Appendix E Paleontological Records Search

Appendices

This page intentionally left blank.

8 May 2018

Mr. Michael Paul
PlaceWorks
750 B Street, Suite 1620
San Diego, CA 92101

RE: Paleontological Records Search – Solana Vista Elementary School Reconstruction Project

Dear Mr. Paul:

This letter presents the results of a paleontological records search conducted for the Solana Vista Elementary School Reconstruction project, located at 780 Santa Victoria in the northeastern portion of the City of Solana Beach, San Diego County, CA. The project site is bordered to the south by San Patricio Drive, to the north and west by Santa Victoria, and to the east by residential development.

A review of published geological maps covering the project site and surrounding area was conducted to determine the specific geologic units underlying the project. Each geologic unit was subsequently assigned a paleontological resource sensitivity following County of San Diego guidelines (Deméré and Walsh, 1993; Stephenson et al., 2009). Published geological reports covering the project area (e.g., Kennedy and Tan, 2007) indicate that the proposed project has the potential to impact the Eocene-age Torrey Sandstone. This geologic unit and its paleontological sensitivity are summarized in detail in the following section.

In addition, a search of the paleontological collection records housed at the San Diego Natural History Museum (SDNHM) was conducted in order to determine if any documented fossil collection localities occur at the project site or within the immediately surrounding area (Figure 1). The SDNHM has five recorded fossil localities within 1 mile of the project site, all from the Pleistocene-age Bay Point Formation, which is not expected to be impacted by construction of the project. A summary of the paleontological resources that have been recovered from the Torrey Sandstone elsewhere in San Diego County is provided below.

Geologic Rock Units Underlying the Project Area

Torrey Sandstone – The nearshore marine deposits of the early middle Eocene-age (approximately 49 to 48 million years old) Torrey Sandstone underlie the entire project site. The SDNHM does not have any recorded fossil localities from the Torrey Sandstone within a 1-mile radius of the project site. Elsewhere in San Diego County, these deposits have produced scientifically valuable remains of fossil plants (primarily leaves, which indicate a subtropical to tropical marshy and riparian woodland paleoenvironment), as well as nearshore marine invertebrates (e.g., clams, oysters, snails, and barnacles). Rare vertebrate fossil remains have also been recovered, and include teeth of crocodiles, sharks, and rays. The Torrey Sandstone typically yields poorly-preserved fossils, so it is assigned a moderate paleontological sensitivity.

Summary and Recommendations

The moderate paleontological sensitivity of the Torrey Sandstone in San Diego County (Deméré and Walsh, 1993; Stephenson et al., 2009) suggests the potential for construction of the proposed project to result in impacts to paleontological resources. Any proposed excavation activities that extend deep enough to encounter previously undisturbed deposits of this geologic unit have the potential to impact the paleontological resources preserved therein. For these reasons, implementation of a complete paleontological resource mitigation program during ground-disturbing activities is recommended.

The fossil collection locality information contained within this paleontological records search should be considered private and is the sole property of the San Diego Natural History Museum. Any use or reprocessing of the locality information contained within this document beyond the scope of the Solana Vista Elementary School Reconstruction project is prohibited.

If you have any questions concerning these findings please feel free to contact me at 619-255-0321 or kmccomas@sdnhm.org.

Sincerely,

Katie McComas
Paleontology Collections Assistant
San Diego Natural History Museum

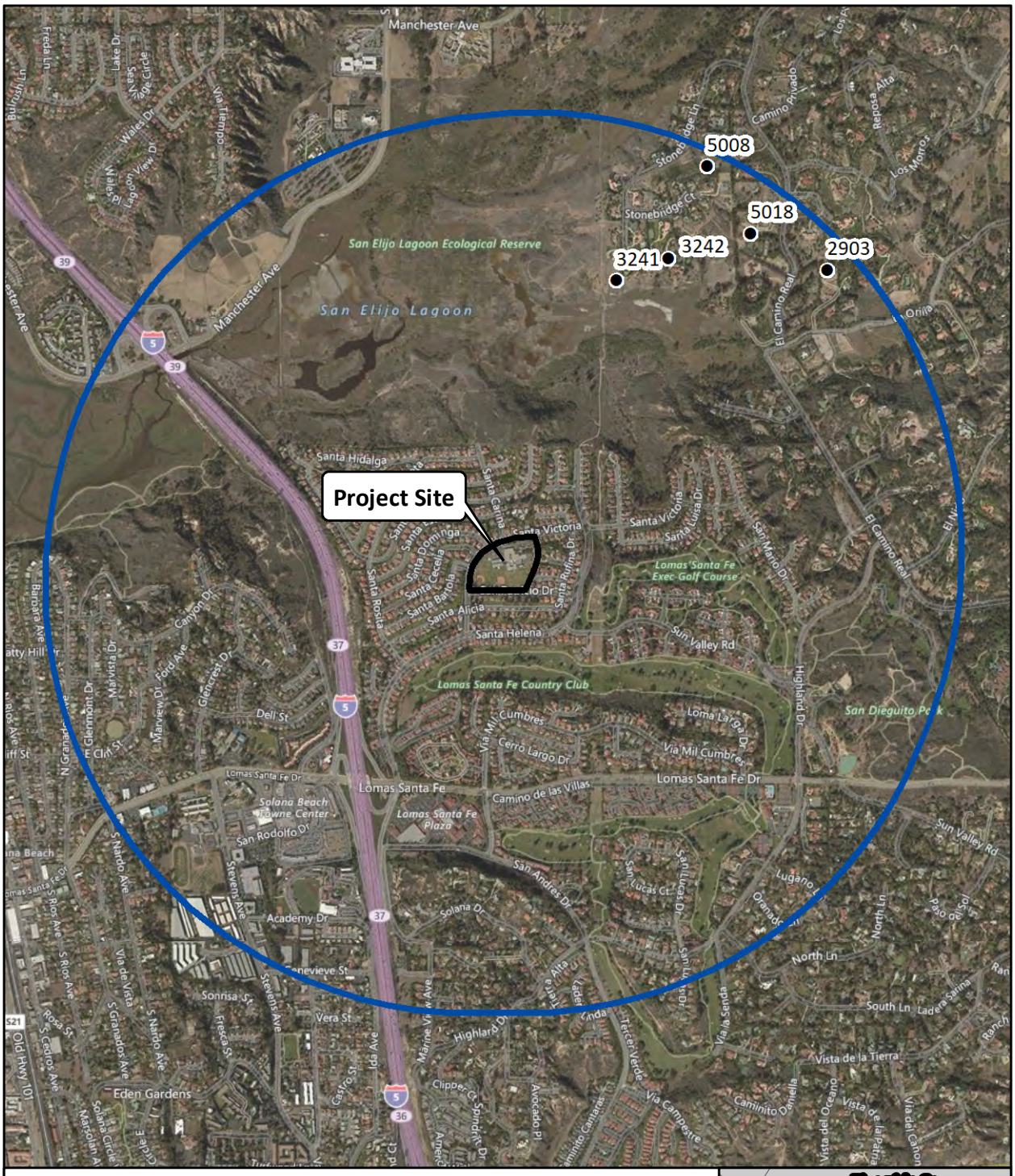
Enc: Figure 1: Project map
Appendix: List of SDNHM fossil localities in the vicinity of the project

Literature Cited

Deméré, T.A., and Walsh, S.L. 1993. Paleontological Resources, County of San Diego. Prepared for the San Diego Planning Commission: 1–68.

Kennedy, M.P., and Tan, S.S. 2007. Geologic Map of the Oceanside 30' x 60' Quadrangle, California. California Geological Survey, Regional Geologic Map Series 1:100,000 scale, map no. 2.

Stephenson, B., and seven others. 2009. County of San Diego Guidelines for determining significance, paleontological resources. Land Use and Environment Group, Department of Planning and Land Use, Department of Public Works, 46 p.



PALEOSERVICES

FIGURE 1

Project Map
Solana Vista Elementary School Reconstruction Project
City of Solana Beach, San Diego County, California

Appendix: Locality List

San Diego Natural History Museum
Department of Paleontology

Locality Number	Locality Name	Location	Elevation (feet)	Geologic Unit	Era	Period	Epoch
2903	Rancho Santa Fe	San Diego County, CA	50	Bay Point Formation, unnamed marine deposit	Cenozoic	Quaternary	late Pleistocene
3241	San Elijo Lagoon	San Diego County, CA	30	Bay Point Formation, unnamed marine deposit	Cenozoic	Quaternary	Pleistocene
3242	San Elijo Lagoon	San Diego County, CA	98	Bay Point Formation, unnamed marine deposit	Cenozoic	Quaternary	Pleistocene
5008	San Elijo Lagoon - Southeast Fork	San Diego County, CA	75	Bay Point Formation, unnamed marine deposit	Cenozoic	Quaternary	Pleistocene
5018	San Elijo Lagoon - Southeast Fork	San Diego County, CA	36	Bay Point Formation, unnamed marine deposit	Cenozoic	Quaternary	Pleistocene