

APPENDIX G

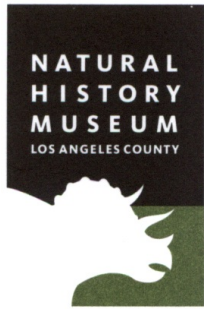
LACM FOSSIL LOCALITY SEARCH



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23 July 2019

LSA Associates, Inc.
20 Executive Park, Suite 200
Irvine, California 92614

Attn: Kelly Vreeland, Paleontologist

re: Paleontological Resources Records Check for the proposed Yorba Linda Boulevard and Savi Ranch Parkway Widening Project, LSA Project # HNT1901.01, in the City of Yorba Linda, Orange County, project area

Dear Kelly:

I have thoroughly searched our paleontology collection records for the locality and specimen data for the proposed Yorba Linda Boulevard and Savi Ranch Parkway Widening Project, LSA Project # HNT1901.01, in the City of Yorba Linda, Orange County, project area as outlined on the portion of the Black Star Canyon USGS topographic quadrangle map that you sent to me via e-mail on 9 July 2019. We do not have any vertebrate fossil localities that lie within the project boundaries, but we do have localities nearby from the same sedimentary deposits that occur in the proposed project area, either at the surface or at depth.

Most of the proposed project area has surface deposits that consist of younger Quaternary Alluvium or active gravel deposits, derived from the Santa Ana River that currently flows through the proposed project area. These deposits typically do not contain significant vertebrate fossils, at least in the uppermost layers, but older sedimentary deposits at depth may well contain significant fossil vertebrate remains. In the very northwestern and southeastern portions of the proposed project area there are some surface deposits of older Quaternary Alluvium, also derived from the Santa Ana River that currently flows through the proposed project area. Our closest fossil vertebrate locality from these deposits is LACM 4943, west-southwest of the proposed project area in the City of Orange between the Newport Freeway (Highway 55) and the Santa

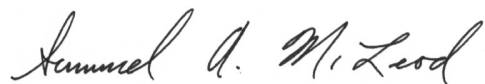
Ana River near the intersection of Glassell Street and Fletcher Avenue. Almost due north of the proposed project area, up Soquel Canyon in the Chino Hills, we have another locality in older Quaternary deposits, LACM 7508, that produced fossil specimens of ground sloth, *Nothrotheriops*, and horse, *Equus giganteus*. Slightly farther north-northeast of the proposed project area in the Chino Hills just south of Los Serranos, our older Quaternary localities LACM 7268 and 7271 both produced specimens of fossil horse, *Equus*.

In the elevated terrain immediately surrounding the older Quaternary exposures, and thus likely to occur at modest depth below the older Quaternary deposits, there are exposures of the marine late Miocene Puente Formation. North-northeast of the proposed project area we have numerous localities from the Puente Formation in the Chino Hills south of Los Serranos including LACM 7266-6267, 7269-7270, and 7272-7284. These localities have produced a suite of fossil fish including herring, *Ganolytes cameo* and *Xyne grex*, cod, *Eclipes*, lantern fish, Myctophidae, jack, *Pseudoseriola*, snake mackerel, *Thyrsoles*, croaker, *Lompoquia*, mackerel, *Sarda* and *Scomber*, and deep sea smelt, Bathylagidae.

Shallow excavations in the younger Quaternary Alluvium exposed in most of the proposed project area are unlikely to uncover significant fossil vertebrate remains. Deeper excavations there that extend down into the older sedimentary deposits, however, as well as any excavations in the exposures of older Quaternary Alluvium or the Puente Formation in the proposed project area, may well encounter significant vertebrate fossils. Any substantial excavations in the proposed project area, therefore, should be monitored closely to quickly and professionally recover any fossil remains while not impeding development. Also, sediment samples should be collected and processed to determine the small fossil potential in the proposed project area. Any fossils collected should be placed in an accredited scientific institution for the benefit of current and future generations.

This records search covers only the vertebrate paleontology records of the Natural History Museum of Los Angeles County. 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.

Sincerely,

A handwritten signature in cursive script that reads "Samuel A. McLeod".

Samuel A. McLeod, Ph.D.
Vertebrate Paleontology

enclosure: invoice