

PALEONTOLOGICAL ASSESSMENT FOR THE WESTPORT CUTTER COVINA SELF STORAGE PROJECT

**529 CUTTER WAY, CITY OF COVINA
LOS ANGELES COUNTY, CALIFORNIA**

APNs 8434-013-010 and 8434-012-091

Prepared on Behalf of:

**EPD Solutions, Inc.
3333 Michelson Drive, Suite 500
Irvine, California 92612**

Prepared for:

**City of Covina
125 East College Street
Covina, California 91723**

Prepared by:

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February 15, 2024; Revised June 28, 2024



BFSA Environmental Services
A Perennial Company

Paleontological Database Information

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<i>Report Date:</i>	February 15, 2024; Revised June 28, 2024
<i>Report Title:</i>	Paleontological Assessment for the Westport Cutter Covina Self Storage Project, 529 Cutter Way, City of Covina, Los Angeles County, California
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<i>Assessor's Parcel Numbers:</i>	8434-013-010 and 8434-012-091
<i>USGS Quadrangle:</i>	Section 15, Township 1 South, Range 10 West of the USGS <i>Baldwin Park, California</i> (7.5-minute) Quadrangle
<i>Study Area:</i>	2.55 acres
<i>Key Words:</i>	Paleontological assessment; City of Covina; Holocene alluvial deposits; monitoring not recommended.

Table of Contents

<u>Section</u>	<u>Page</u>
I. INTRODUCTION AND LOCATION.....	1
II. REGULATORY SETTING	1
<i>State of California</i>	1
<i>City of Covina</i>	4
III. GEOLOGY	4
IV. PALEONTOLOGICAL RESOURCES.....	6
<i>Definition</i>	6
<i>Fossil Locality Records Search</i>	6
<i>Project Survey</i>	6
V. PALEONTOLOGICAL SENSITIVITY.....	7
<i>Overview</i>	7
<i>Professional Standards</i>	7
VI. CONCLUSIONS AND RECOMMENDATIONS	7
VII. CERTIFICATION.....	8
VIII. REFERENCES.....	8

Appendices

Appendix A – Qualifications of Key Personnel
Appendix B – Paleontological Locality Records Search

List of Figures

<u>Figure</u>	<u>Page</u>
Figure 1 General Location Map	2
Figure 2 Project Location Map.....	3
Figure 3 Geologic Map.....	5

I. INTRODUCTION AND LOCATION

A paleontological resource assessment has been completed for the Westport Cutter Covina Self Storage Project, located at 529 Cutter Way, north of San Bernardino Road, in the westernmost area of the city of Covina, Los Angeles County, California (Figure 1, attached). The 2.55-acre project consists of two parcels, identified as Assessor's Parcel Numbers (APNs) 8434-013-010 and 8434-012-091. On the U.S. Geological Survey (USGS) *Baldwin Park, California* (7.5-minute) topographic quadrangle map, the project is located in Section 15, Township 1 South, Range 10 West of the San Bernardino Baseline and Meridian (Figure 2, attached). As proposed, the project applicant plans to construct a four-story public self-storage facility.

According to the geotechnical consultant, a minimum cut of two to three feet deep was recommended. However, the presence of undocumented fill and unstable soils necessitated remedial overexcavation activities. Two options were recommended to accommodate the planned building. For Option 1, areas within the proposed building pad area would be overexcavated to a depth of at least 12 feet deep. Option 2 consists of an overexcavation of five feet deep, followed by the drilling of borings to at least 20 to 25 feet deep for the construction of rammed aggregate columns (RACs) that would be used as an alternative to Option 1 to support the proposed building (Frias and Trazo 2023).

As the lead agency, the City of Covina 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 for a previous project 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 regulation 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 on the environment, determine whether the impacts are significant, and provide recommendations, if necessary.

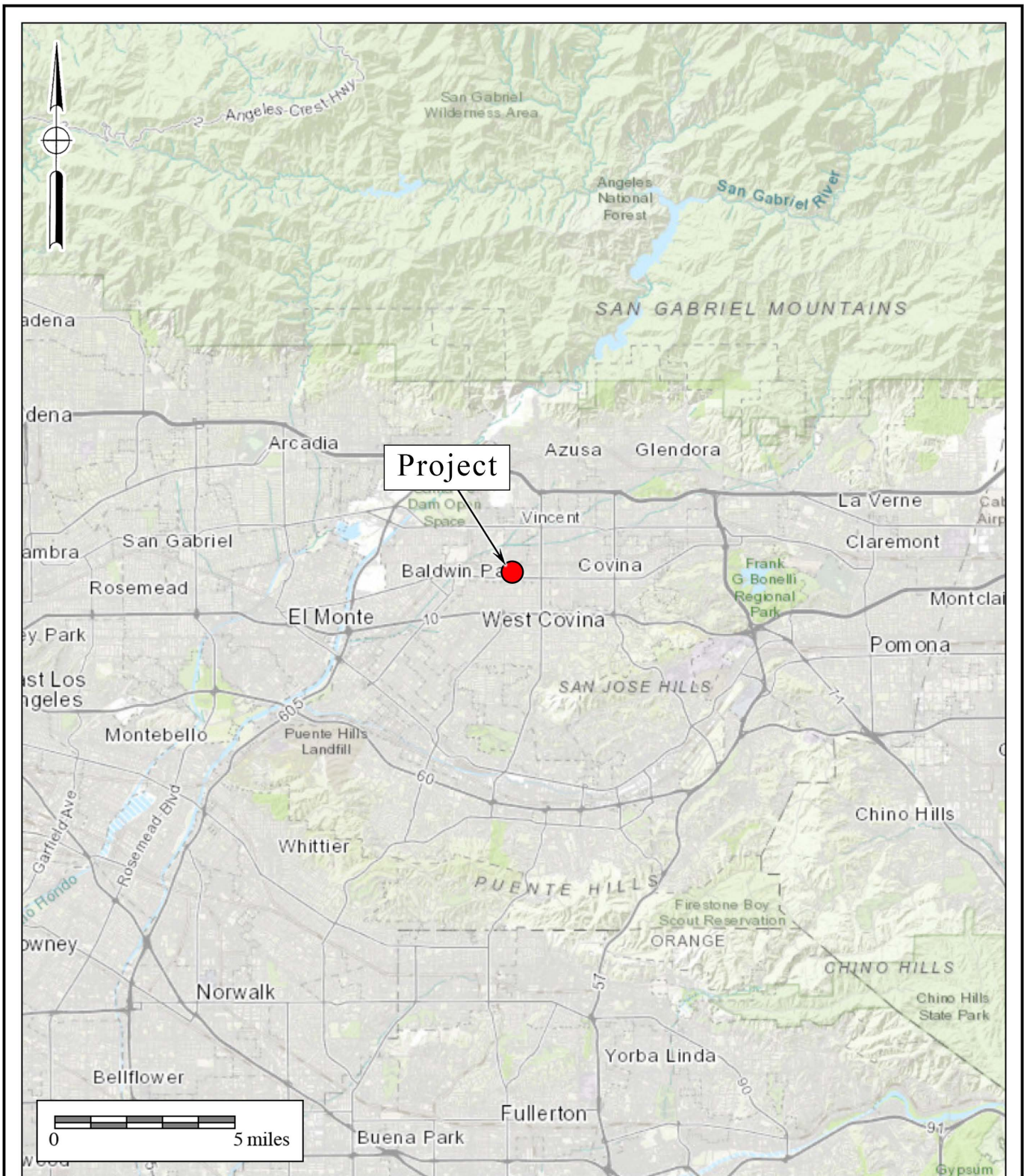


Figure 1
General Location Map
 The Westport Cutter Covina Self Storage Project
 ESRI

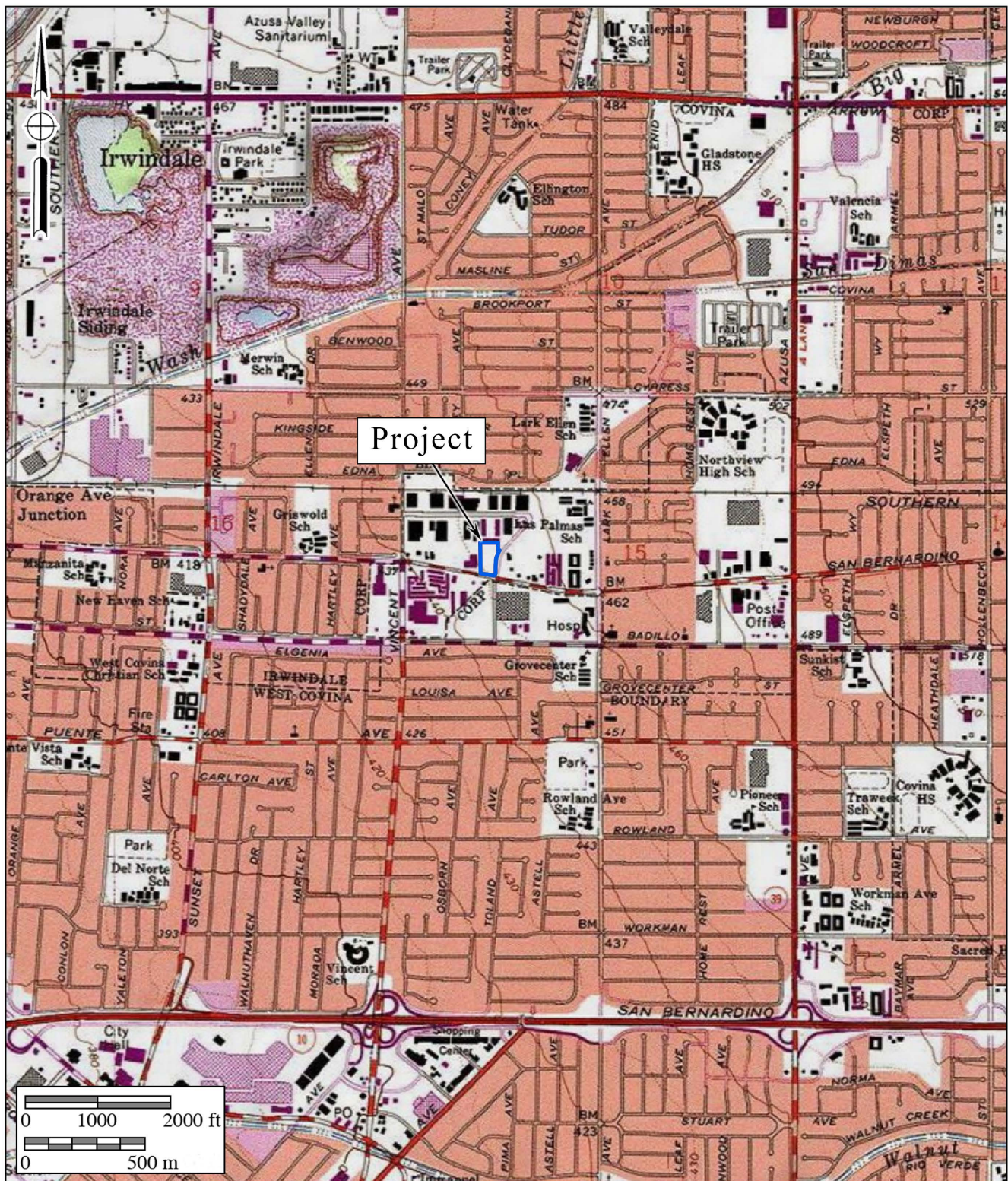


Figure 2
Project Location Map
 The Westport Cutter Covina Self Storage Project
 USGS Baldwin Park Quadrangle (7.5-minute series)

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.

City of Covina

The General Plan of the City of Covina (City of Covina 1998, 2000) does not specifically address paleontological resources, however the primary goal of the city is to provide "A physical environment that provides for the housing, employment, business, service, recreational, social, educational, cultural, and entertainment needs of and maintains and enhances a high quality of life for its residents" (City of Covina 2000). Policy 17 states that the city shall "Identify and encourage the retention and preservation of significant architectural, historical, and/ or cultural resources" (City of Covina 2000: A-18).

III. GEOLOGY

The project is located within the San Gabriel Valley, a part of the northeastern block of the Los Angeles Basin, characterized by thick successions of Miocene and Quaternary rocks (Yerkes et al. 1965). According to geologic mapping by Tan (2000), the project is in sandy, Holocene-aged alluvial fan and valley deposits (pale tan area labeled "Qyfa" on Figure 3). These deposits are underlain by Pleistocene-aged sediments at an unknown depth.



Figure 3
Geologic Map
The Westport Cutter Covina Self Storage Project
Geology after Tan (2000)

A geotechnical investigation was conducted for the project by Southern California Geotechnical (Frias and Trazo 2023). The investigation found that the project is covered by approximately 2.5 to three feet of artificial fill. The fill soils were underlain by alluvium to the total depth explored of approximately 50 feet deep. The alluvium generally consisted of loose to dense silty fine sands and fine sands with varying medium to coarse sand and fine gravel content. Occasional layers of loose to very dense, fine sandy silts, fine to medium sands, gravelly fine to coarse sands, and stiff to very stiff clayey silts were encountered. The authors did not speculate on the geologic age of the alluvium.

IV. PALEONTOLOGICAL RESOURCES

Definition

Paleontological resources are the remains of prehistoric life that have been preserved in 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, for example. Fossils are considered a nonrenewable resource under state and local guidelines (see Section II).

Fossil Locality Records Search

A fossil locality records search was performed for a nearby prior project in Covina by the Los Angeles County Museum of Natural History (LACM) (Bell 2023; Appendix B). The records search indicates the nearest-known fossil localities held by the LACM are east, west, and south of the current project, several miles away, in Miocene and Pleistocene-aged rock units.

Based on published literature, the nearest-known locality was found less than one mile north of the project at the former Manning Brothers materials quarry in Irwindale, and consists of mastodon remains from Pleistocene deposits (LACM locality no. 1807; Jefferson 1991). The fossil specimen was found 115 to 120 feet deep at the quarry (McLeod 2018).

Project Survey

Personnel from BFS Environmental Services, a Perennial Company, under the direction of Principal Investigator Todd A. Wirths, conducted a pedestrian survey of the project on January 24, 2024. The field methodology employed for the project included an intensive reconnaissance survey consisting of a series of 1.5-meter transects conducted across the project alignment. A building, driveway, and paved parking area were present, with grasses and trees covering the ground surface. 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 upon 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 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 (more than 11,700-year-old) alluvial deposits in Los Angeles County, however, often yield important Ice Age terrestrial vertebrate fossils such as extinct rodents, mammoths, mastodons, giant ground sloths, extinct species of horse, bison, camel, saber-toothed cats, and others (Jefferson 1991). These Pleistocene sediments are thus accorded a high paleontological resource sensitivity.

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 upon 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.

Using these criteria, based on the young geologic age of the deposits at the project, a low paleontological sensitivity may be applied to the surficial sediments mapped at the project.

VI. CONCLUSIONS AND RECOMMENDATIONS

Based on the young (Holocene) age of the deposits mapped at the project, significant paleontological resources are unlikely to be encountered during earth-disturbing activities. Pleistocene deposits underlie the Holocene surficial deposits, however, the thickness of the

Holocene deposits at the project is not known. A nearby Pleistocene fossil locality in Irwindale suggests Holocene deposits are rather thick (see Section IV). No other fossil localities are known within several miles of the project.

The geotechnical report for the project did not cite any published geologic map for the project, nor did the report cite any relevant published geologic literature, other than for earthquake modeling and liquefaction studies. Typically, however, geotechnical reports use the modifiers “old” and “very old” to denote relative geologic age in general terms, for Pleistocene-aged alluvial deposits, in line with associated published maps. The absence of these modifiers is typically applied to Holocene-aged alluvial deposits. Frias and Trazo (2023) did not use modifiers for the sediments encountered at the project. Based on these points, it is assumed all the strata encountered in their investigation are Holocene in age. The substandard consolidation of the native soils to at least 12 feet deep supports this conclusion, as Holocene deposits would not be expected to test as “very dense.” Holocene deposits are typically poorly consolidated to unconsolidated, as is reflected here.

The presence of Holocene-aged alluvial deposits at the project, and the lack of any known fossil specimens or fossil localities within a several-mile radius encompassing the project supports the conclusion that paleontological monitoring is *not* recommended during earth-disturbing activities at the Westport Cutter Covina Self Storage Project. A Paleontological Resource Impact Mitigation Program is not warranted.

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.



June 28, 2024

Todd A. Wirths

Date

Senior Paleontologist

California Professional Geologist No. 7588

VIII. REFERENCES

Bell, A. 2023. Paleontological resources for the 747 N Barranca Project (BFSA Project No. 23-224). Unpublished letter for BFSA Environmental Services, Poway, California, by the Natural History Museum of Los Angeles County, Los Angeles, California. (attached)

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APPENDIX A

Qualifications of Key Personnel

Todd A. Wirths, MS, PG No. 7588

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E ducation

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

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

P rofessional C ertifications

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

P rofessional M emberships

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

E xperience

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 BFSAE nvironmental Services, 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.

S elected R ecent R eports

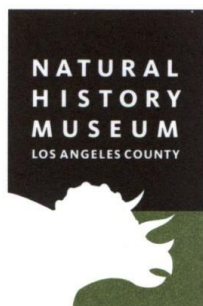
2019 *Paleontological Assessment for the 10575 Foothill Boulevard Project, City of Rancho Cucamonga, San Bernardino County, California.* Prepared for T&B Planning, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

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.
- 2020 *Paleontological Monitoring Report for the Imperial Landfill Expansion Project (Phase VI, Segment C-2), Imperial County, California.* Prepared for Republic Services, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.
- 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 Records Search



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www.nhm.org

Research & Collections

e-mail: paleorecords@nhm.org

August 27, 2023

BFSA Environmental Services
Attn: Todd A. Wirths

re: Paleontological resources for the 747 N Barranca Project (BFSA Project No. 23-224)

Dear Todd:

I have conducted a thorough search of our paleontology collection records for the locality and specimen data for proposed development at the 747 N Barranca project area as outlined on the portion of the Baldwin Park USGS topographic quadrangle map that you sent to me via e-mail on August 22, 2023. We do not have any fossil localities that lie directly within the proposed project area, but we do have fossil localities nearby from the same sedimentary deposits that occur in the proposed project area, either at the surface or at depth.

The following table shows the closest known localities in the collection of the Natural History Museum of Los Angeles County (NHMLA).

Locality Number	Location	Formation	Taxa	Depth
LACM VP 6166, 6167, 6172, 6173, 7471	Puddingstone Reservoir, San Jose Hills	Puente Formation	Sturgeonfish (<i>Prionurus</i>), Mako shark (<i>Isurus planus</i>), Extinct bony fish (<i>Etrungus</i>), Mola (<i>Molidae</i>), other Fish (<i>Osteichthyes</i>)	Surface
LACM VP 1728	W of intersection of English Rd & Peyton Dr, Chino	Unknown (light brown shale with interbeds of very coarse brown sand; Pleistocene)	Horse (<i>Equus</i>), camel (<i>Camelops</i>)	15-20 feet bgs
LACM VP 7268, 7271	Sundance Condominiums, S of Los Serranos Golf Course	Unknown (Pleistocene)	Horse (<i>Equus</i>)	Unknown
LACM VP 7508	Near intersection of Vellano Club Dr. and Palmero Dr., Oakcrest Development; N of Serrano Canyon, Chino Hills	Unknown formation (Pleistocene)	Ground sloth (<i>Nothrotheriops</i>); elephant family (Proboscidea); horse (<i>Equus</i>)	Unknown

	W of Monterey Pass Road in Coyote Pass; E of the Long Beach Freeway & S of the N boundary of Section 32;	Unknown Formation (Pleistocene; sand and silt)		
LACM VP 3363	Monterey Park		Horse (<i>Equus</i>)	Unknown
LACM VP 2027	1600 block, Bridgen Rd., Pasadena	Unknown Formation (Pleistocene)	Mammoth (<i>Mammuthus</i>)	Unknown

VP, Vertebrate Paleontology; IP, Invertebrate Paleontology; bgs, below ground surface

This records search covers only the records of the NHMLA. It is not intended as a paleontological assessment of the project area for the purposes of CEQA or NEPA. Potentially fossil-bearing units are present in the project area, either at the surface or in the subsurface. As such, NHMLA recommends that a full paleontological assessment of the project area be conducted by a paleontologist meeting Bureau of Land Management or Society of Vertebrate Paleontology standards.

Sincerely,



Alyssa Bell, Ph.D.
Natural History Museum of Los Angeles County

enclosure: invoice