Applied EARTHWORKS Inc.

133 N. San Gabriel Blvd., Suite 201
Pasadena, CA 91107-3414
O: (626) 578-0119 | F: (626) 204-5500
www.appliedearthworks.com

October 9, 2023

Ms. Stephanie Standerfer
Albert A. Webb Associates
37888 McCray Street
Riverside, CA 92506
Transmitted via email to stephanie.standerfer@webbassociates.com

RE: REVISED Paleontological Technical Memorandum for the Shea Properties–Sanderson Avenue Project, City of San Jacinto, Riverside County, California

Dear Ms. Standerfer,

At the request of Albert A. Webb Associates, Applied EarthWorks, Inc. (Æ) completed a paleontological resource assessment for the Shea Properties–Sanderson Avenue Project (Project) in the city of San Jacinto, Riverside County, California. The Project is a multiparcel development planned for future commercial/industrial buildings in northwest San Jacinto.

Æ's scope of work included desktop review of geologic maps, paleontological literature, geotechnical findings for the Project, museum records searches, and preparation of this technical memorandum. This memorandum, which serves as a summary of findings, was written by staff who meet mitigation paleontology industrywide standards (Murphey et al., 2019) as well as qualifications standards of the Society of Vertebrate Paleontology (2010) and who also satisfy the requirements of the California Environmental Quality Act (CEQA). The City of San Jacinto (City) is the lead agency for CEQA compliance.

PROJECT DESCRIPTION AND BACKGROUND

The 660-acre is located generally south of Ramona Boulevard (Record Road), east of Odell Avenue, west of Sanderson Avenue, and north of Cottonwood Road. Additional offsite improvements are located within unimproved and partially improved rights-of-ways. The Project area is mapped in Sections 17–20 and 29–30 of Township 4 South, Range 1 West as shown on the Lakeview, CA, 7.5-minute U.S. Geological Survey topographic quadrangle map (Figure 1).

The Project does not propose any development at this time but does include entitlement proposals for the planning of future development of up to 9 million square-feet of industrial warehouse speculative buildings, ancillary and complementary uses, parking, landscaping, amenity spaces, trails, bike paths, and infrastructure necessary to support future development of the approximately 514-acre Project site. The approximately 146 acres of offsite improvement areas would be planned for future utility, drainage, and roadway improvements. The Project site grading would be mass graded in one phase while future development of the Project site would occur in four phases. The maximum depth of Project-related ground disturbing activities is 75 feet below ground surface (bgs).

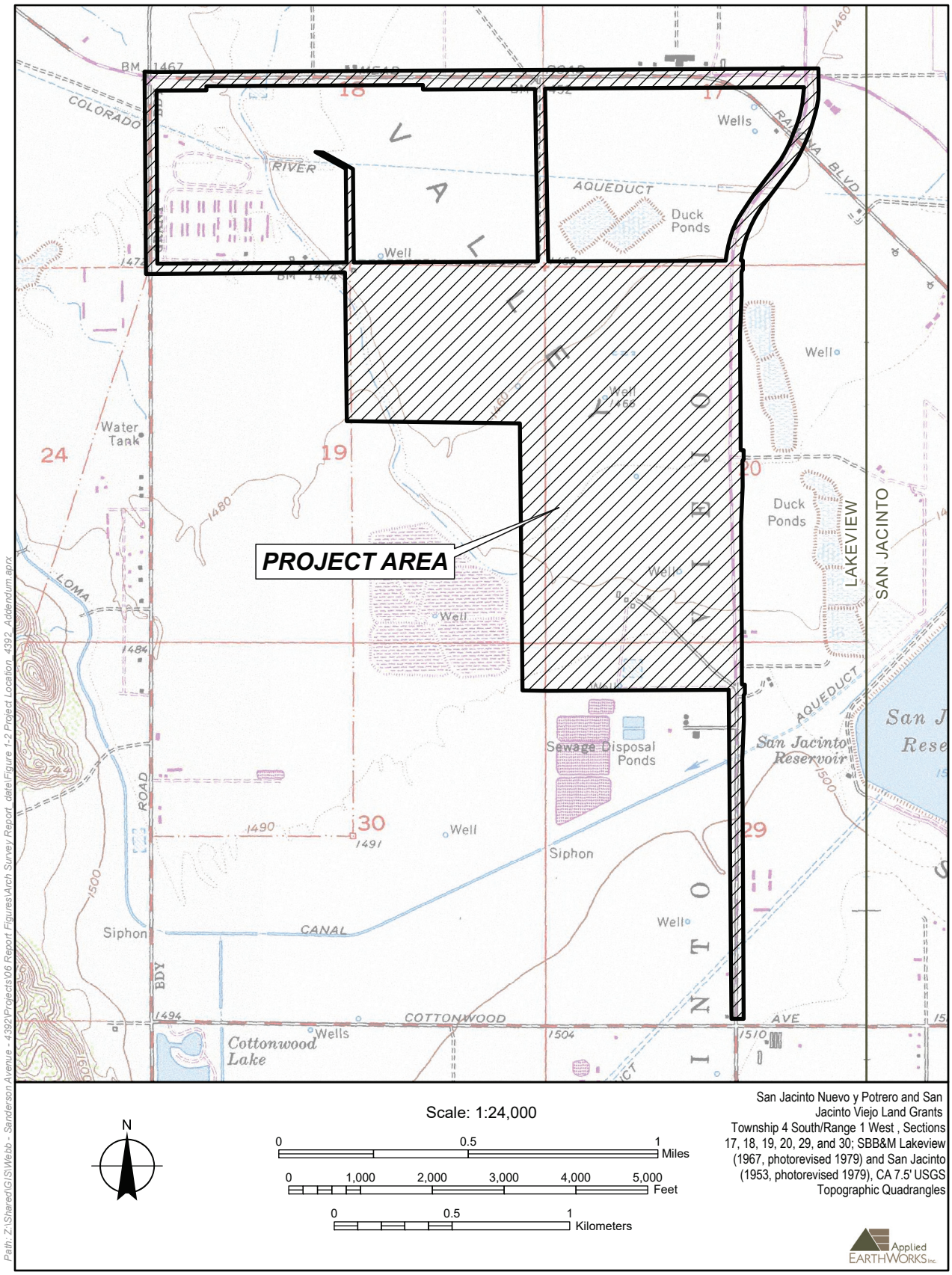

Figure 1 Project location on USGS Lakeview 7.5-minute topographic quadrangle.

REGULATORY CONTEXT

This Project is subject to both state laws and local goals and policies. The following section provides an overview of the relevant laws and regulations.

State of California

At the state level, paleontological resources are protected under CEQA, which requires detailed studies that analyze the environmental effects of a proposed project. If a project is determined to have a potential significant environmental effect, the act requires that alternative plans and mitigation measures be considered. Specifically, Section VII(f) of Appendix G of the CEQA Guidelines, the Environmental Checklist Form, poses the question, "Will the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?" If paleontological resources are identified as being within the proposed project area, the sponsoring agency must take those resources into consideration when evaluating project effects. The level of consideration may vary with the importance of the resource.

County of Riverside

There are several policies covering paleontological resources within the County of Riverside's (County) *General Plan*, *Multipurpose Open Space (OS) Element* (Riverside County Planning Department, 2015:OS-51):

> **OS 19.6:** Whenever existing information indicates that a site proposed for development has high paleontological sensitivity as shown on Figure OS-8, paleontological resource impact mitigation program (PRIMP) shall be filed with the Riverside County Geologist prior to site grading. The PRIMP shall specify the steps to be taken to mitigate impacts to paleontological resources.
>
> **OS 19.7:** Whenever existing information indicates that a site proposed for development has low paleontological sensitivity as shown on Figure OS-8, no direct mitigation is required unless a fossil is encountered during site development. Should a fossil be encountered, the Riverside County Geologist shall be notified and a paleontologist shall be retained by the project proponent. The paleontologist shall document the extent and potential significance of the paleontological resources on the site and establish appropriate mitigation measures for further site development.
>
> **OS 19.8:** Whenever existing information indicates that a site proposed for development has undetermined paleontological sensitivity as shown on Figure OS-8, a report shall be filed with the Riverside County Geologist documenting the extent and potential significance of the paleontological resources on site and identifying mitigation measures for the fossil and for impacts to significant paleontological resources prior to approval of that department.
>
> **OS 19.9:** Whenever paleontological resources are found, the County Geologist shall direct them to a facility within Riverside County for their curation, including the Western Science Center in the City of Hemet.

City of San Jacinto

The City's *General Plan, Resource Management (RM) Element* also includes goals, policies, and implementation program that pertain to paleontological resources (City of San Jacinto, 2006:RM-9 and

Appendix RM-5 and RM-6). Those within the cultural resources section of the document that are relevant to paleontological resources include:

> **Resource Management (RM) Goal 4:** Promote cultural awareness through the preservation of the City's historical, archaeological, and paleontological resources. Policies 4.1 through 4.4 cover the identification, protection, and preservation of such resources within the City.
>
> **RM-16 California Environmental Quality Act, Cultural Resources**
>
> Continue to assess development proposals for potential impacts to sensitive historic, archaeological, and paleontological resources pursuant to the California Environmental Quality Act (CEQA). The first two policies, a and b, cover archaeological and built-environment resources, but the third policy addresses paleontological resources:
>
> c. The City shall require an assessment of the potential for development proposals to significantly impact paleontological resources pursuant to the California Environmental Quality Act Guidelines. If the project involves earthworks, the City may require a study conducted by a professional paleontologist to determine if paleontological assets are present, and if the project will significantly impact the resources. If significant impacts are identified, the City may require the project to be modified to avoid impacting the paleontological materials, require monitoring of rock units with high potential to contain significant nonrenewable paleontologic resources, or require mitigation measures to mitigate the impacts, such as recovering the paleontological resources for preservation.

PALEONTOLOGICAL RESOURCE POTENTIAL

Most professional paleontologists in California adhere to the guidelines set forth by the Society of Vertebrate Paleontology (2010) and industrywide standards (Murphey et al., 2019) to determine the course of paleontological mitigation for a given project unless specific city, county, state, or federal guidelines are available. The City does not have its own paleontological sensitivity guidelines. However, the County has developed a system that establishes detailed protocols for the assessment of the paleontological sensitivity of a project area and outlines measures to follow in order to mitigate adverse impacts to known or unknown fossil resources during project development (County of Riverside, 2015). Therefore, this memo utilizes the County's ranking system and mitigation measures.

Following the County's established process, baseline information is used to assign the paleontological sensitivity of a geologic unit(s) (or members thereof) to one of four categories—Low, Undetermined, High A (Ha), and High B (Hb) potential (County of Riverside, 2015). Geologic units are considered to have Low Potential for paleontological resources if they are unlikely to preserve fossils (e.g., very young sedimentary deposits, plutonic rocks, medium-grade or higher metamorphic rocks) or have been demonstrated to have Low Potential from previous surveys and assessments. Geologic units with Undetermined Potential for paleontological resources are those with little to no information in the literature or have not been previously assessed. Geologic units are considered to be "sensitive" for paleontological resources and have a High Potential for paleontological resources if they are known to include significant fossils anywhere in their extent, even if outside the Project area. Significant fossils are defined by the Society of Vertebrate Paleontology (2010) as those that contribute new and useful taxonomic, phylogenetic, paleoecologic, taphonomic, biochronologic, or stratigraphic data. The County's High A (Ha) Sensitivity is based on the occurrence of fossils that may be present at the ground surface of the Project area, while High B (Hb) Sensitivity is based on the occurrence of fossils at or below 4 feet deep, which may be impacted during construction activities (County of Riverside, 2015). A

coarse-grained paleontological sensitivity map of Riverside County indicates the sensitivity rankings across the ground surface based on the County's established process (Riverside County Planning Department, 2015:Figure OS-8, OS-55).

METHODOLOGY

To assess the paleontological sensitivity of geologic units exposed at the ground surface and those likely to occur in the subsurface of the Project area, *Æ* reviewed published geologic maps and paleontological literature, and conducted museum records searches. For the records searches, *Æ* retained the Natural History Museum of Los Angeles County (NHMLAC) and the Western Science Center (WSC) in Hemet to conduct a search of fossil localities recorded in their collections (Bell, 2022; Stoneburg, 2022).

To augment these results, *Æ* also conducted searches of the online Paleobiology Database (PBDB) and the University of California Museum of Paleontology (UCMP). The PBDB lists a large collection of museum records and publications of fossil material, while the UCMP is the largest repository of fossils on the West Coast of the United States with an older history of collection than several other regional natural history museums.

RESOURCE CONTEXT

The Project area is in the San Jacinto Valley within the northern part of the geologically complex Peninsular Ranges geomorphic province. A geomorphic province is a region of unique topography and geology that is distinguished from other regions based on its landforms and tectonic history (American Geological Institute, 1976). Derived from the same massive batholith (i.e., very deep igneous intrusion) as the core of the Sierra Nevada, the Peninsular Ranges are a series of mountain ranges separated by northwest-trending valleys formed from faults branching from the San Andreas Fault (Norris and Webb, 1976; California Geological Survey, 2002). The mountain ranges are bounded to the east by the Colorado Desert and range in width from 30 to 100 miles (Norris and Webb, 1976). The Project area is within the San Jacinto Fault Zone and is crossed by the Casa Loma Fault (Morton et al., 2006a, 2006b).

The basement rocks in this region are part of a large assemblage known as the Peninsular Ranges Assemblage. The assemblage includes plutonic rocks of the Mesozoic-age Peninsular Ranges batholith, as well as pre-batholithic metasedimentary and metavolcanic rocks (Jahns, 1954; Morton et al., 2006a, 2006b). Thick sequences of Cenozoic sediments, mostly Quaternary in age, have accumulated above these in the valleys of the region (i.e., late Pleistocene- to Holocene-age young alluvial-valley deposits—Qyv_a, Qyv_{1a}, Qyv_{sa}—and middle to late Pleistocene-age old alluvial-fan deposits—Qof_a).

The surficial geology of the Project area is mapped entirely as young alluvial-valley deposits (Qyv_a, Qyv_{1a}) (Morton et al., 2006a, 2006b). These deposits are commonly present along valley floors in the region and consist of unconsolidated sand, silt, and clay. The deposits in the Project area are mostly sandy in composition (arenaceous, subscript "a"), and the deposits west of the Casa Loma Fault (i.e., the southwest half of the Project area) are interpreted to be as recent as only the early Holocene in age (Qyv_{1a}) (Morton et al., 2006a, 2006b).

Previous geotechnical investigations by Leighton and Associates, Inc. (LAI) and Southern California Geotechnical, Inc. (SCG) confirm the presence of alluvial deposits in the Project area. The investigations include a total of 37 borings (LAI–27, SCG–10) to depths ranging from 10 to 76.5± feet bgs as well as

46 Cone Penetration Test soundings (LAI–30, SCG–16) to depths ranging from 50 to 100± feet bgs (Trazo et al., 2021). The findings indicate the presence of topsoil to a depth of 2 feet bgs followed by alluvial sediments that extend to the maximum depth of the investigations. LAI's descriptions of the topsoil and alluvial sediments in Trazo et al. (2021:7) are "silty sands and silty to sandy clay with scattered gravel sized [*sic*] clasts" and "yellow-brown to medium gray and dark brown, dry to wet, silty, very fine to fine sand, with local lenses of silt and silty clay" to the maximum depth explored of 76.5± feet bgs. SCG found artificial fill at the ground surface of all boring locations, except for one boring in the northwest corner of the Project area, to depths of 2.5 to 5.5 feet bgs. SCG encountered undisturbed alluvium beneath the fill or at the ground surface at all boring locations to at least the maximum depth explored of 50 feet bgs. Textures of the alluvial sediments within approximately the upper 25 feet bgs generally range from clayey silts to coarse sands. At depths greater than 25 feet, the textures of the alluvium generally range from silty clays to coarse sands (Trazo et al., 2021:11). No paleontological resources are noted in any of SCG's descriptions.

While topsoil generally does not preserve fossils and middle and late Holocene-age deposits are typically too young for fossilization (Scott and Springer, 2003; Society of Vertebrate Paleontology, 2010), older deposits from Qyv_a and Qyv_{1a} sediments may preserve fossils. Pleistocene-age deposits have proven to be highly fossiliferous elsewhere in inland valleys of Riverside and San Bernardino counties (Reynolds and Reynolds, 1991) and have yielded a wide variety of megafauna, such as mammoths, ground sloths, dire wolves, saber-toothed cats, horses, camels, and bison as well as numerous invertebrate and plant taxa (Scott, 2007; Springer et al., 2009).

RECORDS SEARCH RESULTS

Records search results from NHMLAC and other institutions are detailed in Table 1. Bell (2022) reports no fossil localities from the NHMLAC collections within the Project area. However, she lists a few nearby localities from Pleistocene-age and younger alluvial deposits similar to those mapped either at the surface or likely at depth in the Project area. The closest locality is LACM VP 4540 northwest of the Project area at the junction of Jackrabbit Trail and Gilman Springs Road, which yielded a specimen belonging to the horse family. The next closest localities are LACM VP 1653 and LACM IP 437, east of the Project area on the west side of Castile Canyon, north of the Soboba Indian Reservation. LACM VP 1653 yielded specimens of monkfish and stickleback while LACM IP 437 yielded protoorthopteran (cricket relative) insect and terebratulid (lamp shell) brachiopod specimens.

Locality LACM VP 5168, which yielded another horse specimen, is far to the southwest of the Project area along Point Marina Drive in the East Bay Section of Canyon Lake. Slightly farther to the south is Locality LACM VP 7261 at Skinner Reservoir in Auld Valley, which yielded a specimen of the elephant order and an unspecified ungulate. The farthest localities from the Project area listed by Bell (2022) are LACM VP 6059 and LACM (CIT) 571–572 from Lake Elsinore to the southwest, and LACM VP 6967 from the Pauba Valley to the south, east of Mahlon Vail Road and south of Highway 79. LACM VP 6059 and LACM (CIT) 571–572 yielded camelid, horse, and peccary specimens. LACM VP 6967 yielded specimens of tree frog, legless lizard, garter snake, pocket gopher, and various snails. Bell (2022) does not suggest an age of the alluvium from this locality, but the fossils likely date to the Pleistocene or Holocene Epochs.

Table 1
Fossil Localities Reported Near the Project Area

Locality No.	Geologic Unit (Date)	Taxa	Depth	Approximate Distance from Project Area
WSC[1]—Eastside Pipeline Project, numerous localities	Alluvial deposits (Pleistocene)	Aves (bird) Rodentia (rodent) Gastropoda (snail) Numerous other vertebrates, microvertebrates, and invertebrates	Unknown	2 miles
PBDB[2]—Lakeview localities	Alluvial deposits (Pleistocene)	*Mammuthus* (mammoth) *Smilodon* (saber-toothed cat) *Equus* (horse) *Bison* sp. cf. *B. antiquus* (bison) Numerous other vertebrates, invertebrates, and plants	Unknown	5–6 miles
LACM[3] VP 4540	Unnamed formation, gravel pit (Pleistocene)	Equidae (horse)	Unknown	6 miles
LACM[3] VP 1653, IP 437	Unknown formation (Pleistocene)	*Squatina* (monkfish) *Gasterosteus* (stickleback) *Sobobapteron kirkbaye* (protoorthopteran insect) *Terebratalia hemphili* (terebratulid brachiopod)	Unknown	7 miles
LACM[3] VP 5168	Unknown formation, clay (Pleistocene)	*Equus* (horse)	Unknown	14–15 miles
LACM[3] VP 7261	Unknown formation, arenaceous silt (Pleistocene)	Proboscidea (elephant) Ungulate, unspecified	Unknown	15–16 miles
LACM[3] VP 6059, (CIT) 571–572	Unknown formation (Pleistocene)	Camelidae (camelid) *Equus* (horse) *Platygonus* (peccary)	Unknown	20 miles
UCMP[4]—Lake Elsinore localities	Alluvial deposits (Holocene)	*Pinus* (pine) *Salix* (willow) *Acer* (maple) *Eriogonum* (buckwheat) *Ambrosia* (ragweed) Numerous other plants	Unknown	20 miles
LACM[3] VP 6967	Younger alluvium pebble—gravel, sand, silt, and clay (Pleistocene or Holocene)	*Hyla* (tree frog) *Anniella* (legless lizard) *Thamnophis* (garter snake) *Thomomys* (pocket gopher) *Peromyscus* (deer mouse) Gastropoda (snail)	Unknown, but collected from subsurface during augering	22–23 miles

Sources: [1]Stoneburg (2022), [2]PBDB, [3]Bell (2022), [4]UCMP

Stoneburg (2022) also reports no fossil localities from the WSC collections within the Project area. However, she notes numerous fossil vertebrates and invertebrates, including birds, rodents, and gastropods were documented from Pleistocene alluvial deposits from the Eastside Pipeline Project within 2 miles of the Project area. Due to the proximity to the Project area, she notes similarly fossiliferous Pleistocene deposits may be present in the subsurface of the Project area and recommends that development activities be observed.

The PBDB online database does not list any fossil localities from Pleistocene- and Holocene-age alluvial deposits within the Project area but lists numerous localities within a 10-mile radius. Several are reported near the community of Lakeview, approximately 5–6 miles west-northwest of the Project area, which are documented by Reynolds and Reynolds (1991). These localities yielded mammoth, saber-toothed cat, horse, bison, and numerous small mammals, reptiles, invertebrates, and plants. The PBDB also lists the LACM IP 437 locality and the Eastside Pipeline localities reported by the WSC, the latter of which are documented by Springer et al. (2009).

As with the PBDB, the UCMP's online database also does not list any fossil localities from Pleistocene- and Holocene-age alluvial deposits within the Project area or within a 10-mile radius. The nearest localities are from Holocene-age alluvial deposits approximately 20 miles southwest of the Project area near Lake Elsinore. These localities yielded over 450 pollen and seed specimens representing dozens of gymnosperm and angiosperm taxa, including pine, willow, maple, buckwheat, ragweed, and many others.

FINDINGS AND RECOMMENDATIONS

According to the County's paleontological sensitivity map, the Project area is mapped in an area with High B (Hb) Sensitivity (Riverside County Planning Department, 2015:Figure OS-8, OS-55). *Æ*'s review of geologic maps, paleontological literature, geotechnical investigations for the Project, and the records search results support this ranking. Previous investigations indicate extensive artificial fill and a layer of topsoil up to 2 feet thick is present throughout the Project area. Below the topsoil, the alluvial deposits range from late Pleistocene- to Holocene-age. The youngest deposits directly underlying the topsoil are likely too young to form fossils, while older deposits in the subsurface could potentially preserve them. Furthermore, Morton et al. (2006b) interpret the deposits west of the Casa Loma Fault, (i.e., the southwest half of the Project area [Qyv_{1a}]), to range from late Pleistocene to early Holocene age. These deposits may have greater potential to yield significant paleontological resources than comparatively younger deposits in the northeast half of the Project area. Therefore, *Æ* recommends construction monitoring of ground-disturbing activities throughout the Project area with particular focus on the southwest half. As the maximum proposed depth of Project-related ground-disturbing activities (75 feet bgs) will exceed 4 feet bgs, there is a high likelihood that such activities will impact paleontological resources, if present, and the likelihood increases with depth.

For construction monitoring, *Æ* recommends a paleontological resource impact mitigation program (PRIMP) be prepared and approved prior to the issuance of grading permits. A qua lified professional paleontologist (Project Paleontologist) who meets industrywide standards (Murphey et al., 2019) and the Society of Vertebrate Paleontology (2010) qualification standards should prepare the PRIMP. The latter qualification standards are recommended because of the preponderance of local and regional evidence for vertebrate fossils to be encountered within the Project area.

The purpose of the PRIMP is to establish mitigation monitoring procedures and discovery protocols, based on industrywide best practices (Murphey et al., 2019), for any paleontological resources that may be encountered as a result of earth-disturbing activities during construction of the Project. For instance, Worker's Environmental Awareness Program (WEAP) training should be prepared prior to the start of Project-related ground disturbance and presented in person to all field personnel to describe the types of fossils that may occur and the procedures to follow if any are encountered in the Project area. A PRIMP also will indicate where construction monitoring will be required for the Project and the frequency of required monitoring (i.e., full-time, spot checks, etc.). The collection and processing (e.g., wet- or dry-screening) of sediment samples to analyze for presence/absence of microvertebrates and other small fossils also would be addressed in a PRIMP. In addition to monitoring and sampling procedures, a PRIMP also will provide details about fossil collection, analysis, and preparation for permanent curation at an approved repository, such as the WSC. Lastly, the PRIMP describes the different reporting standards to be used for monitoring with negative findings versus monitoring resulting in fossil discoveries.

It has been a pleasure assisting you with this Project. If you have any questions, please do not hesitate to contact me at (626) 578-0119 x403.

Sincerely,

Chris Shi
Senior Paleontologist
Applied EarthWorks, Inc.

Edited and Approved By:

Amy Ollendorf, Ph.D., M.S., RPA 12588
Paleontology Program Manager
Applied EarthWorks, Inc.

REFERENCES CITED

American Geological Institute. 1976. Dictionary of geological terms. Anchor Press, Garden City, New York, 472 pp.

Bell, A. 2022. Paleontological Resources for the Sanderson Avenue Project (#4392). Research and Collections, Natural History Museum of Los Angeles County, Los Angeles, California.

California Geological Survey. 2002. California Geomorphic Provinces. California Geological Survey Note 36. California Department of Conservation.

City of San Jacinto. 2006. San Jacinto General Plan.

County of Riverside. 2015. Section 4.9, Cultural and Paleontological Resourcesin Draft Environmental Impact Report No. 521. Riverside County General Plan Updated Project, General Plan Amendment No. 960. Riverside County Planning Department, Riverside, California.

Jahns, R. H. 1954. Geology of the Peninsular Range Province, Southern California and Baja California. California Division of Mines Bulletin 170:9–52.

Morton, D. M., F. K. Miller, P. M. Cossette, and K. R. Bovard. 2006a. Geologic map of the San Bernardino and Santa Ana 30' × 60' quadrangles, California. U.S. Geological Survey Open-File Report 2006-1217.

Morton, D. M., F. K. Miller, P. M. Cossette, and K. R. Bovard. 2006b. Geologic map of the San Bernardino and Santa Ana 30' × 60' quadrangles, California: geology and description of map units, version 1.0. U.S. Geological Survey Open File Report 2006-1217.

Murphey, P. C., G. E. Knauss, L. H. Fisk, T. A. Deméré, and R. E. Reynolds. 2019. Best practices in mitigation paleontology. Proceedings of the San Diego Society of Natural History No. 47, 43 pp.

Norris, R. M., and R. W. Webb. 1976. Geology of California. Wiley and Sons, Santa Barbara, California.

Reynolds, R. E., and R. L. Reynolds. 1991. The Pleistocene Beneath Our Feet: Near-surface Pleistocene Fossils in Inland Southern California Basins; pp. 41–43 in M. O. Woodburne and R. E. Reynolds (eds.), Inland Southern California: the Last 70 Million Years. San Bernardino County Museum Association, Redlands, California.

Riverside County Planning Department. 2015. Riverside County General Plan. Riverside, California, revised December 8, 2015 pp.

Scott, E. 2007. Paleontology review, Yucaipa Freeway Corridor Specific Plan, Calimesa and Yucaipa, San Bernardino County, California. San Bernardino County Museum, Redlands, California. Submitted April 30, 2007, to P&D Consultants.

Scott, E., and K. Springer. 2003. CEQA and fossil preservation in California. The Environmental Monitor Fall 2003.

Society of Vertebrate Paleontology. 2010. Standard procedures for the assessment and mitigation of adverse impacts to paleontological resources. Society of Vertebrate Paleontology Impact Mitigation Guidelines Revision Committee. Available at https://vertpaleo.org/wp-content/uploads/2021/01/SVP_Impact_Mitigation_Guidelines.pdf. Accessed April 27, 2022. 11 pp.

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

Stoneburg, B. E. 2022. Paleontological Records Search for the Sanderson Avenue Project. Western Science Center, Hemet, California.

Trazo, R. G., D. Kas, and G. K. Mitchell. 2021. Geotechnical Feasibility Study, Proposed Commercial/Industrial Development, southwest of intersection of Sanderson Avenue and Record Road, San Jacinto, California. Southern California Geotechnical, Yorba Linda, California. Prepared for Shea Property Management Company, Aliso Viejo, California.