Paleontological Resources Assessment
Rider and Evans Multi Family Project
City of Perris, Riverside County, California

APN: 0405-383-31

Section 16, Township 4 South, Range 3 West, USGS 7.5' *Perris, Calif.*

Prepared for:
Perris Land, LLC.
2716 Ocean Park Boulevard, Suite 1055
Santa Monica, California 90405
(973) 431-0027

Prepared by:

Adrian Garibay, B.S. and
Morgan Bender, M.A., RPA,
Duke Cultural Resources Management, LLC
18 Technology Dr., Suite 103
Irvine, California 92618
(949) 356-6660
curt@dukecrm.com
www.DukeCRM.com

DUKE CRM Project Number: C-0390

February 2023

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ABBREVIATIONS

CEQA ..... California Environmental Quality Act
Client ..... Perris Land, LLC.
DUKE C R M ..... Duke Cultural Resources Management, LLC
Kgab ..... Heterogeneous mixture of olivine, pyroxene, and hornblende gabbro
Khg ..... plutonic volcanic deposits
Ma ..... million years ago
NHMLAC ..... Natural History Museum of Los Angeles County
Project ..... Rider and Evans Multi Family Project
Qyf ..... young alluvial deposits
Qof ..... old alluvial fan deposits
RPA ..... Registered Professional Archaeologist

APPENDICES

EXECUTIVE SUMMARY

Duke Cultural Resources Management, LLC (DUKE CRM) is under contract to Perris Land, LLC (Client) to provide a Paleontological Resources Assessment for the proposed Rider and Evans Multi-Family Project (Project), City of Perris, Riverside County, California. The Project applicant proposes to construct residential units with associated streets and infrastructure on 14.7 acres of undeveloped land just southwest of the intersection of Rider Street and Evans Road in Perris, California. The purpose of this report is to comply with the California Environmental Quality Act (CEQA) with regards to paleontological resources.

The paleontological resource assessment included a records search by the Natural History Museum of Los Angeles County (NHMLAC) and other online and published databases, and a field survey to identify potential paleontological resources. The records searches indicated multiple nearby (within 3 miles) fossil localities from projects underlain by deposits similar to those underlying this Project area. The young alluvial deposits (*Qyf*) underlying the Project area, due to their recent deposition, have not had the opportunity to amass and fossilize biologic material and, therefore have low paleontological potential at or near the surface. However, these deposits can transition into older, higher-sensitivity Pleistocene deposits with depth, and as a result, their paleontological sensitivity increases to high with depth. The old alluvial fan deposits (*Qof*) underlying the Project are assigned a high paleontological sensitivity due to other Pleistocene-age sediments elsewhere in Riverside County yielding significant fossils of Pleistocene fauna and flora. In addition, there are plutonic volcanic deposits (*Khg*) that outcrop near the Project area that may be present at depth within the boundaries of the Project area, these are assigned low sensitivity.

Analysis of these data sources indicate that ground disturbance into old alluvial fan deposits has a high potential to directly impact unique paleontological resources. This would result in a potentially significant impact under CEQA. In order to mitigate this potential impact to a level that is less than significant under CEQA, DUKE CRM recommends paleontological monitoring during ground disturbing activities in old alluvial fan deposits. Additional efforts may be necessary if the proposed Project changes.

INTRODUCTION

Duke Cultural Resources Management, LLC (DUKE CRM) is under contract to Perris Land, LLC (Client) to provide a Paleontological Resources Assessment for the proposed Rider and Evans Multifamily (Project), in the City of Perris, Riverside County, California. The Project applicant proposes to construct residential units with associated streets and infrastructure on 14.7 acres of undeveloped land just southwest of the intersection of Rider Street and Evans Road (Appendix A, Figure 1 – Project Vicinity). The minimum depth of excavation is expected to be approximately two feet while excavation of building footings, utilities, and a swimming pool would extend several feet. The lot has remained vacant with a housing development immediately to the south and north of the lot. The purpose of this report is to comply with the California Environmental Quality Act (CEQA) with regards to paleontological resources.

The Project area is located in NW ¼ of the NE ¼ of Section 16, Township 4 South, and Range 3 West as depicted on the USGS *Perris, California* 7.5' quadrangle map (Appendix A, Figure 2 – Project Location). The Project area is bordered to the north by Rider Street and housing development, to the South by housing developments, to the East by Evans Road, and to the East by the Perris Valley Storm Drain (Appendix A, Figure 3 – Project Aerial).

NATURAL SETTING

California is divided into 11 geomorphic provinces, each naturally defined by unique geologic and geomorphic characteristics. The Project area is located in the northeastern portion of the Peninsular Ranges geomorphic province. The Peninsular Ranges province is distinguished by northwest trending mountain ranges and valleys following faults branching from the San Andreas Fault. The Peninsular Ranges are bound to the east by the Colorado Desert and extend north to the San Bernardino – Riverside county line (Norris and Webb, 1976), west into the submarine continental shelf, and south to the California state line and beyond.

Locally, the Project area is located on the eastern edge of the Perris Block, a large, eroded mass of Cretaceous and older (66 million years ago [Ma] and older) plutonic igneous rocks, bordered to the west by the Elsinore Fault System and to the east by the San Jacinto Fault (Woodford, et al., 1971). The Perris Block, in contrast to many geological features in southern California, has remained largely intact and unaltered over the past 23 million years (Langenheim, et al., 2006). Subsequent erosion and minor volcanic activity have resulted in the Perris Block being mantled by thin sedimentary and volcanic units. Being harder and more resistant to erosion than the surrounding sedimentary and volcanic units, rocks from the Perris Block form prominent hills and mountains in the area. In the Project area, a central exposure of Perris Block igneous rock is surrounded by a combination of the remnants of a Pleistocene-age (2.6 Ma to 11,700 years ago) and Holocene-age (11,700 years ago to present) alluvial fans (Morton, 2003). The geology in the vicinity of the Project has been mapped by Morton (2003) at a scale of 1:24,000. A review of this map indicates the Project area is composed of four (4) geologic units (Appendix A, Map 4 – Project Geology).

Quaternary alluvial deposits (*Qyf*)

Young alluvial deposits (*Qyf*) are locally composed of clay, silt, sand, gravel, and caliche deposited by streams in through-going stream valleys; cemented only where carbonate rocks are in the source area. Gravels are composed of igneous and sedimentary clasts.

Old alluvial fan deposits (*Qof*)

Old alluvial fan deposits (*Qof*) are locally composed of reddish-brown, moderately consolidated sand, with lesser amounts of gravel, deposited during the Pleistocene Epoch (Morton, 2003). These deposits surround the central igneous rock exposure in the southern 75% of the Project area.

Heterogeneous mixture of olivine, pyroxene, and hornblende gabbro (*Kgab*)

These deposits represent the northern portion of a gabbro complex of the Perris Block which is rich in of olivine, pyroxene, and hornblende, with lesser amounts of quartz diorite and tonalite, emplaced during the Cretaceous Period (145 to 66 Ma) (Morton, 2003). These deposits are exposed in a roughly circular exposure, in the south-central portion of the Project area.

Heterogeneous granitic rocks (*Khg*)

Heterogeneous granitic rocks (*Khg*) deposits represent the northern end of a batholith of the Perris Block dominated by tonalite, but locally containing high amounts of schist and gneiss, emplaced during the Cretaceous Period (Morton, 2003). These deposits are part of the Peninsular Range batholith.

Summary of the Project Area Geology and Paleontological Sensitivity

Research and analysis indicate young alluvial fan deposits occur at the surface and to an unknown depth (Appendix A, Figure 4 – Project Geology). The young alluvial fan deposits (*Qyf*) and old alluvial fan deposits (*Qof*) are both sourced from the igneous rocks composing the Perris Block (Morton and Matti, 2005; Dibblee and Minch, 2008). Young alluvial fan deposits, due to their recent deposition, have not had the opportunity to amass and fossilize biologic material, and are assigned low paleontological sensitivity at the surface (Appendix A, Figure 5 – Paleontological Sensitivity). However, these deposits often transition into older, higher-sensitivity Pleistocene deposits with depth, and as a result, increase to high paleontological sensitivity with depth (estimated at approximately 5 feet below surface).

Old alluvial fan deposits and other Pleistocene-age sediments have yielded significant fossils of Pleistocene fauna and flora elsewhere in Riverside County (discussed further in Records Search) and are assigned high paleontological sensitivity. The paleontological sensitivity of these sediments also depends on their lithology: coarse deposits of cobbles and boulders are not conducive to fossil preservation, but finer-grained deposits of sand and mud have a higher potential (Scott, 2014). Assuming the lithology continues into the old alluvial fan deposits (*Qof*), the sand-dominated alluvial fan deposits in the Project area obtain a high paleontological sensitivity.

The igneous rocks, should they be present in the Project (*Khg*), are not conducive to preserving fossils, and are assigned a low paleontological sensitivity. These paleontological sensitivities are consistent with the paleontological sensitivities assigned by the City of Hemet General Plan FEIR (p. 4.6-10) (AECOM, 2012) and the Riverside County Land Information System (Table 1; Appendix A, Figure 5 – Paleontological Sensitivity).

Table 1: Geological Units and their Paleontological Sensitivity

Age	Geologic Unit[1]	Potential Fossils	Paleontological Sensitivity
Holocene	Young alluvial fan deposits (*Qyf*)	None	Low
Pleistocene			
	Old alluvial fan deposits (*Qof*)	Large and small mammals, reptiles, invertebrates, and plants[2]	High
Cretaceous	Heterogeneous mixture of olivine, pyroxene, and hornblende gabbro (*Kgab*)	None	Low
	Heterogeneous granitic rocks (*Khg*)	None	Low

[1] Morton, 2003

[2] Springer, et al., 2009; 2010; Radford, 2019

PERSONNEL

This report was completed by Adrian Garibay, B.S., Paleontologist and Morgan Bender, M.A., Archaeologist. Mr. Garibay has participated in many phases of paleontology (research, field survey, laboratory analysis, construction monitoring) since 2015. Mr. Garibay B.S. in Geology from California State University of Fullerton with an emphasis on vertebrate paleontology. The work that Mr. Garibay has done has centered in and around southern California.

Ms. Bender holds a B.A. degree in Anthropology/Sociology and minored in Classical Studies from Agnes Scott College in Decatur, Georgia. She received her M.A. in Anthropology California State University, Los Angeles. She meets the Secretary of Interior Standards for principal investigator and is a Registered Professional Archaeologist (RPA) with over four (4) years of experience in California archaeology. Ms. Bender acted as field and laboratory director for the Project.

All work was conducted under the supervision of Curt Duke, M.A., RPA. Mr. Duke is the Principal Archaeologist and President of DUKE C R M . Mr. Duke meets the professional qualifications of the Secretary of the Interior for prehistoric and historical archaeology; he is also an RPA who has worked in all phases of archaeology (archival research, field survey, testing and data recovery excavation, laboratory analysis, construction monitoring) since 1994. Mr. Duke holds a Master of Arts degree in Anthropology with an emphasis in archaeology from California State University, Fullerton and a Bachelor of Arts degree in Anthropology from the University of California, Santa Cruz. Mr. Duke has worked throughout southern and northern California and parts of Arizona and Nevada. Mr. Duke is a certified archaeologist in Riverside County. Please see Appendix B for staff resumes.

METHODS AND RESULTS

Records Search and Literature Review

On November 21, 2021, the NHMLAC performed a paleontological records search to determine if fossil localities were previously identified in or near the Project area (Radford, 2019) (Appendix C – Paleontological Records Search Results). Additionally, Mr. Garibay performed a search of the online University of California Museum of Paleontology collections, NHMLAC collections, Paleobiology Database, FAUNMAP, and other published literature for fossil localities from similar deposits in or near (within 3 miles) the Project area. These records searches produced documentation of numerous fossil localities from two (2) projects:

- The Diamond Valley Lake Project, and associated Eastside Pipeline Project, collectively produced over 250,000 fossil specimens from a large excavation area, representing over 105 taxa of large and small mammals, reptiles, invertebrates, and plants. The fossil material was recovered from numerous fossil localities, ranging from 1 to 3 miles east and south of the Project area (Springer, et al., 2009; 2010).
- The Natural History Museum of Los Angeles conducted a records search of the project site and the associated geologic units. The records search concluded that there were no fossil localities located within the proposed project area. But did find fossil localities within the same geologic formation within 20 miles that have yielded, horse remains, camel, Proboscidea, reptiles, and various marine and terrestrial invertebrates.

Field Survey

On March 8, 2022, Morgan Bender performed a paleontological resources pedestrian survey of the Project area. Parallel survey transects were spaced no further than 15 meters apart. The majority of the Project area was moderately vegetated by scrub and brush, reducing ground visibility to 30 – 50% (Appendix A, Figure 6). Observed ground surface and exposed sidewalls in washes exhibited a brown, silty unconsolidated alluvium

with (Appendix A, Figure 7). The land within the Project has been disturbed by activities such as mowing and tracks marks. No fossils or paleosols were observed in any exposed ground surface during the field survey.

IMPACTS ANALYSIS AND RECOMMENDATIONS

DUKE CRM evaluated the proposed Project for potential impacts to paleontological resources according to the requirements of CEQA. The records search and the field survey did not identify paleontological resources within the Project area, but the records search indicates numerous nearby fossils localities (within 3 miles) in Pleistocene-age deposits. Young alluvial fan deposits have a low sensitivity for fossil resources at the surface but can transition with depth in old alluvial fan deposits. Old alluvial fan deposits underlying the Project area have a high potential to contain fossil resources. Therefore, ground disturbance into the old alluvial fan deposits has a high potential to directly impact unique paleontological resources. This would result in a potentially significant impact according to CEQA. In order to mitigate this potential impact to a level that is less than significant under CEQA, the Project is required to implement the City's standard mitigation measure for paleontological resources as described below:

Prior to the issuance of grading permits, the project proponent/developer shall submit to and receive approval from the City, a Paleontological Resource Impact Mitigation Monitoring Program (PRIMMP). The PRIMMP shall include the provision for a qualified professional paleontologist (or his or her trained paleontological representative) to be on-site for any project-related excavations that exceed three (3) feet below the pre-grade surface. Selection of the paleontologist shall be subject to approval of the City of Perris Planning Manager and no grading activities shall occur at the project site or within the off-site project improvement areas until the paleontologist has been approved by the City.

Monitoring shall be restricted to undisturbed subsurface areas of older Quaternary alluvium. The approved paleontologist shall be prepared to quickly salvage fossils as they are unearthed to avoid construction delays. The paleontologist shall also remove samples of sediments which are likely to contain the remains of small fossil invertebrates and vertebrates. The paleontologist shall have the power to temporarily halt or divert grading equipment to allow for removal of abundant or large specimens.

Collected samples of sediments shall be washed to recover small invertebrate and vertebrate fossils. Recovered specimens shall be prepared so that they can be identified and permanently preserved. Specimens shall be identified and curated and placed into an accredited repository (such as the Western Science Center or the Riverside Metropolitan Museum) with permanent curation and retrievable storage.

A report of findings, including an itemized inventory of recovered specimens, shall be prepared upon completion of the steps outlined above. The report shall include a discussion of the significance of all recovered specimens. The report and inventory, when submitted to the City of Perris Planning Division, will signify completion of the program to mitigate impacts to paleontological resources.

REFERENCES

AECOM
2012 City of Hemet General Plan 2030, Final Environmental Impact Report, prepared for City of Hemet, January 12.

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2008 Geologic map of the Hemet & Idyllwild 15 minute quadrangles, Riverside County, California: Dibblee Foundation Map DF-371

Langenheim, V.E., Lee, T.C., Biehler, S., Jachens, R.C., and D.M. Morton
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Morton, D.M.
2003 Preliminary geological map of the Winchester 7.5' quadrangle, Riverside County, California: United States Geological Survey Open File Report 03-188.

Morton, D.M., and J.C. Matti
2005 Preliminary geologic map of the Hemet 7.5' quadrangle, Riverside County, California: United States Geological Survey Open-File Report OF-2004-1455.

Norris, R.M., and R.W. Webb
1976 Geology of California, second edition: New York, John Wiley & Sons, p. 277-300.

Radford, D.
2019 Records Search for the Hemet 30 Project, County of Riverside: submitted to DUKE CRM, September 4.

Scott, E.
2014 Paleontology literature and records review, Lakeside Temescal Valley Project, Riverside County, California. Prepared for DUKE CRM, August 1.

Springer, K.B., Scott, E., Sagebiel, J.C., and L.K. Murray
2009 The Diamond Valley Lake local fauna: late Pleistocene vertebrates from inland southern California. Papers on Geology, Vertebrate Paleontology and Biostratigraphy in Honor of Michael O. Woodburne (L.B. Albright III, ed). Museum of Northern Arizona Bulletin 65, 217-235.

2010 Late Pleistocene large mammal faunal dynamics from inland southern California: the Diamond Valley Lake local fauna. In Scott, E. and G. McDonald, eds., Faunal dynamics and extinction in the Quaternary: Papers honoring Ernest L. Lundelius, Jr. Quaternary International, v. 217, p. 256-265.

Woodford, A.O., Shelton, J.S., Doehring, D.O., and Morton, R.K.
1971 Pliocene-Pleistocene History of the Perris Block, Southern California: Geological Society of America Bulletin, v. 82, p. 3421-3448.

Appendix A

Project Maps & Figures

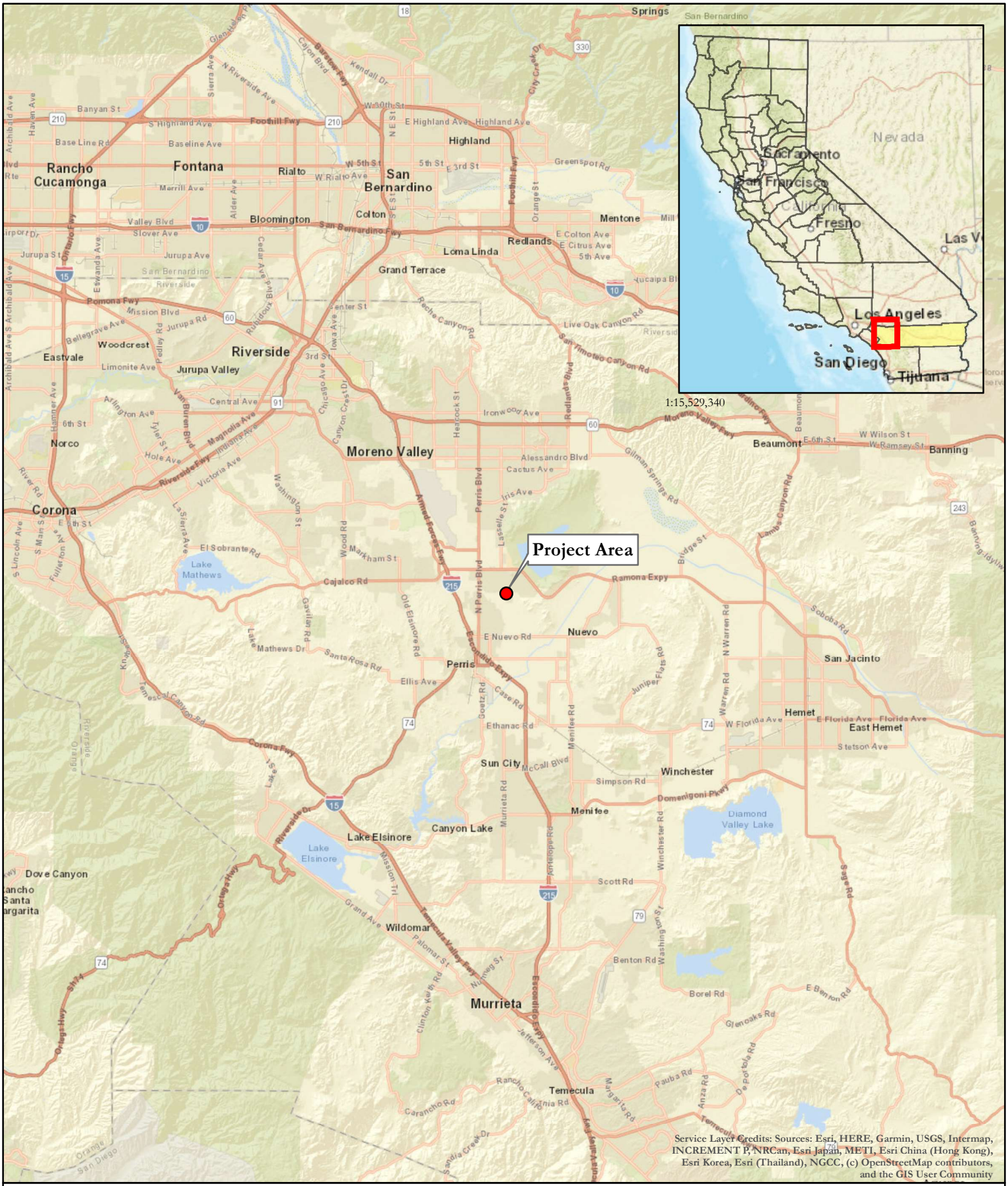

Figure 1 - Project Vicinity
Rider & Evans Multi Family, C-0390

DUKE CRM

Project Area

0 6 12 Miles N

1 inch = 6 miles 1:360,000

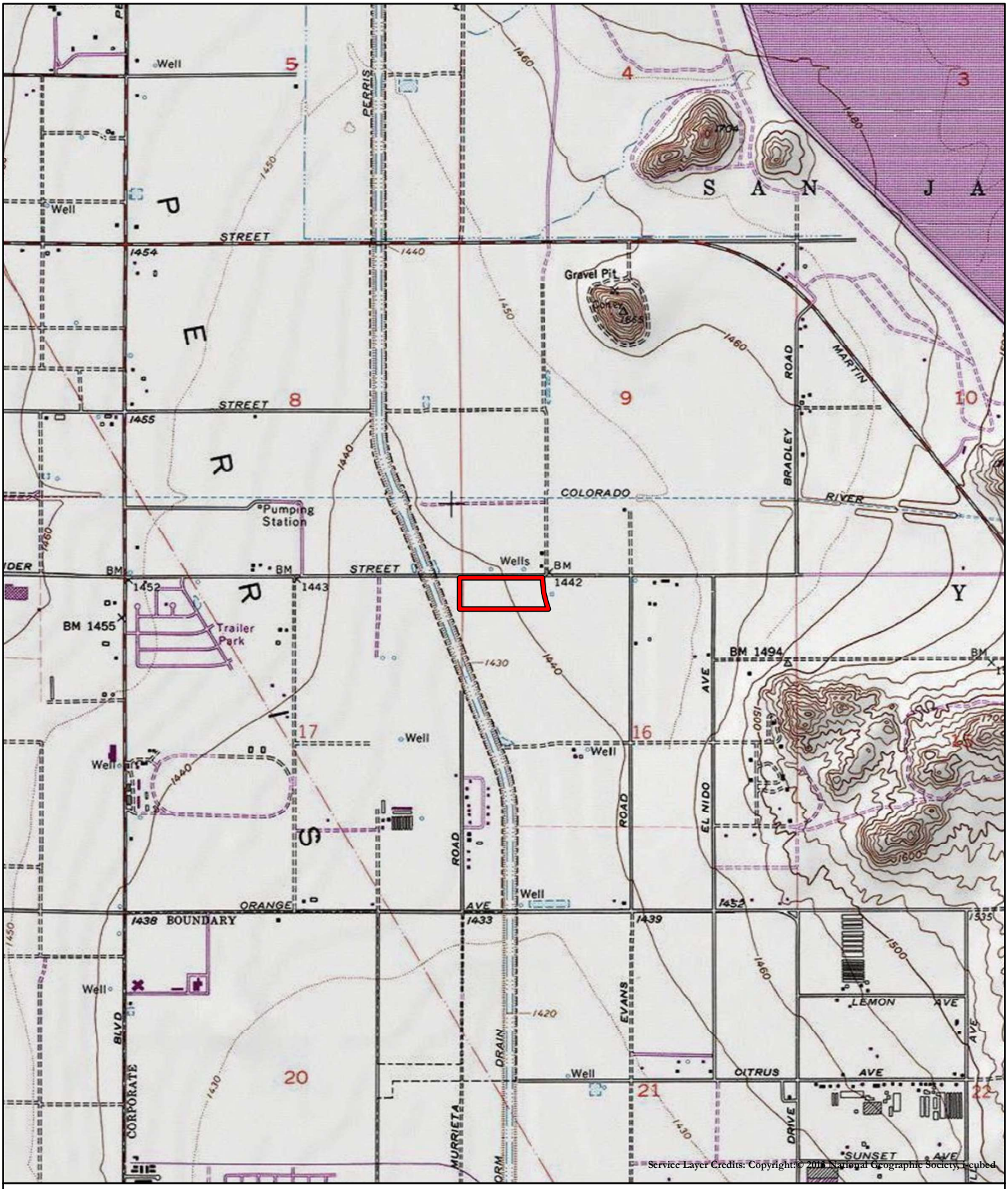

Figure 2 - Project Location
Rider & Evans Multi Family, C-0390

DUKE CRM

Perris, Calif USGS 7.5-Minute Quadrangle
T4S, R3W, Section 16
Date of Map: 1953 / Photorevised: 1979

Project Area
USGS 7.5' Quads

0 0.25 0.5 Miles
0 0.25 0.5 Kilometers
N
1 inch = 2,000 feet 1:24,000

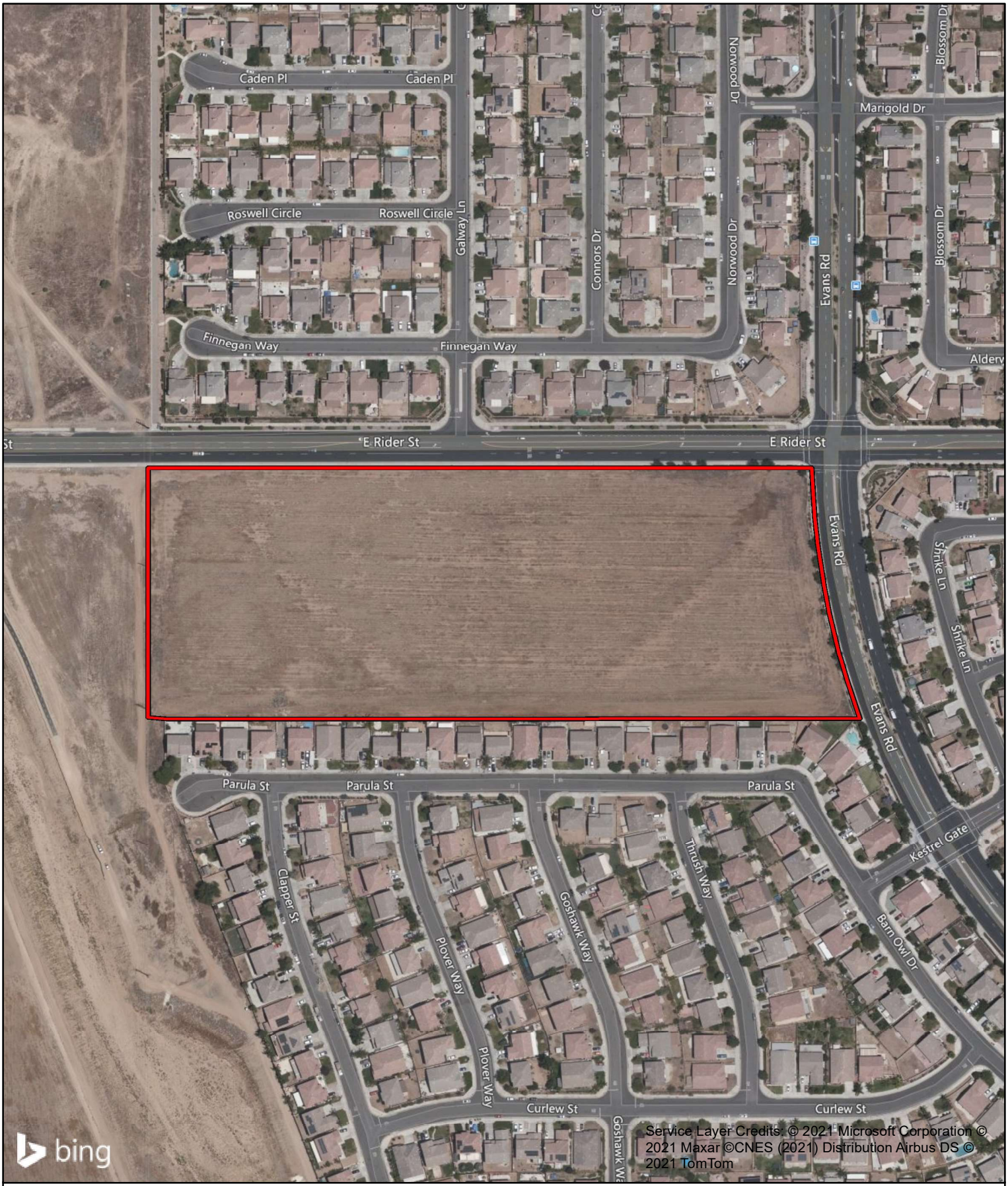

Figure 3 - Project Aerial Photo

Rider & Evans Multi Family, C-0390

DUKE CRM

Project Area

0 125 250 Feet

N

1 inch =250 feet 1:3,000

Figure 4 - Project Geology
Rider & Evans Multi Family, C-0390

DUKE CRM

Geology from Dibblee and Minch (2003):
Qa: alluvial sand and clay of valley area, Holocene
Project Area

0 125 250 Feet
N
1 inch =250 feet
1:3,000

Map 5 - Project Paleontological Sensitivity

Rider & Evans Multi Family, C-0390

DUKE CRM

Low sensitivity

Project Area

0 125 250 Feet

N

1 inch =250 feet

1:3,000

Figure 6. Ground visibility throughout project. View to west.

Figure 7. Exposed sediment. View to south.

Appendix B

Resumes

DUKE CRM

18 Technology Dr., Ste. 103
Irvine, CA 92618
949-356-6660
www.dukecrm.com

Curt Duke

President/Principal Archaeologist

Expertise

Cultural Resources Management
California Prehistory
Section 106 Compliance
CEQA Compliance
Native American Consultation

Education

CSU, Fullerton, M.A., Anth, 2006
SDSU, Grad Studies, Anth, 1996-97
UC Santa Cruz, B.A., Anth, 1994

Professional Registrations

RPA, No. 15969
County of Riverside (No. 151)
County of Orange

Professional Memberships

Society for California Archaeology
Society for American Archaeology
Pacific Coast Archaeological Society
Assoc. of Environmental Professionals
Building Industry Association

Professional Experience

President/Principal Archaeologist, DUKE CRM, March 2011 to present
Archaeologist/Principal, LSA Associates, 1997-2011
Archaeological/Paleontological Technician, Various Companies, 1995-97
Archaeological Technician/Teachers Assistant, Cabrillo College, 1994
Anthropological Laboratory Technician, UC Santa Cruz, 1994

Selected Project Experience

Sweeny Road, Lompoc, 2018
Vantage Point Church, Eastvale, 2016 and 2018
Murrieta's Hospitality Commons, Murrieta, 2017-Present
VA West Los Angeles Campus Master Plan, 2017-Present
Avenue S-8 and 40th St. E. Roundabout, Palmdale, 2017-18
SR-110 Improvements, Los Angeles, 2017
Diamond Valley Estates Specific Plan, Hemet, 2017
VA West Los Angeles Campus Hospital Replacement, 2016-Present
Shoemaker Bridge Replacement, Long Beach, 2016-Present
Spruce Goose Hangar, Playa Vista, 2016
Rice Avenue at 5th Street Grade Separation, Oxnard, 2015-Present
Vila Borba, Chino Hills, 2013-Present
Skyridge Residential, Mission Viejo, 2011-Present
Baker Water Treatment Plant, Lake Forest, 2014-2015
VA Clinic, Loma Linda, 2014-Present
Evanston Inn, Pasadena, 2014-2016
Petersen Ranch, Leona Valley, 2013-2014
California Street/Highway 101, Ventura, 2014-Present
6th Street Bridge Replacement, Los Angeles, 2013-Present
I-15/I-215 IC Project, Devore, 2008-10
Colton Crossing Rail-to-Rail Grade Separation, 2008-11
City of LA DPW BOE, On-Call, Cultural/Paleo Services, 2008-11
Mid County Parkway, Riverside County, 2014-10
McSweeny Farms Specific Plan, Hemet, 2004-08
Mesquite Regional Landfill, Coachella Valley, 2006-08
Hacienda at Fairview Valley Specific Plan, Apple Valley2007-08
Majestic Hills Specific Plan, Hesperia, 2006-07
Chuckwalla Solar I Project, Desert Center, 2007-08
Needles Highway Improvement Project, 2004-06
Superstition Solar I Project, Salton Sea, Imperial County, 2008
Muddy Canyon Archaeological Project, Newport Beach, 1997-2001
Temecula 32, Archaeological Phase II Testing, 2007
Mammoth Lakes Parks/Rec and Trail System Master Plan, 2010
24th Street Improvements, City of Bakersfield, 2008-11
California Valley Solar Ranch, San Luis Obispo County, 2009-10
Delano-Alpaugh Water Pipeline, Kern/Tulare Counties, 2006-09
I-15/SR-79 IC Project, Temecula, 2006-10
Westlake Historic Resources Survey, Los Angeles, 2008-09
CETAP, western Riverside County, 1999-2001
Los Coches Creek Elementary School, near Alpine, 2003-06
Oak Valley Specific Plan 1 Amendment, Beaumont, 2004
Fort Irwin, National Training Center, 1999
San Nicolas Island, Naval Base Ventura County, CA, 1997
Cell Sites, ~3,000 projects in CA and in NV, AZ, IL, WI, 1997-2018

DUKE CRM
18 Technology Drive, #103
Irvine, CA 92618
949-356-6660
www.dukecrm.com

Morgan Bender

Archaeologist

Professional Experience: 4 Years

Expertise

Cultural Resources Management
California Prehistory
Historical Archaeology
Prehistoric Archaeology

Education

California State University, Los Angeles, M.A. Anthropology, 2019
Agnes Scott College, B.A., Anthropology/ Sociology, 2014

Professional Registrations

RPA, No. 18011

Professional Memberships

Society for California Archaeology
Society for American Archaeology

Professional Experience

Ms. Bender attended Agnes Scott College in Decatur, Georgia where she obtained her BA in 2014 in Anthropology/ Sociology and minored in Classical Studies. During her time there, she studied abroad and traveled throughout Turkey where she visited many archaeological sites. Ms. Bender attended California State University, Los Angeles where she received her MA in Anthropology, emphasis in California Archaeology in 2019. Her thesis focused on tracking climatic shifts using crab and sea urchin remains from a Middle Holocene site on San Nicolas Island, California (CA-SNI-40). She has four years of professional experience as a staff archaeologist where she became a Registered Professional Archaeologist. During this time, she has monitored major infrastructure sites such as Metro and utility projects as well as private commercial and residential developments projects. While monitoring, she identifies historic and prehistoric resources and is cross trained in paleontology. Additionally, she prepares the necessary DPR and archaeological reports for these finds. She has also surveyed sites in Arizona and California. Ms. Bender partook in the Woolsey Fire reconnaissance work with Cardno and Southern California Edison. She has training and significant experience in faunal and shellfish analysis, and lithic identification.

Selected Project Experience

San Marcos Creek Project, San Marcos 2021.
Metro Purple Line Section 3, West Los Angeles 2019-2021.
I-405 Project, Orange County 2020-2021.
ICF Metro Division 20, Los Angeles 2019-2021.
ICF Metro Regional Connector, Los Angeles 2017-2021.
Southern California Edison, Los Angeles and Ventura Counties, 2019-2021.
Moorefield French Valley, Murrieta 2020.
Caltrans Collection, Redlands 2019.
Stanton Energy Reliability Center, Stanton 2019.
Southern California Edison Pole Survey, Lake Isabella 2019.
10 West Walnut Morley Construction, Pasadena June 2019.
Survey, Redlands November 2018.
Woolsey Fire, Los Angeles December 2018.
Survey, Nothing July 2018.
Brookfield Residential Nelles Project, Whittier 2018-2020.
Brookfield Kaplan Project North, Ontario 2017-2018.
Brookfield Kaplan Project, Eastvale 2017.

ADRIAN GARIBAY
PALEONTOLOGIST

EXPERTISE
- Paleontology
- Museology
- Curation
- Geological Science

EDUCATION
M.S., Geology, California State University, Fullerton, Anticipated 2022 (ABT)

B.S., Geological Science, California State University, Fullerton, 2016

PROFESSIONAL RESPONSIBILITIES

Mr. Garibay has a variety of experience ranging from fossil preparator, paleontological monitor, and field surveyor. He has served as a Senior Curational Technician at the John D. Cooper Center and a guest researcher at the San Diego Natural History Museum. He has also conducted paleontological monitoring on large commercial development projects and surveyed for archaeological resources in the High Desert.

PROJECT EXPERIENCE

SR-91 Atlantic Avenue to Cherry Avenue, Long Beach
LA Metro proposes to develop and implement an auxiliary lane on Eastbound State Route 91 within a 1.4-mile segment from the southbound I-710 interchange connector to eastbound SR-91, to Cherry Avenue. The study area includes EB SR-91 (Post Miles [PM] R11.8–R13.2) in the City of Long Beach. Mr. Garibay serves as a paleontologist for this project. He aided in writing the Post-Review Discovery and Monitoring Plan for the auxiliary lane improvement project on SR-91 from Atlantic Avenue to Cherry Avenue project.

7th Street Bridge Over Tuolumne River Bridge, Stanislaus
The County of Stanilaus, in cooperation with the City, and with funding from the Highway Bridge Program, proposes to improve movement and safety for vehicles, pedestrians, and bicyclists across the Tuolumne River along the 7th Street corridor in Modesto. Mr. Garibay serves as a Paleontologist for this project. He aided in writing the Paleontological Resources Monitoring and Mitigation Program for improvements to the Tuolomne River Bridge over 7th Street.

West LA Veterans Hospital, West Los Angeles, Jackie Robinson Stadium
The Project is located on the Veterans Hospital, West Los Angeles Campus at the Jacki Robinson Stadium. The Project consists of a new synthetic turf practice infield and bullpen surrounded by an 8-foot (ft.) high chain link fence. New sports lighting for practice infield will be added as well as accessible parking and a path of travel to right-of-way at Constitution Avenue. The Project includes demolition of a portion of parking lot number 15 and landscaping adjacent to the existing Jackie Robinson Stadium. Mr. Garibay served as a Paleontologist and performed test trenching prior to construction activities and identified historical artifacts.

West LA Veterans Hospital, West Los Angeles, Tiny Homes
The Project is located on the Veterans Hospital, West Los Angeles Campus. It includes placing tiny homes for homeless veterans on the VA property. Mr. Garibay serves as a Paleontologist and performed test trenching prior to construction activities and identified historical artifacts.

Appendix C

Paleontological Records Search Results

Natural History Museum
of Los Angeles County
900 Exposition Boulevard
Los Angeles, CA 90007
tel 213.763.DINO
www.nhm.org

Research & Collections

e-mail: paleorecords@nhm.org

November 21, 2021

Duke Cultural Resources Management
Attn: Morgan Bender

re: Paleontological resources for the Rider & Evans Multi Family Project

Dear Morgan:

I have conducted a thorough search of our paleontology collection records for the locality and specimen data for proposed development at the Rider & Evans Multi Family project area as outlined on the portion of the Perris USGS topographic quadrangle map that you sent to me via e-mail on November 11, 2021. 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.

Locality Number	Location	Formation	Taxa	Depth
LACM IP 437	West side of Castile Canyon, north of the Soboba Indian Reservation	Unknown formation (Pleistocene)	Invertebrates – insect (*Sobobapteron kirkbaye*), brachiopod (*Terebratalia hemphili*)	Unknown
LACM VP 7261	Skinner Reservoir, Auld Valley	Unknown formation (Pleistocene, arenaceous silt)	Elephant clade (Proboscidea); ungulate (Ungulata)	Unknown
LACM VP 6059	Overflow area just east-southeast of Lake Elsinore	unknown formation (Pleistocene)	Camel family (Camelidae)	Unknown
LACM VP 1207	Hill on east side of sewage disposal plant; 1 mile N-NW of Corona	Unknown formation (Pleistocene)	Bovidae	Unknown
LACM VP 7811	W of Orchard Park, Chino Valley	Unknown formation (eolian, tan silt; Pleistocene)	Whip snake (*Masticophis*)	9-11 feet bgs
LACM VP 7268, 7271	Sundance Condominiums, S of Los Serranos Golf Course	Unknown (Pleistocene)	Horse (*Equus*)	Unknown

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

This records search covers only the records of the Natural History Museum of Los Angeles County ("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