

Appendix D-2

Paleo Letter



June 12, 2015

Scott Dinovitz
Glassell Park, LLC
23622 Calabasas Rd, Ste 220
Calabasas, CA, 91302
Cc: Nancy Johns, Wildflower Development

SUBJECT: Paleontological Resources Letter Report for the Haverhill Project, Glassell Park, Los Angeles County, CA

Dear Mr. Dinovitz,

During research and surveying for the Haverhill Project Cultural Resources Report, Paleo Solutions, Inc. (Paleo Solutions) discovered that the Haverhill Project has the potential to impact paleontological resources. While a paleontological study was not part of our original scope of work, we felt it was our responsibility to provide a brief paleontological letter report in order to ensure that potentially impacts to scientifically significant paleontological resources are mitigated pursuant to the California Environmental Quality Act (CEQA) and local regulations (Appendix A).

A review of the geological maps (Figure 1; Dibblee and Ehrenspeck, 1989) and the results of the Paleo Solutions' cultural resources survey of the Project area (Kay and Aron, 2015) indicate that construction activities will impact the high paleontologically sensitive Miocene Monterey Formation at the surface of the site in some areas, and immediately subsurface throughout the remainder of the site.

The Monterey Formation is a well-studied rock unit that was deposited in a deep-marine environment, and consists chiefly of mudstone, shale, diatomite, biogenic siltstone, and chert (Garrison and Douglas, 1981). The Monterey is said to represent a condition rather than a laterally contiguous deposit – the condition being the opening of rift basins along the continental margin of coastal California during the Miocene (~10 to 15 million years ago) as the San Andreas Fault was forming and lengthening (Fritsche and Behl, 2008; USGS, 2007). This formation has yielded some of California's finest vertebrate, invertebrate, and plant fossils. Throughout its statewide distribution, the Monterey Formation has produced a high diversity of very well preserved, mostly marine vertebrates, invertebrates, and terrestrial plants (Pyenson and Haasl, 2007). These include whales, dolphins, desmostylians, sea cows, sharks, bony fishes, marine and terrestrial plants, and diverse assemblages of marine invertebrates (Uhen, 2014). This formation is one of the most important and paleontologically sensitive units in the state of California, as its fine grain and depositional environment make it eminently suitable for the exceptional preservation of fossils, including items that are not normally preserved, such as shark bones and vertebrae (cartilage), and marine plants, as well as unique and scientifically important assemblages such as whale falls (the community of creatures that scavenge and populate the area around a whale carcass on the sea floor) (Pyenson and Haasl, 2007). Particularly exciting are the well preserved fossil whales and dolphins, as well as the large numbers of finely preserved crabs and leatherback turtles. Arguably some of the most important finds, however, are the kelps and other large soft-bodied seaweeds, which are seldom found as fossils elsewhere (Kleinpell, 1938;



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Parker and Dawson, 1965; Garrison and Douglas, 1981; Finger, 1992). The Monterey Formation has the potential to contain significant nonrenewable paleontological resources and has a high paleontological sensitivity.

Meghan Lamb, M.A., RPA and Michael Kay, M.A., RPA conducted an intensive cultural resources pedestrian survey of the Project area on May 22, 2015. The survey involved the visual inspection of ground surfaces within the boundary of the Project area that had not been previously graded or extensively disturbed. The Project area is undeveloped and virtually overgrown with wild grasses; however, a bedrock exposure of the underlying Monterey Formation was observed at the south edge of Group A of the proposed residential lots, which conveyed scars from a three-foot bucket of an excavator (Figure 2). Based on the results of the field survey, it appears that the Monterey Formation is immediately below surface (Kay and Aron, 2015). While the presence of Monterey Formation exposures at the surface indicates a low sensitivity for archaeological resources, it is indicative of a high sensitivity for paleontological resources. Additionally, while no paleontological resources were noted during the survey, this does not preclude the discovery of subsurface paleontological resources.

Due to the high paleontological potential of the Monterey Formation, mitigation of potential adverse impacts resulting from construction-related ground disturbance is recommended. It is recommended that full-time monitoring be performed during all earthmoving activities impacting native bedrock of the Monterey Formation to reduce potential impacts to a less than significant level. Additionally, a paleontological records search should be requested from the Natural History Museum of Los Angeles County (LACM) to check for the presence of previously recorded localities within the site boundaries. Prior to the start of construction a paleontological resources monitoring plan should be prepared and implemented. The plan should include specific locations and construction activities requiring monitoring, procedures to follow for monitoring and fossil discovery, and a curation agreement with LACM. Any fossils encountered during monitoring should be photographed, recorded, and collected for later documentation to be included in a final technical report.

Please do not hesitate to contact me if you have any questions or concerns.

Respectfully,



Courtney Richards
Project Manager/Principal Investigator
crichards@paleosolutions.com
626-716-2000



Figure 1. Project Geology Map.



Figure 2. View west toward Monterey Formation exposure with excavator scarring at the south edge of development Group A.

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APPENDIX A: Regulatory Setting

STATE REGULATORY SETTING

California Environmental Quality Act (CEQA)

The procedures, types of activities, persons, and public agencies required to comply with the California Environmental Quality Act (CEQA) are defined in the Guidelines for Implementation of CEQA (State CEQA Guidelines), as amended on March 18, 2010 (Title 14, Section 15000 et seq. of the California Code of Regulations [i.e., 14 CCR Section 15000 et seq.] and further amended January 4th, 2013. One of the questions listed in the CEQA Environmental Checklist is: “Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?” (State CEQA Guidelines Section 15064.5 and Appendix G, Section V, Part C).

LOCAL REGULATORY SETTING

Los Angeles County

The County of Los Angeles General Plan Conservation and Open Space Element (1980) contains goals and policies regarding paleontological resources. This general Plan is currently under revision and is expected to have more specific guidance regarding paleontological resources in the updated version. The Conservation and Open Space Element establishes the goals of preserving and protecting sites of historical, archaeological, and scientific values, and defines the following policies relative to paleontological resources:

- Protect cultural heritage resources, including historical, archaeological, paleontological, and geological sites;
- Encourage public use of cultural heritage sites consistent with the protection of these resources;
- Promote public awareness of cultural resources; and
- Encourage private owners to protect cultural resources.

The Santa Monica Mountains Local Coastal Program (2014) is currently in the process of being approved by the State of California. As it is written, currently the Local Coastal Program Conservation and Open Space Element includes one goal and four policies relating to paleontological resources. Goal CO-8 requires that the County engage in active preservation of the area’s rich and diverse archaeological, paleontological and historic cultural resources in the Coastal Area. Four policies within this document relate to this goal and the preservation of paleontological resources. The goals require that the County in the Coastal Area protect and preserve archaeological, historical, and paleontological resources from destruction, and avoid impacts to such resources where feasible. Where avoidance is not feasible, minimize impacts to resources to the maximum extent feasible. Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required. Mitigation shall be designed to accord with guidelines of the State Office of Historic Preservation and the State of California Native American Heritage Commission. This document also prohibits the unauthorized collection of paleontological and historic cultural artifacts. Finally, the County must notify all appropriate agencies, including Native American tribes, and the Department of Regional Planning of



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archaeological or paleontological resources discovered during any phase of development construction to ensure proper surface and site recordation and treatment.

City of Los Angeles

The City of Los Angeles (City of Los Angeles, 2001) in Section 3 of the Conservation Element of the General Plan requires that measures be taken to protect the city's archaeological and paleontological resources for historical, cultural, research and/or educational purposes. One policy and one program support this requirement. This policy requires that the City continue to identify and protect significant archaeological and paleontological sites and/or resources known to exist or are identified during land development, demolition or property modification activities.