Appendix I

Paleontological Resources Report

Paleontological Resources Report
Azusa Greens Redevelopment EIR Project

Los Angeles County, California

Prepared For: Helix Environmental Planning, Inc.
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La Mesa, CA 91942

Report Date: October 2023

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Paleontological Resources Summary Information

USGS 7.5-Minute Quadrangle(s): Azusa

City and County: City of Azusa, Los Angeles County

Dates of Fieldwork: N/A

Total Acreage of Lands Surveyed: N/A

Total Linear Miles Surveyed: N/A

Geologic Units in Project Area: Holocene-age alluvial gravel and sand (Qg; low paleontological potential)

Paleontological Resources Identified in Project Area: 0

Previously Recorded Resources in Project Area: 0

Newly Recorded Resources in Project Area: 0

MANAGEMENT SUMMARY

Bargas Environmental Consulting, LLC (Bargas) completed a paleontological resources assessment at the request of Helix Environmental Planning, Inc. for the Azusa Greens Redevelopment EIR Project (Project) in the City of Azusa, Los Angeles County, California. The purpose of the assessment was to determine if the Project has the potential to impact paleontological resources within the Project Area. All work was completed in compliance with the California Environmental Quality Act (CEQA) and City of Azusa (City) requirements.

The Project Area is located within the northwestern portion of the City of Azusa, and is bounded by 10th Street to the south, industrial and residential uses to the east, spreading grounds to the north, and Todd Avenue to the west. Azusa Owner LP (AOLP) is proposing to redevelop a portion of the Azusa Greens Golf Course and maintain the remainder of the land as a functioning 9-hole course. The Project will include demolition of existing golf-related improvements, construction of new industrial buildings, construction of a senior housing community and an amenity/community building, as well as light renovation to the existing property. The maximum depth of proposed ground disturbance for the Project is 19.2 feet.

Bargas completed a desktop-level paleontological study that included reviews of geologic maps and paleontological literature, and a records search at the Natural History Museum of Los Angeles County (NHMLA) to identify any known paleontological resources within the Project boundaries or from the same geologic unit within a 1-mile buffer.

Geologic mapping indicates that the Project Area is entirely underlain by Holocene-age alluvial gravel and sand (Qg). Based on the results of the study, there are no known paleontological resources within the Project Area boundaries nor a 1-mile buffer, and the Holocene-age deposits have a low potential for significant paleontological resources. Furthermore, Holocene-age alluvial gravel and sand (Qg) in the region are known to extend to depths of over 50 feet. Therefore, Project excavations are not expected to result in impacts to significant paleontological resources.

Paleontological monitoring is not recommended during any excavations. However, in the event of an unanticipated paleontological resource discovery, work within 50 feet of the resource shall stop until a qualified paleontologist can evaluate the significance of the find. Construction activities may continue in other areas. If the discovery is identified as potentially significant, additional work, such as recovery, laboratory preparation, fossil identification, curation, and reporting, may be necessary.

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1 Introduction

Bargas Environmental Consulting, LLC (Bargas) completed a paleontological resources assessment at the request of Helix Environmental Planning, Inc. for the Azusa Greens Redevelopment EIR Project (Project) in the City of Azusa, Los Angeles County, California. The purpose of the assessment was to determine if the Project has the potential to impact paleontological resources within the Project Area. All work was completed in compliance with the California Environmental Quality Act (CEQA) and City of Azusa (City) requirements.

1.1 Project Location and Description

The Project Area is located within the northwestern portion of the City of Azusa. Specifically, the site is located at 919 Sierra Madre Avenue within an unsectioned portion of Township 1 North, Range 10 West of the U.S. Geological Survey's (USGS) *Azusa, California* 7.5-minute quadrangle (Figures 1 and 2). The Project Area is approximately 92.12 acres and is surrounded by warehousing/distribution, residential, and recreational uses. The Project Area is generally bounded by 10th Street to the south, industrial and residential uses to the east, spreading grounds to the north, and Todd Avenue to the west. The Project Area is currently developed as a part of the Azusa Greens Country Club, which includes an 18-hole golf course, Azusa Greens Club House, parking lot, and driving range.

Azusa Owner LP (AOLP) is proposing to redevelop a portion of the Azusa Greens Golf Course and maintain the remainder of the land as a functioning 9-hole course. The Project involves three components: a proposed industrial site, a proposed 55+ age-restricted residential community site, and upgrades and reconfiguration of a portion of the existing golf course. Work would include the demolition of existing golf-related improvements in the redevelopment area, construction of six new, tilt-up concrete industrial buildings on approximately 19.33 acres, and construction of a senior housing community on approximately 20 acres consisting of two 3-story buildings, 40 single-story duplexes and triplexes, and an amenity/community building. The Project would also include light renovation to approximately 47.24 acres of the existing Azusa Greens Club House, renumbering of golf course holes, and relocation of the green for existing hole 17. The maximum depth of proposed ground disturbance for the Project is 19.2 feet.

2 Methods

Bargas completed a desktop-level paleontological study that included reviews of geologic maps and paleontological literature, and a records search at the Natural History Museum of Los Angeles County (NHMLA) to identify any known paleontological resources within the Project boundaries or from the same geologic unit within a 1-mile buffer. Paleontological potential rankings were assigned using the federal Potential Fossil Yield Classification (PFYC) system (see Section 2.1).

2.1 Paleontological Potential and Impact Methods

In general, paleontological resources are preserved in sedimentary rocks; however, they can occasionally be preserved in low-grade metamorphic rocks and can, on rare occasions, be preserved in volcanic rocks. Beyond acting as a vessel for the preservation of fossil remains, sedimentary strata record telltale information reflecting the environment in which they were deposited (e.g., sedimentary structures, maturity, and lithology). For example, fossil remains found within the fine-grained sediments of a floodplain deposit represent organisms that died and were later buried on an ancient floodplain. Because of the interwoven relationship between fossil remains and their geologic contexts, paleontological sensitivity is generally assigned to geologic units rather than to specific regions, areas, or localities.

For this project, the paleontological potential of the geologic units within the Project Area, both at the surface and at depth, were assigned using the federal PFYC system developed by the Bureau of Land Management (BLM 2022). PFYC rankings are assigned to geologic units based on the relative abundance of scientifically important paleontological resources within a given geologic unit and their sensitivity to impacts. The rankings and typical management recommendations are summarized in Table 1.

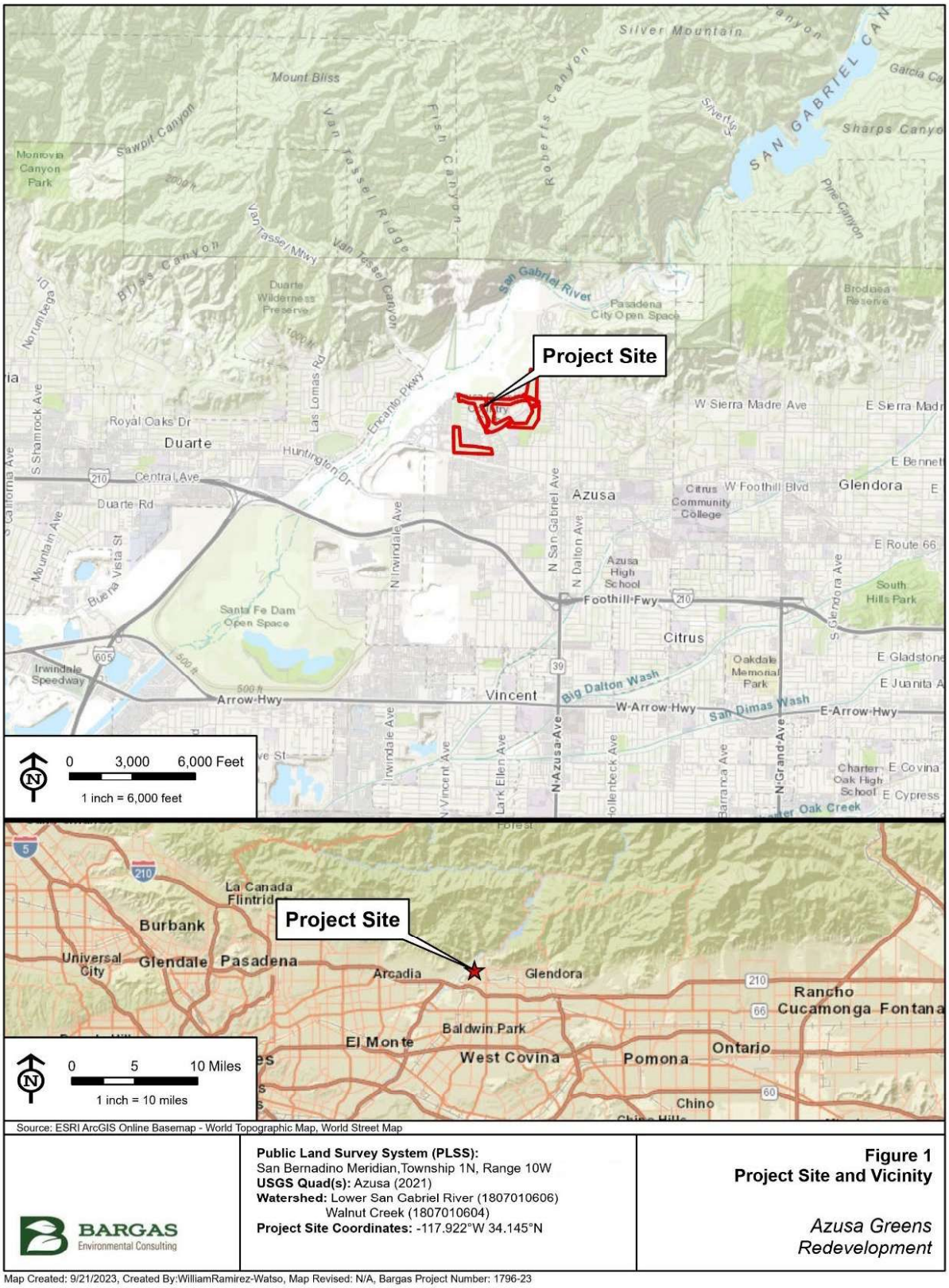

Figure 1. Project Vicinity Map

Figure 2. Project Overview Map

Table 1. PFYC Summary

PFYC Ranking	Description	Typical Management Recommendations
Class 1 – Very Low Potential	Geologic Units that are not likely to contain recognizable paleontological resources. Geologic units typically have one or more of the following characteristics: • Geologic units are igneous or metamorphic, excluding air-fall and reworked volcanic ash units • Geologic units are Precambrian in age	Management concerns are usually negligible or not applicable and paleontological mitigation is unlikely to be necessary except in very rare or isolated circumstances.
Class 2 – Low Potential	Geologic units are not likely to contain paleontological resources. Geologic units typically have one or more of the following characteristics: • Field surveys have verified that scientifically important paleontological resources are not present or are rare • Units are generally younger than 10,000 years before present • Recent aeolian deposits • Sediments exhibit significant physical and chemical changes (i.e., diagenetic alteration) that make fossil preservation unlikely	Management concerns are generally low except where paleontological resources are known or found to exist, and paleontological mitigation is usually unnecessary except in occasional or isolated circumstances. Localities containing important paleontological resources may exist but are occasional and should be managed on a case-by-case basis.
Class 3 – Moderate Potential	Sedimentary geologic units where fossil content varies in scientific importance, abundance, and predictable occurrence. Geologic units have some of the following characteristics: • Marine in origin with sporadic known occurrences of paleontological resources • Paleontological resources may occur intermittently, but abundance is known to be low • Geologic unit may contain scientifically important paleontological resources, but these occurrences are widely scattered • The potential for an authorized land use to impact important paleontological resource is low-to-moderate	Management concerns are moderate because the existence of significant paleontological resources is known to be low. Paleontological mitigation strategies are proposed based on the nature of the proposed activity, and may include record searches, pre-construction surveys, monitoring, mitigation, or avoidance. Areas with common invertebrate or plant fossils may present opportunities for casual collecting by the public.
Class 4 – High Potential	Geologic units that are known to contain a high occurrence of paleontological resources. Geologic units typically have the following characteristics: • Scientifically important paleontological resources have been documented, but may vary in occurrence and predictability • Surface-disturbing activities may adversely affect paleontological resources • Rare or uncommon fossils, including non-vertebrate (such as soft body preservation) or unusual plant fossils, may be present • Illegal collecting activities may impact some areas	Management concerns are moderate to high. Paleontological mitigation strategies are proposed based on the nature of the proposed activity, but often include a field assessment by a qualified paleontologist to assess local conditions, preparation of mitigation plans, and on-site monitoring or spot-checking. In some cases, avoidance of known paleontological resources may be necessary.

PFYC Ranking	Description	Typical Management Recommendations
Class 5 – Very High Potential	Highly fossiliferous geologic units that consistently and predictably produce scientifically important paleontological resources. Geologic units have some or all of the following characteristics: • Important paleontological resources have been documented and occur consistently • Paleontological resources are highly susceptible to adverse impacts from surface-disturbing activities • The geologic unit is frequently the focus of illegal collecting activities	Management concerns are high to very high. Paleontological mitigation often includes pre-construction surveys and on-site monitoring. Avoidance or resource preservation may be necessary.
Class U – Unknown Potential	Geologic units that cannot receive an informed PFYC assignment. Characteristics of these geologic units may include: • Geologic units may exhibit features or preservational conditions that suggest significant paleontological resources could be present, but little information about the actual paleontological resources of the unit or area is known • Geologic units represented on a map are based on lithologic character or basis or origin, but have not been studied in detail • Scientific literature does not exist or does not reveal the nature of paleontological resources • Reports of paleontological resources are anecdotal or have not been verified • Area or geologic unit is poorly or under-studied • The nature of the geologic unit has not yet been assessed	Management concerns are medium to high until a provisional assignment is made. Since these geologic units are often poorly studied, field surveys, record searches, literature searches, and consultation may be necessary. Once adequate information is available to make an informed PFYC determination, the ranking should be updated.
Class W – Water	Any surface area that is mapped as bodies of water	Bodies of water do not normally contain paleontological resources. However, uncovered or transported fossils may be present along shorelines; fossils may be exposed during low water intervals in reservoirs; and fossils may be present in karst area sinkholes and cenotes where animals may have become trapped and preserved. Project activities in those areas should be carefully considered for impacts to paleontological resources Activities that result in the disturbance of sediments, such as dredging, should also be assessed for the potential to encounter paleontological resources.
Class I – Ice	Any area that is mapped as ice or snow	Receding glaciers and melting snow fields should be considered for the potential to reveal recently exposed paleontological resources.

Source: Modified from BLM 2022

2.2 Paleontological Resources Definition and Significance Criteria

Fossils are generally defined here as the remains or trace remains (both physical and chemical) of prehistoric organisms (i.e., animals, plants, and microorganisms). These resources can be preserved as body fossils, such as bones, teeth, shells, and plant matter, or as trace fossils, such as burrows and footprints. Geologic deposits make up the context in which these fossil remains were originally buried and provide information about the environment in which an organism lived. In the broadest sense, a fossil can be defined as any remains documenting past life. Typically, to be considered within the scope of paleontology, fossils must be at least 10,000 years in age (i.e., dating from before the beginning of the modern Holocene Epoch). However, some Holocene-age remains are also considered of paleontological interest if they contribute to our understanding of the record of past life. Alteration or replacement (e.g., permineralization, petrification, or "fossilization") of the original organic material is not required for determination of whether an object is a fossil or not.

Fossils are important scientific and educational resources because they serve as direct and indirect evidence of prehistoric life and are used to understand the history of life on Earth, the nature of past environments and climates, the membership and structure of ancient ecosystems, and the pattern and process of organic evolution and extinction. Fossils are limited, nonrenewable resources, because they typically represent organisms that are now extinct or life in a context that no longer exists. Therefore, if destroyed, a particular fossil can never be replaced, and the information associated with it is forever lost. However, not all fossils are regarded as significant resources or offered protection under existing laws and regulations. CEQA, the National Environmental Policy Act (NEPA), and many other regulations do not define what constitutes unique or significant paleontological resources, instead leaving it to agencies to determine or adopt appropriate criteria. Many agencies have adopted the Society of Vertebrate Paleontology (SVP) standards, which define significant paleontological resources as:

> "... fossils and fossiliferous deposits, here defined as consisting of identifiable vertebrate fossils, large or small, uncommon invertebrate, plant, and trace fossils, and other data that provide taphonomic, taxonomic, phylogenetic, paleoecologic, stratigraphic, and/or biochronologic information. Paleontological resources are considered to be older than recorded human history and/or older than middle Holocene (i.e., older than about 5,000 radiocarbon years)." (SVP 2010)

3 Regulatory Framework

3.1 State Regulations

3.1.1 California Environmental Quality Act

The purpose of CEQA is to 1) inform governmental decision makers and the public about the potential, significant environmental effects of proposed projects; 2) identify ways to avoid or reduce environmental damage; 3) prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when feasible; and 4) disclose to the public the reason why a governmental agency approved the project if significant environmental effects are involved (CEQA Guidelines, Article 1, Section 15002(a)). The CEQA Environmental Checklist Form includes one question regarding proposed project effects on paleontological resources:

> "Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?" (CEQA Guidelines, Appendix G, Section VII, Part F)

The answer to this question must take account of the whole action involved, including on-site, off-site, direct, indirect, construction, operational, project-level, and cumulative impacts. If a project would result in significant adverse effects on paleontological resources, then alternative plans or mitigation measures must be considered. The level of consideration may vary with the importance of the paleontological resource.

3.1.2 California Public Resources Code

The California Public Resources Code (PRC) Section 5097.5 provides protection for paleontological resources located on public lands in California, which are defined as lands owned by, or under the jurisdiction of, the state, or any city, county district, authority, or public corporation, or any agency thereof. Under PRC Section 5097.5, it is a misdemeanor for a person to knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any vertebrate paleontological site, including fossilized footprints, or any other paleontological feature situated on public lands without the express permission of the public agency having jurisdiction of the lands.

3.2 Local Regulations

3.2.1 Los Angeles County

The Historic, Cultural, and Paleontological Resources Element under Chapter 9 of the updated Los Angeles County General Plan (2022), recognizes the cultural, research, and educational importance of paleontological resources and includes four policies related to their protection and preservation:

- **Policy C/NR 14.1.** Mitigate all impacts from new development on or adjacent to historic, cultural, and paleontological resources to the greatest extent feasible.
- **Policy C/NR 14.2.** Support an inter-jurisdictional collaborative system that protects and enhances historic, cultural, and paleontological resources.
- **Policy C/NR 14.5.** Promote public awareness of historic, cultural, and paleontological resources.
- **Policy C/NR 14.6.** Ensure proper notification and recovery processes are carried out for development on or near historic, cultural, and paleontological resources.

3.2.2 City of Azusa

The Historic/Cultural Resources section of Chapter 3 of the City of Azusa General Plan (2004) recognizes the importance of paleontological resources and includes an Implementation Program (HR2) to ensure the identification and protection of those resources within the City of Azusa. Implementation Program HR2 states in part that:

> "In the event that any prehistoric, historic, or paleontological resources are discovered during construction-related earth-moving activities, all work within 50 feet of the resources shall be halted and the developer shall consult with a qualified archaeologist or paleontologist to assess the significance of the find. If any finds are determined to be significant by the qualified archaeologist, then representatives from the City of Azusa and the qualified archaeologist and/or paleontologist shall meet to determine the appropriate course of action."

4 Geological and Paleontological Setting

4.1 Regional Overview

At the regional level, the Project is situated in the northeastern portion of the Los Angeles Basin, just east of the San Gabriel River along the southern edge of the San Gabriel Mountains, at the boundary between the Transverse Ranges Geomorphic Province to the north and Peninsular Ranges Geomorphic Province to the south. While the Los Angeles Basin is traditionally considered to be part of the Peninsular Ranges Geomorphic Province, its formation is also closely tied to the clockwise rotation and northward drift of the western Transverse Ranges, which opened the basin, and the subsequent uplift of the Transverse Ranges, which contributed to the rapid and thick accumulation of sediment in the basin (Harden 2004; Sylvester and O'Black Gans 2016). The Transverse Ranges Geomorphic Province is composed primarily of a series of east-west trending mountain ranges (including the San Gabriel Mountains) and valleys, which sit in stark contrast to the generally northwest oriented structural features of coastal California (Yerkes et al. 1965). The Peninsular Ranges Geomorphic Province extends approximately 1,450 kilometers (km) (900 miles) from the Transverse Ranges to the tip of Baja Mexico and varies in width

from 48 to 160 km (30 to 100 miles) (Norris and Webb 1990). The terrestrial (i.e., unsubmerged) portion of the Peninsular Ranges Geomorphic Province is characterized by a series of elongated northwest–southeast-trending mountains (Yerkes et al. 1965). The mountain ranges of the Transverse and Peninsular Ranges are composed dominantly of plutonic igneous rocks (often granites and granitoids) of Cretaceous age (approximately 120 to 90 million years ago [Ma]) and older metamorphic rocks of Jurassic to earliest Cretaceous age (approximately 200 to 140 Ma), as well as Cenozoic-age sedimentary rocks (Gastil 1975; Krummenacher et al. 1975; Walawender 2000; Norris and Webb 1990). In the basins and valleys beneath these mountain ranges, the igneous and metamorphic basement rocks are often overlain by sedimentary deposits of late Mesozoic to Cenozoic age (approximately 90 Ma to 10 thousand years ago [ka]) (Tweet et al. 2014).

Structurally, the Los Angeles Basin is divided into four major blocks that are bounded and divided by fault zones. The Project lies within the Northeastern Block, which includes the San Gabriel Valley in the central portion of the block, the San Jose Hills in the northeastern portion of the block, and much of the Repetto and Puente Hills in the western and southeastern portions of the block, respectively (Yerkes et al. 1965). The geologic units overlying the igneous and metamorphic basement rocks in the Northeastern Block are estimated to have a maximum thickness of 24,000 feet and primarily consist of Cenozoic-age marine clastic sedimentary rocks, middle Miocene-age volcanic rocks, late Eocene- to early Miocene-age nonmarine sedimentary rocks, and Quaternary-age marine and nonmarine sedimentary rocks (Yerkes et al. 1965; Sylvester and O'Black Gans 2016). Strata within the Northeastern Block were laid down in a variety of marine and terrestrial depositional contexts, which has given rise to a rich fossil record for the region.

4.2 Geologic Map and Paleontological Literature Review

The entirety of the Project Area is mapped as Holocene-age alluvial gravel and sand (Qg) (Dibblee and Ehrenspeck 2012). Although not mapped within the Project Area itself, artificial fill is mapped within approximately 300 feet of the northwestern section of the Project Area and was observed within the Project Area during geotechnical investigations.

4.2.1 Artificial Fill, Holocene

During geotechnical investigations for the Project, artificial fill was observed within the Project Area starting at the surface and extending to depths of 1.25 to 5.5 feet below ground surface. Artificial Fill is comprised of fine- to coarse-grained sands with some instances of bricks and rebar fragments (Southern California Geotechnical, Inc. 2022). Artificial fill may contain reworked or transported fossils; however, these types of fossils are out of context and are generally not considered to be significant. Therefore, artificial fill is assigned a low paleontological potential (PFYC 2) using BLM guidelines (2022).

4.2.2 Alluvial Gravel and Sand, Holocene

The alluvial gravel and sand deposits (Qg) within the Project Area were deposited during the Holocene Epoch (11,700 years ago to present) and consist of unconsolidated, undissected, alluvial sand and gravel originating from the San Gabriel Mountains (Dibblee and Ehrenspeck 2012). According to the geotechnical reports, the unit is characterized by fine- to coarse-grained sands with occasional to excessive cobbles and boulders with maximum diameters of 4 to 5 feet. The sediments tend to be coarser grained with depth, although boulders were encountered as shallow as 1.5 to 2 feet below the surface. Native alluvium was observed beneath the fill to the maximum depth explored (9 feet deep). While the geotechnical investigations for the Project were limited to the upper 9 feet of the site, the geotechnical reports indicate that the alluvial deposits are known to extend more than 50 feet in depth in the vicinity of the Project Area (Southern California Geotechnical, Inc. 2022; Albus & Associates, Inc. 2023a,b).

Holocene-age deposits typically do not contain fossils at or near the surface due to their relatively young age (less than approximately 11,700 years old). Holocene-age remains may occasionally be of scientific interest, such as the late-surviving woolly mammoths from Wrangle Island that survived until approximately 4,000 years before present; however, such discoveries are relatively rare and are addressed on a case-by-case basis. Reworked or transported fossils may also be present; however, these types of fossils are out of context and are generally not considered to be significant. Therefore, Holocene-age younger alluvial gravel and sand deposits (Qg) are assigned a low paleontological potential (PFYC 2).

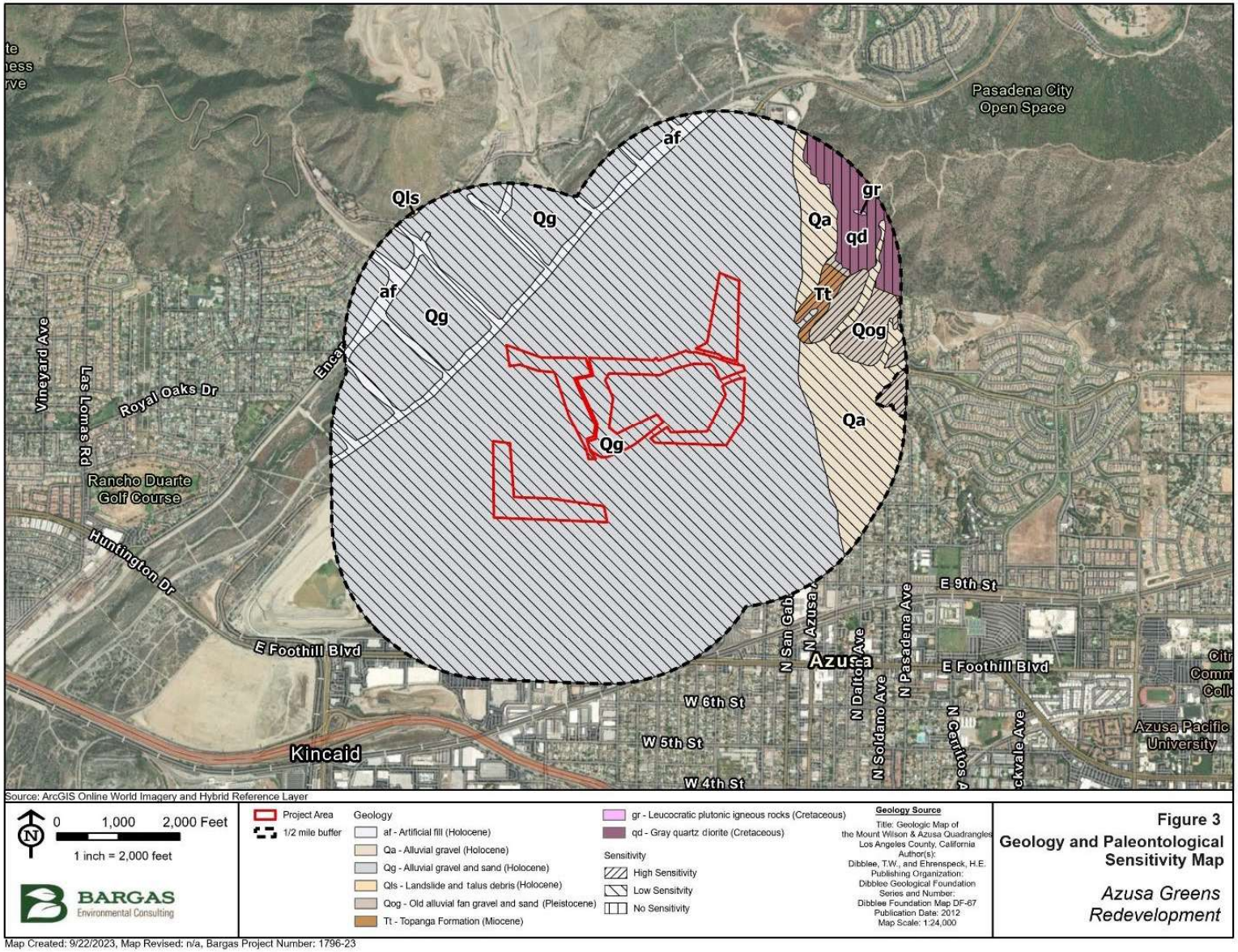

Figure 3. Project Geology and Paleontological Sensitivity Map

5 Records Search Results

The NHMLA completed a records search of the Project Area on October 1, 2023 (Bell 2023; Appendix A). No fossils were reported from within the Project Area boundaries nor within a 1-mile buffer. However, five fossil localities were reported and recovered in the region within Pleistocene-age sedimentary deposits. These localities produced fossil vertebrates, including specimens of mammoth, camel, horse, ground sloth, rodent, rabbit, fish, and snake (Bell 2023; Table 2; Appendix A).

Table 2. Paleontological Records Search Results

Locality Number	Geologic Unit and Age	Common Name	Scientific Name	Location/Depth/ Proximity to Project
LACM VP 2027	Unknown formation (Pleistocene)	Mammoth	*Mammuthus*	Bridgen Road, Pasadena. Approximately 11 miles west of the Project Area. Depth not reported.
LACM VP 3363	Unknown formation: sand and silt (Pleistocene)	Horse	*Equus*	West of Monterey Pass Road and east of the Long Beach Freeway, Monterey Park. Approximately 15 miles southwest of the Project Area. Depth not reported.
LACM VP 7702	Unknown formation: silt (Pleistocene)	Fish Snake Western pocket gopher Meadow vole Harvest mouse Rabbit	*Gasterosteus* Colubridae *Thomomys* *Microtus* *Reithrodontomys* *Sylvilagus*	Intersection of 26th Street and Atlantic Boulevard, Bell Gardens. Approximately 17 miles southwest of the Project Area. Depth of 30 feet below ground surface (bgs).
LACM VP 1728	Unknown formation: light brown shale with interbeds of very coarse brown sand (Pleistocene)	Horse Camel	*Equus* *Camelops*	Intersection of English Road and Peyton Drive, Chino. Approximately 14 miles southeast of the Project Area. Depth of 15 to 20 feet bgs.
LACM VP 7508	Unknown formation (Pleistocene)	Ground sloth Elephant family Horse	*Nothrotheriops* Proboscidea *Equus*	Near the intersection of Vellano Club Drive and Palmero Drive, Chino Hills. Approximately 16 miles southeast of the Project Area. Depth not reported.

Source: Bell 2023

6 Paleontological Impact Analysis

Impacts under CEQA are classified as direct, indirect, or cumulative. Direct impacts are the primary effects of a project. For paleontological resources, direct impacts are typically the result of ground-disturbing construction or maintenance activities that damage or destroy paleontological resources at the surface or in the subsurface. Indirect impacts are the secondary effects of a project, including project-induced changes such as increased public access to paleontologically sensitive areas and increased susceptibility of fossil-bearing geologic units to erosion due to activities like vegetation removal, which may result in adverse impacts to paleontological resources from illegal collection and damage from weathering, respectively. Cumulative impacts are the incremental effects of a project in combination with the effects of past, current, and probable future projects.

No fossils were documented from within the Project Area boundaries, and the closest reported fossil localities were more than 10 miles from the Project Area (Bell 2023). The Holocene-age deposits present at the surface of the Project Area are typically considered to have a low potential for significant paleontological resources at and near the surface due to the relatively young age of the deposits. Furthermore, these sediments are known to extend more than 50 feet in depth, well below the maximum planned Project excavation depth of 19.2 feet for the sewer main trench. Implementation of the Project

would not increase public access or erosion; therefore, no indirect impacts to significant paleontological resources are anticipated. With implementation of the paleontological resource treatment recommendations described in Section 7, direct impacts on paleontological resources would be reduced to less than significant levels, and the Project's potential to contribute to cumulative impacts would be negligible.

7 Summary and Recommendations

Bargas completed a desktop-level paleontological study that included reviews of geologic maps and paleontological literature, and a records search at the NHMLA to identify any known paleontological resources within the Project boundaries or from the same geologic unit within a 1-mile buffer. Paleontological potential rankings were assigned using the federal PFYC system.

Based on the results of the study, there are no known paleontological resources within the Project Area boundaries, and the Holocene-age deposits expected both at the surface and at depths of the Project Area have a low potential for significant paleontological resources. Paleontological monitoring is not recommended during any excavations. However, in the event of an unanticipated paleontological resource discovery, work within 50 feet of the resource shall stop until a qualified paleontologist can evaluate the significance of the find. Construction activities may continue in other areas. If the discovery is identified as potentially significant, additional work, such as recovery, laboratory preparation, fossil identification, curation, and reporting, may be necessary.

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9 Project Personnel

Daniel Nolan, Paleontologist

B.S., Geological Sciences, California Polytechnic University, Pomona (2014)
Years of Experience: 9

Courtney Richards, Principal Paleontologist

M.S., Biological Sciences (paleontology focus), Marshall University (2011)
B.S., Earth and Space Sciences, University of Washington (2006)
Years of Experience: 19

Appendix A. Natural History Museum of Los Angeles County Records Search

Natural History Museum
of Los Angeles County
900 Exposition Boulevard
Los Angeles, CA 90007

tel 213.763.DINO
www.nhm.org

Research & Collections

e-mail: paleorecords@nhm.org

October 1, 2023

Bargas Environmental Consulting

Attn: Courtney Richards
re: Paleontological resources for the 1796-23 Azusa Greens Redevelopment Project

Dear Courtney:

I have conducted a thorough search of our paleontology collection records for the locality and specimen data for proposed development at the 1796-23 Azusa Greens Redevelopment Project area as outlined on the portion of the Azusa USGS topographic quadrangle map that you sent to me via e-mail on September 26, 2023. We do not have any fossil localities that lie directly within the proposed project area, but we do have fossil localities nearby from the same sedimentary deposits that occur in the proposed project area, either at the surface or at depth.

The following table shows the closest known localities in the collection of the Natural History Museum of Los Angeles County (NHMLA).

Locality Number	Location	Formation	Taxa	Depth
LACM VP 2027	1600 block, Bridgen Rd., Pasadena	Unknown Formation (Pleistocene)	Mammoth (*Mammuthus*)	Unknown
LACM VP 3363	W of Monterey Pass Road in Coyote Pass; E of the Long Beach Freeway & S of the N boundary of Section 32; Monterey Park	Unknown Formation (Pleistocene; sand and silt)	Horse (*Equus*)	unknown
LACM VP 7702	Intersection of 26th St and Atlantic Blvd, Bell Gardens	Unknown Formation (Pleistocene; silt)	Fish (*Gasterosteus*); Snake (Colubridae), Rodents (*Thomomys, Microtus, Reithrodontomys)*; Rabbit (*Sylvilagus*)	30 feet bgs
LACM VP 1728	W of intersection of English Rd & Peyton Dr, Chino	Unknown (light brown shale with interbeds of very coarse brown sand; Pleistocene)	Horse (*Equus*), camel (*Camelops*)	15-20 feet bgs
LACM VP 7508	Near intersection of Vellano Club Dr. and Palmero Dr., Oakcrest Development; N of	Unknown formation (Pleistocene)	Ground sloth (*Nothrotheriops*); elephant family	Unknown

Serrano Canyon, Chino Hills	(Proboscidea); horse (*Equus*)

VP, Vertebrate Paleontology; IP, Invertebrate Paleontology; bgs, below ground surface

This records search covers only the records of the NHMLA. It is not intended as a paleontological assessment of the project area for the purposes of CEQA or NEPA. Potentially fossil-bearing units are present in the project area, either at the surface or in the subsurface. As such, NHMLA recommends that a full paleontological assessment of the project area be conducted by a paleontologist meeting Bureau of Land Management or Society of Vertebrate Paleontology standards.

Sincerely,

Alyssa Bell, Ph.D.
Natural History Museum of Los Angeles County

enclosure: invoice