

# SAN DIEGO NATURAL HISTORY MUSEUM

2 November 2018

Ms. Arleen Garcia-Herbst  
Spindrift Archaeological Consulting  
8895 Towne Centre Drive # 105-248  
San Diego, CA 92122

RE: Paleontological Records Search – Bay Vista Methodist Lisbon Heights AP Inventory Project

Dear Ms. Garcia-Herbst:

This letter presents the results of a paleontological records search conducted for the Bay Vista Methodist Lisbon Heights AP Inventory Project (Project), located in the western portion of the Jamacha Lomita Neighborhood within the Skyline-Paradise Hills Community Planning Area of the City of San Diego, San Diego County, CA. The Project site is partially bordered to the south by Lisbon Street, and bordered on all other sides 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 City of San Diego and County of San Diego guidelines (City of San Diego, 2011; Deméré and Walsh, 1993; Stephenson et al., 2009). Published geological reports covering the Project area (e.g., Kennedy and Tan, 2008) indicate that the proposed Project has the potential to impact the middle Eocene-age Mission Valley Formation. 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 immediate surrounding area (Figure 1). The SDNHM has 12 recorded fossil collection localities within a 1-mile radius of the Project site. Ten of these localities are from the late Pliocene- to early Pleistocene-age San Diego Formation, which is not anticipated to be impacted by construction. The remaining two localities are from the Mission Valley Formation, and are discussed in greater detail below.

## **Geologic Rock Units Underlying the Project Area**

**Mission Valley Formation** – The marine and fluvial deposits of the middle Eocene-age (approximately 43 million years old) Mission Valley Formation underlie the entire Project site. The SDNHM has two fossil collection localities from the Mission Valley Formation within a 1-mile radius of the Project site, which produced trace fossils (e.g., worm burrows) and fossilized impressions or remains of terrestrial invertebrates (e.g., land snails), marine invertebrates (e.g., polychaete worms, snails, mussels, oysters, and clams), and marine vertebrates (e.g., sharks, rays, and bony fish). The Mission Valley Formation has been assigned a high paleontological sensitivity for the diverse fossil assemblages of marine invertebrates and terrestrial vertebrates it has produced.

## Summary and Recommendations

The high paleontological sensitivity of the Mission Valley Formation in San Diego County (Deméré and Walsh, 1993; Stephenson et al., 2009), 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 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 information contained within this document beyond the scope of the Bay Vista Methodist Lisbon Heights AP Inventory 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, M.S.  
Paleontological Report Writer & GIS Specialist  
San Diego Natural History Museum

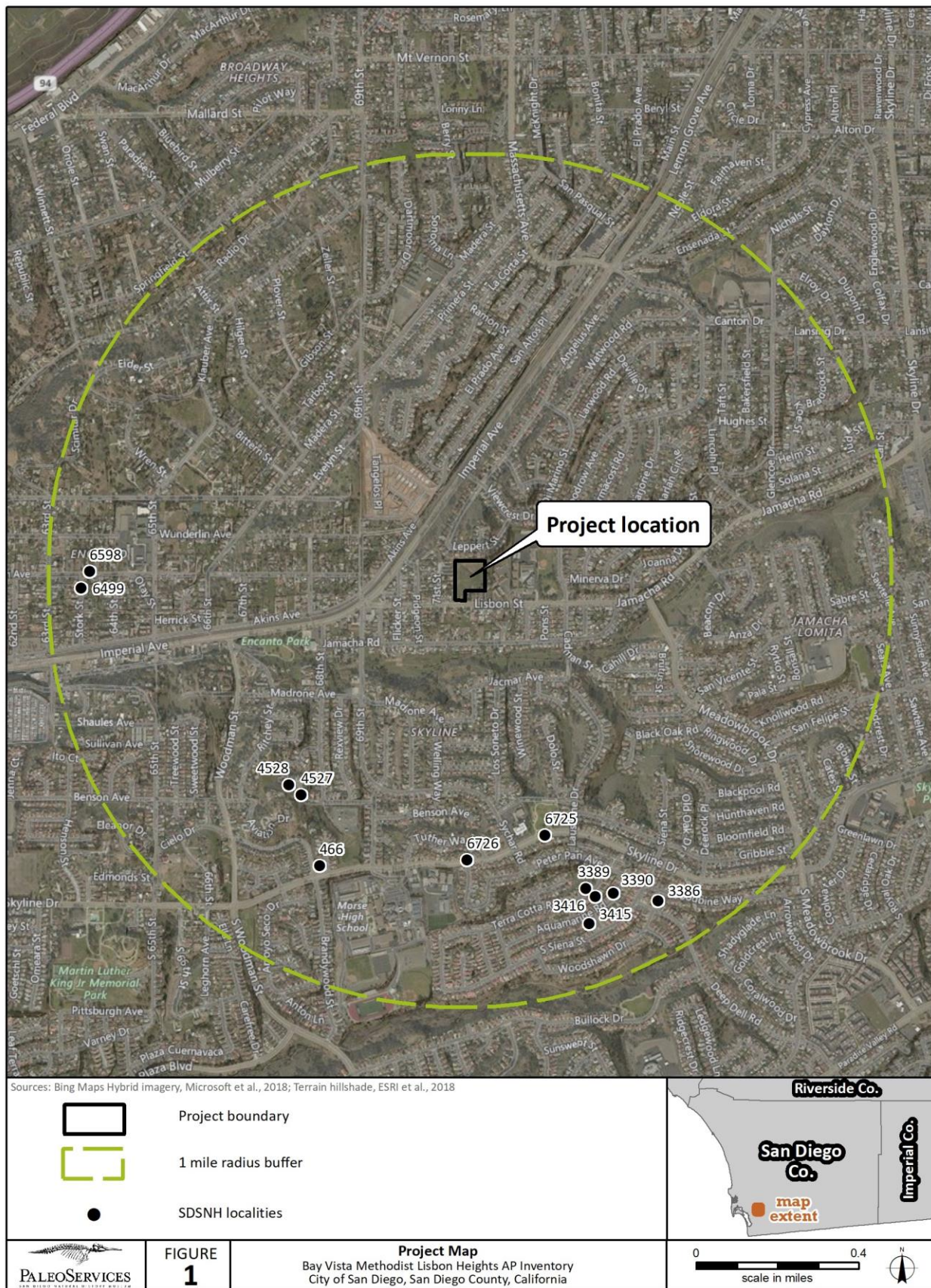
*Enc: Figure 1: Project map*

*Appendix: List of fossil collection localities in the vicinity of the Project site*

## Literature Cited

- City of San Diego. 2011. California Environmental Quality Act, Significance Determination Thresholds. Development Services Department, 84 p.
- 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. 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.
- 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.





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

Locality Number	Locality Name	Location	Elevation (feet)	Geologic Unit	Era	Period	Epoch
6499	Sewer & Water Group 792	City of San Diego, San Diego County, CA	226	Mission Valley Formation	Cenozoic	Paleogene	middle Eocene
6598	Sewer & Water Group 792	City of San Diego, San Diego County, CA	267	Mission Valley Formation	Cenozoic	Paleogene	middle Eocene
466	East San Diego (Skyline Dr. & Cielo Dr.)	City of San Diego, San Diego County, CA	435	San Diego Formation	Cenozoic	Neogene	late Pliocene
3386	View Ridge	City of San Diego, San Diego County, CA	455	San Diego Formation	Cenozoic	Neogene	late Pliocene
3389	View Ridge	City of San Diego, San Diego County, CA	452	San Diego Formation	Cenozoic	Neogene	late Pliocene
3390	View Ridge	City of San Diego, San Diego County, CA	454	San Diego Formation	Cenozoic	Neogene	late Pliocene
3415	View Ridge	City of San Diego, San Diego County, CA	452	San Diego Formation	Cenozoic	Neogene	late Pliocene
3416	View Ridge	City of San Diego, San Diego County, CA	455	San Diego Formation	Cenozoic	Neogene	late Pliocene
6725	Sewer Group 949 (7200 Block Skyline)	City of San Diego, San Diego County, CA	460	San Diego Formation	Cenozoic	Neogene	Pliocene
6726	Sewer Group 949 (7000-7100 blocks Skyline)	City of San Diego, San Diego County, CA	435	San Diego Formation	Cenozoic	Neogene	Pliocene
4527	Benson Heights (Encanto)	City of San Diego, San Diego County, CA	429	San Diego Formation, member 1	Cenozoic	Neogene	late Pliocene
4528	Benson Heights (Encanto)	City of San Diego, San Diego County, CA	422	San Diego Formation, member 1	Cenozoic	Neogene	late Pliocene