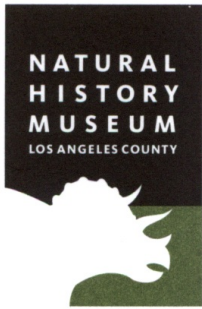

APPENDIX Q
PALEONTOLOGICAL RECORDS SEARCH

Natural History Museum
of Los Angeles County
900 Exposition Boulevard
Los Angeles, CA 90007

tel 213.763.DINO
www.nhm.org



Vertebrate Paleontology Section
Telephone: (213) 763-3325

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31 May 2019

UltraSystems Environmental
16431 Scientific Way
Irvine, CA 92618-7443

Attn: Stephen O'Neil, Cultural Resources Manager

Re: Paleontological Records Search for the proposed HACLA - Rose Hill Courts Rehabilitation Project, UltraSystems Environmental Project No. 6022A, in the City of Los Angeles, Los Angeles County, project area

Dear Stephen:

We have conducted a thorough search of our Vertebrate Paleontology records for the proposed HACLA - Rose Hill Courts Rehabilitation Project, UltraSystems Environmental Project No. 6022A, in the City of Los Angeles, Los Angeles County, project area as provided on the portion of the Los Angeles USGS topographic quadrangle map that Megan Black Doukakos sent to me via e-mail on 17 May 2019. We do not have any vertebrate fossil localities that lie within the proposed project area boundaries, but we do have localities nearby from the same sedimentary deposits that occur in the proposed project area.

The lower lying terrain in the western portion of the proposed project area has surface deposits that consist of younger Quaternary Alluvium, derived as alluvial fan deposits from the surrounding hills. These deposits typically do not contain significant vertebrate fossils, at least in the uppermost layers, and we have no localities from such deposits anywhere nearby, but they are underlain by older sedimentary deposits at relatively shallow depth that may well contain significant fossil vertebrate remains. The more elevated terrain on the eastern side of the proposed project area, and in all of the surrounding elevated terrain, there are exposures of the marine late Miocene Puente Formation [that may also be referred to as the Monterey Formation or even an unnamed shale in this vicinity], and these deposits occur at unknown but probably

shallow depth in the western portion of the proposed project area. We have numerous vertebrate fossil localities within the Puente Formation scattered throughout the area. Our closest vertebrate fossil locality from the Puente Formation is LACM 3882, west-southwest of the proposed project area in Lincoln Heights near Lincoln Park Avenue, that produced the holotype specimen (the specimen used as the basis for describing a species new to science) of the fossil cetotheriid baleen whale *Mixocetus elysius*, (R. Kellogg, 1934. A New Cetothere from the Modelo Formation at Los Angeles, California. Carnegie Institution of Washington Publication, 447(3):86), one of the most complete fossil whale skulls known from California.

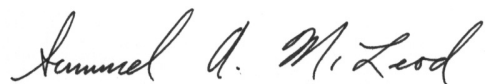
Our next closest Puente Formation locality is probably LACM 7007, southeast of the proposed project area west of Alhambra Avenue west of the intersection of Chester Street and Vaquero Avenue, that produced a specimen of undetermined fossil bony fish, Osteichthyes. Slightly farther to the southeast, near the intersection of Valley Boulevard and Highbury Avenue, our Puente Formation locality LACM 1027 produced fossil fish specimens of the extinct herring *Xyne grex*. West-southwest of the proposed project area, near the intersection of North San Fernando Road and Humboldt Street between the Golden State Freeway (I-5) and the Los Angeles River, our Puente Formation locality LACM 7507 produced a fossil specimen of the snake mackerel, *Thyrsocles kriegeri*, from a sewer street shaft at a depth of about 100 feet below the surface.

Just north of west of the proposed project area, along Seymour Street between San Fernando Road and Figueroa Street, our Puente Formation locality LACM 1880 produced a suite of fossil fish including needlefish, Belonidae, herring, *Etringus*, cod, *Eclipes*, croaker, *Lompoquia*, slickheads, Alepocephalidae, rockfish, Scorpaenidae, viperfish, *Chauliodus*, bristlemouth, *Cyclothone*, and hatchetfish, *Argyropelecus bullockii*. Just north of east of the proposed project area, in Emery Park, between Huntington Drive, Main Street, and Poplar Boulevard, our Puente Formation locality LACM 1031 produced a suite of fossil fish including moray, *Deprandus lestes*, grunion, *Zanteclites hubbsi*, herrings, *Clupea hadleyi*, *Ganolytes cameo*, and *Xyne grex*, sardine, *Ellimma elmodenae*, cods, *Eclipes extensus* and *Merriamina ectenes*, lanternfishes, Myctophidae, snake mackerel, *Thyrsocles kriegeri*, porgie, *Plectrites classeni*, deep sea smelt, *Quaesita quisquilia*, and pipefish, *Hipposyngnathus imporcitor*. Specimens of the pipefish *Hipposyngnathus imporcitor* from locality LACM 1031 were published in the scientific literature by L. R. David (1943. Miocene fishes of southern California. Geological Society of America Special Papers, 43:1-193) and R. A. Fritzsche (1980. Revision of the eastern Pacific Syngnathidae (Pisces: Syngnathiformes), including both Recent and fossil forms. Proceedings of the California Academy of Science, 42(6):181-227). Locality LACM 1031 also produced a paratype (a specimen used in describing a species new to science) of the fossil herring *Clupea hadleyi* (D. S. Jordan and J. Z. Gilbert. 1919. Fossil Fishes of Southern California. II. Fossil fishes of the Miocene (Monterey) Formations. Leland Stanford Junior University Publications University Series, pp.13-64).

Shallow excavations in the younger Quaternary Alluvium exposed in the lower lying terrain in the western portion of the proposed project area are unlikely to uncover any significant vertebrate fossils. Deeper excavations there that extend down into the Puente Formation, or any excavations in the Puente Formation exposed in the elevated terrain in the eastern portion of the proposed project area, however, may well encounter significant to highly 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 their small fossil potential. 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". The signature is written in black ink and is positioned below the word "Sincerely,".

Samuel A. McLeod, Ph.D.
Vertebrate Paleontology

enclosure: invoice