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5 April 2018

Psomas 3 Hutton Centre Drive, Suite 200 Santa Ana, CA 92707-8794

Attn: Charles Cisneros, Senior Archaeologist / Project Manager

re: Paleontological Resources for the proposed Temple Avenue Project, Psomas Project 3MTS010200, in the City of Walnut, Los Angeles County, project area

Dear Charles:

I have conducted a thorough search of our Vertebrate Paleontology records for the proposed Temple Avenue Project, Psomas Project 3MTS010200, in the City of Walnut, Los Angeles County, project area as outlined on the portion of the San Dimas USGS topographic quadrangle map that you sent to me via e-mail on 22 March 2018. We have no vertebrate fossil localities that lie directly within the boundaries of the proposed project area, but we do have localities somewhat nearby from sedimentary deposits similar to those that may occur at depth in the proposed project area.

In the lower lying terrain in the southwestern portion and the eastern margin of the proposed project area the surface deposits consist of younger Quaternary Alluvium, derived as alluvial fan deposits from the San Jose Hills immediately to the north. These deposits typically do not contain significant vertebrate fossils, at least in the uppermost layers, but they may be underlain by older sedimentary deposits that do contain significant fossil vertebrate remains. Our closest vertebrate fossil locality from similar older Quaternary deposits is LACM 8014, east-southeast of the proposed project area in the northeastern Puente Hills just southwest of the intersection of the Riverside Freeway (Highway 60) and the Corona Freeway (Highway 71), that produced a fossil specimen of bison, *Bison*. A little farther to the east-southeast from the proposed project area, in English Canyon west of Chino, our older Quaternary locality LACM 1728 produced fossil specimens of horse, *Equus*, and camel, *Camelops*, at a depth of 15 to 20 feet below the surface.



In the surrounding elevated terrain there are exposures of the marine late Miocene Puente Formation, also sometimes considered to be part of the Monterey Formation in this area with the youngest member of the Puente Formation referred to as the Sycamore Canyon Formation. Our closest vertebrate fossil locality from the Puente Formation is LACM 6171, due west of the proposed project area in the hills on the west side of Collegewood Drive, that produced a fossil fish specimen of herring, Ganolytes. Our next closest fossil vertebrate locality from the Puente Formation is LACM 7153, just south of east of the proposed project area south of Temple Avenue and west of Valley Boulevard, that produced many specimens of fossil pipefish including the holotype (name bearing specimen of a species new to science) of the pipefish Syngnathus emeritus, published by R. A. Fritzsche in 1980 (Revision of the eastern Pacific Syngnathidae (Pisces: Syngnathiformes), including both Recent and fossil forms. Proceedings of the California Academy of Sciences, 42(6):181-227). Further to the southeast of the proposed project area, in Diamond Bar south and west of the intersection of the Pomona Freeway (Highway 60) and the Orange Freeway (Highway 57), our Puente Formation locality LACM 7190 produced a fauna of fossil fish including deep sea smelts, Bathylagidae, lantern fish, Myctophidae, jacks, Carangidae, and herrings, Ganolytes and Etringus.

Shallow excavations in the younger Quaternary Alluvium exposed throughout the proposed project area probably will not uncover significant vertebrate fossil remains. Deeper excavations there that extend down into older deposits, however, may well encounter significant fossil vertebrate specimens. Any substantial excavations in the proposed project area, therefore, should be monitored closely to quickly and professionally recover any fossil remains discovered while not 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,

Jummel a. Mi Lood

Samuel A. McLeod, Ph.D. Vertebrate Paleontology

enclosure: invoice