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Mr. Edward Chan 4743 Thurston Pl San Diego, CA 92130 Final April 1, 2024

Subject: Biological Resources; the 4004 Arroyo Sorrento Road Project, San Diego Project No. 698398

Dear Mr. Chan:

This report addresses biological resources, project-related impacts, and mitigation requirements associated with development of the approximately 1.79-acre 4004 Arroyo Sorrento Road property in the City of San Diego (Project No. 698398). The project site is located in the northern part of the City of San Diego, east of Interstate Highway 5 and north of El Camino Real (Figure 1). It is located in the Bosque del Mar area of the city, with access from El Camino Real to the west, approximately 850 meters northeast of the intersection with Arroyo Sorrento Road.

PROJECT DESCRIPTION

Development of the 4004 Arroyo Sorrento Road Project site will result in the construction of a single family residence (SFR) with ADU and associated improvements which include landscaping, fences, driveways, and utilities. Access to the new ADU will be from the south off Arroyo Sorrento Road and access to the SFR will be from the east off Arroyo Sorrento Place. The subject property is currently vacant. Soil types include Terrace Escarpments (TeF) and Corallitos Loamy Sand (CsD). The site slopes to the south. It is assumed that the entirety of this lot will be impacted by residential development, either directly or indirectly. Staging of construction will take place entirely onsite.

PURPOSE OF STUDY

The purpose of this study was to inventory the property for biological resources, identify onsite habitats, search for signs of rare, endangered, threatened, or otherwise sensitive plants or animals which have a potential to occur here, and ensure development compliance with all relevant federal, state, and local laws, as applicable. These data were used in an assessment of biological resource values. This analysis allows a determination of project-related direct and indirect impacts, as required by the California Environmental Quality Act (CEQA), and mitigation, if appropriate and necessary. It further allows a determination of the project's conformance with the City of San Diego's Land Development Code (LDC), Environmentally-Sensitive Lands (ESL) Ordinance, and Multiple Species Conservation Program (MSCP) Subarea Plan, including the Multi-Habitat Planning Area (MHPA), as well as the Federal and State Endangered Species Act (FESA, CESA), the Native Plant Protection Act, the Migratory Bird Protection Act (MBTA) of 1918, and Sections 3503 and 3513 of the California Fish and Game Code (CFGC). The project is located in the City's MSCP Subarea Planning Area but outside of the MHPA. The nearest MHPA lands are located approximately 1,600 feet to the west (Figure 2) and separated from the project site by residential development. The project is required to comply with the federal Migratory Bird Treaty Act and the California Fish and Game Code. Compliance with the federal Migratory Bird Treaty Act and the California Fish and Game Code is anticipated per the conclusions and recommendations in this report.

METHODS

Prior to field surveying, a CNDDB search was conducted in support of the project. A field survey of the 4004 Arroyo Sorrento Road Project was completed by myself on the mornings of 21 March and 10 April 2017. Weather conditions during the survey consisted of mostly clear skies with temperatures in the high 60°s and no measurable wind. The entire 4004 Arroyo Sorrento Road site was examined, and all plants, animals, and habitats encountered were inventoried.

An updated field survey of the site to verify conditions was completed by myself on 1 October 2021. Weather conditions consisted of mostly clear skies with temperatures in the high 60°s and no wind. The entire 4004 Arroyo Sorrento Road site was reexamined, and all plants, animals, and habitats encountered were reinventoried. Updated sensitive species and habitat mapping took place on 12 October 2023. All plants identified in association with the property are listed in Table 2, attached. Floral nomenclature used in this letter follows Hickman (1993) and others. Plant communities follow Holland (1996, as amended).

Wildlife observations were made opportunistically. All wildlife species observed or otherwise detected were noted (Table 2). Animal nomenclature used in this report is taken from Stebbins (2003) for reptiles and amphibians, American Ornithologist's Union (1998, as updated) for birds, and Jones, et. al (1992) for mammals.

RESULTS

Habitats

The 4004 Arroyo Sorrento Road Project site supports three more-or-less discrete plant associations or habitats. These are Southern Maritime Chaparral, Diegan Coastal Sage Scrub, and Disturbed Habitat/Non-native Vegetation.

Southern Maritime Chaparral (Holland Code 37C30) – Tier I – 0.17 acre

Southern Maritime Chaparral (SMC) vegetation is present on the upper slopes of the property. This rare and depleted habitat is indicated by stands of Chamise (*Adenostoma fasciculatum*), with San Diego Barrel Cactus (*Ferocactus viridescens*), South Coast Saltscale (*Atriplex pacifica*), Decumbent Goldenbush (*Isocoma menziesii* var. *decumbens*), many other many native forbs, and other chaparral indicators growing on exposures and shallow soils of the Linda Vista formation. SMC is a Tier I habitat-type in the City of San Diego, of significant local and regional biological resource value.

Diegan Coastal Sage Scrub (Holland Code 32500) - Tier II - 1.30 acres

Diegan Coastal Sage Scrub (CSS) covers the majority of the project site. Indicator species in the habitat include Flattop Buckwheat (*Eriogonum fasciculatum*), California Sagebrush (*Artemisia californica*), Lemonadeberry (*Rhus integrifolia*), and Black Sage (*Salvia mellifera*). Many of the areas show signs of periodic disturbance, although the vegetation nevertheless provides significant habitat value because it is very diverse (see Table 2). CSS is a Tier II habitat-type in the City of San Diego, of local biological resource value.

Disturbed Habitat/Non-native Vegetation (Holland Code 11300/11000) - Tier IV - 0.32 acre

Patches of Disturbed Habitat and Non-native Vegetation (DH/NNV) are found along the southern and western portions of the project site. These consist of areas of bare soil, stands of eucalyptus trees (*Eucalyptus* sp.), and a large acacia shrub (*Acacia* sp.) DH/NNV is a Tier IV habitat-type in the City of San Diego, of no local or regional biological value.

Flora and Fauna

Ninety-five plant species and thirteen animal species were observed on the 4004 Arroyo Sorrento Road Project site during the field surveys. These typify the diversity normally found in this part of the city. A complete list of the flora and fauna observed is presented in Table 2.

SENSITIVE RESOURCES

Sensitive Vegetation Communities

Sensitive vegetation communities are those recognized by the City's MSCP (City of San Diego, 1997) and LDC as depleted, rare within the region, supporting sensitive animal or plant species, and/or serving as important wildlife corridors. These habitats are typically rare throughout their ranges, or are highly localized and/or fragmented.

Two of the three vegetation communities on the 4004 Arroyo Sorrento Road Project site - CSS and SMC - are considered "sensitive" habitat-types (ESL) in the City of San Diego. Impacts to these plant communities are regulated as part of the City's LDC pursuant to CEQA.

Sensitive Plants and Animals

Six sensitive plant species were observed on the 4004 Arroyo Sorrento Road property. These are Wart-stemmed Ceanothus (*Ceanothus verrucosus*), Torrey Pine (*Pinus torreyana*), San Diego Barrel Cactus (*Ferocactus viridescens*), South Coast Saltscale (*Atriplex pacifica*), Decumbent Goldenbush (*Isocoma menziesii* var. *decumbens*), and Ashy Spike-moss (*Selaginella cinerascens*). Additional sensitive plants known from the vicinity, but not observed/detected, are presented in Attachment A. Sensitive plant species with a moderate or high potential to occur are discussed subsequently.

Wart-stemmed Ceanothus (*Ceanothus verrucosus*)
City of San Diego Listing: MSCP "Covered Species"
Other Agency Listing: CRPR 2B.2
State Rank: S2?
Global Rank: G2
Federal/State Listing Status: none
Description: Hard-woody shrub with small, thick, smooth leaves and fragrant white flower clusters that appear in the winter.
Distribution: Occurs naturally in chaparral and some CSS from coastal northern San Diego County to northern Baja California, Mexico.
Habitat(s): Occurs in Southern Maritime Chaparral and Diegan Coastal Sage Scrub with mesic conditions associated with the maritime influence.
Status On Site: Two specimens observed in the central western area of the project site.

Torrey Pine (*Pinus torreyana*) City of San Diego Listing: MSCP "Covered Species" Other Agency Listing: CRPR 1B.2 State Rank: S1 Global Rank: G1T1 Federal/State Listing Status: none Description: Medium to large sized, open conifer with bunches of five, grooved, relatively long needles. **Distribution:** Occurs naturally in the Torrey Pines State Reserve in coastal San Diego and Del Mar, although it is widely used in horticulture.

Habitat(s): Occurs in Southern Maritime Chaparral and Diegan Coastal Sage Scrub in proximity to the ocean,

Status On Site: Nine individual specimens of varying size were observed at the southeastern area of the site with two more just offsite to the east. At least one of these appears to have been planted.

San Diego Barrel Cactus (Ferocactus viridescens)

City of San Diego Listing: MSCP "Covered Species"

Other Agency Listing: CRPR 2B.1

State Rank: S2S3

Global Rank: G3?

Federal/State Listing Status: none

Description: Unmistakable, helmet-shaped cactus with dense covering of stout spines.

Distribution: Coastal areas of San Diego County from Del Mar south into northern Baja California, Mexico.

Habitat(s): Occurs on dry slopes in coastal sage scrub and chaparral. Normally most abundant on south or west-facing gentle slopes.

Status On Site: At least thirty specimens were observed at upper elevations of the parcel during the initial site surveys. Some were in poor condition or dead by 2023 as a result of the protected drought.

South Coast Saltscale (Atriplex pacifica)

City of San Diego Listing: Sensitive, non-covered species **Other Agency Listing:** CRPR 1B.2 State Rank: S2 Global Rank: G4

Federal/State Listing Status: none

Description: A generally prostrate, small and inconspicuous annual herb with gray leaves and non-descript flowers.

Distribution: This poorly defined species is found from San Diego and Orange County south into Baja California, Mexico. It is also reported from San Clemente and Santa Catalina Island.

Habitat(s): Occurs in coastal sage scrub habitat intermixed with grassland, primarily on clay soils.

Status on Site: About ten specimens were observed in the open, flattish area just above where the SMC transitions to CSS. Difficult to detect except during the spring when it can be easily overlooked.

Decumbent Goldenbush (*Isocoma menziesii* var. *decumbens*) **City of San Diego Listing:** Sensitive, non-covered species

Other Agency Listing: CRPR 1B.2

State Rank: S2 Global Rank: G3G5T2T3

Endoral/State Listing Status: nor

Federal/State Listing Status: none

Description: A low-growing, hairy-leaved subshrub with bright yellow flowers that appear in the late summer.

Distribution: This poorly defined variety is found from San Diego and Orange County south into Baja California, Mexico. It is also reported from San Clemente and Santa Catalina Island.

Habitat(s): Occurs in coastal sage scrub habitat intermixed with grassland, primarily on clay soils.

Status on Site: A dozen or so specimens that key to var. *decumbens* are found on the property, most scattered about the site in lightly disturbed areas.

Ashy Spike-moss (Selaginella cinerascens)
City of San Diego Listing: Sensitive, non-covered species
Other Agency Listing: CRPR 4.1
State Rank: S3
Global Rank: G3G4
Federal/State Listing Status: none
County status: "Sensitive Plant" (County of San Diego, 2012)
Description: A prostrate, perennial herb which grows to form an ashen mat on the surface of the ground.
Distribution: Occurs along coast from southern Orange County well into northern Baja California, Mexico.
Habitat(s): Occurs on open, dry slopes in coastal sage scrub and chaparral.
Status On Site: Uncommon onsite between shrubs on the upper-most area of the site.
Numbers cannot be determined, given this species' unusual growth form.

Sensitive animal species are those that are considered federal or state threatened or endangered; MSCP Covered Species; or MSCP Narrow Endemic species. No sensitive animals were detected onsite during the field survey. A few species of sensitive, wide-ranging animals have a moderate probability to utilize this property on an occasional basis. These might include sensitive bats or raptors that could fly over or roost onsite on occasion, as discussed below. No "occupied" habitat or raptor nests were detected. A few species of locally-abundant but sensitive reptiles, such as Orange-throated Whiptail (*Cnemidophorus hyperythrus beldingi*), Coast Patch-nosed Snake (*Salvadora hexalepis virgultea*), and others could occur here in low numbers. In any case, no local or regional sensitive animal populations would depend on the resources provided by this small property. Sensitive animals known from the vicinity are presented in Attachment A. Sensitive animal species with a moderate or high potential to occur are discussed subsequently.

Undetected Moderate to High Probability Sensitive Species

The following sensitive species have either a moderate or high probability of occurring onsite (Attachment A) although they were not detected during the surveys:

Accipiter cooperii Cooper's Hawk	Eumops perotis californicus Greater Western Mastiff Bat								
Buteo lineatus Red-shouldered Hawk	Lasiurus blossevillii Western Red Bat								
Sialia mexicana Western Bluebird	Myotis ciliolabrum Small-footed Myotis								
Lanius ludovicianus Loggerhead Shrike	Myotis yumanensis Yuma Myotis								
Polioptila californica California Gnatcatcher	Nyctinomops macrotis Big Free-tailed Bat								
Antrozous pallidus Pallid Bat	Nyctinomops femorosaccus Pocketed Free-tailed Bat								
Corynorhinus townsendii Townsend's Big-Eared Bat	Danaus plexippus Monarch Butterfly								

This first group consists of wide ranging to locally ranging species that could fly over the property on occasion. Nesting habitat for the birds is present, although no nests were detected during the site surveys. Because of the small size of the property, none of the above species would be dependent on this site for critical resources.

Anniella pulchra pulchra Silvery Legless Lizard Cnemidophorus hyperythrus Orange-throated Whiptail Coleonyx variegatus abbotti San Diego Banded Gecko Crotalus ruber ruber Red Diamond Rattlesnake Diadophis punctatus similis San Diego Ringneck Snake Phrynosoma blainvillei San Diego Horned Lizard Salvadora hexalepis virgultea Coast Patch-Nosed Snake Neotoma lepida intermedia San Diego Desert Woodrat This second group consists of resident species that might live on the property. These are generally cryptic species, but no significant populations of any of these species would be anticipated.

Crotch's Bumble Bee (*Bombus crotchii*) is currently in candidacy to become state listed as Endangered or Threatened. Crotch's Bumble Bee is a distinctive but poorly known species known to occur in coastal San Diego County and across other parts of the state into northern Baja California, Mexico. Worker bees are active from April to August with the peak of worker activity between May and June. Males generally foraging from May to September with their peak foraging occurring in July, and queens are active for only two months - from March until May -with maximum activity typically in April.

Crotch's Bumble Bee could forage on the Project site based on the diversity of host plants and relatively open vegetation. However, the likelihood of this rare species nesting on this small property in any significant numbers is considered low due to the presence of edge effects, small patch size, and very limited areas of open, exposed soil. No evidence of *B. crotchii* nesting or foraging was noted during the multiple biological surveys of the site.

Narrow Endemics

The City of San Diego recognizes a variety of "narrow endemics" within the MSCP, including the following: San Diego Thorn-mint (*Acanthomintha ilicifolia*), Shaw's Agave (*Agave shawii*), San Diego Ambrosia (*Ambrosia pumila*), Aphanisma (*Aphanisma blitoides*), Coastal Dunes Milk Vetch (*Astragalus tener* var. *titi*), Short-Leaved Dudleya (*Dudleya brevifolia*), Variegated Dudleya (*Dudleya variegata*), Otay Tarplant (*Hemizonia conjugens*), Prostrate Navarretia (*Navarretia fossalis*), Snake Cholla (*Opuntia serpentina*), California Orcutt Grass (*Orcuttia californica*), San Diego Mesa Mint (*Pogogyne abramsii*), and Otay Mesa Mint (*Pogogyne nudiuscula*). Most of these occur in habitats, such as vernal pools, native grasslands, coastal dunes, etc., not found on this property. Narrow endemics and other sensitive species known from the vicinity of this site are listed in Attachment A.

Attachment A lists sensitive plants and animals that are known from the area. Species in Attachment A ranked as "high" probability are expected (at least occasionally); species ranked as "moderate" might or might not occur occasionally; species ranked as "low" are very unlikely to ever occur on or otherwise utilize the site.

Wildlife Corridors

Wildlife corridors are not present on the 4004 Arroyo Sorrento Road Project site. No significant impacts to wildlife movement would thus result from the development of this site, as homes are present on adjoining parcels in three directions.

Environmentally Sensitive Lands

The 4004 Arroyo Sorrento Road Project site supports sensitive resources including sensitive native vegetation, sensitive native habitats, and sensitive species. Therefore, the property qualifies as supporting ESL as defined by the City's LDC.

Compatibility with the MSCP and MHPA and MSCP Conditions for Covered Species

The 4004 Arroyo Sorrento Road Project site is not within or adjacent to the City's MHPA (Figure 2). No encroachment into any MHPA will occur. However, six MSCP-covered species that were not observed have potential to occur in the survey area: Cooper's Hawk, Western Bluebird, Loggerhead Shrike, California Gnatcatcher, Orange-throated

Whiptail, and San Diego Horned Lizard. The MSCP includes conditions for coverage and consistency with these conditions is addressed below:

Cooper's Hawk. Compliance of coverage with Cooper's Hawk requires a 300 ft avoidance area around active nests. This will be achieved through a condition of approval.

Western Bluebird. The Western Bluebird is covered by the MSCP with over 15,000 acres of habitat conserved.

Loggerhead Shrike. The Loggerhead Shrike is not covered by the MSCP. However, pre-construction nesting bird surveys will take place prior to construction to reduce potential impacts.

California Gnatcatcher. Pre construction nesting surveys will take place between March 1 and August 15. No cleaning of occupied habitat within the cities' MHPAs and within the County's Biological Resource Core Areas may occur between March 1 and August 15 if area is found to be occupied.

Orange-throated Whiptail. The Orange-throated Whiptail is covered by the MSCP and all potential edge effects are less that significant.

San Diego Horned Lizard. The San Diego Horned Lizard is covered by the MSCP and specific measures have been implemented to maintain native ant species through onsite preservation and limit potential edge effects.

Crotch's Bumble Bee. Crotch's Bumble Bee (*Bombus crotchii*) is not currently "covered" by the MSCP and survey and management guidance regarding this species is currently in draft form and subject to change as the California Department of Fish and Wildlife develops standards for evaluating presence and potential for impact to the species. Specific measures will be developed by the City and implemented to limit any impacts throughout the MSCP planning area.

IMPACTS

The determination of the "significance" of project impacts, per the City's Biology Guidelines, is based on one or all of the following criteria (pg. 70, 8/09):

- a. The site has been identified as part of the MHPA by the City's MSCP Subarea Plan.
- b. The site supports or could support (e.g. in different seasons/rainfall conditions, etc.) Tier I, II, or IIIA & B vegetation communities (such as grassland, chaparral, coastal sage scrub, etc.). The CEQA determination of significant impacts may be based on what was on the site (e.g. if illegal grading or vegetation removal occurred, etc.), as appropriate.
- c. The site contains, or comes within 100 feet of a natural or manufactured drainage (determine whether it is vegetated with wetland vegetation). The site occurs within the 100-year flood plain established by the Federal Emergency Management Agency (FEMA) or the Flood Plain Fringe (FPF)/ Flood Way (FW) zones.
- d. The site does not support a vegetation community identified in Tables 2a, 2b or 3 (Tier I, II, IIIA or IIIB) of the Biology Guidelines (July 2002); however, wildlife species listed as threatened or endangered or other protected species may use the site (e.g. California least terns on dredge spoil, wildlife using agricultural land as a wildlife corridor, etc.).

Anticipated impacts (Table 1) were calculated by determining the acreage affected by full site development, including grading, landscaping, brush management, and related improvements.

Direct impacts entail the actual removal of biological features from the site due to clearing and grading. These direct impacts are considered permanent, because they result in a conversion of habitats to landscaped areas, structures, etc. Indirect impacts are those effects on native habitats, plants, or animals resulting from project implementation that are not the direct result of grading or development. Examples of indirect impacts include introduction of exotic species, human intrusion, lighting, noise, and "edge effects".

Direct and Indirect Impacts

Full development of the 4004 Arroyo Sorrento Road Project site could result in the following direct and indirect project-related impacts to sensitive species and sensitive habitats:

- 1. A permanent loss of up to 0.03 acre of Southern Maritime Chaparral vegetation, a Tier I habitattype. This loss would be considered "significant" as defined by the CEQA and the City's LDC.
- 2. A permanent loss of up to 1.07 acres of Diegan Coastal Sage Scrub vegetation, a Tier II habitattype. This loss would be considered "significant" as defined by the CEQA and the City's LDC.
- 3. A permanent loss of up to 0.31 acre of Disturbed Habitat/Non-native Vegetation, a Tier IV habitattype. This loss is considered "less than significant" as defined by the CEQA and the City's LDC.
- 4. Impacts to or the loss of two or more specimens of Wart-stemmed Ceanothus. This is considered "significant" as defined by the CEQA and the City's LDC.
- 5. Impacts to or the loss of up to 9 specimens of Torrey Pine. This is considered "significant" as defined by the CEQA and the City's LDC.
- 6. Impacts to or the loss of up to at least 30 specimens of San Diego Barrel Cactus. This is considered "significant" as defined by the CEQA and the City's LDC.
- 7. Impacts to or the loss of up to at least ten specimens of South Coast Saltscale. This is considered "significant" as defined by the CEQA and the City's LDC.
- 8. Impacts to or the loss of up to a dozen specimens of Decumbent Goldenbush. This is considered "significant" as defined by the CEQA and the City's LDC.
- 9. Potential impacts to Crotch's Bumble Bee, if present, would be considered "significant" as defined by the CEQA if this species were to become state listed as threatened or endangered.
- 10. Impacts to undetected Moderate to High Probability Sensitive Species (Red-shouldered Hawk, Western Bluebird, Loggerhead Shrike, California Gnatcatcher, Pallid Bat, Townsend's Big-Eared Bat, Greater Western Mastiff Bat, Western Red Bat, Small-footed Myotis, Yuma Myotis, Big Freetailed Bat, Pocketed Free-tailed Bat, Monarch Butterfly, Silvery Legless Lizard, Orange-throated Whiptail, San Diego Banded Gecko, Red Diamond Rattlesnake, San Diego Ringneck Snake, San Diego Horned Lizard, Coast Patch-Nosed Snake, San Diego Desert Woodrat) would be considered significant.

Also potentially impacted would be sensitive, wide-ranging species, such as various sensitive bats, raptors, or reptiles (see Attachment A), which might be expected to utilize this property. These impacts are considered "less than significant" because no populations of any of the potential sensitive species that could fly over or otherwise occur on this property would depend on resources provided by this property, and also because of the very small size of the project site. All of the anticipated sensitive animal species are locally-common or widely distributed.

Offsite indirect impacts associated with site development are not expected because adjoining areas on three sides are developed. The fourth side is natural but under private ownership and subject to eventual future development. Therefore, new noise, lighting, and other related impacts to offsite biological resources are not anticipated.

Cumulatively considerable impacts (significant cumulative impacts) are not anticipated. The City Biology Guidelines indicate that projects that conform to the MSCP would not result in significant cumulative impacts. The subject project conforms to the MSCP.

CONCLUSIONS AND RECOMMENDATIONS - MITIGATION

Impacts to biological resources are assessed by City staff through the CEQA review process, and through review of the project's consistency with the Environmentally Sensitive Lands (ESL) regulations, the current version of the Biology Guidelines, and with the City's MSCP Subarea Plan and VPHCP. Before a determination of the significance of an impact can be made, the presence and nature of the biological resources must be established.

Table 1 summarizes project-related impacts to onsite habitats and mitigation requirements, per the City's Biology Guidelines and LDC. This assumes that offsite habitat mitigation would take place inside of the MHPA via the City of San Diego's Habitat Acquisitions Fund (HAF). The City's Biology Guidelines (2018, Appendix I) provide the basis for determining whether or not an impact is significant. Per the City Biology Guidelines, Brush Management Zone 2 thinning outside the MHPA which affects non-covered species is potentially significant. Impacts #7 (South Coast Saltscale, ~10 specimens) and #8 (Decumbent Goldenbush ~12 specimens) above are considered significant as these are associated with non-covered species within the development footprint or within Brush Management Zone 2 and outside of the MHPA. In addition to the conservation of habitats required by the MSCP, certain other species are only considered adequately conserved as part of the MSCP (e.g., Covered Species) if translocation/restoration of the species is provided at the project-level (see Table 3-5 of MSCP Plan and Section 1.3 of the City's Subarea Plan). In this case, this requirement applies specifically to:

- Wart-stemmed Ceanothus. This can be accomplished through hand planting of locally-sourced Wartstemmed Ceanothus (1-gallon size) in the COE area at a 10:1 ratio. The approval of a revegetation plan followed by planting of no less than 20 Wart-stemmed Ceanothus plants is to provide conformance with the MSCP and shall be included as a condition of approval.
- Species-based mitigation for impacts to San Diego Barrel Cactus is recommended. This can be accomplished through salvage and translocation of the onsite Barrel Cactus to the onsite COE area. The approval of a translocation plan followed by translocation of the San Diego Barrel Cactus is to provide conformance with the MSCP and shall be included as a condition of approval.

Two additional recommendations are made to preclude potential impacts to sensitive fauna. These are considered design features of the project and not specifically mitigation. It is recommended that the language below be made a condition of the project and incorporated into the grading plan for the project:

- Site brushing, grading, and/or the removal of native vegetation within 300 feet of any potential migratory songbird nesting location should not take place during the spring/summer songbird breeding season, defined as from 1 February to 15 September of each year. This is required in order to ensure compliance with the federal Migratory Bird Treaty Act and Sections 3503, 3503.5 and 3513 of the California Fish and Game Code, which prevents the "take" of eggs, nests, feathers, or other parts of most native bird species, and the federal Endangered Species Act. Limiting activities to the non-breeding season will minimize chances for the incidental take of migratory songbirds or raptors.
- To avoid potential impacts to Crotch's Bumble Bee, removal of vegetation onsite should occur outside of the active flight period for this species (April 1 through August 31). If removal should occur during the flight season, a qualified biologist shall conduct a pre-construction survey to determine the presence or absence of any active Crotch's Bumble Bee nests. The pre-construction survey shall be conducted within 10 calendar days prior to the start of vegetation removal and construction. Should pre-construction surveys identify any active nests, the biologist shall notify the California Department of Fish and Wildlife and establish, monitor, and maintain buffers around any nest or nests in consultation with the Department. No clearing or construction activities shall occur within the established buffers until the colony is no longer active.

<u>Habitat</u>	<u>Onsite</u> <u>Acreage</u>	<u>Impacted</u> <u>Acreage</u>	<u>Impact</u> <u>Neutral</u> <u>Acreage</u>	Preserved <u>Acreage</u>	<u>Mitigation</u> <u>Ratio¹</u>	<u>Mitigation</u> <u>Required</u>
Southern Maritime Chaparral	0.17	0.03	0.14	none	1:1	0.03 acre through contribution to City's Habitat Acquisitions Fund
Diegan Coastal Sage Scrub	1.30	1.07	0.11	0.12	1:1	1.07 acres through contribution to City's Habitat Acquisitions Fund
Disturbed Habitat/ Non-native Vegetation	0.32	0.31	0.01	none	n/a	none
Totals	1.79	1.41	0.26	0.12		1.10 acres

Table 1. Ha	bitat Impact/Mitig	ation Analysis - the	e 4004 Arroyo Sorrent	o Road Project
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As shown in Table 1, mitigation for direct impacts to 0.03 acre of SMC and 1.07 acres of CSS shall be provided for at a 1:1 ratio. To achieve this mitigation, payment into the City's HAF shall be made to offset no less than 0.03 acre of Tier I SMC and 1.07 acres of Tier II CSS. No mitigation is required for impacts to 0.30 acre of Disturbed Habitat/Non-native Vegetation. A COE shall be placed over the area of onsite preservation and all of Brush Management Zone 2 that contains sensitive habitat.

Mitigation for impacts to other sensitive species, including South Coast Saltscale, Decumbent Goldenbush, Ashy Spike-moss, and Undetected Moderate to High Probability Sensitive Species, (Impacts #7, #8,# 9, and #10) shall be accomplished through habitat-based mitigation and preconstruction surveys. Pre-construction surveys for Crotch's Bumble Bee, Red-shouldered Hawk, Western Bluebird, Loggerhead Shrike, and California Gnatcatcher shall generally take place between February 1 and September 15.

Please contact me if you have any questions or concerns.

Very truly yours,

Vince Scheidt Certified Biological Consultant

Attachments:Bibliography
Report Preparer Qualifications
Table 2. Plants and Animals Observed
Figure 1. Project Location
Figure 2. Location of Project in Relation to MHPA
Figure 3. Aerial Photograph
Figure 4. Biological Resources on Site Plan
Figure 5. Site Photographs
Attachment A. Sensitive Species Known from Vicinity

¹ For impacts to Tier II, III A and III B habitats, the mitigation could (1) occur within the MHPA portion of Tiers I - III (out-ofkind) or (2) occur outside of the MHPA within the affected habitat type (in-kind).

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- M.A. Biology, University of California, Los Angeles
- B.S. Zoology, San Diego State University

Biological Consultant:

- Baseline Biology Surveys
- Zoological Surveys and Inventories
- Botanical Surveys and Inventories
- Endangered Species Surveys
- Forensic Vegetation Surveys
- · Focused Survey Coordination
- · Technical Study Reports
- · Revegetation Planning
- · Habitat Management Planning
- · Habitat Mapping
- Open Space Management
- Jurisdictional Wetland Delineations

Applicable Experience:

- Has extensive practical experience in various biologically-related projects in San Diego, Orange, Riverside, Imperial, San Bernardino and Los Angeles Counties. Additional biological studies in northern California.
- Has conducted focused surveys for numerous sensitive species of plants and animals over the last thirty years.
- Has prepared baseline biological surveys, habitat delineations, and natural community viability analyses on a continuous basis since 1980.
- Has conducted biological surveys for private individuals, corporations, partnerships, the military, and numerous public organizations throughout California.
- Has authored more than 2,400 biological technical reports and professional papers.

In addition to extensive field experience, Mr. Scheidt authored the standard reference "Status of the Indigenous Amphibians of San Diego County" in 1980 under contract to the San Diego County Fish and Wildlife Committee and San Diego Herpetological Society. All taxa native to San Diego were reviewed and discussed with respect to current and historical distribution, endangerment, listing status at federal, state, and local levels. This text remains the definitive overall text on this group of organisms in San Diego County.

Completed studies include a 1995 vegetative analysis of the biota of the 4,350-acre Monte Vista Ranch property in Central San Diego County. This study defined seventeen discrete habitats occurring on this property. Preliminary definitions were prepared for each plant association. This habitat delineation will allow eventual species complex modeling and biologically-based conservation planning.

Another major project, prepared under contract to HDR Engineering in 2000-2002, involved comprehensive field surveying of a proposed 155 mile fiber-optic line through several southern California counties. Numerous sensitive species surveys were conducted as a part of this study, including Least Bell's Vireo, Arroyo Toad, Willow Flycatcher, Desert Tortoise, Flat-tailed Horned Lizard, and other directed surveys

A recent project, completed under contract to DC&E Planning in 2009-2011, involved biology studies associated with the City of National City's General Plan Update. Included in the scope of work were three project-specific studies for proposed city redevelopment projects. Comprehensive biology surveys were conducted as a part of this study, including floral and faunal inventories, habitat evaluations for sensitive species, and other directed surveys

Mr. Scheidt's professional affiliations include: Member, State Board of Directors; the California Native Plant Society (2008-2012), the San Diego Herpetological Society, and others.

Mr. Scheidt possesses federal Section 10(a) 1(a) Recovery Permit #TE788133 to allow focused field surveying for California Gnatcatcher and Quino Checkerspot Butterfly.

Table 2. Species Observed - 4004 Arroyo Sorrento Road Project

Scientific Name	Common Name	<u>Habitat</u>

Plants		
Acacia sp.*	Acacia	DH/NNV
Acmispon glaber	Coastal Deerweed	CSS
Adenostoma fasciculatum	Chamise	SMC
Ambrosia psilostachya	Western Ragweed	CSS
Amsinckia intermedia	Fiddleneck	CSS
Anagallis arvensis *	Scarlet Pimpernel	CSS
Antirrhinum kelloggii	Climbing Snapdragon	SMC
Antirrhinum nuttallianum	Nuttall's Snapdragon	CSS
Apiastrum angustifolium	Mock Parsley	CSS
Arctotis stoechadifolia *	African Daisy	DH/NNV
Artemisia californica	California Sagebrush	SMC
Atriplex pacifica	South Coast Saltscale	SMC
Atriplex semibaccata *	Australian Saltbush	DH/NNV
Avena barbata *	Slender Wild Oat	DH/NNV
Baccharis pilularis	Coyote Brush	CSS
Brassica geniculata *	Perennial Mustard	DH/NNV
Bromus diandrus *	Ripgut Brome	DH/NNV
Bromus madritensis *	Compact Brome	SMC
Calystegia macrostegia	Morning Glory	CSS
Camissonia bistorta	Southern Sun Cup	CSS
Carpobrotus edulis *	Hottentot Fig	DH/NNV
Ceanothus verrucosus	Wart-stemmed Ceanothus	CSS
Centaurea melitensis *	Tocalote	CSS
Chenopodium murale *	Goosefoot	DH/NNV
Chlorogalum parviflorum	Soap Plant	SMC
Chrysanthemum coronarium *	Chrysanthemum	DH/NNV
Crassula argentea *	Jade Plant	DH/NNV
Crassula connata	Pygmyweed	CSS
Cryptantha sp.	Cryptantha	CSS
Cuscuta californica	California Dodder	CSS
Datura meteloides *	Jimsonweed	CSS
Daucus pusillus	Rattlesnake Weed	CSS
Deinandra fasciculata	Fascicled Tarweed	SMC
Dichelostemma capitatum	Blue Dicks	CSS
Diplacus aurantiacus	San Diego Monkeyflower	CSS
Dudleya edulis	Edible Dudleya	SMC
Dudleya lanceolata	Lance-leaved Dudleya	SMC
Encelia californica	California Encelia	CSS
Encelia farinosa	Brittle Bush	DH/NNV
Eriogonum fasciculatum	Flat-top Buckwheat	CSS
Eriophyllum confertiflorum	Golden Yarrow	SMC
Erodium cicutarium *	Red-stem Stork's-bill	DH/NNV

Table 2. Species Observed - 4004 Arroyo Sorrento Road Project

Scientific Name	Common Name	<u>Habitat</u>
Plants		
Erodium moschatum *	White-stem Stork's-bill	DH/NNV
Eucalyptus sideroxylon *	Red Ironbark	DH/NNV
Eucalyptus polyanthemos. *	Silver Dollar Gum	DH/NNV
Euphorbia peplus *	Petty Spurge	DH/NNV
Euphorbia polycarpa	Small-seed Sand Mat	CSS
Ferocactus viridescens	San Diego Barrel Cactus	SMC
Festuca megalura *	Foxtail Fescue	DH/NNV
Filago gallica *	Narrow-leaf Filago	CSS
Gazenia sp. *	Gazenia	DH/NNV
Hazardia squarrosa	Hazardia	CSS
Heteromeles arbutifolia	Toyon	CSS
Heterotheca grandiflora *	Telegraphweed	DH/NNV
Isocoma menziesii var. decumbens	Decumbent Goldenbush	SMC
Isocoma menziesii	Coastal Goldenbush	CSS
Lasthenia californica	Gold Fields	CSS
<i>Lepidium</i> sp.	Peppergrass	SMC
<i>Limonium</i> sp.	Sea Lavendar	CSS
Linaria canadensis	Common Toadflax	CSS
Lonicera subspicata denudata	Johnson's Honeysuckle	CSS
Lupinus truncatus	Collar Lupine	CSS
Malacothamnus fasciculatus	Bushmallow	CSS
Malosma laurina	Laurel Sumac	CSS
Malva parviflora *	Cheeseweed	DH/NNV
Marah macrocarpus	Man Root	CSS
Matricaria marticarioides	Pineapple Weed	DH/NNV
Melilotus indicus *	Indian Sweet Clover	DH/NNV
Mesembryanthemum crystallinum	Ice Plant	DH/NNV
Microseris lindleyi	Silver Puffs	CSS
Mirabilis laevis	Coastal Wishbone Plant	CSS
Muhlenbergia microsperma	Small-seed Muhly	SMC
Nicotiana glauca *	Tree Tobacco	DH/NNV
Oenothera hookeri	Marsh Primrose	DH/NNV
Opuntia ficus-indica *	Indian Fig	DH/NNV
Oxalis pes-caprae *	Sorrel	DH/NNV
Pectocarya recurvata	Recurved Pectocarya	CSS
Phacelia parryi	Parry's Phacelia	CSS
Pinus torreyana	Torrey Pine	DH/NNV
Plantago erecta	Plantain	SMC
Portulacaria afra *	Elephant Bush	DH/NNV
Pseudognaphalium luteoalbum	Everlasting Cudweed	CSS
Rhus integrifolia	Lemonadeberry	CSS
Salsola tragus *	Prickly Russian Thistle	DH/NNV
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Table 2. Species Observed - 4004 Arroyo Sorrento Road Project

Plants Salvia apiana White Sage CSS Salvia mellifera Black Sage CSS Schismus barbatus * Schismus CSS Schismus barbatus * Schismus CSS Scrophularia californica Bee Plant SMC Selaginella cinerascens Ashy Spike-moss SMC Senecio vulgaris * Common Groundsel CSS Solanum parishii Parish's Nightshade CSS Sonchus asper * Spiny Sow Thistle DH/NNV Sonchus oleraceus * Sow Thistle DH/NNV Sonchus anna Anna's Hummingbird CSS Stipa lepida CSS CSS Birds Carpodacus mexicanus Housefinch CSS Chamaea fasciata Wrentit CSS Pipilo crissalis California Towhee CSS Pipilo crissalis Bushtit CSS Psaltriparus minimus Bushtit CSS Psaltriparus minimus Bushtit CSS Pspelnophilus beecheyi California Ground Squirrel DH/NNV Sylvilagus audubonii Desert Cottontail Rabbit	Scientific Name	Common Name	<u>Habitat</u>
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	Eumeces skiltonianus	Western Skink	DH/NNV
Uta stansburiana Side-blotched Lizard CSS	Sceloporus occidentalis	Western Fence Lizard	CSS
	Uta stansburiana	Side-blotched Lizard	CSS

* = non-native or non-indigenous taxon

bold = sensitive taxon



Figure 1. Project Location – The 4004 Arroyo Sorrento Road Project Portion of U.S.G.S. "De Mar" 7.5' quadrangle





Figure 3. Aerial Photo – The 4004 Arroyo Sorrento Road





Figure 4. Biological Resources on Site Plan – 4004 Arroyo Sorrento Road



Figure 5. Site Photos - April 2017



Photo 1. Looking west across upper slope supporting Southern Maritime Chaparral habitat.



Photo 2. Looking northeast from southwest corner. Note dense Diegan Coastal Sage Scrub vegetation in foreground



Photo 3. Looking at southeastern corner of the site looking south. This area supports Non-native Vegetation dominated by eucalyptus.

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Accipiter cooperii	Cooper's Hawk				✓			✓	✓	✓													М
Accipiter striatus	Sharp-shinned Hawk					✓				✓		\checkmark											L
Acanthomintha ilicifolia	San Diego Thorn-mint			✓	✓			\checkmark															L
Adolphia californica	California Adolphia					✓	✓	✓															L
Agave shawii	Shaw's Agave			✓	✓	✓	\checkmark																L
Aimophila ruficeps canescens	Rufous-crowned Sparrow				✓	✓					\checkmark											1	L
Ambrosia pumila	San Diego Ambrosia			√	✓			✓	\checkmark													1	L
Anniella pulchra pulchra	Silvery Legless Lizard					✓		✓	✓												✓	1	Μ
Antrozous pallidus	Pallid Bat		1		İ.	✓	✓	✓	✓	✓	~	✓	✓	✓		✓	✓			✓			M
Aphanisma blitoides	Aphanisma			✓	✓																✓		L
Astragalus tener var. titi	Coastal Dunes Milk-vetch			✓	~												1				√	1	L
Brodiaea orcuttii	Orcutt's Brodiaea				✓			✓	✓	✓	✓								✓				L
Bufo microscaphus californicus	Arroyo Toad	✓			✓	✓	✓	✓	~	✓	✓									✓			L
Buteo lineatus	Red-shouldered Hawk	-						-	· •	· •												-	M
Cathartes aura	Turkey Vulture					✓	✓	✓	√	✓	~	✓	✓										L
Chaetodipus californicus femoralis	Dulzura CA Pocket Mouse					√	✓	√		✓	✓	✓											L
Cnemidophorus hyperythrus	Orange-throated Whiptail				✓	√	· ~	√	~		· ~	•											H
Cnemidophorus tigris multiscutatus	Coastal Western Whiptail					Ľ	• •	•	• •	✓	• •												L
Coleonyx variegatus abbotti	San Diego Banded Gecko					✓	·	✓	•	•	~												M
Coreonyx variegalus abboli Corynorhinus townsendii	Townsend's Big-Eared Bat					•	~	• •	~	✓	• •	✓	✓	✓		~	~			~			M
Crotalus ruber ruber		_				✓	• •	-	•	•	•	•	•	• •		• •	-			•			M
	Red Diamond Rattlesnake Monarch Butterfly	_				v	v	~		✓	v			v		v				~			M
Danaus plexippus Dia daphia muastatua similia		_				✓	✓	v	~	▼ ✓	✓	✓	✓							v			M
Diadophis punctatus similis	San Diego Ringneck Snake Short-leaved Dudleya	_		~	~	•	• •		•	•	•	•	•										L
Dudleya blochmaniae ssp. brevifolia				√	· ✓		v	~														-	L
Dudleya variegata	Variegated Dudleya Greater Western Mastiff Bat			ľ	•	✓	~	▼ ✓	✓	✓	✓	~	~	✓	~	~	~	~	~	~			M
Eumops perotis californicus					√	v √	▼ √	v	v	v	× ✓	v	v	▼ √	•	v	v	v	v	v		·	M 0
Ferocactus viridescens	San Diego Barrel Cactus	_			ŀ	▼ √	v	✓			▼ √			v								<u> </u>	
Harpagonella palmeri	Palmer's Grappling Hook	_		✓		v		✓ ✓			v											<u> </u>	L
Hemizonia conjugens	Otay Tarplant	_		ľ	~	✓		✓ ✓		~							~					<u> </u>	L
Lanius ludovicianus	Loggerhead Shrike	_			•	v		v	✓ ✓	✓		~	✓			✓	•			√		<u> </u>	M
Lasiurus blossevillii	Western Red Bat	_							v		/						-			v		<u> </u>	M
Lepus californicus bennettii	SD Black-tailed Jackrabbit	_				✓	✓ ✓	✓		✓	✓	✓ ✓	✓ ✓									<u> </u>	L
Myotis ciliolabrum	Small-footed Myotis	_					✓ ✓		✓	✓	~	✓	✓ ✓	✓ ✓			✓			✓		_	M
Myotis yumanensis	Yuma Myotis	_		~	~	✓	✓	✓	✓	~	~	✓	~	✓	✓			✓	✓	✓		✓	M
Navarretia fossalis	Prostrate Navarretia	_		v	~														✓			┣──	L
Neotoma lepida intermedia	San Diego Desert Woodrat	_				✓	,		✓	✓	✓			,		,	,	,	,	,		<u> </u>	Μ
Nyctinomops macrotis	Big Free-tailed Bat	_				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		√	Μ
Nyctinomops femorosaccus	Pocketed Free-tailed Bat					✓	✓	✓	✓	✓	~	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	Μ
Opuntia parryi var. serpentina	Snake Cholla			~	✓	✓	✓																L
Orcuttia californica	California Orcutt Grass		<u> </u>		✓	<u> </u>											<u> </u>					_	L
Phrynosoma coronatum blainvillei	San Diego Horned Lizard		<u> </u>	Ļ	✓	✓	✓	✓	✓		✓	✓					<u> </u>					┣—	Μ
Pogogyne abramsii	San Diego Mesa Mint		<u> </u>	✓	✓	<u> </u>											<u> </u>		✓			L	L
Pogogyne nudiuscula	Otay Mesa Mint			✓	✓														\checkmark			\vdash	L
Polioptila californica	California Gnatcatcher		\checkmark		✓	\checkmark																\vdash	Μ
Piperia leptopetala	Narrow-petaled Rein Orchard					\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark										\vdash	L
Salvadora hexalepis virgultea	Coast Patch-Nosed Snake					\checkmark	\checkmark				\checkmark			\checkmark									Н
Sialia mexicana	Western Bluebird		1		\checkmark				\checkmark	\checkmark							1						Μ

Probability of Occurrence Codes:

L – Low Probability; rare species in area, and no significant habitat (animals); *or* distinctive perennial that would not have been missed if present onsite (plants). M – Moderate Probability; could be expected to occur onsite on at least an occasional basis, based on habitat quality (animals); *or* could occur onsite, but very rare, and/or poorly known (plants). H – High Probability; nearly certain to occur onsite on a regular basis (animals), but cryptic; *or* ephemeral species known from the immediate vicinity, but seasonal in occurrence (plants). O – Observed; see report