

Appendix F1

Paleontological Resources Assessment



CARLSBAD
FRESNO
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

November 11, 2021

Heather Crossner
Senior Vice-President of Development
Qume & Commerce LLC
3101 Ocean Park Boulevard, Suite 100, Private Mail Box #60
Santa Monica, California 90405

Subject: Paleontological Resources Assessment for the Qume and Commerce Drive Project, San José, Santa Clara County, California

Dear Ms. Crossner:

LSA conducted a Paleontological Resources Assessment for the Qume and Commerce Drive Project (project) in San José, Santa Clara County, California. The purpose of the assessment was to determine whether paleontological resources may be present within the project site, whether they might be impacted by development of the project, and to make recommendations to mitigate any potential impacts to paleontological resources.

PROJECT LOCATION AND DESCRIPTION

The 32.80-acre project site is located at 2222 and 2350 Qume Drive and 2150 Commerce Drive (Assessor Parcel Numbers [APN]: 244-15-003, -020, -026) in the City of San José, Santa Clara County, California. The site is bound by an office park to the north, McKay Drive and industrial uses to the south and southeast, the BART corridor to the east, and Qume Drive with a range of industrial and commercial uses to the west. The project site is depicted on the *Milpitas, California 7.5-minute United States Geological Survey (USGS) topographic map* in unsectioned land of the Rincón de los Esteros Land Grant, Mount Diablo Baseline and Meridian (USGS, 1980; Figure 1 [Attachment B]).

The proposed project would construct four new industrial warehouse buildings with dock doors and associated site improvements. Currently, the project site is developed with an office park complex containing three buildings, as well as existing utility access (water, sewer, electricity, gas), lighting, and landscaping. Development of the project will involve demolition of all existing on site improvements; new site grading; construction of the new structures; and installation of new wet and dry utilities, landscaping, and lighting. The deepest excavation associated with the project is expected to be for the underground utilities and will extend to a maximum depth of approximately 14 feet (ft). Additionally, excavation for site grading will extend a maximum of 10 ft for bioretention ponds and extend 3 ft for the building pads (personal communication, Bridge Industrial, October 12, 2021).

REGULATORY ENVIRONMENT

State of California

Under State law, paleontological resources are protected by the California Environmental Quality Act (CEQA) and Public Resources Code Section 5097.5.

California Environmental Quality Act (Public Resources Code 21000 et seq.)

CEQA's purpose is to provide a statewide policy of environmental protection. As part of this protection, State and local agencies are required to analyze, disclose, and, when feasible, mitigate the environmental impacts of, or find alternatives to, proposed projects. The State *CEQA Guidelines* (California Code of Regulations 15000 et seq.) provide regulations for the implementation of CEQA and include more-specific direction on the process of documenting, analyzing, disclosing, and mitigating environmental impacts of a project. To assist in this process, Appendix G of the State *CEQA Guidelines* provides a sample checklist form that may be used to identify and explain the degree of impact a project will have on a variety of environmental aspects, including paleontological resources (Section VII[f]). As stated in Section 15002(b)(1-3) of the *State CEQA Guidelines*, CEQA applies to governmental action, including activities that are undertaken by, financed by, or require approval from a governmental agency.

California Public Resources Code, Section 5097.5

This law protects historic, archaeological, and paleontological resources on public lands within California and establishes criminal and civil penalties for violations. Specifically, Public Resources Code Section 5097.5 states that "No person shall knowingly or willfully excavate upon, remove, destroy, injure, or deface any ... paleontological or historical feature, situated on public lands" and that public lands includes lands "... under the jurisdiction of the state, or any city, county, district, authority, or public corporation, or any agency thereof."

City of San José

The Environmental Resources Element of the City of San José (City) General Plan (City of San José, 2020) establishes the City's priorities as they relate to natural, cultural, and paleontological resources and outlines the means for their preservation by implementing the following policies to protect these resources:

Policy ER-10.1: For proposed development sites that have been identified as archaeologically or paleontologically sensitive, require investigation during the planning process in order to determine whether potentially significant archeological or paleontological information may be affected by the project and then require, if needed, that appropriate mitigation measures be incorporated into the project design.

Policy ER-10.3: Ensure that City, State, and Federal historic preservation laws, regulations, and codes are enforced, including laws related to archaeological and paleontological resources, to ensure the adequate protection of historic and pre-historic resources.

METHODS

LSA examined geologic maps of the project site and reviewed relevant geological and paleontological literature to determine which geologic units are present within the project site and whether fossils have been recovered within the project site or from those or similar geologic units elsewhere in the region. A fossil locality search was conducted through the collections of the University of California Museum of Paleontology at Berkeley (UCMP) in order to determine the status and extent of previously recorded paleontological resources within and surrounding the

project site. A pedestrian survey of the open and unpaved portions of the project area was also conducted to note the sediments at the surface and whether any paleontological resources are present in the project area.

RESULTS

Literature Review

The project is located in the northern part of the Coast Ranges Geomorphic Province of California (California Geological Survey, 2002). The Coast Ranges Geomorphic Province is characterized by mountain ranges and valleys that stretch for 600 miles from the Oregon border to the Santa Ynez River in Santa Barbara County (Norris and Webb, 1976). These mountains and valleys trend in a northwest direction, subparallel to the direction of the San Andreas Fault (California Geological Survey, 2002; Norris and Webb, 1976). The province can be divided into northern and southern subprovinces by San Francisco Bay (Norris and Webb, 1976). While the northern and southern ranges are geologically extremely similar, the southern ranges lie west of the San Andreas Fault zone and are better known because of their oil and gas resources, clearer exposures, and more intensive development (Norris and Webb, 1976). Within the province, basement rocks consist of Jurassic and Cretaceous (201.3–66 million years ago [Ma]) igneous, metamorphic, and marine sedimentary rocks that formed in island arc, subduction zone, and deep to shallow marine environments (Howard, 1979; Norris and Webb, 1976). These basement rocks are overlain by Cenozoic (less than 66 Ma) sedimentary rocks that accumulated in deep to shallow and eventually continental environments (Howard, 1979; Norris and Webb, 1976).

Geologic mapping by Dibblee (2005) shows that the entire project site is underlain by Surficial Sediments, which are Holocene in age (less than 11,700 years ago). Although not mapped in the project area, Artificial Fill is likely also present due to previous development of the area. These geologic units and their paleontological sensitivities are described in more detail below. Dates for the geologic time intervals referenced in this report are derived from the *International Chronostratigraphic Chart* published by the International Commission on Stratigraphy (Cohen et al., 2021).

Artificial Fill

Artificial Fill consists of sediments that have been removed from one location and transported to another location by human activity, rather than by natural means. The transportation distance can vary from a few feet to many miles, and composition is dependent on the source and purpose.

Artificial Fill will sometimes contain modern debris such as asphalt, wood, bricks, concrete, metal, glass, plastic, and even plant material. While Artificial Fill may contain fossils, these fossils have been removed from their original location and are thus out of stratigraphic context. Therefore, they are not considered important for scientific study, and Artificial Fill has no paleontological sensitivity.

Surficial Sediments

The Surficial Sediments are Holocene in age (less than 11,700 years ago) and consist predominantly of alluvial gravel, sand, and clay (Dibblee, 2005). These sediments were eroded from higher

elevations, carried by flooding streams and debris flows, and deposited in a fan or lobe shape at the base of the hills.

Although Holocene (less than 11,700 years ago) deposits can contain remains of plants and animals, only those from the middle to early Holocene (4,200 to 11,700 years ago) are considered scientifically important (Society of Vertebrate Paleontology [SVP], 2010), and fossils from this time interval are not very common. Therefore, these deposits are assigned a low paleontological sensitivity.

Fossil Locality Search

The fossil locality search through the online collections database at the UCMP indicated that no fossil localities are present within the boundaries of the project site. However, this search noted many fossil localities from Holocene age deposits within Santa Clara County, as well as from neighboring Alameda and San Mateo Counties. The UCMP has records of 5 microfossil and plant fossil localities of Holocene age in Santa Clara County; however, no specimens are listed in the database from those localities. The museum also has records of 73 microfossil and invertebrate localities of Holocene age in nearby San Mateo County, with one locality listing three specimens of Foraminifera. The UCMP lists 5 microfossil and plant fossil localities of Holocene age in nearby Alameda County, with 1 specimen in their database consisting of knob cone pine tree.

Field Survey

No paleontological resources were observed during the field survey. The project area is heavily developed with buildings and pavement. Native sediments were only observed within a few planters around the parking lots and driveways, as well as in a large area of open ground behind the northernmost building. Due to these factors, ground visibility was extremely poor (approximately 5 percent). Where visible, the native sediments within the project area were a gray-brown sandy silt/clay with some small gravels, consistent with the Surficial Sediments mapped by Dibblee (2005).

RECOMMENDATIONS

The project site contains Artificial Fill, which has no paleontological sensitivity, and Surficial Sediments, which have low paleontological sensitivity. With a maximum depth of 14 ft, excavation for this project is expected to remain in deposits with no or low paleontological sensitivity. Therefore, in order to mitigate potential impacts to scientifically significant nonrenewable paleontological resources, LSA recommends the following mitigation measure.

- PALEO-1** In the event that paleontological resources are encountered, work in the immediate area of the discovery shall be halted and the project applicant shall retain a professional Paleontologist who meets the qualifications established by the Society of Vertebrate Paleontology to assess the discovery. The qualified, professional Paleontologist shall make recommendations regarding the treatment and disposition of the discovered resources, as well as the need for subsequent paleontological mitigation, which may include, but not be limited to, paleontological monitoring, collection of observed resources, preservation, stabilization and identification of collected resources, curation of resources into a museum

repository, and preparation of a monitoring report of findings). The City of San José shall ensure that the recommendations from the qualified, professional Paleontologist shall be followed by the project applicant.

Implementation of this mitigation measure will ensure that project impacts to scientifically significant paleontological resources will be mitigated to a level that is less than significant.

Sincerely,

LSA Associates, Inc.



Sarah Rieboldt, Ph.D.
Associate/Principal Paleontologist

Attachments: A – References
B – Figure 1: Project Location

ATTACHMENT A

REFERENCES

California Geological Survey

- 2002 California Geomorphic Provinces. California Geologic Survey Note 36. California Department of Conservation.

City of San José

- 2020 Environmental Resources, Envision San José 2040 General Plan. Adopted 2011; revised 2020.

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- 2021 The ICS International Chronostratigraphic Chart. Updated July 2021. Episodes 36: 199-204

Dibblee, T.W.

- 2005 Geologic map of the Milpitas quadrangle, Alameda & Santa Clara Counties, California: Dibblee Geological Foundation. Edited by John A. Minch. Map DF-153, Map Scale: 1:24,000.

Howard, Arthur D.

- 1979 Geologic History of Middle California. California Natural History Guides No. 43. University of California Press, Berkeley, California. 113 pp.

Norris, R.M., and R.W. Webb

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Society of Vertebrate Paleontology (SVP)

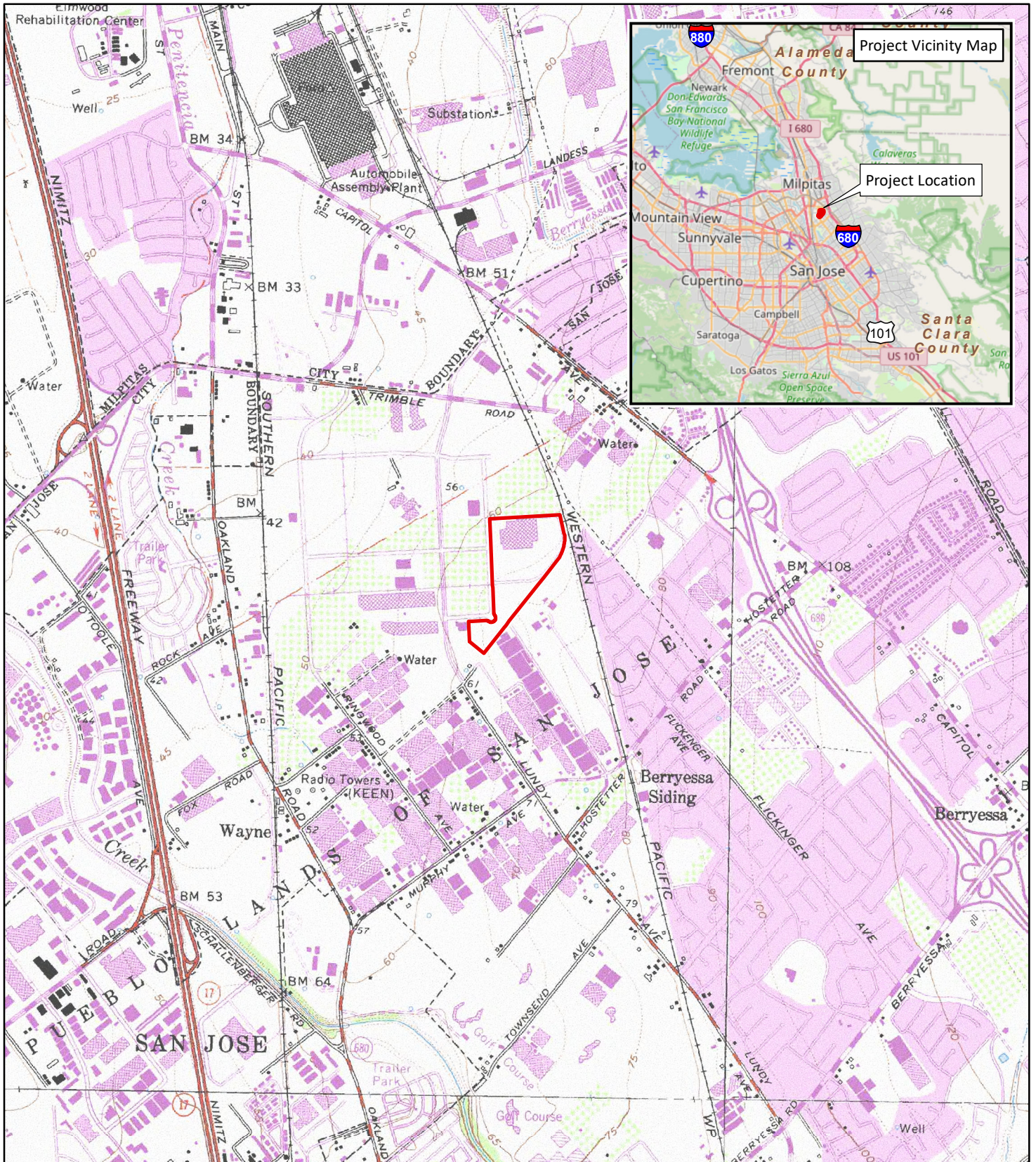
- 2010 Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. Society of Vertebrate Paleontology. Impact Mitigation Guidelines Revision Committee. 11 pp.

United States Geological Survey (USGS)

- 1980 Milpitas, California 7.5-minute topographic quadrangle. Published 1961, photorevised 1981. United States Geological Survey, Denver, Colorado.

ATTACHMENT B

FIGURE 1: PROJECT LOCATION

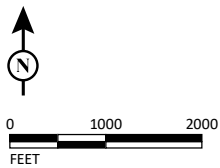


LSA

LEGEND

Project Area

FIGURE 1



*Cultural Resources Study for the
Qume and Commerce Drive Project
City of San José, Santa Clara County, California
Project Area*

SOURCE: USGS 7.5-minute Topo Quads -Milpitas, Calif. (1980); Calaveras Reservoir, Calif. (1980); San Jose West, Calif. (1980); San Jose East, Calif. (1980);.

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