

## **Appendix IS-3**

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### Paleontological Memo

## MEMORANDUM

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**To:** Katie Mangin, Senior Manager – Planning and Entitlements, Plus Development Group  
**From:** Sarah Siren, M.S., GISP, Senior Paleontologist, Dudek  
**Subject:** Paleontological Resources Review – 1235 Vine Street Project  
**Date:** 8/4/20 (*revised 1/13/21*)  
**cc:** Adam Giacinto and Michael Williams, Dudek  
**Attachment(s):** A: Project Map, B: Paleontological Records Search Results Letter (*confidential*)

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Dudek is providing this memo after completing a review of the potential for impacts to paleontological resources during proposed construction activities for the 1235 Vine Street Project (project) located in the City of Los Angeles (herein City), Los Angeles County, California (Attachment A). The project site has been previously developed and is underlain by older Quaternary alluvial deposits that are late Pleistocene in age (approximately 125,000 to 11,700 years old; map unit Qae) derived from the Hollywood Hills to the north (Dibblee and Ehrenspeck, 1991; Cohen et al., 2013). According to the records search results received from the Natural History Museum of Los Angeles County (LACM) on June 25, 2020, these elevated and dissected Pleistocene age alluvial deposits have a moderate to high potential to yield paleontological resources (Dibblee and Ehrenspeck, 1991; McLeod, 2020-Attachment B).

No paleontological localities are documented within a one-half mile radius of the project boundaries (McLeod 2020-Attachment B); however, localities are documented elsewhere in the City from the same geological units that occur beneath portions of the project site. These sedimentary deposits have the potential to yield scientifically significant vertebrate fossils, as discussed below.

According to the records search results received from the Natural History Museum of Los Angeles County (LACM), four vertebrate fossil localities, LACM 6297 through 6300, were recovered between 47 and 80 feet below the ground surface (bgs) northeast of the project area during excavations for the Metrorail Red Line tunnels and stations (McLeod 2020-Attachment B). These localities were along Hollywood Boulevard, between the Hollywood Freeway (Interstate 101) and Western Avenue and yielded late Pleistocene paleofauna including fossil specimens of horse (*Equus*), bison (*Bison*), camel (*Camelops*), and mastodon (*Mammuth americanum*) (McLeod 2020-Attachment B). Additional localities to the south, near the Rancho La Brea asphalt deposits in the Hancock Park region, yielded vertebrate fossil specimens at shallower depths. One such locality discovered within older Quaternary deposits is LACM 5845, located southeast of the project area, near the intersection of Western Avenue and Council Street. At this locality, a fossil mastodon (Mammuthidae) was found at a depth of 5-6 feet bgs. Southeast of the project area and east-northeast of locality LACM 5845, near the intersection of Madison Avenue and Middlebury Street, locality LACM 3250 yielded a fossil specimen of mammoth (*Mammuthus*) at a depth of eight feet bgs. Southwest of the project area, near the intersection of Sierra Bonita and Oakwood Avenue, locality LACM 3371 yielded specimens of fossil bison (*Bison antiquus*) at a depth of 12 feet bgs (McLeod 2020-Attachment B).

Scientifically significant paleontological resources have been recovered from correlative Pleistocene old alluvial deposits elsewhere in the City and include recorded fossil collecting localities. These localities have yielded fossils

Memorandum

Subject: Paleontological Resources Review – 1235 Vine Street Project

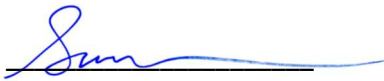
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of terrestrial mammals (e.g., mammoths, mastodons, ground sloths, dire wolves, sabre-toothed cats, large and small horses, large and small camels, and bison), in addition to plant macro-and micro-fossils and microvertebrate fossils (Jefferson 1991a, 1991b).

Although no vertebrate fossils are documented within the project area, previously undisturbed Pleistocene age alluvial deposits, mapped within the project site (Dibblee and Ehrenspeck, 1991), do have the potential to produce significant paleontological resources. If encountered, these deposits would be conducive to preserve remains of Ice Age amphibians, reptiles, and mammals. Holocene age alluvial deposits, which are considered to be too young to contain significant paleontological resources, would be considered to have a low sensitivity (McLeod 2020-Attachment B). Implementation of the City’s Conditions of Approval (or COAs) would ensure that impacts would be less than significant to paleontological resources.

If you have any questions regarding this memo, please feel free to contact me (760.846.9326 or [ssiren@dudek.com](mailto:ssiren@dudek.com)).

Sincerely,



Sarah A. Siren, M.S., GISP

Senior Paleontologist, Dudek

Enc. Attachment A: Project Map, Attachment B: Paleontological Records Search Results Letter (*confidential*)

**References Cited:**

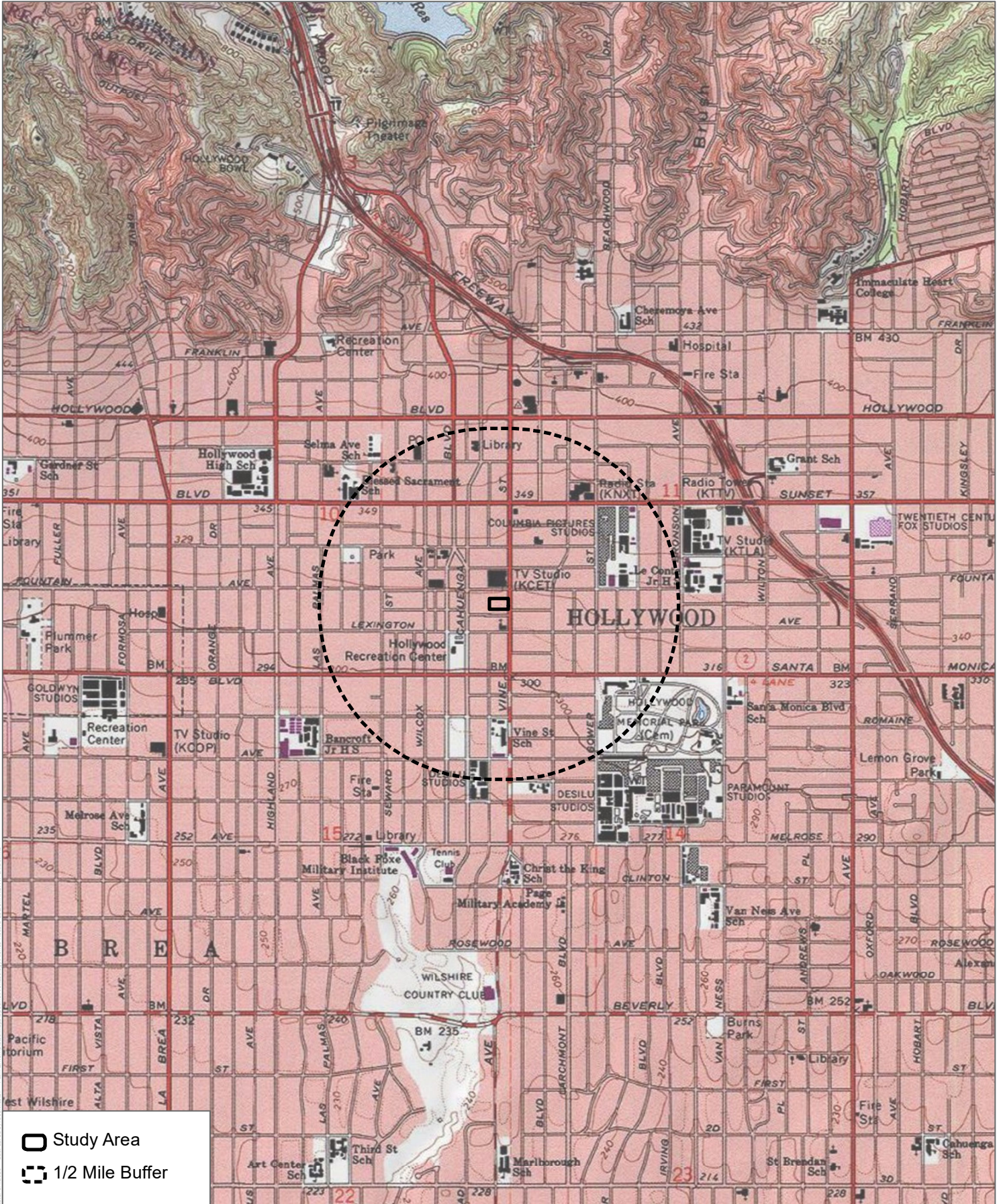
- Cohen, K.M., S.C. Finney, P.L. Gibbard, and J.X. Fan, (2013; updated). The ICS International Chronostratigraphic Chart. Episodes 36: 199-204. Available: <https://stratigraphy.org/icschart/ChronostratChart2020-03.pdf>.
- Dibblee, T.W., and H.E. Ehrenspeck, 1991. Geologic map of the Hollywood and Burbank (south 1/2) quadrangles, Los Angeles, California: Dibblee Geological Foundation, Dibblee Foundation Map DF-30, scale 1:24,000.
- Jefferson, G.T., 1991a. A Catalogue of late Quaternary vertebrates from California: Part One, nonmarine lower vertebrate and avian taxa. Natural History Museum of Los Angeles County, Technical Reports, No. 5. Updated 18 May 2012.
- Jefferson, G.T., 1991b. A Catalogue of late Quaternary vertebrates from California: Part Two, Mammals. Natural History Museum of Los Angeles County, Technical Reports, No. 7. Updated 18 May 2012.
- McLeod, S.A., 2020. Vertebrate Paleontology Records Check for Paleontological Resources for the Proposed 1235 Vine Street Project, Dudek Project Number 12764, in the City of Los Angeles, Los Angeles County, Project Area. Unpublished Records Search Results Letter from the Natural History Museum of Los Angeles County, Los Angeles, California. (Attachment B).
- Society of Vertebrate Paleontology (SVP), 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. 11 p. Available: [http://vertpaleo.org/Membership/Member-Ethics/SVP\\_Impact\\_Mitigation\\_Guidelines.aspx](http://vertpaleo.org/Membership/Member-Ethics/SVP_Impact_Mitigation_Guidelines.aspx).



# Attachment A

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Project Map



SOURCE: USGS 7.5-Minute Series Hollywood Quadrangle  
 Township 1S; Range 14W; Sections 10, 11, 14, 15





# Attachment B

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Paleontological Records Search Results Letter (*confidential*)

Confidential information:  
On file with City.