

**DRAFT**

**INITIAL STUDY/  
MITIGATED NEGATIVE DECLARATION**

**ALAMITOS BAY SHORELINE TRAIL PROJECT  
CITY OF LONG BEACH**



**LSA**

August 2017

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MITIGATED NEGATIVE DECLARATION**

**ALAMITOS BAY SHORELINE TRAIL PROJECT  
CITY OF LONG BEACH**



Submitted to:

City of Long Beach  
Development Services, Planning Bureau  
333 West Ocean Boulevard, 5<sup>th</sup> Floor  
Long Beach, California 90802

Prepared by:

LSA  
20 Executive Park, Suite 200  
Irvine, California 92614  
(949) 553-0666

Project No. CLB1605

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## TABLE OF CONTENTS

<b>1.0 INTRODUCTION.....</b>	<b>1-1</b>
1.1 Contact Person.....	1-1
<b>2.0 MITIGATED NEGATIVE DECLARATION .....</b>	<b>2-1</b>
2.1 EXISTING SETTING .....	2-1
2.2 Surrounding Land Uses .....	2-5
2.3 Existing Site Conditions .....	2-5
2.4 Project Context and History .....	2-5
2.5 Proposed Project.....	2-13
2.6 Discretionary Actions .....	2-27
2.7 Other Ministerial City Actions .....	2-28
2.8 Probable Future Actions by Responsible Agencies .....	2-28
2.9 Native American consultation.....	2-28
<b>3.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED.....</b>	<b>3-1</b>
3.1 AESTHETICS.....	3-4
3.2 AGRICULTURE & FOREST RESOURCES.....	3-9
3.3 AIR QUALITY.....	3-11
3.4 BIOLOGICAL RESOURCES.....	3-17
3.5 CULTURAL RESOURCES.....	3-22
3.6 GEOLOGY AND SOILS.....	3-25
3.7 GREENHOUSE GAS EMISSIONS.....	3-31
3.8 HAZARDS AND HAZARDOUS MATERIALS.....	3-37
3.9 HYDROLOGY AND WATER QUALITY.....	3-41
3.10 LAND USE/PLANNING.....	3-50
3.11 MINERAL RESOURCES.....	3-61
3.12 NOISE.....	3-63
3.13 POPULATION AND HOUSING.....	3-74
3.14 PUBLIC SERVICES.....	3-76
3.15 RECREATION.....	3-81
3.16 TRANSPORTATION/TRAFFIC.....	3-82
3.17 Tribal cultural resources.....	3-85
3.18 UTILITIES/SERVICE SYSTEMS.....	3-88
3.19 MANDATORY FINDINGS OF SIGNIFICANCE.....	3-94
<b>4.0 MITIGATION MONITORING AND REPORTING PROGRAM .....</b>	<b>4-1</b>
4.1 Mitigation Monitoring Requirements.....	4-1
4.2 Mitigation Monitoring Procedures .....	4-2
<b>5.0 REFERENCES.....</b>	<b>5-1</b>

## FIGURES AND TABLES

### FIGURES

Figure 2.1: Project Location .....	2-3
Figure 2.2: Surrounding Land Uses .....	2-7
Figure 2.3: Existing Project Site .....	2-9
Figure 2.4: Photos of Existing Project Site .....	2-11
Figure 2.5: Conceptual Site Plan .....	2-15
Figure 2.6.a: Segment 1: Southwestern-most Segment .....	2-17
Figure 2.6.b: Segment 2: Siena Drive to Tivoli Drive .....	2-19
Figure 2.6.c: Segment 3: Tivoli Drive to San Remo Drive .....	2-21
Figure 2.6.d: Segment 4: Novara Drive to Appian Way .....	2-25
Figure 3.1: General Plan Land Uses .....	3-53
Figure 3.2: Zoning Districts .....	3-59

### TABLES

Table 2.A: Construction Phases .....	2-27
Table 2.B: Probable Future Actions by Responsible Agencies .....	2-28
Table 3.3.A: SCAQMD Significance Thresholds .....	3-13
Table 3.3.B: Peak Daily Construction Emissions (lbs/day) .....	3-14
Table 3.7.A: Project Construction Greenhouse Gas Emissions .....	3-35
Table 3.12.A: Human Response to Different Levels of Ground-Borne Noise and Vibration .....	3-65
Table 3.12.B: Construction Vibration Damage Criteria .....	3-67
Table 3.12.C: Typical Maximum Construction Equipment Noise Levels ( $L_{max}$ ) .....	3-69
Table 3.12.D: Vibration Source Amplitudes for Construction Equipment .....	3-70
Table 4.A: Mitigation and Monitoring Reporting Program .....	4-3

### APPENDICES

- A: AIR QUALITY AND GREENHOUSE GAS MODELING OUTPUTS
- B: BIOLOGICAL RESOURCES MEMORANDUM
- C: GEOTECHNICAL ENGINEERING INVESTIGATION
- D: ASSEMBLY BILL 52 LETTER

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## 1.0 INTRODUCTION

In accordance with the California Environmental Quality Act (CEQA) and the *State CEQA Guidelines*, this Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared for the Alamos Bay Shoreline Trail Project (proposed project) at East Sorrento Drive between 2<sup>nd</sup> Street and Appian Way in the City of Long Beach. Consistent with *State CEQA Guidelines* Section 15071, this IS/MND includes a description of the proposed project, an evaluation of the potential environmental impacts, and findings from the environmental review.

This IS/MND evaluates the potential environmental impacts that may result from development of the proposed project. The City is the Lead Agency under CEQA and is responsible for adoption of the IS/MND and approval of the project.

### 1.1 CONTACT PERSON

Any questions or comments regarding the preparation of this IS/MND, its assumptions, or its conclusions should be referred to the following:

Christopher Koontz, Advance Planning Officer  
City of Long Beach  
Long Beach Development Services, Planning Bureau  
333 West Ocean Boulevard, 5<sup>th</sup> Floor  
Long Beach, California 90802  
Tel: (562) 570-6288  
Email: Christopher.Koontz@longbeach.gov

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## 2.0 MITIGATED NEGATIVE DECLARATION

<b>1.0 Project Title:</b> Alamitos Bay Shoreline Trail Project	<b>Reference Application Numbers:</b> SPR17-059 / LCDP 17-015
<b>2.0 Lead Agency Name and Address:</b> City of Long Beach 333 West Ocean Boulevard Long Beach, California, 90802	<b>3.0 Contact Person and Telephone No.:</b> Christopher Koontz Advanced Planning Officer (562) 570-6288
<b>4.0 Project Location:</b> East Sorrento Drive, from East 2 <sup>nd</sup> Street to Appian Way Long Beach, California 90803	
<b>5.0 Project Sponsor's Name and Address:</b> Same as Lead Agency's name and address listed above.	
<b>6.0 Existing General Plan Designation:</b> 3A-Townhomes and one Single-Family Residential	<b>7.0 Existing Zoning Classification:</b> R-4-R: Moderate Density, Multifamily Residential and R-1-S: Single-Family Residential

In accordance with the California Environmental Quality Act (CEQA) and the *State CEQA Guidelines*, this Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared for the Alamitos Bay Shoreline Trail Project (proposed project) in the City of Long Beach (City). Consistent with *State CEQA Guidelines* Section 15071, this IS/MND includes a description of the project, an evaluation of the potential environmental impacts, and findings from the environmental review.

This IS/MND evaluated the potential environmental impacts that may result from development of the proposed project. The City is the Lead Agency under CEQA, and its Zoning Administrator is responsible for adoption of the IS/MND and approval of the project.

### 2.1 EXISTING SETTING

#### 2.1.1 Regional Setting

The project site is located in the southeastern-most portion of the City in the County of Los Angeles (County), California. The project site is located on the northern boundary of Naples, an island neighborhood surrounded on all sides by Alamitos Bay, adjacent to the Pacific Ocean. The island is connected to the mainland at two locations via 2<sup>nd</sup> Street, which runs east-west through the central/northern portion of the island.

Naples is primarily comprised of single-family residential homes with some multifamily residential structures located along Naples Plaza and 2<sup>nd</sup> Street. The island neighborhood of Naples was given its name because the character of the neighborhood, defined by small residential lots connected by bridges and walkways, is reminiscent of Venice, Italy.

The project site is bound by Alamitos Bay to the north, 2<sup>nd</sup> Street to the west, residences and East Sorrento Drive to the south, and Appian Way to the east, as shown in Figure 2.1, Project Location.

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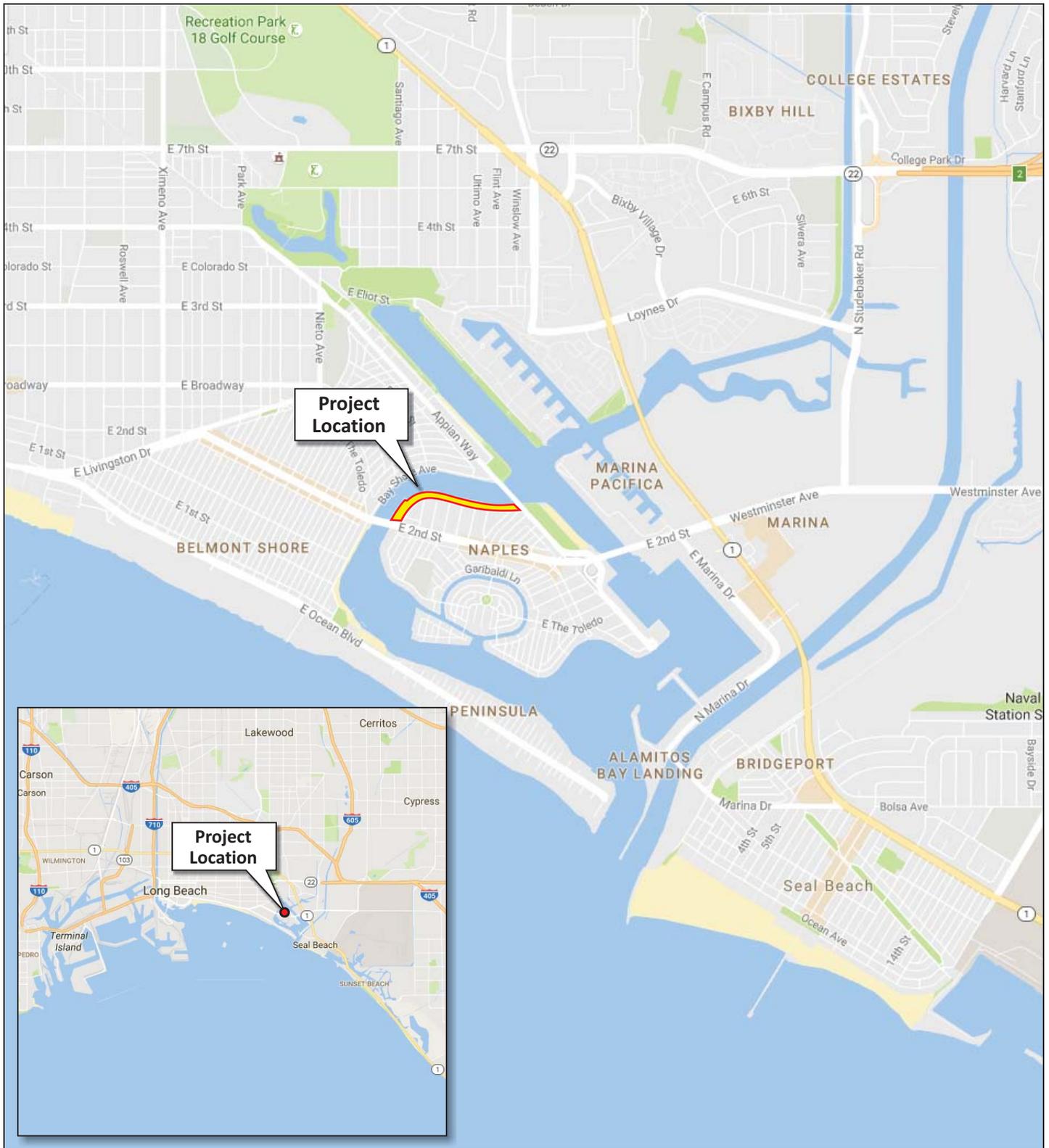
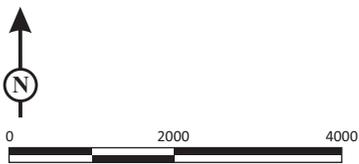


FIGURE 2.1

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SOURCE: Google Maps, 2016

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Alamos Bay Shoreline Trail Project  
Project Location

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## 2.2 SURROUNDING LAND USES

The project site is bound by Alamitos Bay to the north, 2<sup>nd</sup> Street to the west, East Sorrento Drive to the south, and Appian Way to the east. To the north are private boat docks adjoining the land-side portion of the project site and Alamitos Bay. Single-family residences are located to the south of the project site across East Sorrento Drive, with 2<sup>nd</sup> Street, commercial/retail uses, restaurant uses, and residential uses located further south of the site. 2<sup>nd</sup> Street and Alamitos Bay are present west of the site, and Appian Way and the Marine Stadium portion of Alamitos Bay are present east of the site. Surrounding land uses are illustrated in Figure 2.2, Surrounding Land Uses.

## 2.3 EXISTING SITE CONDITIONS

The approximately 5.22-acre<sup>1</sup> project site includes areas located both on the street-side and the water-side of 36 single-family residential lots.<sup>2</sup> The project site is comprised of the 15-foot (ft) public right-of-way along the northern portion of the project site between the residences and the waters of Alamitos Bay, the accessways, and the entire East Sorrento Drive right-of-way (including sidewalks and roadway between 2<sup>nd</sup> Street and Appian Way) (refer to Figure 2.3, Existing Project Site). This public walkway is characterized by scattered utility boxes; vegetation; dirt/sand; and encroachments from private residences, such as yards and patios, as illustrated on Figure 2.4, Photos of Existing Project Site.

The Alamitos Bay Shoreline Trail is currently open for public use along the seaward edge of the adjacent bay-fronting homes. Although this trail is located within a 15 ft easement owned by the City, the majority of the trail is obstructed by encroachments including patio furniture, personal items, hardscaping/landscaping, and gates. The majority of the trail is also supported by retaining walls along the seaward edge of the right-of-way. Private docks and piers (one pier for each house) extend into the bay from the fill behind the retaining walls.

In the existing condition, pedestrian access to the water-side public walkway is provided off East Sorrento Drive through six separate 10 ft wide accessways perpendicular to East Sorrento Drive. Existing conditions are shown in the aerial photographs on Figures 2.3 and 2.4.

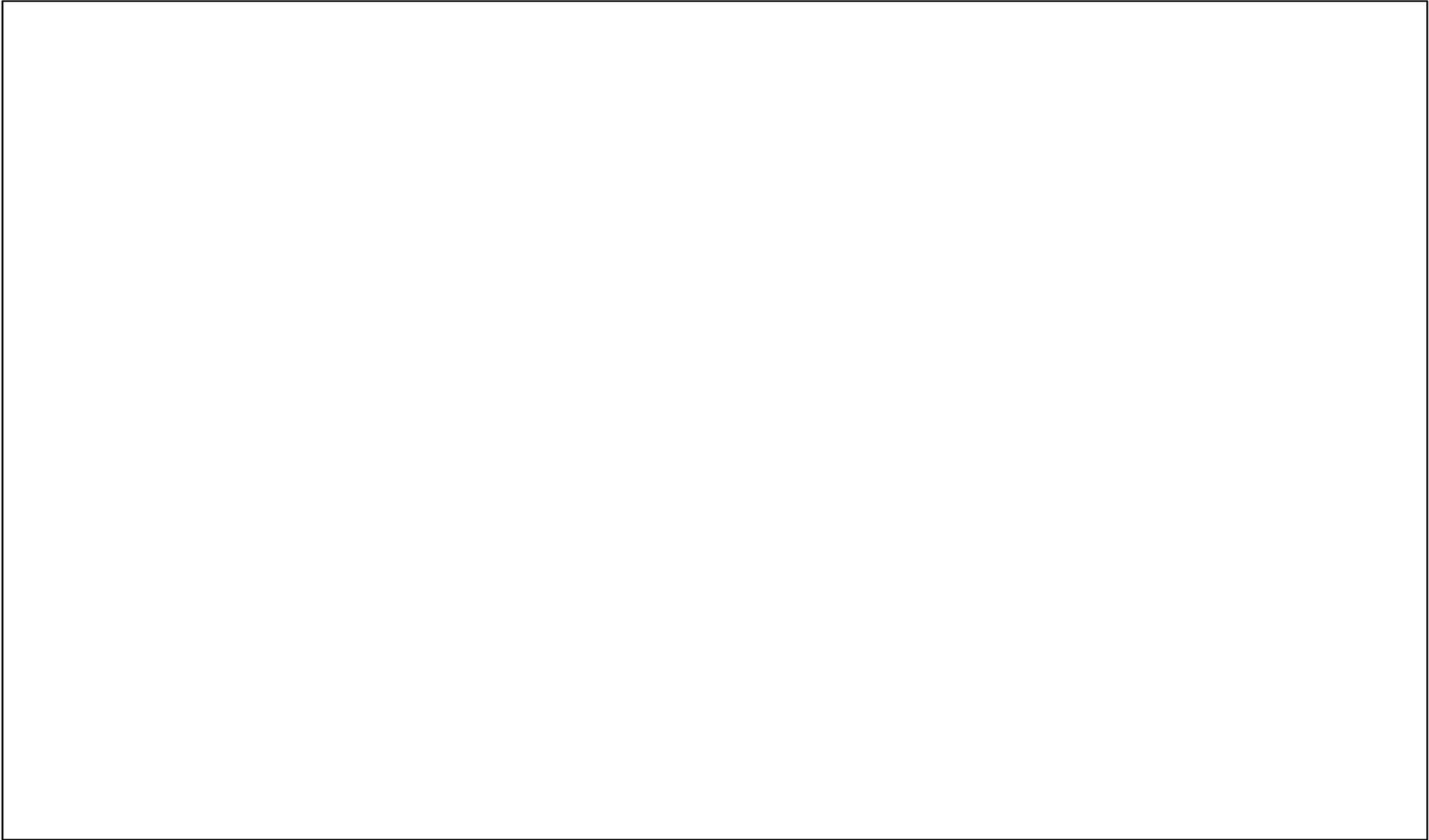
## 2.4 PROJECT CONTEXT AND HISTORY

Naples Island, which consists of three islands and the Naples Canals (Rivo Alto and Naples Canal), was constructed in the early 1900s in the delta of the San Gabriel River, the area that is now referred to as Alamitos Bay. The original seawalls in these areas were built in the 1930s. Rivo Alto Canal is currently 70 ft wide and 7–14 ft deep, depending on the tide. A 20 ft wide portion of public land is present on the upland portions of each side of the Rivo Alto Canal right-of-way, between the existing vertical concrete seawalls and the residential property lines.

<sup>1</sup> While the total project site is approximately 5.22 acres, only approximately 3.0 acres of the site are proposed for physical improvements under the project.

<sup>2</sup> The residential parcels are not a part of project site but are included within the project area because the proposed improvements would be located on the northern and southern boundaries of these parcels.

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 Project Area

Existing Land Use

 Single Family Residential

 Multi-Family Residential

 Mobile Homes and Trailer Parks

 General Office

 Commercial and Services

 Facilities

 Education

 Industrial

 Transportation, Communications, and Utilities

 Mixed Residential and Commercial

 Open Space and Recreation

 Vacant

 Water



SOURCE: Bing (2010); LSA (9/2016); SCAG (2012)

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FIGURE 2.2

*Alamitos Bay Shoreline Project*  
Surrounding Land Uses

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FIGURE 2.3

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 Project Location - Does not include residential properties



0 250 500  
FEET

SOURCE: Google Earth, 2016

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Alhambra Bay Shoreline Trail Project  
Existing Project Site

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Stairway to Alamitos Bay



View of existing Sorrento Trail on western portion of the project site



View of current trail and improvements



Accessway connecting East Sorrento Drive and Alamitos Bay

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Over time, the width of the waterways has narrowed by approximately 10 ft due to previous repair projects, which included the construction of the existing seawalls following the Long Beach Earthquake of 1933 on the seaward side of the original wooden seawalls. The existing seawalls are in a deteriorated condition and are in need of rehabilitation or replacement.

As such, on October 9, 2013, the California Coastal Commission (Coastal Commission) approved Coastal Development Permit (CDP) No. 5-11-085, submitted by the City of Long Beach. The CDP requested by the City was for the Naples Island Seawall Repair Project (Seawall Repair Project), which involves the installation of a new steel sheet-pile seawall on the water side of the existing vertical concrete seawalls along each side of Rivo Alto Canal (1,915 linear feet) and new guardrails, landscape beds, sidewalks, an improved drainage system, and relocated street lighting along the canal. All lighting included as part of the Seawall Repair Project would be light-emitting diode (LED) lighting to reduce the project's energy demand. The proposed seawall will extend into the existing channel, resulting in the fill of approximately 1,727 square feet (sf) of submerged soft-bottom habitat. The Seawall Repair Project also includes a mitigation program involving the excavation of the northern bank and northern arm of Colorado Lagoon to create 20,908 sf of submerged soft-bottom habitat to mitigate the loss of soft-bottom habitat from the proposed project.

As part of the Naples Island Seawall Repair Project, the Coastal Commission required the City to comply with several Special Conditions on the project. The proposed Alamitos Bay Shoreline Trail project is a result of CDP Special Condition No. 14, which requires the City to construct the Alamitos Bay Shoreline Trail Project. Specifically, Special Condition No. 14 requires the creation of a 5 ft wide, Americans with Disabilities Act of 1990 (ADA)-compliant public walkway along the filled portion of the City's existing public right-of-way known as the Alamitos Bay Shoreline Trail. This walkway would allow for lateral access along the Bayfront and connections to vertical access points from East Sorrento Drive. This walkway would also provide for pedestrian access to public trust lands (including Alamitos Bay waters and shoreline), which would in turn provide improved access to launch points along the northern Bayfront for non-motorized boats (e.g., stand-up paddle boards and kayaks). Special Condition No. 14 of the CDP notes that some local residents have registered their opposition to the requirements to improve the existing Alamitos Bay Shoreline Trail; however, the Coastal Commission has the authority to impose a requirement to provide a public trust use as a condition of approval for the Naples Seawall Repair Project since the project would be inconsistent with Section 30210 of the California Coastal Act without the imposition of such a condition.

## 2.5 PROPOSED PROJECT

The purpose of the proposed project is to comply with CDP No. 5-11-085, Special Condition No. 14 by providing an improved contiguous public walkway within an existing 15 ft wide portion of the existing public right-of-way/easement that runs along the northwestern shoreline of Naples Island.

The proposed trail will be 5 ft in width and will comply with applicable rules and regulations established in the ADA. The proposed trail would consist of a resin-stabilized aggregate.<sup>3</sup>

In addition to the trail improvements on the water-side portion of the site, the proposed project also includes bay-friendly native landscaping along the water-side portion of the site and ornamental landscaping along the street-side portion of the project site. Ornamental landscaping would consist of street trees to be located near the proposed rolled driveway aprons. Refer to Figure 2.5, Conceptual Site Plan, for an illustration of the proposed trail and street-side improvements.

As illustrated on Figure 2.5, the proposed project will provide pedestrian access to public trust lands, including Alamitos Bay waters and shoreline, and will also provide improved stair access to several launch points along the northern bayfront for non-motorized boats, such as stand-up paddle boards and kayaks. All six existing accessways perpendicular to East Sorrento Drive will be maintained in their existing conditions and locations. The accessways will remain open and accessible to the general public 24 hours per day, consistent with other walkways within the Naples neighborhood.

In total, the proposed project would be comprised of four major segments: (1) Southwestern-most Section, (2) Siena Drive to Tivoli Drive, (3) Tivoli Drive to San Remo Drive, and (4) Novara Drive to Appian Way. These four segments are described further below.

**Segment 1: Southwestern-most Section.** As illustrated by Figure 2.6.a, Segment 1: Southwestern-most Section, the first segment of the proposed project will begin at the western end of the public right-of-way on East Sorrento Drive and will continue to Siena Drive. This segment will include trail improvements, bay-friendly landscaping (including the implementation of two new trees on the eastern and western boundaries of this segment), the implementation of riprap to control erosion, a new ADA-accessible ramp, a new barbeque, new trash receptacles, and new concrete tables along the water-side portion of the site, as well as a new sidewalk with rolled curb extensions, street resurfacing, repairs to the vertical accessway in the eastern area of this segment, and ornamental landscaping along the street-side portion of the site.

**Segment 2: Siena Drive to Tivoli Drive.** As illustrated by Figure 2.6.b, Segment 2: Siena Drive to Tivoli Drive, the second segment of the proposed project will begin at Siena Drive and will continue to Tivoli Drive. This segment will include trail improvements, bay-friendly landscaping, the implementation of an ADA-accessible viewing area, the restoration of connections to gangways and adjacent residences, and stair improvements on the water-side portion of the site. Improvements to the street-side portion of the site include a new level sidewalk with rolled curb extensions, street resurfacing, and new tree wells with street trees.

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<sup>3</sup> A resin-stabilized aggregate generally consists of a combination of several materials (e.g., decomposed granite or crushed stone) that are blended with a stabilizing binder. The combination of these materials with a stabilizing binder would allow for the trail to resist the erosive effects of weather and traffic as compared to traditional cement or granite materials.

**PROJECT CONTEXT**



**PERSPECTIVE SKETCHES**



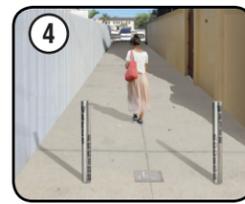
1 Planting under the bridge and at path terminus dissuades entry except from public walkways.



2 Uniform paving delineates path of travel; Clear sight lines and defined edges communicate care and ownership; Low-growing native plants prevent erosion, provide habitat, and keep sight lines clear.



3 Extended rolled driveway aprons create level sidewalks for pedestrian safety and accessibility; Street trees calm traffic and provide beauty and shade; Street trees are only placed in areas too small for a parking space.



4 Improved walkways provide pedestrian safety; Plaques in paving and text on bollards creates clear, but subdued signage.



5 Improved walkways provide pedestrian safety; Code-compliant vertical access-ways provide safety. Embedded plaque in paving creates clear, but subdued signage.

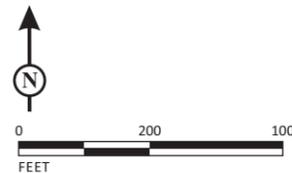


6 Improved walkways provide pedestrian safety; Code-compliant vertical access-ways provide safety. Embedded plaque in paving creates clear, but subdued signage.



7 Uniform paving delineates path of travel; Low-growing native plants prevent erosion, provide habitat, and keep sight lines clear; Paths from residences to gangways are preserved; Existing trees are preserved wherever feasible

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SOURCE: Mia Lehrer & Associates

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FIGURE 2.5

Alamitos Bay Shoreline Trail Project  
Conceptual Site Plan

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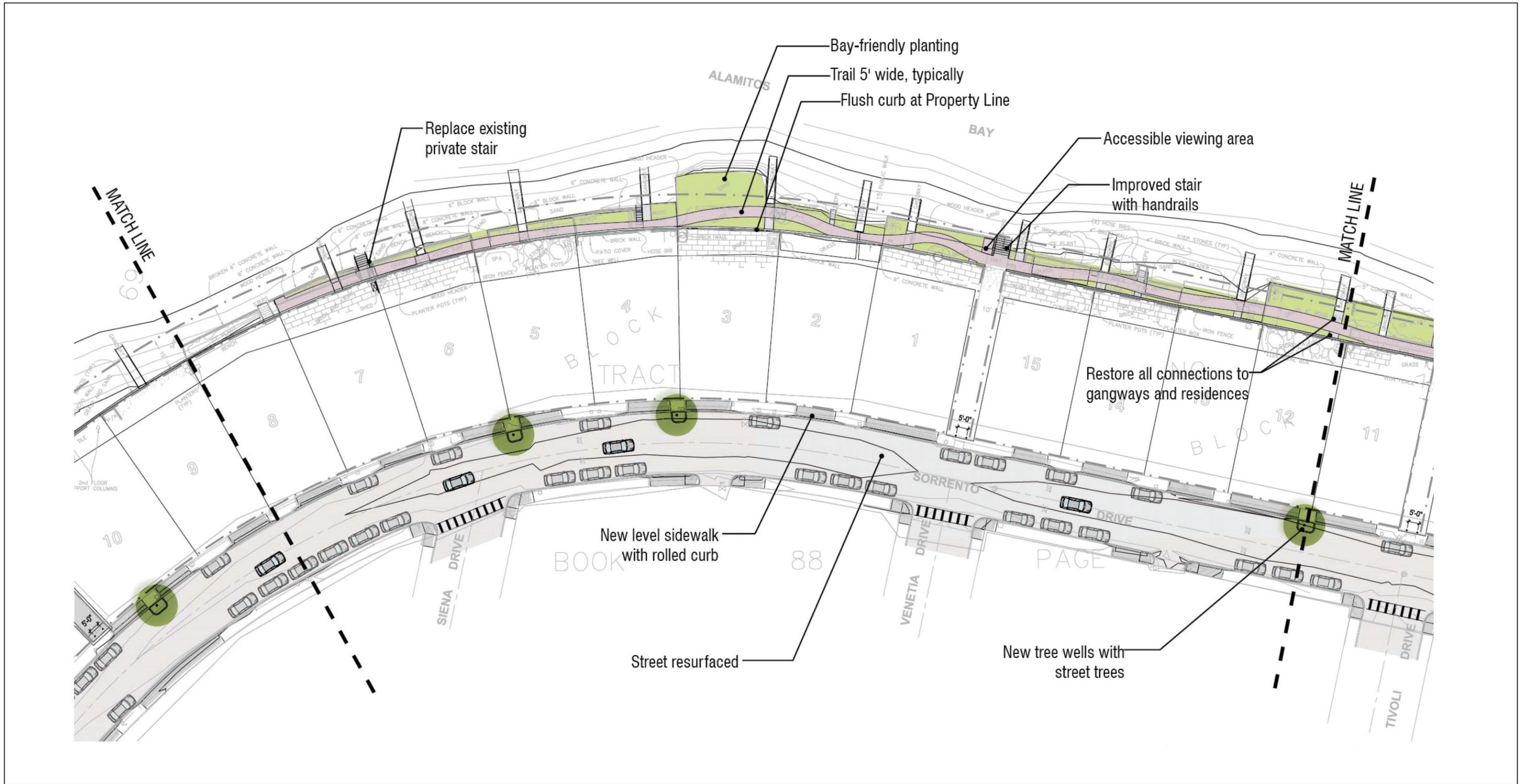


FIGURE 2.6.b

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SOURCE: Mia Lehrer & Associates

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Alamitos Bay Shoreline Trail Project  
Segment 2: Siena Drive to Tivoli Drive

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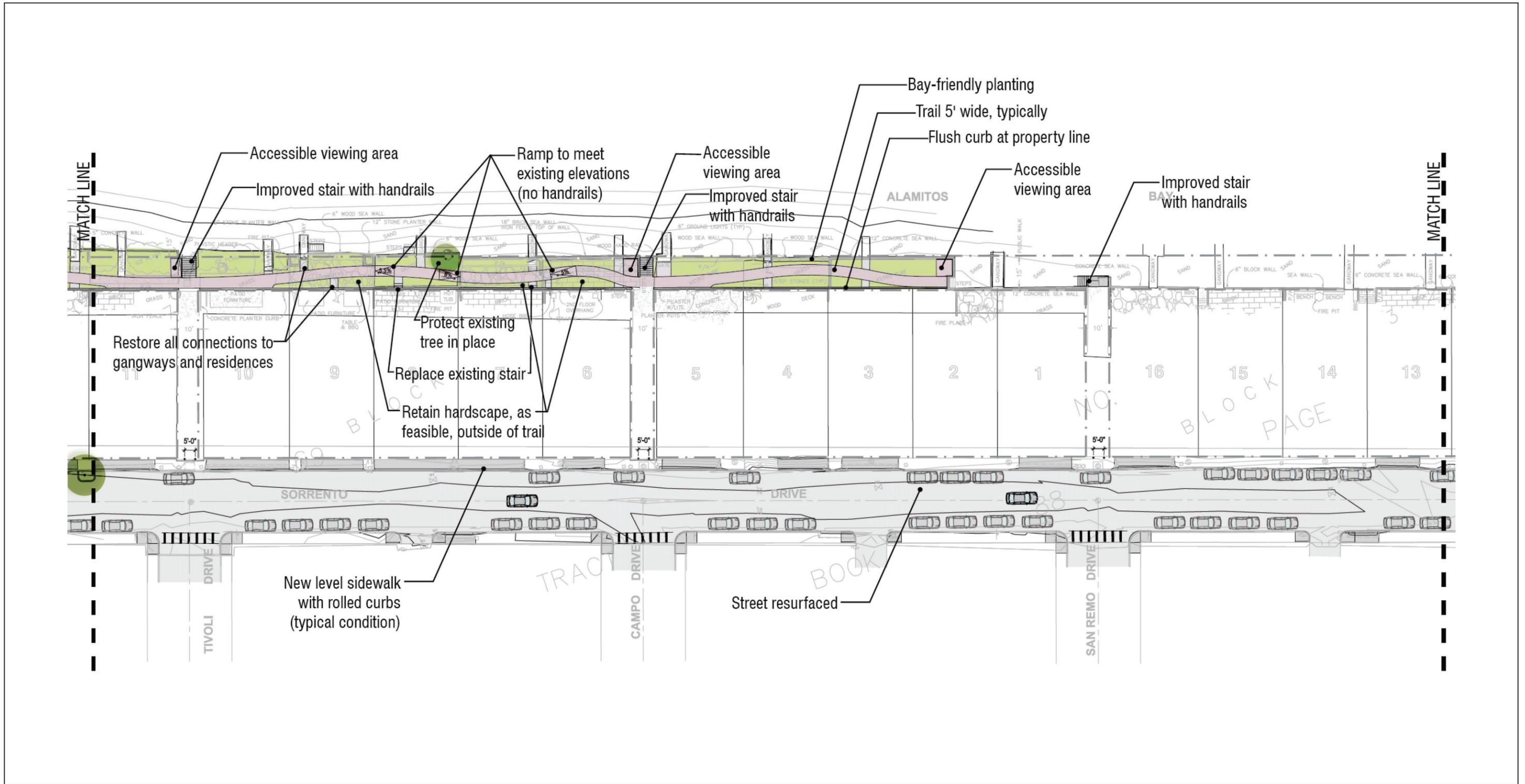


FIGURE 2.6.c

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SOURCE: Mia Lehrer & Associates

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Alamitos Bay Shoreline Trail Project  
Segment 3: Tivoli Drive to San Rameo Drive

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**Segment 3: Trivoli Drive to San Remo Drive.** As illustrated by Figure 2.6.c, Segment 3: Tivoli Drive to San Remo Drive, the third segment of the proposed project will begin at Tivoli Drive and will continue to San Remo Drive. Trail improvements, bay-friendly landscaping, a new ADA-accessible ramp and viewing areas, the restoration of all connections to gangways and adjacent residences, and improved stairs with handrails are proposed along the water-side portion of the site within this segment and improved stair access to Alamitos Bay is proposed on the water-side portion of the site across from Campo Drive and San Remo Drive. Ornamental landscaping along the eastern half of the water-side portion of this segment is not proposed due to physical design constraints (i.e., a lack of right-of-way). A new level sidewalk and rolled curb extensions are proposed along the street-side portion of the site.

**Segment 4: San Remo Drive to Appian Way.** As illustrated by Figure 2.6.d, Segment 4: San Remo Drive to Appian Way, the final segment of the proposed project will begin at San Remo Drive and continue to Appian Way. Due to the physical infeasibility and lack of right-of-way in this area, trail improvements and bay-friendly landscaping are not proposed along the water-side portion of this segment; rather, the existing sand edge is to remain in place within this portion of the site. While no trail improvements are proposed along the water-side portion of the site, this segment does include an improved access to Alamitos Bay in the area across from Novara Drive. In addition, rolled curb extensions and ornamental landscaping are proposed along the street-side portion of the site.

### 2.5.1 Signage and Lighting

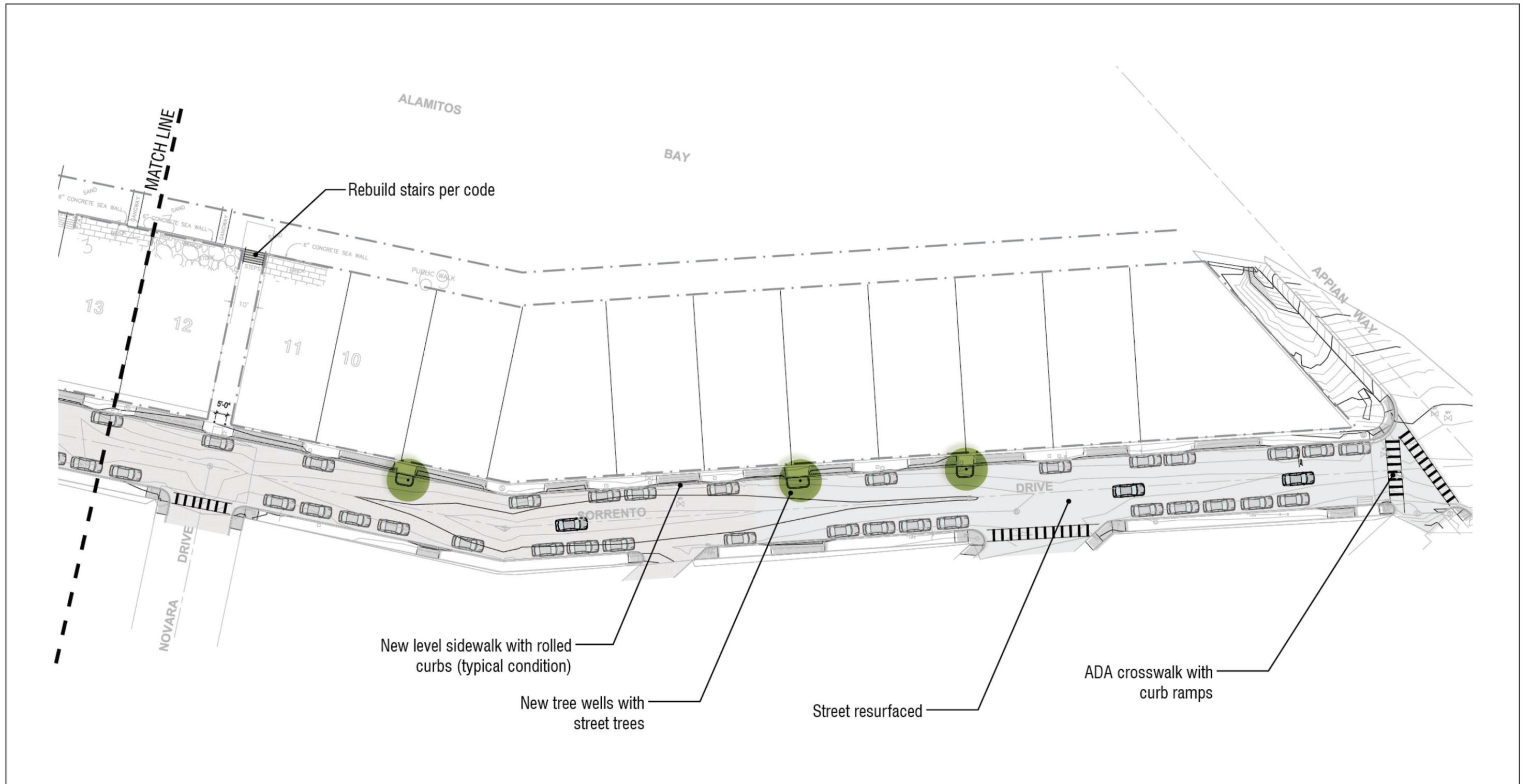
Signage will be provided along the proposed walkway and along the northern side of East Sorrento Drive at each intersection with an accessway that extends to the Sorrento Alamitos Bay Shoreline. As required by CDP No. 5-11-085, the signs will indicate that the trail is open to the public. Public access and directional signs will be posted at the entrance to each accessway along East Sorrento Drive and at the intersections of East 2<sup>nd</sup> Street/East Sorrento Drive and East Appian Way/East Sorrento Drive. Public access signage will also acknowledge that the proposed project was provided through the cooperative efforts of the City and the Coastal Commission.

Lighting included as part of the project would be limited to the area near the apartments (consisting of replacement lighting), safety lighting at the stairways, and the maintenance of existing street lights along East Sorrento Drive. All lighting included as part of the proposed project would consist of LED lighting to reduce the project's energy demand.

### 2.5.2 On-Site and Off-Site Infrastructure

As part of the project, existing electrical and utility lines would remain in place, with the exception of minor electrical improvements required to provide safety lighting proposed along the stairs and near the portion of the trail closest to 2<sup>nd</sup> Street. Minor irrigation improvements would also be implemented on the site during the landscaping installation phase of the project.

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SOURCE: Mia Lehrer & Associates

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FIGURE 2.6.d

Alamitos Bay Shoreline Trail Project  
Segment 4: Novara Drive to Appian Way

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### 2.5.3 Implementation/Phasing

The proposed project will be constructed in three phases, concurrent with the phased construction of the Seawall Naples Island Repair Project. The first phase of construction for the Seawall Naples Island Repair Project has been approved under CDP No. 5-11-085; however, the remaining phases would be required to be reviewed by the Coastal Commission as separate permit applications or amendments to CDP No. 5-11-085.

The proposed project would begin with ADA improvements along East Sorrento Drive. Thereafter, project construction would include improvements within the six accessways and shoreline right-of-way improvements. Phases of project construction would be concurrent with Phase I of the Seawall Naples Island Repair Project. Table 2.A, Construction Phases, below, lists the activities and anticipated duration proposed for each construction phase. Completion of the project is anticipated to take 2–3 years and be completed no later than 2023. While there is a possibility that Phase 3 of project construction could occur over the course of 2 years, for purposes of a worst-case CEQA analysis, construction impacts have been analyzed with the assumption that Phase 3 would be completed within 1 year.<sup>4</sup>

**Table 2.A: Construction Phases**

Phase	Activities	Duration
Phase 1	ADA improvements along East Sorrento Drive, including ramps, crosswalks, rolled curbs, and planters.	8–11 months
Phase 2	Improvements within the six accessways.	6–8 months
Phase 3	Shoreline improvements	12 months

Source: MIA Lehrer & Associates (November 2016).

Consistent with the existing CDP Permit for the project, the project would not import any additional fill and would export approximately 180.61 cubic yards of fill associated with grading, site preparation, construction, and landscaping. No soil stockpiling would be required during project construction. All construction equipment, including construction worker vehicles, would be staged at one of two locations near the project site: the park across from Appian Way or the parking lot across the Appian Way Bridge.

### 2.6 DISCRETIONARY ACTIONS

Development of the proposed project would require discretionary approvals by the City, the Lead Agency, and Responsible Agencies. The City’s discretionary actions include the following:

- **Site Plan Review.** The Site Plan Review allows multiple departments in the City to analyze the utilities, construction, safety, streets, parking, landscape, fire access, land use compatibility, and overall site design and make recommendations based on staff review.

<sup>4</sup> The assumption that Phase 3 would occur over the course of one rather than two years is considered a “worst-case scenario” under CEQA because more construction would occur on the site in a condensed period of time, thus capturing greater peak air quality/greenhouse gas and noise emissions.

- **Zoning Administrator.** The Zoning Administrator will consider adoption of this environmental document and approval of the proposed project through issuance of a local Coastal Development Permit (CDP).

## 2.7 OTHER MINISTERIAL CITY ACTIONS

Ministerial permits/approvals (e.g., grading permits) would be issued by the City or other appropriate agency to allow site preparation, curb cuts, and landscaping improvements.

## 2.8 PROBABLE FUTURE ACTIONS BY RESPONSIBLE AGENCIES

Because the project also involves approvals, permits, or authorization from other agencies, these agencies are “Responsible Agencies” under CEQA. Section 15381 of the *State CEQA Guidelines* defines Responsible Agencies as public agencies other than the Lead Agency that will have discretionary approval power over the project or some component of the project, including mitigation. These agencies include, but are not limited to, the agencies identified in Table 2.B.

**Table 2.B: Probable Future Actions by Responsible Agencies**

Responsible Agency	Action
State Water Resources Control Board (SWRCB)	Applicant must submit Permit Registration Documents, including a Notice of Intent (NOI), to comply with the National Pollution Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities.
California Coastal Commission	Approval of Special Condition No. 14 for Coastal Development Permit (CDP) No. 5-11-085
United States Army Corps of Engineers (USACE)	Permit Authorization
California State Lands Commission	Permit Authorization

## 2.9 NATIVE AMERICAN CONSULTATION

Native American consultation per Assembly Bill 52 (AB 52) has been conducted as part of this project. Results of these consultation efforts are addressed further in Chapter 3.0, Sections 3.5, Cultural Resources, and 3.17, Tribal Cultural Resources.

### 3.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

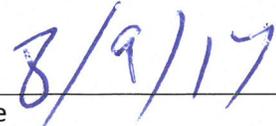
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Aesthetics                                    | <input type="checkbox"/> Agriculture & Forest Resources       | <input type="checkbox"/> Air Quality                        |
| <input checked="" type="checkbox"/> Biological Resources               | <input checked="" type="checkbox"/> Cultural Resources        | <input type="checkbox"/> Geology/Soils                      |
| <input type="checkbox"/> Greenhouse Gas Emissions                      | <input type="checkbox"/> Hazards & Hazardous Materials        | <input checked="" type="checkbox"/> Hydrology/Water Quality |
| <input type="checkbox"/> Land Use/Planning                             | <input type="checkbox"/> Mineral Resources                    | <input checked="" type="checkbox"/> Noise                   |
| <input type="checkbox"/> Population/Housing                            | <input type="checkbox"/> Public Services                      | <input type="checkbox"/> Recreation                         |
| <input type="checkbox"/> Transportation/Traffic                        | <input checked="" type="checkbox"/> Tribal Cultural Resources | <input type="checkbox"/> Utilities/Service Systems          |
| <input checked="" type="checkbox"/> Mandatory Findings of Significance |   |   |

**DETERMINATION. On the basis of this initial evaluation:**

1. I find that the project **could not** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.
2. I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.
3. I find the proposed project **may have a significant effect** on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.
4. I find that the proposed project **may have a "potentially significant impact" or "potentially significant unless mitigated impact"** on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.
5. I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or Negative Declaration pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or Negative Declaration, including revisions or mitigation measures that are imposed upon the proposed project nothing further is required.

  
Project Planner, Senior Planner

Date 

## EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
4. “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from earlier analyses may be cross-referenced, as discussed below).
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 or negative declaration (Section 15063 (c)(3)(D)). In this case, a brief discussion should identify the following:
  - a. Earlier Analysis Used. Identify and state where they are available for review.
  - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c. Mitigation Measures. For effects that are “Less Than Significant with Mitigation Measures Incorporated”, describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

- 
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
  9. The explanation of each issue should identify:
    - a. The significance criteria or threshold, if any, used to evaluate each question; and
    - b. The mitigation measure identified, if any, to reduce the impact to less than significant.

**3.1 AESTHETICS.**

*Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Impact Analysis**

**(a) Would the project have a substantial adverse effect on a scenic vista?**

**Less Than Significant Impact.** California State Government Code Section 65560(b)(3) stipulates that city and county General Plans address "...Open space for outdoor recreation, including but not limited to, areas of outstanding scenic, historical and cultural value; areas particularly suited for park and recreation purposes, including access to lakes shores, beaches, and rivers, and streams; and areas which serve as links between major recreation and open space reservations, including utility easements, banks of rivers and streams, trails, and scenic highway corridors..."

A scenic vista is the view of an area that is visually or aesthetically pleasing from a certain vantage point. It is usually viewed from some distance away. Aesthetic components of a scenic vista include (1) scenic quality, (2) sensitivity level, and (3) view access. A scenic vista can be impacted in two ways: a development project can have visual impacts by either directly diminishing the scenic quality of the vista or by blocking the view corridors or "vista" of the scenic resource. Important factors in determining whether a proposed project would block scenic vistas include the project's proposed height, mass, and location relative to surrounding land uses and travel corridors.

The City of Long Beach's (City) proposed General Plan Urban Design Element, which would replace the currently adopted Scenic Routes Element, identifies existing scenic vistas in the City. Examples of these scenic vistas include the following: views along Alamitos south to Villa Riviera; El Dorado Park; 3rd Street to the Port of Long Beach cranes; Ocean Boulevard; Bluff Park to the Pacific Ocean and Belmont Pier; Queensway Bay and Shoreline Park to the Queen Mary and cruise ships; the Downtown; the marinas; and Los Coyotes Diagonal to the distant San Gabriel Mountains. Although the Draft Urban Design Element identifies several examples of existing scenic vistas in the City, these scenic vistas are not officially designated by the City nor has the Draft Urban Design Element been officially adopted by the City.

The proposed project would be located on Naples Island, which itself is a fully urbanized area within the City of Long Beach. The current use of the project site is a noncontiguous public trail interrupted by residential rear yard encroachments within a public right-of-way. While there are no locally designated scenic vistas on the project site, expansive views of Alamitos Bay are

provided throughout the entirety of the project site. The closest public park to the project site is Marine Park (Mother's Beach) located directly east of the project site across Appian Way.

All improvements included as part of the proposed project are at-grade and would not include any structures that would block or impede views of Alamitos Bay or any scenic vistas within the proximity of the project site. Therefore, the proposed project does not have the potential to damage scenic vistas, and no mitigation is required. Refer to Section 3.15, Recreation, for additional discussion and analysis of potential impacts related to public parks in the City.

**(b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?**

**No Impact.** The California Department of Transportation's (Caltrans) Landscape Architecture Program administers the Scenic Highway Program, contained in Streets and Highways Code Sections 260–263. State highways are classified as either Officially Listed or Eligible. The portion of State Route 1 (SR-1 or Pacific Coast Highway [PCH]) located approximately 0.50 mile east of the project site is identified as an Eligible State Scenic Highway, but is not officially designated as a scenic highway by Caltrans.<sup>5</sup> It should also be noted that the City's Draft General Plan Urban Design Element identifies the area of 2<sup>nd</sup> Street that traverses through Naples Island as a scenic corridor.<sup>6</sup> 2<sup>nd</sup> Street is not visible from the project site and as such, project improvements on the site would not result in any impacts adversely impacting scenic views from the area of 2<sup>nd</sup> Street that passes through Naples Island. Therefore, the proposed project does not have the potential to damage resources within a State-designated scenic highway.

Improvements included as part of the proposed project are intended to improve public access to Alamitos Bay from the shoreline of Naples Island and visually improve the existing pedestrian trail along the northwestern boundary of Naples Island. There are no scenic rock outcroppings located within the project limits, and the proposed project would preserve the existing trees on site to the extent feasible. The proposed project would also replace any trees required to be removed to facilitate project implementation with new ornamental trees and landscaping along the proposed trail and within raised planters proposed along the sidewalk on the north end of East Sorrento Drive. Therefore, no impacts related to scenic resources would occur. No mitigation is required.

**(c) Would the project substantially degrade the existing visual character or quality of the site and its surroundings?**

**Less Than Significant Impact.**

<sup>5</sup> California Department of Transportation (Caltrans). California Scenic Highway Mapping System (Los Angeles County). Website: [http://www.dot.ca.gov/hq/LandArch/scenic\\_highways/index.htm](http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm) (accessed September 2016).

<sup>6</sup> City of Long Beach, Draft General Plan Urban Design Element, February 2017.

**Visual Character and Quality of the Site.** The project site is located within a developed area on Naples Island within the City of Long Beach. As illustrated by Figure 2.4, Photos of the Existing Project Site, the site is characterized by bay-fronting single-family residential uses (and their associated piers and boat docks) and an intermittent, mostly unimproved, trail along the northwestern boundary of Naples Island. The current trail is characterized by a noncontiguous pathway, picnic tables, barbeques, trash bins, and rear yard improvements associated with on-site residences.

In its existing condition, the project site includes vehicular and pedestrian access to existing residential uses along East Sorrento Drive and pedestrian access to the existing trail and Alamitos Bay via several accessways located perpendicularly to East Sorrento Drive. Access to Alamitos Bay from the project site is provided via stairways to the shoreline from various points along the trail and private docks associated with on-site residences. There are views of the Alamitos Bay waters and private residential docks from the northwestern boundary of Naples Island where the trail will be located.

According to the *Biological Resources Assessment for the Alamitos Bay Shoreline Trail Project* (Appendix B), existing vegetation on the project site is minimal and is generally limited to landscaping fronting Alamitos Bay and landscaped yards associated with adjacent residences. The majority of this vegetation is nonnative, and includes ornamental trees and Mexican fan palms, as well as ornamental ground cover consisting of hottentot-fig. The only native plant observed on the site was pickleweed, which was found in small bunches. Please refer to Section 3.4, Biological Resources, for further discussion regarding on-site vegetation.

**Construction.** Construction of the proposed project would involve on-site grading and construction activities that would be visible from Bay Shore Avenue (north of the project site across Alamitos Bay), recreational users within Alamitos Bay, visitors along the existing Alamitos Bay Shoreline Trail, and residents on the project site. These activities would be temporary in nature and would cease upon project completion, and therefore, would not result in the long-term degradation of the existing visual character or quality of the site and its surroundings. Therefore, construction impacts would be less than significant, and no mitigation is required.

**Operation.** The proposed project involves the creation of a continuous paved trail along the northern boundary of the site, the implementation of uniform landscaping along the proposed trail and along the northern boundary of East Sorrento Drive, and improved accessways to Alamitos Bay (including stairway improvements). The proposed development reflects an internally consistent design that would reflect integrated landscaping, signage, and lighting at the ground level. The proposed project would also be similar in character to the existing trail on the site, but would remove existing rear yard improvements associated with the on-site residences that would serve to improve the continuity of the visual character and quality on the project site. Because no structures are proposed, there would be no impacts to the views of Alamitos Bay or the private docks. Therefore, potential impacts related to the degradation of the visual character or quality of the site would be less than significant, and no mitigation is required.

**Visual Character and Quality of the Surrounding Area.** As stated above, the project site is located in a fully developed area characterized by residential uses on an island surrounded by waters associated with Alamitos Bay. The project site is bound on the north by Alamitos Bay, on the east by 2<sup>nd</sup> Street, on the south by East Sorrento Drive, and on the west by Appian Way.

Naples Neighborhood is a dynamic combination of commercial/retail and residential areas blended together in a compact, walkable space. According to the City's General Plan Land Use Element (LUE) (adopted 1989 and revised in 1997), the architectural style of many of the homes in the Naples area is Mediterranean, with many of the homes in the neighborhood more than 40 years old.

Implementation of the proposed project would improve and restore the existing trail on the project site to ensure the trail continues in a contiguous fashion. The proposed project improvements would be consistent with the visual character of the site in the context of the surrounding area. As such, the proposed project would not fundamentally alter the surrounding land use character. Further, because no structures are proposed, there would be no impacts to the views of Alamitos Bay or the private docks. Therefore, the proposed project would not degrade the character or quality of the project area, nor would the proposed project contribute to an overall degradation of the visual character or quality of the surrounding area. Projects impacts would be less than significant, and no mitigation is required.

**(d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?**

**Less Than Significant Impact.** The impact of nighttime lighting depends upon the type of use affected, the proximity to the affected use, the intensity of specific lighting, and the background or ambient level of the combined nighttime lighting. Nighttime ambient levels may vary considerably depending on the age, condition, and abundance of point-of-light sources present in a particular view. The use of exterior lighting for security and aesthetic illumination of architectural features may contribute to ambient nighttime lighting conditions.

Spill light occurs when lighting standards, such as streetlights, parking lot lighting, exterior building lighting, and landscape lighting, are not properly aimed or shielded to direct light to the desired location and light escapes and partially illuminates a surrounding location. The spillover of light onto adjacent properties has the potential to interfere with certain activities, including vision, sleep, privacy, and general enjoyment of the natural nighttime condition. Light-sensitive uses include residential, some commercial and institutional uses, and, in some situations, natural areas. Changes in nighttime lighting may become significant if a proposed project substantially increases ambient lighting conditions beyond its property line and project lighting routinely spills over into adjacent light-sensitive land uses areas.

Reflective light (glare) is the result of sunlight or artificial light reflecting from finished surfaces (e.g., window glass) or other reflective materials. Glass and other materials can have many different reflectance characteristics. Buildings constructed of highly reflective materials from which the sun reflects at a low angle commonly cause adverse glare. Reflective light is common

in urban areas. Glare generally does not result in the illumination of off-site locations but results in a visible source of light viewable from a distance.

The proposed project consists of a public trail and landscape improvements and does not contain any building structures or roadways that would introduce significant light and glare to the project area.

Construction activities would primarily occur during the daylight hours and within the City's approved construction hours.<sup>7</sup> Any construction-related illumination would be used for safety and security purposes (in compliance with Long Beach Municipal Code light intensity requirements) and would occur only for the duration required for the temporary construction processes. With adherence to Long Beach Municipal Code regulations, construction lighting would not substantially impact sensitive uses, substantially alter the character of off-site areas surrounding the site, or interfere with the performance of an off-site activity. Therefore, construction of the proposed project would not create a new source of substantial light that would adversely affect day or nighttime views in the area, and light impacts associated with construction would be less than significant.

Nighttime illumination impacts are evaluated in terms of the project's net change in ambient lighting conditions and proximity to light-sensitive land uses. Light-sensitive uses on and surrounding the project site include residences directly on the project site, north of the project site across Alamitos Bay, and south of the project site throughout Naples Island. Other sources of light present in the vicinity of the project site consist of street lighting and vehicular headlights on nearby roadways, building façade and interior lighting, and pole-mounted lighting along sidewalks on East Sorrento Drive. As previously stated, construction is anticipated to occur primarily during daylight hours. Construction illumination during nighttime hours (if necessary) would be for safety and security purposes and would be temporary in nature.

The proposed project would be located within a developed area of the City, which currently emits lighting that is typical for an urban area (i.e., residential uses). Lighting included as part of the project would be implemented within the landscaped areas and would be placed at the ground-level for security purposes only. The on-site low-level lighting would consist of light-emitting diode (LED) lights that would be designed to contain light within the project site, eliminating light spill and glare through design features (e.g., light shielding) to be implemented with the project. Impacts related to glare from on-site lighting would not occur because the proposed project does not include any highly reflective materials (e.g., windows or glass with mirror-like tints).

Therefore, lighting provided as part of the proposed project would be consistent with the type and intensity of existing lighting in the project vicinity. The final lighting for the project would be subject to review and approval as part of the site plan review process. Therefore, lighting impacts would be less than significant, and no mitigation is required.

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<sup>7</sup> City of Long Beach Municipal Code, Section 8.80. Approved construction hours: 7:00 a.m. to 7:00 p.m. Monday through Friday and from 9:00 a.m. to 6:00 p.m. on Saturdays.

### 3.2 AGRICULTURE & FOREST RESOURCES.

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### Impact Analysis

**(a) Would the project 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?**

**No Impact.** The project site is not used for agricultural production and is not designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. The surrounding area is characterized by Alamitos Bay, as well as recreational, commercial and residential uses. The proposed project would not convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or any other type of farmland to a nonagricultural use. Likewise, the project site would not conflict with existing zoning for agricultural use or a Williamson Act contract or contribute to environmental changes that could result in conversion of farmland to nonagricultural use. No impacts would occur, and no mitigation is required.

**(b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?**

**No Impact.** The project site currently has zoning designations of R-4-R (Moderate Density, Multi-Family Residential) and R-1-S (Single-Family Residential). The project site is not used for agricultural production, not zoned for agricultural use, and is not protected by, or eligible for, a Williamson Act contract. No impacts would occur, and no mitigation is required.

- (c) **Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?**

**No Impact.** As previously stated, the project site currently has zoning designations of R-4-R and R-1-S. The project site currently consists of residential uses, piers and docks with access to Alamitos Bay, and a non-contiguous pathway along the Alamitos Bay shoreline. The project site is located on Naples Islands, which itself is developed with residential and commercial uses in an urbanized area of the City. The project site is not used for timberland production, not zoned as forest land or timberland, and does not contain forest land or timberland. No impacts would occur, and no mitigation is required.

- (d) **Would the project result in the loss of forest land or conversion of forest land to non-forest use?**

**No Impact.** The project site currently consists of residential uses, piers and docks with access to Alamitos Bay, and a non-contiguous pathway along the Alamitos Bay shoreline. The proposed project would not convert forest land to a non-forest use. Likewise, the project site would not contribute to environmental changes that could result in conversion of forest land to non-forest use. No impacts would occur, and no mitigation is required.

- (e) **Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?**

**No Impact.** The project site currently has zoning designations of R-4-R and R-1-S. The project site is not used for agricultural production nor is the site designated or zoned for agricultural uses. The proposed project would not convert farmland to a nonagricultural use. Likewise, the project site would not contribute to environmental changes that could result in conversion of farmland to nonagricultural use. No impacts would occur, and no mitigation is required.

### 3.3 AIR QUALITY.

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### Discussion

The following section is based on air quality modeling and analysis conducted by LSA Associates, Inc. (LSA) (May 2017). The air quality modeling worksheets are included in Appendix A.

#### Impact Analysis

##### (a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

**Less Than Significant Impact.** The project site is located within the City of Long Beach, which is part of the South Coast Air Basin (Basin). The Basin includes all of Orange County and portions of Los Angeles, Riverside, and San Bernardino Counties. Air quality within the Basin is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). SCAQMD and the Southern California Association of Governments (SCAG) adopted the *2016 Air Quality Management Plan (2016 AQMP)* in March 2017.

The main purpose of an Air Quality Management Plan (AQMP) is to describe air pollution control strategies to be taken by a city, county, or region classified as a nonattainment area. A nonattainment area is considered to have worse air quality than the National Ambient Air Quality Standards (NAAQS) and/or the California Ambient Air Quality Standards (CAAQS), as defined in the federal Clean Air Act. The Basin is in nonattainment for the federal and State standards for ozone (O<sub>3</sub>), and particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>). In addition, the Basin is in nonattainment for the State particulate matter less than 10 microns in diameter (PM<sub>10</sub>) standard, and in attainment/maintenance for the federal PM<sub>10</sub>, carbon monoxide (CO), and nitrogen dioxide (NO<sub>2</sub>) standards.

Consistency with the 2016 AQMP for the Basin would be achieved if a project is consistent with the goals, objectives, and assumptions in the respective plan to achieve the federal and State air quality standards. Per the SCAQMD *CEQA Air Quality Handbook (April 1993)*, there are two main indicators of a project's consistency with the applicable AQMP: (1) whether the project would

increase the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the 2016 AQMP; and (2) whether the project would exceed the 2016 AQMP's assumptions for 2030 or yearly increments based on the year of project buildout and phasing. For the proposed project to be consistent with the AQMP, the pollutants emitted from the project should not exceed the SCAQMD daily threshold or cause a significant impact on air quality. Additionally, if feasible mitigation measures are implemented and are shown to reduce the impact level from significant to less than significant, a project may be deemed consistent with the AQMP.

The City's General Plan is consistent with the 2016 AQMP. Because the proposed project does not require a General Plan Amendment and is consistent with the intent of the General Plan's land use designation for the project site, the proposed project would not conflict with the 2016 AQMP. Furthermore, as discussed in Responses 3.3(b) through 3.3(e), the proposed project's emissions would be below emissions thresholds established in SCAQMD's *Air Quality Significance Thresholds* (March 2015) and would not be expected to result in significant air quality impacts. Therefore, the proposed project would not conflict with the AQMP and would not conflict with or obstruct implementation of the AQMP. No mitigation is required.

**(b) Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?**

**Less Than Significant Impact.** The *State CEQA Guidelines* indicate that a significant impact would occur if the project would violate any air quality standard or contribute substantially to an existing or projected air quality violation. Specific criteria for determining whether the potential air quality impacts of a project are significant are set forth in SCAQMD's *CEQA Air Quality Handbook* (April 1993). The criteria include emission thresholds, compliance with State and national air quality standards, and conformity with the existing State Implementation Plan (SIP) or consistency with the current AQMP. A summary of the specific criteria contained in SCAQMD's *Air Quality Significance Thresholds* (2015) is presented in Table 3.3.A below.

Projects in the Basin with emissions that exceed any of the mass daily emission thresholds above are considered significant by the SCAQMD.

**Landscape Construction Emissions.** Air quality impacts could occur during landscape demolition and implementation of the proposed project due to soil disturbance and equipment exhaust. Major sources of emissions during site preparation, demolition, site paving, and landscaping include (1) exhaust emissions from small construction vehicles, (2) equipment and fugitive dust generated by small vehicles and equipment traveling over exposed surfaces, and (3) soil disturbances from landscaping, compacting, and cement paving. The following discussion summarizes construction emissions and associated impacts of the proposed project.

**Table 3.3.A: SCAQMD Significance Thresholds**

Air Pollutant	Construction Phase	Operational Phase
ROCs	75 lbs/day	55 lbs/day
CO	550 lbs/day	550 lbs/day
NO <sub>x</sub>	100 lbs/day	55 lbs/day
SO <sub>x</sub>	150 lbs/day	150 lbs/day
PM <sub>10</sub>	150 lbs/day	150 lbs/day
PM <sub>2.5</sub>	55 lbs/day	55 lbs/day

Source: SCAQMD *Air Quality Significance Thresholds* (March 2015).

CO = carbon monoxide

lbs = pounds

NO<sub>x</sub> = nitrogen oxides

PM<sub>2.5</sub> = particulate matter less than 2.5 microns in size

PM<sub>10</sub> = particulate matter less than 10 microns in size

ROCs = reactive organic compounds

SCAQMD = South Coast Air Quality Management District

SO<sub>x</sub> = sulfur oxides

Implementation of the proposed project would include the following tasks: site preparation, compacting, cement paving, natural resin pavement installations, and landscaping. It is anticipated that there would be three phases for the proposed project. As described in the Project Description, the project phasing would generally start with the Americans with Disabilities Act (ADA) improvements along East Sorrento Drive, continue with the improvements for the six accessways, and finally complete the shoreline improvements in four major segments. It is anticipated that each phase would take approximately up to one year to construct, with completion no later than year 2023. Peak daily and annual emissions were analyzed using California Emission Estimator Model (CalEEMod Version 2016.3.1). Project-specific information provided by the City was used where available, including landscaping details, construction schedule, and materials and earthwork requirements. For purposes of the modeling, LSA assumes that approximately 50 percent of the landscape implementation activities will be performed with hand tools and physical labor. There are no emissions associated with the use of hand tools. It is anticipated that the following equipment will be utilized as necessary: small landscape tractors, compactor, delivery trucks, haul trucks, concrete mixer trucks, hydraulic concrete pumps, small loader, and electric Cushman carts. Default CalEEMod inputs were used for the remaining landscape implementation activities.

Fugitive dust emissions would be substantially reduced by compliance with SCAQMD Rules 402 and 403. Implementation of these rules, including measures such as on-site watering at least two times daily was accounted for in the project emission estimates.

Table 3.3.B presents the peak daily construction emissions based on the CalEEMod emission estimates. This table shows that construction equipment/vehicle emissions during project implementation phases would not exceed any of the SCAQMD daily emissions thresholds. Therefore, the air quality impacts would be less than significant. No mitigation is required.

**Table 3.3.B: Peak Daily Construction Emissions (lbs/day)**

Construction Emissions Activity	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub> (total)	PM <sub>2.5</sub> (total)
Phase 1 – ADA Improvements	3.42	35.80	22.82	0.04	9.94	6.11
Phase 2 – Accessway Improvements	3.30	34.54	18.32	0.03	9.85	6.02
Phase 3 – Shoreline Improvements	2.70	27.83	21.59	0.04	9.49	5.70
<b>SCAQMD Construction Emissions Threshold</b>	<b>75.00</b>	<b>100.00</b>	<b>550.00</b>	<b>150.00</b>	<b>150.00</b>	<b>55.00</b>
<b>Exceed Significance?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Source: Compiled by LSA (May 2017).

CO = carbon monoxide

lbs/day = pounds per day

NO<sub>x</sub> = nitrogen oxide

PM<sub>2.5</sub> = particulate matter less than 2.5 microns in diameter

PM<sub>10</sub> = particulate matter less than 10 microns in diameter

ROG = reactive organic gases

SCAQMD = South Coast Air Quality Management District

SO<sub>2</sub> = sulfur dioxide

**Operational Emissions.** Long-term air emission impacts are those impacts associated with any change in permanent use of the project site by on-site stationary and off-site mobile sources that substantially increase emissions. Stationary-source emissions include emissions associated with electricity consumption and natural gas usage. Mobile-source emissions usually result from vehicle trips associated with a project.

The proposed project is not expected to result in mobile source emissions because the proposed project is a recreational trail improvement and public access to the project site currently exists; the proposed project is an improvement to the public access. Furthermore, the proposed project is intended to serve the same public users that currently access the Naples Island trails and would, therefore, not generate daily traffic trips to the project site. However, the proposed project would generate small quantities of area source and energy emissions derived from landscape maintenance and trail lighting, respectively. All lighting included as part of the project would include light-emitting diode (LED) lighting to reduce the project’s energy demand. Newly planted trees and vegetation would need a substantial amount of time, care and, particularly, proper irrigation, to become established in the landscape. On-site watering irrigation systems would also be carried out during the establishment period (the first one to three years of project operation), during the dry and high heat days, and during periods of drought. Due to the nature of the project as a recreational trail, the off-site emissions associated with the production of electricity production and water conveyance systems are anticipated to be negligible and would not exceed any operational emissions thresholds established by SCAQMD. Therefore, the proposed project would not cause any operational air quality impacts, and no mitigation is required.

- (c) **Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?**

**Less Than Significant Impact.** The South Coast Air Basin is in nonattainment for the federal and State standards for O<sub>3</sub> and PM<sub>2.5</sub>. In addition, the Basin is in nonattainment for the State PM<sub>10</sub> standard, and is in attainment/maintenance for the federal PM<sub>10</sub>, CO, and NO<sub>2</sub> standards. As

discussed in Response 3.3(b) above, no exceedance of SCAQMD criteria pollutant emission thresholds would be anticipated for either construction or operation of the proposed project. The projected emissions of criteria pollutants as a result of the proposed project are expected to be below the emissions thresholds established for the region. Cumulative emissions are part of the emission inventory included in the AQMP for the project area. Therefore, there would be no cumulatively considerable net increase of the criteria pollutants that are in nonattainment status in the Basin. No mitigation is required.

**(d) Would the project expose sensitive receptors to substantial pollutant concentrations?**

**Less Than Significant Impact.** As described in Response 3.3(b), the proposed project would not significantly increase long-term emissions within the project area. Project implementation may expose surrounding sensitive receptors to airborne particulates, as well as a small quantity of construction equipment pollutants (i.e., usually diesel-fueled vehicles and equipment). However, landscaping construction contractors would be required to implement measures to reduce or eliminate emissions by following the SCAQMD's standard construction practices (Rules 402 and 403). Rule 402 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. Rule 403 requires that fugitive dust be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. Some of the applicable dust suppression techniques from Rule 403 are summarized as follows:

- Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
- Water active sites at least twice daily (locations where grading is to occur will be thoroughly watered prior to earthmoving).
- All trucks hauling demolished material, dirt, sand, soil, or other loose materials are to be covered or should maintain at least 2 feet of freeboard in accordance with the requirements of California Vehicle Code Section 23114 (freeboard means vertical space between the top of the load and top of the trailer).

No mitigation would be required to reduce the project's construction emissions to below the SCAQMD's significance thresholds. Therefore, sensitive receptors are not expected to be exposed to substantial pollutant concentrations during construction, and potential short-term impacts are considered less than significant. No mitigation is required.

**(e) Would the project create objectionable odors affecting a substantial number of people?**

**Less Than Significant Impact.** SCAQMD's *CEQA Air Quality Handbook* (1993) identifies various secondary significance criteria related to odorous air contaminants. Substantial odor-generating sources include land uses such as agricultural activities, feedlots, wastewater treatment facilities, landfills, or heavy manufacturing uses. Pursuant to SCAQMD Rule 402, these sources shall include a quantitative assessment of potential odors and meteorological conditions. The project does not propose any such uses or activities that would result in potentially significant

odor impacts. Some objectionable odors may emanate from the operation of diesel-powered construction equipment during construction of the proposed project. However, these odors would be limited to the construction period and would disperse quickly; therefore, these odors would not be considered a significant impact. Furthermore, approximately 50 percent of the landscape implementation activities will be performed with hand tools; there are no emissions or odors associated with the use of hand tools.

The proposed project is a trail improvement project, which does not typically produce objectionable odors. Therefore, no significant impacts related to objectionable odors would result from the proposed project, and no mitigation is required.

### 3.4 BIOLOGICAL RESOURCES.

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) Have a substantial adverse effect on federally protected wetlands as defined by Section 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### Discussion

The following section is based on the *Biological Resources Assessment for the Alamitos Bay Shoreline Trail Project* (Biological Resources Assessment) conducted by LSA Associates, Inc. (LSA) (November 2016) (Appendix B).

#### Impact Analysis

**(a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?**

**Less Than Significant Impact.** The project site primarily consists of disturbed land adjacent to Alamitos Bay surrounded by residential uses, piers and docks with access to Alamitos Bay, and a non-contiguous pathway along the Alamitos Bay shoreline.

Vegetation on the project site consists of mostly nonnative species, including ornamental trees and Mexican fan palms (*Washingtonia robusta*); ornamental ground cover consists mainly of hottentot-fig (*Carpobrotus edulis*). The only native plant observed on the project site was pickleweed (*Salicornia* sp.), which was found in small bunches. As required by Compliance Measure BIO-1, a qualified biologist will oversee that the installation of Environmentally Sensitive Habitat (ESA) fencing around each patch of pickleweed be retained on the project site as part of the project to the maximum extent feasible. Due to the disturbed nature of the vegetation and soil on the site and the project site's isolation from native habitats, there is little potential for special-status plant species on the project site.

Wildlife observed on the project site include the mourning dove (*Zenaida macroura*), black-bellied plover (*Pluvialis squatarola*), willet (*Tringa semipalmata*), black phoebe (*Sayornis nigricans*), American crow (*Corvus brachyrhynchos*), northern mockingbird (*Mimus polyglottos*), European starling (*Sturnus vulgaris*), yellow-rumped warbler (*Setophaga coronate*), and raccoon (*Procyon lotor*). Additionally, a homeowner on the project site, noted during the LSA Biologist's field survey of the site, that great blue herons (*Ardea herodias*) have previously been observed in a pine tree on the project site. Special-status bird species identified through the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDDB) as having been observed within 3 miles of the project site include California least tern (*Sterna antillarum browni*) and Belding's savannah sparrow (*Passerculus sandwichensis*). These species may be found foraging near the site; however, on-site habitat is not suitable for nesting and is not considered critical habitat. Therefore, no significant impacts to sensitive or special-status species would result from project implementation, and no mitigation is required.

#### **Compliance Measure:**

**BIO-1: Pickleweed.** Prior to construction, a qualified biologist will oversee the installation of Environmentally Sensitive Habitat (ESA) fencing around each patch of pickleweed found within the project area. The ESA fencing will serve to protect existing pickleweed in place throughout construction.

#### **(b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?**

**No Impact.** The project site primarily consists of disturbed land adjacent to Alamitos Bay surrounded by residential uses, piers and docks with access to Alamitos Bay, and a non-contiguous pathway along the Alamitos Bay shoreline. The project site does not contain suitable nesting habitat for special-status species, and no known listed or candidate species are known to nest on the site. As discussed further in Response 3.4(a), the California least tern (*Sterna antillarum browni*) and Belding's savannah sparrow (*Passerculus sandwichensis*) are the only identified special-status bird species within the vicinity of the site; however, on-site habitat is not suitable for nesting. Additionally, the United States Fish and Wildlife Service (USFWS) *Threatened & Endangered Species Active Critical Habitat Report (2017)* does not identify any locations of critical habitat within 4 miles of the project site. The closest known critical habitat (Western Snowy plover [*Charadrius Alexandrinus*]) is approximately 4.41 miles southeast of the

project site. Therefore, no impacts to sensitive or special-status species would result from implementation of the proposed project, and no mitigation is required

- (c) **Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 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?**

**No Impact.** The project site primarily consists of disturbed land adjacent to Alamitos Bay surrounded by residential uses, piers and docks with access to Alamitos Bay, and a non-contiguous pathway along the Alamitos Bay shoreline. The proposed trail is separated from Alamitos Bay by a seawall. According to the *Biological Resources Assessment* (Appendix B), Alamitos Bay is a water resource subject to the federal Clean Water Act (CWA) regulated by the United States Army Corps of Engineers (USACE) and the Regional Water Quality Control Board (RWQCB). The proposed project does not include any in-water activities and all in-water activities associated with the seawall project have been assessed and analyzed as part of the *Naples Seawall Interim and Long Range Repair Project Mitigated Negative Declaration* (RBF Consulting, January 2010) and CDP No. 5-11-085. Therefore, implementation of the proposed land-side-based project would not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including but not limited to marsh, vernal pools, and coastal) through direct removal, filling hydrological interruption, or other means, and no mitigation is required.

- (d) **Would the project 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?**

**Less Than Significant with Mitigation Incorporated.** The project site primarily consists of disturbed land adjacent to Alamitos Bay surrounded by residential uses, piers and docks with access to Alamitos Bay, and a non-contiguous pathway along the Alamitos Bay shoreline. Given the fact that the site is heavily disturbed and located on an island that is almost entirely developed, the project site does not function as a wildlife movement corridor and does not offer a significant amount of habitat for wildlife to reside. However, existing landscaping and trees may provide suitable habitat for nesting birds. Nesting bird species are protected under the Migratory Bird Treaty Act (MBTA) (Title 33, United States Code [U.S.C.], Section 703 et seq., see also Title 50, Code of Federal Regulations [CFR], Part 10) and Section 3503 of the California Department of Fish and Game Code. Therefore, the proposed project would be subject to the provisions of the MBTA, which prohibits disturbing or destroying active nests.

Project implementation must also be accomplished in a manner that avoids impacts to active nests during the breeding season. The nesting season accepted by the California Coastal Commission extends from January through September. Therefore, if project construction occurs between January and September, a qualified biologist shall conduct a nesting bird survey no more than 3 days prior to ground- and/or vegetation-disturbing activities to confirm the absence of nesting birds. As documented in Mitigation Measure BIO-1, avoidance of impacts can be accomplished through a variety of means, including establishing suitable buffers around any

active nests. With implementation of Mitigation Measure BIO-1, impacts to nesting birds would be less than significant, and no mitigation is required.

**Mitigation Measure:**

**BIO-1 Migratory Bird Treaty Act.** In the event that vegetation and tree removal should occur between January and September, the City of Long Beach (City) (or its contractor) shall retain a qualified biologist (meaning a professional biologist that is familiar with local birds and their nesting behaviors) to conduct a nesting bird survey no more than 3 days prior to commencement of construction activities. The nesting survey shall include the project site and areas immediately adjacent to the site that could potentially be affected by project-related construction activities such as noise, human activity, and dust, etc. If a nest is found with eggs or active young of any species covered under the Migratory Bird Treaty Act (MBTA) or California Fish and Game Code within 100 feet of the designated construction area prior to construction, the biologist shall establish suitable buffers around the active nests [subject to the recommendations of the qualified biologist]), and the buffer areas shall be avoided until the nests are no longer occupied and the juvenile birds can survive independently from the nests. Prior to commencement of grading activities and issuance of any demolition or grading permits, the Director of the City of Long Beach Development Services Department, or designee, shall verify that all project grading and construction plans include specific notes regarding the requirements of the MBTA, that preconstruction surveys have been completed and the results reviewed by staff, and that the appropriate buffers (if needed) are noted on the plans and established in the field with orange snow fencing.

**(e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

**Less Than Significant Impact.** The City of Long Beach Municipal Code (Ordinance C-7642) regulates the care and removal of trees on public property. The City's Municipal Code requires that a ministerial permit from the City of Long Beach Director of Public Works be obtained prior to the removal of trees from City-owned property. The City's Tree Maintenance Policy also requires a 1:1 replacement ratio and a payment of a fee that is equivalent to a City-approved 15-gallon tree.

The project site primarily consists of disturbed land adjacent to Alamitos Bay surrounded by residential uses, piers and docks with access to Alamitos Bay, and a non-contiguous pathway along the Alamitos Bay shoreline. Trees on the existing project site include ornamental trees and Mexican fan palms (*Washingtonia robusta*). In the event that project implementation would require the removal of on-site trees, the project would be required to comply with Compliance Measure BIO-2, Local Tree Removal Ordinances. Consistent with Compliance Measure BIO-2, a tree removal permit would be obtained prior to any grading or construction activities and removed trees will be replaced with an approved 15-gallon tree and payment of a fee that is equivalent to a City-approved 15-gallon tree. Therefore, compliance with Compliance Measure

BIO-2 would ensure that the proposed project would not result in a significant impact related to local policies or ordinances protecting biological resources, and no mitigation is required.

**Mitigation Measures:** No mitigation is required. However, the following compliance measure is a standard condition based on local regulations that serve to reduce impacts related to biological resources. This compliance measure is applicable to the proposed project and shall be incorporated to ensure that the project has minimal impacts to biological resources.

**Compliance Measure:**

**BIO-2: Local Tree Removal Ordinances.** Prior to the start of any demolition or construction activities, the City of Long Beach (City) Development Services Director, or designee, shall obtain a tree removal permit from the City's Director of Public Works. A City-approved Construction Plan shall be submitted with the permit to remove tree(s). The City-approved Construction Plan shall show that the existing City tree has a direct impact on the design and function of the proposed project. The City shall incur all removal costs, including site cleanup, make any necessary repair of hardscape damage, and replace the tree. The removed tree shall be replaced with an approved 15-gallon tree and payment of a fee that is equivalent to a City-approved 15-gallon tree.

**(f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?**

**No Impact.** The project site and surrounding areas are not located within the boundaries of a Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or any other local or regional conservation plan. Therefore, implementation of the proposed project would not result in any impacts to an HCP or NCCP, or other approved local, regional, or State HCP and no mitigation is required. Therefore, the proposed project would not result in an impact related to local ordinances and the adopted NCCP/HCP, and no mitigation is required.

### 3.5 CULTURAL RESOURCES.

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### Impact Analysis

**(a) Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?**

**No Impact.** The California Environmental Quality Act (CEQA) defines a “historical resource” as a resource that meets one or more of the following criteria: (1) listed in, or determined eligible for listing in, the California Register of Historical Resources (California Register); (2) listed in a local register of historical resources as defined in Public Resources Code (PRC) Section 5020.1(k); (3) identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); or (4) determined to be a historical resource by a project’s Lead Agency (PRC Section 21084.1 and *State CEQA Guidelines* Section 15064.5[a]).

The California Register defines a “historical resource” as a resource that meets one or more of the following criteria: (1) associated with events that have made a significant contribution to the broad patterns or local or regional history of the cultural heritage of California or the United States; (2) associated with the lives of persons important to local, California, or national history; (3) embodies the distinctive characteristics of a type, period, region, or method of construction or represents the work of a master or possesses high artistic values; or (4) has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

According to the City’s Draft General Plan Urban Design Element Historic Sites Map (Map UD-1), there are no historic sites on or adjacent to the project site. The closest historic sites to the project site are located along 2<sup>nd</sup> Street on Naples Island. Therefore, because there are no local, State, or federal historic resources on or adjacent to the proposed project, the proposed project would not impact the significance of a historical resource as defined in Section 15064.5. No mitigation is required.

**(b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?**

**Less Than Significant Impact.** Naples Island is an entirely manmade island that was constructed in the early 1900s. The original seawalls in these areas were built in the 1930s from dredged

materials. The majority of the project site has previously been disturbed as the result of construction of the existing residences. Although project construction would require grading and excavation activities, these activities would be limited to the first few feet below the surface of the site. Furthermore, because the island on which the project site is located is manmade and consists of artificial fill,<sup>8</sup> no impacts to archaeological resources are anticipated. Therefore, potential impacts to unknown archaeological resources on the project site are considered less than significant. No mitigation is required.

**(c) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

**Less Than Significant Impact.** Naples Island is an entirely manmade island that was constructed in the early 1900s. Therefore, it is unlikely that the proposed project would encounter paleontological resources because the project site is located on land created by fill material, which has a low sensitivity for paleontological resources. Therefore, potential impacts to unknown paleontological resources on the project site are considered to be less than significant. No mitigation is required.

**(d) Would the project disturb any human remains, including those interred outside of formal cemeteries?**

**Less Than Significant with Mitigation Incorporated.** No human remains are present on the project site, and it is unlikely that that Native Americans or people of European descent are buried on the project site given that Naples Island is an entirely manmade island constructed of fill material. While the potential to encounter human remains is unlikely because the project site is located on land created by fill material, buried and undiscovered human remains may be present below the ground surface. Disturbing human remains could violate the State's Health and Safety Code, as well as destroy the resource. In the unlikely event that human remains are encountered during project grading, the proper authorities would be notified, and standard procedures for the respectful handling of human remains during the earthmoving activities would be adhered to. Construction contractors are required to adhere to California Code of Regulations (CCR) Section 15064.5(e), PRC Section 5097, and Section 7050.5 of the State's Health and Safety Code. To ensure proper treatment of burials, in the event of an unanticipated discovery of a burial, human bone, or suspected human bone, the law requires that all excavation or grading in the vicinity of the find halt immediately, the area of the find be protected, and the contractor immediately notify the County Coroner of the find. The contractor, the Applicant, and the County Coroner are required to comply with the provisions of CCR Section 15064.5(e), PRC Section 5097.98, and Section 7050.5 of the State's Health and Safety Code. Compliance with these provisions (specified in Mitigation Measure CUL-1), would ensure that any potential impacts to unknown buried human remains would be less than significant by ensuring appropriate examination, treatment, and protection of human remains as required by State law.

<sup>8</sup> City of Long Beach Seismic Safety Element, 1988, Soil Profiles & Geocon West Inc., *Geotechnical Investigation for the Proposed Sorrento Alamitos Bay Shoreline Trail Project Public Right-of-Way Along the Los Cerritos Channel Between East 2<sup>nd</sup> Street and East Appian Way Long Beach, California* (June 11, 2015).

**Mitigation Measure:**

**CUL-1:**       **Human Remains.** In the event that human remains are encountered on the project site, work within 50 feet of the discovery shall be redirected and the County Coroner notified immediately consistent with the requirements of California Code of Regulations (CCR) Section 15064.5(e). State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code (PRC) Section 5097.98. If the remains are determined to be Native American, the County Coroner shall notify the Native American Heritage Commission (NAHC), which shall determine and notify a Most Likely Descendant (MLD). With the permission of the property owner, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Consistent with CCR Section 15064.5(d), if the remains are determined to be Native American and an MLD is notified, the City of Long Beach shall consult with the MLD as identified by the NAHC to develop an agreement for treatment and disposition of the remains. Prior to the issuance of grading permits, the City of Long Beach Development Services Department, or designee, shall verify that all grading plans include notes specifying the requirements of CCR Section 15064.5(e), State Health and Safety Code Section 7050.5, and PRC Section 5097.98.

### 3.6 GEOLOGY AND SOILS.

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### Discussion

The following section is based on the *Geological Investigation for the Proposed Sorrento Alamitos Bay Shoreline Trail Project Public Right-of-Way Along the Los Cerritos Channel Between East 2<sup>nd</sup> Street and East Appian Way Long Beach, California* (Geotechnical Investigation) conducted by Geocon West, Inc. (June 11, 2015) (Appendix C).

#### Impact Analysis

**(a) Would the project 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.**

**Less Than Significant Impact.** As with all of Southern California, the project site in the City of Long Beach (City) is subject to strong ground motion resulting from earthquakes on nearby faults. However, according to the *Geotechnical Investigation* prepared for the proposed project, the project site is not located within an established Alquist-Priolo Earthquake Fault Zone for surface fault ruptures. In addition, there are no known active faults with the potential for surface fault rupture crossing the project site. The closest surface trace of an active fault to the

project site is the Reservoir Hill-Seal Beach segment of the Newport-Inglewood Fault Zone located approximately 0.6 mile northeast of the site, and the closest potentially active fault to the site is the Los Alamitos Fault located approximately 3.7 miles northeast of the site. Therefore, impacts related to the rupture of a known earthquake fault as depicted on the most recent Alquist-Priolo Earthquake Fault Zoning Map are anticipated to be less than significant, and no mitigation is required.

**(a) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:**

**(ii) Strong seismic ground shaking?**

**Less Than Significant Impact.** As previously stated, the project site is located in an active seismic region and could be subject to strong ground motion resulting from earthquakes. Ground shaking resulting from earthquakes associated with both nearby and more distant faults may result in the generation of moderate to strong shaking at the project site. Damage to development and infrastructure associated with the surrounding areas could be expected as a result of significant ground shaking during a strong seismic event in the region. However, due to the nature of the project being a recreational trail containing no inhabitable structures, impacts to the proposed facilities due to strong seismic ground shaking are expected to be less than significant.

**(a) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:**

**(iii) Seismic-related ground failure, including liquefaction?**

**Less Than Significant with Mitigation Incorporated.** Liquefaction commonly occurs when three conditions are present simultaneously: (1) high groundwater; (2) relatively loose, cohesionless (sandy) soil; and (3) earthquake-generated seismic waves. The presence of these conditions may cause a loss of shear strength and, in many cases, ground settlement. According to the City's General Plan Seismic Safety Element (1988) and the Geotechnical Investigation (Appendix C) prepared for the project, the site has a significant potential for liquefaction-induced hazards.

Although the proposed project is a recreational trail and does not include the development of any habitable structures on the project site, impacts to the proposed facilities due to seismically induced liquefaction could occur. Mitigation Measure GEO-1 requires that the City comply with the recommendations of the project Geotechnical Investigation, the most current California Building Code (CBC) and the City Building Code. With implementation of Mitigation Measure GEO-1, impacts related to seismically induced liquefaction would be reduced to a less than significant level.

## Mitigation Measure:

**GEO-1: Incorporation of and Compliance with the Recommendations in the Geotechnical Study.** All grading operations and construction shall be conducted in conformance with the recommendations included in the geotechnical documents prepared by Geocon West Inc. (provided in Appendix C). Recommendations found in the geotechnical document address topics including, but not limited to, the following:

- Earthwork, including site preparation (e.g., grading), soil replacement, compaction standards, groundwater seepage, and fill placement;
- Foundations, including design recommendations and parameters;
- Storm water infiltration systems;
- Soil excavations;
- Seismic design parameters;
- Retaining wall design and construction criteria including backfill requirements;
- Concrete flatwork, including exterior slabs, walkways, and design of these features;
- Soil corrosion; and
- Post-construction considerations, including drainage and burrowing animal maintenance.

Additional site grading, foundation, and utility plans shall be reviewed by the project Geotechnical Consultant prior to construction to check for conformance with the recommendations of this report. The project Geotechnical Consultant shall be present during site grading and foundation construction to observe and document proper implementation of the geotechnical recommendations. The City of Long Beach (City) shall require the Project Geotechnical Consultant to perform at least the following duties during construction:

- Observe earthwork and test compacted fill to ensure soils are suitable for re-use as engineered fill.
- Observe and test imported fill prior to bringing soil to the site.
- Observe and test the bottom of removals to check that the recommendations presented in the Geotechnical Investigation are incorporated during site grading, construction of project improvements, and excavation of foundations.
- Observe all trench and foundation excavation bottoms prior to placing bedding sands, fill, steel, gravel, or concrete.
- Observe foundation excavations prior to the placement of reinforcing steel and concrete to verify that excavations and exposed soil conditions are consistent

with those anticipated. If unanticipated soil conditions are encountered, foundation modifications may be required.

- Observe all drilled pile excavations to verify adequate penetration into the recommended bearing materials. The compressive and tensile strength of the pile sections should be checked to verify the structural capacity of the piles.
- Observe the bottom and subdrain pipe behind retaining walls on the site prior to placement of gravel or compacting.

Grading plan review shall also be conducted by the City Engineer, or designee, prior to the start of grading to verify that requirements developed during the preparation of geotechnical documents (Appendix C) have been appropriately incorporated into the project plans. Design, grading, and construction shall be performed in accordance with the requirements of the City Building Code and the California Building Code (CBC) applicable at the time of grading, as well as the recommendations of the project Geotechnical Consultant as summarized in the final Geotechnical Investigation subject to review by the City Engineer, or designee, prior to the start of grading activities. The final Geotechnical Investigation shall present the results of observation and testing done during grading activities.

**(a) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:**

**iv) Landslides?**

**No Impact.** Seismically induced landslides and other slope failures are common occurrences during or soon after earthquakes in areas with significant ground slopes. The topography at the existing project site and within the surrounding area is relatively flat. According to the City's General Plan Seismic Safety Element (1988) and the Geotechnical Investigation prepared for the project, the project is not within an earthquake-induced landslide zone and is not located within an area subject to potential seismic slope instability. Furthermore, the proposed project does not include the development of any structures on the site that would result in the potential exposure of people or structures to significant adverse impacts associated with landslides on the site. Therefore, seismically induced landslides are unlikely to occur at the site, and no mitigation is required.

**(b) Would the project result in substantial soil erosion or the loss of topsoil?**

**Less Than Significant Impact.** During construction activities, soil would be exposed, and there would be an increased potential for soil erosion compared to existing conditions. During a storm event, soil erosion could occur at an accelerated rate. The increased erosion potential could result in short-term water quality impacts as identified in Section 3.9, Hydrology and Water Quality, of this IS/MND. As discussed in Mitigation Measure WQ-1 in Section 3.9, Hydrology and Water Quality, the proposed project would be required to prepare an Erosion and Sediment Control Plan (ESCP) in compliance with the City of Long Beach MS4 Permit (Compliance Measure WQ-1) and would also be required to conduct any potential dewatering activities in compliance

with the Los Angeles Regional Water Quality Control Board's (RWQCB) Groundwater Discharge Permit (Compliance Measure WQ-2). Additionally, the project would be required to prepare a Low Impact Development Plan (Compliance Measure WQ-3), which itself requires the identification of Source Control Best Management Practices (BMPs), and Low Impact Development BMPs to reduce potential water quality impacts associated with soil erosion. Adherence with Compliance Measures WQ-1 through WQ-3 would reduce impacts related to erosion during construction and operation to a less than significant level.

**(c) Would the project 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?**

**Less Than Significant with Mitigation Incorporated.** Landslides and other forms of mass wasting, including mud flows, debris flows, and soil slips, occur as soil moves downslope under the influence of gravity. Landslides are frequently triggered by intense rainfall or seismic shaking. Because the project site is in a relatively flat area, landslides or other forms of natural slope instability do not represent a significant hazard to the project or the surrounding area. In addition, the site is not within a State-designated hazard zone for seismically induced landslides.

Although no indications of landslide activity or gross slope instability were observed at the project site, grading activities during construction would produce temporary construction slope in some areas. Unstable cut-and-fill slopes could create significant short-term and long-term hazards both on and off site. All excavations must be performed in accordance with City and State Building Codes, and the Division of Occupational Safety and Health requirements. Temporary unsurcharged embankments, if required during excavations and earthwork on the site, would be no steeper than a 1:1 ratio. With implementation of the recommendations in the project Geotechnical Investigation (as required in Mitigation Measure GEO-1), potential impacts related to slope instability would be reduced below a level of significance.

As discussed in Response 3.6(a)iii), there are no structures on the existing project site nor are there any habitable structures proposed to be developed as part of the project. Therefore, there is no potential for liquefiable soils to result in bearing capacity failures due to the loss of foundation support or vertical settlement and/or undergo lateral spreading. No mitigation is required.

Subsidence, the sinking of the land surface due to oil, gas, and water production, causes loss of pore pressure as the weight of the overburden compacts the underlying sediments. According to the Geotechnical Investigation, no subsidence has occurred in the area since the late 1950s due to the full-scale-water injection operations that were implemented by several local agencies in an effort to reduce impacts associated with subsidence in the City. Therefore, impacts related to subsidence would be less than significant, and no mitigation is required.

**(d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?**

**No Impact.** Expansive soils contain types of clay minerals that occupy considerably more volume when they are wet or hydrated than when they are dry or dehydrated. Volume changes associated with changes in the moisture content of near-surface expansive soils can cause uplift or heave of the ground when they become wet or, less commonly, cause settlement when they dry out.

According to the Geotechnical Investigation for the proposed project, on-site soils are considered “non-expansive.” Therefore, the proposed project would not result in impacts associated with expansive soils, and no mitigation is required.

**(e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?**

**No Impact.** The project does not include construction of or connections to septic tanks or alternative wastewater disposal systems. Therefore, the proposed project would not result in impacts related to the soils capability to adequately support the use of septic tanks or alternative wastewater disposal systems, and no mitigation is required.

### 3.7 GREENHOUSE GAS EMISSIONS.

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### Technical Background

Global climate change (GCC) describes alterations in weather features (e.g., temperature, wind patterns, precipitation, and storms) that occur across the Earth as a whole. Global temperatures are modulated by naturally occurring components in the atmosphere (e.g., water vapor, carbon dioxide [CO<sub>2</sub>], methane [CH<sub>4</sub>], and nitrous dioxide [N<sub>2</sub>O]) that capture heat radiated from the Earth’s surface, which in turn warms the atmosphere. This natural phenomenon is known as the “greenhouse effect.” That said, excessive human-generated greenhouse gas (GHG)<sup>9</sup> emissions can and are altering the global climate. The principal GHGs of concern contributing to the greenhouse effect are CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>). Water vapor is the largest naturally occurring GHG; however, it is not identified as an anthropogenic constituent of concern.

State CEQA Guidelines Section 15064.4 states:

(a) The determination of the significance of greenhouse gas emissions calls for a careful judgment by the Lead Agency consistent with the provisions in section 15064. A Lead Agency should make a good-faith effort, based on available information, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project. A Lead Agency shall have discretion to determine, in the context of a particular project, whether to:

(1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use. The Lead Agency has discretion to select the model it considers most appropriate provided it supports its decision with substantial evidence. The Lead Agency should explain the limitations of the particular model or methodology selected for use; or

(2) Rely on a qualitative analysis or performance based standards.

(b) A Lead Agency may consider the following when assessing the significance of impacts from greenhouse gas emissions on the environment:

<sup>9</sup> The principal GHGs of concern contributing to the greenhouse effect are CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, and SF<sub>6</sub>. Water vapor is the largest naturally occurring GHG; however, it is not identified as an anthropogenic constituent of concern.

(1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.

(2) Whether the project emissions exceed a threshold of significance that the Lead Agency determines applies to the project.

(3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must include specific requirements that reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

*State CEQA Guidelines* Section 15064(b) provides that the “determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data,” and further states that an “ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting.”

Revisions to Appendix G of the *State CEQA Guidelines* suggest that the project be evaluated for the following impacts:

- Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
- Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?

However, despite this, neither the CEQA statutes, the California Office of Planning and Research (OPR) guidelines, nor the draft proposed changes to the *State CEQA Guidelines* currently prescribe specific quantitative thresholds of significance or a particular methodology for conducting an impact analysis related to GHG effects on global climate. Rather, as with most environmental topics, significance criteria are left to the judgment and discretion of the Lead Agency.

In the absence of any adopted threshold, the significance of the proposed project's GHG emissions is evaluated with *State CEQA Guidelines* Section 15064.4(b)(2) by considering whether the proposed project complies with applicable regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHGs. Based on guidance in the California Air Pollution Control Officers Association (CAPCOA) report, *CEQA and Climate Change* (dated January 2008), the City is using a screening threshold of 900 metric tons of GHGs per year to determine when further GHG analysis is required. The CAPCOA report references the 900-metric-ton guideline as a conservative threshold for requiring further GHG analysis and mitigation.

For the second criterion, as a recreational trail improvement project, the most directly applicable adopted plan to reduce GHGs is the City of Long Beach's (City) General Plan and Sustainability City Action Plan.

The City's General Plan has adopted a broad spectrum of policies related to climate change, as shown in the Air Quality Element. This element was adopted in 1996 and sets forth the goals, objectives, and policies that guide the City on the implementation of its air quality improvement programs and strategies. The following goals and policies are applicable to the proposed project.

**Goal 7:** Reduce emissions through reduced energy consumption.

**Policy 7.1:** Energy Conservation. Reduce energy conservation through conservation improvements and requirements.

**Action 7.1.4:** Encourage the incorporation of energy conservation features in the design of all new construction

**Action 7.1.7:** Support efforts to reduce GHG emissions that diminish the stratospheric ozone layer.

Individual GHGs have varying global warming potentials and atmospheric lifetimes. Because it is not possible to tie specific GHG emissions to actual changes in climate, this evaluation focuses on the project's emission of GHGs. CO<sub>2</sub>e is a consistent methodology for comparing GHG emissions because it normalizes various GHGs to the same metric. GHG emissions are typically measured in terms of metric tons of "CO<sub>2</sub> equivalents" (CO<sub>2</sub>e). Therefore, for the purpose of this technical analysis, the concept of CO<sub>2</sub>e is used to describe how much global climate change a given type and amount of GHG may cause, using the functionally equivalent amount or concentration of CO<sub>2</sub> as the reference. The GHG emissions estimates were calculated using CalEEMod Version 2016.3.1.

## Impact Analysis

**(a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

**Less Than Significant Impact.** Construction and operation of the proposed project would generate GHG emissions, with the majority of energy consumption (and associated generation of GHG emissions) occurring during the project's landscape implementation (as opposed to its operation).

Overall, the following activities associated with the proposed project could directly or indirectly contribute to the generation of GHG emissions:

- **Removal and Replacement of Vegetation:** The removal of vegetation results in a loss of the carbon sequestration in plants. However, the proposed project includes the planting of new native vegetation, which would result in additional carbon sequestration and would reduce the GHG emissions of the project.

- **Construction Activities:** GHGs would be emitted through the operation of construction equipment and from worker and supply vendor vehicles, each of which typically uses fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O.
- **Electricity and Water Use:** Minor electricity use can result in GHG production if the electricity is generated by combusting fossil fuel. Existing lights on the site would be replaced with LED lights. California's water conveyance system is energy-intensive. Approximately one-fifth of the electricity and one-third of the nonpower-plant natural gas consumed in the State are associated with water delivery, treatment, and use.<sup>10</sup> The proposed project would require a minimal amount of water during implementation in order to comply with SCAQMD Rule 403, and during operation to water the landscaping.
- **Solid Waste Disposal:** Solid waste (e.g., green waste, trash from receptacles, and construction waste) generated by the project could contribute to GHG emissions in a variety of ways. Landfilling and other methods of disposal use energy for transporting and managing the waste, and they produce additional GHGs to varying degrees. Landfilling, the most common waste management practice, results in the release of CH<sub>4</sub> from the anaerobic decomposition of organic materials. CH<sub>4</sub> is 25 times more potent a GHG than CO<sub>2</sub>. However, landfill methane (CH<sub>4</sub>) can also be a source of energy. In addition, many materials in landfills do not decompose fully, and the carbon that remains is sequestered in the landfill and not released into the atmosphere.

**Construction GHG Emissions.** GHG emissions associated with the project would occur over the short term from construction activities, consisting primarily of emissions from equipment and vehicle exhaust. The calculation presented below includes construction emissions in terms of CO<sub>2</sub> and annual CO<sub>2</sub>e GHG emissions from increased energy consumption, water usage, and solid waste disposal.

GHG emissions generated by the proposed project would predominantly consist of CO<sub>2</sub>. In comparison to criteria air pollutants such as O<sub>3</sub> and PM<sub>10</sub>, CO<sub>2</sub> emissions persist in the atmosphere for a substantially longer period of time. While emissions of other GHGs, such as CH<sub>4</sub>, are important with respect to GCC, emission levels of other GHGs are less dependent on the land use and circulation patterns associated with the proposed land use development project than are levels of CO<sub>2</sub>.

Construction activities produce combustion emissions from various sources such as site preparation, demolition, compacting, cement paving, and landscaping, on-site landscape construction vehicles, equipment hauling materials to and from the site, and motor vehicles transporting the construction crew. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change. Table 3.7.A presents the annual construction emissions based on the CalEEMod emission estimates. Results indicate that project implementation would generate approximately 213 metric tons of CO<sub>2</sub>e per year. Per SCAQMD

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<sup>10</sup> California Air Resources Board, 2010. *Economic Sectors Portal*. Website: [www.arb.ca.gov/cc/ghgsectors/ghgsectors.htm](http://www.arb.ca.gov/cc/ghgsectors/ghgsectors.htm) (accessed May 2017).

**Table 3.7.A: Project Construction Greenhouse Gas Emissions**

Emissions	Pollutant Emissions (MT/yr)					
	Bio- CO <sub>2</sub>	NBio- CO <sub>2</sub>	Total CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
Phase 1	0.00	105.13	105.13	0.03	0.00	105.97
Phase 2	0.00	36.17	36.17	0.01	0.00	36.45
Phase 3	0.00	69.75	69.75	0.02	0.00	70.28
<b>Total Project Emissions</b>	<b>0.00</b>	<b>211.05</b>	<b>1,100</b>	<b>0.07</b>	<b>0.00</b>	<b>212.70</b>
<b>Amortized Emissions</b>	--	--	--	--	--	<b>7.09</b>

Source: Compiled by LSA Associates, Inc. (May 2017).

Note: Numbers in table may not appear to add up correctly due to rounding.

Bio-CO<sub>2</sub> = biologically generated CO<sub>2</sub>

CH<sub>4</sub> = methane

CO<sub>2</sub> = carbon dioxide

CO<sub>2</sub>e = carbon dioxide equivalent

MT/yr = metric tons per year

N<sub>2</sub>O = nitrous oxide

NBio-CO<sub>2</sub> = non-biologically generated CO<sub>2</sub>

guidance, due to the long-term nature of the GHGs in the atmosphere, instead of determining significance of construction emissions alone, the total construction emissions are amortized over 30 years (an estimate of the life of the project) and included in the operations analysis. To amortize the emissions over the life of the Project, the SCAQMD recommends calculating the total greenhouse gas emissions for the construction activities, dividing it by a 30-year project life. As such, construction emissions were amortized over a 30-year period. Amortized over 30 years, the total construction emissions would generate approximately 7.09 metric tons of CO<sub>2</sub>e per year.

The estimated CO<sub>2</sub> equivalent emissions associated with amortized construction activities would be below the screening criteria of 900 metric tons. Therefore, construction emissions would be negligible and considered to have a less than significant impact related to GHG emissions and would not impede or interfere with achieving the City’s GHG emission reduction objectives in the General Plan and Sustainable City Action Plan.

**Operational GHG Emissions.** There would no long-term regional GHG emissions associated with the operation of the proposed project. Because most of the project’s indirect emissions would be generated from electricity generated off-site and consumed on-site, energy embodied in water delivery and consumption on-site, and from solid waste generation and transport. Operational emissions in terms of CO<sub>2</sub> (both biologically and nonbiologically generated), CH<sub>4</sub>, N<sub>2</sub>O, and annual CO<sub>2</sub>e emissions from increased energy consumption, water usage, and solid waste disposal would not change from the no project scenario and considered to have a less than significant impact. There will be no new operational vehicle trips or natural gas consumption for this project. Therefore, no significant impacts related would result from the proposed project, and no mitigation is required.

**(b) Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?**

**Less Than Significant Impact.** The Sustainable City Action Plan (SCAP) was adopted by the City in February 2010<sup>11</sup> and is intended to guide operational, policy, and financial decisions to create a more sustainable Long Beach. The plan identifies a wide range of goals and implementation actions to conserve energy and water, reduce solid waste, address global warming, tailor urban design, protect natural habitats, improve pedestrian options, and reduce risks to human health. Specific goals related to GHG include increasing the use of renewable energy in Long Beach and reducing the City's overall electric load by 10 percent. Other goals include creating pedestrian friendly neighborhoods. All pedestrian sidewalk lightings would be upgraded with light-emitting diode (LED) lighting to reduce the project's energy demand. Low-flow watering irrigation system would also be implemented. With the improvements to the pedestrian accessways and shoreline trail in the neighborhood, the proposed project would be consistent with these goals and initiatives of the Sustainable City Action Plan. Therefore, no significant impacts related would result from the proposed project, and no mitigation is required.

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<sup>11</sup> City of Long Beach. 2010. *City of Long Beach Sustainably City Action Plan*. February.

### 3.8 HAZARDS AND HAZARDOUS MATERIALS.

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(e) For a project 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, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### Impact Analysis

**(a) Would the project create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?**

**Less Than Significant Impact.** Hazardous materials are chemicals that could potentially cause harm during an accidental release or mishap, and are defined as being toxic, corrosive, flammable, reactive, and an irritant or strong sensitizer.<sup>12</sup> Hazardous substances include all chemicals regulated under the United States Department of Transportation “hazardous materials” regulations and the United States Environmental Protection Agency (EPA) “hazardous waste” regulations. Hazardous wastes require special handling and disposal because of their potential to damage public health and the environment. The probable frequency and severity of consequences from the routine transport, use, or disposal of hazardous materials is affected by

<sup>12</sup> A “sensitizer” is a chemical that can cause a substantial proportion of people or animals to develop an allergic reaction in normal tissue after repeated exposure to a chemical (U.S. Department of Labor, 2017).

the type of substance, the quantity used or managed, and the nature of the activities and operations.

Construction activities associated with the proposed project would use a limited amount of hazardous and flammable substances/oils (e.g., oils) typical during heavy equipment operation for site grading and construction. The amount of hazardous chemicals present during construction is limited and would be in compliance with existing government regulations. The potential for the release of hazardous materials during project construction is low and, even if a release would occur, it would not result in a significant hazard to the public, surrounding land uses, or environment due to the small quantities of these materials associated with construction vehicles. Therefore, no mitigation is required.

The proposed project includes the creation of a trail and improvements to several accessways along the northern side of Naples Island in the City of Long Beach (City). Recreation uses typically do not present a hazard associated with the accidental release of hazardous substances into the environment because visitors to the site would not use, store, dispose, or transport large volumes of hazardous materials. Hazardous materials associated with long-term operations of the proposed project would consist of landscape maintenance on the project site including the use of fertilizers and light equipment (e.g., edgers) that may require fuel. As stated previously, these types of activities do not involve the use of a large or substantial amount of hazardous materials. In addition, such materials would be contained, stored, and used in accordance with manufacturers' instructions and handled in compliance with applicable standards and regulations. Any associated risk would be adequately reduced to a less than significant level through compliance with these standards and regulations. Further, operation of the proposed project would not store, transport, generate, or dispose of large quantities of hazardous substances. Therefore, potential impacts from the routine transport, use, or disposal of hazardous materials resulting from operation of the proposed project would be less than significant, and no mitigation is required.

The Long Beach Certified Unified Program Agency (Unified Program) is the administering agency for the chemical inventory and business emergency plan regulations for the City. The Unified Program combines both the Long Beach Fire Department (LBFD) and the Health Department into one primary agency responsible for hazardous materials management in the City. The Long Beach Certified Unified Program Agency makes information regarding the appropriate handling, storage, and disposal of all hazardous chemical waste generated in the City publicly available to all residents of the City. Because these resources are available to anyone in the City, it is reasonable to conclude that maintenance workers on the site would use such programs to properly dispose of hazardous waste. Therefore, impacts associated with the disposal of hazardous materials and/or the potential release of hazardous materials that could occur with the implementation of the proposed project are considered less than significant, and no mitigation is required.

- (b) Would the project create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment?**

**Less Than Significant Impact.** As previously stated, construction and operation of the proposed project would involve the use of hazardous materials associated with construction activities and routine maintenance. The amount of these chemicals during construction and operation would be minimal and would be in compliance with existing government regulations. Therefore, the proposed project, which is a recreational trail, would not create a significant hazard to the public or the surrounding environment through foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment, and no mitigation is required.

**(c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

**Less Than Significant Impact.** The proposed project includes the construction of a trail along the northeastern boundary of Naples Island and would not produce hazardous emissions or handle acutely hazardous materials, substances, or waste. The nearest existing school, Naples Elementary School, is located approximately 0.21 mile southwest of the project site. Although there is a school within 0.25 mile, there would not be any acutely hazardous materials produced or handled on the project site due to the nature of the project being a recreational trail. As noted in Response 3.8(a), the proposed project is not anticipated to release hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste in significant quantities. Construction activities associated with the proposed project would use a limited amount of hazardous and flammable substances/oils during equipment operation and would be in compliance with existing government regulations. Landscaping activities associated with project operation would not require the use, storage, disposal, or transport of large volumes of hazardous materials that could cause serious environmental damage in the event of an accident. Therefore, impacts related to hazardous emissions or the handling of hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school would be less than significant, and no mitigation is required.

**(d) Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?**

**No Impact.** The project site is not included on any hazardous materials sites pursuant to Government Code Section 65962.5 and would not create a significant hazard to the public or the environment. No mitigation is required.

**(e) For a project 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, would the project result in a safety hazard for people residing or working in the project area?**

**Less Than Significant Impact.** The project site is located approximately 3.5 miles southeast of the Long Beach Airport. However, the proposed project is located within the Airport Influence Area for the Joint Forces Training Base in Los Alamitos. Because the project is a trail improvement project, the project does not include any structures or improvements that would be of a sufficient height so as to block or obstruct flight patterns within this area. Therefore, the proposed project would not cause a safety hazard for people residing or working in the project area. No mitigation is required.

**(f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?**

**No Impact.** The proposed project is not located within the vicinity of a private airstrip, and as a result, the proposed project would not result in a safety hazard for people residing or working in the project area. No mitigation is required.

**(g) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

**Less Than Significant Impact.** The City's Emergency Operations Plan (August 2015) outlines the City's emergency response organization and policies. This plan also identifies ways in which the City and its residents can minimize risk and prevent loss from natural hazard events. Emergency events addressed in this plan include those associated with earthquakes, flooding, windstorm, tsunamis, public health events, technological and human-caused events, and drought.

During short-term construction activities, the proposed project is not anticipated to result in any substantial traffic queuing on nearby streets, and all equipment would be staged at one of two locations near the project site: the park across from Appian Way or the parking lot across the Appian Way Bridge. Additionally, all large construction vehicles entering and exiting the site would be guided by the use of personnel to avoid vehicle queuing.

The proposed project does not include any characteristics (e.g., permanent road closure or long-term blocking of road access) that would physically impair or otherwise conflict with the City's Emergency Operations Plan or another adopted emergency response plan or emergency evacuation plan. Further, the proposed project would not obstruct or alter any other transportation routes that could be used as evacuation routes during emergency events. Access to and from the project site for emergency vehicles would be reviewed and approved by the LBFD as part of the project approval process to ensure the proposed project is compliant with all applicable codes and ordinances for emergency vehicle access. Therefore, potential impacts to emergency response and evacuations plans would be less than significant, and no mitigation is required.

**(h) Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?**

**No Impact.** The area surrounding the project site is considered urban and built out. The project site is bound by residential uses on all sides, with the exception of Alamitos Bay to the north, and is not adjacent to any wildland areas. Furthermore, according to the California Department of Forestry and Fire Protection (Cal Fire), the project site is not located in a fire hazard area. As a result, the proposed project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. Therefore, no impacts are anticipated, and no mitigation is required.

### 3.9 HYDROLOGY AND WATER QUALITY.

Would the project:

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(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 which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in a substantial erosion or siltation on- or off-site.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d)	Substantially alter the existing drainage pattern of the site or area, including through the 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 flooding on- or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(e)	Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(f)	Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(j)	Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### Impact Analysis

##### (a) Would the project violate any water quality standards or waste discharge requirements?

**Less Than Significant with Mitigation Incorporated.** Pollutants of concern during project construction include sediments, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and chemicals. During construction activities, excavated soil would be exposed, and there would be an increased potential for soil erosion and transport of sediment downstream compared to existing conditions. During a storm event, soil erosion could occur at an accelerated rate. In addition, construction-related pollutants such as chemicals, liquid and petroleum products (e.g., paints, solvents, and fuels), and concrete-related waste could be spilled, leaked or transported via storm runoff into adjacent drainages and into downstream receiving waters. Any of these pollutants has the potential to be transported via stormwater runoff into receiving waters (i.e., Alamitos Bay).

Construction activities associated with the proposed project would disturb less than 1 acre of soil. Only projects that disturb more than 1 acre of soil are required to comply with the State

Water Resources Control Board's (SWRCB) Construction General Permit, which requires preparation of a Storm Water Pollution Prevention Plan and implementation of Construction Best Management Practices (BMPs); therefore, the project is exempt from coverage under the Construction General Permit. However, preparation of an Erosion and Sediment Control Plan (ESCP) would be required in compliance with the City of Long Beach MS4 Permit, as specified in Compliance Measure WQ-1.

In compliance with the City of Long Beach (City) MS4 Permit, the Construction Contractor would be required to prepare an ESCP, and implement construction BMPs during construction activities. Construction BMPs would include, but not be limited to, Erosion Control and Sediment Control BMPs designed to minimize erosion and retain sediment on site and Good Housekeeping BMPs to prevent spills, leaks, and discharge of construction debris and waste into receiving waters.

According to the City's General Plan Seismic Safety Element (1988), groundwater at the project site is anticipated to be less than 10 feet (ft) below ground surface (bgs). Additionally as discussed in the Geotechnical Investigation (Appendix C) prepared for the proposed project, groundwater was encountered at depths between 1 ft and 2 ft bgs. Due to the shallow depth of groundwater on the project site, there is a potential for groundwater to be encountered during project construction and groundwater dewatering may be required. Dewatered groundwater may contain elevated levels of total dissolved solids or other constituents that could be introduced to receiving waters (i.e., Alamitos Bay). As specified in Compliance Measure WQ-2, any groundwater dewatering during excavation would be conducted in accordance with the requirements of the Los Angeles Regional Water Quality Control Board's (RWQCB) Groundwater Discharge Permit. This order requires testing and treatment, as necessary, of groundwater encountered during dewatering prior to its release into surface waters to ensure that effluent limitations for constituents are not exceeded.

Pollutants of concern during operation of the proposed trail include suspended solids/sediment, nutrients, pathogens (bacteria and virus), pesticides, and trash and debris. It is assumed that the proposed trail would be impervious and would result in a net increase in impervious surface area of approximately 0.44 acre. An increase in impervious surface area would expand the volume of runoff during a storm, which would increase the amount of pollutants discharged into downstream receiving waters. In addition, there is a potential for increased erosion due to expanded runoff that could increase solids/sediment in stormwater runoff. Pedestrians and pets utilizing the trail would be a potential source of nutrients, pathogens, and trash and debris (e.g., fecal matter). Landscaping along the project site would capture and aid with treatment of stormwater runoff from the increased impervious surface areas, but could also be a potential source of nutrients and pesticides.

The City is subject to the requirements of the *Waste Discharge Requirements for Municipal Separate Storm Sewer System Discharges from the City of Long Beach* (City of Long Beach MS4 Permit), Order No. R4-2014-0024, NPDES No. CAS004003. Under the City of Long Beach MS4 Permit, the proposed project qualifies as a "New Development Project or Redevelopment Project." New Development Projects that disturb greater than 1 acre and increase impervious surface area by more than 10,000 square feet (approximately 0.23 acre) and Redevelopment

Projects that create, add, or replace 5,000 square feet (approximately 0.115 acre) are required to implement post-construction controls to mitigate stormwater pollution and prepare a Low Impact Development (LID) Plan or equivalent, in compliance with the *City of Long Beach Low Impact Development (LID) Best Management Practices (BMP) Design Manual*, as outlined in the City of Long Beach Municipal Code Chapter 18.74, Low Impact Development Standards, and as specified in Compliance Measure WQ-3. Therefore, the proposed project would be required to prepare a LID Plan, or equivalent that details the Source Control BMPs and LID BMPs that would be implemented to treat stormwater runoff and reduce impacts to water quality during operation.

For the reasons outlined above, implementation of Compliance Measures WQ-1, WQ-2, and WQ-3 (which require implementation of construction and post-construction BMPs and testing and treatment of dewatered groundwater) would reduce impacts related to Waste Discharge Requirements, water quality standards, and degradation of water quality to a less than significant level, and no mitigation is required.

**Mitigation Measures:** No mitigation is required. However, the following compliance measures are standard conditions based on local, State, and federal regulations or laws that serve to reduce impacts related to hydrology and water quality. These Compliance Measures are applicable to the proposed project and shall be incorporated to ensure that the project has minimal impacts to receiving waters.

**Compliance Measures:**

**WQ-1:** **Erosion and Sediment Control Plan.** Prior to the issuance of a building permit, the Construction Contractor shall prepare and submit an Erosion and Sediment Control Plan (ESCP) to the City of Long Beach (City) for review and approval, as specified in the City of Long Beach MS4 Permit (Order No. R4-2014-0024, National Pollutant Discharge Elimination System [NPDES] No. CAS004003). Construction activity shall not commence until the Construction Contractor receives written approval of the ESCP by the City. The ESCP shall include but not be limited to the following: (1) methods to minimize the footprint of the disturbed area and to prevent soil compaction outside of the disturbed area; (2) methods used to protect native vegetation and trees; (3) Sediment and Erosion Control Best Management Practices (BMPs); (4) controls to prevent tracking on and off the site; (5) non-storm water controls (e.g., vehicle washing, dewatering, etc.); (6) materials management (delivery and storage); (7) Spill Prevention and Control; and (8) waste management (e.g., concrete washout/waste management; sanitary waste management, etc.).

**WQ-2:** **Groundwater Discharge Permit.** During groundwater dewatering activities, the Construction Contractor shall comply with the requirements of the *Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties* (Order No. R4-2013-0095, Permit No. CAG994004) (Groundwater Discharge Permit), or subsequent permit. The Construction Contractor shall comply with all applicable provisions in the permit, including water sampling, analysis, and

reporting of dewatering-related discharges. The City of Long Beach Development Services Director, or appropriate designee, shall submit a Notice of Intent for coverage under the permit to the Los Angeles Regional Water Quality Control Board (RWQCB) at least 60 days prior to the start of dewatering. Upon completion of groundwater dewatering activities, the City of Long Beach shall submit a Notice of Termination to the Los Angeles RWQCB.

**WQ-3:** **Low Impact Development Plan.** In compliance with the City of Long Beach MS4 Permit and as specified in Chapter 18.74, Low Impact Development Standards, of the City of Long Beach Municipal Code, the City of Long Beach Development Services Director, or appropriate designee, shall ensure that a Low Impact Development (LID) Plan, or equivalent is prepared for the project prior to issuance of a grading permit. The LID Plan shall be prepared consistent with the requirements of the *City of Long Beach Low Impact Development (LID) Best Management Practices (BMP) Design Manual* and shall include BMPs to be incorporated into the project to target pollutants of concern in runoff from the project site.

**(b) Would the project 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 which would not support existing land uses or planned uses for which permits have been granted)?**

**Less Than Significant Impact.** As discussed in Response 3.9(a) above, due to the shallow depth of groundwater (1 to 2 ft bgs), groundwater dewatering may be required during excavation activities. However, any required groundwater dewatering activities would be temporary in nature and would cease following completion of construction. It is not anticipated that the volume of groundwater extracted during dewatering activities would be substantial in comparison to the overall volume of the groundwater basin. In addition, grading and construction activities would compact soil, which can decrease infiltration during construction. As such, there would not be a substantial change in infiltration or groundwater recharge compared to the existing condition. Therefore, construction activities associated with the proposed project would result in a less than significant impact associated with the depletion of groundwater supplies or interference with groundwater recharge, and no mitigation is required.

Operation of the proposed project would not require groundwater extraction. However, implementation of the proposed project would increase impervious surface by 0.44 acre. An increase in impervious surface area decreases infiltration, which can decrease the amount of water that is able to recharge the aquifer/groundwater. However, landscaping is proposed along the trail which would capture stormwater runoff and aid with groundwater recharge to offset any decreased infiltration from the increased impervious surface areas. Therefore, the proposed project would not constitute an interference with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. Therefore, operational impacts related to depletion of groundwater supplies or interference with groundwater recharge would be less than significant, and no mitigation is required.

- (c) **Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in a substantial erosion or siltation on- or off-site.**

**Less Than Significant with Mitigation Incorporated.** During construction activities, excavated soil would be exposed and disturbed, drainage patterns would be temporarily altered during grading and other construction activities, and there would be an increased potential for soil erosion and the transport of sediment downstream compared with existing conditions. Additionally, during a storm event, soil erosion could occur at an accelerated rate. As discussed in Response 3.9(a) above and specified in Compliance Measures WQ-1 and WQ-2, the Construction General Permit and City of Long Beach MS4 Permit require preparation of a Storm Water Pollution Prevention Plan (SWPPP) and/or ESCP and implementation of construction BMPs to reduce impacts to water quality during construction, including those impacts associated with soil erosion, and siltation. Therefore, adherence to Compliance Measures WQ-1 and WQ-2 would ensure that construction of the proposed project would result in a less than significant impact related to altering the existing drainage pattern of the project site during construction activities in a manner that would result in substantial erosion or siltation on- or off-site. No mitigation is required.

The proposed project would increase the impervious surface area on the project site by 0.44 acre compared to existing conditions, which would increase runoff peak flow by 0.21 cubic feet per second. However, landscaping proposed along the trail would capture stormwater runoff and would attenuate any increase in flow. In the proposed condition, the impervious surface areas would not be prone to erosion or siltation. The landscaped areas would convey storm water and minimize on-site erosion and siltation that could reach downstream receiving waters. As specified in Mitigation Measure WQ-1, a detailed hydrology report would be prepared for the proposed project to ensure that the on-site storm drain facilities, including landscaped areas, are appropriately sized to reduce stormwater runoff. Therefore, because the project would not substantially change the stormwater runoff from the project site, the proposed project would not contribute to downstream erosion or siltation. Finally, the proposed project would not alter the course of a stream or river. As such, operational impacts related to on-site or off-site erosion or siltation would be less than significant with implementation of Mitigation Measure WQ-1.

**Mitigation Measure:**

**WQ-1: Hydrology Report.** Prior to issuance of grading permits, the City of Long Beach (City) Development Services Director, or appropriate designee, shall ensure that a final hydrology report is prepared and approved by the City. The hydrology report shall demonstrate, based on hydrologic calculations, that the project's on-site storm conveyance and retention facilities, including landscaped areas, are designed in accordance with the requirement of the Los Angeles County Department of Public Works Hydrology and Hydraulic Design Manual.

- (d) Would the project substantially alter the existing drainage pattern of the site or area, including through the 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 flooding on- or off-site?**

**Less Than Significant with Mitigation Incorporated.** During construction, soil would be disturbed and compacted and drainage patterns would be temporarily altered, which can increase the volume and velocity of stormwater runoff and increase the potential for localized flooding compared to existing conditions. As discussed in Response 3.9(a), above, and specified in Compliance Measures WQ-1 and WQ-2, the Construction General Permit and City of Long Beach MS4 Permit require preparation of a SWPPP and/or ESCP and implementation of construction BMPs to control and direct surface runoff on-site. By controlling and directing surface runoff on-site, the BMPs will direct additional runoff into Alamitos Bay, which has additional capacity. Because additional runoff during construction will be channeled to Alamitos Bay, which has capacity, construction activities would not result in on- or off-site flooding. Therefore, with adherence to Compliance Measures WQ-1 and WQ-2, construction impacts related to altering the existing drainage pattern of the site or area or increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site would be less than significant, and no mitigation is required.

The proposed project would increase the impervious surface area on the project site by 0.44 acre compared to existing conditions, which would increase runoff peak flow by 0.21 cubic feet per second. However, landscaping proposed along the trail would capture stormwater runoff and attenuate any increase in flow. As specified in Mitigation Measure WQ-1, a detailed hydrology report would be prepared for the proposed project to ensure that the on-site storm drain facilities, including landscaped areas, are appropriately sized to reduce stormwater runoff and ensure that on-site flooding would not occur. Because stormwater flows would be attenuated by the proposed landscaping, the project would not exceed the capacity of the downstream storm drain lines or result in off-site flooding. Finally, the proposed project would not alter the course of a stream or river. Therefore, impacts related to alteration of the existing drainage patterns in a manner that would substantially increase the rate or amount of surface runoff or result in flooding on or off site would be less than significant with implementation of Mitigation Measure WQ-1.

**Mitigation Measures:** Refer to Mitigation Measure WQ-1 in Response 3.9(c), above.

- (e) Would the project create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?**

**Less Than Significant with Mitigation Incorporated.** As discussed in Response 3.9(a) and 3.9(d) above, earthwork activities would compact soil, which could increase storm water runoff during construction. In addition, drainage patterns would be temporarily altered during grading and other construction activities, and construction-related pollutants such as liquid and petroleum products and concrete-related waste could be spilled, leaked, or transported via storm runoff into adjacent drainages and into downstream receiving waters. The proposed project would be

required to comply with requirements set forth by the City of Long Beach MS4 Permit, which requires preparation of an ESCP and implementation of construction BMPs to control storm water runoff, including the discharge of pollutants, as specified in Compliance Measure WQ-1. Therefore, with adherence to Compliance Measure WQ-1, impacts related to the creation or contribution of runoff that would exceed the capacity of the storm water drainage system or provide substantial additional sources of polluted runoff would be less than significant. No mitigation is required.

As discussed under Response 3.9(a) above, groundwater dewatering could be required during construction. Dewatered groundwater may contain elevated levels of total dissolved solids or other constituents that could be introduced to receiving waters. As specified in Compliance Measure WQ-3, groundwater dewatering during construction would be conducted in accordance with the requirements of the Los Angeles RWQCB's Dewatering Permit. Therefore, with adherence to Compliance Measure WQ-2, impacts associated with the introduction of substantial sources of polluted runoff from groundwater dewatering during construction would be less than significant, and no mitigation would be required.

As discussed in Response 3.9(a) above, pollutants of concern during operation of the proposed trail include suspended solids/sediment, nutrients, pathogens (bacteria and virus), pesticides, and trash and debris. As required by Compliance Measure WQ-3, a LID Plan, or equivalent, would be prepared for the project that details the Source Control BMPs and LID BMPs that would be implemented to treat stormwater runoff and reduce impacts to water quality during operation. Therefore, with adherence to Compliance Measure WQ-3, impacts associated with the introduction of substantial sources of polluted runoff during operation would be less than significant.

As discussed under Responses 3.9(c) and 3.9(d), the proposed project would increase the impervious surface area on the project site by 0.44 acre compared to existing conditions, which would increase runoff peak flow by 0.21 cubic feet per second. However, landscaping is proposed along the trail that would capture stormwater runoff to attenuate any increase in flow. As specified in Mitigation Measure WQ-1, a detailed hydrology report would be prepared for the proposed project to ensure that the on-site storm drain facilities, including landscaped areas, are appropriately sized to reduce stormwater runoff. Therefore, with implementation of Mitigation Measure WQ-1, the project would not exceed the capacity of the downstream storm systems, and no mitigation is required.

**Mitigation Measures:** Refer to Compliance Measure WQ-1 in Response 3.9(c), above.

**(f) Would the project otherwise substantially degrade water quality?**

**Less Than Significant Impact.** Refer to Response 3.9(a), above.

**(g) Would the project 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?**

**No Impact.** The proposed project is a trail improvement project intended to revitalize an existing trail within the public right-of-way; the project does not include a housing component. Therefore, implementation of the proposed project would not place housing within a 100-year flood hazard area, and no mitigation is required.

**(h) Would the project place structures in a 100-year flood hazard area that would impede or redirect flood flows?**

**Less Than Significant Impact.** According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) (Map No. 06037C1970F and 06037C1988F, September 26 2008), the project site is located within Zone AE, a Special Flood Hazard Area (SFHA) subject to inundation by the 1-percent annual chance flood. The proposed project is a trail improvement project intended to revitalize the existing trail within the public right-of-way. Implementation of the proposed project does not include the development of any elevated structures that would impede or redirect flows compared to the existing conditions. Therefore, impacts related to placing structures in a 100-year flood hazard area that would impede or redirect flood flows would be less than significant, and no mitigation is required.

**(i) Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?**

**Less Than Significant Impact.** A levee is a type of dam that runs along the banks of a river or canal that provides flood protection. A levee system failure could create severe flooding and high water velocities. Los Cerritos Channel flows into Los Alamitos Bay; however, no levees are located along Los Cerritos Channel. Therefore, the project site would not be at risk from inundation due to failure of a levee. Dam failure is defined as the structural collapse of a dam that releases the water stored in a reservoir behind the dam. A dam failure is usually the result of the age of the structure, inadequate spillway capacity, or structural damage caused by an earthquake or flood. The Sepulveda Dam, Hansen Dam, and Whittier Narrows Dam lie more than 20 miles upstream from where the San Gabriel River and the Los Cerritos Channel pass through Alamitos Bay. According to the Sepulveda and Hansen Dam Failure Inundation Maps, the project site is not located within or adjacent to the dam inundation area of these two dams. In addition, due to the intervening low and flat ground and the distance between the dams and the project site, flood waters resulting from failure of either of these dams would be expected to dissipate before reaching the project site. According to the Whittier Narrows Dam Failure Inundation Map, flood waters would be discharged into the Los Cerritos Channel and San Gabriel River, resulting in raised water levels and potential flooding of the project site. In the event of failure while the Whittier Narrows Dam is full, water from the reservoir would take over 24 hours to reach Alamitos Bay, which would allow ample time for the project site to be evacuated. The City has also developed emergency preparedness plans that would help the public be prepared for these types of emergency situations and has designated local and regional evacuation routes. Furthermore, the proposed project does not include the development of any structures, including residences that would increase the population on the site. Therefore for the reasons listed above, impacts associated with the failure of a dam or levee would be less than significant, and no mitigation is required.

**(j) Would the project be subject to inundation by seiche, tsunami, or mudflow?**

**Less Than Significant Impact.** Seiching is a phenomenon that occurs when seismic groundshaking induces standing waves (seiches) inside water retention facilities such as reservoirs and water tanks. Such waves can cause retention structures to fail and flood downstream properties. According to the Geotechnical Investigation (Appendix C) prepared for the proposed project, there are no major water-retaining structures located immediately up-gradient from the project site; therefore, inundation on the project site from a seismically induced seiche is considered unlikely. Impacts would be less than significant, and no mitigation is required.

Tsunamis are generated wave trains generally caused by tectonic displacement of the sea floor associated with shallow earthquakes, sea floor landslides, rock falls, and exploding volcanic islands. According to the State of California Department of Conservation Tsunami Inundation Maps (California Department of Conservation 2009), the project site is located within a tsunami inundation area. Implementation of the proposed project would attract pedestrians to the site, as the trail would provide pedestrian access to Alamitos Bay and shoreline. However, because the proposed project would not include the development of any habitable structures, or increase population on the site, the proposed project would not expose the project site to additional risk of inundation by tsunami beyond existing conditions. The proposed project would also occur in conjunction with planned seawall improvements along the perimeter of Naples Island, as outlined in Coastal Development Permit (CDP) No. 5-11-085, walls which are intended to protect the shoreline from coastal erosion and other damage from waves and storms. Therefore, the risk associated with possible inundation as a result of tsunami would be less than significant impact, and no mitigation is required.

Mudslides and slumps are described as a shallower type of slope failure, usually affecting the upper soil mantle or weathered bedrock underlying natural slopes and triggered by surface or shallow subsurface saturation. The project site is relatively flat and is not located downslope of any area of potential mudflow. Therefore, the risk associated with possible mudflows and mudslides would be less than significant, and no mitigation is required.

**3.10 LAND USE/PLANNING.**

*Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Impact Analysis**

**(a) Would the project physically divide an established community?**

**No Impact.** Project improvements would occur within the existing public right-of-way along the northern portion of Naples Island and within the sidewalk and public accessways on the northern side of East Sorrento Drive. Existing uses on the project site include mostly unpermitted private landscape and hardscape improvements associated with the residential uses immediately adjacent to the existing 15-foot (ft) public right-of-way where the proposed trail will be implemented on the northern side of Naples Island. Surrounding land uses primarily consist of single-family residential uses, with the exception of several multifamily residential structures located along Naples Plaza and 2<sup>nd</sup> Street. In addition, Alamitos Bay is directly adjacent to the location of the proposed trail improvements.

The proposed project would improve the existing public walkway that runs along the northern shoreline of Naples Island, improve existing accessways leaving the trail, and implement sidewalk improvements and ornamental landscaping along the existing sidewalk on the northern side of East Sorrento Drive. Implementation of the project site would not change the existing residential configuration on the site or in adjacent areas, nor would it change the existing street layout. The project would re-establish the existing trail in areas where improvements associated with the rear yards of on-site residential uses have encroached into the 15 ft wide public right-of-way. While project improvements would require removal of residential improvements within the existing trail, these improvements would occur within the existing right-of-way and would not divide any established community with a roadway, infrastructure, or new land uses. Therefore, the proposed project would not result in the physical division of any established community, and impacts would be less than significant. No mitigation is required.

**(b) Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?**

**Less Than Significant Impact.** The main documents regulating land use on the project site are the City of Long Beach (City) General Plan, Local Coastal Program (LCP), the Zoning Code, and the California Coastal Act. The proposed project's relationship to these planning documents is described further below.

**General Plan.** The City's General Plan is the principal land use document guiding development within the City. The City's General Plan is a comprehensive plan that establishes goals, objectives, and policies intended to guide growth and development in the City. The General Plan also serves as a blueprint for development throughout the community and is the vehicle through which the community needs, desires, and aspirations are balanced. The Long Beach General Plan is the fundamental tool for influencing the quality of life in the City.

At the heart of the General Plan is the Land Use Element (LUE) (adopted in 1989 and revised in April 1997). The LUE establishes land use districts and develops a long-term land use vision for these land use districts throughout the City. The Land Use Element also includes goals and policies for each land use district and implements them through implementation strategies. Although there is a Land Use Element update in progress, as described below, the following discussion is applicable to the project site until any changes to the LUE are adopted by the City.

As illustrated on Figure 3.1, General Plan Land Uses, the majority of the project site is designated Land Use District (LUD) No. 1, with the exception of the westernmost portion of the site which is designated LUD No. 3A. According to the City's General Plan LUE (adopted in 1989 and revised in 1997), allowable uses within the LUD No. 1 land use designation include single-family residential uses, existing mobile home parks, neighborhood-serving retail uses, and local public amenities (i.e., bike paths, parks, beach access, frontage or interior roads, and dedications for public use). Allowable uses within the LUD No. 3.A designation are residential townhomes. The City's General Plan Land Use Element also establishes a Neighborhood Policy for the Naples area aimed at preserving and maintaining residential properties as a primary consideration.

The proposed project includes trail improvements along the northern portion of the site, improvements to the existing accessways from East Sorrento Drive to the trail, and landscaping and sidewalk improvements along the northern portion of East Sorrento Drive. The intent of the project is to improve public access to Alamitos Bay and to improve the existing trail within the current right-of-way on the site. Because the proposed project would retain the existing residential uses on the site and would not require or necessitate changes to the existing land use designations on the site, the proposed project would not require a General Plan Amendment and would be consistent with applicable goals and policies included in the City's General Plan. Therefore, the proposed project would be consistent with the General Plan, and no land use conflict would occur. No mitigation is required.

**Proposed General Plan Update.** The City is currently in the process of updating and replacing the existing Land Use Element with an entirely new LUE that would guide future development in the City through the year 2040. The proposed Land Use Element would introduce the concept of "PlaceTypes," which would replace the traditional land uses designations and zoning classifications in the existing LUE. The updated LUE would establish 14 primary PlaceTypes that

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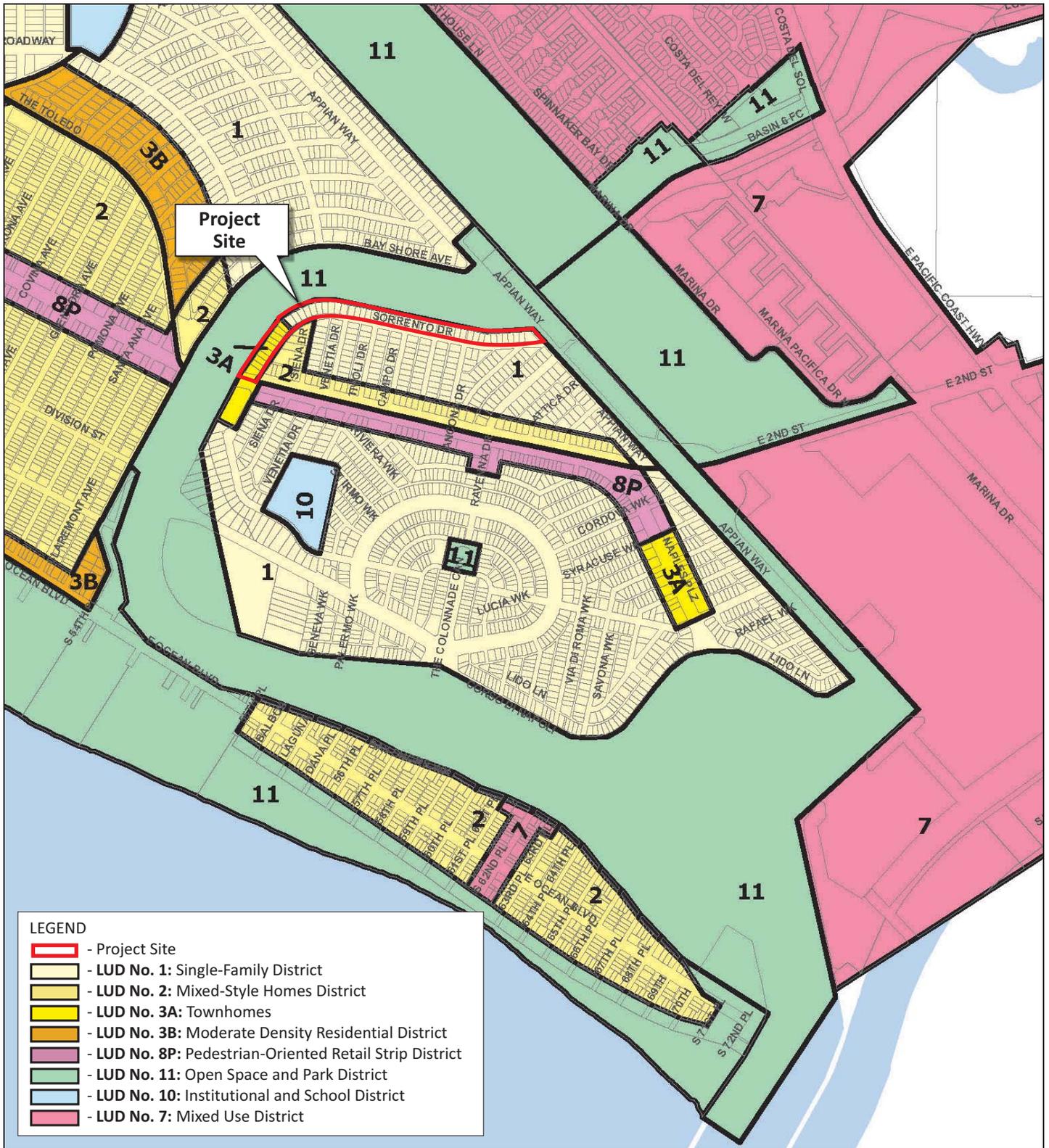


FIGURE 3.1

LSA



NO SCALE

SOURCE: Long Beach General Plan Land Use Element (1989) & General Plan Land Use Map (2002)

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Alamitos Bay Shoreline Trail Project  
General Plan Land Uses

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would divide the City into distinct neighborhoods, thus allowing for greater flexibility and a mix of compatible land uses within these areas. Each PlaceType would be defined by unique land use, form, and character-defining goals, policies, and implementation strategies tailored specifically to the particular application of that PlaceType within the City. The proposed 14 PlaceTypes are as follows: (1) Open Space, (2) Founding and Contemporary Neighborhood, (3) Multi-Family Residential—Low, (4) Multi-Family Residential—Moderate, (5) Neighborhood-Serving Centers and Corridors—Low, (6) Neighborhood-Serving Centers and Corridors—Moderate, (7) Transit-Oriented Development-Low, (8) Transit-Oriented Development-Moderate, (9) Community Commercial, (10) Industrial, (11) Neo-Industrial, (12) Regional-Serving Facility, (13) Downtown, and (14) Waterfront. In total, the Land Use Element proposes changes to approximately 13 percent of the land area (or the equivalent of 4,180 acres) in the City. The establishment of PlaceTypes in place of standard parcel-by-parcel land use designations would allow for greater flexibility in development types to create distinct residential neighborhoods, employment centers, and open space areas.

The Draft LUE (February 2016) designates the majority of the project site as a Founding and Contemporary Neighborhood, with the exception of the westernmost portion of the site, which is designated as Multi-Family Residential-Low. These PlaceTypes primarily allow for the development of low-density, single- and multifamily residential uses, but would allow for small-scale, neighborhood-serving commercial uses within some areas already developed with small-scale commercial uses. The proposed project would not interfere with the existing single-family and multifamily residential uses on the project site and would not introduce the development of any structures or new land uses on the project site. Because no small-scale commercial uses currently exist on the project site, these would not be allowed within the project boundaries. Project improvements would be limited to trail, accessway, and sidewalk improvements on the site. Therefore, the proposed project would be consistent with the proposed PlaceTypes and applicable goals, policies, and implementation strategies regulating land use on the project site under the proposed 2040 General Plan LUE. Therefore, no land use conflict would occur, and no mitigation is required.

**Local Coastal Program.** The project site is located within the State's Coastal Zone, and is, therefore, regulated under the requirements of the California Coastal Act (CCA). Due to the site's location within the Coastal Zone, the City retains jurisdiction over the land-side portion of the project site while the Coastal Commission retains authority over projects within the adjacent water-side areas. However, the Coastal Commission is a Responsible Agency over the proposed project because the project itself is a requirement of Special Condition No. 14 of Coastal Development Permit (CDP) No. 5-11-085, a Coastal Commission permit for the Naples Island Seawall Repair Project that will not be issued until Special Condition No. 14 has been satisfied.

The CCA requires that all cities located within the Coastal Zone adopt an LCP, which is used by cities to regulate local land uses and development in a manner that is consistent with goals of the CCA. Specifically, LCPs identify the location, types, densities, and other land use policies for future development within the Coastal Zone. In accordance with State law, development within the Coastal Zone in Long Beach is guided by the City's LCP, which was approved by the California Coastal Commission (Coastal Commission) in 1980 and subsequently revised in 1994. Because

the City's LCP has been certified by the Coastal Commission, the primary responsibility for issuing CDPs is transferred from the Coastal Commission to the City for all nonshore/nonwater projects in the Coastal Zone. However, the Coastal Commission retains permanent coastal permit authority over development proposed on tidelands, submerged lands, and public trust lands. Projects proposed within the Coastal Zone are required to obtain a CDP prior to commencement.

The City-certified LCP includes the project site and surrounding area. The City's LCP divides the Coastal Zone into 10 different Planning Areas. The project site is located within Planning Area E, The Naples and Alamitos Peninsula Communities. As described in the City's LCP, public access to waterways within public walkways is encouraged within Area E. The City's LCP also aims to improve public access to the shoreline by maintaining public right-of-ways between the seawall and the adjacent sidewalk around Naples Island in Area E. The proposed project aims to improve the existing trail between the seawall and sidewalk within the boundaries of the site, in an area where the trail is currently intermittent and obstructed by landscaping and yard improvements, outdoor patio furniture, and overgrown trees and shrubbery. Therefore, the proposed project would be consistent with goals and policies for Area E of the City's LCP. No land use conflict would occur, and no mitigation is required

**California Coastal Act.** In addition to consistency with the City's LCP, the project is required to comply with applicable policies outlined in the CCA. Specifically, Chapter 3 of the CCA identifies Coastal Resources Planning and Management Policies (Chapter 3, Section 30200, et seq.) that address the following issue areas: maintaining public access to the Coastal Zone, maintaining and providing increased opportunities for recreation within the Coastal Zone; preserving and protecting the existing marine environment within the Coastal Zone; preserving and protecting land resources within the Coastal Zone; encouraging development patterns that minimize impacts to public access, recreation, and resources within the Coastal Zone; and discouraging harmful industrial development within the Coastal Zone. The primary intent of the proposed project is to encourage and promote public access to Alamitos Bay through trail, accessway, and sidewalk improvements along the northern perimeter of Naples Island. The proposed project would also improve public access and increase low cost public recreational opportunities by ensuring that the proposed improvements would be compliant with the Americans with Disabilities Act (ADA) and consistent with the requirements of Special Condition No. 14 of CDP No. 5-11-085. Therefore, the proposed project would be consistent with applicable goals and policies established in Chapter 3 of the CCA.

**Zoning Code.** The City's Zoning Code is the primary implementation tool for the LUE and goals and policies contained therein. The City's Zoning Map indicates the general location and extent of future development in the City. The City's Zoning Ordinance, which includes the Zoning Map, describes and elaborates on the Zoning Map, contains more specific information related to permitted land uses, building intensities, and development standards.

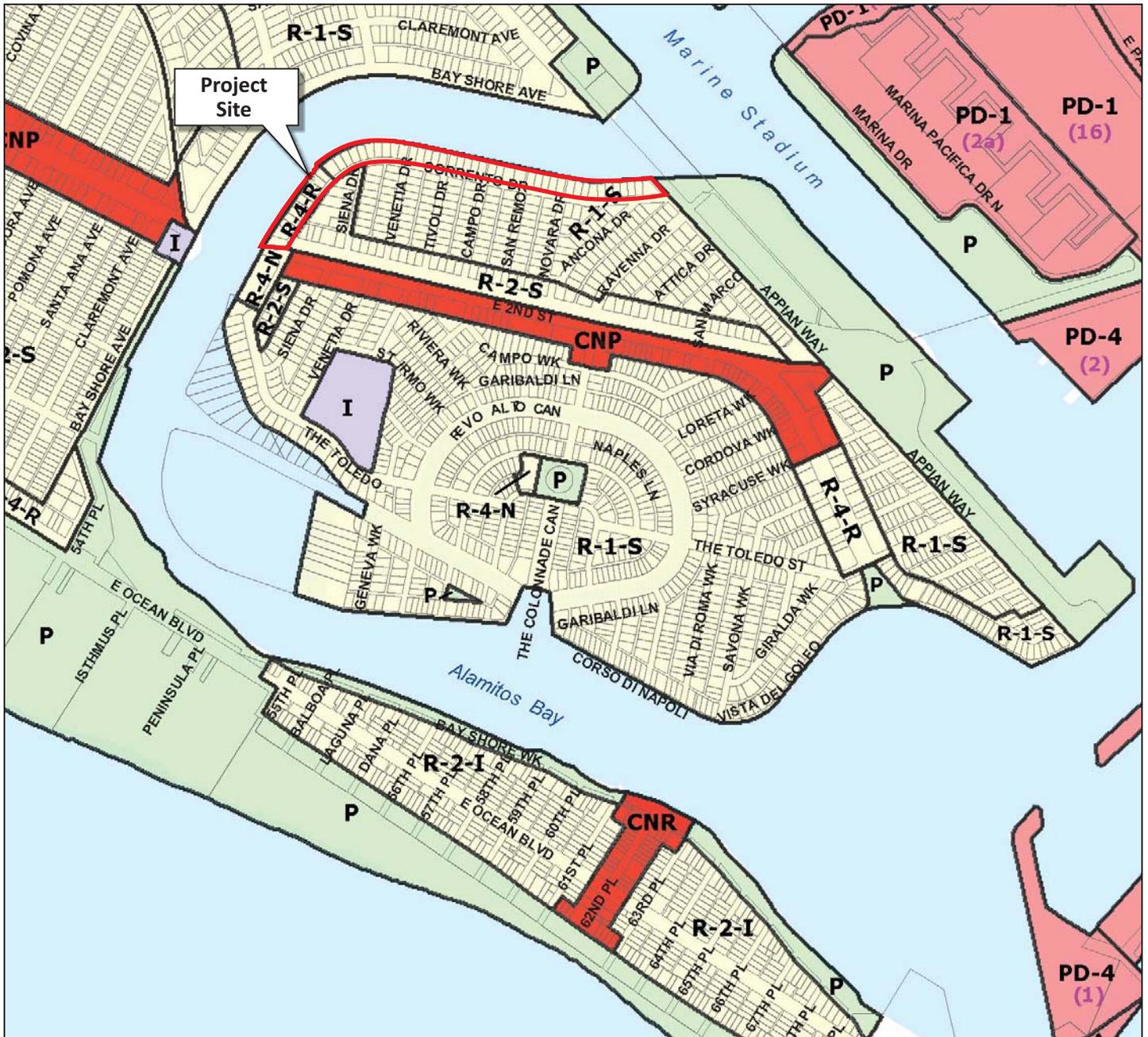
Based on the City's Zoning Map, the project site is classified as R-4-R, Moderate Density, Multi-Family Residential, and R-1-S, Single-Family Residential. According to the City's Municipal Code, the R-4-R District permits moderate density residential development with restrictions on building height. This zoning district is established to encourage full development in moderate-

density neighborhoods. The R-1-S, Single-Family Residential District, allows for single-family uses on small lots. The Zoning Code specifies that this zoning district is appropriate in open space areas, such as the Coastal Zone. The R-1-S district also implements LUD No. 1 of the General Plan. Refer to Figure 3.2, Zoning Districts, for an illustration of the applicable zoning districts. The proposed project involves trail improvements along the Alamitos Bay shoreline, accessway improvements, and sidewalk improvements along East Sorrento Drive. The proposed project does not involve changes to the existing residential uses or designations on the project site and would not necessitate amendments to the existing zoning districts on the project site. Therefore, the proposed project would be consistent with the City's Zoning Code, and no mitigation is required.

**(c) Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?**

**No Impact.** As stated in Response 3.5(f), the project site is not located within a Natural Community Conservation Plan (NCCP) and/or Habitat Conservation Plan (HCP). As such, no impacts associated with conflicts with an applicable NCCP or HCP would occur.

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LEGEND	
	- Project Site
	- P: Park
	- I: Institutional Zone
	- CNP: Neighborhood Pedestrian-Oriented Commercial
	- Planned Development District
	PD-1: Southwest Area Development and Improvement Plan (SEADIP)
	PD-4: Long Beach Marina
	- Residential Zone
	R-1-S: Single-Family Residential, Small Lot
	R-4-N: Medium-Density, Multiple Residential
	R-4-R: Moderate-Density, Multiple Residential
	R-2-I: Two-Family Residential, Intensified Development

FIGURE 3.2

LSA



NO SCALE  
SOURCE: Long Beach Zoning Map (2012)

Alamitos Bay Shoreline Trail Project  
Zoning Districts

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### 3.11 MINERAL RESOURCES.

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### Impact Analysis

**(a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?**

**No Impact.** In 1975, the California Legislature enacted the Surface Mining and Reclamation Act which, among other things, provided guidelines for the classification and designation of mineral lands. Areas are classified on the basis of geologic factors without regard to existing land use and land ownership. The areas are categorized into four Mineral Resource Zones (MRZ):

- **MRZ-1:** An area where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
- **MRZ-2:** An area where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence.
- **MRZ-3:** An area containing mineral deposits, the significance of which cannot be evaluated.
- **MRZ-4:** An area where available information is inadequate for assignment to any other MRZ zone.

Of the four categories, lands classified as MRZ-2 are of the greatest importance. Such areas are underlain by demonstrated mineral resources or are located where geologic data indicate that significant measured or indicated resources are present. MRZ-2 areas are designated by the State of California Mining and Geology Board as being “regionally significant.” Such designations require that a Lead Agency’s land use decisions involving designated areas be made in accordance with its mineral resource management policies and that it consider the importance of the mineral resource to the region or the State as a whole, not just to the Lead Agency’s jurisdiction.

According to the City of Long Beach (City) General Plan Conservation Element (1973), the primary mineral resources within the City of Long Beach have historically been oil and natural gas. However, oil and natural gas extraction has diminished over the last century as the resources have become depleted. Although extraction operations continue, they are on a reduced scale compared to past levels.

The project site has been classified by the California Department of Mines and Geology as being located in MRZ-3, indicating that the project site is located in an area where there are mineral deposits, the significance of which cannot be evaluated. Although the California Department of Mines and Geology classified the site as MRZ-3, there are no known mineral resources or mineral resource extraction activities on the project site. Additionally, according to Plate 3, Soil Profiles, of the City's General Plan Seismic Safety Element (1988) and the Geotechnical Investigation prepared for the project (Appendix C), soils on the project site predominantly consist of artificial fill and soils of unknown origins, which are not considered mineral resources of value. Therefore, because no known mineral resources are present on the project site, the project would not result in the loss of a known commercially valuable mineral resource that would be of value to the region and the residents of the State. Therefore, the proposed project would not result in impacts related to the loss of availability of a known mineral resource that would be of value to the region and residents of the State, and no mitigation is required.

**(b) Would the project 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?**

**No Impact.** As discussed further in Response 3.11(a), no known valuable mineral resources exist on or near the project site, and no mineral resource extraction activities occur on the site. In addition, the project site is not located within an area known to contain locally important mineral resources. Therefore, the project would not result in the loss of availability of a locally important mineral resource recovery site as delineated on a local general plan, specific plan, or other land use plan as a result of project implementation. No significant impacts related to mineral resources would result from project implementation, and no mitigation is required.

### 3.12 NOISE

Would the project result in:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Exposure of persons to or generation of noise levels in excess of standards established in the local General Plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(e) For a project 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, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### Introduction

The following section is based on noise modeling and analysis conducted by LSA (May 2017) for the proposed project.

The discussion and analysis provided in this section describes the potential short-term construction noise and vibration impacts associated with the proposed project. Since the project is the improvement of a recreational pedestrian trail and improvements to the associated accessways, no new noise sources such as vehicular traffic would occur. Therefore, operational noise or vibration impacts are not anticipated to occur once the proposed project is complete.

#### Technical Background

The following provides an overview of the characteristics of sound and the regulatory framework that applies to noise in the vicinity of the project site.

**Characteristics of Sound.** Noise is usually defined as unwanted sound. Noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, or sleep.

Several noise measurement scales exist that are used to describe noise in a particular location. A decibel is a unit of measurement that indicates the relative intensity of a sound. Sound levels in decibels are calculated on a logarithmic basis. An increase of 10 decibels (dB) represents a tenfold increase in acoustic energy, while 20 dB is 100 times more intense, and 30 dB is 1,000 times more intense. Each 10 dB increase in sound level is perceived as approximately a doubling of loudness; similarly, each 10 dB decrease in sound level is perceived as half as loud. Sound intensity is normally

measured through the A-weighted decibel (dBA) sound level. This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive.

As noise spreads from a source, it loses energy; therefore, the farther away the noise receiver is from the noise source, the lower the perceived noise level. Geometric spreading causes the sound level to attenuate or be reduced, resulting in a 6 dB reduction in the noise level for each doubling of distance from a single point source of noise to the noise-sensitive receptor of concern.

There are many ways to rate noise for various time periods, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. The equivalent continuous sound level ( $L_{eq}$ ) is the total sound energy of time-varying noise over a sample period. However, the predominant rating scales for human communities in the State of California are the  $L_{eq}$ , the community noise equivalent level (CNEL), and the day-night average level ( $L_{dn}$ ) based on A-weighted decibels. CNEL is the time-varying noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly  $L_{eq}$  for noise occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours) and a 10 dBA weighting factor applied to noise occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours).  $L_{dn}$  is similar to the CNEL scale, but without the adjustment for events occurring during the evening relaxation hours. CNEL and  $L_{dn}$  are within 1 dBA of each other and are normally interchangeable. The City of Long Beach (City) uses the CNEL noise scale for long-term noise impact assessment.

**Characteristics of Vibration.** Vibration refers to ground-borne noise and perceptible motion. Ground-borne vibration is almost exclusively a concern inside buildings and is rarely perceived as a problem where the motion may be discernible, but there is less adverse reaction without the effects associated with the shaking of a building. Vibration energy propagates from a source through intervening soil and rock layers to the foundations of nearby buildings. The vibration then propagates from the foundation throughout the remainder of the structure. Building vibration may be perceived by occupants as motion of building surfaces, the rattling of items on shelves or hanging on walls, or a low-frequency rumbling noise, otherwise referred to as ground-borne noise. Typically, sources that have the potential to generate ground-borne noise are likely to produce airborne noise impacts that mask the radiated ground-borne noise. The rumbling noise is caused by the vibrating walls, floors, and ceilings radiating sound waves. Annoyance from vibration often occurs when the vibration exceeds the threshold of perception by 10 dB or less. This is an order of magnitude below the damage threshold for normal buildings.

Typical sources of ground-borne vibration are construction activities (e.g., blasting, pile driving, and operating heavy-duty earthmoving equipment) and occasional traffic on rough roads. Problems with ground-borne vibration and noise from these sources are usually localized to areas within approximately 100 feet (ft) of the vibration source, although there are examples of ground-borne vibration causing interference out to distances greater than 200 ft. When roadways are smooth, vibration from traffic, even heavy trucks, is rarely perceptible. For most projects, it is assumed that the roadway surface will be smooth enough that ground-borne vibration from street traffic will not exceed the impact criteria; however, construction of the project could result in ground-borne vibration that could be perceptible and annoying. Table 3.12.A illustrates the human response to various noise and vibration levels.

**Table 3.12.A: Human Response to Different Levels of Ground-Borne Noise and Vibration**

Vibration Velocity Level	Noise Level		Human Response
	Low-Frequency <sup>1</sup>	Mid-Frequency <sup>2</sup>	
65 VdB	25 dBA	40 dBA	Approximate threshold of perception for many humans. Low-frequency sound usually inaudible; midfrequency sound excessive for quiet sleeping areas.
75 VdB	35 dBA	50 dBA	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find transit vibration at this level annoying. Low-frequency noise acceptable for sleeping areas; midfrequency noise annoying in most quiet occupied areas.
85 VdB	45 dBA	60 dBA	Vibration acceptable only if there are an infrequent number of events per day. Low-frequency noise annoying for sleeping areas; midfrequency noise annoying even for infrequent events with institutional land uses, such as schools and churches.

Source: Federal Transit Administration. 2006. *Transit Noise and Vibration Impact Assessment*. May.

<sup>1</sup> Approximate noise level when vibration spectrum peak is near 30 Hz.

<sup>2</sup> Approximate noise level when vibration spectrum peak is near 60 Hz.

dBA = A-weighted decibels

Hz = Hertz

VdB = vibration velocity decibels

Factors that influence ground-borne vibration and noise include the following:

- **Vibration Source:** Vehicle suspension, wheel types and condition, track/roadway surface, track support system, speed, transit structure, and depth of vibration source
- **Vibration Path:** Soil type, rock layers, soil layering, depth to water table, and frost depth
- **Vibration Receiver:** Foundation type, building construction, and acoustical absorption

Among the factors listed above, there are significant differences in the vibration characteristics when the source is underground compared to at the ground surface. In addition, soil conditions are known to have a strong influence on the levels of ground-borne vibration. Among the most important factors are the stiffness and internal damping of the soil and the depth to bedrock.

Experience with ground-borne vibration indicates that (1) vibration propagation is more efficient in stiff clay soils than in loose sandy soils, and (2) shallow rock seems to concentrate the vibration energy close to the surface and can result in ground-borne vibration problems at large distances from the track. Factors such as layering of the soil and depth to water table can have significant effects on the propagation of ground-borne vibration. Soft, loose, sandy soils tend to attenuate more vibration energy than hard, rocky materials. Vibration propagation through groundwater is more efficient than through sandy soils.

### Applicable Noise and Vibration Standards

The City regulates construction noise based on the criteria presented in the Municipal Code Noise Ordinance. Section 8.80.202 of the City Municipal Code provides the following applicable regulations related to construction noise:

- A. Weekdays and Federal Holidays. No person shall operate or permit the operation of any tools or equipment used for construction, alteration, repair, remodeling, drilling, demolition or any other related building activity which produce loud or unusual noise which annoys or disturbs a reasonable person of normal sensitivity between the hours of seven p.m. and seven a.m. the following day on weekdays, except for emergency work authorized by the Building Official. For purposes of this Section, a federal holiday shall be considered a weekday.
- B. Saturdays. No person shall operate or permit the operation of any tools or equipment used for construction, alteration, repair, remodeling, drilling, demolition or any other related building activity which produce loud or unusual noise which annoys or disturbs a reasonable person of normal sensitivity between the hours of seven p.m. on Friday and nine a.m. on Saturday and after six p.m. on Saturday, except for emergency work authorized by the Building Official.
- C. Sundays. No person shall operate or permit the operation of any tools or equipment used for construction, alteration, repair, remodeling, drilling, demolition or any other related building activity at any time on Sunday, except for emergency work authorized by the Building Official or except for work authorized by permit issued by the Noise Control Officer.
- D. Owner's/employer's Responsibility. It is unlawful for the landowner, construction company owner, contractor, subcontractor or employer of persons working, laboring, building, or assisting in construction to permit construction activities in violation of provisions in this Section.
- E. Sunday Work Permits. Any person who wants to do construction work on a Sunday must apply for a work permit from the Noise Control Officer. The Noise Control Officer may issue a Sunday work permit if there is good cause shown; and in issuing such a permit, consideration will be given to the nature of the work and its proximity to residential areas. The permit may allow work on Sundays, only between nine a.m. and six p.m., and it shall designate the specific dates when it is allowed.

Additionally, Section 8.80.200G of the City's Municipal Code provides the following direction regarding vibration impacts:

"Operating or permitting the operation of any device that creates vibration which is above the vibration perception threshold of an individual at or beyond the property boundary of the source if on private property or at one hundred fifty feet (150') (forty-six (46) meters) from the source if on a public space or public right-of-way. For the purposes of this subsection, "vibration perception threshold" means the minimum ground or structure-borne vibrational motion necessary to cause a normal

person to be aware of the vibration by such directed means as, but not limited to, sensation by touch or visual observation of moving objects.”

The vibration standards included in the Federal Transit Administration’s (FTA) *Transit Noise and Vibration Impact Assessment* (May 2006) are used in this analysis for ground-borne vibration impacts on human annoyance, as shown in Table 3.12.A. The criteria account for variation in project types as well as the frequency of events, which differ widely among projects. When there are fewer events per day, it takes higher vibration levels to evoke the same community response. This is accounted for in the criteria by distinguishing between projects with frequent and infrequent events, in which the term “frequent events” is defined as more than 70 events per day.

The criteria for environmental impact from ground-borne vibration and noise are based on the maximum levels for a single event. Table 3.12.B lists the potential vibration building damage criteria associated with construction activities, as suggested in the FTA’s *Transit Noise and Vibration Impact Assessment* (2006). FTA guidelines show that a vibration level of up to 102 VdB (equivalent to 0.5 inches per second [in/sec] in PPV) is considered safe for buildings consisting of reinforced concrete, steel, or timber (no plaster), and would not result in any construction vibration damage. For a nonengineered timber and masonry building, the construction building vibration damage criterion is 94 VdB (0.2 in/sec in PPV).

**Table 3.12.B: Construction Vibration Damage Criteria**

Building Category	PPV (in/sec)	Approximate $L_v$ (VdB) <sup>1</sup>
Reinforced concrete, steel, or timber (no plaster)	0.50	102
Engineered concrete and masonry (no plaster)	0.30	98
Non-engineered timber and masonry	0.20	94
Buildings extremely susceptible to vibration damage	0.12	90

Source: Federal Transit Administration. 2006. *Transit Noise and Vibration Impact Assessment*. May.

<sup>1</sup> RMS VdB re 1  $\mu$ in/sec.

$\mu$ in/sec = microinches per second

in/sec = inches per second

$L_v$  = velocity in decibels

PPV = peak particle velocity

RMS = root-mean-square

VdB = vibration velocity in decibels

### Thresholds of Significance

A project would normally have a significant effect on the environment related to noise if it would substantially increase the ambient noise levels for adjoining areas or conflict with the adopted environmental plans and the goals of the community in which the project is located. The applicable noise standards governing the project site are the criteria in the City’s Noise Ordinance. Typically, compliance with the City’s Municipal Code and exceedance of the FTA vibration standards listed above in Tables 3.12.A and 3.12.B are used to determine when a project results in a significant impact.

### Sensitive Land Uses in the Project Vicinity

The proposed project is located on the northern boundary of Naples, an island neighborhood surrounded on all sides by Alamitos Bay, adjacent to the Pacific Ocean. The island is connected to

the mainland at two locations via 2<sup>nd</sup> Street, which runs east-west through the central/northern portion of the island. The improvements associated with the project will surround existing single-family homes located on Naples Island and have the potential to occur in very close proximity to the existing structures.

### **Construction Noise and Vibration Impact Analysis**

- (a) Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

#### **Less than Significant with Mitigation Incorporated.**

**Construction Noise Impacts.** As presented under the local noise standards, the threshold used for determining significance related to construction noise is compliance with the City's Municipal Code.

Typical construction noise impacts occurring under the project would be associated with concrete mixer trucks (which will transport the concrete material), hydraulic pumps (which will transport the mixed wet concrete from the mixer trucks to the stairs), rolled curb extensions, supporting foundations for the barrier wall, and a concrete plank boardwalks. Hand tools may also emit construction noise and may include, but are not limited to, electric powered augers, drills, nail guns, welders, and sanders. Construction-related noise levels would be higher than existing ambient noise levels in the project area, but would no longer occur once construction of the project is completed.

Two types of noise impacts could occur during construction of the project.

The first type of construction noise would result from construction crew commutes and the transport of construction equipment and materials to the site for the project. These activities would incrementally increase noise levels on access roads leading to the site. Although there would be a relatively high single-event noise-exposure potential causing intermittent noise nuisance (passing pickup trucks at 50 ft would generate up to a maximum of 75 dBA), the effect on longer-term (hourly or daily) ambient noise levels would be small. Therefore, construction-related impacts associated with worker commutes and equipment transport to the project site would be less than significant.

The second type of construction noise impact is related to noise generated during on-site construction activities. Construction is completed in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on the site and, therefore, the noise levels surrounding the site as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Construction-related noise levels would be higher than existing ambient noise levels in the project area, but would no longer occur once construction of the project is completed.

Table 3.12.C lists typical construction equipment noise levels recommended for noise impact assessments, based on a distance of 50 ft between the equipment and a noise receptor, taken from the Federal Highway Administration’s (FHWA) *Roadway Construction Noise Model*. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full-power operation followed by 3 or 4 minutes at lower power settings.

**Table 3.12.C: Typical Maximum Construction Equipment Noise Levels ( $L_{max}$ )**

Type of Equipment	Acoustical Usage Factor	Suggested Maximum Sound Levels for Analysis (dBA $L_{max}$ at 50 ft)
Air Compressor	40	80
Backhoe	40	80
Cement Mixer	50	80
Concrete/Industrial Saw	20	90
Crane	16	85
Excavator	40	85
Forklift	40	85
Generator	50	82
Grader	40	85
Loader	40	80
Paver	50	85
Roller	20	85
Rubber Tire Dozer	40	85
Scraper	40	85
Tractor	40	84
Truck	40	84
Welder	40	73

Source: Federal Highway Administration. 2016. *Roadway Construction Noise Model*.

dBA = A-weighted decibel

ft = feet

$L_{max}$  = maximum noise level

Based on the information in Table 3.12.C, the maximum noise level generated by hand tools, such as a concrete saw is assumed to be 90 dBA  $L_{max}$  at 50. In addition to the referenced maximum noise level, the usage factor provided is used to calculate the hourly noise level impact for each piece of equipment. Once the hourly noise level is calculated, reference noise levels can then be adjusted for distance.

In general, doubling the distance would decrease noise levels by 6 dBA while halving the distance would increase noise levels by 6 dBA. At a distance of 25 ft, a typical distance from activities to residential uses, the composite noise level would be 89 dBA  $L_{eq}$ . Although construction activities may occur closer than 25 ft to the residences resulting in higher noise level impacts, activities will vary and may also be located further away, thus resulting in a lower noise level impact.

Compliance with the City’s Noise Ordinance would ensure that construction noise does not disturb residents during the times they are most likely to be home or during hours when

ambient noise levels are likely to be lower (i.e., at night). Although construction noise would be higher than the ambient noise in the project vicinity, construction noise would cease to occur once project construction is completed. Mitigation Measure NOI-1 would limit construction hours and require the implementation of noise-reducing measures during construction. Therefore, with implementation of mitigation, construction activity noise impacts would be less than significant.

**Construction Vibration – Human Annoyance.** During construction activities, the majority of the tools used are not expected to induce any vibration-related impacts. In order to provide a conservative analysis for the equipment that may cause ground-borne vibrations, for which reference information is not available, the level associated with a small bulldozer is assumed to be 58 VdB (as shown below in Table 3.12.D). This level is below the distinctly perceptible threshold; therefore, the vibration level from the project construction would not exceed the FTA vibration threshold for human annoyance at the nearest sensitive uses, and no mitigation is required.

**Construction Vibration– Building Damage.** Ground-borne noise and vibration from construction activities would be low to nonexistent. A vibration level of 0.003 in/sec PPV would occur when measured at 25 ft using the vibration impacts associated with a small bulldozer based on the FTA’s *Transit Noise and Vibration Impact Assessment* (2006). This vibration level is considered a conservative assumption. As shown in Table 3.12.D, it would take a minimum of 0.12 in/sec PPV to cause any potential building damage. FTA guidelines show that a vibration level of up to 0.5 in/sec in PPV is considered safe for buildings consisting of reinforced concrete, steel, or timber (no plaster), and would not result in any construction vibration damage. For a nonengineered timber and masonry building, the construction vibration damage criterion is 0.2 in/sec in PPV. As stated previously, vibration impacts would approach 0.003 in/sec PPV, which is well below the threshold for potential vibration damage; therefore, vibration impacts associated with construction would be less than significant, and no mitigation is required.

**Table 3.12.D: Vibration Source Amplitudes for Construction Equipment**

Equipment	Reference PPV/L <sub>v</sub> at 25 ft	
	PPV (in/sec)	L <sub>v</sub> (VdB) <sup>1</sup>
Vibratory Roller	0.210	94
Vibratory Compactor	0.200	94
Hoe Ram	0.089	87
Large Bulldozer	0.089	87
Caisson Drilling	0.089	87
Loaded Trucks	0.076	86
Jackhammer	0.035	79
Small Bulldozer	0.003	58

Sources: Federal Transit Administration. 2006. *Transit Noise and Vibration Impact Assessment*. May.

<sup>1</sup> RMS VdB re 1 μin/sec.

μin/sec = microinches per second

ft = feet

in/sec = inches per second

L<sub>v</sub> = velocity in decibels

PPV = peak particle velocity

RMS = root-mean-square

VdB = vibration velocity in decibels

**Operational Noise and Vibration.** Due to the nature of the proposed project being a recreational trail with no vehicular traffic, operational noise and vibration impacts are anticipated to be less than significant.

**Mitigation Measure:**

Implementation of the following measure will ensure that construction noise impacts are reduced to a less than significant level.

**NOI-1 Construction Noise:** Prior to issuance of building permits, the City of Long Beach, or its designee, (or its contractor), shall verify that grading and construction plans include the following requirements:

- Construction activities occurring as part of the project shall be subject to the limitations and requirements of the City of Long Beach Municipal Code, which states that construction activities shall occur only between the hours of 7:00 a.m. and 7:00 p.m. on weekdays and federal holidays, and from 9:00 a.m. to 6:00 p.m. on Saturdays. Construction is not permitted on Sundays.
- Prior to the commencement of construction activities, the project contractor shall distribute construction information to the public regarding the construction schedule. The construction schedule information shall include the specific location, days, frequency, and duration of construction activities that will occur during each phase of project construction.
- Prior to the issuance of grading permits, the project Applicant shall incorporate the following measures as notes on the grading plan cover sheet to ensure that the greatest distance between noise sources and sensitive receptors during construction activities has been achieved:
  - Engine idling from construction equipment shall be limited to a maximum of 5 minutes at any given time.
  - Construction equipment, fixed or mobile, shall be equipped with properly operating and maintained noise mufflers consistent with manufacturer's standards.
  - Construction staging areas shall be located as far away from sensitive receptors as possible during all phases.
  - The project contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site whenever feasible.
  - Radio, music playback equipment, musical instruments, or automobile or truck alarms shall be prohibited on the construction site.

- Except as otherwise required by law, construction employees shall ensure that all construction-related vehicle horns shall remain silent except in case of emergency.
- The project contractor shall maintain a complaint phone line for use by residents and visitors within the project area in reporting construction noise levels.

**(b) Would the project result in Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?**

**Less than Significant Impact.**

**Construction Vibration and Ground-Borne Noise.** As discussed in Response 3.12(a), vibration has the potential to approach 58 VdB based on the conservative assumptions within this analysis. This level is below the distinctly perceptible threshold (approximately 65 VdB); therefore, the vibration level from project construction would not exceed the FTA vibration threshold for human annoyance at the nearest sensitive uses. In addition, vibration impacts would approach 0.003 in/sec, which is well below the threshold for potential vibration damage to standard buildings of 0.12 in/sec PPV. At this level, there is virtually no risk resulting in architectural damage to buildings extremely susceptible to vibration damage; therefore, construction vibration impacts would be less than significant, and no mitigation is required.

**Operational Vibration and Ground-Borne Noise.** Due to the nature of the proposed project being a recreational trail with no operation of heavy equipment or vehicular traffic, operational vibration or ground-borne noise levels are not anticipated to occur. No mitigation is required.

**(c) Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?**

**No Impact.** Because the project is a recreational trail with associated accessway improvements and does not add any new long-term noise sources to the environment, there are no long-term noise or vibration impacts expected once the project is complete. Therefore, there would be no impacts, and no mitigation is required.

**(d) Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?**

**Less than Significant with Mitigation Incorporated.** As discussed in Response 3.12(a), implementation of the proposed project would include construction activities that would result in a substantial temporary increase in ambient noise levels in the project site vicinity above levels existing without the project, but would no longer occur once construction is completed. Sensitive receptors in the project vicinity (residences) are on average approximately 25 ft from the project site. Compliance with the hours specified in the City's Municipal Code regarding construction activities, as well as implementation of Mitigation Measure NOI-1, which requires compliance with construction hours and placing construction equipment as far as possible from sensitive receptors, would reduce construction noise impacts on adjacent noise-sensitive land uses to a less than significant level.

- (e) For a project 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, would the project expose people residing or working in the project area to excessive noise levels?**

**No Impact.** The project site is 3.5 miles southeast of the Long Beach Airport. However, the project is located within the Airport Influence Area for the Joint Forces Training Base in Los Alamitos. The project is more than 3 miles outside of the 65 dBA noise contour of this Airport Influence Area. Because the project is a trail improvement project, it does not include any structures or improvements that would result in the exposure of people to excessive noise levels within the project area. Therefore, the proposed project would not result in a noise-related impact due to airport activities. No mitigation is required.

- (f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?**

**No Impact.** The project site is not in the vicinity of a private airstrip. No impacts related to private airstrips are anticipated, and no mitigation is required.

**3.13 POPULATION AND HOUSING.**

*Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Impact Analysis**

**(a) Would the project 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)?**

**No Impact.** The proposed project includes trail improvements within the existing public right-of-way along the northwestern shoreline of Alamitos Bay, accessway improvements, and sidewalk improvements, in an effort to provide increased public access to the coast. The proposed project does not include the construction of any new residences or businesses and is intended for recreational use by the existing population. Consequently, the proposed project would not significantly affect the location, density, or growth rate of populations within the project vicinity and would not result in population growth in the area. Therefore, no impact related to substantial population growth would occur, and no mitigation is required.

**(b) Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?**

**No Impact.** The proposed project includes trail improvements within the existing public right-of-way along the northwestern shoreline of Alamitos Bay, accessway improvements, and sidewalk improvements, in an effort to provide increased public access to the coast. Project improvements would remove existing obstructions within the existing public-right-of-way, which include rear yard improvements associated with on-site single-family housing parcels. The project would serve to more clearly define existing residential parcel boundaries and the existing public-right-of way. The proposed project would not result in the loss of housing associated with any of the on-site units, and therefore, would not require or necessitate the development of replacement housing elsewhere. Therefore, the proposed project would not result in an impact to the displacement of housing, and no mitigation is required.

**(c) Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?**

**No Impact.** Refer to Response 3.13(b). Project implementation would not displace any existing housing or persons, and would not necessitate the construction of replacement housing elsewhere. No people would be displaced as a result of project implementation, and no mitigation is required.

**3.14 PUBLIC SERVICES.**

*Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Would the project result in substantial adverse physical impacts associated with the provision of or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
v) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Impact Analysis**

**(a) (i). Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection?**

**Less Than Significant Impact.** Fire protection services would be provided to the proposed project by the Long Beach Fire Department (LBFD). The LBFD provides fire protection, emergency medical and rescue services, hazardous inspection and response, and public education activities to the City of Long Beach’s (City) approximately 469,000 residents. Currently, the LBFD has a total of 25 stations (including the headquarters) in the City.<sup>13</sup> The closest fire station to the project site is Fire Station No. 8, located at 5365 East 2<sup>nd</sup> Street (approximately 0.13 mile west of the site).

Although the project site is located within a Critical Fire Zone according to the Fire Hazards Area Map in the City’s General Plan Public Safety Element (1975), the site is not located within a Special Fire Protection Area or Fire Hazard Severity Zone on the Statewide Cal Fire Map for the Los Angeles Region.<sup>14</sup>

Development of the proposed project will result in improved access on the project site, which may result in an increase in pedestrian use of the trail. However, given the size and nature of the proposed project, the increased demand for fire protection services would be nominal. As such, the proposed project would not elicit the need for new or altered facilities. Furthermore, the bollards within the existing accessways from East Sorrento Drive to the trail can be removed to

<sup>13</sup> City of Long Beach, Fire Department, Station Locations. Website: <http://longbeach.gov/fire/station-locations/> (accessed December 29, 2016).

<sup>14</sup> California Department of Forestry and Fire Protection. Website: [http://www.fire.ca.gov/fire\\_prevention/fhsz\\_maps/FHSZ/los\\_angeles/Los\\_Angeles.pdf](http://www.fire.ca.gov/fire_prevention/fhsz_maps/FHSZ/los_angeles/Los_Angeles.pdf) (accessed December 29, 2016).

allow for emergency personnel to access the site in the unlikely event of an emergency. The proposed project would also comply with all Lbfd access requirements and California Fire Code requirements. Therefore, with project implementation, the response profile for the project area would remain the same in terms of service delivery, staffing requirements, facilities, and equipment. The Lbfd would be able to service the proposed project at the same levels provided to this area of the City before project implementation. Therefore, the impact of the proposed project on fire protection would be less than significant, and no mitigation is required.

- (a) (ii). Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection?**

**Less Than Significant Impact.** Police protection services would be provided to the proposed project by the Long Beach Police Department (LBPD). The LBPD has approximately 800 sworn officers and 1,200 support personnel that provide law enforcement services to the City's residents. The LBPD also provides contracted law enforcement services to the Port of Long Beach, the Long Beach Airport, Long Beach Transit, and Long Beach City College.<sup>15</sup> The LBPD is divided into five bureaus: the Investigation Bureau, Support Bureau, Administration Bureau, Financial Bureau, and Patrol Bureau. The Investigation Bureau includes the Detective Division, Gang and Violent Crimes Division, Youth Services Division, and the Forensic Science Services Division. The Support Bureau includes the Jail Division, Emergency Operations Division, and Training Division. The Administration Bureau oversees the Records Division, Personnel Division, and Community Relations Division. The Financial Bureau is responsible for processing purchase orders for payment, issuing billings, preparing the annual budget and monitoring its execution, performing financial analyses, and providing office supplies to the police department. The Patrol Bureau is the largest of the five, encompassing over 40 percent of the LBPD's operating budget and over 50 percent of its personnel.<sup>16</sup>

The LBPD headquarters is located at 400 W Broadway, approximately 4.7 miles east of the project site. Currently, the Lbfd has a total of four stations in the City, including Headquarters, North Division, East Division, and West Division. The closest police station to the project site is East Division, located at 3800 E. Willow Street (approximately 4.6 miles northwest of the site). The average response time for the South Division is 4.8 minutes for Priority 1 calls, which are defined as potentially life-threatening emergencies. The City has an established goal of responding to Priority 1 calls in 5 minutes or less.<sup>17</sup>

Development of the proposed project will result in improved access on the project site, which may result in an increase in pedestrian use of the trail. However, given the size and nature of the

<sup>15</sup> City of Long Beach. About the LBPD. Website: <http://www.longbeach.gov/police/about-the-lbpd/> (accessed February 10, 2017).

<sup>16</sup> City of Long Beach, Police Department, Patrol Bureau. Website: <http://www.longbeach.gov/police/about-the-lbpd/bureaus/patrol-bureau/patrol-bureau/> (accessed January 27, 2016).

<sup>17</sup> City of Long Beach. 2017. Fiscal Year 2017 Adopted Budget (accessed February 6, 2017).

proposed project, the increased demand in police services for the project would be nominal. Development of a more contiguous well-defined trail would not result in a significant increase in pedestrians or users, as access to the project site and trail currently exist today. As such, the proposed project would not elicit the need for new or altered LBPD facilities. Therefore, with project implementation, the response profile for the project area would remain the same in terms of service delivery, staffing requirements, facilities, and equipment. The project would not prevent LBPD from maintaining acceptable service ratios, response times, or other performance objectives for police protection. Therefore, the impact of the proposed project on police protection would be less than significant, and no mitigation is required.

- (a) (iii). Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for schools?**

**No Impact.** The proposed project is located within the Long Beach Unified School District (LBUSD). Approximately 75,000 students from preschool to high school are currently enrolled in one of LBUSD's 84 public schools. The LBUSD currently operates schools located within the City of Long Beach, as well as schools located in the Cities of Lakewood, Signal Hill, and Avalon (on Catalina Island). More than 12,000 full-time and part-time employees work at the school district, making it the largest employer in Long Beach.<sup>18</sup>

Naples Elementary School, Rogers Middle School, and Wilson High School are the public schools currently serving the areas near the project site.<sup>19</sup> Naples Elementary School is located approximately 0.3 mile south of the project site at 5537 East The Toledo. Rogers Middle School is located approximately 1.0 mile north of the project site at 365 Monrovia Avenue. Wilson High School is located approximately 2.1 miles northwest of the project site at 4400 E 10<sup>th</sup> Street.

As described in Section 3.13, Population and Housing, the proposed project does not include any residential uses and would not develop the site with any structures or uses that would result in an increase in population growth, including any increase in school-aged children. As such, the proposed project would not result in an increased demand for school facilities and would not require the construction of new or expanded school facilities. Therefore, no impacts to school services and facilities would occur as a result of the proposed project, and no mitigation is required.

- (a) (iv). Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered facilities, the construction of which could cause significant environmental impacts, in**

<sup>18</sup> Long Beach Unified School District. About. Website: <http://www.lbusd.k12.ca.us/District/> (accessed February 10, 2017).

<sup>19</sup> Long Beach Unified School District, School Finder. Website: [http://www.lbusd.k12.ca.us/Schools/school\\_finder\\_results\\_streets.cfm](http://www.lbusd.k12.ca.us/Schools/school_finder_results_streets.cfm) (accessed January 27, 2017).

**order to maintain acceptable service ratios, response times or other performance objectives for parks?**

**Less Than Significant Impact.** The Long Beach Parks, Recreation, and Marine (LBPRM) Department is responsible for providing community services and maintaining parks and recreational facilities throughout the City. LBPRM currently offers programs and services at 162 parks with 26 community centers, two historic sites, two tennis centers, five golf courses, the marina system, and 6 miles of beaches. According to the City's Draft General Plan Land Use Element, over 2,750 acres within the City's 50 square miles are developed for parks and recreation uses. In addition, the LBPRM offers recreation programs related to arts, sports and fitness, and enrichment subjects for all ages. More than 2,800 recreational and educational classes are offered each year.<sup>20</sup>

The LBPRM is comprised of multiple bureaus, including the Marine Bureau. The Marine Bureau operates the nation's largest municipal marina, an economic asset with 3,600 boat slips that employs over 100 staff and generates \$19 million in slip revenue annually.<sup>21</sup>

According to the United States Census Bureau Population Estimates, the City's 2015 population was estimated at 474,140.<sup>22</sup> As stated in the City's Open Space and Recreation Element, the City has established a goal of providing of minimum of 8 acres of parkland per 1,000 residents.<sup>23</sup> Based on the current population and the existing amount of park space, the City has an acreage ratio of approximately 5.8 acres per 1,000 residents. For that reason, the City would need to develop approximately 1,043 acres of additional parkland to meet the target goal. The proposed project would increase the acreage of recreational facilities available to residents of and visitors to the City through the creation of a distinct on-site trail that would improve public access to Alamitos Bay. As such, the proposed project would help improve the Citywide access to recreational uses. Therefore, impact to parks and parkland facilities would be less than significant, and no mitigation is required.

- (a) (v). Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for other facilities?**

<sup>20</sup> Long Beach Parks, Recreation, and Marine. About the Department. About Long Beach Parks, Recreation and Marine. Website: <http://www.longbeach.gov/park/business-operations/about/> (accessed February 1, 2017).

<sup>21</sup> Long Beach Parks, Recreation, and Marine. About the Department. Long Beach Marine Bureau. Website: <http://www.longbeach.gov/park/business-operations/about/> (accessed February 1, 2017).

<sup>22</sup> United States Census Bureau. QuickFacts Long Beach city, CA. Website: <https://www.census.gov/quickfacts/table/PST045215/0643000> (accessed February 1, 2017).

<sup>23</sup> City of Long Beach. Open Space and Recreation Element of the General Plan. October 2002. Website: <http://www.lbds.info/civica/filebank/blobload.asp?BlobID=2540> (accessed February 1, 2017).

**Less Than Significant Impact.** The Long Beach Public Library (LBPL) system is comprised of the Main Library and 11 branches, which collectively house over 800,000 volumes.<sup>24</sup> The Main Library was constructed in 1977 and is located at 101 Pacific Avenue, approximately 4.5 miles from the project site. Amenities include a Family Learning Center, an auditorium, community meeting spaces, and public-use computers. The Bay Shore Branch Library, located at 195 Bay Shore Avenue, is the primary facility that would service the project site. The 6,900-square-foot facility includes amenities such as a Family Learning Center, a community meeting room, and public-use computers.<sup>25</sup>

Development of the proposed project would result in improved access to the project site, which may result in an increase in pedestrian use of the trail. However, public access to the site is currently available, and it is unlikely that any potential increase in visitors to the area would result in increased usage of libraries. Consequently, the proposed project is unlikely to result in an increased use of library facilities within the City, and would not elicit the need for new or altered facilities. Therefore, the impact of the proposed project on library facilities would be less than significant, and no mitigation is required.

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<sup>24</sup> Long Beach Public Library. Facts and Figures. Website: [http://www.lbpl.org/info/about/facts\\_and\\_figures.asp](http://www.lbpl.org/info/about/facts_and_figures.asp) (accessed February 1, 2017).

<sup>25</sup> Long Beach Public Library. Bay Shore Neighborhood Library. Website: [http://www.lbpl.org/location/bay\\_shore/default.asp](http://www.lbpl.org/location/bay_shore/default.asp) (accessed February 10, 2017).

### 3.15 RECREATION.

*Would the project:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Would the project 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### Impact Analysis

**(a) Would the project 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?**

**Less Than Significant Impact.** As previously described in Section 3.14, Public Services, the City of Long Beach (City) currently maintains 2,750 acres of parks and recreational uses throughout the City. The City’s General Plan Open Space and Recreation Element establishes a goal of providing 8 acres of park space per 1,000 residents. Currently, the City provides 5.8 acres of park space per 1,000 residents. The proposed project would improve the access to recreational facilities available to residents of and visitors to the City through the creation of a distinct on-site trail that would increase public access to Alamitos Bay. Because the project improvements would result in the increased use of an existing public trail, it is not anticipated that the proposed project would increase capacity of existing neighborhood parks resulting in accelerated physical deterioration. As stated in Section 3.13, Population and Housing, the proposed project would not increase employment or population that would potentially utilize existing recreational facilities within the project vicinity. Therefore, implementation of the proposed project would result in a less than significant impact related to the increased use and deterioration of recreational facilities, and no mitigation is required.

**(b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?**

**Less Than Significant Impact.** As previously stated, the proposed project includes improvements to an existing pedestrian trail on the north side of Naples Island. Access to this trail would be available to all members of the community, similar to current conditions. Because the proposed project is the improvement of a recreation use, the adverse physical effects of implementing a recreational facility have been analyzed in all sections of this Mitigated Negative Declaration (MND). As has been detailed throughout this MND, implementation of all design standards, compliance measures, and mitigation measures would ensure that project implementation would not have significant adverse impacts on the environment. The proposed project does not involve the construction or expansion of recreation facilities beyond the proposed trail improvements. Therefore, impacts related to the construction or expansion of recreational facilities included in the proposed project would be less than significant, and no mitigation is required.

### 3.16 TRANSPORTATION/TRAFFIC.

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(d) Substantially increase hazards due to a design feature (e. g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### Impact Analysis

**(a) Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?**

**Less Than Significant Impact.** The proposed project includes improvements to an existing pedestrian trail on the north side of Naples Island. Construction-related vehicular trips would be generated throughout each phase of project construction and would consist of construction workers and delivery vehicles. The majority of construction workers is anticipated to arrive and depart outside peak hours (7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m.), while delivery trucks would likely arrive and depart throughout the day. In addition, the proposed project schedule would comply with the City of Long Beach (City) Municipal Code Chapter 8.80, which permits construction Monday through Friday from 7:00 a.m. to 7:00 p.m., and Saturdays from 9:00 a.m. to 6:00 p.m.

Primary users of the proposed trail are anticipated to be pedestrians within the Naples Island area. The project does not introduce a new recreational use on the site, and operations are

expected to remain similar to existing conditions. Therefore, due to the scale and nature of the project, it is not anticipated that the project would result in the generation of any new vehicular trips as a result of project implementation. Impacts related to potential conflicts with any plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system would be less than significant, and no mitigation is required.

**(b) Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?**

**Less than Significant Impact.** The Los Angeles County Metropolitan Transportation Authority (Metro) adopted the current Congestion Management Program (CMP) in 2010. The 2010 CMP is the eighth CMP adopted for Los Angeles County since the requirement became effective with the passage of Proposition 111 in 1990. This CMP establishes level of service (LOS) standards for roadway intersections in the County. LOS E is the established standard in Los Angeles County except where the base year LOS is worse than LOS E. The nearest CMP monitoring location to the project site is the intersection of Pacific Coast Highway/Westminster Avenue. When the CMP was first established in 1992, this location operated at LOS F. The location now operates at LOS E. Construction traffic associated with this project will be temporary in nature and is not anticipated to affect this CMP intersection after completion of the construction phase. During operation of the project, this CMP intersection is anticipated to continue to operate at LOS E, which meets the CMP standard. Therefore, the proposed project would not result in conflicts with the County's 2010 CMP, and no mitigation is required.

**(c) Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?**

**No Impact.** The nearest airport to the project site is the Long Beach Airport, which is located 3.2 miles north of the property. The proposed project does not include the development of any structures that would be of sufficient height to warrant changes to air traffic patterns, and the project does not alter any roadways or increase traffic near an airport. Therefore, because the project site is not located in the immediate vicinity of any airfields or airports, it would not affect air traffic patterns. No mitigation is required.

**(d) Would the project substantially increase hazards due to a design feature (e. g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

**No Impact.** The proposed project consists of the improvement of an existing public trail, accessways, and sidewalks and does not include any sharp curves, dangerous intersections, or incompatible uses. Although adjacent residents have made improvements within the public right-of-way, the trail area is marked as public access and the proposed project is not considered an incompatible use because access to the site is currently available. Therefore, the proposed project would not result in hazards associated with a design feature or incompatible use, and no mitigation is required.

**(e) Would the project result in inadequate emergency access?**

**Less Than Significant Impact.** Direct access for emergency vehicles would be provided via East Sorrento Drive, which would remain open during construction, and allow project site access to be maintained. The proposed project would not impede or prevent emergency access to the project site. As part of the project's approval process, access to, from, and on site for emergency vehicles would be reviewed and approved by the Long Beach Fire Department (LBFD) prior to project construction. The proposed project would be required to comply with all applicable codes and ordinances for emergency vehicle access, which would ensure adequate access to, from, and on site for emergency vehicles. Furthermore, the proposed project would improve emergency access on the site because the project would reestablish an existing trail within an area currently characterized by landscaping and rear yard improvements that currently obstruct access to and within the site. Therefore, implementation of the proposed project would result in less than significant impacts associated with inadequate emergency access, and no mitigation is required.

**(f) Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities supporting alternative transportation (e.g., bus turnouts, bicycle racks)?**

**Less Than Significant Impact.** The proposed project would not affect adopted policies supporting alternative transportation and would be subject to compliance with policies, plans, and programs of the City and other applicable agencies regarding alternative modes of transportation. Pedestrians accessing the project site may utilize pedestrian facilities (e.g., sidewalks and crosswalks) that are part of the surrounding street system. The project itself is an improvement to an existing public pedestrian trail, which would serve to provide additional pedestrian facilities for residents and visitors on Naples Island.

The project site and area are supported by alternative modes of transportation. The Long Beach Transit System operates Bus Routes 121 and 131 along 2<sup>nd</sup> Street in the project area.<sup>26</sup> The proposed project would not remove or relocate any alternative transportation access points in the project area, including bus stops along Routes 121 and 131. Therefore, the project would not conflict with any adopted plans, policies, or programs supporting alternative transportation, and no mitigation is required.

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<sup>26</sup> Long Beach Transit System, LBT System Map, [http://lbtransit.com/Schedules/pdf/map\\_system.pdf](http://lbtransit.com/Schedules/pdf/map_system.pdf), (accessed February 6, 2017).

### 3.17 TRIBAL CULTURAL RESOURCES

*Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:*

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**(a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?**

OR

**(b) Would the project cause a substantial adverse change in the significance of a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?**

**Less Than Significant Impact.**

The following responses address the thresholds in 4.17(a) and 4.17(b).

Chapter 532, Statutes of 2014 (i.e., Assembly Bill [AB] 52), requires that Lead Agencies evaluate a project’s potential to impact “tribal cultural resources.” Such resources include “[s]ites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are eligible for inclusion in the California Register of Historical resources or included in a local register of historical resources.” AB 52 also gives Lead Agencies the discretion to determine, supported by substantial evidence, whether a resource qualifies as a “tribal cultural resource.”

Also per AB 52 (specifically Public Resources Code [PRC] 21080.3.1), Native American consultation is required upon request by a California Native American tribe that has previously requested that the City provide it with notice of such projects.

The City currently maintains a list of tribal councils based on a list of councils and corresponding Native American representatives provided to the City by the Native American Heritage Commission (NAHC). All tribal councils on this list were emailed a letter for the purposes of AB 52 consultation. Despite several rounds of follow-up phone calls, only one response was received in response to the City's AB 52 letters.

In a letter dated December 14, 2016 (Appendix D), Mr. Salas, Chairperson, Gabrieleno Band of Mission Indians – Kizh Nation, requested AB 52 consultation with the City regarding the proposed project. Mr. Salas stated that the project lies within the ancestral territories of the Kizh Gabrieleno, and requested that a certified Native American monitor from that group be present during all ground-disturbing activities. Mr. Salas also suggested the City contact him to conduct consultation by phone or face-to-face meeting. The City attempted to follow up with Mr. Sallas with several phone calls; however, no response was received.

As discussed in Response 3.5(a), the project site does not contain any "historical resources" as defined by the California Environmental Quality Act (CEQA). Therefore, the proposed project would not cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the *State CEQA Guidelines* or PRC 5020.1(k).

As discussed in Response 3.5(b), the project site is not likely to contain any prehistoric site or archaeological resources due to the fact that soils on the site consist of Artificial Fill associated with the manmade creation of Naples Island in the early 1900s. There is little potential for the proposed project to impact prehistoric resources due to significant prior disturbance from past grading and development activities on the project site and surrounding area.

As noted above, Mr. Salas, Chairperson, Gabrieleno Band of Mission Indians – Kizh Nation, stated that the project site lies within the ancestral territories of the Kizh Gabrieleno, and requested that a certified Native American monitor from that group be present during all ground-disturbing activities. While Mr. Salas did not present any evidence that the proposed project would result in a substantial adverse change in the significance of a tribal cultural resource (defined in PRC Section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe that is listed or eligible for listing in the California Register, or in a local register of historical resources as defined in PRC Section 5020.1(k)), the City agreed to require Native American monitoring during ground-disturbing activities in native soils. Although no evidence of cultural resources has been provided by the tribes consulted, Mitigation Measure TCR-1 has been proposed and requires the presence of a Native American monitor during ground-disturbing activities, as requested during the consultation processes conducted for the project. Implementation of Mitigation Measure TCR-1 would reduce any potential impacts to previously undiscovered tribal cultural resources to a less than significant level. Therefore, on this basis and as a result of the City's consultation with the Gabrieleno Band of Mission Indians – Kizh Nation, the City has concluded that, with implementation of Mitigation Measure TCR-1, potential impacts related to unknown buried tribal cultural resources would also be reduced below a level of significance.

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**Mitigation Measure:**

**TCR-1 Tribal Cultural Resources: Monitoring Procedures.** Prior to commencement of any ground-disturbing activities, the project Applicant shall present evidence to the City of Long Beach Development Services Department Director, or designee, that a qualified Native American monitor has been retained to provide Native American monitoring services during project construction activities. The Native American monitor shall be selected by the project Applicant from the list of certified Native American monitors maintained by the Gabrieleno Band of Mission Indians – Kizh Nation. The Native American monitor shall be present at the pre-grading conference to establish procedures for tribal cultural resource surveillance. Those procedures shall include provisions for temporarily halting or redirecting work to permit sampling, identification, and evaluation of resources deemed by the Native American monitor to be tribal cultural resources as defined in Public Resources Code Section 21074. These procedures shall be reviewed and approved by the City of Long Beach Development Services Department Director, or designee, prior to commencement of any surface disturbance on the project site.

### 3.18 UTILITIES/SERVICE SYSTEMS.

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Require or result in the construction of new water or wastewater treatment or collection facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(f) Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(g) Comply with federal, state, and local statutes and regulations related to solid wastes.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### Impact Analysis

##### (a) Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

**No Impact.** The Los Angeles County Sanitation Districts (LACSD) is a public agency created under State law to manage wastewater and solid waste on a regional scale. LACSD consists of 24 independent special districts serving about 5.5 million people in Los Angeles County, with a service area covering approximately 824 square miles and encompassing 78 cities and unincorporated territory. Currently, the wastewater system includes approximately 1,400 miles of sewers, 48 active pumping plants, and 11 wastewater treatment plants that transport and treat about half the wastewater in the County.<sup>27</sup> The majority of the City of Long Beach's (City) wastewater is diverted to the Joint Water Pollution Control Plant (JWPCP), which is the largest of the LACSD's wastewater treatment plants.<sup>28</sup>

<sup>27</sup> Sanitation Districts of Los Angeles County. Wasterwater Collection Systems. Website: <http://www.lacsd.org/wastewater/wwfacilities/wcs.asp> (accessed February 8, 2017).

<sup>28</sup> Sanitation Districts of Los Angeles County. Joint Outfall System Water Reclamation Plants. Website: [http://www.lacsd.org/wastewater/wwfacilities/joint\\_outfall\\_system\\_wrp/default.asp](http://www.lacsd.org/wastewater/wwfacilities/joint_outfall_system_wrp/default.asp) (accessed February 8, 2017).

The remaining wastewater is delivered to the Long Beach Water Reclamation Plant (LBWRP), located at 7400 E. Willow Street.<sup>29</sup>

The Los Angeles Regional Water Quality Control Board (RWQCB) regulates the treatment of wastewater at treatment plants and the discharge of treated wastewater into receiving waters. While both wastewater treatment plants that serve the City have been designed to treat typical wastewater flows from different land uses, the proposed project would not generate wastewater due to the nature and scale of the project as a proposed pedestrian recreational trail. Therefore, the project would not require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, and would not result in a determination by the wastewater treatment provider that they have inadequate capacity to serve the proposed project's projected demand in addition to existing commitments. Since the capacity of the treatment facility that serves the proposed project would not be exceeded with project implementation, no impact regarding the ability of the treatment facility to treat and dispose of wastewater would occur from project implementation. Thus, no potential exists for the proposed project to exceed wastewater treatment requirements of the Los Angeles RWQCB, and there would be no impact. No mitigation is required.

**(b) Would the project require or result in the construction of new water or wastewater treatment or collection facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

**No Impact.** The LACSD owns and operates approximately 1,400 miles of sewers, 48 active pumping plants, and 11 wastewater treatment plants that transport and treat about 500 mgd (million gallons per day) of wastewater.<sup>30</sup> The LACSD's service area includes sewer systems located within the Joint Outfall System (JOS). In addition to Long Beach, the JOS includes 73 cities and unincorporated territory in Los Angeles County. The system provides wastewater collection, treatment, reuse, and disposal for residential, commercial, and industrial users. Currently, most of the City's wastewater is diverted to the JWPCP, located at 24501 S. Figueroa Street in the City of Carson.<sup>31</sup>

The JWPCP is the largest of the LACSD's wastewater treatment plants, serving a population of 3.5 million people throughout the County. The facility provides treatment for approximately 260 mgd of wastewater, and has a total permitted capacity of 400 mgd. Anaerobic digestion tanks are used to process solids collected in both primary and secondary treatment, resulting in the production of methane gas. After digestion, the solids are transported off site to be used for

<sup>29</sup> Sanitation Districts of Los Angeles County. Long Beach Water Reclamation Plant. Website: [http://www.lacsd.org/wastewater/wwfacilities/joint\\_outfall\\_system\\_wrp/long\\_beach.asp](http://www.lacsd.org/wastewater/wwfacilities/joint_outfall_system_wrp/long_beach.asp) (accessed February 1, 2017).

<sup>30</sup> Sanitation Districts of Los Angeles County. Wasterwater Collection Systems. Website: <http://www.lacsd.org/wastewater/wwfacilities/wcs.asp> (accessed February 8, 2017).

<sup>31</sup> Sanitation Districts of Los Angeles County. Joint Outfall System Water Reclamation Plants. Website: [http://www.lacsd.org/wastewater/wwfacilities/joint\\_outfall\\_system\\_wrp/default.asp](http://www.lacsd.org/wastewater/wwfacilities/joint_outfall_system_wrp/default.asp) (accessed February 8, 2017).

composting, land application, and landfill disposal. The methane gas is used to produce power at an off-site Total Energy Facility, which permits the JWPCP to supply most of its electricity.<sup>32</sup>

The remaining wastewater is delivered to the LBWRP, located at 7400 E. Willow Street. The LBWRP provides primary, secondary, and tertiary treatment using microfiltration, reverse osmosis, and ultraviolet disinfection for 25 million gallons of wastewater per day. Six million gallons of the recycled water are used for landscape irrigation of schools, golf courses, parks, and greenbelts, the re-pressurization of oil-bearing strata off the coast of Long Beach, and the replenishment of the groundwater supply. The recycled water is blended with imported water and pumped into the Alamitos Seawater Barrier to protect the groundwater basin from seawater intrusion. The excess is discharged to Coyote Creek.<sup>33</sup>

Both wastewater treatment plants that serve the City have been designed to treat typical wastewater flows from different land uses. However, given the nature and scale of the proposed project as a pedestrian recreational trail, the project will not generate wastewater. As such, the project would not require or result in the construction of new wastewater treatment facilities or the expansion of existing facilities. Therefore, there are no impacts related to construction or expansion of wastewater treatment facilities, and no mitigation is required.

**(c) Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

**Less Than Significant with Mitigation Incorporated.** The Stormwater/Environmental Compliance Division within the City of Long Beach Public Works Department is responsible for maintaining the storm drain system and monitoring storm water quality. Development of the proposed project includes the creation of a pedestrian trail and access improvements along the north side of Naples Island within the existing public right-of-way. As discussed further in Responses 3.9(a) and 3.9(c), implementation of the proposed project would increase the impervious surface area on the project site, which would increase runoff from the site. Landscaping included as part of the project would capture stormwater runoff to attenuate any increase in flow. Additionally, Mitigation Measure WQ-1, which requires preparation of a detailed Hydrology Report, would be prepared to ensure that on-site storm drain facilities are appropriately sized to reduce storm water runoff. Therefore, with implementation of WQ-1, the proposed project would not exceed the capacity of downstream storm water drainage facilities or cause the expansion of existing facilities.

<sup>32</sup> Sanitation Districts of Los Angeles County. Joint Water Pollution Control Plant. Website: <http://www.lacsd.org/wastewater/wwfacilities/jwpcp/> (accessed February 1, 2017).

<sup>33</sup> Sanitation Districts of Los Angeles County. Long Beach Water Reclamation Plant. Website: [http://www.lacsd.org/wastewater/wwfacilities/joint\\_outfall\\_system\\_wrp/long\\_beach.asp](http://www.lacsd.org/wastewater/wwfacilities/joint_outfall_system_wrp/long_beach.asp) (accessed February 1, 2017).

**(d) Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?**

**Less Than Significant Impact.** Delivery of domestic water service in the City is provided by the Long Beach Water Department. The City is responsible for the installation and maintenance of the entire water network system. The City's potable water supply comes from two main sources, groundwater and imported water. Due to the ownership of pumping rights, over half of the water supply is produced from groundwater wells located within Long Beach. The remainder of the City's water supply is purchased from the Metropolitan Water District of Southern California, which originates from two sources: the Colorado River, via the Colorado River Aqueduct, and the Northern California Bay-Delta region, via the California Aqueduct. The City's non-potable water demand is met through reclaimed water supplies. Recycled water originates from the LBWRP, a facility that processes wastewater that is treated to a quality standard that is suitable for irrigation of outdoor landscapes. Delivery of domestic water service in the City is provided by the Long Beach Water Department. The City is responsible for the installation and maintenance of the entire water network system.<sup>34</sup>

The proposed project includes the creation of a pedestrian recreational trail and access improvements. The project does not include the development of any structures or uses that would result in an increased demand for potable water. The primary cause of increased water usage on the project site will be necessitated by the irrigation of drought-tolerant landscaping proposed as part of the project. This increase in water usage would be nominal and would replace the current water usage demand for existing landscaping. Furthermore, on-site watering of landscaping included as part of the project would occur during the establishment period (the first one to three years of project operation), during dry and high-heat days, and during periods of drought. Therefore, the proposed project would not result in or require the construction of new water treatment or collection facilities or the expansion of existing facilities. Impacts related to water supplies would be less than significant, and no mitigation is required.

**(e) Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

**No Impact.** Refer to Response 3.18(b) for discussion on wastewater treatment providers that serve the City. The proposed project is recreational in nature and does not include the development of any structures or uses that would generate wastewater. Therefore, the proposed project would not impact the wastewater treatment provider's service capacity or the ability of the service provider to meet existing service commitments. Therefore, no impacts related to wastewater generation and treatment would occur, and no mitigation is required.

**(f) Would the project be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs?**

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<sup>34</sup> Long Beach Water Department. Sources of Water. Website: <http://www.lbwater.org/sources-water> (accessed February 8, 2017).

**Less Than Significant Impact.** The LACSD comprehensive solid waste management system currently provides about one-fourth of the countywide solid waste disposal needs through the operation of two sanitary landfills, three landfill energy recovery facilities, two recycling centers, three materials recovery/transfer facilities, and two refuse-to-energy facilities.<sup>35</sup> The majority of the solid waste generated in the City is disposed of at the Southeast Resource Recovery Facility (SERRF). The City and LACSD have a Joint Powers Agreement to operate the SERRF, located at 120 Pier S Avenue in Long Beach. SERRF is a refuse-to-energy transformation facility that reduces the volume of solid waste by approximately 80 percent while creating electrical energy.<sup>36</sup>

The SERRF is the closest active solid waste operated by LACSD that could be used to dispose of waste generated at the project site. Solid waste from the site would be collected and trucked to the SERRF, where it would be processed. The SERRF currently accepts an average of 1,427 tons per day and is authorized to dispose of a maximum of 2,240 tons per day.<sup>37</sup> The remaining capacity and estimated closure dates have not been determined because the SERRF is a transformation facility that converts solid waste to energy and ash.

As discussed in Section 3.13, Population and Housing, project implementation would not result in any increase in population or employment. Although operation of the proposed project is anticipated to generate nominal amounts of solid waste from pedestrians using the trail, it would not generate an amount of solid waste that would exceed the capacity of landfills. Solid waste generated by the project would be taken to either the Calabasas or the Scholl Canyon landfill.

Construction activities would generate construction debris from removal of the landscape and hardscape improvements, as well as removal of some portions of the concrete on East Sorrento Drive associated with the proposed sidewalk improvements. However, the project would comply with the City's Construction and Demolition Ordinance (ORD-07-0025), which requires that certain demolition and/or construction projects divert at least 60 percent of waste through recycling, salvage, or deconstruction. Therefore, the proposed project would result in a less than significant impact with respect to solid waste generation and landfill capacity, and no mitigation is required.

**(g) Would the project comply with federal, state, and local statutes and regulations related to solid wastes?**

**No Impact.** The California Integrated Waste Management Act (Assembly Bill [AB] 939) changed the focus of solid waste management from landfill to diversion strategies such as source

<sup>35</sup> Sanitation Districts of Los Angeles County. More About Us. Website: [http://www.lacsd.org/aboutus/more\\_about\\_us/default.asp](http://www.lacsd.org/aboutus/more_about_us/default.asp) (accessed February 10, 2017).

<sup>36</sup> Long Beach Gas and Oil. SERRF Operations. Website: <http://www.longbeach.gov/lbgo/about-us/serff/operations//> (accessed February 27, 2017).

<sup>37</sup> Los Angeles County Department of Public Works (LACDPW), Environmental Programs Division. *Countywide Integrated Waste Management Plan, 2015 Annual Report December 2016*. Website: <https://dpw.lacounty.gov/epd/swims/ShowDoc.aspx?id=6530&hp=yes&type=PDF>.

reduction, recycling, and composting. The purpose of the diversion strategies is to reduce dependence on landfills for solid waste disposal. AB 939 established mandatory diversion goals of 25 percent by 1995, 50 percent by 2000, and 75 percent by 2020. In 2006, the waste diversion rate of 69 percent was submitted to the California Integrated Waste Management Board, well surpassing the State-mandated diversion rate of 50 percent.<sup>38</sup>

The proposed project would comply with existing or future statutes and regulations, including waste diversion programs mandated by City (ORD-07-0025), State, or federal law. In addition, as discussed above, the proposed project would not result in an excessive production of solid waste that would exceed the capacity of the existing landfill serving the project site. Therefore, the proposed project would not result in an impact related to federal, State, and local statutes and regulations related to solid wastes, and no mitigation is required.

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<sup>38</sup> City of Long Beach. Waste Reduction. Website: <http://www.longbeach.gov/sustainability/green-urban-services/waste-reduction/> (accessed January 30, 2017).

**3.19 MANDATORY FINDINGS OF SIGNIFICANCE.**

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	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 or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects?)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Impact Analysis**

**(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 or eliminate important examples of the major periods of California history or prehistory?**

**Less Than Significant with Mitigation Incorporated.** The project site primarily consists of disturbed land adjacent to Alamitos Bay surrounded by residential uses, piers and docks with access to Alamitos Bay, and a non-contiguous pathway along the Alamitos Bay shoreline. As discussed further in Section 3.4, Biological Resources, the project site mostly contains nonnative species. The only native plant on the site is pickleweed, which was found in small bunches. Due to the disturbed nature of vegetation and soil on the project site and the site’s isolation from native habitats, there is little potential for special-status species on the project site and impacts would be less than significant. Development of the proposed project does not have the potential to degrade the quality of the natural environment. Implementation of the proposed project would remove some on-site nonnative landscaping and would retain native landscaping (i.e., pickleweed) to the extent feasible. The proposed project would also include the planting of vegetation along the northern and southern perimeter of the project site. The existing on-site trees may, however, provide suitable habitat for nesting birds, some of which are protected by the Migratory Bird Treaty Act (MBTA). Disturbing or destroying active nests that are protected is a violation of the MBTA. In addition, nests and eggs are protected under Fish and Game Code Section 3503. Adherence to Mitigation Measure BIO-1 would ensure that the project complies with the MBTA. Additionally, Mitigation Measure BIO-1 requires nesting bird surveys if vegetation and tree removal occurs between January and September to reduce potential project

impacts related to migratory birds. With implementation of Mitigation Measure BIO-1, potential impacts to biological resources would be less than significant.

The potential for archaeological and paleontological resources on the project site is considered low because the site contains Artificial Fill (which has no paleontological sensitivity) and because the site is located on Naples Island, which is an entirely manmade island. Furthermore, ground-disturbing activities on the site are would be limited to the first few feet below ground surface. In the event that human remains are discovered during construction, Mitigation Measure CUL-1 requires notification of the proper authorities and adherence to standard procedures for the respectful handling of human remains. In addition, Mitigation Measure TRC-1 requires Native American monitors to be present on site during ground-disturbing activities. Implementation of Mitigation Measures CUL-1 and TRC-1 would reduce any potential impacts to previously undiscovered cultural resources to a less than significant level.

**(b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects?)**

**Less Than Significant Impact.** The project site primarily consists of disturbed land adjacent to Alamitos Bay surrounded by residential uses, piers and docks with access to Alamitos Bay, and a non-contiguous pathway along the Alamitos Bay shoreline.

The proposed project would be consistent with the City of Long Beach’s (City) General Plan Land Use designation and zoning designation. Impacts related to the proposed project are less than significant or can be reduced to less than significant levels with the incorporation of mitigation measures. In addition, the proposed project can be accommodated by the existing road system, public services, and utilities. The proposed project would not result in or contribute to significant biological or cultural impacts. Moreover, the proposed project would not exceed the South Coast Air Quality Management District’s (SCAQMD) air quality and greenhouse gas significance thresholds and would also not exceed applicable noise thresholds established by the City. Based on the Project Description and preceding responses, impacts related to the proposed project are less than significant or can be reduced to less than significant levels with incorporation of mitigation measures. The proposed project’s contribution to any significant cumulative impacts would be less than cumulatively considerable.

**(c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?**

**Less Than Significant with Mitigation Incorporated.** The project site primarily consists of disturbed land adjacent to Alamitos Bay surrounded by residential uses, piers and docks with access to Alamitos Bay, and a non-contiguous pathway along the Alamitos Bay shoreline. The proposed project involves the re-establishment of a trail in an existing public-right-of way and the implementation of streetscape improvements along East Sorrento Drive. The proposed project is consistent with the City’s General Plan and Zoning designations for the site.

Based on the Project Description and preceding responses, implementation of the proposed project would not cause substantial adverse impacts related to human beings because all potentially significant impacts can be mitigated to a less than significant level (please refer to Mitigation Measures BIO-1, CUL-1, GEO-1, WQ-1, NOI-1, and TRC-1, as well as Compliance Measures Bio-1, BIO-2, and WQ-1 through WQ-3).

## 4.0 MITIGATION MONITORING AND REPORTING PROGRAM

### 4.1 MITIGATION MONITORING REQUIREMENTS

Public Resources Code (PRC) Section 21081.6 (enacted by the passage of Assembly Bill [AB] 3180) mandates that the following requirements shall apply to all reporting or mitigation monitoring programs:

- The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation. For those changes which have been required or incorporated into the project at the request of a Responsible Agency or a public agency having jurisdiction by law over natural resources affected by the project, that agency shall, if so requested by the Lead Agency or a Responsible Agency, prepare and submit a proposed reporting or monitoring program.
- The Lead Agency shall specify the location and custodian of the documents or other material, which constitute the record of proceedings upon which its decision is based. A public agency shall provide the measures to mitigate or avoid significant effects on the environment that are fully enforceable through permit conditions, agreements, or other measures. Conditions of project approval may be set forth in referenced documents which address required mitigation measures or in the case of the adoption of a plan, policy, regulation, or other project, by incorporating the mitigation measures into the plan, policy, regulation, or project design.
- Prior to the close of the public review period for a draft Environmental Impact Report (EIR) or Mitigated Negative Declaration (MND), a Responsible Agency, or a public agency having jurisdiction over natural resources affected by the project, shall either submit to the Lead Agency complete and detailed performance objectives for mitigation measures which would address the significant effects on the environment identified by the Responsible Agency or agency having jurisdiction over natural resources affected by the project, or refer the Lead Agency to appropriate, readily available guidelines or reference documents. Any mitigation measures submitted to a Lead Agency by a Responsible Agency or an agency having jurisdiction over natural resources affected by the project shall be limited to measures that mitigate impacts to resources, which are subject to the statutory authority of, and definitions applicable to, that agency. Compliance or noncompliance by a Responsible Agency or agency having jurisdiction over natural resources affected by a project with that requirement shall not limit that authority of the Responsible Agency or agency having jurisdiction over natural resources affected by a project, or the authority of the Lead Agency, to approve, condition, or deny projects as provided by this division or any other provision of law.

## 4.2 MITIGATION MONITORING PROCEDURES

The Mitigation Monitoring and Reporting Program has been prepared in compliance with PRC Section 21081.6. It describes the requirements and procedures to be followed by the City of Long Beach to ensure that all mitigation measures adopted as part of the proposed project will be carried out as described in this IS/MND. Table 4.A lists each of the mitigation measures specified in this document and identifies the party or parties responsible for implementation and monitoring of each measure.

**Table 4.A: Mitigation and Monitoring Reporting Program**

Mitigation Measures	Responsible Party	Timing for Compliance Measure or Mitigation Measure
<b>3.1 Aesthetics</b>		
The proposed project would not result in significant adverse impacts related to aesthetics. No mitigation is required.		
<b>3.2 Agricultural &amp; Forest Resources</b>		
The proposed project would not result in significant adverse impacts related to agriculture. No mitigation is required.		
<b>3.3 Air Quality</b>		
The proposed project would not result in significant adverse impacts related to air quality. No mitigation is required.	Director of the City of Long Beach Development Services Department, or designee	Prior to the issuance of a grading permit
<b>3.4 Biological Resources</b>		
<b>Compliance Measure BIO-1:</b>		
<b>Pickleweed.</b> Prior to construction, a qualified biologist will oversee the installation of Environmentally Sensitive Habitat (ESA) fencing around each patch of pickleweed found within the project area. The ESA fencing will serve to protect existing pickleweed in place throughout construction.	Director of the City of Long Beach Development Services Department, or designee	Prior to construction
<b>Compliance Measure BIO-2:</b>		
<b>Local Tree Removal Ordinances.</b> Prior to the start of any demolition or construction activities, the City of Long Beach (City) Development Services Director, or designee, shall obtain a tree removal permit from the City's Director of Public Works. A City-approved Construction Plan shall be submitted with the permit to remove tree(s). The City-approved Construction Plan shall show that the existing City tree has a direct impact on the design and function of the proposed project. The City shall incur all removal costs, including site cleanup, make any necessary repair of hardscape damage, and replace the tree. The removed tree shall be replaced with an approved 15-gallon tree and payment of a fee that is equivalent to a City-approved 15-gallon tree.	Director of the City of Long Beach Development Services Department, or designee	Prior to the start of any demolition or construction activities
<b>Mitigation Measure BIO-1:</b>		
<b>Migratory Bird Treaty Act.</b> In the event that vegetation and tree removal should occur between January and September, the City of Long Beach (City) (or its contractor) shall retain a qualified biologist (meaning a professional biologist that is familiar with local birds and their nesting behaviors) to conduct a nesting bird survey no more than 3 days prior to commencement of	Director of the City of Long Beach Development Services Department, or designee	In the event that vegetation and tree removal should occur between January and September/Prior to commencement of grading activities and issuance of any

**Table 4.A: Mitigation and Monitoring Reporting Program**

Mitigation Measures	Responsible Party	Timing for Compliance Measure or Mitigation Measure
<p>construction activities. The nesting survey shall include the project site and areas immediately adjacent to the site that could potentially be affected by project-related construction activities such as noise, human activity, and dust, etc. If a nest is found with eggs or active young of any species covered under the Migratory Bird Treaty Act (MBTA) or California Fish and Game Code within 100 feet of the designated construction area prior to construction, the biologist shall establish suitable buffers around the active nests [subject to the recommendations of the qualified biologist]), and the buffer areas shall be avoided until the nests are no longer occupied and the juvenile birds can survive independently from the nests. Prior to commencement of grading activities and issuance of any demolition or grading permits, the Director of the City of Long Beach Development Services Department, or designee, shall verify that all project grading and construction plans include specific notes regarding the requirements of the MBTA, that preconstruction surveys have been completed and the results reviewed by staff, and that the appropriate buffers (if needed) are noted on the plans and established in the field with orange snow fencing.</p>		<p>demolition or grading permits</p>
<p><b>3.5 Cultural Resources</b></p>		
<p><b>Mitigation Measure CUL-1:</b></p> <p><b>Human Remains.</b> In the event that human remains are encountered on the project site, work within 50 feet of the discovery shall be redirected and the County Coroner notified immediately consistent with the requirements of California Code of Regulations (CCR) Section 15064.5(e). State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code (PRC) Section 5097.98. If the remains are determined to be Native American, the County Coroner shall notify the Native American Heritage Commission (NAHC), which shall determine and notify a Most Likely Descendant (MLD). With the permission of the property owner, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Consistent with CCR Section 15064.5(d), if the remains are determined to be Native American and an MLD is notified, the City of Long Beach shall consult with the MLD as identified by the NAHC to develop an agreement for treatment and disposition of the remains. Prior to the issuance of grading permits, the City of Long Beach Development Services Department, or designee, shall verify that all grading plans include notes specifying the requirements of CCR Section 15064.5(e), State Health and Safety Code Section 7050.5, and PRC Section 5097.98.</p>	<p>Construction Contractor/ County Coroner/ Director of the City of Long Beach Development Services Department, or designee</p>	<p>In the event that human remains are encountered on the project site/Within 48 hours of notification by the NAHC/ Prior to the issuance of grading permits</p>

**Table 4.A: Mitigation and Monitoring Reporting Program**

Mitigation Measures	Responsible Party	Timing for Compliance Measure or Mitigation Measure
<b>3.6 Geology and Soils</b>		
<p><b>Mitigation Measure GEO-1:</b></p> <p><b>Incorporation of and Compliance with the Recommendations in the Geotechnical Study.</b> All grading operations and construction shall be conducted in conformance with the recommendations included in the geotechnical documents prepared by Geocon West Inc. (provided in Appendix C). Recommendations found in the geotechnical document address topics including, but not limited to, the following:</p> <ul style="list-style-type: none"> <li>• Earthwork, including site preparation (e.g., grading), soil replacement, compaction standards, groundwater seepage, and fill placement;</li> <li>• Foundations, including design recommendations and parameters;</li> <li>• Storm water infiltration systems;</li> <li>• Soil excavations;</li> <li>• Seismic design parameters;</li> <li>• Retaining wall design and construction criteria including backfill requirements;</li> <li>• Concrete flatwork, including exterior slabs, walkways, and design of these features;</li> <li>• Soil corrosion; and</li> <li>• Post-construction considerations, including drainage and burrowing animal maintenance.</li> </ul> <p>Additional site grading, foundation, and utility plans shall be reviewed by the project Geotechnical Consultant prior to construction to check for conformance with the recommendations of this report. The project Geotechnical Consultant shall be present during site grading and foundation construction to observe and document proper implementation of the geotechnical recommendations. The City of Long Beach (City) shall require the Project Geotechnical Consultant to perform at least the following duties during construction:</p> <ul style="list-style-type: none"> <li>• Observe earthwork and test compacted fill to ensure soils are suitable for re-use as engineered fill.</li> <li>• Observe and test imported fill prior to bringing soil to the site.</li> <li>• Observe and test the bottom of removals to check that the recommendations presented in the Geotechnical Investigation are incorporated during site grading, construction of project improvements, and excavation of foundations.</li> </ul>	<p>Project Geotechnical Consultant/City of Long Beach City Engineer, or designee</p>	<p>Prior to the start of grading activities/During site grading and foundation construction</p>

**Table 4.A: Mitigation and Monitoring Reporting Program**

Mitigation Measures	Responsible Party	Timing for Compliance Measure or Mitigation Measure
<ul style="list-style-type: none"> <li>• Observe all trench and foundations excavation bottoms prior to placing bedding sands, fill, steel, gravel, or concrete.</li> <li>• Observe foundation excavations prior to the placement of reinforcing steel and concrete to verify that excavations and exposed soil conditions are consistent with those anticipated. If unanticipated soil conditions are encountered, foundation modifications may be required.</li> <li>• Observe all drilled pile excavations to verify adequate penetration into the recommended bearing materials. The compressive and tensile strength of the pile sections should be checked to verify the structural capacity of the piles.</li> <li>• Observe the bottom and subdrain pipe behind retaining walls on the site prior to placement of gravel or compacting.</li> </ul> <p>Grading plan review shall also be conducted by the City Engineer, or designee, prior to the start of grading to verify that requirements developed during the preparation of geotechnical documents (Appendix C) have been appropriately incorporated into the project plans. Design, grading, and construction shall be performed in accordance with the requirements of the City Building Code and the California Building Code (CBC) applicable at the time of grading, as well as the recommendations of the project Geotechnical Consultant as summarized in the final Geotechnical Investigation subject to review by the City Engineer, or designee, prior to the start of grading activities. The final Geotechnical Investigation shall present the results of observation and testing done during grading activities.</p>		
<b>3.7 Greenhouse Gas Emissions</b>		
The proposed project would not result in significant adverse impacts related to greenhouse gas emissions. No mitigation is required.		
<b>3.8 Hazards and Hazardous Materials</b>		
The proposed project would not result in significant adverse impacts related to hazards or hazardous materials. No mitigation is required.		

**Table 4.A: Mitigation and Monitoring Reporting Program**

Mitigation Measures	Responsible Party	Timing for Compliance Measure or Mitigation Measure
<b>3.9 Hydrology and Water Quality</b>		
<p><b>Compliance Measure WQ-1:</b></p> <p><b>Erosion and Sediment Control Plan.</b> Prior to the issuance of a building permit, the Construction Contractor shall prepare and submit an Erosion and Sediment Control Plan (ESCP) to the City of Long Beach (City) for review and approval, as specified in the City of Long Beach MS4 Permit (Order No. R4-2014-0024, National Pollutant Discharge Elimination System [NPDES] No. CAS004003). Construction activity shall not commence until the Construction Contractor receives written approval of the ESCP by the City of Long Beach. The ESCP shall include but not be limited to the following: (1) methods to minimize the footprint of the disturbed area and to prevent soil compaction outside of the disturbed area; (2) methods used to protect native vegetation and trees; (3) Sediment and Erosion Control Best Management Practices (BMPs); (4) controls to prevent tracking on and off the site; (5) non-storm water controls (e.g., vehicle washing, dewatering, etc.); (6) materials management (delivery and storage); (7) Spill Prevention and Control; and (8) waste management (e.g., concrete washout/waste management; sanitary waste management, etc.).</p>	<p>Construction Contractor/ Director of the City of Long Beach Development Services Department, or designee</p>	<p>Prior to the issuance of a building permit</p>
<p><b>Compliance Measure WQ-2:</b></p> <p><b>Groundwater Discharge Permit.</b> During groundwater dewatering activities, the Construction Contractor shall comply with the requirements of the <i>Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties</i> (Order No. R4-2013-0095, Permit No. CAG994004) (Groundwater Discharge Permit), or subsequent permit. The Construction Contractor shall comply with all applicable provisions in the permit, including water sampling, analysis, and reporting of dewatering-related discharges. The City of Long Beach Development Services Director, or appropriate designee, shall submit a Notice of Intent for coverage under the permit to the Los Angeles Regional Water Quality Control Board (RWQCB) at least 60 days prior to the start of dewatering. Upon completion of groundwater dewatering activities, the City of Long Beach shall submit a Notice of Termination to the Los Angeles RWQCB.</p>	<p>Director of the City of Long Beach Development Services Department, or designee</p>	<p>During groundwater dewatering activities</p>
<p><b>Compliance Measure WQ-3:</b></p> <p><b>Low Impact Development Plan.</b> In compliance with the City of Long Beach MS4 Permit and as specified in Chapter 18.74, Low Impact Development Standards, of the City of Long Beach Municipal Code, the City of Long Beach Development Services Director, or designee, shall ensure that a Low Impact Development (LID) Plan, or equivalent is prepared for the project prior to</p>	<p>Director of the City of Long Beach Development Services Department, or designee</p>	<p>Prior to issuance of a grading permit</p>

**Table 4.A: Mitigation and Monitoring Reporting Program**

Mitigation Measures	Responsible Party	Timing for Compliance Measure or Mitigation Measure
<p>issuance of a grading permit. The LID Plan shall be prepared consistent with the requirements of the <i>City of Long Beach Low Impact Development (LID) Best Management Practices (BMP) Design Manual</i> and shall include BMPs to be incorporated into the project to target pollutants of concern in runoff from the project site.</p>		
<p><b>Mitigation Measure WQ-1:</b> <b>Hydrology Report.</b> Prior to issuance of grading permits, the City of Long Beach Development Services Director, or appropriate designee, shall ensure that a final hydrology report is prepared and approved by the City. The hydrology report shall demonstrate, based on hydrologic calculations, that the project’s on-site storm conveyance and retention facilities, including landscaped areas, are designed in accordance with the requirement of the Los Angeles County Department of Public Works Hydrology and Hydraulic Design Manual.</p>	<p>Director of the City of Long Beach Development Services Department, or designee</p>	<p>Prior to issuance of grading permits</p>
<p><b>3.10 Land Use/Planning</b></p>		
<p>The proposed project would not result in significant adverse impacts related to land use/planning. No mitigation is required.</p>		
<p><b>3.11 Mineral Resources</b></p>		
<p>The proposed project would not result in significant adverse impacts related to mineral resources. No mitigation is required.</p>		
<p><b>3.12 Noise</b></p>		
<p><b>Mitigation Measure NOI-1:</b> <b>Construction Noise:</b> Prior to issuance of building permits, the City of Long Beach Development Services Director, or its designee, (or its contractor), shall verify that grading and construction plans include the following requirements:</p> <ul style="list-style-type: none"> <li>• Construction activities occurring as part of the project shall be subject to the limitations and requirements of the City of Long Beach Municipal Code, which states that construction activities shall occur only between the hours of 7:00 a.m. and 7:00 p.m. on weekdays and federal holidays, and from 9:00 a.m. to 6:00 p.m. on Saturdays. Construction is not permitted on Sundays.</li> <li>• Prior to the issuance of grading permits, the project Applicant shall incorporate the following measures as notes on the grading plan cover sheet to ensure that the greatest distance between noise sources and sensitive receptors during construction activities has been achieved:</li> </ul>	<p>Director of the City of Long Beach Development Services Department, or designee</p>	<p>Prior to issuance of building permits</p>

**Table 4.A: Mitigation and Monitoring Reporting Program**

Mitigation Measures	Responsible Party	Timing for Compliance Measure or Mitigation Measure
<ul style="list-style-type: none"> <li>○ Construction equipment, fixed or mobile, shall be equipped with properly operating and maintained noise mufflers consistent with manufacturer’s standards.</li> <li>○ Construction staging areas shall be located as far away from sensitive receptors as possible during all phases.</li> <li>○ The project contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site whenever feasible.</li> </ul>		
<b>3.13 Population and Housing</b>		
The proposed project would not result in significant adverse impacts related to population or housing. No mitigation is required.		
<b>3.14 Public Services and Utilities</b>		
The proposed project would not result in significant adverse impacts related to public services or utilities. No mitigation is required.		
<b>3.15 Recreation</b>		
The proposed project would not result in significant adverse impacts related to recreation. No mitigation is required.		
<b>3.16 Transportation/Traffic</b>		
The proposed project would not result in significant adverse impacts related to transportation/traffic. No mitigation is required		
<b>3.17 Tribal Cultural Resources</b>		
<p><b>Mitigation Measure TCR-1:</b></p> <p><b>Tribal Cultural Resources: Monitoring Procedures.</b> Prior to commencement of any ground-disturbing activities, the project Applicant shall present evidence to the City of Long Beach Development Services Department Director, or designee, that a qualified Native American monitor has been retained to provide Native American monitoring services during project construction activities. The Native American monitor shall be selected by the project Applicant from the list of certified Native American monitors maintained by the Gabrieleno Band of Mission Indians – Kizh Nation. The Native American monitor shall be present at the pre-grading conference to establish procedures for tribal cultural resource surveillance. Those procedures shall include provisions for temporarily halting or redirecting work to permit sampling, identification, and evaluation of resources deemed by the Native American monitor to be tribal cultural resources as defined in Public Resources Code Section 21074. These procedures shall be</p>	Director of the City of Long Beach Development Services Department, or designee	Prior to commencement of any ground-disturbing activities

**Table 4.A: Mitigation and Monitoring Reporting Program**

Mitigation Measures	Responsible Party	Timing for Compliance Measure or Mitigation Measure
reviewed and approved by the City of Long Beach Development Services Department Director, or designee, prior to commencement of any surface disturbance on the project site.		
<b>3.18 Utilities/Service Systems</b>		
The proposed project would not result in significant adverse impacts related to utilities/service systems. No mitigation is required.		

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