CALIFORNIA COASTAL COMMISSION
SAN DIEGO DISTRICT OFFICE
7575 METROPOLITAN DRIVE, SUITE 103
SAN DIEGO, CA 92108-4402
VOICE (619) 767-2370
FAX (619) 767-2384

W30a

6-20-0433 (Mission Bay Drive 1 Channel clearing)

January 2021

EXHIBITS

Table of Contents

EXHIBIT NO. 1

APPLICATION NO.

6-20-0433

Vicinity Map

California Coastal Commission

EXHIBIT NO. 2
APPLICATION NO.
6-20-0433
Aerial View
California Coastal Commission


Los Peñasquitos Phase II
Lopez Canyon Open Space
Los Peñasquitos Canyon
El Cuervo Phase II
Coastal Zone Boundary
N
Sorrento Valley Blvd
Pacific Center Blvd
Sequence Dr
Genetic Center Dr
Sunny Mesa Rd
Shaw Lopez Rd
Glenstone Way
Greenshade Rd
Lopez Ridge Way
Torrey Circle

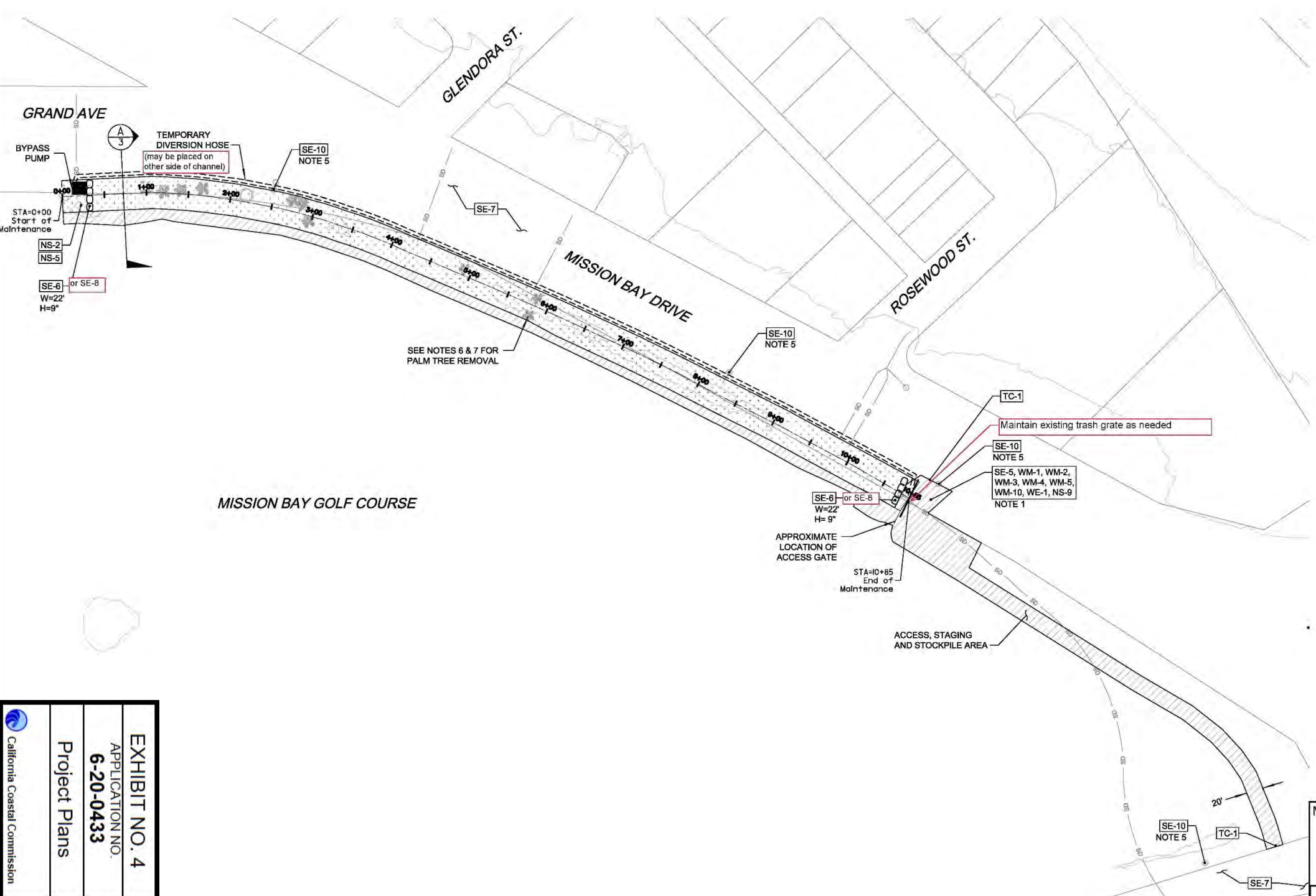
1. Mission Bay Drive 1: At upstream end of channel; culvert not visible.

2. Mission Bay Drive 1: Representative upstream channel segment with dense vegetation.

3. Mission Bay Drive 1: Representative downstream channel segment with dense vegetation.

4. Mission Bay Drive 1: Recently maintained culvert inlet at downstream end of segment.

EXHIBIT NO. 3
APPLICATION NO.
6-20-0433
Site Photos
California Coastal Commission



LEGEND:

- EXIST. MAJOR CONTOURS
- EXIST. LOT LINE (APPROXIMATE)
- EXIST. STORM DRAIN MAIN
- EXIST. OVERHEAD ELECTRIC
- EXIST. STORM DRAIN INLET
- BYPASS PUMP
- TEMPORARY DIVERSION HOSE
- STORM WATER BMP
- MAINTENANCE AREA: VEGETATION, SEDIMENT, AND DEBRIS REMOVAL ACCESS, STAGING, AND STOCKPILING AREA
- GRAVEL BAG BERM or sand bag berm (temporary)
- EXIST. PALM/TREE
- A/2 TYPICAL SECTION REFERENCE SHEET NUMBER

NOTES:

1. STORM WATER MANAGEMENT BMPS SE-5, WM-1, WM-2, WM-4, WM-5, WM-6, WM-10, WE-1, NS-9 SHALL BE IMPLEM THROUGHOUT MAINTENANCE ACCESS, AND STAGING A FOR DURATION OF THE PROJECT. NS-9 SHALL NOT BE IMPLEMENTED WITHIN 50 FEET OF CHANNEL. REFER TO MAINTENANCE BMPS NOTES ON SHEET 4
2. SET UP TEMPORARY FLOW DIVERSION AROUND WORK A EXACT LOCATION OF BERM (SE-8 OR EQUIVALENT) TO B COORDINATED WITH PROJECT BIOLOGIST TO MINIMIZE IMPACTS. BYPASS PUMP SHALL PUMP FLOW INTO DISCH HOSE.
3. DISCHARGE POINT FOR DIVERSION HOSE FLOWS SHALL THE FLOWLINE OF THE CHANNEL. A FILTER BAG MAY BE AT THE END OF DIVERSION HOSE LINE IF NECESSARY. I FILTER BAG IS USED, BAG SHALL BE LOCATED ON DRY F SURFACE. COORDINATE EXACT LOCATION WITH PROJE BIOLOGIST TO MINIMIZE IMPACTS.
4. ROUTE DIVERSION HOSE TO AVOID TRAFFIC, ACCESS, STAGING, AND STOCKPILING AREAS. WHERE HOSE MUS CROSS ACCESS AREA PROTECT IN PLACE, USE BERMS, PLATES, AND STEEL PIPE AS NEEDED TO PROTECT AGA DAMAGE AND CRUSHING.
5. INSTALL STORM DRAIN INLET PROTECTION FOR CURB IN
6. TREE IN CHANNEL: FLUSH CUT OR REMOVE ROOT BALL FROM SEDIMENT REMOVAL IS AVAILABLE
7. TREE ON BANK: FLUSH CUT OR REMOVE ROOT BALL IF F FROM SEDIMENT REMOVAL IS AVAILABLE AND REMOVAL NOT INCREASE RISK TO ADJACENT INFRASTRUCTURE C CHANNEL BANK

N

60 30 0 60 120 180

GRAPHIC SCALE 1" = 60'

MAINTENANCE PLANS FOR:

MISSION BAY - MISSION BAY DRIV

MISSION BAY DRIVE 1

FACILITY NO. 3-02-130

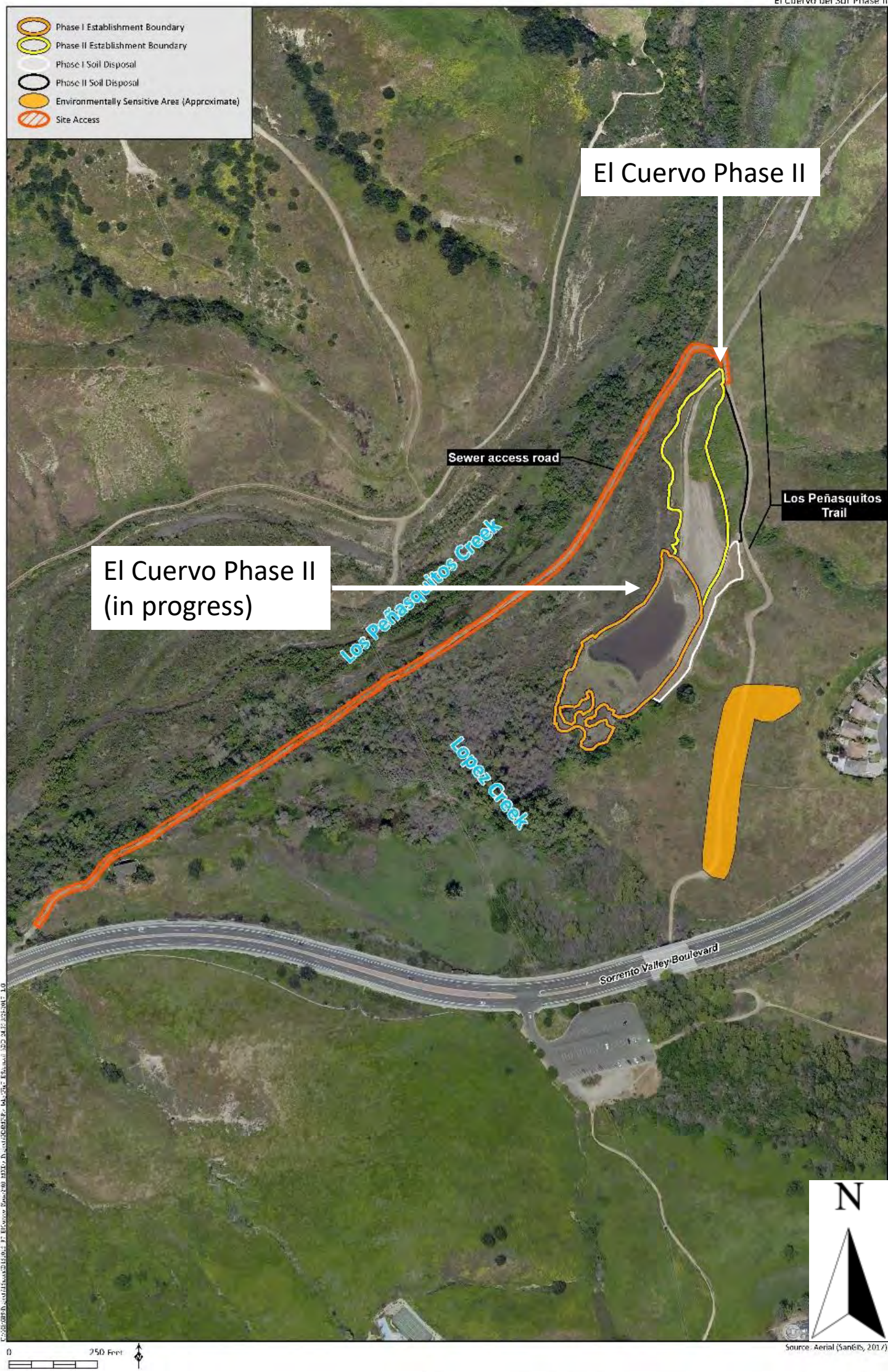
CITY OF SAN DIEGO, CALIFORNIA

EXHIBIT NO. 4

APPLICATION NO. 6-20-0433

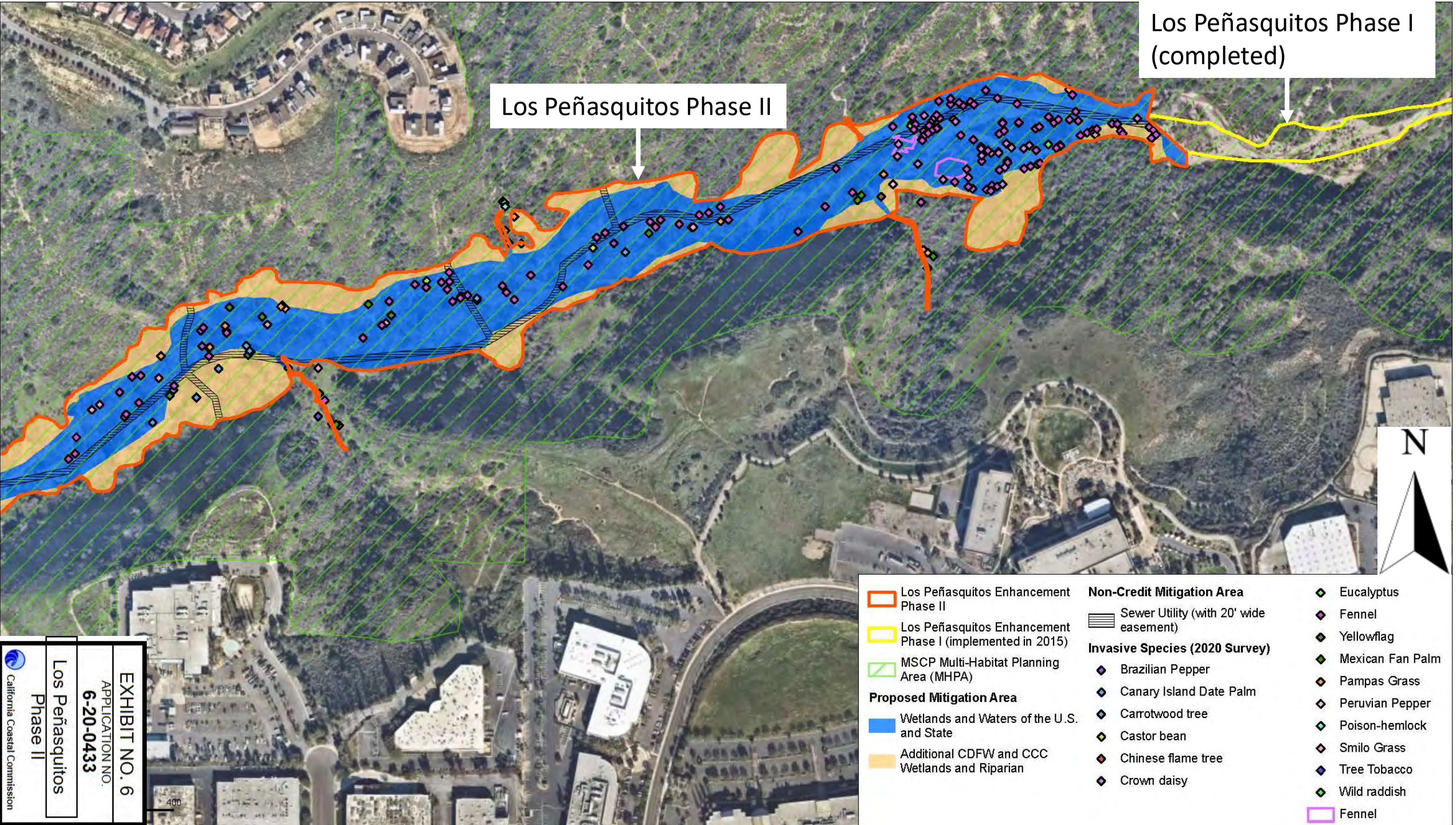
Project Plans

California Coastal Commission



Environmentally Sensitive Area/ Site Access

EXHIBIT NO. 5
APPLICATION NO.
6-20-0433
El Cuervo Phase II
California Coastal Commission


Los Peñasquitos Phase I (completed)
Los Peñasquitos Phase II
N
Los Peñasquitos Enhancement Phase II
Los Peñasquitos Enhancement Phase I (implemented in 2015)
MSCP Multi-Habitat Planning Area (MHPA)
Proposed Mitigation Area
Wetlands and Waters of the U.S. and State
Additional CDFW and CCC Wetlands and Riparian
Non-Credit Mitigation Area
Sewer Utility (with 20' wide easement)
Invasive Species (2020 Survey)
Brazilian Pepper
Canary Island Date Palm
Carrotwood tree
Castor bean
Chinese flame tree
Crown daisy
Eucalyptus
Fennel
Yellowflag
Mexican Fan Palm
Pampas Grass
Peruvian Pepper
Poison-hemlock
Smilo Grass
Tree Tobacco
Wild raddish
Fennel
400
EXHIBIT NO. 6
APPLICATION NO.
6-20-0433
Los Peñasquitos Phase II
California Coastal Commission


Los Peñasquitos Enhancement Phase II
MSCP Multi-Habitat Planning Area (MHPA)
Trails
Proposed Mitigation Area
Wetlands and Waters of the U.S. and State
Additional CDFW and CCC Wetlands and Riparian
Non-Credit Mitigation Area
Sewer Utility (with 20' wide easement)
Invasive Species (2020 Survey)
Bottlebrush
Brazilian Pepper
Canary Island Date Palm
Eucalyptus
Fennel
Mexican Fan Palm
Milk Thistle
Olive tree
Pampas Grass
Peruvian Pepper
Poison-hemlock
Smilo Grass
Umbrella plant
Curly dock/Fennel/Poison hemlock/Milk thistle
Poison hemlock
Smilo grass
Los Peñasquitos Phase II
Los Penasquitos Canyon Trail
SORRENTO VALLEY BLVD
Lopez Canyon Trail
N
0
400
Feet

CALIFORNIA COASTAL COMMISSION

45 FREMONT STREET, SUITE 2000
SAN FRANCISCO, CA 94105-2219
VOICE (415) 904- 5200
FAX (415) 904-5400
TDD (415) 597-5885
WWW.COASTAL.CA.GOV

MEMORANDUM

TO: Alexander Llerandi, Coastal Program Analyst

FROM: Laurie Koteen, Ph.D., Senior Ecologist

RE: Analysis of suitability of mitigation options for Mission Bay Drive 1 Channel clearance

DATE: December 17, 2020

Documents Reviewed:

Environmental Science Associates, *Los Penasquitos Canyon Preserve Phase II Enhancement Project: Habitat Mitigation and Monitoring Plan*, Prepared for the City of San Diego Transportation and Storm Water Department, July 2020.

Helix Environmental Planning Inc., and Environmental Science Associates, *El Cuervo del Sur Phase II Mitigation and Monitoring Plan,* Prepared for the City of San Diego Transportation and Storm Water Department, July 2020.

Garske-Garcia, Lauren, Memorandum to: Peter Allen, Tami Grove & Dan Carl, *Impact Definitions and Mitigation Framework for Gleason's Beach Highway 1 Realignment*, Exhibit 24, Application No. 2-20-0282 (California Department of Transportation (Caltrans), Gleason Beach Highway 1 (PM 15.1-15.7), Sonoma Co.) https://www.coastal.ca.gov/meetings/agenda/#/2020/11.

San Diego Municipal Code, Land Development Code, Biology Guidelines, last amended February 1, 2018.

I have been asked to evaluate the suitability of two sites as a mitigation package in compensation for clearing of the storm channel that runs adjacent to Mission Bay Drive and Grand Avenue, in the city of San Diego. In the time since the last storm drain maintenance was performed, large stretches of the channel have become filled with sediment and colonized by wetland vegetation. For purposes of classification of the habitat that has developed in the storm drain, the city of San Diego Land Development Manual, (LDM), designates the areas to be cleared as freshwater marsh in the Coastal Overlay Zone and as natural flood channel; each requiring mitigation at given ratios[1]. I visited

[1] San Diego Municipal Code, Land Development Code, Biology Guidelines, last amended February 1, 2
2A, pg. 37. (see staff report)

both of the mitigation sites, El Cuervo Phase II and Los Peñasquitos Phase II on October 28th, 2020, and was able to observe the condition and appropriateness of each site as a mitigation option at that time. In consultation with coastal planning staff, we have determined that the proper way to identify available mitigation acreage at Los Peñasquitos Phase II location is to divide the available habitat by twelve. Our determination is based on several factors: 1) the fundamental ecological principles that guide the Coastal Commission mitigation practices across the state, 2) guidance from the city's LDM and an attempt at continuity with the prior authorization of the of their Master Maintenance Permit (MMP), 3) consistency with mitigation requirements elsewhere in the state, 4) recent updates to Coastal Commission mitigation practices that have been approved by the Commission, and 4) observation of the site and the degree of invasion it currently supports. Although this project will be among those folded into the Municipal Waterways Maintenance Plan (MWMP), the successor program to the MMP currently undergoing Commission review, it is being addressed here in advance of the larger planning process due to the urgency of preventing flooding in the area of the Mission Bay Drive 1 Channel during the wet season currently underway.

Mitigation Ratios: The basis for establishing mitigation ratios

The Coastal Commission, through established practice over many years, sets compensatory mitigation ratios as multipliers of the habitat that has been impacted. The basis for these ratios is twofold: considerations of temporal loss of the impacted resources between the time of impact (when the resources are lost) and the timing of mitigation completion and bet hedging in case of creation/ restoration failure. This policy has its basis in sound ecological principles. Temporal loss of habitat means that vital resources are compromised for a period time, in the case of temporary impacts, or wholly unavailable to the species that require them when habitat is permanently impacted. This can mean that wildlife species are temporarily or permanently extirpated from a habitat, for example, and that the local carrying capacity for one or many species is reduced over the time period that the habitat is impacted. Further, no creation or restoration site is identical to the area impacted. Plant species that were present in the impacted habitat may never establish in a created or restored habitat if abiotic variables such as slope, aspect or elevation are dissimilar to the impacted habitat, or if the soil type, soil nutrient status, mychorrizal associations, climate, or plant community interactions differ.

The mitigation ratios are also set as high as they are because restoring ecosystem structure and function through creation, restoration or enhancement activities is difficult to achieve and requires time. Many ecosystem functions (e.g. nutrient cycling, resistance to invasion, filtering of pollutants, soil development, carbon storage…) require considerable time to establish, depending on the type of habitat that is created or restored. This represents another component of temporal loss; the loss of ecosystem functions over the period of habitat recovery following restoration or enhancement activities. Moreover, there is no guarantee of restoration success and mitigation projects fail to reach their objectives.

In the case of the proposed mitigation package for the Mission Bay storm drain clearing, only creation at 1:1 is offered. If success criteria are not achieved, and ecosystem functions take many years to establish, a net loss of wetland habitat will result.

Consistency in Compensatory Mitigation Practices Across the State and the San Diego Land Development Manual

While not based on a specific algorithm or mathematical formula, the Coastal Commission always strives for fair treatment in its mitigation requirements up and down the state. This objective is necessarily constrained by the policies enumerated in individual Local Coastal Plans (LCPs), but the parity across regions has only grown in recent years. Generally, as LCPs are updated, Commissioners have approved increases in resource protection and adherence to past practices. Viewing the San Diego LDM in this light, there is substantially greater flexibility in choosing mitigation options regarding wetlands than is found in most areas of the state. Most LCPs require that wetland impacts be mitigated at a ratio of 4:1. The assumption is that four acres of wetland habitat will be created for every impacted wetland acre, for example. In the San Diego LDM, impacts to freshwater marsh, as occurs in the Mission Bay storm channel, are to be mitigated at a ratio of 4:1. However, the LDM allows that a portion of this area may be mitigated through enhancement. It states:

> *...acquisition and/or enhancement of existing wetlands may be considered as partial mitigation only, for any balance of the remaining mitigation requirement after restoration or creation if wetland acreage is provided at* ***a minimum*** *of a 1:1 ratio.*

In the case of the proposed mitigation package for the Mission Bay storm channel, the city is offering to create wetland at a ratio of 1:1 at El Cuervo Phase II, and enhancement at a ratio of 3:1 at Los Peñasquitos Phase II, while also discounting the enhancement offered to 30% of available habitat. Although the composition is consistent with the LDM, Coastal Commission staff are troubled that the policy is stated in a manner such that the creation ratio now consistently sought has become 1:1 by default, and not just when constraints make greater amounts of creation infeasible. Yet, a higher ratio of creation to enhancement would be far more consistent with similar practices enacted elsewhere in the state. Higher creation would be consistent with the San Diego LDM as well, which also explicitly recognizes the superiority of creation to enhancement as a mitigation option in stating:

> *Wetland enhancement and wetland acquisition focus on the preservation or the improvement of existing wetland habitat and function, and do not result in an increase in wetland area; therefore, a net loss of wetland may result……*For permanent wetland impacts that are unavoidable and minimized to the maximum extent feasible, mitigation shall consist of creation of new, **in-kind** habitat **to the fullest extent possible** and at the appropriate ratios.

It is this discrepancy with the spirit, if not the letter, of the LDM that provides one reason for the selection of 12 as a divisor for the proposed enhancement of Los Peñasquitos Phase II habitat, and

rejection of the 30% figure proposed by city staff. Moreover, in other parts of the state, riparian enhancement is not considered "in-kind," as riparian habitat is primarily upland habitat that is influenced by its proximity to creeks or rivers, and not actually wetland habitat. Even so, because the example of removal of exotic species from riparian habitat is explicitly stated as an example of "wetland enhancement" in the LDM, Commission staff have agreed to consider it as a mitigation option in this case. For that reason, and also because the previous MMP consisted of a similar combination of creation and enhancement, we see the inclusion of Los Peñasquitos Phase II site as permissible, if not desirable as a mitigation option.

A second reason why Commission staff are adopting a different method for assessing available mitigation, namely dividing the available Los Peñasquitos Phase II habitat by 12, is found in the sentences directly following those quoted above, where the LDM states:

> *…unavoidable impacts to wetlands located within the Coastal Overlay Zone shall be mitigated on-site, if feasible. If on-site mitigation is not feasible, then mitigation shall occur within the same watershed.*

The general practice that the mitigation project must be performed in the same watershed as the project impacts ensures that the created or restored habitat is as similar as possible to the habitat that's impacted. Yet, in the case of the proposed mitigation at both El Cuervo Phase II site and Los Peñasquitos Phase II site, the mitigation is occurring off-site, and within a different watershed from the area that is impacted, (Figure 1). Outside of the current context, Commission staff do see the proposed mitigation actions as worthwhile, however, in our view, and in practices consistently carried out elsewhere in the state, Los Peñasquitos Phase II enhancement would be considered out-of-kind. The proposal of the mitigation in a different watershed runs counter to standard practices carried out both within San Diego and in most other California locations.

Recent Updates in Mitigation Policy adopted by the Commission

As discussed previously, the flexibility of mitigation options for wetland impacts in the LDM is inconsistent with mitigation practices enacted in other parts of coastal California. Commission approval of a recent mitigation package, supported by an ecological memo by staff ecologist, Dr. Lauren Garske-Garcia, makes this discrepancy between the LDM mitigation policies and current practices wider still.[2] In her memo, Dr. Garske-Garcia makes explicit what has been the long-standing practice of mitigation requirements, namely that creation or substantial restoration as mitigation options are superior to restoration, enhancement and preservation, in that order. She then took this analysis a step further by assigning specific ratios to each activity based on the degree to which each mitigation strategy is able to accomplish compensation for the full suite of ecological functions and services lost when impacts are

[2] Garske-Garcia, Lauren, Memorandum to: Peter Allen, Tami Grove & Dan Carl, *Impact Definitions and Mitigation Framework for Gleason's Beach Highway 1 Realignment*, Exhibit 24, Application No. 2-20-0282 (California Department of Transportation (Caltrans), Gleason Beach Highway 1 (PM 15.1-15.7), Sonoma Co.) https://www.coastal.ca.gov/meetings/agenda/#/2020/11

incurred. Compensation for lost wetland habitat could be satisfied at a ratio of 4:1 for habitat creation or substantial restoration, at double that ratio for enhancement, or at 8:1, and triple that ratio for preservation alone, or 12:1.

It was, in part, with this memo in mind that Commission staff settled on the use of twelve as a divisor to arrive at a value of available credit for the enhancement site. We did not opt for a ratio of 12:1, which would have required that enhancement occur at a rate of 0.92 x 12 = 11.04 acres,[3] as that ratio would seem to violate the policy laid out in the LDM and the earlier MMP permit, and would also have left the question of available acreage at Los Peñasquitos Phase II site unresolved. Following the letter of the memo would have led to the use of six as a divisor. However, Commission staff believes that 12, or twice that figure, is the more appropriate divisor for all the reasons discussed above, but also because the chosen site, Los Peñasquitos Phase II, is largely native, with a presence of only about 4% invasive cover. Relative to other projects in which credit is given for enhancement as a mitigation option, this project requires a very low percentage of invasive removal. According to this reasoning, the selection of twelve as a divisor is at least semi-quantitative.

In all, we believe the analysis presented here makes a fair and convincing case for the selection of 12 as a divisor for choosing the amount of available acreage at Los Peñasquitos Phase II enhancement site. Although a worthwhile project, the proposed enhancement in our view is out-of-kind. It is also not located in the same watershed. The arrived upon figure is based on ecological reasoning in attempting to provide just compensation for the resources that will be lost by the storm channel clearance. The figure also respects the language of the LDM and provides continuity with the earlier MMP permit. Lastly, it is much more in line with Coastal Commission mitigation practices in other regions of the state.

[3] The required mitigation in all is 4:1 for impacts to freshwater marsh, which is 4 x 0.24 acres = 0.96 acres plus the mitigation required for impacts to the natural flood channel at a ratio of 2:1, which is 2 x 0.2 = 0.4, for a total mitigation requirement of 1.36 acres. Because mitigation is proposed at 1:1, or 0.44 acres at the El Cuervo site, the remainder is 0.92 acres.

Figure 1: Location of Mission Bay golf course storm drains (impact area) and proposed mitigations