Appendices

Appendix H Paleontological Resources Data

Appendices

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27 December 2018

PlaceWorks, Inc. 3 MacArthur Place, Suite 1100 Santa Ana, CA 92707

Attn: Elizabeth Kim, Senior Associate

re: Paleontological Records Search for the proposed 6501–6513 Serrano Avenue Project, in the City of Anaheim, Orange County, project area

Dear Kim:

I have conducted a thorough search of our Vertebrate Paleontology records for the proposed 6501–6513 Serrano Avenue Project, in the City of Anaheim, 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 18 December 2018. We do not have any vertebrate fossil localities that lie within the proposed project site boundaries, but we do have localities nearby from the same sedimentary deposits that probably occur at depth in the proposed project area.

From the level of geologic mapping available to me it appears that the entire proposed project area has exposures of the marine late Miocene Puente Formation, consisting of the lower members of the Puente Formation: the Soquel Member and the La Vida Member. Our closest vertebrate fossil locality from the Puente Formation (La Vida Member) is LACM 6287, southeast of the proposed project area in Limestone Canyon south of Santiago Canyon Road, that produced fossil specimens of tonguefish, *Symphurus*. Our next closest fossil vertebrate localities in the Puente Formation, but from the slightly younger Yorba and Soquel Members, are about sixty localities, LACM 5560, 6307-6337, 7266-7267, 7269-7270, 7272-7284, 7373-7381, 7383, and 7386, just south of Los Serranos and west of the Corona Freeway northeast of the proposed project area. These localities have produced a rich fauna of fossil fish and marine mammals (see appendix for the composite fauna from these localities).

Any excavations in the Puente Formation exposed throughout the proposed project area may well encounter significant vertebrate fossil remains. 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. Also, sediment samples should be collected and processed to determine the small fossil potential in the proposed project area. Any fossil materials uncovered during mitigation activities 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

Summel A. M. Level

enclosures: appendix, invoice

Composite fossil fauna from Puente Formation localities just south of Los Serranos, Chino Hills Localities LACM 5560, 6307-6337, 7266-7267, 7269-7270, 7272-7284, 7373-7381, 7383, and 7386

Osteichthyes

Clupeiformes

Clupeidae - herrings

Ganolytes cameo Xyne grex

Gadiformes

Gadidae - cods

Eclipes

Moridae - moras

Myctophiformes

Myctophidae - lanternfishes

Perciformes

Carangidae - jacks; amberjacks; pompanos

Decapterus Pseudoseriola

Gempylidae - snake mackerels; escolars; oilfishes

Thyrsocles kriegeri

Sciaenidae - croakers

Lompoquia

Scombridae - mackerels & tunas

Sarda Scomber

Serranidae - sea basses & groupers

Sparidae - porgies

Plectrites classeni

Salmoniformes

Bathylagidae - deep sea smelts
Salmonidae - trouts & salmons

Oncorhynchus

Scorpaeniformes

Scorpaenidae - scorpionfishes & rockfishes

Stomiatiformes

Chauliodontidae - viperfish

Chauliodus eximius

Sternoptychidae - hatchetfishes

Argyropelecus

Mammalia

Carnivora

Otariidae - eared seal [sea lions]

Pithanotaria

Cetacea

Balaenopteridae - rorqual baleen whales

Phocoenidae - porpoises
Physeteridae - sperm whales

Scaldicetus