FINAL

INITIAL STUDY
MITIGATED NEGATIVE DECLARATION

CARDIFF STATE BEACH LIVING SHORELINE PROJECT
SCH#2016021029

March 2016

State of California
DEPARTMENT OF PARKS AND RECREATION

FINAL MITIGATED NEGATIVE DECLARATION

PROJECT: **CARDIFF STATE BEACH LIVING SHORELINE PROJECT**

LEAD AGENCY: California Department of Parks and Recreation (DPR)

Availability of Documents:
The initial Study for this Negative Declaration was made available throughout the 30-day public review period at the reference desk of the Santa Barbara County. It was also available at the public information desks of the DPR's Northern Service Center, the Channel Coast District Headquarters, and Carpinteria Beach Visitor Center. The Final Negative Declaration and all supporting materials will be available, by request, at DPR's Northern Service Center and the Channel Coast District Headquarters office.

PROJECT DESCRIPTION:

In partnership with the San Elijo Lagoon Conservancy, the City of Encinitas, and the California State Coastal Conservancy, California State Parks proposes to construct a dune system along back beach portions of Cardiff State Beach. The project is located in San Diego County, along the western edge of Highway (HWY) 101 spanning approximately 2,900 linear feet (~0.5 mile) of shoreline at South Cardiff State Beach. Primary project elements include:

- Sand Dune Restoration - A sand dune would be constructed with approximately 25,000 cubic yards (cy) of imported sand. The sand dune would cover reconfigured riprap with a cobble core starting from the existing edge of pavement or parking along HWY 101. The dune would be seeded with native plants after construction. The crest of the sand dune would range from 4 feet above the crown elevation of HWY 101 along the northern end to 18 inches above the crown elevation in the middle and southern reaches. The dune is anticipated to be constructed after implementation of a significant beach nourishment project as part of the San Elijo Lagoon Restoration Project described in more detail below.

- Buried Riprap - The existing un-engineered rock riprap along the project site will be reconfigured into a more robust form, using no more than 10,000 cy of new 2-ton rock. The rock would provide a last line of defense for HWY 101 against extreme waves and high tides. The crest elevation of the riprap would vary, but would be no higher than 17.5 feet (NAVD88). The riprap would be buried by a minimum of 18 inches of imported sand to allow for plant establishment.

- Pedestrian Footpath – A 4-foot wide, decomposed granite footpath is proposed adjacent to and along the western side of HWY 101. The footpath will run parallel to the dune system and will improve public access along Cardiff State Beach. Six lateral public access points will also be constructed across the proposed dunes, allowing pedestrians to access the beach from HWY 101.

Though the proposed project is not a component of the San Elijo Lagoon Restoration Project (SELRP), the two projects are being closely coordinated due to its utility in providing a source of sand to the project. The SELRP is a large-scale wetland restoration project proposed to be restored starting in the winter of 2017 and spanning through 2019. Construction is estimated to yield just under one million cy of sand from the proposed dredging. The export material from the lagoon is proposed to be used for the construction of the proposed dune system, as well as beach nourishment at Cardiff State Beach with 300,000 cy of sand. Beach nourishment would directly benefit the proposed project by providing a wider beach, which would protect the proposed coastal dune system and provide more sand to the system. Impacts associated with the lagoon restoration project and the beach nourishment component are analyzed in the Final EIR/EIS prepared for the SELRP (AECOM 2016).

Finding:
An Initial Study has been prepared to assess the proposed project's potential impacts on the environment and the significance of those impacts and is incorporated in the Draft ND. Based on this initial Study, it has been determined that the proposed project would not have any significant impacts on the environment, once all proposed project requirement have been implemented. The conclusion is supported by the following findings:

- There is no potential for adverse impacts on Agricultural Resources, Land Use and Planning, Mineral Resources, Population and Housing Public Services, Recreation, Transportation and Utilities and Service systems associated with the proposed project.

- Potential adverse impacts resulting from the proposed project were found to be less than significant in the following areas, Aesthetics, Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, and Noise.

Changes to Document:
Minor punctuation, spelling, text changes and grammatical corrections that contribute to ease of understanding, but have no significant impact on the content, have not been noted. The following additions have been made to the initial study. Additions are underlined and deletions are indicated by ~~strikeouts~~.

Changes were made to the following pages:

Page vi - The sand dune would cover reconfigured riprap with a cobble core starting from the edge of pavement (or edge of existing parking) at HWY 101.

Page 7 – Sentence revised to "The sand dune would occupy a maximum width of 60 feet (starting from the edge of existing pavement or parking ~~at~~ along HWY 101 to the seaward toe)" to clarify landward limit of the sand dune along the northern reach of the project site. The existing parking along Highway 101 would remain as part of the proposed project.

Page 10, 20, and 29 – Added "a 1602 Streambed Alteration Permit was determined to not be required for the project."

Page 16 – Both "less than significant" and "no impact" boxes were checked. The document was revised to only include "no impact" since the project would not conflict with an air quality plan.

Page 18 – Fixed typographical error from Southern foredunes are coastal d-ependent.

Page 46 – Summary of Mitigation Measures - Sentence was revised to "The following mitigation measures ~~would~~ shall be implemented by DPR as part of the proposed project."

Page 46 – Biological Resources, 2nd Bullet – Sentence was revised to "To avoid adverse impacts to any sensitive species (i.e. least tern, western snowy plover or grunion), construction activities ~~will~~ shall occur between September 15th and February 28th of any given year."

Page 46 and 47 – Cultural Resources, Section revised as follows:

- In areas where existing ground disturbance (trenching associated with the riprap reconfiguration) is proposed, DPR Archaeologist shall ~~will~~ be consulted such that archaeological and Native American monitors can be scheduled as necessary.
- The discovery of any archaeological or historical objects or features (including bone) ~~will~~ shall be reported to the Cultural Resources specialist immediately and work ~~will~~ shall cease in that location until the potential resource can be evaluated. Whenever possible resources ~~will~~ shall be protected and avoided through redesign in consultation with District Archaeologist. If archaeological deposits and features are encountered during the project, resources shall be protected from construction impacts until a data recovery program can be implemented.
- Contractor educational efforts ~~will~~ shall be completed prior to construction to alert workers to potential sensitive cultural resources and impact minimization measures to be implemented during construction.
- In the event that human remains are observed, there shall be no further excavation or disturbance of the site or any nearby area suspected to overlie adjacent human remains until the San Diego County Medical Examiner has evaluated the remains. If the Medical Examiner determines the remains to be Native American, the Medical Examiner ~~will~~ shall contact the Native American Heritage Commission within 24 hours. The Native American Heritage Commission shall identify the person or persons to be the Most Likely Descendent (MLD). The landowner (DPR) or DPR representative and the MLD will determine the appropriate course of action.

Page 47 – Hazards and Hazardous Materials, Sentence revised to "The contractor ~~will~~ shall implement an applicable plan to avoid contamination from fuel or other potential hazards."

Page 47 – Transportation / Traffic, Section revised to:

- The City ~~would~~ shall require the C~~c~~ontractor to implement a traffic control plan with a system of signs and flagmen to prevent accidents while construction vehicles access and egress from the project site. The traffic control plan ~~would~~ shall include plans for traffic lane closure, shoulder closure, bike lane detour and pedestrian detour. The traffic control plan ~~would~~ shall also consider the additional safety measures at the schools located within the vicinity of the haul routes (e.g., extra control at school crossings) to reduce potential hazards. The traffic control features ~~would~~ shall reduce impacts to transportation and circulation to below a level of significance.

This document along with the Draft Initial Study (SCH#2016021029), corrections and the Notice of Determination constitute the Final Negative Declaration for the Cardiff State Beach Living Shoreline Project.

Pursuant to Section 21082.1 of the California Environmental Quality Act, the California Department of Parks and Recreation (DPR) has independently reviewed and analyzed the Initial Study and Negative Declaration for the proposed project and finds that these documents reflect the independent judgment of DPR. DPR, as lead agency, also confirms that the project mitigation measures detailed in these documents are feasible and will be implemented as stated in the Negative Declaration.

Dave Smith for Robin Greene — 3/23/16

Robin Greene, District Superintendent — Date

Cindy Krimmel — March 23, 2016

Cindy Krimmel, Environmental Coordinator — Date

MITIGATED NEGATIVE DECLARATION

PROJECT: **CARDIFF STATE BEACH LIVING SHORELINE PROJECT**

LEAD AGENCY: California Department of Parks and Recreation

AVAILABILITY OF DOCUMENTS: The Initial Study for this Mitigated Negative Declaration is available for review at:

- San Diego Coast District Headquarters
  California Department of Parks & Recreation
  4477 Pacific Highway, San Diego, CA 92110

- North Sector Office San Diego Coast District
  2680 Carlsbad Blvd., Carlsbad, CA 92008

- San Diego County Library Encinitas Branch
  540 Cornish Drive Encinitas, CA 92024

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Though the proposed project is not a component of the San Elijo Lagoon Restoration Project (SELRP), the two projects are being closely coordinated due to its utility in providing a source of sand to the project. The SELRP is a large-scale wetland restoration project proposed to be restored starting in the winter of 2017 and spanning through 2019. Construction is estimated to yield just under one million cy of sand from the proposed dredging. The export material from the lagoon is proposed to be used for the construction of the proposed dune system, as well as beach nourishment at Cardiff State Beach with 300,000 cy of sand. Beach nourishment would directly benefit the proposed project by providing a wider beach, which would protect the proposed coastal dune system and provide more sand to the system. Impacts associated with the lagoon restoration project and the beach nourishment component are analyzed in the Final EIR/EIS prepared for the SELRP (AECOM 2016).

A copy of the Initial Study is attached. Questions or comments regarding this Initial Study/Mitigated Negative Declaration may be addressed to:

Darren Smith, District Service Manager
California Department of Parks & Recreation
San Diego Coast District
4477 Pacific Highway
San Diego, CA 92110

Pursuant to Section 21082.1 of the California Environmental Quality Act, the California Department of Parks and Recreation (DPR) has independently reviewed and analyzed the Initial Study and Negative Declaration for the proposed project and finds that these documents reflect the independent judgment of DPR. DPR, as lead agency, also confirms that the project mitigation measures detailed in these documents are feasible and will be implemented as stated in the Negative Declaration.

2/3/16
Date

District Superintendent

Cindy Krimmel

2/3/16
Date

Environmental Coordinator

TABLE of CONTENTS

Chapter/Section		Page
1	INTRODUCTION	1
2	PROJECT DESCRIPTION	5
3	ENVIRONMENTAL CHECKLIST	11
	I. Aesthetics	14
	II. Agricultural Resources	15
	III. Air Quality	16
	IV. Biological Resources	18
	V. Cultural Resources	22
	VI. Geology And Soils	24
	VII. Hazards And Hazardous Materials	26
	VIII. Hydrology And Water Quality	28
	IX. Land Use And Planning	31
	X. Mineral Resources	32
	XI. Noise	33
	XII. POPULATION AND HOUSING	35
	XIII. Public Services	36
	XIV. Recreation	37
	XV. Transportation/Traffic	39
	XVI. Utilities And Service Systems	42
4	MANDATORY FINDINGS OF SIGNIFICANCE	44
5	SUMMARY OF MITIGATION MEASURES	46
6	REFERENCES	48
7	Report Preparation	50

Appendices

A MAPS, TABLES, AND CHARTS

B PROJECT DESIGN GRAPHICS

C CNDDB RECORD SEARCH

D ACRONYMS

E MITIGATION MONITORING AND REPORTING PROGRAM

CHAPTER 1
INTRODUCTION

1.1 INTRODUCTION AND REGULATORY GUIDANCE

The Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared by Moffatt and Nichol (M&N) on the behalf of the California Department of Parks and Recreation (DPR) to evaluate the potential environmental effects of the proposed Cardiff State Beach Living Shoreline Project (Project) at Cardiff State Beach, San Diego County, California. This document has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code §21000 *et seq*., and the State CEQA Guidelines, California Code of Regulations (CCR) §15000 *et seq*.

An Initial Study is conducted by a lead agency to determine if a project may have a significant effect on the environment [CEQA Guidelines §15063(a)]. If there is substantial evidence that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) must be prepared, in accordance with CEQA Guidelines §15064(a). However, if the lead agency determines that revisions in the project plans or proposals made by or agreed to by the applicant mitigate the potentially significant effects to a less-than-significant level, a Mitigated Negative Declaration may be prepared instead of an EIR [CEQA Guidelines §15070(b)]. This IS/MND conforms to the content requirements under CEQA Guidelines §15071.

1.2 LEAD AGENCY

The lead agency is the public agency with primary approval authority over the proposed project. In accordance with CEQA Guidelines §15051(b)(1), "the lead agency will normally be an agency with general governmental powers, such as a city or county, rather than an agency with a single or limited purpose." The lead agency for the proposed project is DPR. The contact person for the lead agency is:

Darren Smith, District Service Manager
California Department of Parks & Recreation
San Diego Coast District
4477 Pacific Highway
San Diego, CA 92110
Darren.Smith@parks.ca.gov

All inquiries regarding environmental compliance for this project, including comments on this environmental document should be addressed to:

Cardiff State Beach Living Shoreline Project
California Department of Parks & Recreation
Attn: Cindy Krimmel
San Diego Coast District
4477 Pacific Highway
San Diego, CA 92110
Cindy.Krimmel@parks.ca.gov

1.3 PURPOSE AND DOCUMENT ORGANIZATION

The purpose of this document is to evaluate the potential environmental effects of the proposed project at Cardiff State Beach. Mitigation measures have also been incorporated into the project to eliminate any potentially significant impacts or reduce them to a less-than-significant level.

This document is organized as follows:

- Chapter 1 - Introduction.
  This chapter provides an introduction to the project and describes the purpose and organization of this document.

- Chapter 2 - Project Description.
  This chapter describes the reasons for the project, scope of the project, and project objectives.

- Chapter 3 - Environmental Checklist.
  This chapter identifies the significance of potential environmental impacts, explains the environmental setting for each environmental issue, and evaluates the potential impacts identified in the CEQA Environmental (Initial Study) Checklist. Mitigation measures are incorporated, where appropriate, to reduce potentially significant impacts to a less-than-significant level.

- Chapter 4 - Mandatory Findings of Significance
  This chapter identifies and summarizes the overall significance of any potential impacts to natural and cultural resources, cumulative impacts, and impact to humans, as identified in the Initial Study.

- Chapter 5 - Summary of Mitigation Measures.
  This chapter summarizes the mitigation measures incorporated into the project as a result of the Initial Study.

- Chapter 6 - References.
  This chapter identifies the references and sources used in the preparation of this IS/MND. It also provides a list of those involved in the preparation of this document.

- Chapter 7 - Report Preparation
  This chapter provides a list of those involved in the preparation of this document.

1.4 SUMMARY OF FINDINGS

Chapter 3 of this document contains the Environmental (Initial Study) Checklist that identifies the potential environmental impacts (by environmental issue) and a brief discussion of each impact resulting from implementation of the proposed project. Based on the IS and supporting environmental analysis provided in this document, the proposed project would result in less-than-significant impacts for the following issues: aesthetics, agricultural resources, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation/traffic, and utilities and service systems.

In accordance with §15064(f) of the CEQA Guidelines, a MND shall be prepared if the proposed project will not have a significant effect on the environment after the inclusion of mitigation measures in the project. Based on the available project information and the environmental analysis presented in this document, there is no substantial evidence that, after the incorporation of mitigation measures, the proposed project would have a significant effect on the environment. It is proposed that a Mitigated Negative Declaration be adopted in accordance with the CEQA Guidelines.

CHAPTER 2
PROJECT DESCRIPTION

2.1 INTRODUCTION

This Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared by M&N on behalf of California Department of Parks and Recreation (DPR) in partnership with the San Elijo Lagoon Conservancy, City of Encinitas, and California State Coastal Conservancy to evaluate the potential environmental effects of the proposed project at Cardiff State Beach, located in the City of Encinitas, San Diego County, California. The proposed project would construct a dune system on the seaward side of HWY 101 on Cardiff State Beach to protect a vulnerable segment of the roadway while providing native dune habitat. The project would serve as a natural sea-level rise (SLR) adaptation approach.

2.2 PROJECT LOCATION

The project is located in San Diego County, along the western edge of HWY 101 in the City of Encinitas, California. The project area spans approximately 2,900 linear feet (~0.5 mile) of shoreline, from the Chart House to the north to South Cardiff State Beach parking lot to the south (Appendix A).

2.3 BACKGROUND AND NEED FOR THE PROJECT

HWY 101 has been damaged and flooded on numerous occasions as a result of extreme wave events and high tides. Increased still water levels associated with projected SLR could result in an increased frequency and severity of flooding and damage to the highway. Coastal dune systems have been found to provide multiple benefits by providing coastal habitat and storm damage reduction during extreme events (USACE 2013).

The project proposes to utilize sand from the San Elijo Lagoon Restoration Project (SELRP) for dune and beach restoration. The SELRP is a large-scale wetland restoration project proposed to be restored starting in the winter of 2017 and spanning through 2019. Construction is estimated to yield just under one million cubic yards (cy) of sand from the dredging of an overdredge pit in the Central Basin. Dredging would be conducted through a barge-mounted, cutterhead pipeline system. Transport to the project site would be via pipeline that would traverse through the existing lagoon inlet and along the back beach to the project site. The dredge export has been determined to be beach compatible and vary from silty sand to sand.

The project is anticipated to require maintenance periodically as a result of wave-driven erosion. Maintenance of the project is proposed to be be accomplished through use of sand from the San Elijo Lagoon mouth opening. The lagoon mouth opening occurs annually in the spring and removes approximately 25,000 cy via conventional earthwork equipment (i.e., excavator and trucks) from the sand deposit in the vicinity of the HWY

101 bridge overcrossing. Excavated materials from the mouth would be loaded into trucks and driven down the beach to the project area for deposition. The sand would be placed in areas in need of rebuilding and the remainder would be placed at the permitted placement site along inter-tidal portions of the beach fronting the Pacific Coast Grill restaurant.

2.4 PROJECT OBJECTIVES

1. Create approximately three acres of sand dunes that are heterogeneous in structure (i.e. incorporate cobble and sand) with 10% or less absolute cover from woody perennial species, less than 5% absolute cover from non-native plant species, and native herbaceous species richness of four and achieving 10 to 30% native herbaceous cover, in proportion to reference site conditions for a given year.
2. Create sand dunes that will persist dynamically for approximately 50 years. Future maintenance may be required in the way of additional beach nourishment and active planting. Future maintenance work will be reviewed and permitted separately prior to commencement of the repair work.
3. Beneficially re-use native beach quality sand from the San Elijo Lagoon to construct and maintain the beach and dune system.
4. Protect HWY 101 from its current vulnerability to episodic flooding and undermining.
5. Protect HWY 101 from more frequent and severe flooding and undermining from storms and sea-level rise over the next 50 years.

2.5 PROJECT DESCRIPTION

In partnership with the San Elijo Lagoon Conservancy, the City of Encinitas, and the California State Coastal Conservancy, California State Parks proposes to construct a dune system along back beach portions of Cardiff State Beach. The project consists of 1) sand dune restoration, 2) riprap maintenance and reconfiguration and a 3) pedestrian footpath. These features are described in detail in this section.

1. <u>Sand Dune Restoration</u>

A sand dune would be constructed with a maximum of 25,000 cy of imported sand from the SELRP restoration project or from another compatible source. Imported sand would be formed in a hummock profile along the project reach to mimic a natural dune system. It is envisioned that the contractor would rework placed sand into dune features with a small backhoe. Minimum and maximum hummock elevations would be given to the contractor to represent the crest and troughs of the dune features. The seaward slope of the dune would have a slope of approximately 2:1 (H:V). The dune is anticipated to be created after implementation of a significant beach nourishment project as part of the SELRP, which proposes to place 300,000 cy of sand on Cardiff Beach.

The sand dune would occupy a maximum width of 60 feet (starting from the edge of existing pavement or parking ~~at~~ along HWY 101 to the seaward toe). The dune feature would have a crest elevation no greater than 4 feet above the HWY 101 crown elevation of the highway at any given location. The majority of the project area would maintain a dune crest elevation no greater than 2 feet above the HWY 101 crown elevation to minimize visual impacts from the roadway. The crown elevation for HWY 101 along the project reach varies from +15.5 to +18 feet NAVD88 from north to south. Thus, the dune crest would be no greater than +20 feet, NAVD88.

The dune is proposed to be seeded with a native plant pallet (an assortment of native plants selected for the area and site conditions) collected from the San Elijo Lagoon and bulked (grown to appropriate size and density) at a local nursery. Dune seeding may incorporate a rice straw feature to promote plant establishment by reducing seed blowing and providing nutrients. Once the imported sand is formed into a hummock profile, the sand would be leached of salt to promote plant establishment. Leaching would be performed by physically irrigating the dune or by allowing for natural precipitation events.

Created dune habitat areas will use sand fencing to capture blowing sand and promote plant establishment. Symbolic fencing (e.g. post and cable) will also be used to reduce public disturbance of created habitat areas. Fencing will also be used to focus beach access points within the project area. Six beach access points are proposed along this reach. Four of the access points will be in the northern reach, where street-side parking currently exists.

2. Riprap Maintenance and Reconfiguration

The existing un-engineered rock riprap along the project site will be reconfigured to protect HWY 101 from undermining. The reconfiguration work would vary along the project reach contingent on the condition of the riprap relative to the proposed riprap template. In general, the riprap along the southern reach is in better condition (i.e. more stone in a tighter configuration) than the northern reach. Many areas, the northern reach in particular, will require the addition of 2-ton rock to form the proposed rock template.

The crest of the riprap will vary along the project reach but will be no higher than 2 feet above the crown of HWY 101 at any location. The reconfigured riprap will occupy a footprint no wider than 30 feet at any location. The seaward riprap slope will have a slope of about 1.5:1 (H:V) . No more than 10,000 cy of 2-ton rock is proposed to be imported to match existing rock riprap. The contractor would use special placement methods to ensure that placed rocks have at least three points of contact with other rocks. Bedding stone and geotextile fabric would be used to form an underlayer base for the reconfigured 2-ton stone.

Excavation of the existing rock, cobble and sand within the riprap footprint will be necessary to construct the design template. This is especially needed in the northern

reach, where the difference between the edge of pavement and the back beach elevation is small (approximately 2 feet). A trench will be dug in these locations in order to construct the buried riprap section. The trench size will vary depending on the beach conditions at the time of construction. Cuts will be no greater than 10 feet below existing grade at any location. The deepest cuts will be on the seaward edge of the riprap footprint. The cut adjacent to the road would be no closer than 2 feet from the edge of pavement at any location to protect the roadway sub-grade.

The excavation needed for the buried riprap is anticipated to generate a sand and cobble mix, with the majority being cobble. The cobble and sand mix is to be placed seaward and adjacent to the reconfigured riprap template and will form a dune core.

Once the riprap and cobble core template are constructed, these features would be buried by imported sand to form the dune. A minimum of 18 inches of sand cover would be achieved at any location in order to allow for plant establishment.

3. Pedestrian Footpath

A four-foot wide, decomposed granite footpath will be constructed along the western edge of HWY 101, parallel to the dune system, to improve public access along Cardiff State Beach. The footpath would be placed between the bike lane and the dune in the middle and southern sections of the project and between the street-side parking and the dune along the northern reach.

Lateral public beach access points will also be constructed across the dune system to allow pedestrians to enter the beach from the footpath along HWY 101. In total, six lateral beach access points are proposed along the Project area. More access points will be provided along the northern reach, where the street-side parking currently exists.

2.6 PROJECT IMPLEMENTATION

Construction of the project is estimated to take four months. Construction would occur between September 15th and March 1st of any given year to avoid breeding seasons of sensitive species and higher public visitation. Construction may require temporary closures of a southbound lane of HWY 101 during construction hours (i.e., 9am to 3pm). If a lane is closed, a 750-foot taper would be provided to transition traffic safely around the construction area. The construction area is anticipated to be no greater than 500 linear feet at any one time. The existing bike lane would be temporarily shifted to the west but, remain usable during construction.

Construction equipment would be staged within a small portion of South Cardiff State Beach parking lot. The staging area would occupy an approximate 6,000 square feet (sq.ft.) area (120 feet wide by 50 feet long) within the parking lot, as shown in Appendix A. The staging area would not occupy more than 10 parking spaces. Staging activities would include equipment fueling, maintenance and overnight storage. Construction best

management practices (BMPs) would be implemented onsite to minimize potential water quality impacts.

Imported clean rock would be temporarily stockpiled on the beach on the northern portion of South Cardiff State Beach. The stockpile would allow efficient and continuous construction by the contractor and would be no greater than 10 feet in height. The stockpile area would occupy no greater than 2,500 sq.ft. (50 feet wide x 50 feet long) of beach, as shown in Appendix A.

The street-side, HWY 101 parking along the northern reach of the beach will be temporarily impacted during construction. It is anticipated that a maximum of 28 street-side parking spaces will be impacted by the 500 foot long construction closure. This assumes parking in parallel along the roadway. The existing north-south pedestrian beach access will be retained along Cardiff State Beach during construction. Beach access along the beach will be on the seaward side of the construction site. Safety personnel will be present on the beach during all construction activities to safely direct the public around the construction area.

A Coastal Permit would be required and BMPs shall be implemented during construction and revegetation of the site. The project would be maintained by the San Elijo Lagoon Conservancy, City of Encinitas, and San Diego State Parks personnel. Habitat maintenance would be provided by the San Elijo Lagoon Conservancy.

2.7 VISITATION TO CARDIFF STATE BEACH

Attendance in fiscal year 2013/2014 was estimated at two million. Attendance consists of paid day use and free day use.

2.8 CONSISTENCY WITH LOCAL PLANS AND POLICIES

The Cardiff State Beach General Plan was approved by the State Parks in November 1983. Cardiff State Beach was classified as a state beach by the State Park and Recreation Commission in May 1969. Primary uses of the beach include sunbathing, swimming and surfing. The project is located within Area 2 of the unit, which is described as generally unimproved with a small, informal boat launch and scattered lifeguard stands. The boat launch is said to lack adequate trailer parking and space to safely maneuver a boat trailer from the highway. The project would not prohibit primary uses and would not preclude future uses of the small boat launch.

2.9 DISCRETIONARY APPROVALS

The project will be required to obtain a Coastal Permit from the California Coastal Commission, a Major Use Permit from the City of Encinitas, and a right-of-entry permit from the DPR. Permits may be required from the U.S. Army Corps of Engineers (USACE), State Lands Commission and Regional Water Quality Control Board contingent on beach conditions at the project site at the time of permit processing. A

Further coordination with these agencies will be conducted to determine specific permit needs. Any other resource agency permits required for the construction of the project shall be coordinated with the jurisdictional agencies before a project enters its construction phase. A 1602 Streambed Alteration Permit was determined to not be required for the project.

2.10 RELATED PROJECTS

The Project is related to the following projects:

- Seaside Terrace Restoration Project – The Seaside Terrace Restoration project is located immediately south of the project and proposes to restore one-acre of habitat for coastal dune plants and coastal sage scrub. Thus, the project has similar goals to the proposed project. Implementation of the Seaside Terrace project is planned in 2016.

- San Elijo Lagoon Restoration Project (SELRP) – The SELRP proposes to restore tidal flow and habitats in the San Elijo Lagoon. Approximately one million cy of sediment is proposed to be dredged from the lagoon to achieve these project goals. Export sand from the lagoon project is proposed to construct and maintain the proposed project. The SELRP is planned for construction in the winter of 2017.

CHAPTER 3
ENVIRONMENTAL CHECKLIST

PROJECT INFORMATION

1.	Project Title:	Cardiff State Beach Living Shoreline Project
2.	Lead Agency Name & Address:	California Department of Parks and Recreation
3.	Contact Person & Phone Number:	Darren Smith, (619) 952-3895
4.	Project Location:	Cardiff State Beach
5.	Project Sponsor Name & Address:	City of Encinitas 505 South Vulcan Avenue Encinitas, California 92024
6.	General Plan Designation:	Cardiff State Beach
7.	Zoning:	State Park
8.	Description of Project:	Refer to Chapter 2
9.	Surrounding Land Uses & Setting:	Refer to Chapter 3 of this document (Section IX, Land Use and Planning)
10.	Approval Required from Other Public Agencies	Refer to Chapter 2, Section 2.9

1. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact", as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agricultural Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology/Soils
☐ Hazards & Hazardous Materials	☐ Hydrology/Water Quality	☐ Land Use/Planning
☐ Mineral Resources	☐ Noise	☐ Population/Housing
☐ Public Services	☐ Recreation	☐ Transportation/Traffic
☐ Utilities/Service Systems	☐ Mandatory Findings of Significance	☐ None

DETERMINATION

On the basis of this initial evaluation:

I find that the proposed project **COULD NOT** have a significant effect on the environment and a **NEGATIVE DECLARATION** will be prepared. ☐

I find that, although the original scope of the proposed project **COULD** have had a significant effect on the environment, there **WILL NOT** be a significant effect because revisions/mitigations to the project have been made by or agreed to by the applicant. A **MITIGATED NEGATIVE DECLARATION** will be prepared. ☒

I find that the proposed project **MAY** have a significant effect on the environment and an **ENVIRONMENTAL IMPACT REPORT** or its functional equivalent will be prepared. ☐

I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated impact" on the environment. However, at least one impact has been adequately analyzed in an earlier document, pursuant to applicable legal standards, and has been addressed by mitigation measures based on the earlier analysis, as described in the report's attachments. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the impacts not sufficiently addressed in previous documents. ☐

I find that, although the proposed project could have had a significant effect on the environment, because all potentially significant effects have been adequately analyzed in an earlier EIR or Negative Declaration, pursuant to applicable standards, and have been avoided or mitigated, pursuant to an earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, all impacts have been avoided or mitigated to a less-than-significant level and no further action is required. ☐

Darren Smith

_____ _____
Date

District Service Manager

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers, except "No Impact", that are adequately supported by the information sources cited. A "No Impact" answer is adequately supported if the referenced information sources show that the impact does not apply to the project being evaluated (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on general or project-specific factors (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must consider the whole of the project-related effects, both direct and indirect, including off-site, cumulative, construction, and operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, the checklist answers must indicate whether that impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate when there is sufficient evidence that a substantial or potentially substantial adverse change may occur in any of the physical conditions within the area affected by the project that cannot be mitigated below a level of significance. If there are one or more "Potentially Significant Impact" entries, an Environmental Impact Report (EIR) is required.

4. A "Mitigated Negative Declaration" (Negative Declaration: Less Than Significant with Mitigation Incorporated) applies where the incorporation of mitigation measures, prior to declaration of project approval, has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact with Mitigation." The lead agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level.

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR (including a General Plan) or Negative Declaration [CCR, Guidelines for the Implementation of CEQA, § 15063(c)(3)(D)]. References to an earlier analysis should:

   a) Identify the earlier analysis and state where it is available for review.

   b) Indicate which effects from the environmental checklist were adequately analyzed in the earlier document, pursuant to applicable legal standards, and whether these effects were adequately addressed by mitigation measures included in that analysis.

   c) Describe the mitigation measures in this document that were incorporated or refined from the earlier document and indicate to what extent they address site-specific conditions for this project.

6. Lead agencies are encouraged to incorporate references to information sources for potential impacts into the checklist or appendix (e.g., general plans, zoning ordinances, biological assessments). Reference to a previously prepared or outside document should include an indication of the page or pages where the statement is substantiated.

7. A source list should be appended to this document. Sources used or individuals contacted should be listed in the source list and cited in the discussion.

8. Explanation(s) of each issue should identify:
   a) the criteria or threshold, if any, used to evaluate the significance of the impact addressed by each question **and**
   b) the mitigation measures, if any, prescribed to reduce the impact below the level of significance.

ENVIRONMENTAL ISSUES

I. AESTHETICS.

ENVIRONMENTAL SETTING

Aesthetic resources at Cardiff State Beach include views of the beach and Pacific Ocean. Existing riprap along the back beach detracts from the visual character of the reach.

WOULD THE PROJECT:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

DISCUSSION

a) Scenic vistas at Cardiff State Beach shall not be adversely affected, but returned to a more natural state by burying the existing riprap and restoring native coastal dune habitat.

b) HWY 101 is recognized as a highway of scenic significance within the City. The dune crest height was optimized to be no greater than 2 feet above the crown elevation of the highway in most areas to avoid visual impacts from motorists on the highway. In the northern portion of the project site (in the area where street-side parking exists), the dune crest would be no greater than 4 feet above the elevation of the crown of the highway. Scenic resources along this reach are not considered significant as views in this area are typically obstructed by parked cars. Thus, scenic resources will not be impacted by the proposed dune system.

c) The visual character of Cardiff State Beach shall not be degraded, but rather improved by restoring the native coastal dune habitat that once existed along this reach. The existing riprap and cobble that exists along the back beach would be buried by imported sand and planted with a native plant palette.

d) The project would not create a new source of light or glare.

II. AGRICULTURAL RESOURCES.

ENVIRONMENTAL SETTING

The project would not convert farmland to nonagricultural use, nor would this project conflict with the existing agricultural zoning, as there is no farmland in the project area.

WOULD THE PROJECT*:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☐	☒
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?	☐	☐	☐	☒

* In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997), prepared by the California Department of Conservation as an optional model for use in assessing impacts on agricultural and farmland.

DISCUSSION

a) No farmlands exists within Cardiff State Beach and, therefore, no farmland will be converted to a non-agricultural use.

b) Cardiff State Beach is not zoned for agricultural use

c) Farmland is not located at Cardiff State Beach or adjacent to it. There is no portion of the proposed project that will impact any farmland.

III. AIR QUALITY.

ENVIRONMENTAL SETTING

The project is within the San Diego Air Basin, which encompasses all of San Diego County. The air basin is currently designated as nonattainment for both the 24-hour and the annual State particulate matter (PM)10 standards. The air basin is also designated as nonattainment for the State annual PM2.5 standard. PM10 is primarily due to activities that re-suspend dust, such as emissions from paved and unpaved roads and construction. PM2.5 is primarily a byproduct of combustion; therefore, is from sources such as vehicles, residential wood combustion, agricultural and prescribed burning, and stationary combustion sources.

Standard construction protocols for dust control during grading shall be implemented. These protocols shall be included within a Stormwater Pollution Prevention Plan (SWPPP) for the project prior to construction. The State's Representative and/or State Environmental Scientist Construction Manager will periodically inspect the work area to ensure that construction-related activities do not generate excessive amounts of dust or cause other in-air disturbances (e.g. noise).

WOULD THE PROJECT*:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Conflict with or obstruct implementation of the applicable air quality plan or regulation?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations (e.g., children, the elderly, individuals with compromised respiratory or immune systems)?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒

* Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied on to make these determinations.

DISCUSSION

a) Construction of the project would not obstruct the implementation of the San Diego Regional Air Quality Strategy (RAQS) or the San Diego portion of the California State Implementation Plan (SIP).

b) The project would not violate any air quality standards maintained by the San Diego County Air Pollution Control District. Construction will result in the short-term increase in PM2.5 emissions. Standard construction protocols for will be implemented during construction.

c) There shall be no cumulatively considerable net increase of any criteria pollutant for which the San Diego Air Basin is in non-attainment.

d) Construction of the project will not expose visitors to substantial pollutant concentrations.

e) The project will not create objectionable odors.

IV. BIOLOGICAL RESOURCES.

ENVIRONMENTAL SETTING

Habitat

The project site is primarily beach that is part of the coastal strand on the west side of San Elijo Lagoon. The substrate in the project area consists of sand, cobble, rip-rap, compacted soil, and remnant pavement. Due to public activity, high salinity, and periodic storm surges, vegetation is absent or composed of sparse non-native sea rocket (*Cakile maritima*) and ocean derived organic material. South of the project site (Seaside Terrace) there is about one acre of higher ground that doesn't receive wave action and supports poorly developed coastal dune and southern foredune habitat.

Southern foredunes are coastal d-ependent ecosystems that occur within a short distance from the shoreline and often integrate with upper beaches. Southern foredune habitat is used by the western snowy plover and the California least tern as foraging, loafing, and nesting habitat. It is also important for certain plant species, some of which are considered to be rare and endangered. Currently, minimal southern foredune habitat still remains in an undisturbed state in California.

Active coastal dunes are dynamic systems affected by wind and waves: waves deposit sand on the beach and wind transports it inland. Sand collects behind various objects on the beach, forming incipient dunes. Left undisturbed, sand continues to collect, eventually forming foredunes. Over time and with adequate space and sand supply, winds further develop foredunes into a larger, more complex system of dune ridges, swales, and deflation plains. Active dunes along the immediate coastline are not necessarily stabilized and only sparsely vegetated (Pickart and Sawyer 1998).

Listed/Sensitive Species

The California Natural Diversity Database and California Native Plant Society's Inventory contained records on 57 special status species that could potentially occur near the project site (Appendix C, Table 1). Based on initial review, 53 of the plants/wildlife were unlikely to be found as appropriate habitat types or conditions were not present in the project boundaries. With respect to other resources, no proposed or designated critical habitat for federally listed species exists on the Cardiff coastal strand.

No sensitive plant species were observed at the site during a rare plant survey conducted in 2015 (Kentner 2015). Immediately south of the site (at Seaside Terrace site), two rare annual plants, *Nemacaulis denudata var. denudata* and *Acmispon prostratus*, occur in small numbers. These plants are both identified as California Rare Plant Rank 1B by the California Native Plant Society.

No special-status wildlife species have been documented within the project site, although the endangered California least tern (*Sternula (Sterna) antillarum browni*) and threatened western snowy plover (*Charadrius alexandrinus nivosus*) have been observed in the vicinity of the project and could use the project area for loafing. The Project site is unsuitable for western

snowy plover nesting habitat. One western snowy plover nest was observed on higher ground immediately south of the site (at Seaside Terrace site) in 2015, the first in at least 15 years.

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
WOULD THE PROJECT:				
a) Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a sensitive, candidate, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands, as defined by §404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

DISCUSSION

a) Federally listed species that could be present within the project area (foraging or loafing) include the endangered California least tern (*Sternula (Sterna) antillarum browni*) and the threatened western snowy plover (*Charadrius alexandrinus nivosus*). Nesting by these federally listed species has not been documented within the project area. Designated critical habitat for these species is not located within the project area. However, the site could potentially support future nesting of special status species. Therefore, areas within and adjacent to the project footprint shall be surveyed for special status species prior to construction. Implementation of mitigation measure BIO-1 would reduce potential impacts to below a level of significance.

The project will ecologically enhance the project area by removing non-native invasive plants, and by amending the existing substrate with sand, adding seeds and plants of locally collected native dune and coastal sage scrub plant species. Pre- and post-construction monitoring will be conducted to evaluate the effectiveness of restoration techniques. These actions may increase the distribution and abundance of rare plant species, potentially making the area more attractive for roosting birds, including the California least tern, western snowy plover, and other migratory birds. A 1602 Streambed Alteration Permit was determined to not be required for the project.

b) With respect to other resources, no proposed or designated critical habitat for federally listed species exists on the Cardiff coastal strand. No sensitive plant species were observed at the site during a rare plant survey conducted in 2015 (Kentner 2015). Immediately south of the site (at Seaside Terrace site), two rare annual plants, *Nemacaulis denudata var. denudata* and *Acmispon prostratus*, occur in small numbers. These plants are both identified as California Rare Plant Rank 1B by the California Native Plant Society.

c) The project is proposed above the high tide line[1] on the beach. Therefore, the project is likely outside the jurisdiction of the USACE and will not require a USACE Permit prior to construction. No federally protected wetlands exist on the project site.

d) The project will not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or nurseries. The breeding restrictions for the western snowy plover, least tern and grunion will be avoided for construction. This would avoid any adverse impacts to these species.

e) The project complies with all known local policies and ordinances. The project site is located within the coastal zone as designated in the City of Encinitas General Plan (1995). Public beaches are designated as Ecological Resource/Open Space/Parks in the City's General Plan (1995). The Encinitas General Plan identifies issues and opportunities relative to planning decisions within the City. In compliance with the California Coastal Act of 1976, the City of Encinitas includes a Local Coastal Plan (LCP) and Land Use Plan (LUP) in its General Plan. The LUP identifies policies and provisions that serve to apply the Coastal Act. The project is also subject to guidelines set forth in the San Diego Coastal State Park System General Plan.

f) The project is not in conflict with any adopted Habitat or Conservation Plan.

MITIGATION MEASURE BIO-1
▪ Prior to substrate deposition or manipulation, areas within and adjacent to the project footprint shall be surveyed for special status species by a biologist. Any such species found on-site shall be avoided to the maximum extent practical through project redesign, timing/seasonal restrictions, delineated buffers, or other

[1] The high tide line is the line of intersection of the land with the water's surface at the maximum height reached by a rising tide.

measures deemed necessary by the SELC or CSP staff.

- To avoid adverse impacts to any sensitive species (i.e., least tern, western snowy plover or grunion), construction activities will occur between September 15th and February 28th of any given year.

- The project footprint shall be kept clear of trash to avoid attracting scavengers/ predators of the western snowy plover. All food and garbage shall be placed in sealed containers and regularly transported from the site. Following construction, any trash, debris, or rubbish remaining within the work limits shall be collected and hauled off to an appropriate location/facility.

V. CULTURAL RESOURCES.

ENVIRONMENTAL SETTING

A previous beach nourishment project at Cardiff State Beach (i.e., Regional Beach Sand Project II) identified 11 cultural resources within about a 0.5-mile radius (AECOM et al. 2011). None of these resources are located within or immediately adjacent to the proposed project footprint. Seven of these sites are prehistoric, three are historic, and one has both prehistoric and historic elements. The prehistoric sites include a shell midden with associated artifacts, two campsites, a shell midden, a habitation site, an artifact and shell scatter, and cobble hearths.

The historic sites include a small trash dump, a kelp factory dating to 1915, and a railroad alignment. One site contains both a small historic trash dump and remnant prehistoric shell midden and associated La Jollan flexed human burial.

The project will not impact any known historic or archaeological resources. Construction activities that could adversely impact unknown historical and archaeological resources, or disturb human remains, include any ground disturbance into native material (deeper than about 3 feet in depth). These activities include riprap rework and trenching. Sand placement is unlikely to adversely affect these resources.

Dredged lagoon sand to be reused on the site as part of the SELRP will be cleared of cultural deposits prior to redeposition on Cardiff State Beach.

WOULD THE PROJECT:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Cause a substantial adverse change in the significance of a historical resource, as defined in §15064.5?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource, pursuant to §15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

DISCUSSION

a) No known historical resources are located within the project area; however, archaeological sites have been identified near the site (AECOM et al. 2011). Therefore, avoidance and mitigation measures are proposed to avoid adverse impacts on historic resources that could be found during trenching. Implementation of these measures will reduce potential impacts to historical resources to below a level of significance.

b) No known archaeological resources are located within the project area (CDPR 1983). However, cultural resources have been identified near the site (AECOM et al. 2011). Therefore, archeological monitoring will be implemented in proposed areas of trenching with the potential for unknown cultural resources. This effort will help minimize adverse impacts on archaeological resources that could be found during trenching work. In the event that cultural resources are discovered, work would be temporally halted and protective measures would be put in place until the resource can be evaluated. The cultural resources principal investigator will coordinate with DPR archaeologist to initiate a plan for evaluation or avoidance through redesign. Resource evaluation may require archaeological testing, including artifact analysis, curation of artifact collection and preparation of a final technical report documenting the resource and addressing regional research issues. Implementation of these avoidance/mitigation measures will reduce potential impacts to archeological resources to below a level of significance.

c) The proposed project will not disturb any human remains, including those interred outside of formal cemeteries. In the event that human remains are observed, the project will be halted until the discovery can be evaluated and the appropriate course of action is determined.

AVOIDANCE AND MITIGATION MEASURES CULT-1

- In areas where existing ground disturbance (trenching associated with the riprap reconfiguration) is proposed, the DPR Archaeologist will be consulted such that archaeological and Native American monitors can be scheduled as necessary.

- The discovery of any archaeological or historical objects or features (including bone) will be reported to the Cultural Resources specialist immediately and work will cease in that location until the potential resource can be evaluated. Whenever possible resources will be protected and avoided through redesign in consultation with District Archaeologist. If archaeological deposits and features are encountered during the project, resources shall be protected from construction impacts until a data recovery program can be implemented.

- Contractor educational efforts will be completed prior to construction to alert workers to potential sensitive cultural resources and impact minimization measures to be implemented during construction.

- In the event that human remains are observed, there shall be no further excavation or disturbance of the site or any nearby area suspected to overlie adjacent human remains until the San Diego County Medical Examiner has evaluated the remains. If the Medical Examiner determines the remains to be Native American, the Medical Examiner will contact the Native American Heritage Commission within 24 hours. The Native American Heritage Commission shall identify the person or persons to be the Most Likely Descendent (MLD). The landowner (DPR) or DPR representative and the MLD will determine the appropriate course of action.

VI. GEOLOGY AND SOILS.

ENVIRONMENTAL SETTING

The project area consists of a low-lying, cobble and sand barrier spit fronting the San Elijo Lagoon. The beach is backed by a natural cobble berm and riprap. The beach has been nourished twice recently (2001 and 2012). These nourishment projects, in combination with a relatively benign wave climate, have resulted in a generally wide, sandy beach at this location. The average beach width at the time of this report is approximately 100 feet, from the back beach to the mean high water line. The back beach (at the toe of the existing riprap) is at an average elevation of 12 feet North American Vertical Datum of 1988 (NAVD88).

Cardiff State Beach displays relatively low seismic activity compared to the regionally high seismic levels in Southern California. The highest seismic risks originate from nearby zones such as the Elsinore Fault zone, the Rose Canyon Fault zone and other offshore faults. Each zone has the potential to cause moderate to large earthquakes that would cause ground shaking. No major earthquakes are known to have originated at Cardiff State Beach and the beach is not located in an Alquist-Priolo special study zone.

WOULD THE PROJECT:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area, or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☒
c) Be located on a geologic unit or soil that is unstable, or that would become unstable, as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1997), creating substantial risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste disposal systems,	☐	☐	☐	☒

	where sewers are not available for the disposal of waste water?				
f)	Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?	☐	☐	☐	☒

DISCUSSION

a) The project does not include any structures and no such substantial adverse effects are anticipated. The City of Encinitas is not listed as a city affected by Alquist-Priolo Earthquake Fault Zones. The project would not expose people or buildings to substantial adverse effects relative to strong seismic ground shaking, ground failure including liquefaction, or landslides beyond that which presently exists.

b) The project will not result in erosion and topsoil loss beyond that which presently occurs. The project site is a sand and cobble beach with no soil cover. Beaches are dynamic environments and erosion is a naturally occurring process.

c) The project site is not located on a geologic unit or soil that is unstable and the project would not create an unstable soil condition.

d) The project site is a sand and cobble beach with no soil cover. Expansive soils are not documented to exist at the beach site, nor would they be created by the project. Therefore, the project would not create risk to human life or property due to expansive soils.

e) Not applicable; septic systems are not proposed by the project.

f) There are no known paleontological resources, sites, or unique geologic features that would be damaged or destroyed by the project. Construction activities involve rock and beach fill placement and minor grading, it is unlikely that any unknown resources, sites, or features exist and construction activities would not damage or destroy such areas.

VII. HAZARDS AND HAZARDOUS MATERIALS.

ENVIRONMENTAL SETTING

No known hazards or hazardous materials are located on Cardiff State Beach (AECOM 2011). Construction of the proposed project would not result in the creation of a significant hazard or result in hazardous emissions.

WOULD THE PROJECT:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials, substances, or waste into the environment?	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites, compiled pursuant to Government Code §65962.5, and, as a result, create a significant hazard to the public or environment?	☐	☐	☐	☒
e) Be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport? If so, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) Be located in the vicinity of a private airstrip? If so, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h) Expose people or structures to a significant risk of loss, injury, or death from wildland fires, including areas where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

DISCUSSION

a) No hazardous substances would be transported to or from the project site. Source sand and rock material that is found to be contaminated, through standard testing practices compliant with applicable federal, state and local regulations, would not be used for riprap

reconfiguration or dune and beach nourishment. Therefore, the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

b) The only type of hazardous materials associated with the project would be the use of conventional types of fuels to power construction equipment and trucks. The potential for leaks during construction exists and will be mitigated through preparation of a Spill Prevention, Containment and Countermeasures Plan (SPCCP).

c) Cardiff Elementary School is located about one mile away from the northern end of the project site at 1888 Montgomery Avenue. While there are no schools located within one-quarter of a mile of the project site, haul routes for equipment and material could use roads that pass closer to the school. The proposed project, including transport trucks, would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste, except for conventional types of fuels. Therefore, the project would have no potential effect on any nearby school related to hazardous material exposure.

d) The proposed project is not located on a hazardous materials site; therefore, would not create a significant hazard to the public or the environment.

e) The project is not located near an airport.

f) The project is not located near a private airstrip.

g) Material transport as part of the proposed project would follow designated haul routes capable of conveying the traffic, while maintaining access for emergency response and evacuation. Construction may result in a temporary lane closure (southbound HWY 101) though adequate access would be provided for emergency response. Therefore, the proposed project would not interfere with an emergency response plan or emergency evacuation plan.

h) The proposed receiving beach sites are not located in wildland fire areas.

MITIGATION MEASURE HAZMAT 1
▪ A Spill Prevention, Containment and Countermeasures Plan (SPCCP) will be prepared by the construction contractor. That plan specifies fueling procedures, equipment maintenance procedures, and containment and cleaning measures to be followed in the event of a spill. If not deemed necessary (due to not requiring fuel storage on-site, similar procedures are specified in the required Stormwater Management Plan (SWMP) or SWPPP.

VIII. HYDROLOGY AND WATER QUALITY.

ENVIRONMENTAL SETTING

Cardiff State Beach has two distinct hydrologic areas with the Pacific Ocean on the west side of the beach and San Elijo Lagoon to the east. The beach consists of a low-lying, cobble and sand barrier spit which separates the San Elijo Lagoon from the Pacific Ocean. The San Elijo Lagoon is connected to the Pacific Ocean by an inlet north of Cardiff State Beach, this inlet is dredged annually to facilitate tidal exchange within the lagoon.

The project area is under the jurisdiction of the San Diego Regional Water Quality Control Board. The board establishes a Total Maximum Daily Load (TMDL) for impaired water bodies in which pollutant sources exceed established concentration levels and are included on a 303(d) list of impaired surface waters. The Pacific Ocean shoreline at Cardiff State Beach is 303(d) listed for total coliform, fecal coliform and enterococcus (SDRWCB 2010).

WOULD THE PROJECT:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, in a manner which would result in substantial on- or off-site erosion or siltation?	☐	☐	☐	☒
d) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in on- or off-site flooding?	☐	☐	☐	☒
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	☒
f) Substantially degrade water quality?	☐	☐	☒	☐
g) Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map, or other flood hazard delineation map?	☐	☐	☐	☒

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
h) Place structures that would impede or redirect flood flows within a 100-year flood hazard area?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury, or death from flooding, including flooding resulting from the failure of a levee or dam?	☐	☐	☐	☒
j) Result in inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

DISCUSSION

a) The proposed project is outside of the range of extreme tides on the beach and should have no impact on water quality, thus will not violate water quality standards. The project will not discharge waste. Sand to be placed to form dune hummocks will be beach compatible, as determined by the U.S. Environmental Protection Agency and U.S. Army Corps of Engineers. During construction, best management practices BMPs outlined in the stormwater pollution prevention plan (SWPPP) will be followed to minimize any water quality impacts that could result during construction. Thus, impacts to water quality would be less than significant.

b) The project does not propose the use of groundwater nor does it introduce new impervious areas or features that would interfere with groundwater recharge.

c) The project does not alter existing drainage patterns of the site or area that would result in erosion or siltation. Drainage along HWY 101 would remain the same as pre-project conditions and additional erosion protection may be provided by the project. The project would not alter the course of a stream or river.

d) The project does not alter the existing drainage pattern of the site or area and does not alter the course of a stream or river. Thus, will not increase the amount of surface runoff and will not result in increased on site or off site flooding and will not require a 1602 Streambed Alteration Permit. The project raises the back beach profile and may provide additional flood protection for HWY 101 and the San Elijo Lagoon.

e) The project does not create any new impervious areas and would not result in increased volumes of storm water runoff or introduce additional polluted runoff from the site. The project uses compatible beach fill materials and any runoff from the project would be similar to existing and naturally occurring conditions. Runoff from construction activities would be managed through the use of BMPs outlined in the SWPPP.

f) The project is outside of the tidal zone and should have no impact on water quality. During construction BMPs, as outlined in the SWPPP, will be followed to minimize any water quality impacts that could result from runoff to less than significant levels.

g) The project does not entail the construction of housing.

h) The project entails the construction of a sand dune and reconfiguring riprap to protect HWY 101 from undermining and flooding during 100-year coastal storms. These features will protect the highway by impeding water from being conveyed onto the highway. Proposed project impacts to 100-year coastal floods are considered beneficial in that they would not result in roadway closures as a result of undermining or flooding.

i) The proposed project would offer added protection to people and the highway from flooding. Therefore, the project would not expose people or structures to a significant risk of loss, injury, or death from flooding.

j) Implementation of the project would not result in the increased exposure of people or property to seiche, tsunami, or mudflow. The project area is currently vulnerable to tsunamis and the project would not significantly improve this existing condition. The project area is not subject to seiches or mudflows.

IX. LAND USE AND PLANNING.

ENVIRONMENTAL SETTING

The project site is located in Cardiff State Beach. The area is classified as a State Beach which allows for balance between recreational activity and natural resource conservation.

WOULD THE PROJECT:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with the applicable land use plan, policy, or regulation of any agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

DISCUSSION

a) The proposed project is located along the Pacific Ocean shoreline, thus, would not divide established communities.

b) Cardiff State Beach is designated as a public beach and the project is consistent with this designation. No change of land use on the subject property or on adjoining properties is anticipated as a result of the proposed project.

c) Under the California Marine Life Protection Act (MLPA) passed in 1999, California began to establish a statewide network of MPAs through a collaborative effort that includes the California Department of Fish and Wildlife and California State Parks. In the waters adjacent to Cardiff State Beach, there are two MPAs, San Elijo Lagoon State Marine Conservation Area (SMCA) No-Take and Swami's State Marine Conservation Area (SMCA). Swami's SMCA is immediately adjacent to Cardiff State Beach. This conservation area does allow some take, including fishing/harvest of some marine species. The proposed project does not conflict with the regulations of the MPA.

X. MINERAL RESOURCES.

ENVIRONMENTAL SETTING

Cardiff State Beach is not located within an area with existing or historic energy or mineral extraction land uses, and it is not designated as an important mineral resource by the California Department of Conservation. Mineral resource extraction is not permitted under the Resource Management Direction of State Parks.

WOULD THE PROJECT:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Result in the loss of availability of a known mineral resource that is or would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

DISCUSSION

a - b) The project area has no known mineral resources that would be lost due to the construction and operation of the project. The site is not classified or nominated as a locally important mineral resource recovery site. Therefore, no impacts to mineral resources are anticipated from the proposed project.

XI. NOISE.

ENVIRONMENTAL SETTING

Cardiff State Beach is located between HWY 101 and the Pacific Ocean. Existing sources of noise include ocean wave noise, vehicular traffic on HWY 101, restaurant and human activity, and NCTD railroad noise. Ambient noise levels near at the rear of one of the restaurants is 64 dBA[2] (AECOM 2016). Human activity levels are generally higher during peak summer months and middle of the day. Traffic noise is higher during peak traffic hours and the summer season. Surf and wind noise is higher as storm-generated swells reach the shoreline. Typical noise levels during restaurant use hours for surf and highway noise have been recorded between 64 and around 68 dBA L_{eq}[3] (AECOM 2015).

WOULD THE PROJECT:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Generate or expose people to noise levels in excess of standards established in a local general plan or noise ordinance, or in other applicable local, state, or federal standards?	☐	☐	☒	☐
b) Generate or expose people to excessive groundborne vibrations or groundborne noise levels?	☐	☐	☒	☐
c) Create a substantial permanent increase in ambient noise levels in the vicinity of the project (above levels without the project)?	☐	☐	☐	☒
d) Create a substantial temporary or periodic increase in ambient noise levels in the vicinity of the project, in excess of noise levels existing without the project?	☐	☐	☒	☐
e) Be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport? If so, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) Be in the vicinity of a private airstrip? If so, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

DISCUSSION

[2] Noise levels are measured and expressed in decibels (dB). Noise levels weighted to the A noise scale to filter out frequencies not audible to the human ear are written dBA.
[3] The Leq is the average sound level over the period of the measurement.

a - b) The EPA office of Noise Abatement and Control issued the federal Noise Control Act in 1972, to establish programs and guidelines that protect public health and safety and prevent disruption of various human activities. Oversight has since been transferred to state and local governments and local jurisdictions now have noise plans and regulations in place. Applicable standards for construction noise and construction hours within City of Encinitas limits are 7:00 a.m. to 7:00 p.m. Mondays through Saturdays (Noise Abatement and Control Ordinance No. 9.32.410). Additionally, a construction noise level limit of 75 dB shall not to be exceeded for more than 8 hours between 7:00 a.m. and 7:00 p.m. per 24-hour period. The City may permit operations outside of these limits if not detrimental to health, safety or welfare.

The main sources of noise during construction would be rock and sand transport and placement. Construction noise may temporarily and intermittently exceed 75 dBA, but, maximum hourly noise levels would be expected to be around 65 dBA.

While ambient noise levels range from 60 to 70 dBA, the difference in character compared to ambient surf and traffic noises would be noticeable, but intermittent and temporary. Therefore, the impact would be less than significant.

c) The proposed project would not result in construction of a permanent noise generating facility. By definition, the activity would only occur during the construction period and involve trucks hauling material and conventional construction equipment (e.g., bulldozers, loaders) spreading and placing material. Therefore, the project would not cause a permanent increase in ambient noise levels in the project vicinity above existing levels.

d) The project could result in temporary, periodic increases in noise levels during construction. However, noise levels would be in compliance with the City's Noise Ordinance and construction would take place during normal construction hours. Compliance with these measures would minimize noise impacts to below a level of significance.

e) The project is not located within an airport land use plan or within two miles of an airport.

f) The project is not located within the vicinity of a private airstrip.

XII. POPULATION AND HOUSING

ENVIRONMENTAL SETTING

The project site is located at Cardiff State Beach along a narrow spit in between HWY 101 and the Pacific Ocean. Several restaurants front the beach at the north end of the site. The nearest residential homes are east of HWY 101 to the north and south of the project area.

WOULD THE PROJECT:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

DISCUSSION

a) The proposed project would not induce population growth.

b) The proposed project would not displace housing.

c) The proposed project would not displace people necessitating the construction of replacement housing elsewhere.

XIII. PUBLIC SERVICES.

ENVIRONMENTAL SETTING

State Park Lifeguards and Rangers are the primary provider of visitor safety and law enforcement at Cardiff State Beach. Fire services are handled by the City of Encinitas and County Fire departments. Medical emergencies are handled by the local emergency responders as well as the local fire departments. Search and rescue operations are conducted by a combined effort with State Park Rangers and County Fire and Sheriff's departments.

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
WOULD THE PROJECT:				
a) Result in significant environmental impacts from construction associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:	☐	☐	☐	☒
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

DISCUSSION

a) The project would not result in a significant increase in visitation to the State Park. There is no impact to fire or police protection, in that levels of required fire or police services would not change as a result of the project. The project would not result in any impacts to schools. The project would also not impact parks by affecting park services or require additional park services or park personnel. The project would have no impact on other public facilities.

XIV. RECREATION.

ENVIRONMENTAL SETTING

Cardiff State Beach is located adjacent to HWY 101. In its entirety, Cardiff State Beach stretches from Cardiff Reef south to Seaside Reef, encompassing approximately 25 acres, along 6,550 feet of ocean frontage. The facility includes two parking lots (one at the north end and one at the south end of the beach), restrooms, and an emergency vehicle access ramp.

Beaches within the project area are used for recreation and surfing; however, are not as heavily used as adjacent beaches due to access, parking and surf quality. More popular recreational and surfing beaches located to the north and the south of the project and include Cardiff Reef to the north and Seaside Reef/Tabletops to the south. A surf spot called George's is located along the project area, which is a beach break of variable quality. Quality is contingent on sandbar form and incident wave conditions. Generally, waves approaching from multiple directions or shorter periods are better at this location due to the typically straight sandbars and beach.

The beaches within the project area are variable in width contingent on seasonal shifts and sand management actions (i.e. beach nourishment projects and annual lagoon bypassing actions). The average beach width at the time of this report is 100 feet from the roadway to the mean high tide line. The portion of the beach width within the project area consists of riprap, cobble and sandy beach (from east to west). The project would designate a portion of this beach area (60 feet in width) as a habitat area with restricted access to the public. The total portion of sandy beach impacted by the project varies along the reach, but is about 30 feet on average. These restricted access points would be bisected by six proposed beach access points.

The San Elijo Lagoon Ecological Reserve is adjacent to the site, just east of HWY101. The San Elijo Lagoon Nature Center opened to the public in January 2009. Recreation at the reserve is primarily limited to passive uses such as hiking, jogging, nature photographing, and bird watching.

WOULD THE PROJECT:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☒

DISCUSSION

a) Due the presence of riprap, cobbles and proximity to HWY 101, the majority of the project area does not support a significant amount of sand-oriented recreational activity (towel space, beach sports, etc.). The project footprint is estimated to convert approximately two acres of sandy beach to a dune habitat area that would be restricted to the public. This assumes a maximum of 30 feet of sandy beach would be impacted. Given the existing beach condition a total of 40 feet, or 2.7 acres of dry beach would still exist for recreation along this reach. Additionally, the proposed project is to planned to be constructed at a similar time to the proposed placement of 300,000 cy of beach sand at Cardiff State Beach as a component of the SELRP. This project would benefit the project by providing wider beach widths. Thus, impacts to recreation are considered less than significant.

During construction, areas in the southern parking lot will be used for staging and could occupy an area of up to 6,000 sq.ft. This would impact no more than 10 parking spaces during construction. Adequate parking exists in this lot during normal, non-special event periods. A portion of the street-side parking that runs parallel to a portion of the project area along HWY 101 may also be restricted during construction activities in these areas. No more than 28 street-side parking spots would be impacted during construction. Use of these parking areas during construction will be temporary and will not result in inadequate parking capacity.

Vehicular and pedestrian access to Cardiff State Beach may be disturbed during construction, but will still be available to all areas of the park. Although some visitors may be detracted from the project area due to construction activities, this impact is not anticipated to be significant.

The proposed project would not increase the use of neighborhood or regional parks

b) The proposed project does not require the construction or expansion of recreational facilities. All work elements are proposed to repair and maintain the existing beach along with access to the area.

XV. TRANSPORTATION/TRAFFIC.

ENVIRONMENTAL SETTING

Access to Cardiff State Beach is provided by HWY 101. Caltrans originally constructed HWY 101 in 1912 and later realigned the highway in 1926 to its present day location. HWY 101 and Interstate 5 (I-5) are the only two north to south arterials in this area of San Diego County. HWY 101 is currently owned and maintained by the City and supports approximately 20,000 average daily trips (ADT). The reach of HWY 101 that runs parallel to the project area is a four lane highway with two traffic lanes and a class II bikeway in each direction. No pedestrian improvements exist along the project site, though pedestrians are not precluded from using the roadway shoulder to traverse the site.

WOULD THE PROJECT:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Cause a substantial increase in traffic, in relation to existing traffic and the capacity of the street system (i.e., a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☒	☐	☐
b) Exceed, individually or cumulatively, the level of service standards established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒
c) Cause a change in air traffic patterns, including either an increase in traffic levels or a change in location, that results in substantial safety risks?	☐	☐	☐	☒
d) Contain a design feature (e.g., sharp curves or a dangerous intersection) or incompatible uses (e.g., farm equipment) that would substantially increase hazards?	☐	☐	☒	☐
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Result in inadequate parking capacity?	☐	☐	☒	☐
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☒	☒

DISCUSSION

a) The project would result in a temporary increase in vehicular traffic as a result of rock being hauled to the site by truck. Trucks hauling the rock material would be limited to the designated truck route roadways. Construction may require temporary closures of a southbound lane of HWY 101 during construction hours. Closures are anticipated to be no greater than 500 feet at any one time; however, additional closure lengths will result from lane closure tapers. Lane closure procedures would be addressed in the traffic

control plan. These segments are identified as currently operating at acceptable levels of service and the proposed project would not result in a change to those levels of service. With the implementation of traffic control procedures outlined in Mitigation Measure Transportation/Traffic-1 any disruptions to traffic will be less than significant.

b) SANDAG prepared the Congestion Management Program (CMP) for the San Diego Region. No roadways identified for this project are designated as a CMP arterial. The CMP requires an Enhanced CEQA review for all large projects that are expected to generate more than 2,400 ADT or more than 200 peak hour trips. The anticipated truck trip generations are well below the threshold identified in the CMP. Therefore, a CMP review would not be required.

c) The project would not include changes to air traffic and is not located in an area that would affect or be affected by air traffic. Therefore, it would not result in a change of air-traffic patterns or levels, or a change in location that results in substantial safety risks.

d) Vehicle transport of rock to the project location may increase hazards along haul routes and at the beach site itself during construction due to conflict between pedestrians, cyclists, and trucks. The contractor would implement a traffic control plan to reduce these potential hazards. The potential for wind to blow sand from the created dune features could result in additional maintenance on HWY 101, the implementation of a roadway buffer, sand fencing and rice straw seeding to help establish herbaceous cover will reduce the likelihood of windblown sand to below a level of significance.

e) The project would not block emergency access to the beach or access to nearby uses at the proposed project site. Adequate emergency access and access to surrounding areas would continue to be provided on public streets with the implementation of the project. A traffic control plan would be required for access to and from construction sites.

f) The project would not result in a significant increase in visitation to the beach and additionally does not propose the removal of any parking spaces; therefore, additional parking capacity will not be needed. During construction, areas in the south parking lot will be used for staging areas; the staging area would occupy an approximate 6,000 sq.ft portion of the parking lot. A portion of the street-side parking that runs parallel to the northern portion of the project area may be closed during construction activities in these areas. Use of these parking areas during construction will be temporary and will not result in inadequate parking capacity.

g) Implementation of the project would not conflict with adopted policies supporting alternative transportation. Existing bicycle routes, bus access, and other similar features would remain accessible during the project. Due to construction activities along HWY 101, temporary lane and shoulder closures would require the existing bike lane to be shifted to the west but, remain usable during construction. During construction any detours to pedestrians or bicycle routes would be temporary and in accordance with the traffic control plan. The project would improve pedestrian access along the project site by

constructing a 4-foot wide footpath adjacent to the western edge of HWY 101. The foot path provide a vital north-south linkage.

MITIGATION MEASURES TRANSPORTATION /TRAFFIC-1
▪ State Parks would require the contractor to implement a traffic control plan with a system of signs and flagmen to prevent accidents while construction vehicles access and egress from the project site. The traffic control plan would include plans for traffic lane closure, shoulder closure, bike lane detour and pedestrian detour. The traffic control plan would also consider the additional safety measures at the schools located within the vicinity of the haul routes (e.g., extra control at school crossings) to reduce potential hazards. The traffic control features would reduce impacts to transportation and circulation to below a level of significance.

XVI. UTILITIES AND SERVICE SYSTEMS.

ENVIRONMENTAL SETTING

The project area is not served by electrical, water, wastewater, or solid waste utilities or services. Two existing utilities were located within the project area, a 36-inch concrete sewer outfall line oriented perpendicular to the shoreline that is operated by the San Elijo Joint Powers Authority (JPA) and a 4-inch gas supply line along the west edge of HWY 101 right of way operated by San Diego Gas & Electric.

WOULD THE PROJECT:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Exceed wastewater treatment restrictions or standards of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities?	☐	☐	☐	☒
Would the construction of these facilities cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities?	☐	☐	☐	☒
Would the construction of these facilities cause significant environmental effects?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the project from existing entitlements and resources or are new or expanded entitlements needed?	☐	☐	☐	☒
e) Result in a determination, by the wastewater treatment provider that serves or may serve the project, that it has adequate capacity to service the project's anticipated demand, in addition to the provider's existing commitments?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒
g) Comply with federal, state, and local statutes and regulations as they relate to solid waste?	☐	☐	☐	☒

DISCUSSION

a) No development is proposed; therefore, the project would not result in an increase of wastewater.

b) The project does not entail the construction of new or expanded water or wastewater treatment facilities.

c) The project does not entail the construction of new or expanded storm water drainage facilities.

d) The project does not require a water supply.

e) The project would not be serviced by a wastewater treatment provider.

f) The project would not produce solid waste and would not be served by a landfill.

g) No development is proposed; therefore, the project would not involve the need for solid waste disposal and, therefore, does not alter the compliance with federal, state, and local statues and regulations related to solid waste.

CHAPTER 4
MANDATORY FINDINGS OF SIGNIFICANCE

WOULD THE PROJECT:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal?	☐	☐	☐	☒
b) Have the potential to eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
c) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means the incremental effects of a project are considerable when viewed in connection with the effects of past projects, other current projects, and probably future projects?)	☐	☐	☒	☐
d) Have environmental effects that will cause substantial adverse effects on humans, either directly or indirectly?	☐	☐	☐	☒

DISCUSSION

a) The project proposes to improve the quality of the environment for wildlife species by restoring native plant habitat along the coastal strand. The project site currently consists of scattered riprap, cobble and some sandy beach that is devoid of native habitat. The project would provide a hummock dune profile with native plantings that would provide habitat for sensitive avian species, such as the western snowy plover.

b) The project proposes up to 10-foot cuts along portions of Cardiff State Beach. Though cultural resources are not known to exist in this area, resources have been identified in nearby areas. Qualified cultural resources monitors are proposed to be present during all trenching activities to identify significant examples of California history or prehistory.

c) Sand placement has occurred on Cardiff State Beach in 2001 and 2012 as part of regional beach nourishment projects. The site received approximately 200,000 cy of sand from these projects. Sand was placed on subaerial and inter-tidal portions of the beach during these projects with the goal to widen the existing beach. Up to 300,000 cy of beach nourishment is proposed at Cardiff State Beach as part of the SELRP. Sand is proposed to be placed along inter-tidal portions of the beach and will ultimately widen the beach in this location. Potential impacts associated with this beach nourishment were evaluated in the

EIR/EIS for that project and were found to be less than significant with incorporation of mitigation measures. The proposed project consists of placement of up to 25,000 cy of sand on only the subaerial (i.e. dry) portion of the beach such that potential impacts to nearshore resources from turbidity or burial are not anticipated. Thus, cumulative impacts from the proposed project are less than significant.

d) The project would not result in any direct or indirect environmental impacts to humans.

CHAPTER 5
SUMMARY OF MITIGATION MEASURES

The following mitigation measures ~~would~~ shall be implemented by DPR as part of the proposed project.

BIOLOGICAL RESOURCES

MITIGATION MEASURES BIO-1

- Prior to substrate deposition or manipulation, areas within and adjacent to the project footprint shall be surveyed for special status species. Any such species found on-site shall be avoided to the maximum extent practical through project redesign, timing/seasonal restrictions, delineated buffers, or other measures deemed necessary by the SELC or CSP staff.

- To avoid adverse impacts to any sensitive species (i.e. least tern, western snowy plover or grunion), construction activities ~~will~~ shall occur between September 15th and February 28th of any given year.

- The project footprint shall be kept clear of trash to avoid attracting scavengers/predators of the western snowy plover. All food and garbage shall be placed in sealed containers and regularly transported from the site. Following construction, any trash, debris, or rubbish remaining within the work limits shall be collected and hauled off to an appropriate location/facility.

CULTURAL RESOURCES

AVOIDANCE AND MITIGATION MEASURES CULT-1

- In areas where existing ground disturbance (trenching associated with the riprap reconfiguration) is proposed, DPR Archaeologist shall~~will~~ be consulted such that archaeological and Native American monitors can be scheduled as necessary.

- The discovery of any archaeological or historical objects or features (including bone) ~~will~~ shall be reported to the Cultural Resources specialist immediately and work ~~will~~ shall cease in that location until the potential resource can be evaluated. Whenever possible resources ~~will~~ shall be protected and avoided through redesign in consultation with District Archaeologist. If archaeological deposits and features are encountered during the project, resources shall be protected from construction impacts until a data recovery program can be implemented.

- Contractor educational efforts ~~will~~ shall be completed prior to construction to alert workers to potential sensitive cultural resources and impact minimization measures to be implemented during construction.

- In the event that human remains are observed, there shall be no further excavation or disturbance of the site or any nearby area suspected to overlie adjacent human remains until the San Diego County Medical Examiner has evaluated the remains. If the Medical

Examiner determines the remains to be Native American, the Medical Examiner ~~will~~ shall contact the Native American Heritage Commission within 24 hours. The Native American Heritage Commission shall identify the person or persons to be the Most Likely Descendent (MLD). The landowner (DPR) or DPR representative and the MLD will determine the appropriate course of action.

HAZARDS AND HAZARDOUS MATERIALS

MITIGATION MEASURES HAZMAT-1

- The contractor ~~will~~ shall implement an applicable plan to avoid contamination from fuel or other potential hazards. A Spill Prevention, Containment and Countermeasures Plan (SPCCP) may be necessary. That plan specifies fueling procedures, equipment maintenance procedures, and containment and cleaning measures to be followed in the event of a spill~~)~~. If not deemed necessary (due to not requiring fuel storage on-site, similar procedures are specified in the required Stormwater Management Plan (SWMP) or SWPPP, mentioned previously in Section III.

TRANSPORTATION/TRAFFIC

MITIGATION MEASURES TRANS-1

- The City ~~would~~ shall require the C~~c~~ontractor to implement a traffic control plan with a system of signs and flagmen to prevent accidents while construction vehicles access and egress from the project site. The traffic control plan ~~would~~ shall include plans for traffic lane closure, shoulder closure, bike lane detour and pedestrian detour. The traffic control plan ~~would~~ shall also consider the additional safety measures at the schools located within the vicinity of the haul routes (e.g., extra control at school crossings) to reduce potential hazards. The traffic control features ~~would~~ shall reduce impacts to transportation and circulation to below a level of significance.

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Report Preparation

MOFFAT & NICHOL ON BEHALF OF CALIFORNIA DEPARTMENT OF PARKS AND RECREATION, SAN ELIJO LAGOON CONSERVANCY AND CALIFORNIA COASTAL CONSERVANCY.

APPENDIX A
MAPS, TABLES, AND CHARTS

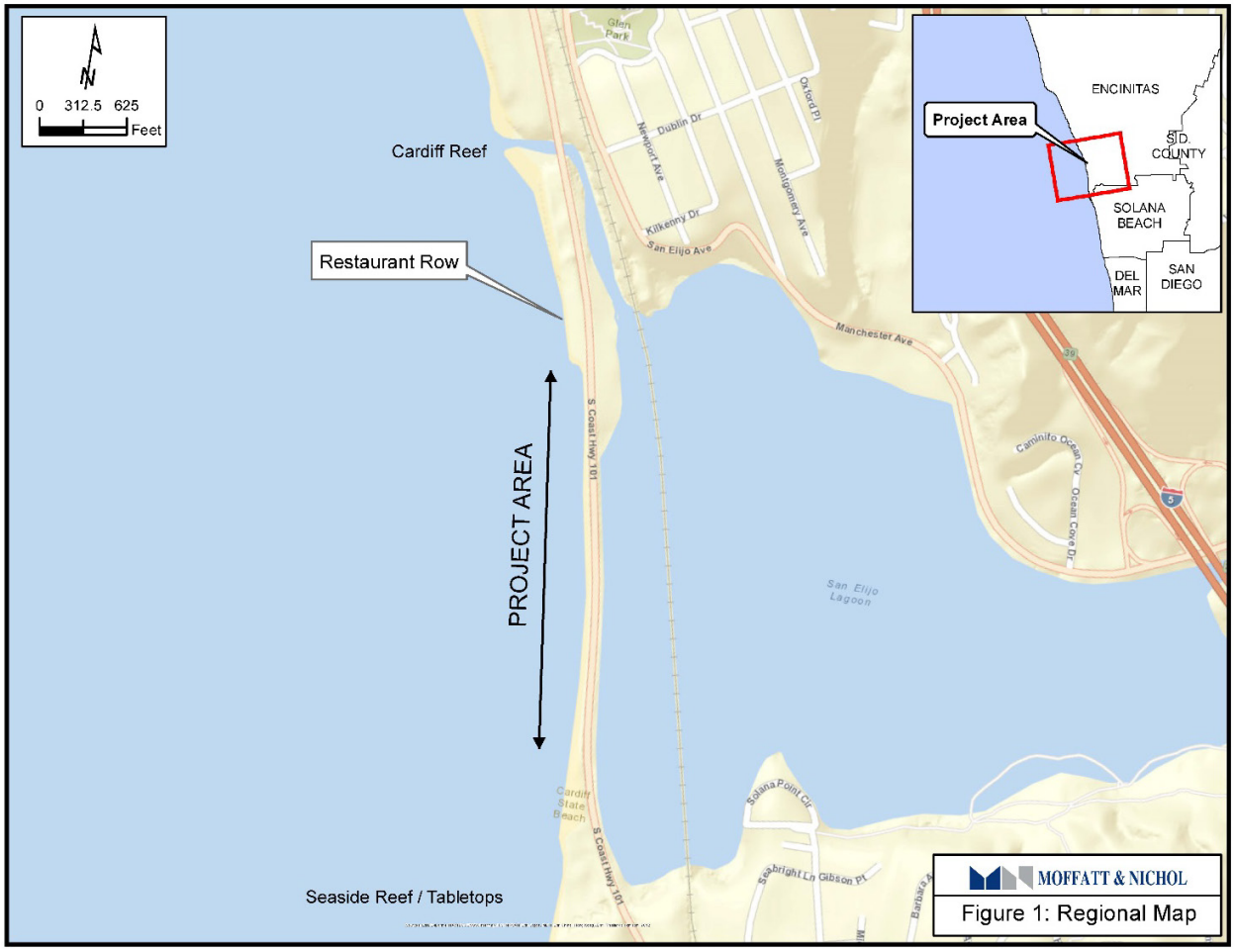

FIGURE 1. PROJECT LOCATION MAP

FIGURE 2. PROPOSED CONSTRUCTION STAGING AND STOCKPILE LOCATION

APPENDIX B

PROJECT DESIGN GRAPHICS

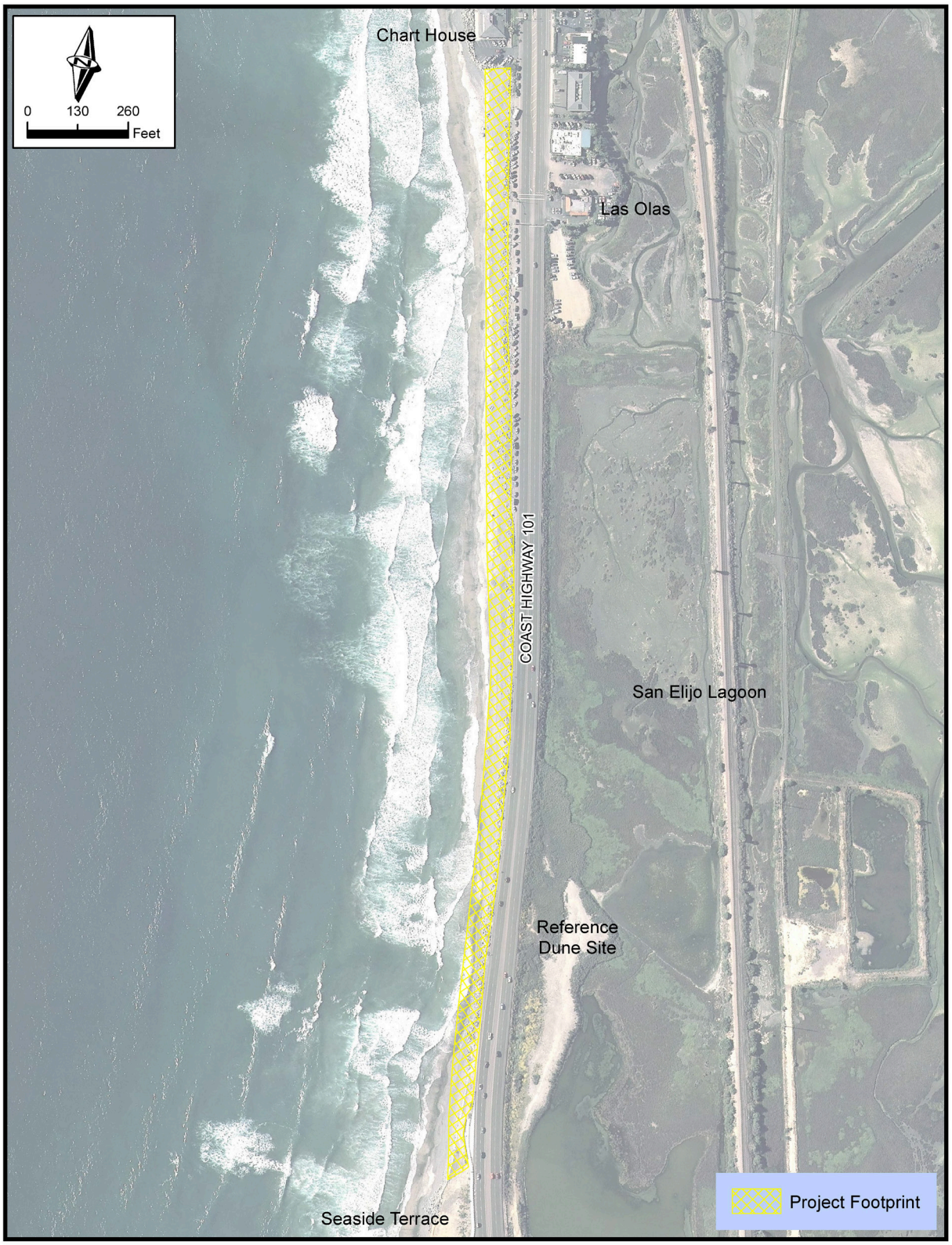

Figure 1. Plan View

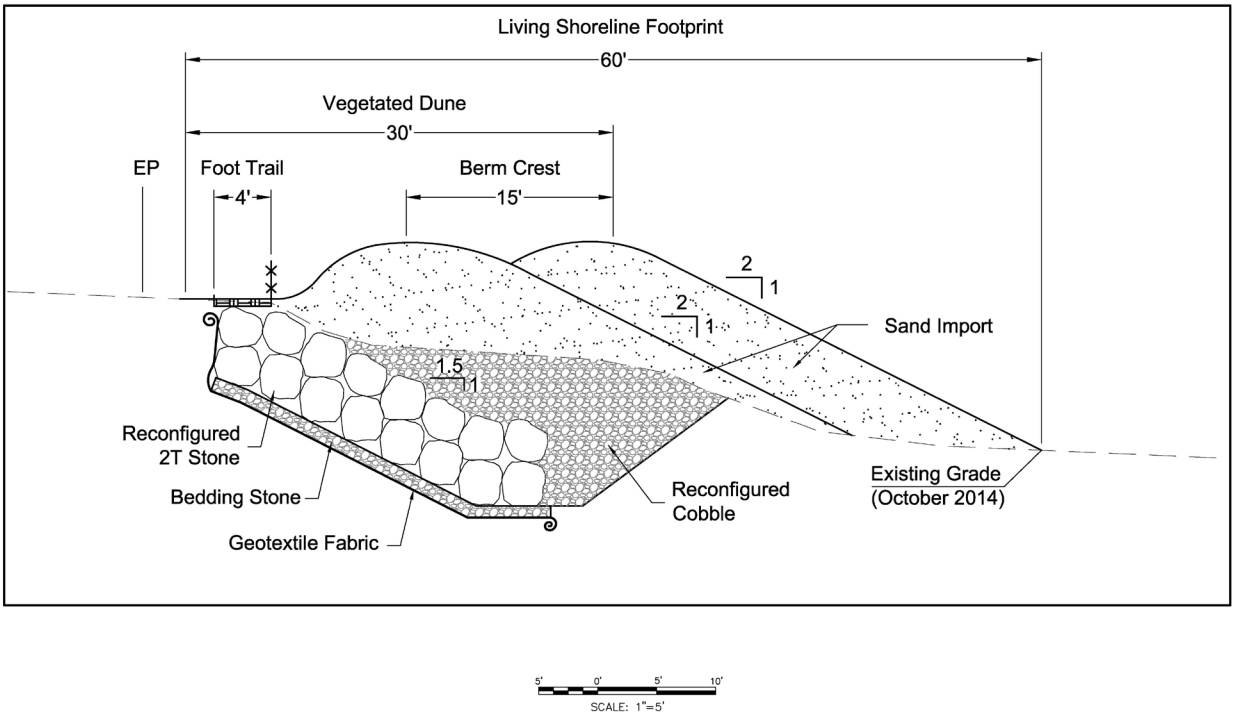

FIGURE 2. TYPICAL SECTION

APPENDIX C

SENSITIVE SPECIES LIST
CNDDB RECORD SEARCH

Table 1. List* of Possible Species Present at Project Site

Scientific Name	Common Name	Listing	Presence
Birds			
Aimophila ruficeps canescens	southern California rufous-crowned sparrow	WL	Unlikely
Campylorhynchus brunneicapillus sandiegensis	coastal cactus wren	SSC	Unlikely
Charadrius alexandrinus nivosus	western snowy plover	FT, SSC	Possible
Laterallus jamaicensis coturniculus	California black rail	CT, FP	Unlikely
Passerculus sandwichensis beldingi	Belding's savannah sparrow	CE	Unlikely
Polioptila californica californica	coastal California gnatcatcher	FT, SSC	Unlikely
Rallus longirostris levipes	light-footed clapper rail	FE, CE, FP	Unlikely
Sternula antillarum browni	California least tern	FE, CE,	Possible
Vireo bellii pusillus	least Bell's vireo	FE, CE,	Unlikely
Crustaceans and Mollusks			
Branchinecta sandiegonensis	San Diego fairy shrimp	FE	Unlikely
Streptocephalus woottoni	Riverside fairy shrimp	FE	Unlikely
Tryonia imitator	mimic tryonia (=California brackishwater snail)	None	Unlikely
Insects			
Cicindela senilis frosti	senile tiger beetle	None	Unlikely
Danaus plexippus pop. 1	monarch - California overwintering population	None	Unlikely
Mammals			
Chaetodipus californicus femoralis	Dulzura pocket mouse	SSC	Unlikely
Chaetodipus fallax fallax	northwestern San Diego pocket mouse	SSC	Unlikely
Choeronycteris mexicana	Mexican long-tongued bat	SSC	Unlikely
Neotoma lepida intermedia	San Diego desert woodrat	SSC	Unlikely
Nyctinomops femorosaccus	pocketed free-tailed bat	SSC	Unlikely
Perognathus longimembris pacificus	Pacific pocket mouse	FE, SSC	Unlikely
Reptiles			
Aspidoscelis hyperythra	orangethroat whiptail	SSC	Unlikely
Phrynosoma blainvillii	coast horned lizard	SSC	Unlikely
Plants			
Acanthomintha ilicifolia	San Diego thorn-mint	FT, CE, CRPR 1B.1	Unlikely
Acmispon prostratus	Nuttall's acmispon	CRPR 1B.1	Possible
Adolphia californica	California adolphia	CRPR 2B.1	Unlikely
Arctostaphylos glandulosa ssp. crassifolia	Del Mar manzanita	FE	Unlikely
Artemisia palmeri	San Diego sagewort	None	Unlikely
Atriplex coulteri	Coulter's saltbush	CRPR 1B.2	Unlikely
Baccharis vanessae	Encinitas baccharis	FT, CE, CRPR 1B.1	Unlikely
Brodiaea filifolia	thread-leaved brodiaea	FT, CE, CRPR 1B.1	Unlikely

Scientific Name	Common Name	Listing	Presence
Brodiaea orcuttii	Orcutt's brodiaea	CRPR 1B.1	Unlikely
Ceanothus verrucosus	wart-stemmed ceanothus	CRPR 2B.2	Unlikely
Chaenactis glabriuscula var. orcuttiana	Orcutt's pincushion	CRPR 1B.1	Unlikely
Chorizanthe orcuttiana	Orcutt's spineflower	FE, CE, CRPR 1B.1	Unlikely
Chorizanthe polygonoides var. longispina	long-spined spineflower	CRPR 1B.2	Unlikely
Comarostaphylis diversifolia ssp. diversifolia	summer holly	CRPR 1B.2	Unlikely
Corethrogyne filaginifolia var. linifolia	Del Mar Mesa sand aster	CRPR 1B.1	Unlikely
Cryptantha wigginsii	Wiggins' cryptantha	CRPR 1B.1	Unlikely
Ericameria palmeri var. palmeri	Palmer's goldenbush	CRPR 1B.1	Unlikely
Eryngium aristulatum var. parishii	San Diego button-celery	FE, CE, CRPR 1B.1	Unlikely
Euphorbia misera	cliff spurge	CRPR 2B.2	Unlikely
Ferocactus viridescens	San Diego barrel cactus	CRPR 2B.1	Unlikely
Harpagonella palmeri	Palmer's grapplinghook	CRPR 4.2	Unlikely
Hazardia orcuttii	Orcutt's hazardia	CT, CRPR 1B.1	Unlikely
Heterotheca sessiliflora ssp. sessiliflora	beach goldenaster	CRPR 1B.1	Unlikely
Isocoma menziesii var. decumbens	decumbent goldenbush	CRPR 1B.2	Unlikely
Iva hayesiana	San Diego marsh-elder	CRPR 2B.2	Unlikely
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	CRPR 1B.1	Unlikely
Lepidium virginicum var. robinsonii	Robinson's pepper-grass	CRPR 4.3	Unlikely
Leptosyne maritima	sea dahlia	CRPR 2B.2	Unlikely
Myosurus minimus ssp. apus	little mousetail	CRPR 3.1	Unlikely
Navarretia fossalis	spreading navarretia	FT, CRPR 1B.1	Unlikely
Nemacaulis denudata var. denudata	coast woolly-heads	CRPR 1B.2	Possible
Orcuttia californica	California Orcutt grass	FE, CE, CRPR 1B.1	Unlikely
Orobanche parishii ssp. brachyloba	short-lobed broomrape	CRPR 4.2	Unlikely
Quercus dumosa	Nuttall's scrub oak	CRPR 1B.1	Unlikely
Suaeda esteroa	estuary seablite	CRPR 1B.2	Unlikely

* Inventory from California Natural Diversity Database and California Native Plant Society's Inventory

FE denotes a species that is a Federal Endangered Species.

FT denotes a species that is a Federal Threatened Species.

FC denotes a species that is a Federal Species of Concern.

CE denotes a species that is California State Endangered.

CT denotes a species that is California State Endangered.

SSC denotes a species that is a California Department of Fish and Game Species of Special Concern.

WL denotes a species that is a California Department of Fish and Game Watch List Species.

CDFS denotes a species that is a California Department of Forestry and Fire Protection Sensitive Species.

CRPR denotes the California Rare Plant Rank of the species.

FP denotes the California State Fully Protected status of the species.

APPENDIX D

ACRONYMS

BMPs	Best Management Practices
CCR	California Code of Regulations
CDPR	California Department of Parks and Recreation
CEQA	California Environmental Quality Act
cy	cubic yards
DPR	[California] Department of Parks and Recreation
EIR	Environmental Impact Report
HWY 101	Highway 101
IS/MND	Initial Study/Mitigated Negative Declaration
LCP	Local Coastal Plan
LUP	Land Use Plan
mcy	million cubic yards
MLD	Most Likely Descendent
MLLW	mean lower low water
NAVD88	North American Vertical Datum of 1988
PM	Particulate Matter
the “project”	Cardiff State Beach Living Shoreline Project
SELRP	San Elijo Lagoon Restoration Project
sq. ft.	square feet
SLR	sea-level rise
USACE	U.S. Army Corps of Engineers
RAQS	[San Diego] Regional Air Quality Strategy
SIP	[California] State Implementation Plan