June 12, 2025

Cheryl A. Tubbs
Lilburn Corporation
1905 Business Center Drive
San Bernardino, California 92408

Subject: Paleontological Records Search for the TTM 20793 Project, City of Rialto, San Bernardino County, California (APNs 0264-012-48 and -58)

Dear Ms. Tubbs:

A paleontological locality records search has been completed for the 7.37-acre TTM 20793 Project (Assessor's Parcel Numbers 0264-012-48 and -58), located along the eastern side of Linden Avenue, between Riverside Avenue and Summit Avenue, in the city of Rialto, San Bernardino County, California. The proposed 67-unit single-family residential project is situated within Section 22, Township 1 North, Range 5 West on the U.S. Geological Survey (USGS) (7.5-minute) *Devore*, *California* topographic quadrangle map.

The paleontological records search focused upon the property's potential to contain significant paleontological resources that could represent a constraint to the use of the property for future development. The scope of work for this paleontological records search included a review of existing records regarding recorded fossil localities within and adjacent to the property, the project's geologic setting, and preparation of this letter report to summarize the results of the search and to present an opinion regarding the potential to encounter significant paleontological resources during the development of the project.

Paleontological resources are the remains of prehistoric life that have been preserved in geologic strata. These remains are called fossils and include bones, shells, teeth, and plant remains (including their impressions, casts, and molds) in the sedimentary matrix, as well as trace fossils such as footprints and burrows. Fossils are considered older than 5,000 years of age (Society of Vertebrate Paleontology 2010) but may include younger remains (subfossils) when viewed in the context of local extinction of the organism or habitat. Fossils are considered a nonrenewable resource under state, county, and local guidelines.

Geology

The project is located near the western margin and distal southern end of the broad Lytle Creek alluvial fan, which emanates from the San Gabriel Mountains approximately nine miles to the north, as a result of uplift and dissection of the eastern San Gabriel Mountains. The main source of these sediments is from the Lytle Creek drainage, near where the northwest-southeast-trending San Andreas fault zone cuts across and separates the San Gabriel and San Bernardino Mountain ranges (Morton and Miller 2006). Geologically, the surface of the project property is mapped as Holocene-aged young alluvial fan deposits, "Unit 5," described as unconsolidated to moderately consolidated, coarse-grained sand to bouldery alluvial fan deposits (Morton and Matti 2001).

Paleontological Locality Records Search

A paleontological collections and locality records search was conducted for a prior, nearby project by the San Bernardino County Museum (SBCM) in Redlands (Kottkamp 2022). The prior project is located approximately one mile south of the current project, northeast of the intersection of Linden Avenue and Casmalia Street. Based upon the records search, the closest known fossils to the current project are located approximately five miles to the east and consist of the remains of a mammoth recovered from Pleistocene old alluvial deposits. No other localities are held by the SBCM within five miles of the current project. Kottkamp (2022) indicated that old alluvial deposits have been found to be highly fossiliferous in the local area, yielding the remains of mastodons, mammoths, camels, horses, bison, and ground sloths, as well as micro-vertebrates including rodents.

Based upon locality records searches for prior paleontological assessments in the region by Brian F. Smith and Associates, Inc., several other fossil localities are known from southwestern Fontana and southern Ontario, all of which consist of Pleistocene mammalian remains. Most are held by the SBCM, and some reside at the Western Science Center in Hemet. The nearest known fossil locality in similar sediments as the project, held by the Los Angeles County Natural History Museum, is located in the city of Eastvale in Riverside County and consists of the bones of a Pleistocene snake (Bell 2021).

Conclusions

The review of the records search, geologic data, and regulatory guidelines for the property has provided sufficient information to provide an opinion regarding the potential for constraints to the development of the property due to paleontological resources. The following points are salient to the evaluation of potential constraints:

- The surface of the project is mapped as Holocene young alluvial fan deposits.
- The completed records search has determined that no paleontological resources are known to be located on or near the property.
- The geological and paleontological records search results indicate that the property has

a low potential to yield Pleistocene-aged mammalian fossils or fossils of any other age based upon the coarse nature of the sedimentary deposits mapped at the project and their young geologic age.

Recommendations

Significant impacts to potential paleontological resources below the surface would likely not occur in relatively shallow grading and excavation activities. A formal paleontological assessment and/or monitoring plan does not appear warranted.

The information and conclusions provided in this letter report represent opinions based upon a preliminary review of the property. If you have any questions concerning this evaluation, please feel free to contact us at our Poway address. Thank you for the opportunity to provide paleontological services for this project.

Sincerely,

Todd Wirths, M.S., P.G.
Principal Paleontologist
California Professional Geologist No. 7588

References

Bell, A. 2021. Paleontological resources for the San Bernardino Trailer Facility Project. Unpublished letter prepared for Brian F. Smith and Associates, Inc., Poway, California, by the Los Angeles County Museum of Natural History, Los Angeles, California.

Kottkamp, S. 2022. Paleontology records review for proposed site of Casmalia and Linden project, Rialto, San Bernardino County, California. Unpublished letter report prepared for Brian F. Smith and Associates, Inc., Poway, California, by the Division of Earth Sciences at the San Bernardino County Museum, Redlands, California.

Morton, D.M., and Matti, J.C. 2001. Geologic map of the Devore 7.5' quadrangle, San Bernardino County, California: USGS Open-File Report 01-173, v. 1.0.

Morton, D.M. and Miller, F.K. 2006. Geologic Map of the San Bernardino and Santa Ana 30' x 60' quadrangles, California: U.S. Geological Survey Open-File Report 06-1217, scale 1:100,000.

Society of Vertebrate Paleontology. 2010. Standard procedures for the assessment and mitigation of adverse impacts to paleontological resources; by the SVP Impact Mitigation Guidelines Revision Committee: https://vertpaleo.org/wp-content/uploads/2021/01/SVP_Impact_Mitigation_Guidelines.pdf.