Kenneth L. Finger, Ph.D.
Consulting Paleontologist

18208 Judy St., Castro Valley, CA 94546-2306 510.305.1080 klfpaleo@comcast.net

October 6, 2015

Dan Jones
RCH Group
1640 White Rock Road, Suite 150-A
Rancho Cordova, CA 95670

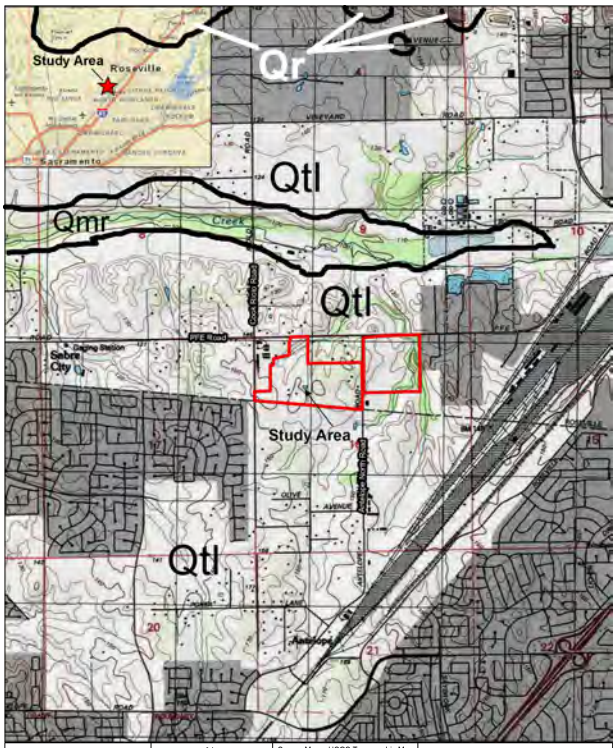
Re: Paleontological Records Search for the Placer Greens Project (PLN15-00053)

Dear Mr. Jones:

As per your request, I have conducted a search of the University of California Museum of Paleontology (UCMP) database for the Placer Greens Project in Placer County. The proposed project location is in the area along the southern border of the County, just south of PFE Road and east of Cook Mountain Road, T10N, R6E, Citrus Heights Quadrangle (1992 USGS 7.5-minute series topographic map).

Geologic Units

The geologic maps of Wagner et al. (1981) and Helley and Harwood (1985) show the general area of the project site as consisting solely of Pleistocene alluvial sediments. As shown on the adjacent map, the units, from youngest to oldest, are the Modesto Formation (Qm), the Riverbank Formation (Qr), undifferentiated Modesto-Riverbank formations (Qmr), and the Turlock Lake Formation (Qtl). The latter unit is the most extensive and covers the entire project site. Its consists of brown to tan sandstone and siltstone, and it represents eroded alluvial fans derived primarily from the plutonic rocks of the Sierra Nevada to the east. The age of this geologic unit is estimated be between 450,000 and 600,000 yBP, or early to middle Pleistocene, which correlates with the Irvingtonian Land Mammal Stage.



UCMP Database Records Search

The UCMP database lists 54 Irvingtonian vertebrate fossil localities throughout California, which have yielded 1287 specimens, but none of the finds were made in Sacramento County or the adjacent counties of Placer and Sutter, and none are ascribed to the Turlock Lake Formation. Dundas and Chatters (2013) recently studied the fauna of UCMP locality V93128 (Fairmead Landfill, Chowchilla, Madera County), however, and reassigned it from the late Pleistocene Riverbank Formation to the subjacent Turlock Lake Formation. The UCMP database lists 221 vertebrate specimens recovered from that site (see attached faunal list). The significance of this locality is evidenced by the adjacent Discovery Center that opened in 2010 to showcase and educate the public about its paleontological resources.

Paleontological Potential and Sensitivity

Fossil occurrences in Pleistocene alluvium are generally spotty and unpredictable, so its paleontological potential is typically low. Nevertheless, the Turlock Lake Formation has yielded highly significant fossils. Although those finds were made outside of Placer Cand adjacent counties, they indicate that these units can have a high paleontological sensitivity.

The results of the records search suggest that it is unlikely that ground-disturbing activities during construction will encounter any significant paleontological resources on Placer Greens project site. Paleontological monitoring of construction activities is therefore not recommended at this time. However, should any fossil bones or teeth be unearthed during construction, all work in its immediate vicinity should be diverted until a paleontologist assesses its scientific value and, if deemed significant, salvages the find for deposition in an accredited and permanent scientific institution (e.g., UCMP or Sierra College). The paleontologist will then reassess whether a monitoring program would be advisable for the remainder of planned excavations.

If I can be of further assistance on this project, please do not hesitate to contact me.

Sincerely,

References Cited

Dundas, R.G., and Chatters, J.C., 2013. The mid-Irvingtonian Fairmead Landfill fossil site, Madera County Paleontology Collection, and Fossil Discovery Center of Madera County, California. In: Putirka , K. (Ed.), Geologic excursions from Fresno, California, and the Central Valley: A tour of California's iconic geology. GSA Field Guides, 32: 63-78.

Helley, E.J., and Harwood, D.S., 1985. Geologic map of the Late Cenozoic deposits of the Sacramento Valley and northern Sierran Foothills, California. U.S. Geological Survey, Miscellaneous Field Studies Map MF-1790, scale 1:62,500.

Wagner, D.L., Jennings, C.W., Bedrossian, T.L., and Bortugno, E.J., 1981. Geologic map of the Sacramento quadrangle, California. California Division of Mines and Geology, Regional Geologic Map 1A, scale 1:250,000.

UCMP VERTEBRATE FOSSILS FROM THE TURLOCK LAKE FORMATION, FAIRMEAD LANDFILL, MADERA COUNTY
(Dundas and Chatters, 2013)

Class Actinopterygii (ray-finned fishes)
Order Perciformes (perch-like fishes)
Archoplites interruptus (Sacramento perch)
Catostomus occidentalis (Sacramento sucker)

Class Amphibia (amphibians)
Order Urodela (salamanders, newts, etc.)
Order Anura (frogs & toads)

Class Reptilia (reptiles)
Order Testudines (turtles & tortoises)
Actinemys marmorata (western pond turtle)
Xerobates agassizi (desert tortoise)
Order Squamata (scaled reptiles)
Family Colubridae (snakes)

Class Aves (birds)
Order Anseriformes (waterfowl)
Branta canadensis (Canada goose)
Tadorna tadorna (common shelduck)
cf. *Aythya* sp. (diving duck)
Cygnus columbianus (Tundra swan)
Order Strigiformes (owls)
Athene cunicularia (burrowing owl)
Order Columbiformes (pigeons, doves, dodo)
Zenaida macroura (mourning dove)

Class Mammalia (mammals)
Order Soricomorpha (shrews & moles)
Sorex sp. (shrew)
Order Xenarthra (anteaters, armadillos & sloths)
Paramylodon harlani (Harlan's ground sloth)
Nothrotheriops shastensis (Shasta ground sloth)
Megalonyx wheatleyi (Wheatley's 2-toed ground sloth)
Order Carnivora (carnivores)
Canis latrans (coyote)
Canis dirus (dire wolf)
Vulpes velox (swift fox)
Homotherium sp. (Scimitar cat)