605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
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MEMORANDUM

To:	City of San Diego
From:	Sarah Siren, M.S., GISP
Subject:	Paleontological Resources Review – 3405 Kite Street Pipe Repair Project (PTS#660539)
Date:	4/23/20
cc:	Vipul Joshi, Michael Williams, and Shannon Brown, Dudek
Attachment(s):	Paleontological Records Search Results Letter (Confidential)

Dudek is providing this memo after completing a review of the potential for impacts to paleontological resources during construction activities for the 3405 Kite Street Pipe Repair Project (project). The project is located at 3405 Kite Street, which is within the Uptown Community Planning Area of the City of San Diego (City), California. The project area is underlain by mapped deposits of Quaternary very old paralic deposits (map unit Qvop10), consisting of early to middle Pleistocene (~1.5 to 0.5 million years old) age deposits correlative with the Lindavista Formation and Pliocene age (~3 to 1.5 million years old) San Diego Formation (Kennedy and Tan, 2008). Based on the records search results obtained from the San Diego Natural History Museum (SDNHM), these geological units are known to produce scientifically significant paleontological resources throughout San Diego County (SDNHM 2020; Confidential Attachment A). The sedimentary deposits underlying the project area have moderate (e.g., Lindavista Formation) to high (e.g., San Diego Formation) paleontological resource sensitivity according to the City of San Diego (2016) thresholds for significance. In contrast, artificial fill and any Holocene age Quaternary alluvium encountered within the project area are unlikely to yield fossils due to their young age (Deméré and Walsh 1993; City of San Diego, 2016). Any fossil material found in these deposits are ex-situ and would not be considered scientifically significant or unique.

In a one-mile radius of the project site, a total of 108 fossil localities have been documented by the SDNHM (2020) within the Lindavista and San Diego Formations. Almost all of these fossil localities were discovered within the San Diego Formation, whereas a single locality discovered within the Lindavista Formation yielded pholad clam borings (Confidential Attachment A). Fossil discovered within the San Diego Formation have included trace fossils, marine invertebrate and vertebrate remains, and terrestrial vertebrate remains (Confidential Attachment A).

Based on information from the City, the San Diego Formation is present at depth (~6 feet deep) below artificial fill along the storm drain alignment within the project area. However, it is our understanding that excavation into native formational (e.g., San Diego Formation) is not anticipated.

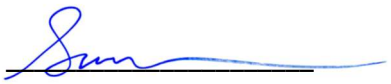
As discussed above, numerous paleontological resource localities were identified within a one-mile radius of the project area as a result of the institutional records search and desktop geological review. If the project does not encounter either the Lindavista or San Diego formations, it is not anticipated that paleontological resources will be

impacted given the limited construction excavation planned. However, intact paleontological resources may be encountered if excavations extend into previously undisturbed sedimentary deposits with high sensitivity (e.g., San Diego Formation).

Given the proximity of past fossil discoveries in the area and the underlying paleontologically sensitive deposits, the project site has the potential to yield scientifically significant paleontological resources. In the event that intact paleontological resources are located on the project site, ground-disturbing activities associated with construction of the project, such as grading during site preparation and trenching for utilities, have the potential to destroy a unique paleontological resource or site. Without mitigation, the potential damage to paleontological resources during construction would be a potentially significant impact (Society of Vertebrate Paleontology [SVP], 2010). However, upon implementation of mitigation measures, as referenced in the museum records search results (Confidential Attachment A), impacts would be reduced to below a level of significance. Impacts of the project are considered less than significant with mitigation incorporated during construction.

If you have any questions regarding this memo, please feel free to contact me (760.846.9326 or ssiren@dudek.com).

Sincerely,



Sarah A. Siren, M.S., GISP

Senior Paleontologist

Enc. Paleontological Records Search Results Letter (Confidential)

References Cited

City of San Diego, 2016. *California Environmental Quality Act, Significance Determination Thresholds*. Development Services Department, 84 p.

Demeré, T.A. and S.L. Walsh. 1993. *County of San Diego Paleontological Resources*. Prepared for the San Diego Planning Commission. 1-68.

Kennedy, M.P. and S.S. Tan. 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.

San Diego Natural History Museum (SDNHM). 2020. *Paleontological Records Search, Kite Street Project*. Unpublished Records Search Results Letter from the San Diego Natural History Museum, San Diego, California.

Society of Vertebrate Paleontology (SVP). 2010. *Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources.* 11 p. Available; http://vertpaleo.org/The-Society/Governance-Documents/SVP_Impact_Mitigation_Guidelines.aspx.

Confidential Attachment A

Paleontological Records Search Results Letter

20 April 2020

Sarah Siren
Dudek
605 Third Street
Encinitas, CA 92024

RE: Paleontological Records Search – Kite Street Pipe Repair

Dear Ms. Siren:

This letter presents the results of a paleontological records search conducted for the Kite Street Pipe Repair project (Project), located in the central portion of the Midtown Neighborhood, within the Uptown Community Planning Area of the City of San Diego, San Diego County, California. The Project site is located at 3405 Kite Street, at the northeastern corner of the intersection of Kite Street and West Upas Street.

Methods

A review of published geological maps covering the Project site and surrounding area was conducted to determine the specific geologic units underlying the Project site. Each geologic unit was subsequently assigned a paleontological resource sensitivity following City of San Diego guidelines (City of San Diego, 2016). 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 proposed Project has the potential to impact early to middle Pleistocene-age very old paralic deposits (broadly equivalent to the Lindavista Formation) and the underlying late Pliocene- to early Pleistocene-age San Diego Formation. These geologic units and their paleontological sensitivity are summarized below. The SDNHM has 108 recorded fossil localities from the Lindavista Formation and San Diego Formation within one mile of the Project site, and these are discussed in more detail below.

very old paralic deposits (Lindavista Formation) – The marine and/or non-marine terrace deposits of the early to middle Pleistocene-age (approximately 1.5 to 0.5 million years old) Lindavista Formation underlie the entire Project site at the surface. More specifically, these deposits rest on the Tecolote terrace (approximately 800,000 years old) of Kern and Rockwell (1992), and are broadly equivalent to unit 10, very old paralic deposits, of Kennedy and Tan (2008). The SDNHM has one recorded fossil collection locality from the Lindavista Formation within a 1-mile radius of the Project site, which produced borings of pholad clams. Elsewhere in San Diego County, the Lindavista Formation has produced remains of nearshore marine invertebrates (e.g., clams, scallops, snails, barnacles, and sand dollars), as well as sparse remains of marine vertebrates (e.g., sharks and baleen whales). Fossils have primarily been recovered from localities in Tierrasanta and Mira Mesa where the Lindavista Formation is

assigned a high paleontological sensitivity; elsewhere in San Diego County, including in the vicinity of the Project site, the Lindavista Formation is assigned a moderate paleontological sensitivity.

San Diego Formation – Marine sedimentary deposits of the late Pliocene- to early Pleistocene-age (approximately 3 to 1.5 million years old) San Diego Formation crop out at lower elevations just to the east of the Project site, and therefore likely underlie the Lindavista Formation at relatively shallow depths within the Project site. The SDNHM has 107 recorded fossil localities from the San Diego Formation within a one-mile radius of the Project site, which produced trace fossils (e.g., sponge borings) and fossil impressions or remains of marine invertebrates (e.g., foraminiferans, bryozoans, polychaete worms, brachiopods, snails, mussels, oysters, scallops, clams, decapods, stomatopods, barnacles, sea urchins, heart urchins, and sand dollars), marine vertebrates (e.g., sharks, rays, bony fish, sea birds, walrus, eared seals, sea cows, dolphins, and whales), and terrestrial vertebrates (e.g., lizard and rabbit). Based on the important fossil remains of marine mammals, sea birds, and mollusks recovered from this geologic unit, the San Diego Formation has been assigned a high paleontological sensitivity.

Summary and Recommendations

The moderate paleontological sensitivity of the Lindavista Formation and high paleontological sensitivity of the underlying San Diego Formation in San Diego County (Deméré and Walsh, 1993), as well as the presence of fossil collection localities in the vicinity of the Project site, 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 these geologic units (i.e., below the depth of any previously imported artificial fill or 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 fossil collection locality information contained within this paleontological record 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 Kite Street Pipe Repair 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 SDNHM fossil localities in the vicinity of the project

Literature Cited

City of San Diego. 2016. California Environmental Quality Act, Significance Determination Thresholds. Development Services Department, 86 p.

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.

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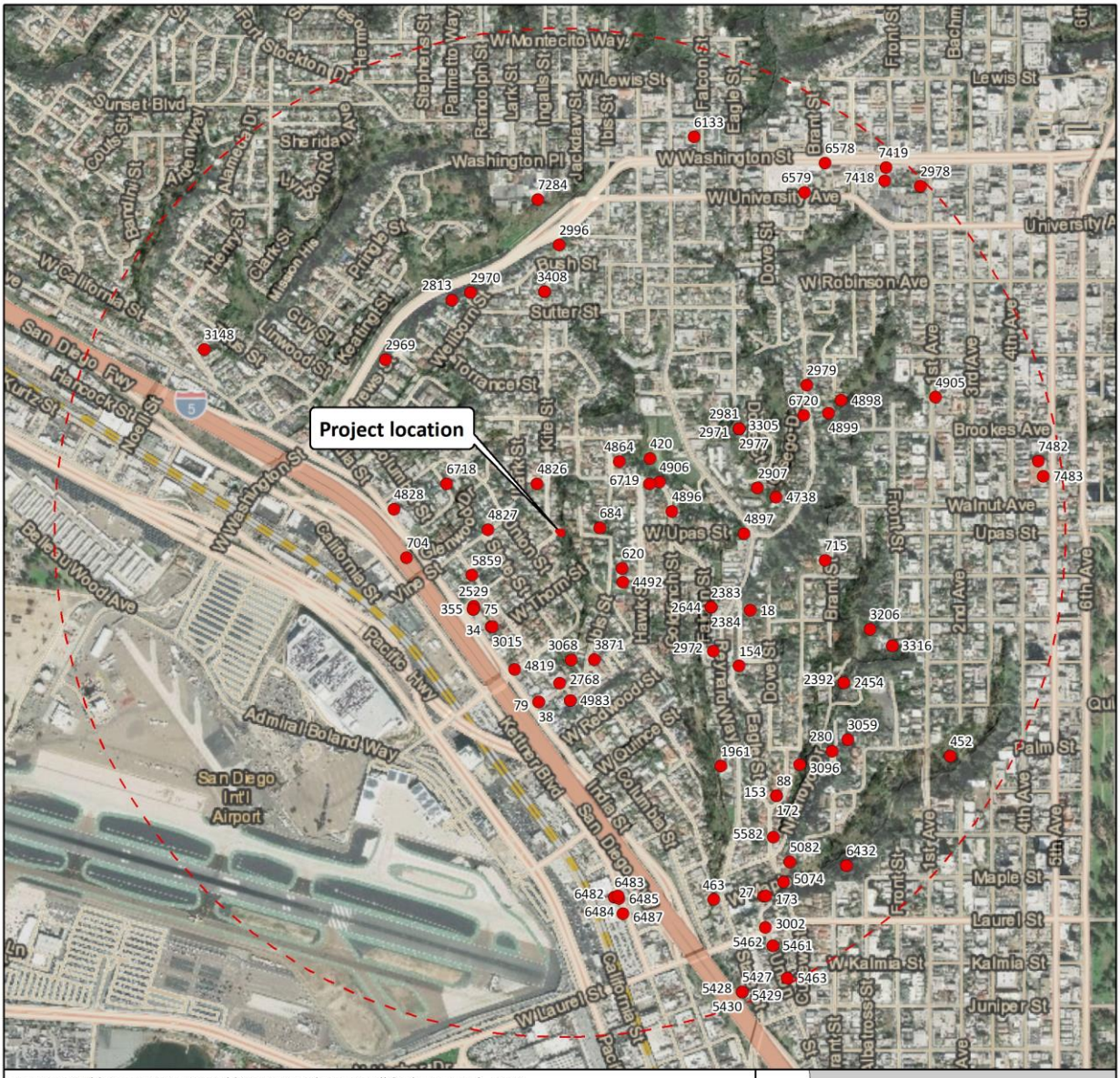
Kern, J.P., and Rockwell, T.K. 1992. Chronology and deformation of Quaternary marine shorelines, San Diego County, California. In, Quaternary Coasts of the United States: Marine and Lacustrine Systems. Society of Economic Paleontologists and Mineralogists, Special Publication 48: 377–382.

San Diego Natural History Museum (SDNHM), unpublished paleontological collections data.


Project location
Sources: World Transportation, World Imagery, and Terrain Hillshade, Esri et al., 2020
Project boundary
1 mile radius buffer
SDSNH localities
map extent
San Diego
PALEOSERVICES
SAN DIEGO NATURAL HISTORY MUSEUM
FIGURE 1
Project Map
Kite Street Pipe Repair
City of San Diego
San Diego County, California
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0.4
scale in miles
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Appendix: Locality List
San Diego Natural History Museum
Department of Paleontology

Locality Number	Locality Name	Location	Elevation (feet)	Geologic Unit	Era	Period	Epoch
7482	Strauss Fifth Avenue	City of San Diego, San Diego County, California	258	Lindavista Formation	Cenozoic	Quaternary	middle Pleistocene
18	Reynard Way - West of Spruce Street	City of San Diego, San Diego County, California	120	San Diego Formation	Cenozoic	Neogene	Pliocene
27	Reynard Way	City of San Diego, San Diego County, California	100	San Diego Formation	Cenozoic	Neogene	Pliocene
34	India & Thorn Streets - Northeast Corner	City of San Diego, San Diego County, California	100	San Diego Formation	Cenozoic	Neogene	Pliocene
38	India and Spruce Streets - Northeast Corner	City of San Diego, San Diego County, California	120	San Diego Formation	Cenozoic	Neogene	Pliocene
75	India and Upas Streets - Southeast Corner	City of San Diego, San Diego County, California	110	San Diego Formation	Cenozoic	Neogene	Pliocene
79	India and Spruce Streets - Northeast Corner	City of San Diego, San Diego County, California	120	San Diego Formation	Cenozoic	Neogene	Pliocene
88	Reynard Way	City of San Diego, San Diego County, California		San Diego Formation	Cenozoic	Neogene	Pliocene
153	Reynard Way	City of San Diego, San Diego County, California	140	San Diego Formation	Cenozoic	Neogene	Pliocene
154	Reynard Way	City of San Diego, San Diego County, California	100	San Diego Formation	Cenozoic	Neogene	Pliocene
172	Reynard Way	City of San Diego, San Diego County, California	140	San Diego Formation	Cenozoic	Neogene	Pliocene
173	Reynard Way - South End of Old Brickyard	City of San Diego, San Diego County, California	100	San Diego Formation	Cenozoic	Neogene	Pliocene
280	Reynard Way - Arroyo Drive near Palm Street	City of San Diego, San Diego County, California		San Diego Formation	Cenozoic	Neogene	Pliocene
355	India and Upas Streets - Southeast Corner	City of San Diego, San Diego County, California	100	San Diego Formation	Cenozoic	Neogene	Pliocene
415	India and Upas Streets - Southeast Corner	City of San Diego, San Diego County, California	100	San Diego Formation	Cenozoic	Neogene	Pliocene
420	Reynard Way	City of San Diego, San Diego County, California	80	San Diego Formation	Cenozoic	Neogene	Pliocene
463	Reynard Way (Maple and State Street)	City of San Diego, San Diego County, California	70	San Diego Formation	Cenozoic	Neogene	late Pliocene
620	Spruce Street	City of San Diego, San Diego County, California	150	San Diego Formation	Cenozoic	Neogene	Pliocene
684	Ibis and Upas Streets	City of San Diego, San Diego County, California		San Diego Formation	Cenozoic	Neogene	Pliocene
704	India and Vine Streets	City of San Diego, San Diego County, California	100	San Diego Formation	Cenozoic	Neogene	Pliocene
1961	Reynard Way	City of San Diego, San Diego County, California		San Diego Formation	Cenozoic	Neogene	Pliocene
2383	Reynard Way - Miscellaneous Locality	City of San Diego, San Diego County, California		San Diego Formation	Cenozoic	Neogene	Pliocene
2384	Reynard Way	City of San Diego, San Diego County, California		San Diego Formation	Cenozoic	Neogene	Pliocene
2392	Arroyo Drive	City of San Diego, San Diego County, California		San Diego Formation	Cenozoic	Neogene	Pliocene
2454	Arroyo Drive	City of San Diego, San Diego County, California		San Diego Formation	Cenozoic	Neogene	Pliocene
2529	Upas and India Streets	City of San Diego, San Diego County, California		San Diego Formation	Cenozoic	Neogene	Pliocene
2644	Reynard Way - Miscellaneous Locality	City of San Diego, San Diego County, California		San Diego Formation	Cenozoic	Neogene	Pliocene
2768	Spruce Street (between India & Ibis)	City of San Diego, San Diego County, California	115	San Diego Formation	Cenozoic	Neogene	Pliocene
2813	Washington Street	City of San Diego, San Diego County, California	125	San Diego Formation	Cenozoic	Neogene	Pliocene

Locality Number	Locality Name	Location	Elevation (feet)	Geologic Unit	Era	Period	Epoch
2907	Curlew Street and Reynard Way	City of San Diego, San Diego County, California		San Diego Formation	Cenozoic	Neogene	Pliocene
2969	Washington Street	City of San Diego, San Diego County, California	150	San Diego Formation	Cenozoic	Neogene	Pliocene
2970	Washington Street - General Locality	City of San Diego, San Diego County, California	180	San Diego Formation	Cenozoic	Neogene	Pliocene
2971	Reynard Way and Curlew St.	City of San Diego, San Diego County, California	200	San Diego Formation	Cenozoic	Neogene	Pliocene
2972	Reynard Way	City of San Diego, San Diego County, California		San Diego Formation	Cenozoic	Neogene	Pliocene
2977	Reynard Way - Between Brooks and Walnut	City of San Diego, San Diego County, California		San Diego Formation	Cenozoic	Neogene	Pliocene
2979	Curlew Street	City of San Diego, San Diego County, California		San Diego Formation	Cenozoic	Neogene	Pliocene
2981	Reynard Way - near Brooks Street	City of San Diego, San Diego County, California		San Diego Formation	Cenozoic	Neogene	Pliocene
2993	Reynard Way	City of San Diego, San Diego County, California		San Diego Formation	Cenozoic	Neogene	Pliocene
2996	Washington Street	City of San Diego, San Diego County, California	200	San Diego Formation	Cenozoic	Neogene	Pliocene
3002	Laurel and Union Sts.	City of San Diego, San Diego County, California		San Diego Formation	Cenozoic	Neogene	Pliocene
3015	India and Upas Street	City of San Diego, San Diego County, California	100	San Diego Formation	Cenozoic	Neogene	Pliocene
3039	India St. and Upas St.	City of San Diego, San Diego County, California		San Diego Formation	Cenozoic	Neogene	Pliocene
3040	India and Upas St. (Southeast Corner)	City of San Diego, San Diego County, California		San Diego Formation	Cenozoic	Neogene	Pliocene
3059	Arroyo Drive	City of San Diego, San Diego County, California	200	San Diego Formation	Cenozoic	Neogene	Pliocene
3068	Spruce Street	City of San Diego, San Diego County, California	16	San Diego Formation	Cenozoic	Neogene	Pliocene
3093	Reynard Way - Miscellaneous Locality	City of San Diego, San Diego County, California		San Diego Formation	Cenozoic	Neogene	Pliocene
3096	Arroyo Drive	City of San Diego, San Diego County, California		San Diego Formation	Cenozoic	Neogene	Pliocene
3148	California Street	City of San Diego, San Diego County, California	120	San Diego Formation	Cenozoic	Neogene	late Pliocene
3206	Mission Hills Quarry	City of San Diego, San Diego County, California	160	San Diego Formation	Cenozoic	Neogene	late Pliocene
3305	Reynard Way - Reynard Arms Apartments	City of San Diego, San Diego County, California	180	San Diego Formation	Cenozoic	Neogene	Pliocene
3316	Arroyo Drive	City of San Diego, San Diego County, California	150	San Diego Formation	Cenozoic	Neogene	late Pliocene
3408	Washington Street	City of San Diego, San Diego County, California	200	San Diego Formation	Cenozoic	Neogene	Pliocene
4738	Curlew Street	City of San Diego, San Diego County, California		San Diego Formation	Cenozoic	Neogene	Pliocene
4819	Sewer and Water Group 673 #1 (Horton-Linwood)	City of San Diego, San Diego County, California	70	San Diego Formation	Cenozoic	Neogene	Pliocene
4826	Sewer and Water Group 673 #2 (Horton-Linwood)	City of San Diego, San Diego County, California	100	San Diego Formation	Cenozoic	Neogene	Pliocene
4827	Sewer and Water Group 673 #3 (Horton-Linwood)	City of San Diego, San Diego County, California	180	San Diego Formation	Cenozoic	Neogene	Pliocene
4828	Sewer and Water Group 673 #4 (Horton-Linwood)	City of San Diego, San Diego County, California	75	San Diego Formation	Cenozoic	Neogene	Pliocene
4864	Ibis Street - Middletown	City of San Diego, San Diego County, California	240	San Diego Formation	Cenozoic	Neogene	middle Pliocene

Locality Number	Locality Name	Location	Elevation (feet)	Geologic Unit	Era	Period	Epoch
4896	Goldfinch Street - Middletown	City of San Diego, San Diego County, California	230	San Diego Formation	Cenozoic	Neogene	middle Pliocene
4897	Reynard Way & Upas Street - Middletown	City of San Diego, San Diego County, California	130	San Diego Formation	Cenozoic	Neogene	middle Pliocene
4898	Brant Street & Brooks Avenue - Hillcrest	City of San Diego, San Diego County, California	163	San Diego Formation	Cenozoic	Neogene	middle Pliocene
4899	Brant Street projection - Hillcrest	City of San Diego, San Diego County, California	160	San Diego Formation	Cenozoic	Neogene	middle Pliocene
4905	First Avenue, 3400 block - Hillcrest	City of San Diego, San Diego County, California	253	San Diego Formation	Cenozoic	Neogene	middle Pliocene
4906	Goldfinch Street - Hillcrest	City of San Diego, San Diego County, California	237	San Diego Formation	Cenozoic	Neogene	middle Pliocene
5074	Dove and Maple - South End of Old Brickyard	City of San Diego, San Diego County, California	100	San Diego Formation	Cenozoic	Neogene	Pliocene
5082	Dove and Maple - South End of Old Brickyard	City of San Diego, San Diego County, California	100	San Diego Formation	Cenozoic	Neogene	Pliocene
5462	Sewer Group 680 - Modiolus Shell (Union St)	City of San Diego, San Diego County, California	115	San Diego Formation	Cenozoic	Neogene	late Pliocene
5463	Sewer Group 680 - Union Street Blue Grey Bed	City of San Diego, San Diego County, California	108	San Diego Formation	Cenozoic	Neogene	late Pliocene
5582	Sewer Group 700-Dove St. South Mission Hills	City of San Diego, San Diego County, California	85	San Diego Formation	Cenozoic	Neogene	Pliocene
6133	Paseo De Mission Hills	City of San Diego, San Diego County, California	252	San Diego Formation	Cenozoic	Neogene	late Pliocene
6432	San Diego Zoo Equalization Tank	City of San Diego, San Diego County, California	140	San Diego Formation	Cenozoic	Neogene	Pliocene
6482	Laurel & Kettner Parking Structure Expansion	City of San Diego, San Diego County, California	20	San Diego Formation	Cenozoic	Neogene	late Pliocene
6483	Laurel & Kettner Parking Structure Expansion	City of San Diego, San Diego County, California	20	San Diego Formation	Cenozoic	Neogene	late Pliocene
6484	Laurel & Kettner Parking Structure Expansion	City of San Diego, San Diego County, California	20	San Diego Formation	Cenozoic	Neogene	late Pliocene
6485	Laurel & Kettner Parking Structure Expansion	City of San Diego, San Diego County, California	10	San Diego Formation	Cenozoic	Neogene	late Pliocene
6486	Laurel & Kettner Parking Structure Expansion	City of San Diego, San Diego County, California	20	San Diego Formation	Cenozoic	Neogene	late Pliocene
6487	Laurel & Kettner Parking Structure Expansion	City of San Diego, San Diego County, California	20	San Diego Formation	Cenozoic	Neogene	late Pliocene
6578	Vons Mission Hills	City of San Diego, San Diego County, California	268	San Diego Formation	Cenozoic	Neogene	late Pliocene
6579	Vons Mission Hills	City of San Diego, San Diego County, California	258	San Diego Formation	Cenozoic	Neogene	late Pliocene
7284	Grant K-8 School, Phase 1	City of San Diego, San Diego County, California	235	San Diego Formation	Cenozoic	Neogene	Pliocene
2971A	Reynard Way and Curlew	City of San Diego, San Diego County, California	200	San Diego Formation	Cenozoic	Neogene	Pliocene
2971B	Reynard Way and Curlew St.	City of San Diego, San Diego County, California	200	San Diego Formation	Cenozoic	Neogene	Pliocene
2971C	Reynard Way and Curlew St.	City of San Diego, San Diego County, California	200	San Diego Formation	Cenozoic	Neogene	Pliocene
3305A	Reynard Way - Reynard Arms Apartments	City of San Diego, San Diego County, California	180	San Diego Formation	Cenozoic	Neogene	Pliocene
3305C	Reynard Way - Reynard Arms Apartments	City of San Diego, San Diego County, California	180	San Diego Formation	Cenozoic	Neogene	Pliocene
3305D	Reynard Way - Reynard Arms Apartments	City of San Diego, San Diego County, California	180	San Diego Formation	Cenozoic	Neogene	Pliocene
3305E	Reynard Way - Reynard Arms Apartments	City of San Diego, San Diego County, California	180	San Diego Formation	Cenozoic	Neogene	Pliocene

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

Locality Number	Locality Name	Location	Elevation (feet)	Geologic Unit	Era	Period	Epoch
3408D	Washington Street	City of San Diego, San Diego County, California	200	San Diego Formation	Cenozoic	Neogene	Pliocene
3408G	Washington Street	City of San Diego, San Diego County, California	200	San Diego Formation	Cenozoic	Neogene	Pliocene
3408I	Washington Street	City of San Diego, San Diego County, California	200	San Diego Formation	Cenozoic	Neogene	Pliocene
5427	Sewer Group 680 - In Situ Oyster Bed	City of San Diego, San Diego County, California	79	San Diego Formation, upper member	Cenozoic	Neogene	late Pliocene
5428	Sewer Group 680 - In Situ Pecten Bed	City of San Diego, San Diego County, California	83	San Diego Formation, upper member	Cenozoic	Neogene	late Pliocene
5429	Sewer Group 680 - Oyster Bed Spoils Pile	City of San Diego, San Diego County, California	75	San Diego Formation, upper member	Cenozoic	Neogene	late Pliocene
5430	Sewer Group 680 - Pecten Bed Spoils Pile	City of San Diego, San Diego County, California	75	San Diego Formation, upper member	Cenozoic	Neogene	late Pliocene
5461	Sewer Group 680 - Union Street Oyster Bed	City of San Diego, San Diego County, California	115	San Diego Formation, upper member	Cenozoic	Neogene	late Pliocene
5859	Aciro Property	City of San Diego, San Diego County, California	130	San Diego Formation, upper member	Cenozoic	Neogene	late Pliocene
3871	Midtown - Ibis Street near Spruce Street	City of San Diego, San Diego County, California	110	San Diego Formation, lower member	Cenozoic	Neogene	late Pliocene
4492	Ibis and Thorn Streets	City of San Diego, San Diego County, California	160	San Diego Formation, lower member	Cenozoic	Neogene	late Pliocene
6718	Sewer and Water Group 761 (3600 Blk State St)	City of San Diego, San Diego County, California	140	San Diego Formation, lower member	Cenozoic	Neogene	Pliocene
6719	Sewer and Water Group 761 (3400 Block Walnut)	City of San Diego, San Diego County, California	235	San Diego Formation, lower member	Cenozoic	Neogene	Pliocene
6720	Sewer and Water Group 761 (3600 Block Curlew)	City of San Diego, San Diego County, California	151	San Diego Formation, lower member	Cenozoic	Neogene	Pliocene
7418	Mission Hills-Hillcrest Library	City of San Diego, San Diego County, California	260	San Diego Formation, lower member	Cenozoic	Neogene	Pliocene
7419	Mission Hills-Hillcrest Library	City of San Diego, San Diego County, California	258	San Diego Formation, lower member	Cenozoic	Neogene	Pliocene
7483	Strauss Fifth Avenue	City of San Diego, San Diego County, California	248	San Diego Formation, lower member	Cenozoic	Neogene	Pliocene
4983A	Spruce Street - Terracina - Site 1	City of San Diego, San Diego County, California	98	San Diego Formation, lower member	Cenozoic	Neogene	Pliocene
4983B	Spruce Street - Terracina - Site 2	City of San Diego, San Diego County, California	104	San Diego Formation, lower member	Cenozoic	Neogene	Pliocene
4983C	Spruce Street - Terracina - Site 3	City of San Diego, San Diego County, California	108	San Diego Formation, lower member	Cenozoic	Neogene	Pliocene
452	First Avenue Bridge	City of San Diego, San Diego County, California	200	San Diego Formation?	Cenozoic	Neogene	Pliocene?