times hindered by vegetation. The southern and eastern peripheries of the southern half of the project have been cleared and graded for vehicular access. Additionally, an extension of El Mirage Airport Road, built between 2018 and 2020, runs through the center of the project and ends at the parking lot located in the northern half of the project. Other noted impacts in the southern half of the project include dirt roads. No paleontological resources, or evidence suggesting the presence of paleontological resources, were observed during the survey.

V. PALEONTOLOGICAL SENSITIVITY

Overview

The degree of paleontological sensitivity of any particular area is based on a number of factors, including the documented presence of fossiliferous resources on a site or in nearby areas, the presence of documented fossils within a particular geologic formation or lithostratigraphic unit, and whether or not the original depositional environment of the sediments is one that might have been conducive to the accumulation of organic remains that may have become fossilized over time. Holocene alluvium is generally considered to be geologically too young to contain significant nonrenewable paleontological resources (*i.e.,* fossils) and is thus typically assigned a low paleontological sensitivity. Pleistocene (over 11,700 years old) alluvial and alluvial fan deposits in the Mojave Desert and Inland Empire, however, are known to yield important terrestrial vertebrate fossils, such as extinct mammoths, mastodons, giant ground sloths, extinct species of horse, bison, camel, saber-toothed cats, and others (Jefferson 1991; Scott and Cox 2008). These Pleistocene sediments are accorded a high paleontological resource sensitivity. Fossils from desert paleosols (ancient soils) have been documented from San Bernardino County (Stewart and Hakel 2016, 2017).

Professional Standards

The Society of Vertebrate Paleontology (2010) has drafted guidelines that include four categories of paleontological sensitivity for geologic units (formations) that might be impacted by a proposed project, as listed below:

- *High Potential:* Rock units from which vertebrate or significant invertebrate, plant, or trace fossils have been recovered.
- *Undetermined Potential:* Rock units for which little information is available

concerning their paleontological content, geologic age, and depositional environment, and that further study is needed to determine the potential of the rock unit.

- *Low Potential:* Rock units that are poorly represented by fossil specimens in institutional collections or based on a general scientific consensus that only preserve fossils in rare circumstances.
- *No Potential:* Rock units that have no potential to contain significant paleontological resources, such as high-grade metamorphic rocks and plutonic igneous rocks.

Based on these criteria, the Holocene-aged young eolian and alluvial fan deposits mapped at the project may be considered to have a low potential. Lacustrine deposits of ancient El Mirage Lake may be present below the young eolian and alluvial fan deposits and the Sheep Creek fan deposits. Potential subfossils deposited in conjunction with these lacustrine deposits would be considered significant. However, there are no known subfossils from the playa sediments of El Mirage Lake, such as remains of small mammals and reptiles, other than plant remains from a nearby ancient shoreline (Miller and Bedford 2000). This could be attributed to a lack of data rather than a lack of fossils.

County of San Bernardino Assessment

The County of San Bernardino regards Holocene alluvial sediments as having a low to high paleontological sensitivity (Bell 2018). Typically, these deposits are too young to produce fossils but, with depth, may increase in age to at least 5,000 years old (Society of Vertebrate Paleontology 2010). Therefore, these deeper deposits have a high paleontological sensitivity.

The County of San Bernardino applies its "[PR] Overlay" guideline to those areas where paleontological resources are known to occur or are likely to be present by using fossil location criteria reported by the SBCM, the University of California Museum of Paleontology (Berkeley), the Los Angeles County Natural History Museum, or other institutions (County of San Bernardino 2019, Section 82.20.020). The following criteria are to be used to evaluate a project's compliance with the intent of the overlay in Section 82.20.030 (County of San Bernardino 2019):

a. **Field survey before grading.** In areas of potential but unknown sensitivity, field surveys before grading shall be required to establish the need for paleontologic monitoring.
b. **Monitoring during grading.** A project that requires grading plans and is located in an area of known fossil occurrence within the overlay, or that has been demonstrated to have fossils present in a field survey, shall have all grading monitored by trained paleontologic crews working under the direction of a qualified professional, so that fossils exposed during grading can be recovered and preserved. Paleontologic monitors shall be equipped to salvage fossils as they are unearthed to avoid construction delays, and to remove

samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. Monitors shall be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. Monitoring is not necessary if the potentially fossiliferous units described for the property in question are not present, or if present are determined upon exposure and examination by qualified paleontologic personnel to have low potential to contain fossil resources.

c. **Recovered specimens.** Qualified paleontologic personnel shall prepare recovered specimens to a point of identification and permanent preservation, including washing of sediments to recover small invertebrates and vertebrates. Preparation and stabilization of all recovered fossils is essential in order to fully mitigate adverse impacts to the resources.

d. **Identification and curation of specimens.** Qualified paleontologic personnel shall identify and curate specimens into the collections of the Division of Geological Sciences, San Bernardino County Museum, an established, accredited museum repository with permanent retrievable paleontologic storage. These procedures are also essential steps in effective paleontologic mitigation and CEQA compliance. The paleontologist must have a written repository agreement in hand prior to the initiation of mitigation activities. Mitigation of adverse impacts to significant paleontologic resources is not considered complete until curation into an established museum repository has been fully completed and documented.

e. **Report of findings.** Qualified paleontologic personnel shall prepare a report of findings with an appended itemized of specimens. A preliminary report shall be submitted and approved before granting of building permits, and a final report shall be submitted and approved before granting of occupancy permits. The report and inventory, when submitted to the appropriate lead agency, along with confirmation of the curation of recovered specimens into the collections of the San Bernardino County Museum, will signify completion of the program to mitigate impacts to paleontologic resources.

f. **Mitigation financial limits.** In no event shall the County require the applicant to pay more for mitigation as required by Subsections (b), (c), and (d), above within the site of the project than the following amounts:
   1. One-half of one percent of the projected cost of the project, if the project is a commercial or industrial project;
   2. Three-fourths of one percent of the projected cost of the project for a housing project consisting of one unit; and
   3. If a housing project consists of more than one unit, three-fourths of one percent of the projected cost of the first unit plus the sum of the following:
      A. $200 per unit for any of the next 99 units;

B. $150 per unit for any of the next 400 units; and
C. $100 per unit for units in excess of 500.

According to Section 82.20.040, a qualified paleontologist working within the County jurisdiction is required to meet the following criteria (County of San Bernardino 2019):

A. **Education**: An advanced degree (master's or higher) in geology, paleontology, biology or related disciplines (exclusive of archaeology).
B. **Professional experience**: At least five years professional experience with paleontologic (not including cultural) resources, including the collection, identification and curation of the resources.

VI. CONCLUSIONS AND RECOMMENDATIONS

The geology at the project consists of Holocene-aged, young eolian and alluvial fan deposits mapped at the surface, composed of silty and clayey sand and sandy silts. These deposits have a low paleontological sensitivity. Grading at the project is planned at 36 inches below the bottom of the proposed building foundations, which are slab-on-grade concrete pads. This depth is too shallow to reach any of the underlying alluvial sediments of the Sheep Creek fan or the deeper lacustrine sediments of ancient El Mirage Lake.

VII. CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this paleontological report, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief and have been compiled in accordance with CEQA criteria.

April 16, 2025

Todd A. Wirths, M.S., P.G. Date
Principal Paleontologist
California Professional Geologist No. 7588

VIII. REFERENCES

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APPENDIX A

Qualifications of Key Personnel

Todd A. Wirths, MS, PG No. 7588

Principal Paleontologist

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BFSA Environmental Services
A Perennial Company

Education

Master of Science, Geological Sciences, San Diego State University, California **1995**

Bachelor of Arts, Earth Sciences, University of California, Santa Cruz **1992**

Professional Certifications

California Professional Geologist #7588, 2003
Riverside County Approved Paleontologist
San Diego County Qualified Paleontologist
Orange County Certified Paleontologist
OSHA HAZWOPER 40-hour trained; current 8-hour annual refresher

Professional Memberships

Board member, San Diego Geological Society
San Diego Association of Geologists; past President (2012) and Vice President (2011)
South Coast Geological Society
Southern California Paleontological Society

Experience

Mr. Wirths has more than a dozen years of professional experience as a senior-level paleontologist throughout southern California. He is also a certified California Professional Geologist. At BFSA, Mr. Wirths conducts on-site paleontological monitoring, trains and supervises junior staff, and performs all research and reporting duties for locations throughout Los Angeles, Ventura, San Bernardino, Riverside, Orange, San Diego, and Imperial Counties. Mr. Wirths was formerly a senior project manager conducting environmental investigations and remediation projects for petroleum hydrocarbon-impacted sites across southern California.

Selected Recent Reports

2019 *Paleontological Assessment for the 10575 Foothill Boulevard Project, City of Rancho Cucamonga, San Bernardino County, California*. Prepared for T&B Planning, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2019 *Paleontological Assessment for the MorningStar Marguerite Project, Mission Viejo, Orange County, California.* Prepared for T&B Planning. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2019 *Paleontological Monitoring Report for the Nimitz Crossing Project, City of San Diego.* Prepared for Voltaire 24, LP. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2019 *Paleontological Resource Impact Mitigation Program (PRIMP) for the Jack Rabbit Trail Logistics Center Project, City of Beaumont, Riverside County, California.* Prepared for JRT BP 1, LLC. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2020 *Paleontological Monitoring Report for the Oceanside Beachfront Resort Project, Oceanside, San California.* Prepared for S.D. Malkin Properties. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2020 *Paleontological Resource Impact Mitigation Program for the Nakase Project, Lake Forest, Orange County, San California.* Prepared for Glenn Lukos Associates, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2020 *Paleontological Resource Impact Mitigation Program for the Sunset Crossroads Project, Banning, Riverside County*. Prepared for NP Banning Industrial, LLC. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2020 *Paleontological Assessment for the Ortega Plaza Project, Lake Elsinore, Riverside County*. Prepared for Empire Design Group. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2020 *Paleontological Resource Record Search Update for the Green River Ranch III Project, Green River Ranch Specific Plan SP00-001, City of Corona, California*. Prepared for Western Realco. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2020 *Paleontological Assessment for the Cypress/Slover Industrial Center Project, City of Fontana, San Bernardino County, California*. Prepared for T&B Planning, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

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2021 *Paleontological Assessment for the Manitou Court Logistics Center Project, City of Jurupa Valley, Riverside County, California*. Prepared for Link Industrial. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2021 *Paleontological Resource Impact Mitigation Program for the Del Oro (Tract 36852) Project, Menifee, Riverside County*. Prepared for D.R. Horton. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2021 *Paleontological Assessment for the Alessandro Corporate Center Project (Planning Case PR-2020-000519), City of Riverside, Riverside County, California*. Prepared for OZI Alessandro, LLC. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2021 *Paleontological Monitoring Report for the Boardwalk Project, La Jolla, City of San Diego*. Prepared for Project Management Advisors, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

APPENDIX B

Paleontological Locality Search Letter

2024 Orange Tree Lane, Redlands, California 92374 | Phone: 909.798.8608
www.SBCounty.gov

SAN BERNARDINO COUNTY

Museum
Division of Earth Science

David Myers
Director

Scott Kottkamp
Curator of Earth Science

April 11th, 2025

BFSA Environmental Services
Attn: Todd Wirths
14010 Poway Road
Poway, CA 92064

PALEONTOLOGY RECORDS REVIEW for proposed site of General Atomic Aeronautical Systems project, El Mirage, San Bernardino County, California

Dear Mr. Wirths,

The Division of Earth Science of the San Bernardino County Museum (SBCM) has completed a record search for the above-named project in San Bernardino County, California. The proposed project site (East Avenue Q) is found just south of El Mirage Dry Lake near the unincorporated community of El Mirage, California, as shown on the United States Geological Survey (USGS) 7.5-minute Shadow Mountains SE quadrangle.

Geologic mapping of that region done by Dibblee and Minch (2008) indicates that the project area occurs atop recent alluvial fan sediments of Holocene age (Qa) in its southern extent and playa clays and silts (Qc) in its northern half. Qa is comprised of poorly sorted gravel, sand, and silt, while Qc is comprised of mixed clay and fine silt. Both units are unlikely to be fossiliferous, though they may contain subfossils. Qa often overlies older alluvial deposits of Pleistocene age (Qoa) in southern California. Such older alluvial deposits are often fossiliferous, yielding the remains of †*Mammut pacificus*, †*Mammuthus columbi*, †*Smilodon* sp., Camelidae, Equidae, *Bison* sp., and ground sloths, as well as microfossils including rodents and mollusks. However, there are no surface exposures of Qoa within a mile of the project site. There is an outcrop of granitic rock (g) west of the project site, which is a source of the local alluvium and is not fossiliferous.

For this review, I conducted a search of the Regional Paleontological Locality Inventory (RPLI) at the SBCM. The results of this search indicate that no SBCM localities occur within the project area, nor within a 1-mile radius of its perimeter. The nearest paleontological localities to the project site are SBCM 1.121.30 – 32, approximately 8 miles east of the project site. Permineralized bones, enamel, and subfossils were surface collected from late Pleistocene to Holocene age alluvium at each of these localities. Fossils from these localities are all in fragmental condition, except for a single complete *Ammospermophilus leucurus* right proximal humerus. Collected taxa include *Ammospermophilus leucurus*, Camelidae indet., Equidae indet., and Mammalia indet.

This records search covers only the paleontological records of the San Bernardino County Museum. It is not intended to be a thorough paleontological survey of the proposed project area covering other institutional records, a literature survey, or any potential on-site survey. Please do not hesitate to contact us with any further questions that you may have.

Sincerely,

Scott Kottkamp

Scott Kottkamp, Curator of Earth Science
Division of Earth Science
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Literature Cited

Dibblee, T.W. and Minch, J.A. 2008. Geologic map of the Shadow Mountains & Victorville 15 minute quadrangles, San Bernardino & Los Angeles Counties, California. Dibblee Geological Foundation. Dibblee Foundation Map DF-387. Scale 1:62,500.
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