

SAN DIEGO NATURAL HISTORY MUSEUM

26 October 2020

Arleen Garcia-Herbst
Spindrift Archaeological Consulting
8895 Towne Centre Drive #105-248
San Diego, CA 92122

RE: Paleontological Records Search – Moreno Valley Family Housing

Dear Ms. Garcia-Herbst:

This letter presents the results of a paleontological records search conducted for the Moreno Valley Family Housing project (Project), located in the western portion of the City of Moreno Valley, Riverside County, California. The Project site lies along the north side of Dracaea Avenue, and is bordered to the north and southeast by existing residential development, and to the east and west by cleared, vacant land.

Methods

A review of published geological maps covering the Project site and surrounding area was conducted to determine the specific geologic units underlying the Project site. Each geologic unit was subsequently assigned a paleontological resource potential following guidelines developed by the City of Moreno Valley (2006) and County of Riverside (2015), which are based, in part, on the standards set forth by the Society of Vertebrate Paleontology (SVP, 2010). In addition, a search of the paleontological collection records housed at the San Diego Natural History Museum (SDNHM) was conducted in order to determine if any documented fossil collection localities occur at the Project site or within the immediate surrounding area.

Results

Published geological reports (e.g., Morton and Miller, 2006) covering the Project area indicate that the proposed Project has the potential to impact Quaternary very old alluvial-fan deposits. This geologic unit and its paleontological potential are summarized below.

The SDNHM does not have any recorded fossil collection localities within a one-mile radius of the Project site.

Quaternary very old alluvial-fan deposits – Early to middle Pleistocene-age (approximately 2.58 million to 774,000 years old) very old alluvial-fan deposits underlie the entire Project site at the surface. Generally, these deposits consist of moderately to well consolidated silt, sand, gravel, and conglomerate (Morton and Miller, 2006). While there are no SDNHM fossil collection localities documented in the vicinity of the Project site, significant vertebrate fossil remains have been recovered from similar deposits elsewhere in the City of Moreno Valley. These fossils include isolated remains of giant ground sloth, camelid, and horse (LSA, 2014). The City of Moreno Valley General Plan EIR (City of Moreno Valley, 2006) neglects to consider the recovery of significant vertebrate fossils from Pleistocene-age alluvial deposits in this area, instead assigning all alluvial deposits exposed across the

valley floor a low paleontological potential. The County of Riverside (2015), in contrast, assigns these deposits a high sensitivity (category B), indicating that fossils are likely to be encountered at or exceeding 4 feet below surface grade. This rating is supported by the known occurrence of fossils in the City of Moreno Valley, as described above, and elsewhere in western Riverside County.

Summary and Recommendations

The high paleontological sensitivity (category B) of Quaternary very old alluvial-fan deposits in the City of Moreno Valley suggests that construction of the proposed Project may result in impacts to paleontological resources. Any proposed excavation activities that extend deep enough to encounter previously undisturbed deposits of this geologic unit (at depths of 4 or more feet below surface grade) have the potential to impact the paleontological resources preserved therein. For these reasons, implementation of a complete paleontological resource mitigation program during ground-disturbing activities is recommended.

If you have any questions concerning these findings please feel free to contact me at kmccomas@sdnhm.org.

Sincerely,

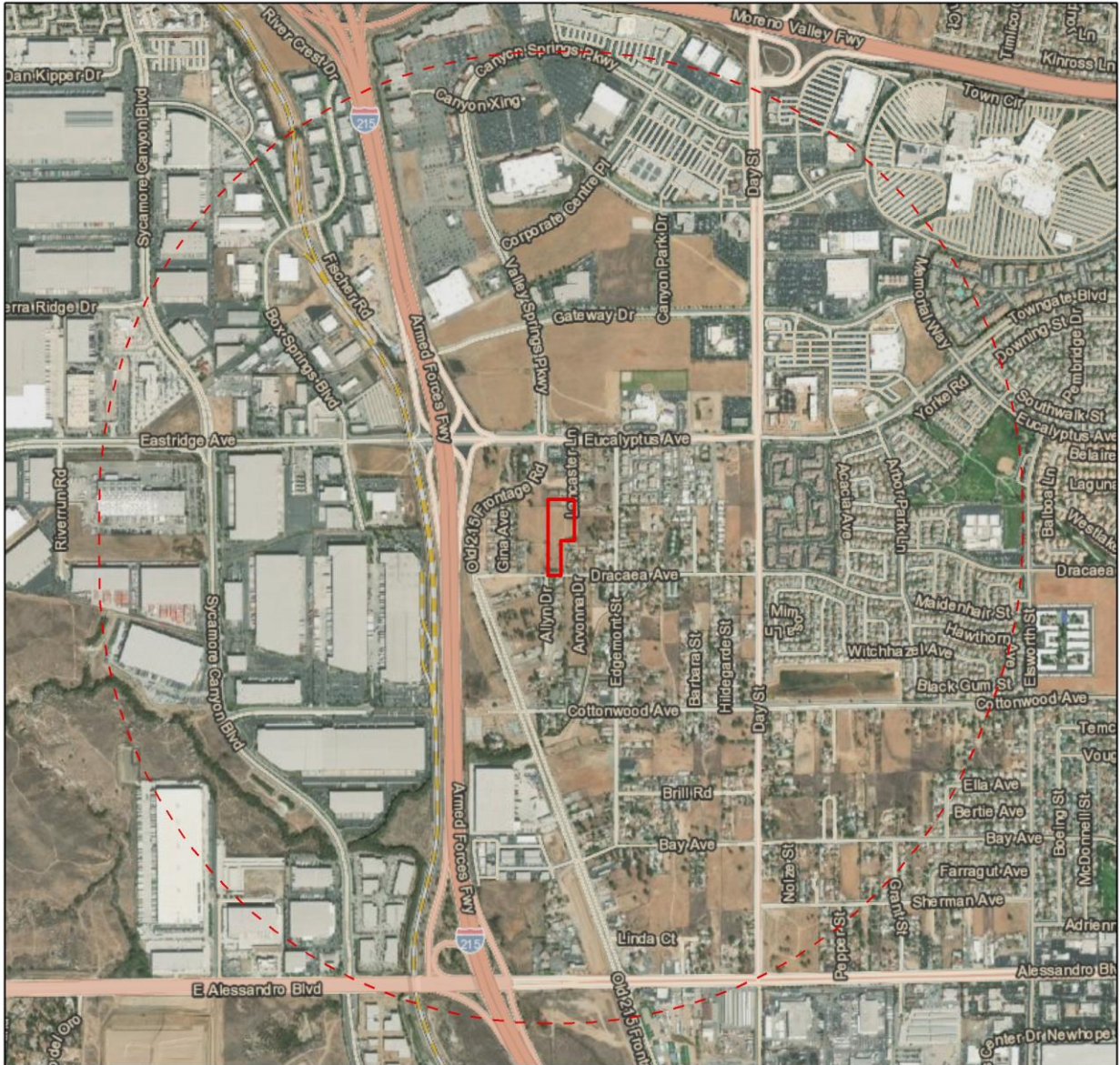


Katie McComas, M.S.
Paleontological Report Writer & GIS Specialist
San Diego Natural History Museum



Enc: Figure 1: Project map

Literature Cited

- City of Moreno Valley. 2006. City of Moreno Valley General Plan, Final Program Environmental Impact Report. Prepared by UCR Archaeological Research Unit. http://www.moreno-valley.ca.us/city_hall/general-plan/06gpfinal/ieir/5_10-cultural-resources.pdf.
- County of Riverside. 2015. County of Riverside Environmental Impact Report No. 521, Public Review Draft. https://planning.rctlma.org/Portals/14/genplan/general_plan_2015/DEIR%20521/04-09_CulturalAndPaleoResrcs.pdf.
- LSA Associates, Inc. (LSA). 2014. Paleontological Mitigation Monitoring Report for the Aldi Distribution Center Project, City of Moreno Valley, Riverside County, California. Prepared by Sarah Rieboldt.
- Morton, D.M., and F.K. Miller. 2006. Geologic map of the San Bernardino and Santa Ana 30' x 60' quadrangles, California. U.S. Geological Survey Open-File Report 2006-1217. Scale 1:100,000.
- San Diego Natural History Museum (SDNHM), unpublished paleontological collections data.
- Society of Vertebrate Paleontology (SVP). 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. Society of Vertebrate Paleontology: 1–11.



Sources: World Transportation, World Imagery, and Terrain Hillshade, Esri et al., 2020

-  Project boundary
-  1 mile radius buffer

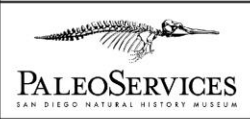


Figure 1: Project Map
 Moreno Valley Family Housing
 City of Moreno Valley, Riverside County, California

