STAFF REPORT
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Lease 8817.9
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S 36 L. Pino

GENERAL LEASE – PUBLIC AGENCY USE

APPLICANT:
City of Encinitas

PROPOSED LEASE:
AREA, LAND TYPE, AND LOCATION:
Sovereign land in the Pacific Ocean at Batiquitos Beach, Moonlight State Beach, Leucadia State Beach, and Cardiff State Beach, Encinitas, San Diego County.

AUTHORIZED USE:
Deposition of up to a maximum of 117,000 cubic yards (cy) of sand annually at Batiquitos Beach, 105,000 cy of sand annually at Moonlight State Beach, 132,000 cy of sand annually at Leucadia State Beach, and 101,000 cy of sand annually at Cardiff State Beach under the City of Encinitas Opportunistic Beach Fill Program.

LEASE TERM:
5 years, beginning October 14, 2019.

CONSIDERATION:
The public use and benefit, with the State reserving the right to set a monetary rent if the Commission finds such action to be in the State's best interests.

STAFF ANALYSIS AND RECOMMENDATION:
Authority:
Public Resources Code sections 6005, 6216, 6301, 6501.1, and 6503; California Code of Regulations, title 2, sections 2000 and 2003.

Public Trust and State's Best Interests Analysis:
On October 14, 2014, the Commission authorized Lease No. PRC 8817.9, a 5-year General Lease – Public Agency Use to the City of Encinitas (City) for opportunistic beach nourishment at four receiver sites: Batiquitos Beach, Moonlight State Beach, Leucadia State Beach, and Cardiff State Beach, beginning October 14, 2014 (Item C71, October 14, 2014). That

lease expired on October 13, 2019. The City has applied for a new lease for the continued use of the four receiver sites as part of the City of Encinitas Opportunistic Beach Fill Program (Program). The City is seeking authorization from the Commission to continue its beach nourishment program with no change to the locations or quantities of sand to be placed.

Sandy beaches like Batiquitos Beach, Moonlight State Beach, Leucadia State Beach, and Cardiff State Beach erode over time due to natural sediment migration and erosion processes, reducing the usable beach area for the public along the State's coast. Through the City's Program, suitable materials from inland development projects can be used to maintain the current usable beach at these locations for erosion control, recreational benefit, and to restore beach habitat for shorebirds and grunion.

The Program's implementation guidelines are specified in the March 2006 Sand Compatibility and Opportunistic Use Program (SCOUP) plan adopted by the San Diego Association of Governments and the Coastal Sediment Management Workgroup. The SCOUP plan assists in streamlining the permitting and regulatory approval process for beach replenishment projects using opportunistic materials in volumes of less than 150,000 cy. This streamlined process allows for the placement of suitable beach fill materials that might be lost due to the timing and cost associated with obtaining separate permits for each project.

Under the Program, the City identifies potential beach fill material, typically generated from upland development projects, which is then tested according to regulatory requirements to confirm its suitability. A Project Notification Report detailing these findings is submitted to each agency with approval authority over the project at least 30 days before any placement activity. The material is not allowed to be used for beach replenishment unless each agency provides written concurrence.

Since 2010, suitable beachfill material from three projects have been permitted under the City's Program: Scripps Memorial Hospital, which placed approximately 5,300 cy of sand in March of 2010; Saxony Detention Basin, which deposited approximately 300 cy of sand in February 2011 in the intertidal zone at Moonlight State Beach; and most recently the Encinitas Beach Resort Project which placed approximately 40,000 cy of sand in the intertidal zone at Batiquitos Beach between January and March 2019.

The timing of beach nourishment activities is intended to replicate natural sediment delivery, which occurs during the wet seasons (fall through early spring). As such, beach nourishment activities typically occur between September and May. This is also during the low beach-use season when there is significantly less human usage compared to summer months. Placement of sand activities would not be permitted to occur at the receiver sites during the summer months—June through August—to prevent impacts to public use of the beaches.

Some potential environmental Project impacts exist but can be avoided or reduced to less-than-significant by compliance with the City's Mitigation Monitoring Plan (MMP). These potential impacts include minor short-term impacts to fish and wildlife during placement activities; and temporary increases in ambient noise levels and turbidity during sand placement.

Grunion, least tern, and western snowy plover may be present at the receiver sites, especially during their respective spawning or breeding seasons between February 28 and May 28. The proposed lease requires the lessee to comply with the attached Exhibit C, Mitigation Monitoring Program (MMP) and Exhibit D, the City's proposed Grunion and Avian Monitoring and Avoidance Plan, unless directed otherwise by U.S. Fish and Wildlife Service through consultation with them as required by the MMP. For any sediment placement between February 28 and May 28 the Grunion and Avian Monitoring and Avoidance Plan requires a qualified biologist familiar with these species to be present on-site before and, if necessary, during beach nourishment activities. The biologist will halt activities if any grunion, least tern, or western snowy plover are present. All personnel associated with the proposed nourishment activity will be required to attend a worker education training program covering sensitive marine and avian species before the initiation of any in-water activities.

Activities which promote, facilitate, and enhance public access to and the use and enjoyment of Public Trust resources are generally consistent with the common law Public Trust Doctrine. Batiquitos Beach, Moonlight State Beach, Leucadia State Beach, and Cardiff State Beach are all used by the public for recreation consistent with the Public Trust Doctrine. The proposed beach nourishment activities will help control beach erosion, preserve recreational opportunities at the beach, and restore habitat for shorebirds and grunion. Impacts from the beach nourishment to Public Trust resources will be substantially avoided through mitigation measures. Therefore, staff believes the proposed lease to authorize continued beach nourishment activities is consistent with the Public Trust Doctrine.

The proposed lease does not alienate the State's fee simple interest or permanently impair public rights. The proposed lease is limited to a 5-year term, does not grant the lessee exclusive rights to the lease premises, and requires the lessee to indemnify the State for any liability incurred as a result of the lessee's activities thereon.

Climate Change:

Climate change impacts, including sea-level rise, more frequent and intense storm events, increased flooding, and erosion affect both open coastal areas and inland waterways in California. The receiver site beaches for the Program are located in a tidally influenced area vulnerable to wave action at the current sea level of the Pacific Ocean.

The California Ocean Protection Council updated the State of California Sea-Level Rise Guidance in 2018 to provide a synthesis of the best available science on sea-level rise projections and rates. Commission staff evaluated the "high emissions," "medium-high risk aversion" scenario to apply a conservative approach based on both current emission trajectories and the lease location and structures. Projected sea-level rise scenarios for the lease area (La Jolla tide gauge) are listed in Table 1.

Table 1. Projected Sea-Level Rise for La Jolla[1]

Year	Projection (feet)
2030	0.9
2040	1.3
2050	2.0
2100	7.1

Source: Table 31, State of California Sea-Level Rise Guidance: 2018 Update
Note: [1] Projections are with respect to a baseline of the year 2000.

As stated in *Safeguarding California Plan: 2018 Update* (California Natural Resources Agency 2018), climate change is projected to increase the frequency and severity of natural disasters related to flooding, drought, and storms (especially when coupled with sea-level rise). The combination of these conditions will likely result in increased wave run-up, storm surge, and flooding in coastal areas. Climate change and sea-level rise will further influence coastal areas by changing erosion and sedimentation rates as beaches, and coastal landscapes are exposed to increased wave force.

The City's Program includes the placement of sand at Batiquitos Beach, Moonlight State Beach, Leucadia State Beach, and Cardiff State Beach,

under the authorized requirements of the Program. The Program is intended to streamline the City's ability to opportunistically use available sand sources to nourish these beaches for protection of upland infrastructure and enhance beach width, public access, and beach habitat. These activities will provide periodic and temporary soft protection to offset the impacts of climate change-induced beach erosion and sea-level rise.

The lease includes an acknowledgment that the lease premises may be subject to the effects of sea-level rise and may require additional maintenance or protection as a result, for which the lessee agrees to be solely responsible.

Conclusion:

For all the reasons above, staff believes the issuance of this lease is consistent with the common law Public Trust Doctrine; will not substantially interfere with the Public Trust needs and values at this location, at this time, and for the foreseeable term of the proposed lease; and is in the best interests of the State.

OTHER PERTINENT INFORMATION:

1. Approval or denial of a lease is a discretionary action by the Commission. Each time the Commission approves or rejects the use of sovereign land, it exercises legislatively delegated authority and responsibility as trustee of the State's Public Trust lands as authorized by law. If the Commission denies the lease, the City will not be allowed to place sand on Batiquitos Beach, Moonlight State Beach, Leucadia State Beach, and Cardiff State Beach under the Program. Upon expiration or prior termination of the lease, the lessee also has no right to a new lease or renewal of any previous lease.

2. This action is consistent with Strategy 1.1 of the Commission's Strategic Plan to deliver the highest levels of public health and safety in the protection, preservation, and responsible economic use of the lands and resources under the Commission's jurisdiction.

3. A Mitigated Negative Declaration (MND), State Clearinghouse No. 2013111057, and a Mitigation Montoring Program (MMP) were prepared by the City and adopted on June 18, 2014, for this project. Staff has reviewed these documents. The previously approved lease for the project was approved by the Commission on October 14, 2014 (Item C71, October 14, 2014), and relied on the adopted MND and MMP. The

Commission adopted the MMP, attached as Exhibit C, at the October 14, 2014 meeting, and it remains in full force.

4. This activity involves lands identified as possessing significant environmental values pursuant to Public Resources Code section 6370 et seq. At the time the Commission considered the MND in 2014, staff concluded that such activity would not affect those significant lands and the Commission found the activity to be consistent with its use classification pursuant to Public Resources Code section 6370 et seq.

APPROVALS OBTAINED:

California Coastal Commission (CDP No. 6-08-110-A2)
U.S. Army Corps of Engineers (SPL-2008-01126-RRS, expires April 1, 2021)

FURTHER APPROVALS REQUIRED:

California Coastal Commission
California Department of Parks and Recreation
Regional Water Quality Control Board

EXHIBITS:

A. Land Description
B-1. Site and Location Map (Parcel 1)
B-2. Site and Location Map (Parcel 2)
B-3. Site and Location Map (Parcel 3)
B-4. Site and Location Map (Parcel 4)
C. Mitigation Monitoring Program
D. Grunion and Avian Monitoring and Avoidance Plan

RECOMMENDED ACTION:

It is recommended that the Commission:

CEQA FINDING:

Find that an MND, State Clearinghouse No. 2013111057, and an MMP were prepared and adopted for this project on June 18, 2014, by the City of Encinitas and that the Commission has reviewed and considered the information contained therein; that in the Commission's independent judgment, the scope of activities to be carried out under the lease to be issued by this authorization have been adequately analyzed; that none of the events specified in Public Resources Code section 21166 or the State CEQA Guidelines section 15162 resulting in any new or substantially more severe significant impact has occurred; and, therefore no additional CEQA analysis is required. The previously adopted MMP remains in full force.

PUBLIC TRUST AND STATE'S BEST INTERESTS:

Find that the issuance of this lease is consistent with the common law Public Trust Doctrine; will not substantially interfere with the Public Trust needs and values at this location, at this time, and for the foreseeable term of the proposed lease; and is in the best interests of the State.

SIGNIFICANT LANDS INVENTORY FINDING:

Find that this activity is consistent with the use classification designated by the Commission for the land pursuant to Public Resources Code section 6370 et seq

AUTHORIZATION:

Authorize issuance of a General Lease – Public Agency Use to the City of Encinitas beginning October 14, 2019, for a term of 5 years, for deposition of up to a maximum of up to 117,000 cy of sand annually at Batiquitos Beach, up to a maximum of 105,000 cy of sand annually at Moonlight State Beach, up to a maximum of 132,000 cy of sand annually at Leucadia State Beach, and up to a maximum of 101,000 cy of sand annually at Cardiff State Beach under the City of Encinitas Opportunistic Beach Fill Program, as described in Exhibit A, and shown on Exhibits B1 through B4 (for reference purposes only) attached and by this reference made a part hereof; consideration being the public use and benefit with the state reserving the right to set a monetary rent if the Commission finds such action to be in the State's best interests.

EXHIBIT A

LEASE 8817.9

LAND DESCRIPTION

Four (4) parcels of tide and submerged land situate in the bed of the Pacific Ocean, City of Encinitas, County of San Diego, State of California and more particularly described as follows:

Parcel 1 (Batiquitos Beach)

All those tide and submerged lands in said bed of the Pacific Ocean, lying adjacent to Government Lot 10, Section 33, Township 12 South, Range 4 West, San Bernardino Meridian, as shown on the official U.S. Government Township Plat approved October 25, 1875 and Government Lot 1, Section 5, Township 13 South, Range 4 West, San Bernardino Meridian, as shown on the official U.S. Government Township Plat approved April 19, 1881; bounded on the east by the Ordinary High Water Mark of said Pacific Ocean; bounded on the west by a line parallel with said Ordinary High Water Mark and lying 600 feet westerly measured at right angles therefrom; bounded on the north by a line running westerly and easterly from a point on said line have NAD83 geodetic coordinates of 33°04'56.81" North, 117°18'42.00" West, said line also being perpendicular to said Ordinary High Water Mark; bound on the south by a line running westerly and easterly from a point on said line having NAD83 geodetic coordinates of 33°04'45.66" North, 117°18'39.74" West, said line also being perpendicular to said Ordinary High Water Mark.

BASIS OF BEARINGS for the above parcel is CCS83 Zone 6 (Epoch 1991.35) as determined by a line between said point on the north line and National Geodetic Survey (NGS) monument "Bush" (PID DX3978), bearing and distance being South 16°01'21" East 4921.86 feet as derived from geodetic values published by the NGS.

Parcel 2 (Cardiff Beach)

All those tide and submerged lands in said bed of the Pacific Ocean, lying adjacent to Fractional Section 27, Township 13 South, Range 4 West, San Bernardino Meridian, as shown on the official U.S. Government Township Plat approved April 19, 1881; bounded on the east by the Ordinary High Water Mark of said Pacific Ocean; bounded on the west by a line parallel with said Ordinary High Water Mark and lying 500 feet westerly measured at right angles therefrom; bounded on the north by a line running westerly and easterly from a point on said line have NAD83 geodetic coordinates of 33°00'45.64" North, 117°16'48.85" West, said line also being perpendicular to said Ordinary High Water Mark; bound on the south by a line running westerly and easterly from a point on said

line having NAD83 geodetic coordinates of 33°00'34.44" North, 117°16'45.14" West, said line also being perpendicular to said Ordinary High Water Mark.

BASIS OF BEARINGS for the above parcel is CCS83 Zone 6 (Epoch 1991.35) as determined by a line between said point on the north line and National Geodetic Survey (NGS) monument "Bush" (PID DX3978), bearing and distance being North 21°07'36" West 22,245.95 feet as derived from geodetic values published by the NGS.

Parcel 3 (Leucadia Beach)

All those tide and submerged lands in said bed of the Pacific Ocean, lying adjacent to Fractional Section 4, Township 13 South, Range 4 West, San Bernardino Meridian, as shown on the official U.S. Government Township Plat approved April 19, 1881; bounded on the east by the Ordinary High Water Mark of said Pacific Ocean; bounded on the west by a line parallel with said Ordinary High Water Mark and lying 300 feet westerly measured at right angles therefrom; bounded on the north by a line running westerly and easterly from a point on said line have NAD83 geodetic coordinates of 33°04'23.00" North, 117°18'31.87" West, said line also being perpendicular to said Ordinary High Water Mark; bound on the south by a line running westerly and easterly from a point on said line having NAD83 geodetic coordinates of 33°03'57.47" North, 117°18'21.22" West, said line also being perpendicular to said Ordinary High Water Mark.

BASIS OF BEARINGS for the above parcel is CCS83 Zone 6 (Epoch 1991.35) as determined by a line between said point on the north line and National Geodetic Survey (NGS) monument "Bush" (PID DX3978), bearing and distance being South 22°08'23" East 1408.52 feet as derived from geodetic values published by the NGS.

Parcel 4 (Moonlight Beach)

All those tide and submerged lands in said bed of the Pacific Ocean, lying adjacent to Government Lot 1 and Lot 2, Section 16, Township 13 South, Range 4 West, San Bernardino Meridian, as shown on the official U.S. Government Township Plat approved April 19, 1881; bounded on the east by the Ordinary High Water Mark of said Pacific Ocean; bounded on the west by a line parallel with said Ordinary High Water Mark and lying 500 feet westerly measured at right angles therefrom; bounded on the north by a line running westerly and easterly from a point on said line have NAD83 geodetic coordinates of 33°02'57.97" North, 117°17'57.52" West, said line also being perpendicular to said Ordinary High Water Mark; bound on the south by a line running westerly and easterly from a point on said line having NAD83 geodetic coordinates of 33°02'43.80"

North, 117°17'52.56" West, said line also being perpendicular to said Ordinary High Water Mark.

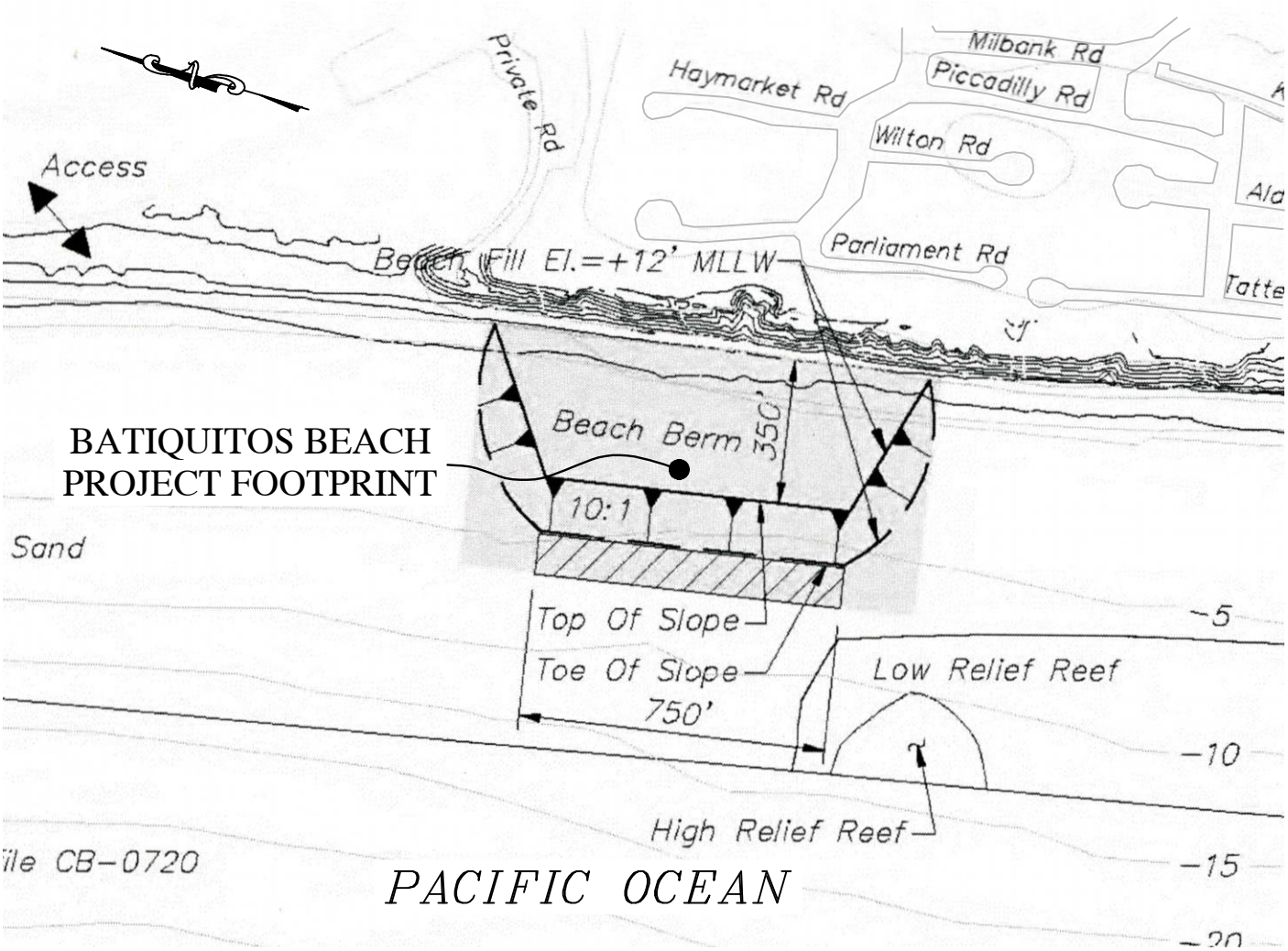
BASIS OF BEARINGS for the above parcel is CCS83 Zone 6 (Epoch 1991.35) as determined by a line between said point on the north line and National Geodetic Survey (NGS) monument "Bush" (PID DX3978), bearing and distance being North 17°28'58" West 7672.45 feet as derived from geodetic values published by the NGS.

END OF DESCRIPTION

Prepared 08/27/2014 by the California State Lands Commission Boundary Unit.

NO SCALE

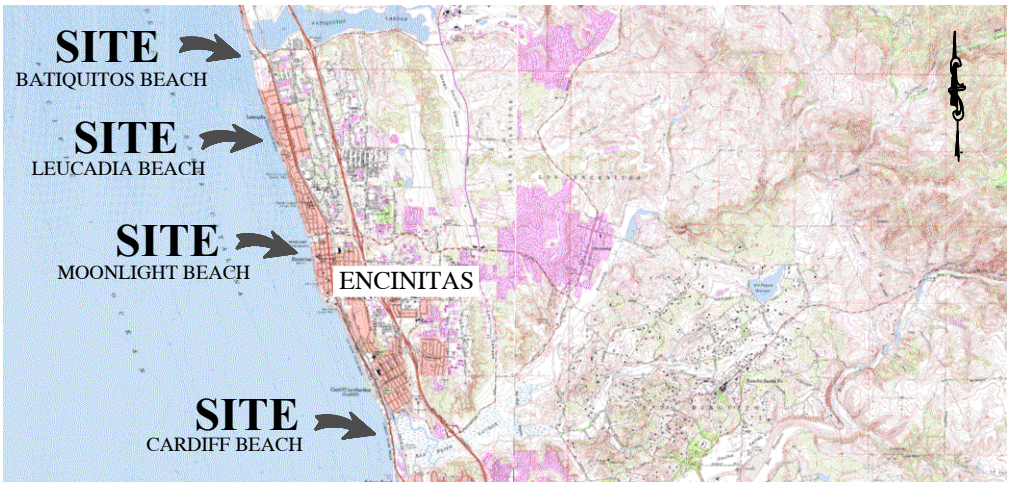
SITE



BATIQUITOS BEACH - PARCEL 1

NO SCALE

LOCATION



MAP SOURCE: USGS QUAD

This Exhibit is solely for purposes of generally defining the lease premises, is based on unverified information provided by the Lessee or other parties and is not intended to be, nor shall it be construed as, a waiver or limitation of any State interest in the subject or any other property.

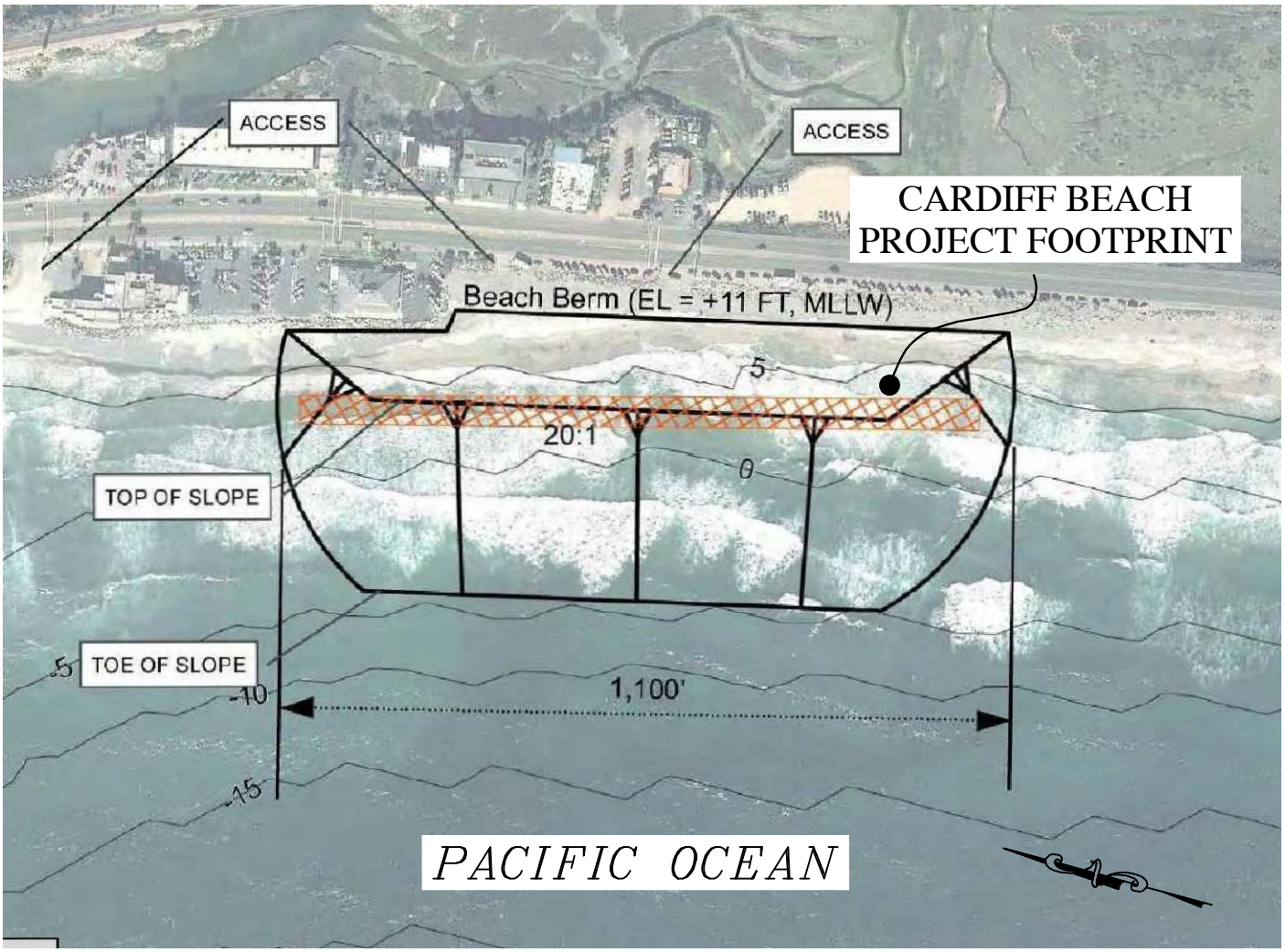
Exhibit B-1

LEASE 8817.9
CITY OF ENCINITAS
GENERAL LEASE -
PUBLIC AGENCY USE
SAN DIEGO COUNTY

JWP 11/7/19

NO SCALE

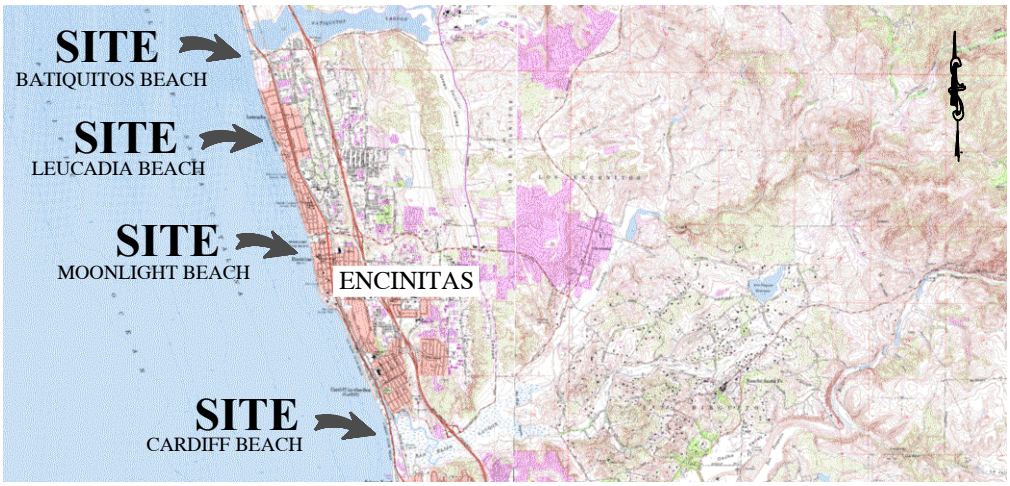
SITE



CARDIFF BEACH - PARCEL 2

NO SCALE

LOCATION



MAP SOURCE: USGS QUAD

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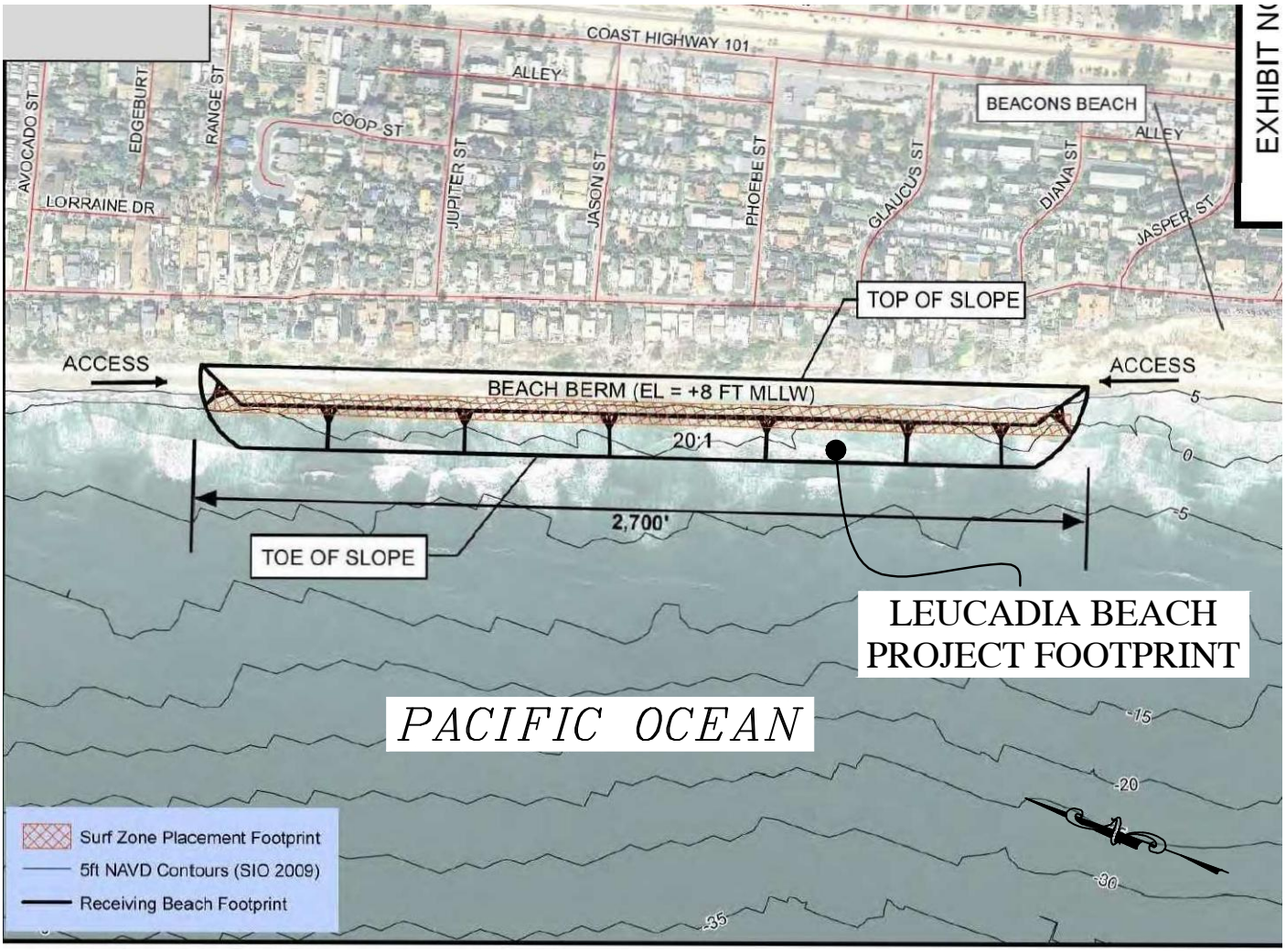
Exhibit B-2

LEASE 8817.9
CITY OF ENCINITAS
GENERAL LEASE -
PUBLIC AGENCY USE
SAN DIEGO COUNTY

JWP 11/7/19

NO SCALE

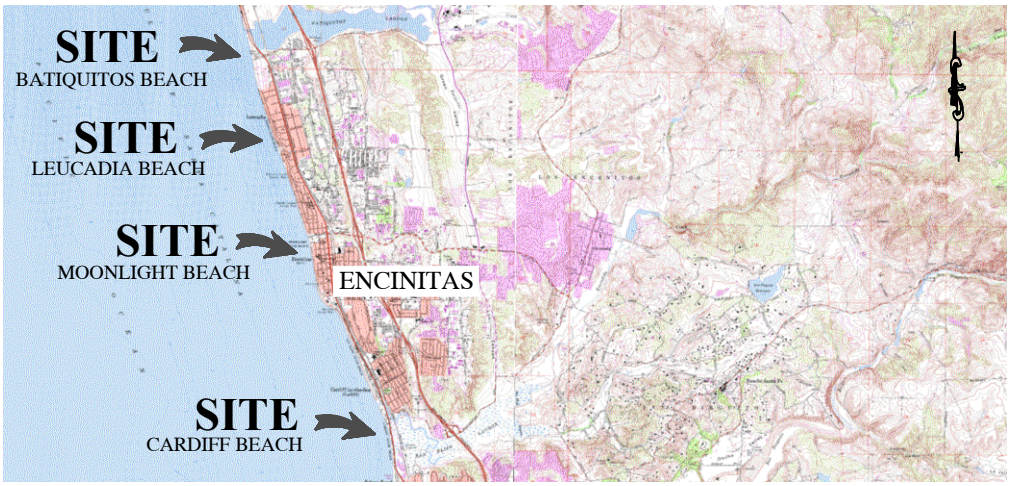
SITE



LEUCADIA BEACH - PARCEL 3

NO SCALE

LOCATION



MAP SOURCE: USGS QUAD

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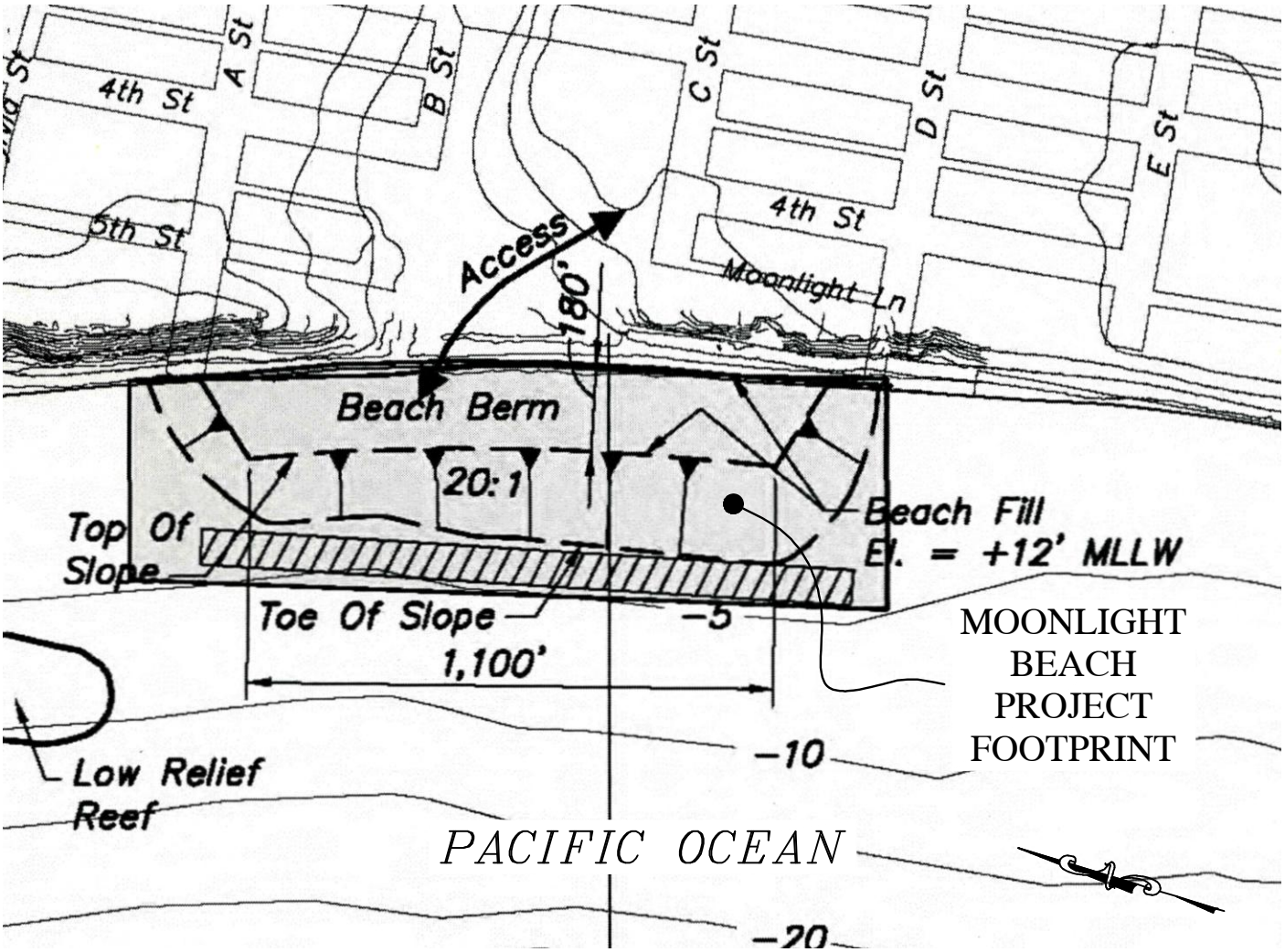
Exhibit B-3

LEASE 8817.9
CITY OF ENCINITAS
GENERAL LEASE -
PUBLIC AGENCY USE
SAN DIEGO COUNTY

JWP 11/7/19

NO SCALE

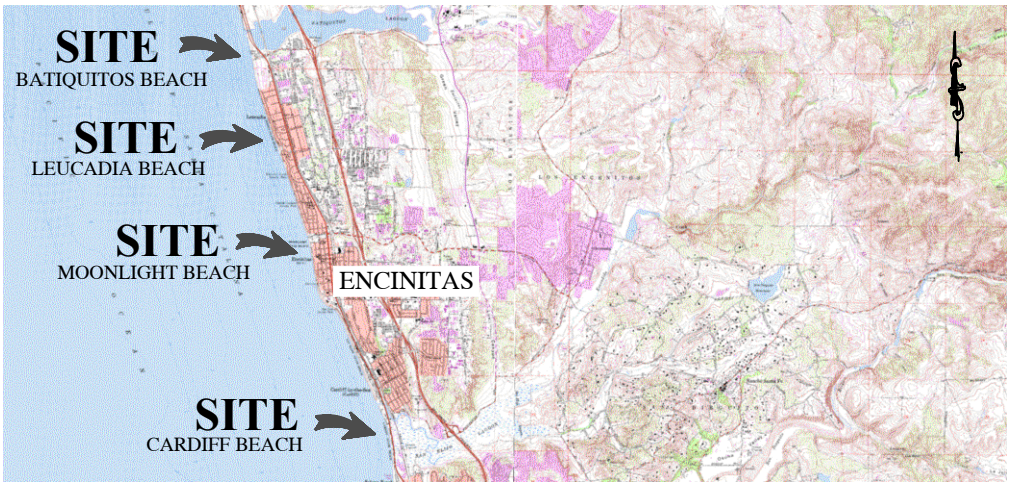
SITE



MOONLIGHT BEACH - PARCEL 4

NO SCALE

LOCATION



MAP SOURCE: USGS QUAD

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Exhibit B-4

LEASE 8817.9
CITY OF ENCINITAS
GENERAL LEASE -
PUBLIC AGENCY USE
SAN DIEGO COUNTY

JWP 11/7/19

EXHIBIT C
CALIFORNIA STATE LANDS COMMISSION
MITIGATION MONITORING PROGRAM

AMENDMENT TO CITY OF ENCINITAS
OPPORTUNISTIC BEACH FILL PROGRAM
(State Clearinghouse No. 2013111057)

The California State Lands Commission (Commission) is a responsible agency under the California Environmental Quality Act (CEQA) for the Amendment to the City of Encinitas Opportunistic Beach Fill Program (Project). The CEQA lead agency for the Project is the City of Encinitas.

In conjunction with approval of this Project, the Commission adopts this Mitigation Monitoring Program (MMP) for the implementation of mitigation measures for the portion(s) of the Project located on Commission lands. The purpose of a MMP is to discuss feasible measures to avoid or substantially reduce the significant environmental impacts from a project identified in an Environmental Impact Report (EIR) or a Mitigated Negative Declaration. State CEQA Guidelines section 15097, subdivision (a), states in part:[1]

> *In order to ensure that the mitigation measures and project revisions identified in the EIR or negative declaration are implemented, the public agency shall adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects. A public agency may delegate reporting or monitoring responsibilities to another public agency or to a private entity which accepts the delegation; however, until mitigation measures have been completed the lead agency remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with the program.*

The lead agency has adopted a MMP for the whole of the Project (see Exhibit C, Attachment C-1) and remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with its program. All of the mitigation measures described in Attachment C-1 are applicable to the Commission's action and authority as a responsible agency, and are incorporated herein by reference, as though set forth in full.

[1] The State CEQA Guidelines are found at California Code of Regulations, Title 14, section 15000 et seq.

ATTACHMENT C-1

Mitigation Monitoring and Reporting Program adopted by the City of Encinitas

V. MITIGATION, MONITORING AND REPORTING PROGRAM:

The proposed amendment to the City's Opportunistic Beach Fill Program evaluated in this document identifies a monitoring program that would be implemented for tracking purposes and to prevent potentially adverse impacts to biological resources and water quality. The monitoring program also requires beach profiles to track sand movement before and after new beach nourishment events. Those overall monitoring requirements are summarized in the table below and described in detail in Section I. Monitoring measures will be implemented as opportunistic projects are performed.

Project design features are also defined to address truck operations and other operational procedures to avoid impacts (e.g., specific haul routes, traffic control plan). These design features are identified in the below table and are discussed in more detail in Section I.

Summary of Project Design Features and Monitoring Actions

Monitoring Activity	**Leucadia Beach**	**Cardiff Beach**	**Responsible / Implementing Party**	**Reporting**
Beach Profiles	Pre-construction Baseline Monitoring: Collection of beach profiles at two established monuments between 1 year and 30 days prior to project. Routine, biannual monitoring program could fulfill this requirement. Post-construction Monitoring: Collection of wading depth surveys (i.e., to a depth of -10 feet MLLW) at established locations immediately after completion if placement volume is greater than 50,000 cy.		City via consultant	Data included in Post-construction Monitoring report to be submitted to resource agencies within 60 days following construction.
Surfing Conditions	Pre-construction Baseline Monitoring: ½ month prior, 3 times per week over 14 days. Construction Monitoring: Daily qualitative monitoring during placement activities. Post-construction Monitoring: ½ month post-construction, 3 times per week over 14 days.		City or consultant	Data included in Post-construction Monitoring report to be submitted to resource agencies within 60 days following construction.

Monitoring Activity	Leucadia Beach	Cardiff Beach	Responsible / Implementing Party	Reporting
Turbidity	Pre-construction Baseline Monitoring: Water clarity testing shall be conducted at the receiving beaches to establish ambient conditions. Testing shall consist of measuring transmission of light through the water using a transmissometer or other turbidity measuring device. Testing should occur 3 or more times within one year during different oceanographic conditions to quantify a range of values. Construction Monitoring: Daily during construction from a high vantage point on land. If visual monitoring (qualitative monitoring) indicates significant turbidity greater than ambient one-half mile from the discharge site (either offshore or downcoast) for two consecutive days, then the monitor shall: i. Evaluate littoral conditions (wind, tide, wave climate, and littoral drift) to determine if the plume distribution is likely of a short-term nature; ii. Evaluate the effectiveness of discharge site BMPs and opportunities to modify shore placement methods to further reduce sediment discharge during periods of strong long shore movement; iii. Record and implement the necessary modifications to the BMPs; iv. Notify the San Diego Water Board and USACE by telephone or email; and; v. comply with any measures identified by the RWQCB, in consultation with other responsible agencies, as appropriate, to mitigate project-related turbidity, including modifying or halting discharge. If significant turbidity persists on the third day, the monitor shall commence daily water clarity testing and reporting to the RWQCB and the USACE (i.e., quantitative monitoring). Testing shall consist of measuring transmission of light through the water using a transmissometer or other turbidity measuring device. Daily testing shall continue until no project-related turbidity is detectable (i.e., until offshore and downcoast reading return to ambient). Testing shall be designed to document the aerial extent and concentration of the turbidity plume at the time of day it is most developed, and shall include at least: samples taken as close as practicable to the discharge site, one-half mile upcoast of the discharge site, one-half mile downcoast of the discharge site (minimum four samples). Sampling shall be done throughout the water column. These sampling protocols may be modified with the San Diego Water Board's written approval. The applicant shall document logistical		City or consultant	If turbidity exceedance, frequent coordination with the Regional Water Quality Control Board. If no exceedance, monitoring data will be included in the Post-construction Monitoring Report.

Monitoring Activity	Leucadia Beach	Cardiff Beach	Responsible / Implementing Party	Reporting
	arrangements for such potential water quality sampling and shall include draft quality assurance/quality control protocols in the projects monitoring plan. If significant turbidity is greater than ambient one-half mile from the discharge site (either offshore or downcoast) for five (5) consecutive days, the discharge shall be halted or modified to reduce turbidity. Post-construction Monitoring: Qualitative or quantitative monitoring shall persist until conditions return to ambient.			
Sediment Gradation	Pre-construction Baseline Monitoring: Establish sediment gradation baseline (i.e. composite grain size envelope) from two shore-perpendicular transects for each receiving beach. Construction Monitoring: Confirmation testing may be conducted daily at the receiving beach to verify the sediment quality being deposited. This monitoring requirement may not be required for high-quality sand sources of a consistent geologic nature. Post-project Monitoring: Sediment gradation baseline should be evaluated every three years to determine if the prior baseline represents existing conditions. If conditions have substantially changed, a new grain size envelope should be developed for the receiving beach.		City or consultant	Coordination with resource agencies if significant (greater than 50%) sediment gradation deviation during construction. Data included in Post-construction Monitoring report to be submitted to resource agencies within 60 days following construction.
Grunion	Pre-construction Monitoring: If project construction is scheduled between March 1st and May 31st, pre-project surveys would be conducted to identify beach suitability for grunion activity. If suitable habitat is present, a grunion monitor will be present to observe grunion runs two to three weeks prior to construction during a predicted grunion run (according to the grunion calendar produced by the California Department of Fish and Wildlife), and immediately prior to construction. If grunion are not present during the predicted run, no further monitoring is required until the next predicted run. If grunion are present during predicted runs, beach nourishment will only occur above the spring high tide line/kelp line or in the nearshore until the spawning season is over. Construction Monitoring: If suitable habitat is present and grunion are identified during a predicted run, beach nourishment will only occur above the spring high tide line/kelp line or in the nearshore until the spawning season is over. Grunion monitoring will continue throughout construction, and if they do not spawn during a predicted run then sand could be		Qualified grunion monitor (City or consultant)	If suitable habitat is found during construction, coordination with and reporting to the California Department of Fish and Wildlife.

Monitoring Activity	Leucadia Beach	Cardiff Beach	Responsible / Implementing Party	Reporting
	placed below the spring high tide line.			
Threatened and Endangered Species	Construction Monitoring: If sand placement to occur during California least tern breeding season (April 1st to September 15th) or the Western Snowy Plover breeding Season (March 1st to September 15th); then coordinate with USFWS to determine monitoring requirements during construction.	Construction Monitoring: Although the placement site is located over 500 yards from western snowy plover and 1,000 yards from California least tern breeding colonies; coordination with the USFWS will be conducted if construction is proposed to occur during these breeding seasons to determine if monitoring is required during construction.	Qualified biological monitor (Consultant) or City. City monitoring may include the extent of turbidity plumes outside the surf zone where water transparency is reduced to less than 3 feet.	City - Monitoring may include observations of timing of nesting activity and the extent of turbidity plumes outside the surf zone where water transparency is reduced to less than 3 feet.
Traffic	During construction: • Implement a traffic control plan; • A flag man shall keep pedestrians a safe distance from the truck, notify beach users of the presence of the truck, and ensure that a clear and safe path is maintained. This system would be codified in the traffic control plan required to be prepared for each project site; • Public streets used as the haul route shall be cleaned via street sweeper as necessary; and • Trucks shall only use haul routes approved by the city and shall be specified in the traffic control plan required to be prepared for each receiver site.		Contractor	City to confirm implementation by Contractor
Trash and Debris	Construction Monitoring: Full-time monitoring of the source site to verify trash and debris is not loaded into trucks delivering sand to the beach (for upland source projects). Daily monitoring of the beach for presence of trash and debris is also required to maintain high quality sand deliveries.		Consultant or contractor	City to confirm implementation by Contractor

EXHIBIT D
Grunion and Avian Monitoring and Avoidance Plan

City of Encinitas' Proposed Monitoring Plans for Placement Activities in the Spring

Grunion, least tern and western snowy plover monitoring programs are presented in this section. These monitoring plans are consistent with those implemented for similar programs in the region to mitigate for potential impacts to these species.

Grunion Monitoring & Avoidance Plan

Should beach placement activities be necessary to occur below the wrack line between Feb 28th and May 28th, the City will adhere to the following provisions in order to avoid impacts to mature and/or spawning grunion and to grunion eggs during a spawning event. The applicant shall retain the services of a qualified biologist or environmental resources specialist (hereinafter, "environmental resources specialist") with appropriate qualifications. The annually published California Department of Fish and Wildlife (CDFW) expected grunion runs shall be used to determine possible grunion spawning periods. The plan shall, at a minimum, include the following:

1. Placement sites shall be monitored for grunion runs beginning at least two weeks prior to commencement of sand placement activities, and throughout the sand placement work during the grunion spawning period of March 1 through August 31. Monitoring will not occur in areas where there is no sand, such as areas supporting 100% cobble or no dry back beach during high tides for grunions to lay their eggs.

2. Grunion monitoring shall be conducted by the environmental resources specialist for 30 minutes prior to, and two hours following, the predicted start of each spawning event. Sufficient personnel shall be utilized to ensure that the entire replenishment site is monitored during the specified period. The magnitude and extent of a spawning event shall be defined in 300-foot segments of beach using the Walker Scale. Beach placement activities will be modified per the following plan for various magnitude Walker Scales:

Walker Scale of 0 or 1:

- If a grunion run consisting of 0-100 individual fish per segment (Walker Scale of 0 or 1) is reported within two weeks prior to, or during, beach replenishment work, the applicant does not need to take any avoidance action for grunion eggs. No mature grunion may be buried or harmed as a result of construction/beach replenishment.

Walker Scale of 2, 3, 4, or 5:

- If a grunion run consisting of more than 100 individual fish per segment (Walker Scale of 2, 3, 4, or 5) is reported within two weeks prior to construction commencement, the applicant shall avoid mobilization on the beach segment(s) and shall avoid a 100-foot buffer on either side of the segment(s) to ensure that no grunion eggs are buried or disturbed at the construction site. The applicant shall adapt the beach construction schedule to avoid operations on beach segments with a Walker Scale of 2, 3, 4, or 5 and their associated buffers. No mature grunion may be buried or harmed as a result of construction/beach replenishment.

- If beach construction has already commenced, and a grunion run consisting of more than 100 individual fish per segment (Walker Scale of 2 or 3) is reported, the applicant shall avoid impact to grunion eggs to the extent feasible, and then shall minimize impacts to grunion eggs. No mature grunion may be buried or harmed as a result of beach replenishment.

- If beach construction has already commenced, and a grunion run consisting of more than 1000 individual fish per segment (Walker Scale of 4 or 5) is reported, no impacts to grunion eggs may occur. The applicant shall avoid impacts to grunion eggs in that portion of the beach construction site through alteration of the discharge point, sand spreading, and/or shifting sand receiver site boundaries. Beach construction activities at this location shall cease if avoidance measures are not feasible. No mature grunion may be buried or harmed as a result of beach replenishment.

Avian Monitoring Plan

Beach placement activities that occur during the western snowy plover breeding season (March 1 to August 31) and California least tern breeding season (April 1 to September 15) will take the following steps to mitigate impacts to these species. A designated avian biological monitor(s) with stop-work authority will conduct pre-and during construction surveys as-needed within the project area and within 500 feet of the work area to determine the location of any active special status avian roosting and nesting areas. If western snowy plovers or California least terns are observed, then the following measures will be implemented:

1. If western snowy plovers or California least terns are observed exhibiting nesting behaviors (scraping, territorial displays or calls, false brooding, etc.) during the breeding season, no project-related activities will occur within 500 feet of these areas until subsequent monitoring indicates that western snowy plovers or California least terns are no longer present.

2. If an active western snowy plover or California least tern nest (nest containing eggs or an empty or partial nest with western snowy plovers or California least terns actively exhibiting breeding behaviors) occurs within 500 feet or the proposed construction area, the following measures will be implemented:

    a. The biological monitor, with stop-work authority, will report the nest to the U.S. Fish and Wildlife Service. After initial identification of the nest, the biological monitor will not approach within 50 feet of an active western snowy plover or California least tern nest. Nest monitoring will occur with binoculars. The biological monitor will use the distance to the project limits and local topography to determine if construction activities are likely to damage a nest or significantly disturb nesting activities. Signage will be installed to deter people from entering any area with an active nest

    b. Where damage or disturbance of any western snowy plover or California least tern nest(s) is likely, the designated biological monitor will implement further measures to avoid the likelihood of nest destruction or disturbance, including: temporarily halting construction activities until the nest fails or until at least 10 days after young fledge from the nest, with construction activities directed to other areas further than 350 feet from the active nest(s) or where the activities will not disturb the active nest(s), as directed by the biological monitor.

    c. A biological monitor will monitor nest progress, construction activity, and protective fencing to minimize potential construction-related disturbance and will submit a weekly nest status report to the U.S. Fish and Wildlife Service. A post-construction report will be submitted to the U.S. Fish and Wildlife Service summarizing the weekly nest status report and outcomes within 6 months of project completion.

EXHIBIT D
Grunion and Avian Monitoring and Avoidance Plan

No activities are allowed within 100 feet of active roost areas for the western snowy plover or California least tern unless measures are implemented to minimize the noise and disturbance to those adjacent birds until subsequent monitoring indicates that western snowy plovers or California least terns are no longer present. If these conditions cannot be met, the following measures will be implemented:

1. The biological monitor, with stop-work authority, will report the roost site to the U.S. Fish and Wildlife Service. After initial identification of the roost, the biological monitor will not approach within 50 feet of roosting western snowy plover or California least terns. Roost monitoring will occur with binoculars. The biological monitor will use the distance to the project limits and local topography to determine if construction activities are likely to damage a nest or significantly disturb nesting activities. Signage will be installed to deter people from entering any area with an active nest.

2. Where damage or disturbance of any western snowy plover or California least tern roosting is likely, the biological monitor will implement further measures to avoid the likelihood of roost disturbance, including temporarily halting construction activities until the birds depart the roost for the season, with construction activities directed to other areas that will not disturb the roost, as directed by the designated biological monitor..

3. A biological monitor will monitor the roost, and construction activity to minimize potential construction-related disturbance and will submit a weekly nest status report to the U.S. Fish and Wildlife Service. A post-construction report will be submitted to the U.S. Fish and Wildlife Service summarizing the weekly nest status report and outcomes within 6 months of project completion.

All participants and contractors for the project will receive educational training concerning special status species within the project area. The program will be conducted during all project phases and will cover the potential presence of listed species; the requirements and boundaries of the project; the importance of complying with avoidance, minimization, and compensation measures; and problem reporting and resolution methods. The designated project biologist and/or other qualified project proponent shall conduct the training and provide a sign-in sheet for each training activity to ensure all participants and contractors are educated on the environmental conditions and associated constraints.