Appendix F
Paleontological Records Search

SAN DIEGO NATURAL HISTORY MUSEUM

27 June 2023

Sarah Siren Dudek 605 3rd Street Encinitas, CA 92024

RE: Paleontological Records Search – PN 14541 Rohr Wohl Specific Plan EIR

Dear Ms. Siren:

This letter presents the results of a paleontological records search conducted for the Rohr Wohl Specific Plan EIR project (Project), which is located in the northwestern portion of the City of Chula Vista, San Diego County, California. The Project site consists of two parcels. The western parcel is bound to the northwest by G Street, to the northeast by an unnamed access road, to the southeast by H Street, and to the southwest by an unnamed access road. The eastern parcel is bound to the northwest by G Street, to the northeast by Bay Boulevard, to the southeast by H Street, and to the southwest by an unnamed access road.

Methods

A review of published geological maps (e.g., Kennedy and Tan, 2008) 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 (Deméré and Walsh, 1993). 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 immediate surrounding area.

Results

Published geological reports (e.g., Kennedy and Tan, 2008) covering the Project area indicate that the Project is underlain by artificial fill and late Pleistocene- to Holocene-age young alluvial fan deposits; however, these units are likely underlain in the subsurface at unknown depths by Quaternary old paralic deposits (broadly equivalent to the Bay Point Formation of Kennedy, 1975), which are exposed directly to the northeast of the Project site. These geologic units and their paleontological sensitivity are summarized below.

The SDNHM has five recorded fossil localities within 1 mile of the Project site, all of which are tentatively thought to be from the Bay Point Formation. These are discussed in greater detail below. A map (Figure 1) and a list (Appendix A) of the fossil localities are attached at the end of this report.

Artificial fill – Artificial fill is mapped at the surface of the southwestern portion of the Project site. The SDNHM does not have any fossil localities from deposits of artificial fill within a 1-mile radius of the Project site. Because artificial fill has been previously disturbed and may have been imported to a project site, any contained fossil remains have lost their original stratigraphic contextual data and are thus of little scientific value. For these reasons, artificial fill is assigned no paleontological sensitivity.

Young alluvial flood plain deposits – Late Pleistocene- to Holocene-age (less than approximately 129,000 years old) young alluvial flood plain deposits underlie the northern and eastern portions of the Project site at the surface. These deposits generally consist of unconsolidated sandy, silty, or clay-bearing alluvium deposited by the action of recently active streams. These deposits are assigned a low paleontological sensitivity based on their relatively young geologic age and lack of recorded fossil collection localities. However, these deposits may be underlain in the relatively shallow subsurface by a geologic unit with high paleontological sensitivity (i.e., the Bay Point Formation, see below).

Quaternary old paralic deposits (Bay Point Formation) – Undivided old paralic deposits likely underlie the site in the subsurface. These deposits are broadly equivalent to the nearshore marine deposits of the Bay Point Formation of Kennedy (1975). The SDNHM has five recorded fossil collection localities from the Bay Point Formation within a 1-mile radius of the Project site. All five localities were documented at significant depths below the surface (between 90 and 282 feet below sea level) during drilling, and the assignment of these localities to the Bay Point Formation is tentative. The localities produced trace fossil borings, as well as fossil remains of marine invertebrates (e.g., bryozoans, sea urchins clams, scallops, oysters, jingle shells, snails, barnacles, decapods,), marine vertebrates (e.g., sharks and bony fish), and terrestrial vertebrates (e.g., rodents). More broadly, the Bay Point Formation has been assigned a high paleontological sensitivity for the diverse and well-preserved fossils of marine invertebrates and marine vertebrates that have been recovered from these deposits (Deméré and Walsh, 1993).

Summary and Recommendations

The high paleontological sensitivity of the Bay Point Formation in San Diego County (Deméré and Walsh, 1993), as well as the presence of fossil localities in the vicinity of the Project site, suggest the potential for construction of the 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 (i.e., below the depth of artificial fill, young alluvial flood plain deposits, or any previously disturbed sediments present within the Project site) have the potential to impact the paleontological resources preserved therein. If such excavation is required for Project construction, implementation of a complete paleontological resource mitigation program during ground-disturbing activities is recommended. The mitigation program must include, at a minimum, measures for construction monitoring, fossil salvage and data recovery, laboratory preparation and curation of the fossils at an appropriate regional repository, and submission of a final paleontological mitigation report.

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 information contained within this document beyond the scope of the Rohr Wohl Specific Plan EIR project is prohibited.

If you have any questions concerning these findings please feel free to contact me at kmueller@sdnhm.org.

Sincerely,

Kirstin Mueller

Assistant Report Writer

San Diego Natural History Museum

Klenda Mulla

Enc: Figure 1: Project map

Appendix A: List of SDNHM fossil localities in the vicinity of the Project

Literature Cited

Deméré, T.A., and S.L. Walsh. 1993. Paleontological Resources, County of San Diego. Unpublished technical report prepared for the San Diego County Department of Public Works: 1–68.

Kennedy, M.P. 1975. Geology of the San Diego metropolitan area, California. Section A - Western San Diego metropolitan area. California Division of Mines and Geology, Bulletin 200: 9–39.

Kennedy, M.P., and Tan, S.S. 2008. Geologic Map of the San Diego 30' x 60' Quadrangle, California. California Geological Survey, Regional Geologic Map Series 1:100,000 scale, map no. 3.

SDNHM unpublished paleontological collections data.



PN14541 Rohr Wohl Specific Plan EIR – Paleontological Records Search

Appendix A: Locality List San Diego Natural History Museum Department of Paleontology

Locality Number	Locality Name	Location	Elevation (feet)	Geologic Unit	Era	Period	Epoch
7846	SDG&E Instl Anode Well, CP463	City of Chula Vista, San Diego County, California	-282	Bay Point Formation?, unnamed marine deposit	Cenozoic	Quaternary	Pleistocene
7847	SDG&E Instl Anode Well, CP463	City of Chula Vista, San Diego County, California	-235	Bay Point Formation?, unnamed marine deposit	Cenozoic	Quaternary	Pleistocene
7848	SDG&E Instl Anode Well, CP463	City of Chula Vista, San Diego County, California	-172	Bay Point Formation?, unnamed marine deposit	Cenozoic	Quaternary	Pleistocene
7850	SDG&E CP459 Split 82-2 Jefferson S/O H St	City of Chula Vista, San Diego County, California	-170	Bay Point Formation?, unnamed marine deposit	Cenozoic	Quaternary	Pleistocene
7851	SDG&E CP459 Split 82-2 Jefferson S/O H St	City of Chula Vista, San Diego County, California	-90	Bay Point Formation?, unnamed marine deposit	Cenozoic	Quaternary	Pleistocene