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14 May 2020

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

Attn: Sarah Rieboldt, Ph.D., Associate / Senior Paleontologist

re: Paleontological Resources Records Check for the proposed Orange Medical Office Building Project, LSA Project # PMB2001, in the City of Orange, Orange County, project area

## Dear Sarah:

I have thoroughly searched our paleontology collection records for the locality and specimen data for the proposed Orange Medical Office Building Project, LSA Project # PMB2001, in the City of Orange, Orange County, project area as outlined on the portion of the Orange USGS topographic quadrangle map that you sent to me via e-mail on 30 April 2020. We do not have any vertebrate fossil localities that lie directly within the proposed project area 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.

Surface sediments in the proposed project area and in the surrounding vicinity consist of younger Quaternary Alluvium, derived as alluvial fan deposits from the hills to the east and northeast via Santiago Creek that currently flows just to the south or via the Santa Ana River to the west, with older Quaternary deposits occurring at various depths. These younger Quaternary deposits typically do not contain significant vertebrate fossils, at least in the uppermost layers, but we have a vertebrate fossil locality, LACM 1652, along Rio Vista Avenue south of Lincoln Avenue almost due north of the proposed project area, that produced a fossil specimen of sheep, *Ovis*. Our closest fossil locality in older Quaternary sediments is LACM 4943, situated northnortheast of the proposed project area immediately east Glassell Street along Fletcher Avenue, that produced a specimen of fossil horse, *Equus*, at a depth of 8-10 feet below the surface.

Shallow excavations in the uppermost layers of the younger Quaternary alluvial sediments in the proposed project site area are unlikely to uncover significant fossil vertebrate remains. Deeper excavations in the proposed project area, however, may well encounter significant vertebrate fossils in older Quaternary sediments. Any substantial excavations below the uppermost layers, therefore, should be closely monitored to quickly and professionally collect any specimens without impeding development. Also, sediment samples should 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,

Samuel A. McLeod, Ph.D. Vertebrate Paleontology

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enclosure: invoice