

Natural History Museum
of Los Angeles County
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Vertebrate Paleontology Section
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7 March 2018

ECORP Consulting, Inc.
215 North Fifth Street
Redlands, CA 92374

Attn: Wendy Blumel, Assistant Cultural Group Manager

re: Paleontological resources for the proposed Zanja Trails 7th to Church Street Project,
ECORP Project # 2018-022, in the City of Redlands, San Bernardino County,
project area

Dear Wendy:

I have conducted a thorough search of our paleontology collection records for the locality and specimen data for the proposed Zanja Trails 7th to Church Street Project, ECORP Project # 2018-022, in the City of Redlands, San Bernardino County, project area as outlined on the portion of the Redlands USGS topographic quadrangle map that you sent to me via e-mail on 21 February 2018. We do not have any vertebrate fossil localities that lie directly within the proposed project boundaries, but we do have a localities at some distance from sedimentary deposits similar to those that may occur subsurface in the proposed project area.

The entire proposed project area has surface deposits composed of soil and younger Quaternary Alluvium, derived primarily as alluvial fan deposits from the Crafton Hills to the east, via The Zanja drainage that flows through or adjacent to the proposed project area. Typically these types of deposits do not contain significant vertebrate fossils in the uppermost layers and we have no vertebrate fossil localities very nearby from these deposits. At varying depths, however, these deposits always have the potential to contain significant fossil vertebrate remains. Our closest vertebrate fossil locality from somewhat similar deposits is LACM 4540, south-southeast of the proposed project area on the northeastern side of the San Jacinto Valley just west of Jack Rabbit Trail, that produced a specimen of fossil horse, *Equus*. Our next closest fossil vertebrate locality from similar deposits is LACM 7811, west-southwest of the proposed

project area in the Jurupa Valley north of Norco and west of Mira Loma, that produced a fossil specimen of coachwhip, *Masticophis flagellum*.

Shallow excavations in the younger Quaternary Alluvium found at the surface throughout the proposed project area probably will not uncover any significant vertebrate fossils. Deeper excavations there that extend down into the older sedimentary deposits, however, may well encounter significant fossil vertebrate remains. Any substantial excavations in the proposed project area, therefore, should be closely monitored to quickly and professionally collect any fossils discovered without impeding development. Sediment samples should also be collected and processed to determine the small fossil potential in the proposed project area. Any fossils recovered during mitigation should be deposited in an accredited and permanent 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