

Notice of Determination

Appendix D

TO:

Office of Planning and Research
For U.S. Mail: P.O. Box 3044 Sacramento, CA 95812-3044
Street Address: 1400 Tenth Street Sacramento, CA 95814
County Clerk
County of: San Mateo County Clerk-Recorder
Address: 555 County Center Redwood City, CA 94063

FROM:

Public Agency: San Mateo County Harbor District
Address: P.O. Box 1449 El Granada, CA 94016
Contact: James Pruett, General Manager
Phone: (650) 583-4400
Lead Agency (if different from above):
Address:
Contact:
Phone:

Subject: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

State Clearinghouse Number (if submitted to State Clearinghouse): 2020079020

Project Title: Pillar Point Harbor West Trail Living Shoreline Project

Project Location (include county): Pillar Point Harbor, San Mateo County

Project Description: The proposed project would include the stabilization of the West Trail and stormwater system improvements. To protect and stabilize the trail, the proposed project would include the construction of a nourished beach with an elevated dune adjacent to, and east of, 300 feet of the trail. Buried beneath the surface of the shoreline and dune would be a cobble berm (otherwise known as a dynamic revetment) and two rock fingers extending perpendicular from the trail. The stormwater improvements would address the aesthetics, function, and maintenance needs of the existing storm drain system as well as provide water quality improvements to the harbor.

This is to advise that the San Mateo County Harbor District has approved the above described project on (X Lead Agency or Responsible Agency)

and has made the following determinations regarding the above described projects. (Date)

- 1. The project [ ] will [X] will not have a significant effect on the environment.
2. [ ] An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA. [X] A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures [X] were [ ] were not made a condition of the approval of the project.
4. A mitigation reporting or monitoring plan [X] was [ ] was not adopted for this project.
5. A statement of Overriding Considerations [ ] was [X] was not adopted for this project.
6. Findings [ ] were [X] were not made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval, or the Negative Declaration, is available to the General Public at:

Harbormaster Office, One Johnson Pier Road, El Granada, CA 94016

Signature (Public Agency) Title: General Manager

Date: 2/11/2021 Date Received filing at OPR:

February 3, 2021

**Response to Comments on the Pillar Point Harbor West Trail Living Shoreline Project Initial  
Study/Notice of Intent to Adopt a Mitigated Negative Declaration  
(State Clearinghouse Number 2020079020)**

**Letter 1 – California Department of Fish and Wildlife**

Response to Comment 1-1

Mitigation measure BIO-1f has been revised to reflect that if the San Francisco Garter Snake is found within the project area during construction it would not be removed by hand. If discovered, construction activities would stop and the San Francisco Garter Snake would be allowed to leave the site at its own volition. Project activities will recommence once the San Francisco Garter Snake is no longer within the Project area.

Pre-construction surveys for listed species (including the California Red-legged Frog) shall be conducted immediately prior to groundbreaking or ground disturbance activities. Surveys shall be conducted by USFWS- and CDFW-approved biologists who shall carefully search all obvious potential hiding spots for CRLF and SFGS, including but not limited to downed woody debris, culverts, riparian vegetation, and entrances to small mammal burrows. Once an area is cleared, vegetation removal would only be conducted with heavy equipment in areas where significant grading is needed. Otherwise, vegetation removal would be removed by small power equipment (e.g., chainsaw) or, to the extent practicable, with hand tools.

**Letter 2 – Keith Mangold**

Response to Comment 2-1

The comment refers to rocky substrate or reef located in the project area. As described in Section 3.2.4, *Biological Resources* of the IS/MND, biological resources within the project boundaries were surveyed and analyzed for impacts on sensitive habitats and special status species and found that with mitigation measures, impacts to these biological resources would be less than significant. Further, construction activities would be limited to areas away from sensitive resources such as reef or eelgrass habitats. The comment referring to a separate, past project is not related to the current project in the IS/MND and is noted.



State of California – Natural Resources Agency  
DEPARTMENT OF FISH AND WILDLIFE  
Bay Delta Region  
2825 Cordelia Road, Suite 100  
Fairfield, CA 94534  
(707) 428-2002  
[www.wildlife.ca.gov](http://www.wildlife.ca.gov)

**GAVIN NEWSOM, Governor**  
**CHARLTON H. BONHAM, Director**



August 20, 2020

Mr. James Pruett  
San Mateo Harbor District  
Post Office Box 1449  
El Granada, CA 94018  
[jpruett@smharbor.com](mailto:jpruett@smharbor.com)

Subject: Pillar Point West Trail Living Shoreline Project, Initial Study/Mitigated Negative Declaration, SCH No. 2020079020, San Mateo County

Dear Mr. Pruett:

The California Department of Fish and Wildlife (CDFW) reviewed the Initial Study/Mitigated Negative Declaration (IS/MND) prepared by the San Mateo Harbor District for the Pillar Point West Trail Living Shoreline Project (Project), located in San Mateo County. CDFW is submitting comments on the IS/MND to inform the San Mateo Harbor District, as the Lead Agency, of our concerns regarding potentially significant impacts to biological resources associated with the proposed Project.

CDFW is a Trustee Agency with responsibility under the California Environmental Quality Act (CEQA; Pub. Resources Code, § 21000 et seq.) pursuant to CEQA Guidelines section 15386 for commenting on projects that could impact fish, plant, and wildlife resources (e.g., biological resources). CDFW is also considered a Responsible Agency if a project would require discretionary approval, such as permits issued under the California Endangered Species Act (CESA), the Native Plant Protection Act, the Lake and Streambed Alteration (LSA) Program, and other provisions of the Fish and Game Code that afford protection to the state's fish and wildlife trust resources.

## **PROJECT DESCRIPTION AND LOCATION**

The Project is located along the western edge of Pillar Point Harbor (Harbor) in western San Mateo County, California at the Pillar Point West Trail (Trail). The Trail is a pedestrian and emergency vehicle pathway from the West Point Avenue access and parking area to the Pillar Point outer harbor and Mavericks Beach.

The Project area has experienced coastal erosion that has degraded the Trail. The Project proposes to stabilize the trail with a living shoreline and upgrade an existing stormwater system to accommodate a 50-year storm event.

Mr. James Pruet  
San Mateo Harbor District  
August 20, 2020  
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## COMMENTS AND RECOMMENDATION

CDFW offers the following comments and recommendations to assist the San Mateo Harbor District in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on biological resources.

### **COMMENT 1: State Fully Protected Species – San Francisco Garter Snake**

*Issue:* San Francisco garter snake (*Thamnophis sirtalis tetrataenia*), a state fully protected species, has the potential to occur within the Project area. CDFW has jurisdiction over fully protected species of birds, mammals, amphibians, reptiles, and fish pursuant to Fish and Game Code §§ 3511, 4700, 5050, and 5515. Take<sup>1</sup> of any fully protected species is prohibited, which includes handling and relocation. CDFW cannot authorize incidental take of fully protected species unless the take is for scientific purposes pursuant to Fish and Game Code Section 2081(a) or a project has an approved Natural Communities Conservation Plan pursuant to Fish and Game Code section 2800.

Based on the current Mitigation Measures, the proposed Project cannot completely avoid impacts to San Francisco garter snake and has the potential to significantly impact the species.

*Evidence impact would be significant:* The Project has the potential to disturb, injure, or kill San Francisco garter snake during project construction, including use of heavy equipment, and relocation. Exclusion fencing is not fully effective for snakes and can cause mortality or injury by capturing San Francisco garter snakes within the fencing.

*Recommendation 1:* CDFW recommends that Mitigation Measure BIO-1f is revised to avoid handling and relocation of San Francisco garter snakes, which includes the handling and relocation of individuals by a qualified biologist. CDFW recommends that if San Francisco garter snake individuals are found within the Project area, Project activities immediately stop, and the individual is allowed to leave the Project area on its own accord. Project activities should not recommence until San Francisco garter snake are no longer within the Project area.

*Recommendation 2:* CDFW recommends that vegetation removal be conducted by using hand tools and not heavy equipment.

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<sup>1</sup> Take is defined by Fish and Game Code § 86 as to "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.

Mr. James Pruet  
San Mateo Harbor District  
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## FILING FEES

CDFW anticipates that the Project will have an impact on fish and/or wildlife, and assessment of filing fees is necessary (Fish and Game Code, section 711.4; Pub. Resources Code, section 21089). Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW.

Thank you for the opportunity to comment on the Project's IS/MND. If you have any questions regarding this letter or for further coordination with CDFW, please contact Ms. Monica Oey, Environmental Scientist, at (707) 428-2088 or [Monica.Oey@wildlife.ca.gov](mailto:Monica.Oey@wildlife.ca.gov); or Ms. Randi Adair, Senior Environmental Scientist (Supervisory), at [Randi.Adair@wildlife.ca.gov](mailto:Randi.Adair@wildlife.ca.gov).

Sincerely,

DocuSigned by:  
*Stacy Sherman for*  
692D021D81CA4F7  
Gregg Erickson  
Regional Manager  
Bay Delta Region

cc: State Clearinghouse

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**From:** Keith Mangold

**Sent:** Friday, August 21, 2020 9:13 PM

**To:** [jpruett@smharbor.com](mailto:jpruett@smharbor.com) <[jpruett@smharbor.com](mailto:jpruett@smharbor.com)>

**Cc:** [teciotti@aol.com](mailto:teciotti@aol.com) <[teciotti@aol.com](mailto:teciotti@aol.com)>

**Subject:** CEQA Report Review - PPH West Trail Living Shoreline Project

The CEQA report makes no mention of the rocky substrate or reef located in the project area. The beach area contains several species of mollusks including Washington and Horse neck clams, olivella, and various marine worms including a “pile worm” that grows to more than 6 feet in length. The reef area shelters limpets, various sea snails and anemones. I fear the sand placement will destroy these intertidal inhabitants. I also suspect that the area is subject to review by the Monterey Bay Marine Sanctuary.

I believe that the negative impact of the project could be lessened or eliminated by reducing or eliminating the sand placement.

In closing, in the late 1990’s, the SMC Harbor District funded a project to expand its berths by dredging a portion of the beach in the inner harbor. As mitigation for the loss of beach area in the inner harbor, they put in riprap, geocloth and sand at the west end of the trail to increase the seabird nesting habitat, which at that time was used by snowy plovers. The trail to “Mavericks Beach” was widened for the project, Mavericks was discovered, and the resulting traffic drove out much of the shorebird population. I bring this up because of the “Law of Unintended Consequences”. The intent of the beach enhancement project was to promote the plovers – the result drove them away. Some of that project is the proposed sand fill recommended in the current project.

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# MITIGATION MONITORING AND REPORTING PROGRAM

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## Introduction

When approving projects with Mitigated Negative Declarations that identify significant impacts, the California Environmental Quality Act (CEQA) requires public agencies to adopt monitoring and reporting programs or conditions of project approval to mitigate or avoid the identified significant effects (Public Resources Code §21081.6(a)(1)). A public agency adopting measures to mitigate or avoid the significant impacts of a proposed project is required to ensure that the measures are fully enforceable, through permit conditions, agreements, or other means (Public Resources Code §21081.6(b)). The mitigation measures required by a public agency to reduce or avoid significant project impacts not incorporated into the design or program for the project, may be made conditions of project approval as set forth in a Mitigation Monitoring and Reporting Program (MMRP). The program must be designed to ensure project compliance with mitigation measures during project implementation.

This MMRP is intended to be used by the San Mateo County Harbor District (Harbor District) to ensure compliance with mitigation measures during project implementation. The Harbor District has ultimate responsibility for implementing and monitoring these measures. However, the Harbor District may contract out for these services and/or make them part of the construction specifications. Mitigation measures identified in this MMRP were developed as part of the Initial Study/Mitigated Negative Declaration (IS/MND) process for the proposed project. The required mitigation measures are summarized in this MMRP.

## Compliance Checklist

The following table contains a compliance monitoring checklist that provides a synopsis of all adopted mitigation measures, the applicable sites, the entity responsible for implementation, the entity responsible for monitoring, and the timing of implementation. All the mitigation measures presented in this MMRP will be incorporated into the proposed project.

**MITIGATION MONITORING AND REPORTING PROGRAM**

Issue Area	Mitigation Measure	Monitoring / Reporting Action	Implementing Party/ Monitoring Party	Timing
Air Quality	<p><b>Mitigation Measure AIR-1: Implement BAAQMD Basic Mitigation Measures.</b>                      The Applicant and/or its construction contractors shall comply with the following applicable BAAQMD basic control measures during project construction:</p> <ol style="list-style-type: none"> <li>1. Water all exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) two times per day.</li> <li>2. Cover all haul trucks transporting soil, sand, or other loose material off-site.</li> <li>3. Remove all visible mud or dirt track-out onto adjacent public roads using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.</li> <li>4. Limit all vehicle speeds on unpaved roads to 15 miles per hour.</li> <li>5. Minimize idling times either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.</li> <li>6. Maintain and properly tune all construction equipment tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.</li> <li>7. Post a publicly visible sign with the telephone number and person to contact at the Harbor District regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations (BAAQMD 2017a).</li> </ol>	<ol style="list-style-type: none"> <li>1. Harbor District construction specifications shall include Mitigation Measure AIR-1.</li> <li>2. Harbor District conducts periodic site inspections during construction to ensure compliance, and adds inspection report to project file.</li> </ol>	<ol style="list-style-type: none"> <li>1. Harbor District or its construction contractors.</li> <li>2. Harbor District.</li> </ol>	<ol style="list-style-type: none"> <li>1. During construction.</li> <li>2. During construction.</li> </ol>
Biological Resources	<p><b>Mitigation Measure BIO-1a: General Construction Conservation Measures.</b>                      The contractor shall be supplied with copies of the permit conditions of approval that detail the below listed measures prior to ground breaking, as well as any other pertinent avoidance and minimization measures:</p> <ul style="list-style-type: none"> <li>• No project related activities shall occur outside the delineated work area.</li> <li>• No rodenticides, pesticides, or herbicides shall be used as part of the project.</li> <li>• Construction Areas: Areas within which construction activities and staging are to take place shall be minimized in size and shall be sited and designed to avoid impacts on coastal waters and marine life, and to the extent feasible, public access to the water and shoreline. Construction (including but not limited to dredging activities, and materials and/or equipment storage) shall be prohibited outside of the defined construction, staging, and storage areas.</li> <li>• Construction Methods and Timing: Methods shall be used to keep the construction areas separated from public recreational use areas (including using unobtrusive fencing or equivalent measures to delineate construction areas) to the maximum extent practicable. Full closure of the trail is anticipated during night work (trail is already closed after dusk and varies seasonally) to the public per County rules.</li> </ul>	<ol style="list-style-type: none"> <li>1. Harbor District reviews construction specifications to verify inclusion.</li> <li>2. Harbor District conducts periodic site inspections during construction to ensure compliance, and adds inspection report to project file.</li> </ol>	<ol style="list-style-type: none"> <li>1. Harbor District and the contractor(s).</li> </ol>	<ol style="list-style-type: none"> <li>1. Prior to and during construction.</li> </ol>

**MITIGATION MONITORING AND REPORTING PROGRAM**

Issue Area	Mitigation Measure	Monitoring / Reporting Action	Implementing Party/ Monitoring Party	Timing
<p>Biological Resources (cont.)</p>	<ul style="list-style-type: none"> <li>All vehicle parking shall be restricted to previously determined staging areas or existing roads. Necessary vehicles belonging to the biological monitors and construction supervisors shall be parked at the nearest point on identified existing access roads.</li> </ul> <p>Construction BMPs shall be installed prior to construction and used during construction to protect coastal water quality, including the following:</p> <ul style="list-style-type: none"> <li>Silt fences, straw wattles, or equivalent apparatus shall be installed at the perimeter of the construction site to prevent construction-related runoff or sediment from discharging to coastal waters or to areas that would eventually transport such discharge to coastal waters.</li> <li>The fueling and maintenance of vehicles and other equipment shall occur at least 100 feet from any aquatic habitat or water body.</li> <li>All construction equipment shall be inspected and maintained at an off-site location to prevent leaks and spills of hazardous materials at the project site.</li> <li>The contractor shall ensure that good construction housekeeping controls and procedures are maintained at all times including: clean up all leaks, drips, and other spills immediately; keep materials covered and out of the rain (including covering exposed piles of soil and wastes); dispose of all wastes properly; place trash receptacles on site for that purpose; cover open trash receptacles during wet weather; and remove all construction debris from the site.</li> <li>All erosion and sediment controls shall be in place prior to the commencement of construction as well as at the end of each workday.</li> </ul>			
	<p><b>Mitigation Measure BIO-1b. General Wildlife Conservation Measures.</b></p> <ul style="list-style-type: none"> <li>At least 15 days prior to any ground disturbing activities, the Harbor District shall submit to the USFW and CDFW for review and approval the qualifications of the proposed biological monitor(s). A qualified biological monitor means any person who has completed at least four years of university training in wildlife biology or a related science and/or has demonstrated field experience in the identification and life history of the listed species.</li> <li>Prior to the start of construction, a USFWS- and CDFW-approved biologist will conduct an Environmental Awareness Training. The training will educate all construction personnel regarding habitat, identification of special status species, and required practices before the start of construction. The training will include the general measures that are being implemented to conserve the species as they relate to the Project, the penalties for non-compliance, and the boundaries of the project area. If new construction personnel are added to the project, the contractor will ensure that the personnel receive the mandatory training before starting work. A fact sheet or other supporting materials containing this information will be prepared and distributed to all construction personnel. Upon completion of training, construction personnel will sign a form stating that they attended the training and understand all the conservation and protection measures.</li> </ul>	<ol style="list-style-type: none"> <li>Harbor District submits the qualifications of the proposed biological monitor(s) to USFWS- and CDFW.</li> <li>Harbor District reviews construction specifications to verify inclusion.</li> <li>Harbor District conducts periodic site inspections during construction to ensure compliance, and adds inspection report to project file.</li> </ol>	<ol style="list-style-type: none"> <li>Harbor District, USFW, and CDFW.</li> <li>Harbor District, contractor(s), USFWS, and CDFW.</li> </ol>	<ol style="list-style-type: none"> <li>At least 15 days prior to any ground breaking activities.</li> <li>Prior to construction and during construction.</li> </ol>

**MITIGATION MONITORING AND REPORTING PROGRAM**

Issue Area	Mitigation Measure	Monitoring / Reporting Action	Implementing Party/ Monitoring Party	Timing
Biological Resources (cont.)	<ul style="list-style-type: none"> <li>A “soft-start” policy shall be implemented in order to allow wildlife species to vacate the area prior to construction activities. A soft-start (e.g. ramp-up period) shall be used prior to full-power equipment use at the beginning of each day, or following a 30 minute or longer break.</li> <li>A litter control program shall be instituted at the proposed project area. All construction personnel will ensure that their food scraps, paper wrappers, food containers, cans, bottles, and other trash from the project area are deposited in covered or closed trash containers. The trash containers will be removed from the project area at the end of each working day.</li> </ul>			
	<p><b>Mitigation Measure BIO-1c: Avoidance and Minimization Measures for Special-status Plants.</b></p> <p>Prior to the commencement of ground disturbance activities, a focused botanical survey(s) for special-status plants shall be conducted in all potentially suitable habitat during the appropriate blooming period for each species and in accordance with the guidelines established by the California Department of Fish and Wildlife in <i>Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities</i> (CDFW 2018). If more than two years elapse between the focused botanical surveys and commencement of ground disturbance activities, a final set of appropriately-timed focused botanical surveys shall be conducted and populations mapped. The results of these final surveys shall be combined with previous survey results to produce habitat maps showing where the special-status plants have been observed during either of the focused botanical surveys conducted for each site.</p> <ul style="list-style-type: none"> <li>To the extent feasible, construction activities shall be sited to avoid permanent and temporary impacts on special-status plants. Special-status plants to be avoided shall be fenced or flagged prior to construction.</li> <li>If avoidance is not feasible, seasonal avoidance measures (i.e., limited operating periods based on timing of annual plant dormancy shall be applied as appropriate. Topsoil salvage and site restoration may also be implemented, to be determined by the Lead Biologist and USFWS and CDFW, as appropriate, to ensure the site is returned to pre-construction conditions.</li> <li>For potential impacts to federal and/or state listed plant species, the Harbor District shall comply with the FESA and/or CESA by implementing any requirements from USFWS and CDFW consultation. For state listed rare plants, a state Incidental Take Permit (ITP) may be required, which would provide conditions for allowable take and measures to compensate impacts on rare plants.</li> </ul>	<ol style="list-style-type: none"> <li>Harbor District includes field surveys in project file. If two years elapse between the survey and commencement of ground disturbance activities, a final set of appropriately-time focused botanical surveys shall be implemented by Harbor District.</li> <li>Harbor District will comply with the FESA and/or CESA by implementing requirements from USFWS and CDFW consultation.</li> <li>Harbor District reviews construction specifications to verify inclusion.</li> </ol>	<ol style="list-style-type: none"> <li>Harbor District, USFW, and CDFW.</li> <li>Harbor District, USFW, and CDFW.</li> <li>Harbor District.</li> </ol>	<ol style="list-style-type: none"> <li>Prior to any ground disturbance activities.</li> <li>During construction.</li> <li>During construction.</li> </ol>

**MITIGATION MONITORING AND REPORTING PROGRAM**

Issue Area	Mitigation Measure	Monitoring / Reporting Action	Implementing Party/ Monitoring Party	Timing
Biological Resources (cont.)	<ul style="list-style-type: none"> <li>• If avoidance is not feasible, compensation for temporary or permanent loss of special-status plant occurrences, in the form of land purchase or restoration, shall be provided at a minimum 1:1 ratio for temporary impacts and 2:1 ratio for permanent impacts. Compensation for loss of special-status plant populations may include the restoration or enhancement of temporarily impacted areas, purchase and permanent stewardship of known occupied habitat or the restoration and reintroduction of populations in degraded, unoccupied habitat. Restoration or reintroduction may be located on- or off-site, or can be incorporated, with agency approval, into the planned dune and associated native plant restoration efforts that are part of the plan. At a minimum, the compensation areas shall meet the following performance standards by the fifth year following initiation of compensation efforts:               <ol style="list-style-type: none"> <li>a. The compensation area shall be at least the same size as the impact area.</li> <li>b. Native vegetation cover shall be at least 70 percent of the baseline/impact area native vegetation cover.</li> <li>c. Population of the impacted special-status species shall have either:                   <ol style="list-style-type: none"> <li>i. at least 60 percent cover of the impact area, or</li> <li>ii. at least 70 percent survival of installed plants</li> </ol> </li> <li>d. Invasive species cover shall be less than or equal to the invasive species cover in the impact area.</li> </ol> <p>Alternatively, compensatory credits may be purchased through a USFWS- and/or CDFW-approved mitigation bank, or USFWS-approved Habitat Conservation Plan.</p> <p>Plant populations that cannot be avoided shall be monitored to document whether the populations re-established after ground-disturbing activities. Results from this monitoring shall be used to determine future compensation requirements for future project impacts.</p> </li> </ul>	<ol style="list-style-type: none"> <li>4. If required, Harbor District will compensate for temporary or permanent loss of special-status plant occurrences, in the form of land purchase or restoration at a minimum 1:1 ratio for temporary impacts and 2:1 ratio for permanent impacts.</li> <li>5. Harbor District conducts periodic site inspections during construction to ensure compliance, and adds inspection report to project file.</li> </ol>	4. Harbor District, USFW, and CDFW.	4. During and after construction.
	<p><b>Mitigation Measure BIO-1d: Avoidance and Minimization Measures for Fish and Sea Turtles.</b> The following measures shall be implemented to avoid potential impacts to listed fish species, sea turtles, and critical habitat:</p> <ul style="list-style-type: none"> <li>• All sand borrow activities shall occur at low tide when no standing water is present.</li> <li>• No refueling or maintenance of equipment shall occur on the beach.</li> <li>• Temporary artificial lighting proposed during night work shall be angled away from open water in Pillar Point Harbor to the greatest extent possible.</li> </ul>	<ol style="list-style-type: none"> <li>1. Harbor District reviews construction specifications to verify inclusion.</li> <li>2. Harbor District conducts periodic site inspections during construction to ensure compliance, and adds inspection report to project file.</li> </ol>	1. Harbor District.	1. During construction.

**MITIGATION MONITORING AND REPORTING PROGRAM**

Issue Area	Mitigation Measure	Monitoring / Reporting Action	Implementing Party/ Monitoring Party	Timing
Biological Resources (cont.)	<p><b>Mitigation Measure BIO-1e: Avoidance and Minimization Measures for Marine Mammals.</b> The following measures shall be implemented avoid potential impacts to marine mammals:</p> <ul style="list-style-type: none"> <li>• A “soft start” (e.g. ramp-up period) prior to full-power equipment use at the beginning of each day, or following a 30 minute or longer break, shall be implemented to warn any marine mammals to move away from the construction area.</li> </ul> <p>To address possible disturbance from temporary artificial lighting during night work:</p> <ul style="list-style-type: none"> <li>• Temporary artificial lighting proposed during night work shall be angled away from open water in Pillar Point Harbor to the greatest extent possible.</li> </ul>	<ol style="list-style-type: none"> <li>1. Harbor District reviews construction specifications to verify inclusion.</li> <li>2. Harbor District conducts periodic site inspections during construction to ensure compliance, and adds inspection report to project file.</li> </ol>	<ol style="list-style-type: none"> <li>1. Harbor District.</li> </ol>	<ol style="list-style-type: none"> <li>1. During construction.</li> </ol>
	<p><b>Mitigation Measure BIO-1f: Avoidance and Minimization Measures for San Francisco Garter Snake (SFGS) and California Red-legged Frog (CRLF).</b></p> <ul style="list-style-type: none"> <li>• There shall be no use of plastic mesh erosion control materials, to prevent entanglement of CRLF or SFGS.</li> <li>• No less than 15 calendar days prior to the onset of activities, the Harbor District shall submit the name(s) and credentials of biologists who could conduct the activities specified in the following measures. A qualified biologist means any person who has completed at least four years of university training including wildlife biology or related coursework, and/or has demonstrated field experience in the identification and life history of the CRLF and SFGS. Resumes of all biologists shall be submitted to the USFWS and CDFW for approval. No earth moving or other project activities shall begin until written approval from the USFWS and CDFW has been received that the biologist(s) is qualified to conduct the work.</li> <li>• Pre-construction surveys for listed species shall be conducted immediately prior to groundbreaking or ground disturbance activities (including grading or equipment staging) that occurs in CRLF or SFGS habitat or any activity that may result in take of these species. Surveys shall be conducted by USFWS- and CDFW-approved biologists who shall carefully search all obvious potential hiding spots for CRLF and SFGS, including but not limited to downed woody debris, culverts, riparian vegetation, and entrances to small mammal burrows. In the event that an ESA-listed animal is observed, construction shall cease until the individual has moved out of the area of its own volition. For CRLF, only USFWS- and CDFW-approved biologists with appropriate permits shall relocate CRLF species to the nearest suitable habitat away from project activities.</li> <li>• Before the onset of any construction activities, the District or construction manager and USFWS- and CDFW-approved biologist shall discuss locations for equipment, personnel access, and materials staging to minimize disturbance to CRLF and SFGS habitat.</li> <li>• A USFWS- and CDFW-approved biologist shall be onsite during all ground-disturbing activities (i.e., vegetation grubbing, excavation) within potential ESA-listed species habitat to ensure compliance with these avoidance measures. This includes monitoring during both daytime and nighttime work.</li> </ul>	<ol style="list-style-type: none"> <li>1. Harbor District shall submit the name(s) and credentials of biologist(s) who could conduct mitigation measure activities to USFWS and CDFW for approval.</li> <li>2. Harbor District includes field surveys in project file for listed species and submits to USFWS- and CDFW as determined by qualified biologist.</li> <li>3. Harbor District reviews construction specifications to verify inclusion.</li> <li>4. Harbor District conducts periodic site inspections during construction to ensure compliance, and adds inspection report to project file.</li> </ol>	<ol style="list-style-type: none"> <li>1. Harbor District, USFW, and CDFW .</li> <li>2. Harbor District, USFW, and CDFW .</li> <li>3. Harbor District, USFW, and CDFW .</li> </ol>	<ol style="list-style-type: none"> <li>1. Prior to earth moving or other project activities.</li> <li>2. Immediately prior to groundbreaking or ground disturbance activities (including grading or equipment staging).</li> <li>3. Prior to construction.</li> </ol>

**MITIGATION MONITORING AND REPORTING PROGRAM**

Issue Area	Mitigation Measure	Monitoring / Reporting Action	Implementing Party/ Monitoring Party	Timing
Biological Resources (cont.)	<ul style="list-style-type: none"> <li>• After ground disturbing activities are complete, the USFWS- and CDFW-approved biologist shall train an individual to act as the on-site construction monitor. The construction monitor shall have attended the Environmental Awareness Training. Both the USFWS- and CDFW-approved biologist and the construction monitor shall have the authority to stop and/or redirect project activities to ensure protection of resources and compliance with all environmental permits and conditions of the proposed project. The USFWS- and CDFW-approved biologist and construction monitor shall complete a daily log summarizing activities and environmental compliance.</li> <li>• The USFWS- and CDFW-approved biologist shall have oversight over the implementation of all the Terms and Conditions resulting from consultation (conducted as part of the resource permitting process), and shall have the authority to stop proposed project activities if any of the requirements associated with these Terms and Conditions are not being fulfilled. If the biologist has presented a stop work order due to take or near-take of any of the listed species, the USFWS and the CDFW shall be notified within one (1) working day via email or telephone.</li> <li>• A USFWS- and CDFW-approved biologist shall survey the work site immediately prior to construction activities. If CRLF adults, tadpoles, or eggs are found, the approved biologist shall contact the Service to determine if moving any of these life-stages is appropriate. In making this determination the USFWS and CDFW shall consider if an appropriate relocation site exists as provided in the relocation plan. Artificial lighting at night shall be taken into consideration for relocation sites (i.e., relocation should occur outside of areas proposed for nighttime illumination). If the USFWS and CDFW approves moving animals, the approved biologist shall be allowed sufficient time to move CRLF from the work site before work activities begin. Only USFWS- and CDFW-approved biologists shall participate in activities associated with the capture, handling, and monitoring of CRLF.</li> <li>• Bare hands shall be used to capture CRLF. USFWS- and CDFW-approved biologists shall not use soaps, oils, creams, lotions, repellents, or solvents of any sort on their hands within two hours before and during periods when they are capturing and relocating individuals. To avoid transferring disease or pathogens of handling of the amphibians, USFWS- and CDFW-approved biologists shall follow the Declining Amphibian Populations Task Force's <i>Code of Practice</i> (DAPTF 2004).</li> <li>• The site inspector shall be trained by the USFWS- and CDFW-approved biologist and may act as the construction monitor during non-ground disturbing or lower risk portions of the proposed project. The inspector shall be identified during the employee education program. The name and telephone number shall be provided to the USFWS and CDFW prior to the initiation of ground disturbance activities.</li> <li>• No pets shall be permitted in the work area to avoid harassment, killing, or injuring of CRLF or SFGS individuals. Because the work area occurs along a pedestrian trail on which dogs are permitted, it is understood that canine or feline pets may be present in the vicinity of the work area that do not belong to the construction workers.</li> <li>• Temporary artificial lighting proposed during night work shall be angled away from potential CRLF breeding habitat (i.e. freshwater portions of Pillar Point Marsh).</li> </ul>			

**MITIGATION MONITORING AND REPORTING PROGRAM**

Issue Area	Mitigation Measure	Monitoring / Reporting Action	Implementing Party/ Monitoring Party	Timing
Biological Resources (cont.)	<p><b>Mitigation Measure BIO-1g: Avoidance and Minimization Measures for Special-Status Birds.</b></p> <ul style="list-style-type: none"> <li>In event that Western Snowy Plovers or California Least Terns nest on the small beach along the West Trail within the project area, nest protection measures (as described below) shall be implemented. In addition, no night work (including artificial lighting) shall be permitted within 300 feet of the nest(s).</li> <li>If construction work occurs adjacent to suitable nesting habitat (i.e., beach) between January 15 to September 15 (general nesting season in the project area), a USFWS- and CDFW-qualified ornithologist shall conduct pre-construction nest surveys (specifically for Western Snowy Plovers and California Least Terns). The ornithologist shall conduct at minimum a one-day pre-construction survey within the 7-day period prior to ground-disturbing activities. If ground disturbance work lapses for seven days or longer during the nesting season, a qualified ornithologist shall conduct a supplemental avian pre-construction survey before project work is reinitiated.</li> <li>If active nests are detected within the construction footprint or up to 500 feet from construction activities, the ornithologist shall flag a buffer around each nest (assuming property access). Construction activities shall avoid nest sites until the ornithologist determines that the young have fledged or nesting activity has ceased. If nests are documented outside of the construction (disturbance) footprint, but within 500 feet of the construction area, buffers shall be implemented as needed (buffer size dependent on species). In general, the buffer size would be determined on a case-by-case basis in consultation with CDFW and, if applicable, with USFWS. Buffer sizes shall take into account factors such as (1) noise and human disturbance levels at the construction site at the time of the survey and the noise and disturbance expected during the construction activity (including proposed temporary new sources of light in the project area during night work); (2) distance and amount of vegetation or other screening between the construction site and the nest; and (3) sensitivity of individual nesting species and behaviors of the nesting birds. An absolute minimum buffer size of 30 feet is recommended as a starting point of discussion with USFWS and CDFW for common species, with larger buffers expected for special status species and raptors.</li> <li>If active nests are detected during the survey, the qualified ornithologist shall monitor all nests at least once per week to determine whether birds are being disturbed. Activities that might, in the opinion of the qualified ornithologist, disturb nesting activities (e.g., excessive noise), shall be prohibited within the buffer zone until such a determination is made. If signs of disturbance or distress are observed, the qualified ornithologist shall immediately implement adaptive measures to reduce disturbance. These measures may include, but are not limited to, increasing buffer size, halting disruptive construction activities in the vicinity of the nest until fledging is confirmed or nesting activity has ceased, placement of visual screens or sound dampening structures between the nest and construction activity, reducing speed limits, replacing and updating noisy equipment, queuing trucks to distribute idling noise, locating vehicle access points and loading and shipping facilities away from noise-sensitive receptors, reducing the number of noisy construction activities occurring simultaneously, and/or reorienting and/or relocating construction equipment to minimize noise at noise-sensitive receptors.</li> </ul>	<ol style="list-style-type: none"> <li>If required, Harbor District will include avoidance procedures in construction contract regarding Western Snowy Plovers or California Least Terns.</li> <li>If required, Harbor district will include pre-construction nest surveys in project file and submits to USFWS- and CDFW-qualified ornithologist.</li> <li>If required, Harbor District will include avoidance procedures in construction contract. Add review to project file.</li> <li>Harbor District reviews construction specification to verify inclusion.</li> <li>Harbor District conducts periodic site inspections during construction to ensure compliance, and adds inspection report to project file.</li> </ol>	<ol style="list-style-type: none"> <li>Harbor District.</li> <li>Harbor District.</li> <li>Harbor District.</li> <li>Harbor District.</li> </ol>	<ol style="list-style-type: none"> <li>During construction.</li> <li>Seven days prior to ground disturbing activities.</li> <li>Periodically, during construction.</li> <li>During Construction.</li> </ol>

**MITIGATION MONITORING AND REPORTING PROGRAM**

Issue Area	Mitigation Measure	Monitoring / Reporting Action	Implementing Party/ Monitoring Party	Timing
Biological Resources (cont.)	<ul style="list-style-type: none"> <li>To minimize the potential for disturbance of Marbled Murrelets foraging in or traveling to/from Pillar Point Harbor during the dawn and dusk hours, temporary artificial lighting proposed during night work shall be angled away from open water in Pillar Point Harbor.</li> </ul>			
	<p><b>Mitigation Measure BIO-1h: Avoidance and Minimization Measures for Nesting Birds</b></p> <ul style="list-style-type: none"> <li>No preconstruction surveys or avoidance measures are required for construction activities that would be completed entirely during the non-nesting season (September 16 to January 31).</li> <li>For all construction activities scheduled to occur during the nesting season (February 1 to September 15), a USFWS- and CDFW-qualified biologist shall conduct a preconstruction avian nesting survey no more than 10 days prior to the start of staging, site clearing, and/or ground disturbance.</li> <li>If there is a break of 10 days or more in construction activities during the breeding season, a new nesting bird survey shall be conducted before reinitiating construction.</li> <li>The surveying biologist shall be capable of determining the species and nesting stage without causing intrusive disturbance. The surveys shall cover all potential nesting sites within 500 feet of the project area for raptors and within 300 feet for other birds.</li> </ul> <p>If active nests are found in the proposed project area or vicinity, a no-disturbance buffer shall be created around the active nests, as determined by a qualified biologist. The buffer distance can be reduced in coordination with CDFW if construction activities would not cause an adult to abandon an active nest or young or change an adult's behavior so it could not care for an active nest or young. If the nest(s) are found in an area where ground disturbance is scheduled to occur, the Harbor District shall require that ground disturbance be delayed until after the birds have fledged.</p> <p>If work must occur within the established buffers, nests shall be continuously surveyed for the first 24 hours prior to any construction related activities to establish a behavioral baseline and, once work commences, all nests shall be continuously monitored to detect any behavioral changes as a result of the project, if feasible. If behavioral changes are observed, work causing the change shall cease and CDFW shall be consulted for additional avoidance and minimization measures. The avoidance and minimization measures shall ensure that the construction activities do not cause the adult to abandon an active nest or young or change an adult's behavior so it could not care for an active nest or young.</p>	<ol style="list-style-type: none"> <li>Harbor District includes field surveys in project file and submits to USFWS- and CDFW as determined by qualified biologist.</li> <li>If required, Harbor District will include avoidance procedures in construction contract. Add review to project file.</li> <li>Harbor District conducts periodic site inspections during construction to ensure compliance, and adds inspection report to project file.</li> </ol>	<ol style="list-style-type: none"> <li>Harbor District.</li> <li>Harbor District.</li> </ol>	<ol style="list-style-type: none"> <li>Prior to construction.</li> <li>Ten days prior to and during construction.</li> </ol>

**MITIGATION MONITORING AND REPORTING PROGRAM**

Issue Area	Mitigation Measure	Monitoring / Reporting Action	Implementing Party/ Monitoring Party	Timing
Biological Resources (cont.)	<p><b>Mitigation Measure BIO-1i: Avoidance and Minimization Measures for Eelgrass Beds</b></p> <ul style="list-style-type: none"> <li>• <b>Pre-construction Survey.</b> The proposed project area shall be surveyed for eelgrass beds with side-scan sonar during the growing season (April to October) and the boundaries between the eelgrass beds and the project work area shall be marked prior to construction with temporary navigation buoys. To the extent feasible, the presence of work activities within the area(s) marked by the buoys shall be prohibited.</li> <li>• <b>Biologist Inspection, Monitoring.</b> If eelgrass beds are found within the proposed project area, a California Coastal Commission-approved biologist shall be on-site during all marine construction activities to monitor the eelgrass beds and ensure that the beds are avoided and impacts are minimized as much as possible during construction.</li> </ul>	<ol style="list-style-type: none"> <li>1. Harbor District includes pre-construction survey in project file.</li> <li>2. If required, Harbor District will include avoidance procedures in construction contract, and submits to California Coastal Commission as determined by an approved biologist. Add review to project file.</li> </ol>	<ol style="list-style-type: none"> <li>1. Harbor District.</li> <li>2. Harbor District.</li> </ol>	<ol style="list-style-type: none"> <li>1. Prior to any construction.</li> <li>2. During construction.</li> </ol>
Cultural Resources	<p><b>Mitigation Measure CUL-1:</b> If prehistoric or historic-period cultural materials are encountered during project implementation, all construction activities within 100 feet shall halt, and a qualified archaeologist, defined as an archaeologist meeting the U.S. Secretary of the Interior’s Professional Qualification Standards for Archeology, shall inspect the find within 24 hours of discovery and notify the San Mateo County Harbor District of their initial assessment. Prehistoric cultural materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil (“midden”) containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-period cultural materials might include building or structure footings and walls, and deposits of metal, glass, and/or ceramic refuse.</p> <p>If the San Mateo County Harbor District determines, based on recommendations from a qualified archaeologist and a Native American representative (if the resource is indigenous), that the resource may qualify as a historic property (meeting the National Register of Historic Places criteria at 36 CFR 60.4), a historical resource or unique archaeological resource (as defined in CEQA Guidelines Section 15064.5), or a tribal cultural resource (as defined in PRC Section 21080.3), the resource shall be avoided if feasible. If avoidance is not feasible, the San Mateo County Harbor District shall consult with appropriate Native American representative (if the resource is indigenous), and other appropriate interested parties to determine treatment measures to avoid, minimize, or mitigate any potential impacts to the resource. This shall include documentation of the resource and may include data recovery (according to PRC Section 21083.2), if deemed appropriate, or other actions such as treating the resource with culturally appropriate dignity and protecting the cultural character and integrity of the resource (according to PRC Section 21084.3).</p>	<ol style="list-style-type: none"> <li>1. Harbor reviews construction specifications to verify inclusion.</li> <li>2. Harbor District conducts periodic site inspections during construction to ensure compliance, and adds inspection report to project file.</li> </ol>	<ol style="list-style-type: none"> <li>1. Harbor District.</li> </ol>	<ol style="list-style-type: none"> <li>1. During ground disturbing activities.</li> </ol>

**MITIGATION MONITORING AND REPORTING PROGRAM**

Issue Area	Mitigation Measure	Monitoring / Reporting Action	Implementing Party/ Monitoring Party	Timing
Cultural Resources (cont.)	<b>Mitigation Measure CUL-2:</b> In the event of discovery of any human remains during project activities, all activities within 100 feet of the find shall cease and the San Mateo County Harbor District shall follow the provisions of California Health and Human Safety Code (Human Remains) Section 7050.5. This shall include immediate notification of the San Mateo County Coroner who will determine if an investigation of the cause of death is required. The Native American Heritage Commission will be contacted within 24 hours if it is determined that the remains are Native American. The Commission will then identify the person or persons it believes to be the most likely descendant from the deceased Native American, who in turn would make recommendations to the San Mateo County Harbor District for the appropriate means of treating the human remains and any grave goods (PRC Section 5097.98).	<ol style="list-style-type: none"> <li>1. Harbor reviews construction specifications to verify inclusion.</li> <li>2. Harbor District conducts periodic site inspections during construction to ensure compliance, and adds inspection report to project file.</li> </ol>	1. Harbor District	1. During ground disturbing activities.

# PILLAR POINT HARBOR WEST TRAIL LIVING SHORELINE PROJECT

Initial Study/Notice of Intent to Adopt a Mitigated Negative Declaration

Prepared for  
San Mateo County Harbor District

February 2021





# 57B58BPILLAR POINT HARBOR WEST TRAIL LIVING SHORELINE PROJECT

Initial Study/Notice of Intent to Adopt a Mitigated Negative Declaration

Prepared for  
San Mateo County Harbor District

February 2021

2600 Capitol Avenue  
Suite 200  
Sacramento, CA 95816  
916.564.4500  
[www.esassoc.com](http://www.esassoc.com)



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# CHAPTER 1

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## Introduction

As lead agency under the California Environmental Quality Act (CEQA), the San Mateo County Harbor District (Harbor District) has prepared this Draft Initial Study (IS) and Notice of Intent (NOI) to adopt a Mitigated Negative Declaration (MND) to address the environmental consequences of the proposed Pillar Point West Trail Living Shoreline Project (proposed project).

The proposed project would include the construction of a living shoreline to protect and restore the severely eroded segment of the Pillar Point Harbor's (PPH) West Trail. The proposed project would also address drainage issues in the vicinity of the project by constructing a new stormwater system that would divert stormwater through a more natural system and eliminate the direct discharge into the harbor. The overall purpose is to provide multiple ecological and community benefits by implementing a nature-based shoreline solution that increases the resilience of the West Trail to coastal erosion, extreme storms, and sea level rise.

This document includes the:

- IS with completed Environmental Checklist (consistent with Appendix G of the CEQA Guidelines); and,
- Proposed Notice of Intent (NOI) to adopt a MND to satisfy CEQA requirements.

This document will be available for public comment from July 22, 2020 to August 21, 2020 at the PPH Harbormaster Office at One Johnson Pier Rd, El Granada, CA 94016 seven days a week from 9 a.m. to 5 p.m. Following completion of the required public comment period, and before taking action on the proposed project, the Harbor District will consider the MND together with any comments provided during the public comment period and will adopt the MND if, based on the whole of the record: (1) there is no substantial evidence that the proposed project will have a significant effect on the environment; and (2) that it represents the Harbor District's independent judgement and analysis. The Harbor District will also prepare and adopt a Mitigation Monitoring Reporting Program (MMRP) as part of the approval process as required under Public Resources Code Section 21081.6(c) for mitigation measures identified in the MND.

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# CHAPTER 2

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## Project Description

### 2.1 Project Location

The proposed project is located along the western edge of Pillar Point Harbor (Harbor) in western San Mateo County, California. The Pillar Point West Trail (West Trail or trail) varies in width from 8 to 18 feet and connects a pedestrian pathway from the West Point Avenue access and parking area to the Pillar Point outer harbor and Mavericks Beach. Pillar Point is a peninsula, just north of the communities of Half Moon Bay and El Granada. The majority of the proposed project area is managed by and publicly owned by the San Mateo County Harbor District (District), though some of the construction activities would require access through parcels publicly owned by San Mateo County and the federal government (Pillar Point Air Force Station [AFS]). All of the ocean water and submerged land west of the project area beyond the Harbor are within Monterey Bay National Marine Sanctuary. The town of Princeton-by-the-Sea is located east of the site, and the AFS is located west of the site. Construction staging for West Point Avenue Parking Lot. A temporary stockpile area would be placed on the beach adjacent to the trail on its eastern side. **Figure 1a** shows the project's general vicinity, the project area, and its immediate surroundings. **Figure 1b** shows the project's area of potential effect.

### 2.2 Project History and Background

#### 2.2.1 Project History

The existing Pillar Point Harbor West Trail was constructed as an equipment access way as part of the Outer Breakwaters project, designed and constructed by the U.S. Army Corps of Engineers (USACE) from 1959-1961, to reduce wave exposure in the Harbor. Following the construction of the Outer Breakwaters project, the shoreline dynamics in the project area have been altered, resulting in sediment transport away from some areas and deposition in other areas. A historical photograph from 1972, only 10 years after construction of the breakwater and thus somewhat representative of previous conditions, shows that the beach adjacent to and protecting the West Trail was much wider than it is today (**Figure 2**). Other locations within the harbor however, are accumulating rather than losing sand, because it's being trapped and redistributed within the harbor. Prior studies have concluded that sand is transported into the harbor by three tributary streams as well as transmission through and over the outer breakwaters (USACE 2015).

**Figure 3** shows how the wave patterns in Half Moon Bay and Pillar Point Harbor have changed due to construction of the Outer Breakwater in the early 1960s. One of the major changes affecting the project site includes a reversal of the predominant sediment transport direction to the west in the western half of the Harbor. This implies that sediment was historically driven toward the project site, which could explain the wide, sandy beach shown in Figure 2.



SOURCE: ESA, 2020; ESRI, 2020

Pillar Point West Trail Living Shoreline Project

**Figure 1a**  
Project Location



SOURCE: ESA, 2020; ESRI, 2020

Pillar Point West Trail Living Shoreline Project

**Figure 1b**  
Area of Potential Effect

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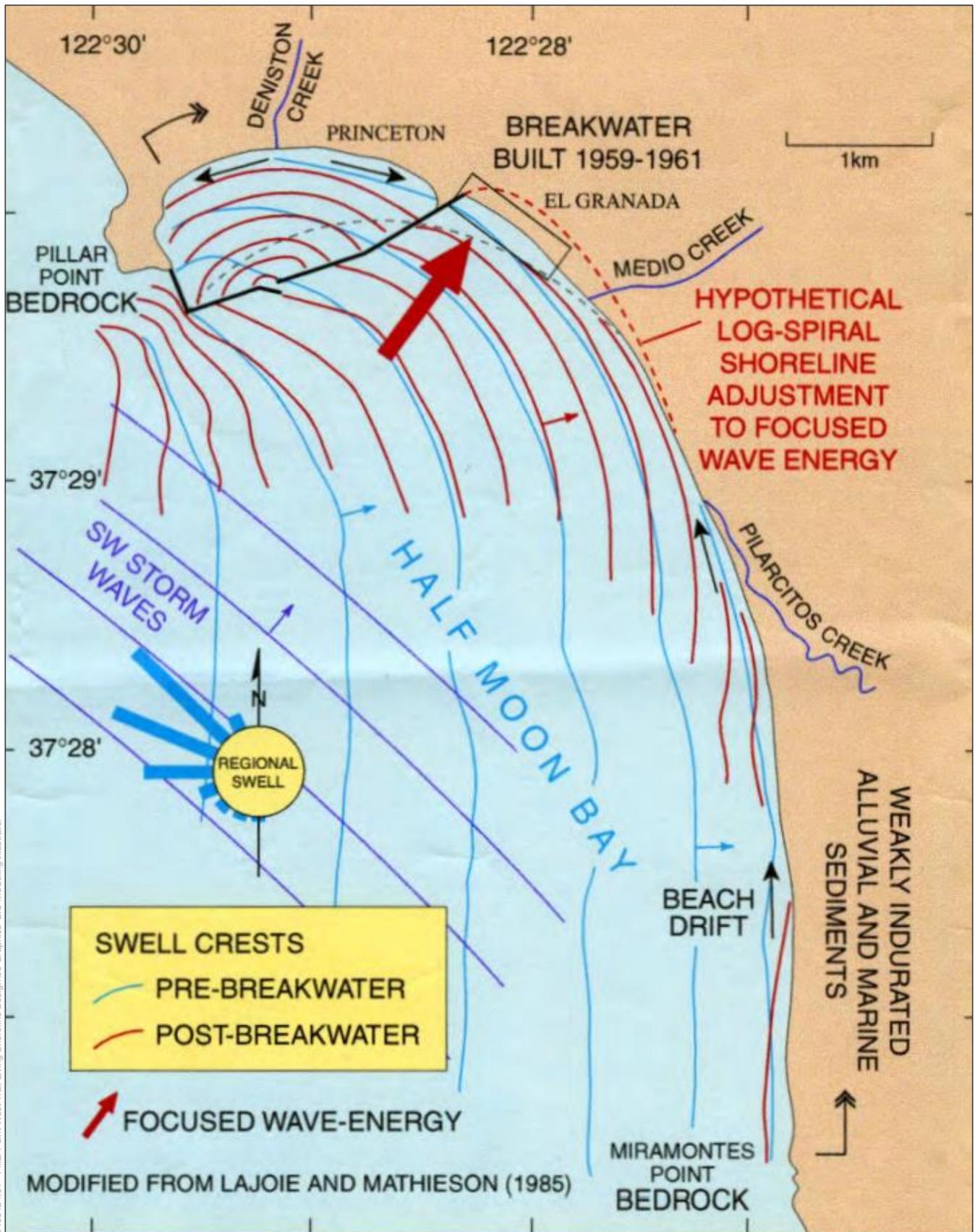
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SOURCE: Copyright © 2002-2019 Kenneth & Gabrielle Adelman, California Coastal Records Project, [www.californiacoastline.org](http://www.californiacoastline.org)

Pillar Point Harbor West Trail Living Shoreline Project



**Figure 2**  
Photograph of Project Site in 1972



SOURCE: Lajoie and Mathieson (Poster; taken from USACE 2009)

Pillar Point Harbor West Trail Living Shoreline Project

**Figure 3**  
Conceptual Schematic of Wave Pattern Changes  
Due to Construction of Outer Breakwater

## 2.3 Project Area

### 2.3.1 Site Use, Access, and Maintenance

The Harbor includes and is adjacent to valuable coastal resources, including beaches, reefs, vegetated wetlands, intertidal flats, and wooded and open bluffs. The project area and vicinity are used on a daily basis by pedestrians, dog owners, surfers and other recreationists. The West Trail provides for public access from the West Point Avenue access and parking area, to the shore including the Maverick's surf break and nearby reefs. The trail is both an important public pedestrian amenity as well as access for emergency and maintenance vehicles and equipment.

### 2.3.2 Trail Conditions and Erosion

The unpaved, unvegetated, and densely compacted dirt trail is approximately 2,300 feet (ft.) in length (from the parking lot to the southern terminus at Mavericks Beach) with a width varying from 8 to 18 ft. The trail provides access from the public parking lot to several beaches, an intertidal reef, and the shoreline to observe and surf at Mavericks surfing reef. The edges of the trail are generally well-defined and bounded by rock, sand beach, and vegetated dune to the east/southeast of the trail. The west/northwest land-side of the trail abuts a bluff and steep hillside, with a dense stand of cypress trees but little to no low growing vegetation; the hillside is subject to erosion.

The project site is an approximately 300-foot-long segment of the trail (shown in **Figure 4**) that has been subject to erosion and emergency repairs since 1994. **Figures 5 and 6** show the eroded trail conditions. The most recent repairs occurred in January 2016 at the corrugated metal pipe (CMP) outfall (stormwater discharge point). At that time, the District replaced the previous drainage basin and associated dual drainage pipes at the toe of the hillside along the western edge of the trail with a larger 36- inch diameter reinforced concrete pipe that discharges into Pillar Point Harbor (see **Figure 7**). Based on the conditions of the Emergency Coastal Development Permit issued by the California Coastal Commission (Coastal Commission) authorizing the culvert repair, the repair was meant to be temporary.

### 2.3.3 On-site Stormwater Drainage

An open concrete swale carries stormwater downhill from the US Air Force Property, collecting stormwater as it traverses the hillside above the trail. The concrete swale is damaged in places and has vegetation growing down its center (see Figure 7). This swale connects to an existing above-ground 24-inch CMP and an inlet that was built as part of the emergency culvert repair in January 2016. This connects to an underground 36-inch diameter reinforced concrete pipe (RCP) with a 36-inch RCP outfall (See other photographs on Figure 7). An abandoned 12-inch Asbestos-Cement (AC) Pipe runs along the eastern edge of the trail. A segment of this pipe has been exposed by coastal erosion at the project site.



SOURCE: Copyright © 2002-2019 Kenneth & Gabrielle Adelman, California Coastal Records Project, www.californiacoastline.org

Pillar Point Harbor West Trail Living Shoreline Project

**Figure 4**  
Aerial View of Existing Project Area





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SOURCE: ESA

Pillar Point Harbor West Trail Living Shoreline Project



**Figure 5**  
Photograph of Project Site at Low Tide,  
Showing Trail Erosion, June 6, 2019



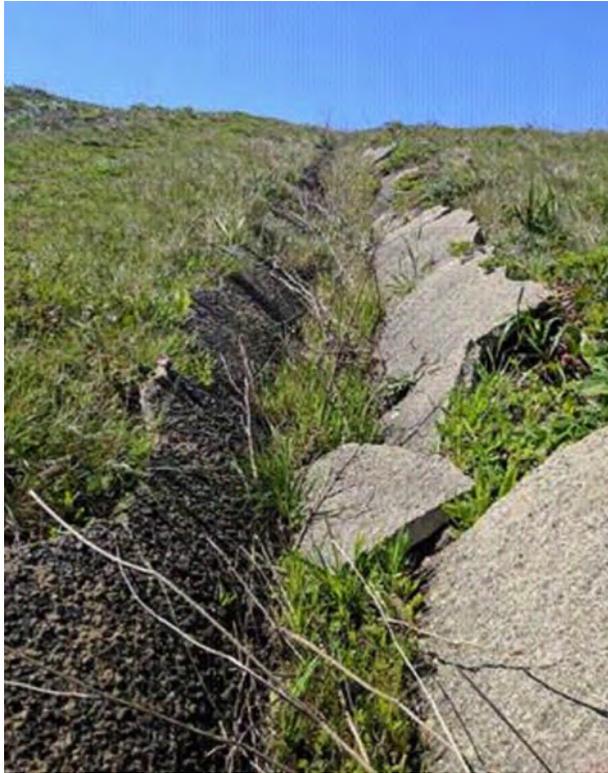
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SOURCE: ESA

Pillar Point Harbor West Trail Living Shoreline Project



**Figure 6**  
Photograph of Project Site,  
Looking South Towards Mavericks Beach, June 6 2019



Existing Gunite Swale



Existing Corrugated Metal Pipe



Existing Outfall

DT190124.01 - Pillar Point West Trail Living Shoreline Design 05 Graphics-GIS-Modeling/Illustrator

SOURCE: GHD

Pillar Point Harbor West Trail Living Shoreline Project

**Figure 7**  
Existing Conditions of Swale, Pipe, and Outfall

## 2.4 Project Objectives

The project area has experienced chronic coastal erosion, resulting in degradation of the existing Pillar Point Harbor West Trail and creating hazardous conditions for trail users. The erosion threatens the structural integrity of the trail for public and emergency vehicle use. In addition, because the trail is the only access point to Mavericks Beach and is a popular trail for visitors, permanent closure of the trail is not favored. The primary objectives of the proposed project are to:

1. Stabilize the trail to protect and maintain access for recreationists and emergency vehicles for at least 25 years.
2. Upgrade the existing stormwater system so it functions adequately for a 50-year storm event.
3. Incorporate natural design features, including living shoreline design techniques to the maximum extent possible and minimize the use of hardscape armoring.
4. Enhance the long-term durability of the surrounding ecological systems through planting of native vegetation and water quality enhancements that require minimal maintenance.
5. Conform with the natural aesthetics of the landscape.

## 2.5 Project Elements and Design

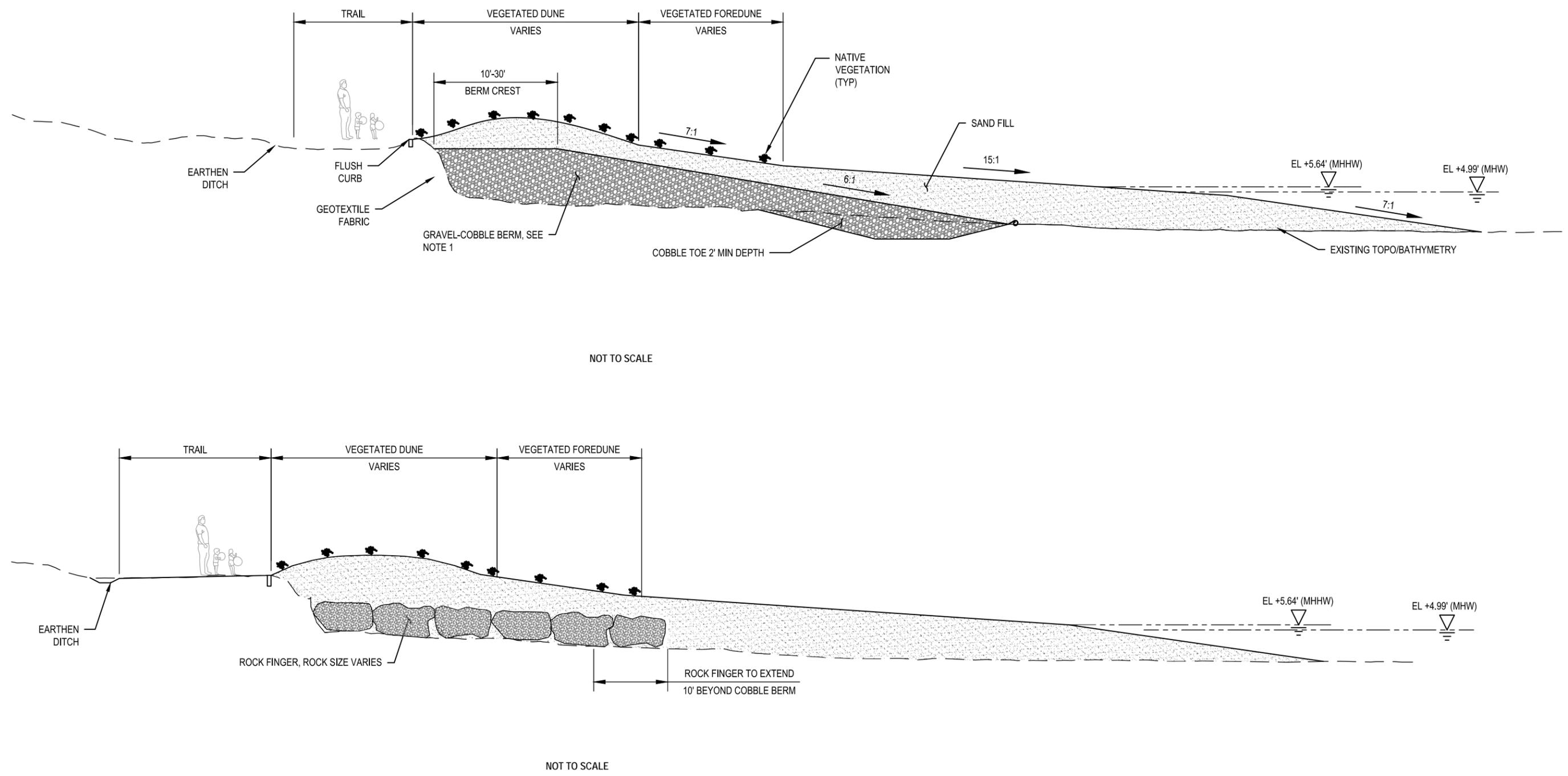
The proposed project would include the stabilization of the West Trail and stormwater system improvements. To protect and stabilize the trail, the proposed project would include the construction of a nourished beach with an elevated dune adjacent to, and east of, 300 feet of the trail. Buried beneath the surface of the shoreline and dune would be a cobble berm (otherwise known as a dynamic revetment) and two rock fingers extending perpendicular from the trail. The stormwater improvements would address the aesthetics, function, and maintenance needs of the existing storm drain system as well as provide water quality improvements to the harbor.

The proposed project would be designed with considerations for the local hydrology and future sea level rise. Sea levels are expected to rise at an accelerating pace based on best available science. Projects that are located in coastal hazard areas must consider sea level rise in the design per the California Coastal Commission's (CCC) updated 2018 Sea-Level Rise Policy Guidance and the Ocean Protection Council's 2018 State of California Sea-Level Rise Guidance (CCC 2018; Ocean Protection Council 2018). **Figures 8, 9 and 10** show the locations of these new elements. The following sections describe the project elements in more detail.

### 2.5.1 West Trail Stabilization

In order to stabilize the trail, an approximately 300-foot long cobble berm would be constructed on the trail's eastern side, using a combination of existing rock and cobble imported from a quarry. The cobble berm would vary in width from 10 to 30 feet and would have an approximate seaward facing slope of 6 to 1, horizontal to vertical (6 horizontal (H):1 vertical (V)) and would be buried beneath the sand dune (see Section 2.5.2).

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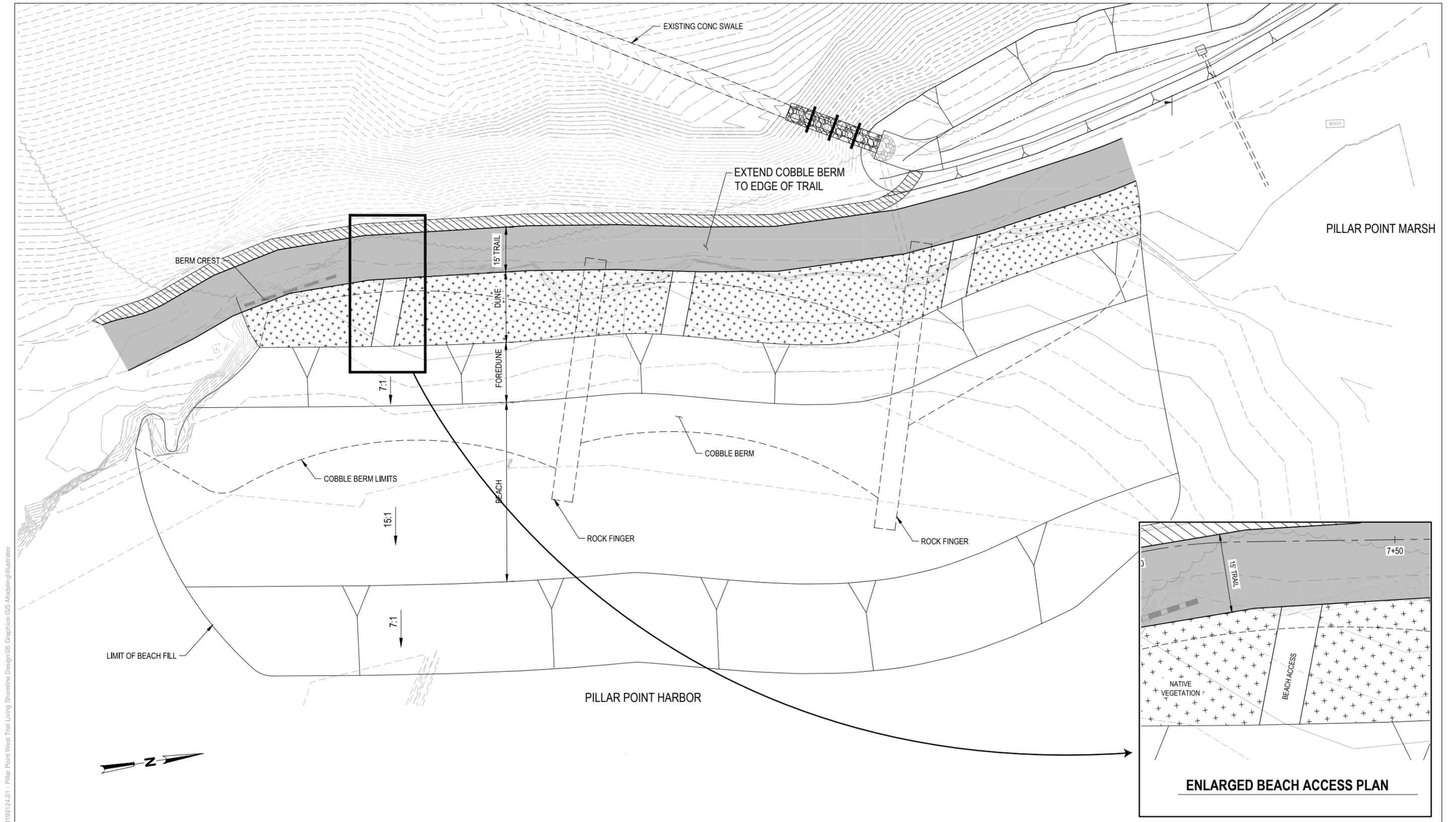


SOURCE: GHD, Inc., 2020

Pillar Point Harbor West Trail Living Shoreline Project

**Figure 8**  
Beach Cross Sections





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SOURCE: GHD, Inc., 2020

Pillar Point Harbor West Trail Living Shoreline Project

**Figure 9**  
Beach Project Elements





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SOURCE: GHD, Inc., 2019

Pillar Point Harbor West Trail Living Shoreline Project



**Figure 10**  
Natural Examples of Existing Rock Finger Design Element

Two rock fingers would be constructed approximately perpendicular to the shore to retain cobbles in the berm from moving in the longshore direction. The fingers would be based on similar bedrock outcrops in the project area (see Figure 10). The rock fingers would be approximately 8- to 10-foot wide, and the length would extend 10 feet past the eastern limit of the cobble berm (see Figure 8).

These elements would support the trail itself, which would be constructed to be a minimum of 15-foot wide and 13 feet high (North American Vertical Datum 88) to accommodate SLR. Decomposed granite is proposed as the finished surfaces along the improved trail length. The trail would be ADA compliant with a maximum cross slope of 2% and less than 5% slope in the longitudinal direction. The trail design includes requirements of the San Mateo County Harbor District Ordinance Code and design characteristics described in the 2019 Edition of the California State Parks Trails Handbook to restore safe public access along the trail.

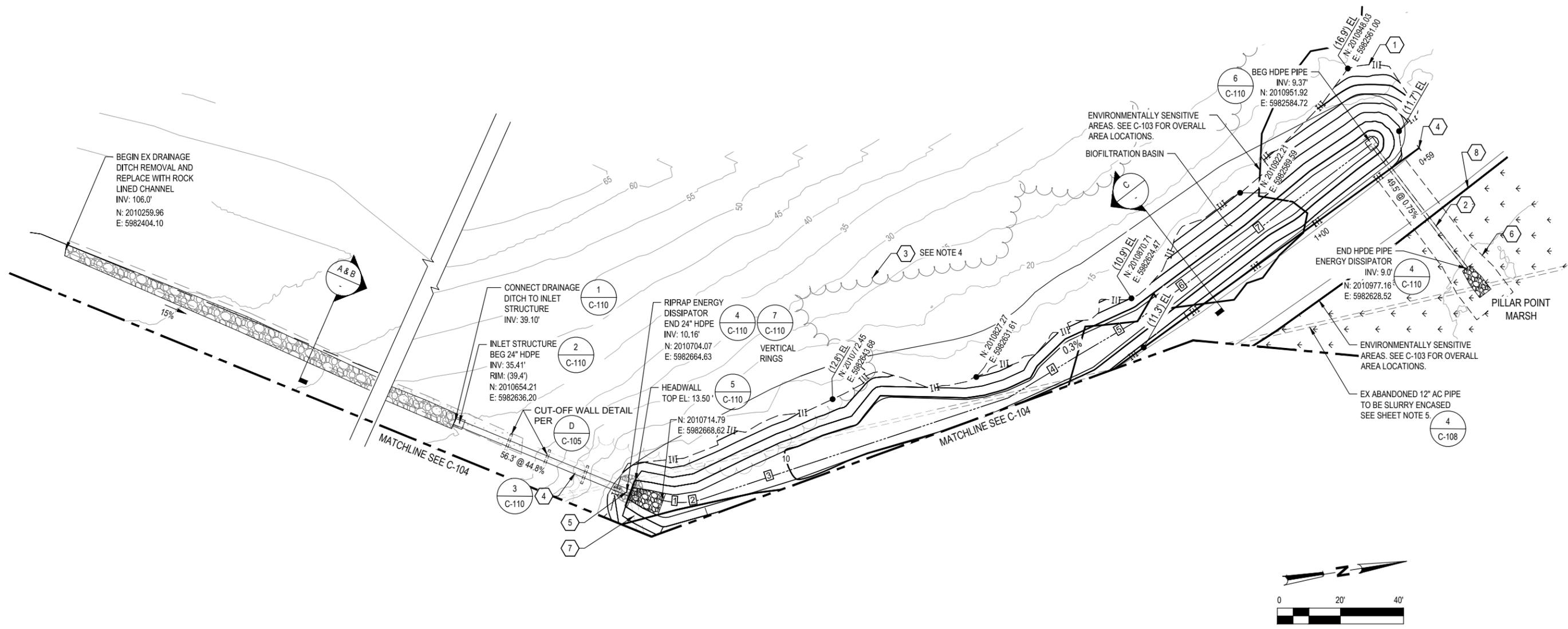
## 2.5.2 Living Shoreline Design Features and Plantings

The sandy beach and dune design was based on the results of a site-specific numerical model developed for the proposed project. Multiple design options were evaluated in the model against varying water levels (current water levels and sea level rise) and extreme wave conditions (e.g., 50 and 100-year wave heights). The proposed project design was selected based on performance in comparison to other considered designs. The 300 foot-long and 30-foot-wide dune would be constructed with sand from within the Harbor and imported sand and formed into natural-shaped dune hummocks. Figure 8 shows the cross-sectional view of the dune design and Figure 9 shows the dune, foredune, and beach plan view. Dune slopes would vary along the length of the beach. Imported sand for the beach and dune would come from the Boat Launch Ramp Maintenance Dredging Project sand stockpile site on Half Moon Bay Airport property. The dune would be planted with native vegetation once constructed. The planted zone would be the landward most 30 feet in width along the entire dune reach. Sand would be used to bury the cobble berm and rock fingers (see Section 2.5.1) with a minimum of two feet of cover such that dune habitat could establish.

## 2.5.3 Stormwater System Improvements

The existing stormwater system, including the damaged concrete swale, the existing 24-inch corrugated metal pipe, and the existing 36-inch reinforced concrete pipe outfall that currently discharges into the Harbor, would be removed and disposed of at the Corinda Los Trancos Landfill (formerly Ox Mountain Landfill). The proposed project would construct new storm water improvements needed to address the function and maintenance needs of the existing stormwater drainage system while also providing water quality improvements. Construction of the proposed drainage system would convey stormwater into both a new earthen ditch along the landward side of the new trail and a new rock-lined concrete channel to convey storm water to a new bioretention basin that would be planted with native vegetation. An existing overflow discharge pipe would be improved so that stormwater from the bioretention basin would discharge into upland portions of the Pillar Point Marsh northeast of the bioretention basin and restore a broken freshwater connection to the marsh. **Figure 11** shows the new storm water system improvements.

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SOURCE: GHD, Inc., 2020

Pillar Point Harbor West Trail Living Shoreline Project

**Figure 11**  
Project Stormwater System Improvements



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## 2.6 Project Construction

Construction activities would generally include:

- equipment and materials staging and laydown;
- site preparation, consisting of existing swale and pipeline demolition and removal;
- excavation and grading for stormwater improvements, including:
  - new concrete swale,
  - new underground pipe to replace the hillside CMP,
  - new bioretention basin,
  - improved culvert from the bioretention basin to the marsh,
  - new pedestrian trail with appurtenances (DG, concrete beach, beach access way);
- restoration of the shoreline including:
  - cobble toe berm,
  - rock fingers,
  - sand dune with native dune plantings, and
  - nourished beach.

The anticipated area of total ground disturbance would be approximately 4 acres, of which 1.6 acres would be considered temporary disturbance. Hauling would be required for materials deliveries (including cobble and sand), and off-haul of construction debris and excavated materials.

### 2.6.1 Construction Staging and Site Access

Construction staging would occur in a portion of the Harbor District parking lot off of West Point Avenue. Site access would be from the Cabrillo Highway and West Point Avenue. The staging area connects to the project site via the existing West Trail. One or more temporary sand ramps would be constructed from the existing trail to the beach to enable vehicles and construction equipment to access the beach during construction. The West Point Avenue parking lot is relatively small for staging and laydown for a project of this size, so it is anticipated that the Contractor would also require offsite laydown facilities for storage of materials and equipment, site facilities and personnel parking.

During construction, the intention is to keep the trail open to the public during daylight hours and have any trail closures occur at night. However, there may be times when the section of the trail at the project site may be closed to public access; in this case, site signage will be posted ahead of time to inform the public of detours during the trail closures. West Point Avenue, the access point for the trail and parking lot, will generally remain open through the project, though it may be reduced to one lane at times during the movement of materials and mobilization/demobilization of equipment. Short durations of full road closure should also be anticipated, likely to be 10 minutes or less.

## 2.6.2 Equipment and Employees

Construction of the project would require various equipment, operators and labor force depending on the elements under construction throughout the construction schedule. The labor force would increase and decrease based on the daily activities and construction schedule. It is estimated that an average of approximately 10 construction workers would be onsite at any given time, with additional non-contractor personnel onsite for construction management, special inspections, materials testing, environmental monitoring, etc.

**Table 2-1** lists the anticipated construction equipment required to complete the proposed project. The actual type of construction equipment and quantity of equipment used by the contractor will be dependent on the means and methods selected by the contractor. The equipment listed in Table 3 is a reasonable estimate based on recent similar shoreline projects.

**TABLE 2-1  
ANTICIPATED CONSTRUCTION EQUIPMENT NEEDED FOR THE PROPOSED PROJECT**

Equipment	Number of Equipment	Maximum Hours per Day	Total Hours
CAT 320 Excavator	1	8	352
CAT 336 Excavator	1	8	40
CAT 415F Skid loader	1	8	256
CAT 226D3 Skid Steer	1	8	36
CAT CB22B Small Roller	1	8	44
Super 10 truck	1	8	181
Super 10 truck + trailer	1	8	1,502
Putzmeister 47Z Boom Pump	1	8	20
Concrete Truck	1	8	16

SOURCE: GHD, 2020

It is anticipated that both tracked and wheeled vehicles would be employed in the construction of the proposed project. The beach is a dynamic environment and actual site conditions encountered during construction may require equipment adjustments. Other factors influencing the equipment used include the resources available to meet the construction schedule. For example, adverse weather could potentially delay the project for a period, in which case, if the scheduled completion date must be maintained, the contractor may need to use additional equipment and manpower to increase production.

## 2.6.3 Construction Schedule and Sequence

The District anticipates approximately four months of construction, beginning in fall/winter of 2020 and concluding in winter/spring of 2021. Construction activities will take place primarily during daytime hours, between approximately 8:00 a.m. and 5:00 p.m., Monday through Friday. Some work may be completed at night to take advantage of tidal conditions and to minimize impacts on trail users. If night work is required, mobile lighting would be used to light the areas where work activities would occur. If needed to satisfy the requirements of the schedule, the

Contractor may request to also work during the weekends; any weekend work will be subject to approval by the District.

It is anticipated that the Contractor's schedule will follow the sequence below. However, this could change depending on the tidal conditions, weather, or other constraints. The Contractor may complete some activities in parallel:

1. Mobilization
2. Site Clearing
3. Demolition
4. Grading
5. Constructing storm drainage improvements
6. Constructing new shoreline: including excavation, placing of rock fingers, cobble, and sand backfill, and planting of dune vegetation
7. Constructing bioretention basin, including inlet and outlet works, and planting vegetation
8. Constructing final grade for the trail, installing new concrete flush curb and placing of decomposed granite surface
9. Cleaning up site, including revegetation of temporarily disturbed areas
10. Demobilization
11. Establishing vegetation i.e. irrigation and replacing plants that do not establish

## 2.6.4 Construction Materials

The proposed project requires the import of cobble, sand, concrete, and decomposed granite from offsite sources. In addition, the proposed project demolition, excavation and grading requires hauling some materials off site to a local landfill, or other suitable disposal site. The total number of truck loads required for hauling and off-hauling of these materials would be approximately 1,235 truckloads based on a 16 cubic yard (CY) haul capacity for all materials, except concrete which is based on a nine cubic yard load capacity.

The proposed project would require approximately: 6,000 CY of cobble; 10,000 CY of sand; 1,000 CY of rock for rock fingers; and, 70 CY of concrete. The imported gravel and cobble would be sourced from a quarry within a 100-mile radius of the proposed project area. Rock and cobble for the rock finger and cobble beneath the dunes would be hauled from offsite suppliers.

Approximately 1,600 CY of sand would be sourced from an existing stockpile at the Half Moon Bay Airport, while the remaining amount of sand needed would come from within the Harbor as indicated on Figure 1.

Borrowing of sand from within the Harbor would require the use of an excavator, or multiple excavators, and two 16 CY haul trucks. Sand would be loaded into the haul trucks at the sand extraction location and the haul trucks would drive along the beach to unload sand within the proposed project area. It is anticipated that an excavator will be used to move and level the sand into the beach and dune construction area, however the Contractor may use other equipment depending on the conditions of the beach at the time of construction i.e. wheeled loader or tracked dozer.

Concrete used in the construction of the storm drainage improvements would be supplied by a nearby ready-mix concrete batch plant. A concrete boom pump or line pump would be used in concrete pours because trucks would have limited access to the swale locations due to the steep terrain and vegetation.

Other materials such as drainage pipes, special soils for the bioretention basin, plantings for the dunes, and water used in construction would be delivered from vendors and deposited directly at the location required within the proposed project area, or stockpiled in the staging area for future use. Stockpiled materials would be included in the Stormwater Pollution Prevention Plan (SWPPP) to ensure appropriate measures are taken to prevent stormwater pollution and runoff. The SWPPP would be prepared by the contractor and approved by the District.

## 2.7 Project Operation and Maintenance

After construction is completed, it is expected that the trail, upgraded stormwater system, and the living shoreline would be effective and require minimal on-going maintenance. However, minor operations and maintenance are expected to be needed in response to extreme events and long-term trends. For the stormwater system, maintenance items are expected to be limited to minor clearing of drains and swales of silt and debris.

In addition, dune vegetation would require irrigation and maintenance throughout the establishment period. Short-term, temporary weeding of sea-rocket would take place during dune establishment for approximately 12-24 months. Longer-term, low-level annual weeding of invasive iceplant seedlings would be expected to take place in early summer. Planting of additional dune vegetation is not expected to be necessary; the proposed diverse vegetation should be well-adapted to recolonize and self-maintain through storm erosion/post-storm recovery cycles, and low levels of dune sand accretion at the shoreline.

Necessary maintenance of the project area may include:

- Re-nourishment of the beach using suitable marine sands sourced from the Pillar Point Boat Ramp or other appropriate local sources (less than 5,000 CY per event). It is anticipated that re-nourishment would be infrequent.
- Physical monitoring of the shoreline and dune profile (e.g., photogrammetry or hydrographic survey methods) to forecast required re-nourishment

## 2.8 Report Organization

This report is organized as follows:

- **Chapter 1, Introduction**, provides an introduction to the project with project background, needs and objectives, and discusses the proposed facilities.
- **Chapter 2, Project Description**, presents the description of the location of the proposed project area, elements of the proposed project, a description of construction methods and materials, and schedule.
- **Chapter 3, Initial Study**, provided the analysis of impacts of the proposed project for the resource topics as listed in Appendix G of the CEQA Guidelines.

## 2.9 Required Approvals and Permits

The proposed project would require federal, state, and local permits and approvals. Based on the current understanding of the project, the following is a list of the agencies and approvals likely to be required for the Project.

1. San Mateo County Harbor District certification of the IS/MND and adoption of the Mitigation Monitoring and Reporting Program
2. U.S. Army Corps of Engineers' (Corps) approval of Section 404 and Section 10 Individual Permit;
3. Regional Water Quality Control Board's (RWQCB) approval of 401 Water Quality Certification and/or Waste Discharge Requirements application and Stormwater Pollution Prevention Plan (SWPPP);
4. California Department of Fish and Wildlife (CDFW) approval of Streambed Alteration Agreement.
5. California Coastal Commission approval of a Consolidated Coastal Development Permit.
6. Various approvals from San Mateo County agencies, such as an Encroachment Permit from Department of Public Works for material transport on County roads and SWPPP.

## 2.10 References

- California Coastal Commission, 2018. Updated 2018 Sea-Level Rise Policy Guidance. <https://www.coastal.ca.gov/climate/slrguidance.html>. California Department Fish and Wildlife (CDFW), 2016a.
- Ocean Protection Council, 2018. State of California Sea-Level Rise Guidance. [http://www.opc.ca.gov/webmaster/ftp/pdf/agenda\\_items/20180314/Item3\\_Exhibit-A\\_OPC\\_SLR\\_Guidance-rd3.pdf](http://www.opc.ca.gov/webmaster/ftp/pdf/agenda_items/20180314/Item3_Exhibit-A_OPC_SLR_Guidance-rd3.pdf).
- U.S. Army Corps of Engineers (USACE), 2015. Coastal Regional Sediment Management Plan for the Santa Cruz Littoral Cell, Pillar Point to Moss Landing, prepared for: The California Coastal Sediment Management Workgroup, Prepared by: U.S. Army Corps of Engineers San Francisco District, Monterey Bay National Marine Sanctuary, Noble Consultants, Inc., September 2015.

# CHAPTER 3

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## Initial Study

1. **Project Title:** Pillar Point Harbor West Trail Living Shoreline Project
2. **Lead Agency Name and Address:** San Mateo County Harbor District
3. **Contact Person and Phone Number:** John Moren (650)741-9163
4. **Project Location:** Pillar Point Harbor, San Mateo County, CA
5. **Project Sponsor's Name and Address:** San Mateo County Harbor District,  
PO BOX 1449, 504 Avenue, Alhambra, 2nd  
Floor, El Granada CA 94018
6. **General Plan Designation(s):** Open Space, Recreation, Public Recreation
7. **Zoning:** Resource Management - Coastal Zone District (RM-CZ)/Design Review District (DR)/Coastal Development District (CD)

### 8. Description of Project:

Within Pillar Point Harbor in western San Mateo County, an approximately 300-foot-long segment of the Pillar Point West Trail has been subject to erosion and emergency repairs since 1994, creating hazardous conditions for trail users and threatening the structural integrity of existing stormwater infrastructure along and near the trail. To protect and stabilize the trail, the proposed project would build a nourished beach with an elevated dune adjacent to 300 feet of the trail. Buried beneath the surface of the shoreline and dune would be a cobble berm and two rock fingers extending perpendicular from the trail. The proposed project would include storm water improvements needed to address the aesthetics, function, and maintenance needs of the existing storm drain system. Additionally, the proposed project was designed with considerations for the local hydrology and future sea level rise. See Chapter 2 for detailed description and figures of the proposed project.

### 9. Surrounding Land Uses and Setting.

The project is surrounded by the Pillar Point Air Force Station to the west, the Half Moon Bay Airport to the north, the community of Princeton by the Sea to the north-east, and the open water of the Pillar Point Harbor to the east and south. Mavericks Beach is at the southern terminus of the trail, and the Pillar Point Marsh is to the east of the parking area and start of the West Trail.

**10. Other public agencies whose approval is required:**

California Coastal Commission, U.S. Army Corps of Engineers, State Water Resources Control Board/San Francisco Regional Water Quality Control Board, California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, U.S. National Marine Fisheries Service.

**11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?**

No tribes have requested consultation.

### 3.1 Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project as indicated by the checklist on the following pages.

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Aesthetics                         | <input type="checkbox"/> Agriculture and Forestry Resources  | <input checked="" type="checkbox"/> Air Quality                        |
| <input checked="" type="checkbox"/> Biological Resources    | <input checked="" type="checkbox"/> Cultural Resources       | <input checked="" type="checkbox"/> Energy                             |
| <input checked="" type="checkbox"/> Geology/Soils           | <input checked="" type="checkbox"/> Greenhouse Gas Emissions | <input checked="" 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 checked="" type="checkbox"/> Transportation           | <input checked="" type="checkbox"/> Tribal Cultural Resources          |
| <input type="checkbox"/> Utilities/Service Systems          | <input type="checkbox"/> Wildfire                            | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

#### **DETERMINATION: (To be completed by the Lead Agency)**

On the basis of this initial study:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the 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.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- 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.
- 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.

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Signature

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Date

## 3.2 Environmental Checklist

### 3.2.1 Aesthetics

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
1. <b>AESTHETICS</b> — Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Environmental Setting

Aesthetic or visual resources include the “scenic character” of a particular region and site. Scenic features can include both natural features, such as vegetation and topography, and manmade features (e.g. historic structures). Areas that are more sensitive to potential effects are usually readily observable, such as land found adjacent to major roadways and hilltops.

The proposed project is located along the coast of California and is characterized by open space and includes views of Pillar Point Harbor, Princeton-by-the Sea, The Pillar Point Air Force Station and bluff, the Pacific Ocean, and the California coastline. The proposed project is within a San Mateo County designated scenic corridor (San Mateo County 2013). There are no officially designated scenic highways in the vicinity of the project area (Caltrans 2020).

### Discussion

- a) **No Impact.** The proposed project is located in an area designated as a county scenic corridor and offers views of Pillar Point Harbor, the Pacific Ocean, and the coastline. Construction of the proposed project would involve demolition, excavation, grading, trail stabilization, and stormwater system upgrades in order to repair the trail and shoreline. Construction of the proposed project would be temporary and would not result in features that would obscure views of the Harbor, Pacific Ocean or the coastline. Once completed, the proposed project would conform with the natural aesthetic of the existing landscape and have a beneficial aesthetic effect by repairing erosion damage and burying stormwater infrastructure. There would be no impacts on scenic vistas.

- b) **No Impact.** A review of the current Caltrans Map of Designated Scenic Routes indicates the proposed project is not located near any officially designated scenic highways (Caltrans 2020) and there would be no impacts.
- c) **No Impact.** The proposed project would repair and stabilize the trail and shoreline, upgrade the existing stormwater system, and enhance the long-term durability of the surrounding ecological systems by planting native vegetation. The proposed project would incorporate natural design features and conform with the natural aesthetics of the landscape. The proposed project would not include development that would substantially degrade the existing visual character or quality of the area and there would be no impacts on the existing visual character or quality of project area.
- d) **Less than Significant.** Construction activities would take place primarily during daytime hours from 8:00 a.m. and 5:00 p.m., Monday through Friday. Some night work may be done to take advantage of tidal conditions, to minimize impacts on trail users, and to meet the restricted duration of construction activities. If nighttime lighting is required, it would be temporary and not used during the majority of construction. Following construction, there would be no nighttime lighting or materials that would result in glare and impacts would be less than significant.

## References

San Mateo County. 2013. San Mateo County General Plan. January 2013.

California Department of Transportation (Caltrans) 2020. California State Scenic Highway System Map. Available: <https://www.arcgis.com/apps/webappviewer/index.html?id=2e921695c43643b1aaf7000dfcc19983>. Accessed May 21, 2020.

### 3.2.2 Agricultural and Forest Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>2. AGRICULTURE AND FORESTRY RESOURCES —</b>				
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
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 or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Discussion

- a-c) The California Department of Conservation Division of Land Resource Protection’s (DLRP) Important Farmland Maps indicate that the project area is designated as Other Land) and none of the project area includes land covered by a Williamson Act contract (DLRP 2018). The proposed project area is located on the coast and there no agricultural land is on or near the project site. Therefore, there would be no impact.
- d) There is no forest land on the site (CDFW 2015) and no trees would be cut down as part of the proposed project. Therefore, the proposed project would not result in the loss of forest land or conversion of forest land to non-forest use and there would be no impact.
- e) The proposed project involves improvements to the shoreline, trail, and stormwater system. None of these project elements would result in conversion of farmland or forest land and there would be no impact.

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## References

- California Department of Conservation Division of Land Resource Protection (DLRP).  
*San Mateo County Important Farmland*. 2018. Available: [http://maps.conservation.ca.gov/dlrp/metadata/importantfarmland/sanmateo\\_meta.htm](http://maps.conservation.ca.gov/dlrp/metadata/importantfarmland/sanmateo_meta.htm). Accessed March 31, 2020.
- California Department of Fish and Wildlife (CDFW). 2015. California Forests and Timberlands.  
Available: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109917&inline>.  
Accessed March 31, 2020.
-

### 3.2.3 Air Quality

Issues (and Supporting Information Sources):	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>3. AIR QUALITY —</b>				
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
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) 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Environmental Setting

Under amendments to the Federal Clean Air Act (CAA), the U.S. Environmental Protection Agency (U.S. EPA) has classified air basins or portions thereof as either “attainment” or “non-attainment” for each criteria air pollutant, based on whether or not the national standards have been achieved. The California CAA, which is patterned after the federal CAA, also requires areas to be designated as “attainment” or “non-attainment” for the state standards. Thus, areas in California have two sets of attainment/non-attainment designations: one set with respect to the national standards and one set with respect to the state standards. The San Francisco Bay Area Air Basin (SFBAAB) is currently designated as a non-attainment area for state and national ozone standards, state particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) standards, and federal PM<sub>2.5</sub> (24-hour) standard.

The Bay Area Air Quality Management District (BAAQMD) is the regional air quality authority in the project area. In April 2017, the BAAQMD adopted the *2017 Clean Air Plan* (BAAQMD, 2017a) which aims to protect public health and protect the climate. The *2017 Clean Air Plan* is a road map that demonstrates how the Bay Area will implement all feasible measures to reduce ozone, particulate matter and Toxic Air Contaminants (TACs) in the SFBAAB in accordance with the requirements of the California CAA. The plan also includes a wide range of proposed control measures that consist of actions to decrease fossil fuel combustion, improve energy efficiency, and decrease greenhouse gas (GHG) emissions.

The *2017 Clean Air Plan* contains 85 measures to address reduction of ozone precursors, particulate matter, TACs, and GHGs. Control strategies from the plan that are potentially applicable to the project are as follows:

- Stationary source measures;
- Transportation control measures; and
- Water Control Measures.

The BAAQMD has published its California Environmental Quality Act Air Quality Guidelines (CEQA Guidelines), to assist lead agencies in analysis and mitigation of impacts from projects within the SFBAAB. The most recent update to the CEQA Guidelines was published in May 2017 (BAAQMD 2017b). The methodology described in the BAAQMD 2017 CEQA Guidelines was used to evaluate air quality impacts that may result from the proposed project. The BAAQMD CEQA Guidelines establish thresholds of significance for criteria air pollutants that can be used to determine whether emissions from a project would result in significant adverse effects to regional air quality. The BAAQMD thresholds of significance were used to determine the significance of each impact discussed in the impact analysis below.

### ***Sensitive Receptors***

Sensitive receptors are defined as a land use that includes members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of sensitive land uses include schools, hospitals, and daycare centers. Residential areas are also considered sensitive receptors, as sensitive individuals may be present at a residence, and because residents are home for extended periods of time, which results in greater exposure to ambient air quality.

The West Trail area is located approximately 1,100 feet southwest of the town of Princeton-By-The-Sea. The land uses include a mix of light industrial, business, warehouses, and residences. The closest residence is in the western portion of the town, approximately 1,100 feet northeast of the section of the West Trail that would be stabilized during the project. A borrow area that would supply sand for trail stabilization is located approximately 530 feet from this residence. This distance represents the center of the sand excavation area. Activities would be taking place throughout that area, sometimes at the farthest distance from this residence, sometimes in the center of the area, and sometimes closer to the eastern edge. It is unlikely that a majority of the activity would occur at the portion of the excavation area closest to the residence, so the center was chosen as a representative distance for impact analysis.

### **Discussion**

- a) **Less than Significant.** The most recently adopted air quality plan in the Bay Area is the BAAQMD's *2017 Clean Air Plan* (BAAQMD, 2017b). BAAQMD guidance states that "if approval of a project would not result in significant and unavoidable air quality impacts, after the application of all feasible mitigation (if necessary), the project would be considered consistent with the Clean Air Plan" (BAAQMD 2017b). As indicated in the discussion of criteria "b" and "c," the project would not result in significant air quality impacts; therefore, this impact is considered less than significant.
- b) **Less than Significant with Mitigation.** BAAQMD's guidance considers no single project is sufficient in size, by itself, to result in non-attainment of ambient air quality standards for regional criteria pollutants. Instead, a project's individual emissions can contribute to existing cumulatively significant adverse air quality impacts. If a project's incremental increase in emissions does not exceed the BAAQMD significance thresholds,

the project's contribution to the cumulative impacts is determined to be not considerable and the impact would be less than significant.

### Construction Emissions – Criteria Air Pollutants

The proposed project would generate construction emissions from a variety of sources, including off-road construction equipment as well as on-road worker vehicles, vendor trucks, and haul trucks. Because construction activity can fluctuate during the course of a project, emissions from construction activities are assessed relative to average daily emissions over the entirety of the construction period (4 months). The average daily emissions approach is consistent with BAAQMD guidance as discussed below.

Emissions from all of the construction emission sources were estimated using the CalEEMod emission estimator model version 2016.3.2. **Table AIR-1** summarizes the project's average daily construction emissions, based on four months of construction occurring five days per week (excluding holidays). BAAQMD thresholds of significance for PM<sub>10</sub> and PM<sub>2.5</sub> are for exhaust emissions only, as fugitive particulate emissions (dust) impacts are addressed in the mitigation approach addressed below. BAAQMD thresholds of significance for construction represent average daily emissions and, as shown in Table AIR-1, construction emissions from the project would be less than significant for all pollutants.

**TABLE AIR-1**  
**AVERAGE CONSTRUCTION DAILY CRITERIA POLLUTANT EMISSIONS (POUNDS/DAY)**

Emissions Category	ROG <sup>1</sup>	NOx <sup>1</sup>	PM10 <sup>1</sup>	PM2.5 <sup>1</sup>
Average Daily Construction Emissions	2.5	31.1	0.8	0.7
BAAQMD Average Daily Thresholds	54	54	82	54
Exceed Thresholds?	No	No	No	No

**NOTES:**

Pounds per day estimates are based on CalEEMod total construction emissions in tons per year, converted to an average pounds per day based on 81 days of construction. BAAQMD's threshold for PM<sub>10</sub> and PM<sub>2.5</sub> are for exhaust emissions only.

<sup>1</sup> ROG – Reactive Organic Gases; NOx – Nitrogen Oxides; PM10 – particulate matter 10 microns or less in diameter; PM2.5 – particulate matter 2.5 microns or less in diameter

SOURCES: ESA, 2020; BAAQMD, 2017b.

### Construction Emissions – Fugitive Dust

Demolition, excavation, grading, and other construction activities may cause wind-blown dust that could contribute PM into the local atmosphere. Construction-related dust emissions would vary from day to day, depending on the level and type of activity, silt content of the soil, and the weather. In the absence of mitigation, dust generated from construction activities may result in significant adverse impacts on a temporary and intermittent basis during the construction period.

The BAAQMD does not have a quantitative threshold of significance for construction-related fugitive dust emissions. Instead, the BAAQMD's recommended approach to evaluating significance of construction-related fugitive dust emissions impacts emphasizes implementation of effective and comprehensive dust control measures.

According to the BAAQMD CEQA Guidelines, construction-related fugitive dust impacts would be considered less than significant if a suite of recommended dust-control measures, also known as Best Management Practices (BMPs), are implemented during project construction. Therefore, BAAQMD-identified BMPs for control of fugitive dust are included as **Mitigation Measure AIR-1**.

Implementation of BAAQMD basic control measures for fugitive dust, which are recommended for every construction project, would reduce impacts associated with fugitive dust emissions to less than significant.

### **Operational Emissions – Criteria Air Pollutants**

After construction is completed, the trail, upgraded stormwater system, and living shoreline would only require minimal on-going maintenance. In addition, minor operations and maintenance could be needed in response to extreme events and long-term trends. For the stormwater system, maintenance items are expected to be limited to minor clearing of drains and swales of silt and debris. In addition, dune vegetation would require irrigation and maintenance throughout the establishment period.

These activities would involve use of on- and off-road equipment emitting a minor amount of combustion pollutants. This work would be long-term but not continuous, and emissions are determined to be minimal. This work would also take place near the West Trail area, which is far from sensitive receptors (approximately 1,100 feet). Additionally, impacts from the proposed project on traffic levels and associated air emissions are also determined to be negligible.

#### **Mitigation Measure AIR-1: Implement BAAQMD Basic Mitigation Measures.**

The Applicant and/or its construction contractors shall comply with the following applicable BAAQMD basic control measures during project construction:

1. Water all exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) two times per day.
2. Cover all haul trucks transporting soil, sand, or other loose material off-site.
3. Remove all visible mud or dirt track-out onto adjacent public roads using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
4. Limit all vehicle speeds on unpaved roads to 15 miles per hour.
5. Minimize idling times either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
6. Maintain and properly tune all construction equipment tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.

7. Post a publicly visible sign with the telephone number and person to contact at the Harbor District regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations (BAAQMD 2017a).

- c) **Less than Significant.** Site preparation activities, such as demolition, excavation, grading, trail construction, and other ground-disturbing construction activity, would affect localized air quality during the construction phases of the proposed project and could result in adverse health impacts to nearby sensitive receptors. Short-term emissions from construction equipment during these activities would include directly-emitted PM<sub>2.5</sub>, PM<sub>10</sub>, and TACs such as diesel particulate matter (DPM). BAAQMD identifies a 1,000-foot zone of influence from a TAC source such as construction activity, beyond which the impact to a given sensitive receptor is assumed to be less than significant. While there is a resident sensitive receptor located approximately 530 feet from the sand excavation activities, as discussed below, the closest sensitive receptor is greater than 1,000 feet from the majority of the main trail construction activities.

Sand excavation would take place within 1,000 feet of the closest resident receptor, but emissions-generating activities would last less than two months at that location, thereby limiting both TAC emissions and exposure. State guidance for evaluating risks to sensitive receptors from TAC sources does not recommend conducting a health risk assessment for short-term construction periods less than two months, due to the uncertainty in assessing risks from very short-term exposures (OEHHA 2015).

Therefore, the proposed project would have a less-than-significant impact with respect to exposure of sensitive receptors to substantial pollutant concentrations.

- d) **Less than Significant.** Typical odor sources of concern include: wastewater treatment plants, sanitary landfills, transfer stations, composting facilities, petroleum refineries, asphalt batch plants, chemical manufacturing facilities, fiberglass manufacturing facilities, auto body shops, rendering plants, and coffee roasting facilities. The proposed project does not fall into any of these categories. During construction, diesel exhaust from construction equipment would generate some odors, but these odorous emissions would be temporary and would likely disperse quickly with coastal wind patterns. Additionally, the proposed project would not introduce significant sources of new odors in the vicinity upon trail restoration completion. Therefore, odor impacts from the proposed project would be less than significant.

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## References

- Bay Area Air Quality Management District (BAAQMD), 2017a. *Draft 2017 Clean Air Plan, Spare the Air, Cool the Climate*. Available: [www.baaqmd.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/baaqmd\\_2017\\_cap\\_draft\\_122816-pdf.pdf?utm\\_campaign=CAP+2017+Draft&utm\\_medium=email&utm\\_content=article3\\_link1](http://www.baaqmd.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/baaqmd_2017_cap_draft_122816-pdf.pdf?utm_campaign=CAP+2017+Draft&utm_medium=email&utm_content=article3_link1). Accessed May 20, 2020.
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- Office of Environmental Health Hazard Assessment (OEHHA), 2015. *Air Toxics Hot Spots Program Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments*. February. Available: [https://oehha.ca.gov/media/downloads/crn/2015\\_guidancemanual.pdf](https://oehha.ca.gov/media/downloads/crn/2015_guidancemanual.pdf). Accessed May 1, 2020.
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### 3.2.4 Biological Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>4. BIOLOGICAL RESOURCES —</b> Would the project:				
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 Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on state or federally protected wetlands (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 checked="" type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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"/>

### Environmental Setting

This section describes the existing conditions for biological resources present within the proposed project area. The biological resources study area referenced throughout this discussion is defined as the project area and relevant areas of similar habitat composition in the surrounding vicinity. The resources described include vegetation communities and associated wildlife, wetlands and other water bodies, and special-status plants and wildlife (federally- or state-listed as endangered, threatened, proposed, and candidate species, and state or local species of concern).

The information on natural communities, plant and animal species, and sensitive biological resources used in the preparation of this discussion was obtained from: the CDFW’s Special Animals List (CDFW 2020a), Special Vascular Plants, Bryophytes, and Lichens List (CDFW 2020b), California Natural Diversity Database (CNDDDB; CDFW 2020c), the California Native Plant Society (CNPS) Electronic Inventory (CNPS 2020), and the USFWS (2020). In addition, on May 13, 2020, ESA staff conducted reconnaissance botanical and wildlife surveys of the proposed project area in order to characterize existing conditions, assess habitat quality, and assess the potential presence of special-status species and sensitive natural communities. Prior to

the survey, a review of pertinent literature and database queries was conducted for the proposed project area. The sources of reference data reviewed for this evaluation included the following:

- Biological Assessment. West Living Shoreline Pillar Point Harbor (GHD 2020a);
- Biological Resources Assessment. Pillar Point Harbor West Trail (WRA and Valerius 2014);
- Delineation of Waters and Wetlands of the United States, Including Wetlands, and Coastal Commission Wetlands, for the Pillar Point Harbor West Trail Living Shoreline Project, San Mateo County, California (Valerius2020);
- Rookery Survey Results for the San Mateo County Harbor District (SMCHD) Pillar Point Harbor West Trail Living Shoreline Project (GHD 2019);
- Pillar Point Harbor Beach and Foredune Vegetation Establishment and Related Environmental Enhancement Options (Baye 2019);
- Pillar Point West Trail Project: Essential Fish Habitat Assessment (Marine Taxonomic Services, Ltd. 2019);
- Federal Endangered and Threatened Species that may occur in the proposed project area, and/or may be affected by the proposed Project (USFWS 2020a);
- CNDDDB list of special-status species occurrences within the proposed project area and within the Half Moon Bay and Montara Mountain USGS 7.5-minute topographic quadrangles;
- CNPS Inventory of Rare and Endangered Plants (v8-03) known to occur within the Half Moon Bay and Montara Mountain USGS 7.5-minute topographic quadrangles;
- USFWS Critical Habitat for Threatened and Endangered Species (USFWS 2020b);
- Special Vascular Plants, Bryophytes, and Lichens List (CDFW 2020); and
- Special Animals List (CDFW 2019).

### **Natural Communities and Wildlife Habitat**

Natural communities are assemblages of plant and wildlife species that occur together in the same area, which are defined by species composition and relative abundance. Vegetation communities and wildlife habitat within and around the proposed project area were described by WRA and Valerius (2014) (**Appendix B**). These habitats and communities were observed and confirmed during the reconnaissance survey conducted by ESA in 2020. The following natural communities and aquatic habitats occur, or have potential to occur, in and adjacent to the study area: northern coastal salt marsh, freshwater marsh, northern coastal scrub, non-native grassland/Monterey cypress (*Cupressus macrocarpa*) grove mosaic, and coastal strand. Descriptions of these communities can be found in Appendix B.

In addition to natural communities, the proposed project area contains existing developed areas. Developed areas include paved and dirt roadways and trails, parking lots, and other manmade features. These areas are typically unvegetated but may support small patches of non-native grassland and ruderal vegetation. Ruderal vegetation growing in these areas, including the areas

immediately adjacent to the trail, include Italian ryegrass (*Festuca perennis*), ripgut brome (*Bromus diandrus*), hare barley (*Hordeum murinum* ssp. *leporinum*), and wild oat (*Avena fatua*). Associated forbs include filaree (*Erodium botrys*), English plantain (*Plantago lanceolata*), wild radish (*Raphanus sativus*), prickly sow thistle (*Sonchus asper*), and iceplant (*Carpobrotus edulis*). Developed areas within the project footprint include the proposed access roads and stockpile areas.

### **Federal and State Jurisdictional Wetlands and Waters**

There are two types of federal and/or state jurisdictional waters: wetlands and other waters. Wetlands and/or waters are regulated by the USACE, RWQCB, CDFW, and/or the California Coastal Commission (CCC).

Waters of the United States are areas subject to federal jurisdiction pursuant to Section 404 of the Clean Water Act as regulated by the USACE. Waters of the United States are typically divided into two types: (1) wetlands and (2) other waters of the United States. Wetlands are “areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 CFR Section 328.3[b], 40 CFR Section 230.3). USACE jurisdiction typically extends to the limit of the wetland, as defined by the presence of hydrophytic vegetation, hydric soils, and wetlands hydrology. Other waters of the United States are seasonal or perennial water bodies, including lakes, stream channels, drainages, ponds, and other surface water features, that exhibit an ordinary high-water mark but lack positive indicators for the three wetland parameters (33 CFR 328.4). Additionally, navigable waters are subject to federal jurisdiction under Section 10 of the Rivers and Harbors Act.

The RWQCB also regulates waters of the state under the Section 401 of the Clean Water Act and the Porter-Cologne Water Quality Control Act (Porter-Cologne Act; Section 13260 of the California Water Code). “Waters of the state” is defined as “any surface water or groundwater, including saline waters, within the boundaries of the state,” and typically includes Waters of the United States as a subset.

The CDFW regulates lakes and streambeds within the state, including the fish and wildlife resources within them, under Section 1600 of the California Fish and Game Code (CFG Code Section 1602). Project proponents must notify CDFW about projects which would divert or obstruct the natural flow of; change the bed, channel, or bank of; or use material from or deposit or dispose of material into any river, stream, or lake.

The CCC jurisdiction for wetlands may extend to the limit of any one of the above three parameters used to identify USACE jurisdictional wetlands and therefore typically is much broader than USACE jurisdiction. The CCC only has jurisdiction over wetlands and waters located within the coastal zone, as well as the open ocean to the Mean High Tide line.

A formal delineation of aquatic resources was conducted on May 28, 2014, and again on January 23, 2020, after the proposed project area limits were changed (Valerius 2020) (**Appendix C**). **Table BIO-1** summarizes the results the January 23, 2020 delineation.

**TABLE BIO-1  
SUMMARY OF JURISDICTIONAL WETLANDS AND WATERS WITHIN THE PROJECT AREA**

<b>Habitat</b>	<b>Acres</b>
<b>Wetlands</b>	
Wetlands of the U.S. and State (Freshwater Emergent Wetland)	0.014
Wetlands of the State/CCC wetlands only	0.008
<b>Jurisdictional Waters</b>	
Non-tidal Section 404 waters of the U.S. (drainage on west side of trail – overlaps with CCC wetlands above)	0.008
Tidal Waters - Section 404 / waters of the State (area below HTL)	2.905
Tidal Waters - Section 10 / waters of the State (area below MHW)	2.84

SOURCE: Valerius, 2020

### ***Special-Status Species***

A number of species known to occur in the vicinity of the proposed project area are protected pursuant to federal and/or State endangered species laws, or have been designated species of special concern by the CDFW. In addition, Section 15380(b) of the CEQA Guidelines provides a definition of rare, endangered, or threatened species that are not currently included in an agency listing, but whose “survival and reproduction in the wild are in immediate jeopardy” (endangered) or which are “in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens” or “is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered ‘threatened’ as that term is used in the federal Endangered Species Act.”<sup>1</sup> Species recognized under these terms are collectively referred to as “special-status species.” For the purpose of this analysis, special-status species include:

1. Species listed or proposed for listing as threatened or endangered under the federal Endangered Species Act (50 CFR 17.12 [listed plants], 17.11 [listed animals], and various notices in the Federal Register [FR] [proposed species]);
2. Species that are candidates for possible future listing as threatened or endangered under the federal Endangered Species Act (61 FR 40, February 28, 1996);
3. Species listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (14 Cal. Code Regs. 670.5);

<sup>1</sup> For example, the CDFW interprets Ranks 1A, 1B, 2A, and 2B of the California Native Plant Society’s *Inventory of Rare and Endangered Vascular Plants of California* to consist of plants that, in a majority of cases, would qualify for listing as rare, threatened, or endangered. However, the determination as to whether an impact is significant is made by the lead agency, absent the protection of other laws.

4. Species formerly designated by the USFWS as species of concern or species designated by the CDFW as species of special concern;<sup>2</sup>
5. Species designated as “special animals” by the state;<sup>3</sup>
6. Species designated as “fully protected” by the state (there are about 35, most of which are also listed as either endangered or threatened);<sup>4</sup>
7. Raptors (birds of prey), which are specifically protected by California Fish and Game Code Section 3503.5, thus prohibiting the take, possession, or killing of raptors and owls, their nests, and their eggs;<sup>5</sup>
8. Plants listed as rare or endangered under the California Native Plant Protection Act (California Fish and Game Code, Section 1900 et seq.);
9. Species that meet the definitions of rare and endangered under CEQA. CEQA Section 15380 provides that a plant or animal species may be treated as “rare or endangered” even if not on one of the official lists (CEQA Guidelines, Section 15380); and
10. Plants considered by the CNPS to be “rare, threatened or endangered in California” under the California Rare Plant Ranking system (CRPR) which include Rank 1A, 1B, 2A, and 2B as well as Rank 3 and 4<sup>6</sup> plant species.

Lists of special-status plant and animal species that have the potential to occur within the proposed project area and surrounding vicinity, or the study area for biological resources, were compiled based on data contained in the CNDDDB (CDFW 2020c) and the CNPS Inventory of Rare and Endangered Plants (CNPS 2020) for the Half Moon Bay and Montara Mountain U.S. Geological Survey 7.5 minute topographical quadrangles, in addition to those included on the official USFWS list of federal endangered and threatened species that have potential to occur

<sup>2</sup> A California species of special concern is one that: has been extirpated from the state; meets the state definition of threatened or endangered but has not been formally listed; is undergoing or has experienced serious population declines or range restrictions that put it at risk of becoming threatened or endangered; and/or has naturally small populations susceptible to high risk from any factor that could lead to declines that would qualify it for threatened or endangered status.

<sup>3</sup> Species listed on the current CDFW “special animals” list which includes 906 species. This list includes species that CDFW considers “those of greatest conservation need.” (CDFW 2019)

<sup>4</sup> The “fully protected” classification was California’s initial effort in the 1960s to identify and provide additional protection to those animals that were rare or faced possible extinction. The designation can be found in the Fish and Game Code.

<sup>5</sup> The inclusion of birds protected by Fish and Game Code Section 3503.5 is in recognition of the fact that these birds are substantially less common in California than most other birds, having lost much of their habitat to development, and that the populations of these species are therefore substantially more vulnerable to further loss of habitat and to interference with nesting and breeding than most other birds. It is noted that a number of raptors and owls are already specifically listed as threatened or endangered by State and federal wildlife authorities.

<sup>6</sup> Rank 3 plants may be analyzed under CEQA Guidelines Section 15380 if sufficient information is available to assess potential impacts to such plants. Factors such as regional rarity vs. statewide rarity should be considered in determining whether cumulative impacts to a Rank 4 plant are significant even if individual project impacts are not. CRPR Rank 3 and 4 may be considered regionally significant if, e.g., the occurrence is located at the periphery of the species’ range, or exhibits unusual morphology, or occurs in an unusual habitat/substrate. For these reasons, CRPR Rank 3 and 4 plants should be included in the special-status species analysis. Rank 3 and 4 plants are also included in the CNDDDB Special Vascular Plants, Bryophytes, and Lichens List. The current online published list is available: <http://www.dfg.ca.gov/biogeodata> (CDFW 2020).

in the proposed project area (USFWS 2020a) (**Appendix D**). Several species not included on these lists are also discussed based on documentation of their presence in the proposed project area and surrounding vicinity presented in prior reports or environmental literature. **Appendix E** presents the special-status species, their status, their habitat requirements, and considers the potential for each species to occur within the proposed project area.

Based on review of the biological literature of the region, information presented in previous environmental documentation, and an evaluation of the habitat conditions of the study area, a species was designated as having “no potential” to occur if: (1) the species’ specific habitat requirements are not present, or (2) the species is presumed, based on the best scientific information available, to be extirpated from the study area or region. A species was designated as having a “low potential” for occurrence if: (1) its known current distribution or range is outside of the study area or (2) only limited or marginally suitable habitat is present within the study area. A species was designated as having a “moderate potential” for occurrence if: (1) there is low to moderate quality habitat present within the study area or immediately adjacent areas or (2) the study area is within the known range of the species, even though the species was not observed during biological surveys. A species was designated as having a “high potential” for occurrence if: (1) moderate to high quality habitat is present within the study area, and (2) the study area is within the known range of the species. Many of the species listed in Appendix D have only a low potential for occurrence or are absent from the study area and were eliminated from further evaluation, primarily because the study area does not provide suitable habitat for them or the proposed project area is outside of their understood range.

### Special-Status Plants and Bryophytes

The following special-status plants were determined to have at least a moderate potential to occur within the proposed project area or surrounding vicinity:

- Coastal triquetrella
- Blasdale's bent grass
- Coastal marsh milk-vetch
- johnny-nip
- perennial goldfields
- coast iris
- rose leptosiphon
- San Mateo tree lupine
- Choris' popcornflower
- San Francisco campion

**Coastal triquetrella (*Triquetrella californica*)** is a CRPR 1B.2 moss that is most often found near the coast in coastal scrub, grasslands and in open gravels on roadsides, hillsides, rocky slopes, and fields. The project area contains suitable habitat for this species.

**Blasdale’s bent grass (*Agrostis blasdalei*)** is a CRPR 1B.2 perennial rhizomatous herb in the grass family (Poaceae) that blooms from May through July. This species occurs in dune, prairie, and bluff scrub communities along the coast from Rockport (Mendocino County) to Point Reyes and between Pescadero and Davenport. The nearest CNDDDB occurrence is from 2015 and within 2.5 miles of the Project Site. Coastal prairie habitat is present on top of the plateau.

**Coastal marsh milk-vetch (*Astragalus pycnostachyus* var. *pycnostachyus*)** is a CRPR 1B.2 perennial herb in the pea family (Fabaceae) that blooms from April to October. This species is another associate of dunes and scrub along the coast that also occurs in marshes, swamps, and coastal brackish streamsides, primarily between Pacifica and Año Nuevo State Reserve with some records documented in Point Reyes and south of the Eel River. Potential habitat exists in the project area and there is a CNDDDB record from Pillar Point. This species has not been recorded at Pillar Point since 1902.

**Johnny-nip (*Castilleja ambigua* var. *ambigua*)** is a CRPR 4.2 annual herb that occurs in coastal bluff scrub, coastal prairie, coastal scrub, marsh and swamp, and valley and foothill grassland habitats. Vernal pools margins. It blooms from March to August. According to Consortium of California Herbaria, the nearest occurrence was located in 1914, 1.5 miles away near El Granada. The most recent collection near the study area is from 2015, 2.4 miles away near Moss Beach. Coastal prairie and scrub habitat are present in the project area.

**Perennial goldfields (*Lasthenia californica* ssp. *macrantha*)** is a CRPR 1B.2 perennial herb in the sunflower family (Asteraceae) that blooms from January to November. This species is found in dunes, scrub, and bluff scrub communities along the coast from Fort Bragg to Gualala, Jenner to Point Reyes, and around Pescadero. The nearest CNDDDB occurrences are located 3.5 miles north of the proposed project area near the town of Montara and south near the town of Half Moon Bay. Coastal dune and scrub habitat are present in the project area.

**Rose Leptosiphon (*Leptosiphon rosaceus*)** is a CRPR 1B.1 species that blooms from April to July. This species is found in coastal bluff scrub habitat. Habitat for this species exists in the project area. There is a CNDDDB occurrence reported from the top of the project area's bluff from 2014. There are also occurrences from Montara Point, Moss Beach and Pacifica.

**San Mateo tree lupine (*Lupinus arboreus* var. *eximius*)** is a CRPR 3.2 species that occurs in chaparral and coastal scrub habitat. This species was observed by Jane Valerius in 2014 within the project area. This subspecies is currently unresolved in the Jepson Manual. It states "possible addition, unresolved variant" (Jepson eFlora 2020).

**Coast iris (*Iris longipetala*)** is a CRPR 4.2 perennial rhizomatous herb in the iris family (Iridaceae) that blooms March through May. This species is associated with mesic sites in coastal prairie, meadows and seeps, and lower montane coniferous forest communities. The nearest CNDDDB occurrence is within 2.5 miles of the proposed project area, near Half Moon Bay. Coastal prairie habitat is present on top of the plateau in the project area.

**Choris' popcornflower (*Plagiobothrys chorisianus* var. *chorisianus*)** is a CRPR 1B.2 annual herb in the forget-me-not (borage) family (Boraginaceae) that occurs in mesic sites in chaparral, coastal prairie, and coastal scrub communities and blooms from March to June. The nearest CNDDDB occurrence is a little over 3 miles from the proposed project area, near Half Moon Bay, and grows in similar conditions to the project area.

**San Francisco champion (*Silene verecunda* ssp. *verecunda*)** is a CRPR 1B.2 perennial herb that usually blooms from March to June. It is found in coastal scrub, valley and foothill grassland, coastal bluff scrub, chaparral, and coastal prairie habitat, often on mudstone or shale. The nearest

CNDDDB occurrence is within 3 miles of the Project Site. Coastal prairie habitat is present on top of the plateau in the project area.

### Special-Status Animals

The following special-status animals were determined to have at least a moderate potential to occur within the project area or surrounding vicinity:

- San Francisco garter snake
- California red-legged frog
- Monarch Butterfly California Overwintering Population
- Marbled Murrelet
- Western snowy plover
- Hoary Bat
- Central California Coast Coho ESU
- Central California Coast Steelhead DPS
- Green sturgeon
- Other Special-Status Birds
- Other Breeding and Migratory Bird
- Marine Mammals

**San Francisco garter snake (*Thamnophis sirtalis tetrataenia*; SFGS)** is federally and State-listed as an endangered species and is a CDFW “fully protected” species. This snake historically occurred in wetland areas on the San Francisco Peninsula from approximately the San Francisco County line south along the eastern and western bases of the Santa Cruz Mountains at least to the Upper Crystal Springs Reservoir, and along the coast south to Año Nuevo Point, San Mateo County, and Waddell Creek, Santa Cruz County, California (Barry 1994; USFWS 1985). Currently, the species has been reduced to only six significant populations in San Mateo County and northern Santa Cruz County, which were described in the USFWS *San Francisco Garter Snake 5-year Review Summary and Evaluation* (USFWS 2006). The preferred habitat for San Francisco garter snake is a densely vegetated pond that hosts its prey base of CRLF, American bullfrog, and Sierran treefrog (*Pseudacris sierra*) near an open hillside with access to sun and rodent burrows for cover. Temporary ponds and other seasonal freshwater bodies are also used. Emergent bankside vegetation such as cattails (*Typha* spp.), bulrushes (*Schoenoplectus* spp.), and rushes (*Juncus* spp.) are preferred and used for cover. Adult garter snakes sometimes aestivate in rodent burrows during summer months when the ponds are dry. On the coast, the snakes hibernate during the winter, but further inland, if the weather is suitable, garter snakes may be active year-round (McGinnis et al. 1987; McGinnis 1989; USFWS 2006).

Exact locations of SFGS occurrences are considered sensitive by CDFW. There is a suppressed record for SFGS within the Montara Mountain Quadrangle (CDFW 2020b). While no occurrences have been documented, suitable habitat exists within the proposed project area and potential presence of SFGS in the project area is assumed.

**California red-legged frog (*Rana draytonii*; CRLF)** is federally listed as a threatened species throughout its range in California and is a CDFW Species of Special Concern (SSC). This frog historically occurred over much of the State from the Sierra Nevada foothills to the coast and from Mendocino County to the Mexican border. CRLF typically inhabit ponds, slow-moving creeks, and streams with deep pools that are lined with dense emergent marsh or shrubby riparian vegetation. Submerged root masses and undercut banks are important habitat features for this

species. However, this species is capable of inhabiting a wide variety of perennial aquatic habitats. CRLF is known to survive in ephemeral streams, although only if deep pools with vegetative cover persist through the dry season. Factors that have contributed to the decline of CRLF include destruction of riparian habitat from development, agriculture, flood control practices, or the introduction of exotic predators such as American bullfrog (*Rana catesbeiana*), crayfish, and a variety of non-native fish.

While CRLF has not been documented in the proposed project area, there are occurrence records of this species from 1999 in the freshwater portion of Pillar Point Marsh as well as more recent records from the nearby Half Moon Bay Airport (CNDDDB 2020). CRLF are not expected to occur in brackish waters of the marsh closest to the proposed project area. However, CRLF could temporarily disperse onto the proposed project area.

**Monarch butterfly (*Danaus plexippus*) California Overwintering Population.** Monarch butterflies living west of the Rocky Mountains migrate to overwintering sites in California along the coast near the Santa Cruz and San Diego areas where climatic conditions allow minimal use of their energy stores. Monarch butterflies cluster together by the thousands at roost sites to stay warm along trunks, branches, and leaves of eucalyptus, Monterey pine, and Monterey cypress tree stands. (Natural Resources Conservation Service and U.S. Fish and Wildlife Service 2016). Monarch butterfly overwintering sites are included on CDFW's Special Animals List (CDFW 2020a). The closest CNDDDB record for this species is within one mile of the proposed project area. A suitably mature stand of Monterey cypress trees that could be used as a wintering site by Monarch butterflies is located within the proposed project area.

**Marbled Murrelet (*Brachyramphus marmoratus*)** is a federally threatened and State endangered species. Marbled murrelets are a small seabird that forage and spend the majority of their lives in near-shore marine environments. They nest in coastal old-growth coniferous forests. The proposed project area is located approximately 6 miles west the closest critical habitat, located along Pilarcitos Creek. Marbled murrelets have been observed within Pillar Point Harbor, but are not expected to nest in the area due to a lack of suitable nesting habitat.

**Western Snowy Plover (*Charadrius nivosus nivosus*)** is federally listed as a threatened species and is a California species of special concern. It is a small shorebird with pale brown to gray upper body, white or buff colored belly, and darker patches on its shoulders and head. The Pacific coast population of the snowy plover has a current breeding range from southern Washington to Baja California, Mexico. It breeds primarily above the high tide line on coastal beaches, sand spits, sparsely vegetated dunes, beaches at creeks and river mouths, and salt pans. Wintering areas are usually similar to nesting habitat. This species forages above and below the mean high waterline, typically gathering food from the surface of the sand, wrack line, or low foredune vegetation. The proposed project area is located approximately 3.1 miles north of the closest critical habitat at Half Moon Bay Beach. Western snowy plovers have not been observed breeding in recent years within the vicinity of the proposed project area. Wintering birds have been observed on the adjacent Mavericks beach, near the proposed project area.

**Other Special Status Birds.** Several special-status birds nest or could potentially nest within or adjacent the proposed project area. A heron and egret rookery is located within the Monterey cypress grove in and adjacent to the project area. Great blue herons (*Ardea herodias*) were observed nesting during the May 13, 2020 reconnaissance survey conducted by ESA. Rookeries of this species are classified as “sensitive species” by the California Department of Forestry and Fire Protection. Merlin (*Falco columbarius*) is considered a “watch list” species by CDFW that could nest in Monterey Cypress groves or bluffs in the Project area. American peregrine falcon (*Falco peregrinus anatum*) is a “fully protected” species in California. This species was reported to have nested successfully on the Pillar Point bluffs in 2019 (GHD 2019). Saltmarsh common yellowthroat (*Geothlypis trichas sinuosa*) is considered a Species of Special Concern by CDFW and a Bird of Conservation Concern by USFWS. This species is documented as occurring in Pillar Point Marsh, which borders the proposed project area.

**Other Breeding and Migratory Birds.** The proposed project area contains a diverse array of habitats that offer foraging and nesting opportunity to a variety of resident and migratory birds. Common raptor species which may nest in the mature Monterey cypress trees could include red-tailed hawk, red-shouldered hawk, great horned owl, and American kestrel (*Falco sparverius*). Passerine species which could nest in the area include but are not limited to Anna’s hummingbird, Bewick’s wren, white-crowned sparrow, American robin, American crow (*Corvus brachyrhynchos*), California towhee (*Melospiza crissalis*), and spotted towhee (*Pipilo maculatus*) among many others. The federal Migratory Bird Treaty Act (MBTA) and California Fish and Game Code protect raptors, most native migratory birds, and breeding birds that could occur in the proposed project area and/or nest in the surrounding vicinity.

**Hoary Bat (*Lasiurus cinereus*)** is a solitary roosting bat species that roosts in dense foliage of medium to large coniferous and deciduous trees. It occurs year-round in California and can be found overwintering in the San Francisco Bay Area. The Monterey cypress grove located within and adjacent to the proposed project area provides potential roosting habit for this species.

**Central California Coast Coho (*Oncorhynchus kisutch*)** evolutionarily significant unit (ESU) is listed as endangered by NMFS. This evolutionarily significant unit, or ESU, includes naturally spawned coho salmon originating from rivers south of Punta Gorda, California, to and including Aptos Creek, as well as such coho salmon originating from tributaries to San Francisco Bay. Denniston Creek, a 4.4-mile tributary stream flowing into Pillar Point Harbor is designated Central California Coast coho critical habitat. Denniston Creek is outside the proposed project area. Dams and culverts (barriers to movement) were installed in the creek in 1992.

**Central California Coast steelhead (*O. mykiss*)** distinct population segment (DPS) is listed as threatened by NMFS. This DPS includes all naturally spawned populations of steelhead from the Russian River to Aptos Creek, and includes the populations spawning in streams and rivers tributary to San Francisco Bay (including San Pablo, and Suisun Bays) eastward to Chipps Island. Denniston Creek, which is outside if the proposed project area, is designated Central California Coast steelhead critical habitat. Neither Pillar Point Harbor nor Denniston Creek provide suitable spawning habitat. Due to dams and culverts placed in Denniston Creek, the steelhead remaining upstream are now considered rainbow trout (Titus et. al. 2011)

**North American Green Sturgeon (*Acipenser medirostris*).** The southern DPS of North American green sturgeon is listed as threatened by NMFS. Green Sturgeon spend much of their life in marine waters, and are anadromous, migrating in March-June from seawater into the freshwater reaches of larger coastal rivers to spawn. The waters in and around Pillar Point Harbor are within the range of the southern DPS of North American green sturgeon and the offshore marine waters outside the boundaries of Pillar Point Harbor are designated as critical habitat.

**Marine Mammals.** Pacific harbor seal (*Phoca vitulina*) and California sea lion (*Zalophus californianus*) occur within and around Pillar Point Harbor and are known to haul out on docks in the harbor. The California sea lion and Pacific harbor seal are both protected under the Marine Mammal Protection Act (MMPA).

### **Critical Habitat**

The USFWS can designate critical habitat for species that have been listed by the federal government as threatened or endangered. “Critical Habitat” is defined in Section 3(5)(A) of the federal Endangered Species Act as those lands (or waters) within a listed species’ current range that contain the physical or biological features that are considered essential to its conservation. Critical habitat for leatherback sea turtle, green sturgeon, and black abalone is present within the project area as follows: for the leatherback sea turtle, at below the extreme low water line; for green sturgeon, below the Mean Higher High Water (MHHW) to 360.9 feet (110 meters) in depth; and for black abalone, rocky intertidal and subtidal habitat from MHHW to 19.7 feet (6.0 meters) in depth.

### **Sensitive Natural Communities and Environmentally Sensitive Habitat Areas**

#### **Sensitive Natural Communities**

Sensitive natural communities (or special-status native plant communities) are designated as such by various resource agencies, such as CDFW, or in local policies and regulations and are generally considered to have important functions or values for wildlife or humans and/or are recognized as declining in extent or distribution and are considered threatened enough to warrant some sort of protection. Some plant communities support a unique or diverse assemblage of plant species and therefore are considered sensitive from a botanical standpoint.

The CNDDDB reports several sensitive natural community occurrences for the Half Moon Bay and Montara Mountain quadrangle areas containing and surrounding the proposed project area. These include northern coastal salt marsh, northern maritime chaparral, serpentine bunchgrass, and valley needlegrass grassland (CDFW 2020). Upon review of the CNDDDB data and previous studies (WRA and Valerius 2014), as well as observations during the May 13, 2020 reconnaissance survey, northern coastal salt marsh occurs within the vicinity of the proposed project area. No project related activities are anticipated to occur within this habitat.

#### **Environmentally Sensitive Habitat Areas**

The California Coastal Act of 1976 defines Environmentally Sensitive Habitat Areas (ESHA) as “any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by

human activities and developments.” In areas where a local coastal program has been developed and approved, the local coastal program may include a separate definition of ESHA.

The San Mateo County’s Local Coastal Program (SMC-LCP) defines several environmentally sensitive habitat areas (ESHA) that are afforded special protection. These ESHA are defined in the SMC-LCP as “...as any area in which plant or animal life or their habitats are either rare or especially valuable and any area which meets one of the following criteria: (1) habitats containing or supporting ‘rare and endangered’ species as defined by the California Department of Fish and Wildlife Commission, (2) all perennial and intermittent streams and their tributaries, (3) coastal tide lands and marshes, (4) coastal and offshore areas containing breeding or nesting sites and coastal areas used by migratory and resident water-associated birds for resting areas and feeding, (5) areas used for scientific study and research concerning fish and wildlife, (6) lakes and ponds and adjacent shore habitat, (7) existing game and wildlife refuges and reserves, and (8) sand dunes.”

Several of these resources occur in the vicinity of and within the proposed project area. However, the designation of these habitats as ESHA are made by County staff on a case-by-case basis at the time a project is proposed. The SMC-LCP limits development in ESHA to resource dependent uses and prescribes minimum set-back, or buffer distances from ESHA for other development.

### ***Habitat Areas of Particular Concern and Essential Fish Habitat***

#### **Habitat Areas of Particular Concern**

Habitat Areas of Particular Concern (HAPC) are considered high priority areas for conservation, management, or research because they are rare, sensitive, stressed by development, or important to ecosystem function. Under the Pacific Groundfish Fishery Management Plan, two HAPCs, rocky reef and canopy kelp, have been designated in the vicinity of the project site because of the valuable ecological functions they provide to multiple species. Canopy kelp does not occur within the proposed project area but is present in the vicinity of Pillar Point Harbor. Rocky reef habitat is present in the southwest portion of the proposed project area. Although not designated in the vicinity of the proposed project area, seagrass beds are also considered an HAPC. Surveys conducted in August and November 2019 showed no presence of eelgrass (*Zostera* spp.) within the proposed project area (Marine Taxonomic Services 2019; GHD 2020b). However, eelgrass beds were mapped in the vicinity of proposed project area near Dogleg Shoal Beach (GHD 2020b).

Eelgrass is a native marine vascular plant indigenous to the soft-bottom shallow bays and estuaries of the Northern Hemisphere. The species’ range extends from Baja California to northern Alaska along the West Coast of North America, as well as from North Carolina to Newfoundland on the East Coast, and along the coasts of Europe and East Asia. Eelgrass beds are extremely dynamic, expanding and contracting seasonally and annually depending on the quality of the site. Consequently, they serve as an indicator community for the overall health of an estuary.

Eelgrass plays many roles within the estuary system. It clarifies water through sediment trapping and habitat stabilization. It also provides benefits of nutrient transformation and water oxygenation. Eelgrass serves as a primary producer in a detrital based food-web and is further directly grazed upon by invertebrates, fish, and birds. It supports epiphytic plants and animals that, in turn, are grazed upon by other invertebrates, larval and juvenile fish, and birds. Eelgrass is a nursery area

for many commercially and recreationally important finfish and shellfish species including those that are resident within bays and estuaries, nearly all of the anadromous fish species found along the Pacific coast, and oceanic species, which enter the estuaries to breed or spawn. Besides providing important habitat for fish, eelgrass habitat also is considered to be an important resource supporting migratory birds during critical life stages, including migratory periods.

### Essential Fish Habitat

Essential Fish Habitat (EFH) was defined by the U.S. Congress in the 1996 amendments to the Magnuson-Stevens Fishery Conservation and Management Act, or Magnuson-Stevens Act, as "those waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity." An Essential Fish Habitat Assessment was prepared for the Project in 2019 (Marine Taxonomic Services, Ltd, 2019). The assessment identified a total of 104 species of marine fish and invertebrates, managed under three distinct Pacific Fishery Management Council (PFMC) Fishery Management Plans (FMP), contain EFH within the Project survey area. Of these species, 96 are currently managed under the Pacific Coast Groundfish FMP, 7 under the Coastal Pelagic Species FMP, and one is managed under the Pacific Coast Salmon FMP.

PFMC-managed fish species with the highest likelihood of occurrence within the project area are listed in **Table BIO-2**, below.

**TABLE BIO-2**  
**PFMC-MANAGED FISH SPECIES WITH HABITAT REQUIREMENTS WITHIN THE PROJECT AREA**

Common Name	Scientific Name
<b>Coastal Pelagic Species FMP</b>	
Jack mackerel	<i>Trachurus symmetricus</i>
Krill	<i>Euphausia Pacifica &amp; Thysanoessa Spinifera</i>
Market squid	<i>Loligo opalescens</i>
Northern anchovy	<i>Engraulis mordax</i>
Pacific mackerel	<i>Scomber japonicas</i>
Pacific sardine	<i>Sardinops sagax</i>
<b>Pacific Coast Salmon FMP</b>	
Coho salmon	<i>Oncorhynchus kisutch</i>
<b>Pacific Coast Groundfish FMP</b>	
Black and Yellow Rockfish	<i>Sebastes chrysomelas</i>
Blue Rockfish	<i>Sebastes mystinus</i>
Boccaccio	<i>Sebastes paucispinis</i>
Cabezon	<i>Scorpaenichthys marmoratus</i>
California skate	<i>Raja inornate</i>
Chilipepper Rockfish	<i>Sebastes phillipsi</i>
Copper rockfish	<i>Sebastes caurinus</i>
Curlfin sole	<i>Pleuronichthys decurrens</i>
Gopher rockfish	<i>Sebastes carinatus</i>

**TABLE BIO-2  
PFMC-MANAGED FISH SPECIES WITH HABITAT REQUIREMENTS WITHIN THE PROJECT AREA**

<b>Common Name</b>	<b>Scientific Name</b>
Grass rockfish	<i>Sebastes rastrelliger</i>
Green-spotted rockfish	<i>Sebastes chlorostictus</i>
Kelp greenling	<i>Hexagrammos decagrammus</i>
Kelp rockfish	<i>Sebastes atrovirens</i>
Leopard shark	<i>Triakis semifasciata</i>
Pacific cod	<i>Gadus macrocephalus</i>
Quillback rockfish	<i>Sebastes maliger</i>
Squarespot rockfish	<i>Sebastes hopkinsi</i>
Starry flounder	<i>Platichthys stellatus</i>
Stripetail rockfish	<i>Sebastes saxicola</i>
Treefish	<i>Sebastes serriceps</i>
Yellowtail rockfish	<i>Sebastes flavidus</i>

SOURCE: Marine Taxonomic Services, Ltd, 2019

## Discussion

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

#### ***Special-Status Plants***

Special-status plants, including Coastal triquetrella, Blasdale's bent grass, Coastal marsh milk-vetch, johnny-nip, perennial goldfields, coast iris, rose Leptosiphon, San Mateo tree lupine, Choris' popcornflower, San Francisco campion, and others listed in the setting section, have potential to occur with the proposed project area.

The proposed project would include placement of cobble and sand in an eroded portion of beach habitat along the existing trail, as well as placement of decomposed granite on the trail. The project would also include replacement of the existing stormwater system and creation of a new stormwater bioretention basin, which span bluff, Monterey cypress, and coastal scrub habitat. Construction activities, including placement and spreading the sand, cobble and rock with equipment, could result in direct mortality of individual special-status plants, if present, through soil disturbance and loss of habitat. Permanent indirect impacts on special-status plant species may arise from population fragmentation and introduction of non-native weeds. These direct and indirect impacts to special-status plants are potentially significant.

Implementing measures **BIO-1a: General Construction Mitigation Measures, BIO-1b General Wildlife Conservation Measures and BIO-1c Avoidance and Minimization for Special-Status Plants**, would reduce potential impacts on special-status plants to a less-than significant level by implementing a construction worker environmental awareness training and education program; implementing general measures to protect

special-status plants such as delineating the work area and avoiding the introduction of weeds; and requiring pre-construction protocol-level surveys, implementing avoidance measures, and providing compensation if special-status plants cannot be avoided.

**Mitigation Measure BIO-1a: General Construction Conservation Measures.**

The contractor shall be supplied with copies of the permit conditions of approval that detail the below listed measures prior to ground breaking, as well as any other pertinent avoidance and minimization measures:

- No project related activities shall occur outside the delineated work area.
- No rodenticides, pesticides, or herbicides shall be used as part of the project.
- Construction Areas: Areas within which construction activities and staging are to take place shall be minimized in size and shall be sited and designed to avoid impacts on coastal waters and marine life, and to the extent feasible, public access to the water and shoreline. Construction (including but not limited to dredging activities, and materials and/or equipment storage) shall be prohibited outside of the defined construction, staging, and storage areas.
- Construction Methods and Timing: Methods shall be used to keep the construction areas separated from public recreational use areas (including using unobtrusive fencing or equivalent measures to delineate construction areas) to the maximum extent practicable. Full closure of the trail is anticipated during night work (trail is already closed after dusk and varies seasonally) to the public per County rules.
- All vehicle parking shall be restricted to previously determined staging areas or existing roads. Necessary vehicles belonging to the biological monitors and construction supervisors shall be parked at the nearest point on identified existing access roads.

Construction BMPs shall be installed prior to construction and used during construction to protect coastal water quality, including the following:

- Silt fences, straw wattles, or equivalent apparatus shall be installed at the perimeter of the construction site to prevent construction-related runoff or sediment from discharging to coastal waters or to areas that would eventually transport such discharge to coastal waters.
- The fueling and maintenance of vehicles and other equipment shall occur at least 100 feet from any aquatic habitat or water body.
- All construction equipment shall be inspected and maintained at an off-site location to prevent leaks and spills of hazardous materials at the project site.
- The contractor shall ensure that good construction housekeeping controls and procedures are maintained at all times including: clean up all leaks, drips, and other spills immediately; keep materials covered and out of the rain (including covering exposed piles of soil and wastes); dispose of all wastes properly; place trash receptacles on site for that purpose; cover open trash receptacles during wet weather; and remove all construction debris from the site.

- All erosion and sediment controls shall be in place prior to the commencement of construction as well as at the end of each workday.

#### **Mitigation Measure BIO-1b. General Wildlife Conservation Measures.**

- At least 15 days prior to any ground disturbing activities, the Harbor District shall submit to the USFW and CDFW for review and approval the qualifications of the proposed biological monitor(s). A qualified biological monitor means any person who has completed at least four years of university training in wildlife biology or a related science and/or has demonstrated field experience in the identification and life history of the listed species.
- Prior to the start of construction, a USFWS- and CDFW-approved biologist will conduct an Environmental Awareness Training. The training will educate all construction personnel regarding habitat, identification of special status species, and required practices before the start of construction. The training will include the general measures that are being implemented to conserve the species as they relate to the Project, the penalties for non-compliance, and the boundaries of the project area. If new construction personnel are added to the project, the contractor will ensure that the personnel receive the mandatory training before starting work. A fact sheet or other supporting materials containing this information will be prepared and distributed to all construction personnel. Upon completion of training, construction personnel will sign a form stating that they attended the training and understand all the conservation and protection measures.
- A “soft-start” policy shall be implemented in order to allow wildlife species to vacate the area prior to construction activities. A soft-start (e.g. ramp-up period) shall be used prior to full-power equipment use at the beginning of each day, or following a 30 minute or longer break.
- A litter control program shall be instituted at the proposed project area. All construction personnel will ensure that their food scraps, paper wrappers, food containers, cans, bottles, and other trash from the project area are deposited in covered or closed trash containers. The trash containers will be removed from the project area at the end of each working day.

#### **Mitigation Measure BIO-1c: Avoidance and Minimization Measures for Special-status Plants.**

Prior to the commencement of ground disturbance activities, a focused botanical survey(s) for special-status plants shall be conducted in all potentially suitable habitat during the appropriate blooming period for each species and in accordance with the guidelines established by the California Department of Fish and Wildlife in *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (CDFW 2018). If more than two years elapse between the focused botanical surveys and commencement of ground disturbance activities, a final set of appropriately-timed focused botanical surveys shall be conducted and populations mapped. The results of these final surveys shall be combined with previous survey results to produce habitat maps showing where the special-status plants have been observed during either of the focused botanical surveys conducted for each site.

- To the extent feasible, construction activities shall be sited to avoid permanent and temporary impacts on special-status plants. Special-status plants to be avoided shall be fenced or flagged prior to construction.
- If avoidance is not feasible, seasonal avoidance measures (i.e., limited operating periods based on timing of annual plant dormancy shall be applied as appropriate. Topsoil salvage and site restoration may also be implemented, to be determined by the Lead Biologist and USFWS and CDFW, as appropriate, to ensure the site is returned to pre-construction conditions.
- For potential impacts to federal and/or state listed plant species, the Harbor District shall comply with the FESA and/or CESA by implementing any requirements from USFWS and CDFW consultation. For state listed rare plants, a state Incidental Take Permit (ITP) may be required, which would provide conditions for allowable take and measures to compensate impacts on rare plants.
- If avoidance is not feasible, compensation for temporary or permanent loss of special-status plant occurrences, in the form of land purchase or restoration, shall be provided at a minimum 1:1 ratio for temporary impacts and 2:1 ratio for permanent impacts. Compensation for loss of special-status plant populations may include the restoration or enhancement of temporarily impacted areas, purchase and permanent stewardship of known occupied habitat or the restoration and reintroduction of populations in degraded, unoccupied habitat. Restoration or reintroduction may be located on- or off-site, or can be incorporated, with agency approval, into the planned dune and associated native plant restoration efforts that are part of the plan. At a minimum, the compensation areas shall meet the following performance standards by the fifth year following initiation of compensation efforts:
  - a. The compensation area shall be at least the same size as the impact area.
  - b. Native vegetation cover shall be at least 70 percent of the baseline/impact area native vegetation cover.
  - c. Population of the impacted special-status species shall have either:
    - i. at least 60 percent cover of the impact area, or
    - ii. at least 70 percent survival of installed plants
  - d. Invasive species cover shall be less than or equal to the invasive species cover in the impact area.

Alternatively, compensatory credits may be purchased through a USFWS- and/or CDFW-approved mitigation bank, or USFWS-approved Habitat Conservation Plan.

Plant populations that cannot be avoided shall be monitored to document whether the populations re-established after ground-disturbing activities. Results from this monitoring shall be used to determine future compensation requirements for future project impacts.

## ***Invertebrates***

Overwintering monarch butterflies (*Danaus plexippus* pop. 1) can be found roosting along the coast from Baja California, Mexico to northern Mendocino county. This species roosts in wind-protected trees groves such as eucalyptus, Monterey pine, and cypress. The Monterey cypress groves present within the proposed project area provide potential roosting habitat for overwintering monarch butterflies. Except for minor tree limbing, as needed, no impacts to Monterey cypress trees are anticipated as part of the proposed project. Any project related impacts to food plants would be minimal and mostly temporary. As such, the proposed project would have less than significant impacts on overwintering monarch butterflies.

## ***Marine Species***

Several special-status fish species and marine mammals, critical habitat for green sturgeon, leatherback sea turtle, and black abalone, as well as EFH, occur within and around Pillar Point Harbor.

Sand and cobble for the Project will be sourced from a combination of imported rock from local quarries and sand from sources within the harbor. Dredging and fill placement activities can cause direct mortality of individuals. These activities, as well as increased activity and noise from construction work and with lights used during night work, could also cause indirect impacts to marine species by disrupting feeding and resting animals and affecting water quality resulting in potentially significant impacts. Implementation of **Mitigation Measures BIO-1b General Wildlife Conservation Measures, BIO-1d Avoidance and Minimization Measures for Fish and Sea Turtles, and BIO-1e Avoidance and Minimization Measures for Marine Mammals** would reduce impacts to less than significant.

**Mitigation Measure BIO-1d: Avoidance and Minimization Measures for Fish and Sea Turtles.** The following measures shall be implemented to avoid potential impacts to listed fish species, sea turtles, and critical habitat:

- All sand borrow activities shall occur at low tide when no standing water is present.
- No refueling or maintenance of equipment shall occur on the beach.
- Temporary artificial lighting proposed during night work shall be angled away from open water in Pillar Point Harbor to the greatest extent possible.

**Mitigation Measure BIO-1e: Avoidance and Minimization Measures for Marine Mammals.** The following measures shall be implemented avoid potential impacts to marine mammals:

- A “soft start” (e.g. ramp-up period) prior to full-power equipment use at the beginning of each day, or following a 30 minute or longer break, shall be implemented to warn any marine mammals to move away from the construction area.

To address possible disturbance from temporary artificial lighting during night work:

- Temporary artificial lighting proposed during night work shall be angled away from open water in Pillar Point Harbor to the greatest extent possible.

### ***Amphibians and Reptiles***

The proposed project area contains suitable habitat for San Francisco garter snake. While less likely to occur and be impacted by the proposed project, California red-legged frog is also considered here as there is potential for this species to disperse onto the proposed project area. Construction related activities, including vehicular traffic, placement of materials, and predation by corvids, raccoons, and other species attracted by human presence and associated food waste could cause direct mortality to these species resulting in potentially significant impacts. Implementation of **Mitigation Measures BIO1-b General Wildlife Conservation Measures** and **BIO-1f Avoidance and Minimization Measures for San Francisco garter snake and California red-legged frog** would reduce impacts to less than significant.

#### **Mitigation Measure BIO-1f: Avoidance and Minimization Measures for San Francisco Garter Snake (SFGS) and California Red-legged Frog (CRLF).**

- There shall be no use of plastic mesh erosion control materials, to prevent entanglement of CRLF or SFGS.
- No less than 15 calendar days prior to the onset of activities, the Harbor District shall submit the name(s) and credentials of biologists who could conduct the activities specified in the following measures. A qualified biologist means any person who has completed at least four years of university training including wildlife biology or related coursework, and/or has demonstrated field experience in the identification and life history of the CRLF and SFGS. Resumes of all biologists shall be submitted to the USFWS and CDFW for approval. No earth moving or other project activities shall begin until written approval from the USFWS and CDFW has been received that the biologist(s) is qualified to conduct the work.
- Pre-construction surveys for listed species shall be conducted immediately prior to groundbreaking or ground disturbance activities (including grading or equipment staging) that occurs in CRLF or SFGS habitat or any activity that may result in take of these species. Surveys shall be conducted by USFWS- and CDFW-approved biologists who shall carefully search all obvious potential hiding spots for CRLF and SFGS, including but not limited to downed woody debris, culverts, riparian vegetation, and entrances to small mammal burrows. In the event that an ESA-listed animal is observed, construction shall cease until the individual has moved out of the area of its own volition or has been relocated to an appropriate location. For CRLF, only USFWS- and CDFW-approved biologists with appropriate permits shall relocate listed species to the nearest suitable habitat away from project activities.
- Before the onset of any construction activities, the District or construction manager and USFWS- and CDFW-approved biologist shall discuss locations for equipment, personnel access, and materials staging to minimize disturbance to CRLF and SFGS habitat.

- A USFWS- and CDFW-approved biologist shall be onsite during all ground-disturbing activities (i.e., vegetation grubbing, excavation) within potential ESA-listed species habitat to ensure compliance with these avoidance measures. This includes monitoring during both daytime and nighttime work.
- After ground disturbing activities are complete, the USFWS- and CDFW-approved biologist shall train an individual to act as the on-site construction monitor. The construction monitor shall have attended the Environmental Awareness Training. Both the USFWS- and CDFW-approved biologist and the construction monitor shall have the authority to stop and/or redirect project activities to ensure protection of resources and compliance with all environmental permits and conditions of the proposed project. The USFWS- and CDFW-approved biologist and construction monitor shall complete a daily log summarizing activities and environmental compliance.
- The USFWS- and CDFW-approved biologist shall have oversight over the implementation of all the Terms and Conditions resulting from consultation (conducted as part of the resource permitting process), and shall have the authority to stop proposed project activities if any of the requirements associated with these Terms and Conditions are not being fulfilled. If the biologist has presented a stop work order due to take or near-take of any of the listed species, the USFWS and the CDFW shall be notified within one (1) working day via email or telephone.
- A USFWS- and CDFW-approved biologist shall survey the work site immediately prior to construction activities. If CRLF adults, tadpoles, or eggs are found, the approved biologist shall contact the Service to determine if moving any of these life-stages is appropriate. In making this determination the USFWS and CDFW shall consider if an appropriate relocation site exists as provided in the relocation plan. Artificial lighting at night shall be taken into consideration for relocation sites (i.e., relocation should occur outside of areas proposed for nighttime illumination). If the USFWS and CDFW approves moving animals, the approved biologist shall be allowed sufficient time to move CRLF from the work site before work activities begin. Only USFWS- and CDFW-approved biologists shall participate in activities associated with the capture, handling, and monitoring of CRLF.
- Bare hands shall be used to capture CRLF. USFWS- and CDFW-approved biologists shall not use soaps, oils, creams, lotions, repellents, or solvents of any sort on their hands within two hours before and during periods when they are capturing and relocating individuals. To avoid transferring disease or pathogens of handling of the amphibians, USFWS- and CDFW-approved biologists shall follow the Declining Amphibian Populations Task Force's *Code of Practice* (DAPTF 2004).
- The site inspector shall be trained by the USFWS- and CDFW-approved biologist and may act as the construction monitor during non-ground disturbing or lower risk portions of the proposed project. The inspector shall be identified during the employee education program. The name and telephone number shall be provided to the USFWS and CDFW prior to the initiation of ground disturbance activities.

- No pets shall be permitted in the work area to avoid harassment, killing, or injuring of CRLF or SFGS individuals. Because the work area occurs along a pedestrian trail on which dogs are permitted, it is understood that canine or feline pets may be present in the vicinity of the work area that do not belong to the construction workers.
- Temporary artificial lighting proposed during night work shall be angled away from potential CRLF breeding habitat (i.e. freshwater portions of Pillar Point Marsh).

### ***Special-Status Birds***

Special-status birds, including the western snowy plover, California least tern, and marbled murrelet have the potential to occur in and adjacent to the proposed project area, and all have been documented either overwintering or foraging in the area. While it is highly unlikely, if any of these species were to nest within the vicinity of the proposed project area, construction activities could directly or indirectly impact these species through loss of nests, eggs, or nestlings, or by causing nest abandonment, which would be a significant impact. In addition, increased day and night construction activity could disrupt foraging patterns.

Implementation of **Mitigation Measures BIO 1-b General Wildlife Conservation Measures and BIO-1g Avoidance and Minimization Measures for Special-Status Birds** would reduce impacts to less than significant.

#### **Mitigation Measure BIO-1g: Avoidance and Minimization Measures for Special-Status Birds.**

- In event that Western Snowy Plovers or California Least Terns nest on the small beach along the West Trail within the project area, nest protection measures (as described below) shall be implemented. In addition, no night work (including artificial lighting) shall be permitted within 300 feet of the nest(s).
- If construction work occurs adjacent to suitable nesting habitat (i.e., beach) between January 15 to September 15 (general nesting season in the project area), a USFWS- and CDFW-qualified ornithologist shall conduct pre-construction nest surveys (specifically for Western Snowy Plovers and California Least Terns). The ornithologist shall conduct at minimum a one-day pre-construction survey within the 7-day period prior to ground-disturbing activities. If ground disturbance work lapses for seven days or longer during the nesting season, a qualified ornithologist shall conduct a supplemental avian pre-construction survey before project work is reinitiated.
- If active nests are detected within the construction footprint or up to 500 feet from construction activities, the ornithologist shall flag a buffer around each nest (assuming property access). Construction activities shall avoid nest sites until the ornithologist determines that the young have fledged or nesting activity has ceased. If nests are documented outside of the construction (disturbance) footprint, but within 500 feet of the construction area, buffers shall be implemented as needed (buffer size dependent on species). In general, the buffer size would be determined on a case-by-case basis in consultation with CDFW and, if applicable, with

USFWS. Buffer sizes shall take into account factors such as (1) noise and human disturbance levels at the construction site at the time of the survey and the noise and disturbance expected during the construction activity (including proposed temporary new sources of light in the project area during night work); (2) distance and amount of vegetation or other screening between the construction site and the nest; and (3) sensitivity of individual nesting species and behaviors of the nesting birds. An absolute minimum buffer size of 30 feet is recommended as a starting point of discussion with USFWS and CDFW for common species, with larger buffers expected for special status species and raptors.

- If active nests are detected during the survey, the qualified ornithologist shall monitor all nests at least once per week to determine whether birds are being disturbed. Activities that might, in the opinion of the qualified ornithologist, disturb nesting activities (e.g., excessive noise), shall be prohibited within the buffer zone until such a determination is made. If signs of disturbance or distress are observed, the qualified ornithologist shall immediately implement adaptive measures to reduce disturbance. These measures may include, but are not limited to, increasing buffer size, halting disruptive construction activities in the vicinity of the nest until fledging is confirmed or nesting activity has ceased, placement of visual screens or sound dampening structures between the nest and construction activity, reducing speed limits, replacing and updating noisy equipment, queuing trucks to distribute idling noise, locating vehicle access points and loading and shipping facilities away from noise-sensitive receptors, reducing the number of noisy construction activities occurring simultaneously, and/or reorienting and/or relocating construction equipment to minimize noise at noise-sensitive receptors.
- To minimize the potential for disturbance of Marbled Murrelets foraging in or traveling to/from Pillar Point Harbor during the dawn and dusk hours, temporary artificial lighting proposed during night work shall be angled away from open water in Pillar Point Harbor.

### ***Other Special-Status and Nesting Birds***

In addition to common passerines and raptors, other special-status birds that have the potential to occur and nest within the Project vicinity include American peregrine falcon, great blue heron, black-crowned night heron (*Nycticorax nycticorax*), merlin, and salt marsh common yellowthroat.

Implementation of Mitigation Measures **BIO-1b General Wildlife Conservation Measures** and **BIO-1h Avoidance and Minimization Measures for Nesting Birds** would reduce impacts to less than significant by conducting work during the non-nesting season as feasible. If work is implemented during the nesting season, then a pre-construction survey would be implemented and a no-work buffer would be placed around an active nest.

This measure applies to all nesting birds protected by the federal Migratory Bird Treaty Act and Section 3503 of the California Fish and Game Code, except for western snowy plover, California least tern, and marbled murrelet, which are addressed in Mitigation Measure BIO-1g.

### **Mitigation Measure BIO-1h: Avoidance and Minimization Measures for Nesting Birds**

- No preconstruction surveys or avoidance measures are required for construction activities that would be completed entirely during the non-nesting season (September 16 to January 31).
- For all construction activities scheduled to occur during the nesting season (February 1 to September 15), a USFWS- and CDFW-qualified biologist shall conduct a preconstruction avian nesting survey no more than 10 days prior to the start of staging, site clearing, and/or ground disturbance.
- If there is a break of 10 days or more in construction activities during the breeding season, a new nesting bird survey shall be conducted before reinitiating construction.
- The surveying biologist shall be capable of determining the species and nesting stage without causing intrusive disturbance. The surveys shall cover all potential nesting sites within 500 feet of the project area for raptors and within 300 feet for other birds.

If active nests are found in the proposed project area or vicinity, a no-disturbance buffer shall be created around the active nests, as determined by a qualified biologist. The buffer distance can be reduced in coordination with CDFW if construction activities would not cause an adult to abandon an active nest or young or change an adult's behavior so it could not care for an active nest or young. If the nest(s) are found in an area where ground disturbance is scheduled to occur, the Harbor District shall require that ground disturbance be delayed until after the birds have fledged.

If work must occur within the established buffers, nests shall be continuously surveyed for the first 24 hours prior to any construction related activities to establish a behavioral baseline and, once work commences, all nests shall be continuously monitored to detect any behavioral changes as a result of the project, if feasible. If behavioral changes are observed, work causing the change shall cease and CDFW shall be consulted for additional avoidance and minimization measures. The avoidance and minimization measures shall ensure that the construction activities do not cause the adult to abandon an active nest or young or change an adult's behavior so it could not care for an active nest or young.

### **Terrestrial Mammals**

Hoary bat (*Lasiurus cinereus*) is ranked by the Western Bat Working group as a Medium Priority species. Hoary bat is a widespread species found throughout North America and parts of South America. Hoary bats are typically solitary and roost primarily in foliage of both coniferous and deciduous trees, near the ends of branches. The proposed project does not include the removal of any trees or structures where bats have potential to roost and little to no tree trimming is anticipated, and impacts would be less than significant on this species.

- b) **Less than Significant with Mitigation Incorporated.** This section addresses impacts on sensitive natural communities, including environmentally sensitive habitat areas

(ESHA), essential fish habitat (EFH) and designated critical habitat. Riparian habitat is not addressed as it is not present in the project area.

### ***Sensitive Natural Communities and Environmentally Sensitive Habitat Areas (ESHA)***

Northern coastal salt marsh is located to the east of the proposed project area and is considered a sensitive natural community and is also likely considered ESHA under the SMC-LCP. As ESHA within a project area are determined by California Coastal Commission staff on a case-by-case basis, additional vegetation communities or habitat types within the project area may also be considered ESHA (e.g. bluffs, coastal, and marine habitats). The SMC-LCP limits development in ESHA to resource dependent uses and prescribes minimum set-back, or buffer distances from ESHA for other development.

Construction of the proposed stormwater drainage system would convey stormwater into a new rock-lined concrete channel to convey stormwater from the hillside to a new bioretention basin with native vegetation along the landward side of the trail. Stormwater in the bioretention basin would discharge into the upland portions of the Pillar Point Marsh northeast of the bioretention basin, thereby redirecting the existing direct discharge into the Harbor. In addition, all work and staging areas would be restricted to clearly delineated work areas outside of this sensitive habitat. Therefore, impacts to northern coastal salt marsh would be less than significant.

West Trail stabilization and construction of a nourished beach with elevated dunes, planted with native vegetation, would result in temporary impacts with the ultimate outcome of enhancing the existing beach habitat and creating new dune habitat that is likely to be considered an ESHA. In addition, construction of the stormwater drainage system would reduce erosion to coastal scrub and beach habitats. The project would adhere to SMC-LCP General Policies on sensitive habitats, which provide guidance on protection of and permitted uses of sensitive habitats. The proposed project would have an overall positive impact on habitats considered as ESHA and therefore would be considered less than significant. Specifically, the project would promote SMC-LCP Guidance Policies 7.20 Management of Pillar Point Marsh and 7.28 Restoration of Dunes.

### ***Critical Habitat***

When the USFWS proposes a species for listing under the Endangered Species Act, they are required to consider whether there are geographic areas that contain essential features on areas that are essential to conserve the species. These areas are then designated as critical habitat.

Critical habitat for green sturgeon, black abalone, and leatherback sea turtle is present within the proposed project area. However, no in-water work is proposed as part of this project. Sand borrow activities for beach nourishment are anticipated to be minor and have no adverse effects on habitat quality for these species. However, project activities including night work and use of construction equipment would expose the proposed project area to additional noise, artificial lighting, and the potential for accidental spills of

small amounts of fuel and/or oil. These effects are not specific to critical habitat, rather they would be shared by all aquatic life in the proposed project area. As such, these effects are applicable to critical habitat and would be considered significant impacts.

Implementation of measures **BIO-1a General Construction Conservation Measures**, **BIO 1b General Wildlife Conservation Measures** and **BIO-1d Avoidance and Minimization Measures for Fish and Sea Turtles** would reduce any potential effects to critical habitat to less than significant.

### ***Eelgrass***

While recent surveys do not report the presence of eelgrass within the proposed project area, eelgrass beds and suitable habitat conditions were mapped within the vicinity (Marine Taxonomic Services 2019; GHD 2019). Eelgrass is most prominent in the summer and locations can vary year-to-year. As no in-water work would take place, direct effects resulting from temporary water quality impairment as a result of in-water work are not anticipated. Though eelgrass was not found and has not been reported within the project area boundaries, sand borrowing activities could result in loss of eelgrass beds, which would be a significant impact.

In 2014, NMFS developed the California Eelgrass Mitigation Policy and Implementation Guidelines to ensure no net loss of eelgrass habitat function occurs within California. Contained within that document are guidelines for pre-project surveys, avoidance and minimization measures to implement during construction, and mitigation options for unavoidable impacts to eelgrass habitat. The following measure is adapted from these guidelines to avoid potential impacts to eelgrass beds. Implementation of **Mitigation Measure BIO-1i Avoidance and Minimization Measures for Eelgrass Beds** would reduce any potential impacts to less than significant.

#### **Mitigation Measure BIO-1i: Avoidance and Minimization Measures for Eelgrass Beds**

- **Pre-construction Survey.** The proposed project area shall be surveyed for eelgrass beds with side-scan sonar during the growing season (April to October) and the boundaries between the eelgrass beds and the project work area shall be marked prior to construction with temporary navigation buoys. To the extent feasible, the presence of work activities within the area(s) marked by the buoys shall be prohibited.
  - **Biologist Inspection, Monitoring.** If eelgrass beds are found within the proposed project area, a California Coastal Commission-approved biologist shall be on-site during all marine construction activities to monitor the eelgrass beds and ensure that the beds are avoided and impacts are minimized as much as possible during construction.
- c) **Less than Significant Impact.** A delineation of aquatic resources was conducted within the project area on May 28, 2014 and again on January 23, 2020 (after the project area limits were changed) to determine the limits of federal and/or State jurisdictional wetlands and/or waters (Valerius 2020). The proposed project would result in 2.84 acres

of fill of tidal waters below Mean High Water (MHW) (5.64 feet MLLW) and 2.905 acres of fill below the High Tide Line (HTL) (7.28 feet) and MHW. The proposed project would also directly impact 0.008 acre of an existing drainage ditch, mapped as seasonal wetland, during construction of the stormwater system improvements, which include a new earthen ditch and a new bioretention basin with native vegetation along the landward side of new trail. The area of drainage ditch that would be disturbed by grading would become a bioswale planted with native vegetation, thereby increasing the area of seasonal wetland. Therefore, impacts to seasonal wetlands would be less than significant as the net area and quality of habitat would be improved by the proposed project.

Restoration activities affecting tidal waters would include the installation of a cobble berm buried beneath the surface of the shoreline and dune, two rock fingers extending perpendicular from the trail, and placement of sand both above and below the high tide line, to support beach nourishment. Although this would be considered permanent fill within a federal and/or state jurisdictional waters, it would not result in the loss of this acreage of waters because the fill placement would be with native and/or appropriate clean materials (sand, cobbles and rock) remaining within the tidal range. In addition, the thin layer of moveable sand has been designed to protect the shoreline by working with the natural processes (e.g. waves, currents and tides) that have been modified from historic conditions due to construction of the breakwaters (**Figure 4**). The sand placement in jurisdictional waters would result in long-term benefits to the Pillar Point Harbor area by restoring and maintaining the beach, foredune, and dune communities in light of both recent erosion and long term sea level rise, and therefore would not have a significant adverse effect on federal and/or State waters. The quality of sand placed on the beach would match the existing sediment in the project area and would not result in increased turbidity as compared to existing conditions. Therefore, impacts would be less than significant.

- d) **Less than Significant Impact.** Wildlife movement corridors are considered an important ecological resource by CDFW and the USFWS and under CEQA. Movement corridors may provide favorable locations for wildlife to travel between different habitat areas such as foraging sites, breeding sites, cover areas, and preferred summer and winter range locations. They may also function as dispersal corridors allowing animals to move between various locations within their range. Topography and other natural factors, in combination with urbanization, can fragment or separate large open-space areas. Areas of human disturbance or urban development can fragment wildlife habitats and impede wildlife movement between areas of suitable habitat. This fragmentation creates isolated “islands” of vegetation that may not provide sufficient area to accommodate sustainable populations, and can adversely affect genetic and species diversity. Movement corridors mitigate the effects of this fragmentation by allowing animals to move between remaining habitats, which in turn allows depleted populations to be replenished and promotes genetic exchange between separate populations.

Open ocean habitat outside of the proposed project area is used as a migratory corridor by numerous marine species. All proposed project activities would be limited to terrestrial

habitat and areas within Pillar Point Harbor. Beach and wetland habitats located on and adjacent to the proposed project area provide potential wildlife movement corridors and breeding areas for a variety of birds and other wildlife species. The proposed project area lies within the Great Pacific Flyway for migratory birds and just outside of California Essential Connectivity Areas (Spencer et. al. 2010). However, residential and commercial development, including California State Route 1, likely serve as a barrier to non-avian wildlife movement between the proposed project area and the Montara Mountain foothills. The proposed project would provide a benefit to the birds and wildlife species that use the areas within and adjacent to the project area by restoring areas of coastal erosion and loss of beach and sand dune communities. Construction activities would be short-term and would occur during the non-nesting season for many bird species. In addition, the proposed project features are not expected to create barriers to wildlife movement within the proposed project area or the surrounding area. Therefore, the project would have less than significant impacts to wildlife movement corridors or breeding areas.

- e) **No Impact.** The proposed project does not require removal of trees; therefore, implementation of the project does not conflict with the City of Half Moon Bay Tree Ordinance and there would be no impact.
- f) **No Impact.** The proposed project is not located within the permit area of an approved local, regional, or State habitat conservation plan; therefore, there is no impact.

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### 3.2.5 Cultural Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>5. CULTURAL RESOURCES —</b> Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Environmental Setting

ESA staff completed a records search of the project area and a 0.5-mile radius around the project area at the Northwest Information Center (NWIC) of the California Historical Resources Information System on March 17, 2020 (File No. 19-1646). The purpose of the records search was to (1) determine whether known cultural resources have been recorded within or adjacent to the project area; (2) assess the likelihood for unrecorded cultural resources to be present based on historical references and the distribution of nearby sites; and (3) develop a context for the identification and preliminary evaluation of cultural resources. Records were also reviewed in the Built Environment Resource Directory for San Mateo County, which contains information on places of recognized historical significance, including those evaluated for listing in the *National Register of Historic Places*, the *California Register of Historical Resources*, the *California Inventory of Historical Resources*, *California Historical Landmarks*, and *California Points of Historical Interest*.

Several cultural resources investigations have been completed in the vicinity of the proposed project including surface surveys, architectural analyses, and archaeological excavations (Applied Earthworks, 2005, 2008; Clark, 1989; Farquhar, 2000; Kendall, 1996; Rudo, 1981). Base maps indicate that there are no previously recorded archaeological resources in the project area. While there are at least four records of indigenous cultural resources in the general vicinity of the project area, including areas of shell midden and other evidence of use and occupation, these resources are not in areas that will be disturbed by project components (NWIC, 2020).

ESA completed a surface survey of the project area on May 17, 2020. An archaeologist walked the project area in narrow transects along all accessible pathways and exposed areas. The archaeologist closely inspected all areas of exposed ground surface for evidence of cultural materials. Cut banks adjacent to West Point Road and the parking area provided good visibility of the soil, which consisted of a medium to dark brown sandy silt with small gravels. Along the waterfront, erosion exposed the surrounding substrate, which consisted of disturbed sand and fill. Soil along the adjacent steep slope was a medium to dark brown silty sand. No cultural materials or other evidence of past human use or occupation, such as shell, midden soil, or lithic artifacts, was identified during the survey.

## Discussion

- a) **No Impact.** A significant impact would occur if the proposed project would cause a substantial adverse change to a historical resource, herein referring to historic-era architectural resources or the built environment, including buildings, structures, and objects. A significant impact includes physical demolition, destruction, relocation, or alteration of a historical resource.

There are no architectural resources in the project area that could be considered historical resources, as defined by Section 15064.5 of the CEQA Guidelines. The adjacent breakwater structure, constructed by the Corps in the early 1960s, will not be impacted by the proposed project. As there are no historical resources in the project area, the proposed project would have no impact on historical resources and no mitigation is required.

- b) **Less than Significant with Mitigation.** Archaeological resources are considered historical resources, according to Section 15064.5 of the CEQA Guidelines, as well as unique archaeological resources, as defined in PRC Section 21083.2(g). A significant impact could occur if the project would cause a substantial adverse change to an archaeological resource through physical demolition, destruction, relocation, or alteration of the resource.

Based on the records search results, survey results, nearby site distribution, previous disturbance, and environmental context, the proposed project area has a low potential to uncover archaeological resources. Despite the low potential, the discovery of archaeological materials during ground-disturbing activities cannot be entirely discounted. The inadvertent discovery of archaeological resources during project implementation could be a potentially significant impact. This impact would be reduced to a less-than-significant level with implementation of **Mitigation Measure CUL-1**, which requires avoidance measures or the appropriate treatment of archaeological resources if discovered during project implementation.

**Mitigation Measure CUL-1:** If prehistoric or historic-period cultural materials are encountered during project implementation, all construction activities within 100 feet shall halt, and a qualified archaeologist, defined as an archaeologist meeting the U.S. Secretary of the Interior's Professional Qualification Standards for Archeology, shall inspect the find within 24 hours of discovery and notify the San Mateo County Harbor District of their initial assessment. Prehistoric cultural materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil ("midden") containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-period cultural materials might include building or structure footings and walls, and deposits of metal, glass, and/or ceramic refuse.

If the San Mateo County Harbor District determines, based on recommendations from a qualified archaeologist and a Native American representative (if the resource is indigenous), that the resource may qualify as a historic property (meeting the National Register of Historic Places criteria at 36 CFR 60.4), a historical resource or

unique archaeological resource (as defined in CEQA Guidelines Section 15064.5), or a tribal cultural resource (as defined in PRC Section 21080.3), the resource shall be avoided if feasible. If avoidance is not feasible, the San Mateo County Harbor District shall consult with appropriate Native American representative (if the resource is indigenous), and other appropriate interested parties to determine treatment measures to avoid, minimize, or mitigate any potential impacts to the resource. This shall include documentation of the resource and may include data recovery (according to PRC Section 21083.2), if deemed appropriate, or other actions such as treating the resource with culturally appropriate dignity and protecting the cultural character and integrity of the resource (according to PRC Section 21084.3).

- c) ***Less than Significant with Mitigation.*** There is no indication from the archival research that any part of the project area has been used for human burial purposes in the recent or distant past. Therefore, it is unlikely that human remains would be encountered during construction of the project. Despite the low potential, the possibility of inadvertent discovery cannot be entirely discounted and would result in a potentially significant impact. This impact would be reduced to a less than significant level with implementation of **Mitigation Measure CUL-2**, which requires avoidance measures or the appropriate treatment of human remains if accidentally discovered during project construction.

**Mitigation Measure CUL-2:** In the event of discovery of any human remains during project activities, all activities within 100 feet of the find shall cease and the San Mateo County Harbor District shall follow the provisions of California Health and Human Safety Code (Human Remains) Section 7050.5. This shall include immediate notification of the San Mateo County Coroner who will determine if an investigation of the cause of death is required. The Native American Heritage Commission will be contacted within 24 hours if it is determined that the remains are Native American. The Commission will then identify the person or persons it believes to be the most likely descendant from the deceased Native American, who in turn would make recommendations to the San Mateo County Harbor District for the appropriate means of treating the human remains and any grave goods (PRC Section 5097.98).

## References

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### 3.2.6 Energy

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>6. ENERGY</b> — Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Discussion

a) **Less than Significant.** During construction of the proposed project, energy use would be direct, in the form of consumption of fuel (typically gasoline and diesel fuel) for operation of construction equipment and vehicles. Proposed project construction is expected to commence in fall/early winter of 2020 with a duration of up to four months. Construction activities would include use of heavy-duty construction equipment such as excavators, loaders, concrete trucks, and dump trucks, which are generally diesel-fueled. Additionally, offsite vehicles would be required to transport equipment, materials, and workers to the project site during construction. The number of construction workers on site would be an average of 10 workers per day. Worker commute trips would primarily use gasoline fueled vehicles. In addition, construction activities would involve truck trips to haul away demolition debris and excavated soil, and bring sand and cobble to the site. It is assumed that haul trucks and vendor trucks would be diesel-fueled. Over the duration of construction, the proposed project would consume approximately 29,182 gallons of diesel and 760 gallons of gasoline. Consumption of fuel energy during construction would be temporary, localized, and would not represent a significant amount of fuel in comparison to the 304 million gallons of gasoline and 17 million gallons of diesel that were sold in San Mateo County in 2018 (CEC 2019).

In addition, the temporary energy consumption during construction would not result in long-term depletion of non-renewable energy resources and would not permanently increase reliance on energy resources that are not renewable. Construction activities would not reduce or interrupt existing electrical or natural gas services due to insufficient supply, and would not include inherently wasteful or unnecessary use of energy. Once operational, the proposed project’s energy requirements would be very minor, in the form of fuel use in motor vehicle trips generated for minimal ongoing maintenance and any changes to surface traffic intensity and related fuel usage would be also be minimal.

San Mateo County developed the *San Mateo County Energy Efficiency Climate Action Plan (CAP)* in 2013. The CAP contains measures to reduce GHG emissions within San Mateo County. CAP Measure 15.1: Construction Idling, would be applicable to the

construction of the proposed project and includes the following strategies to reduce GHG emissions:

- Minimize idling times either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes.
- Require maintenance of construction equipment per manufacturer specifications.
- County staff work with project proponents to limit GHG emissions from construction equipment by selecting measures identified by the BAAQMD. Such measures could include use of Tier 4 engines or compressed natural gas fuel, or biodiesel, where available (San Mateo County 2013).

Both construction and operation of the proposed project would involve expenditure of energy, however the consumption of energy would not be wasteful, inefficient or unnecessary. Because of this, both construction and operational activities would result in a less-than-significant impact associated with energy consumption.

- b) **Less than Significant.** Equipment and vehicles used for Project construction would be required to comply with all federal and state fuel efficiency standards. Additionally, there are no Project characteristics or features that would be inefficient or that would result in the use of construction equipment and vehicles in a manner that would be less energy efficient than similar projects. Fuel use for Project construction would be consistent with typical construction practices.

Therefore, the Project would not conflict with or obstruct any state or local plan for renewable energy or energy efficiency. This would be a less than significant impact.

## References

Bay Area Air Quality Management District (BAAQMD), 2017. *Final 2017 Clean Air Plan, Spare the Air, Cool the Climate*, adopted April 19, 2017. Available: [http://www.baaqmd.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a\\_-\\_proposed-final-cap-vol-1-pdf.pdf?la=en](http://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-_proposed-final-cap-vol-1-pdf.pdf?la=en), Accessed October 14, 2019.

California Energy Commission (CEC), 2019. 2018 California Annual Retail Fuel Outlet Report Results (CEC-A15) Energy Assessments Division, July 1, 2019.

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### 3.2.7 Geology, Soils, and Seismicity

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>7. GEOLOGY and Soils</b> — Would the project:				
a) Directly or indirectly cause 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" 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 direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) 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"/>

## Environmental Setting

### Regional Geology

San Mateo County is located within the Coast Range geomorphic province of California. The Coast Ranges are a series of relatively low mountain ranges and associated valleys that trend northwest, subparallel to the active San Andreas Fault. Elevations of the ranges are typically 2,000 to 4,000 feet, sometimes reaching 6,000 feet above sea level. The Coast Ranges are predominantly composed of thick late Mesozoic and Cenozoic (251 million years ago to present) sedimentary rocks. The northern and southern portions of the province are separated by a depression containing the San Francisco Bay (California Geological Survey 2002).

In some areas of the Coast Ranges, the topography is dominated by irregular, knobby outcrops of the landslide-prone rocks of the Franciscan Complex. In the Sonoma and Clear Lake regions Pliocene and younger volcanic flows, ash deposits, and cones are prominent. In the southern Coast Ranges, granitic and metamorphic rocks of the Salinian block lie to the west of the

San Andreas Fault and extend from the southern extremity of the Coast Ranges, north to the Farallon Islands (CGS 2002).

### **Seismic Hazards**

Surface fault rupture (or disruption at the ground surface as a result of fault activity) and seismic ground shaking are considered primary seismic hazards by the State of California. The major hazards associated with earthquakes are surface fault rupture (ground displacement), ground motion (or ground shaking), ground failure (e.g., liquefaction), and landslides. Each of these hazards is discussed further below.

### **Surface Fault Rupture**

Seismically induced ground rupture is defined as the physical displacement of surface deposits in response to an earthquake's seismic waves. The magnitude and nature of fault rupture can vary for different faults, or even along different strands of the same fault. Ground rupture is considered most likely along active faults. The highest potential for surface faulting is along existing fault traces that have had Holocene displacement.

The closest known active faults with historical earthquake events are the San Gregorio and San Andreas. The Pilarcitos fault is approximately 5 miles from the project area, but has not exhibited Holocene displacement and is not considered sufficiently active or well-defined, the potential is very low that the individual traces of this fault could generate an earthquake and result in surface fault rupture. The San Andreas fault is approximately 7 miles from the proposed project and the San Gregorio fault transects the project area. According to the California Earthquake Hazards Zone Application (CGS 2019), the portion of the San Gregorio fault that transects the project area is within an Alquist-Priolo Fault Zone. As such, fault ground rupture is considered a hazard in the project area.

### **Potential Ground Motion**

Unlike surface rupture, ground shaking is not confined to the trace of a fault, but propagates into the surrounding areas during an earthquake. The intensity of ground shaking typically diminishes with distance from the fault, but ground shaking may be locally amplified or prolonged by some types of substrate materials. The Bay Area region contains both active and potentially active faults and is considered a region of high seismic activity.<sup>7</sup> Throughout the project area there is a potential for damage from movement along any one of a number of the active Bay Area faults. In 2007, the USGS, the CGS, and the Southern California Earthquake Center formed the Working Group on California Earthquake Probabilities (WGCEP) to evaluate the probability of one or more earthquakes of Mw 6.7 or higher occurring in the state of California over the next 30 years. (WGCEP 2015).

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<sup>7</sup> An "active" fault is defined by the State of California as a fault that has had surface displacement within Holocene time (approximately the last 11,000 years). A "potentially active" fault is defined as a fault that has shown evidence of surface displacement during the Quaternary (last 1.6 million years), unless direct geologic evidence demonstrates inactivity for all of the Holocene or longer. This definition does not, of course, mean that faults lacking evidence of surface displacement are necessarily inactive (CGS 2018).

The WGCEP estimates that there is a 72 percent probability of at least one moment magnitude 6.7 or greater earthquake occurring in the San Francisco Bay region over the next 30 years (WGCEP 2015).<sup>8</sup> Within the 72 percent probability, the San Gregorio fault has a 2.69 percent probability of having an earthquake of moment magnitude 6.7 or greater. The Pilarcitos fault has a 0.50 percent probability of having an earthquake of moment magnitude 6.7 or greater.

### **Liquefaction**

Liquefaction is the process in which the soil is transformed to a fluid form during intense and prolonged ground shaking. Areas most prone to liquefaction are those that are water saturated and consist of relatively uniform sands that are of loose to medium density. Liquefaction can lead to severe settlement of foundations and slope failure. Properties such as depth to groundwater, soil texture and density, and sediment within and above the groundwater are the primary factors that determine whether an area is prone to liquefaction. The sediments most susceptible to liquefaction are saturated, unconsolidated sand and silt soils (particularly Quaternary-age units) with low plasticity within 50 feet of the ground surface (CGS 2008). The project area is within an area mapped as a Liquefaction Zone within the Earthquake Zone of Required Investigation as prepared by CGS (2019).

### **Earthquake-Induced Settlement**

The relatively rapid compaction and settling of subsurface materials (particularly loose, noncompacted, and variable sandy sediments) during prolonged ground shaking can cause settlement of the ground surface. Typically, areas underlain by artificial fills, unconsolidated alluvial sediments, and slope wash, and areas with improperly engineered construction fills are susceptible to settlement. The proposed project is located in an area with the potential to experience stronger earthquake shaking more frequently (DOC 2016).

### **Slope Instability and Landslides**

Slope failures, commonly referred to as landslides, include many phenomena that involve the downslope displacement and movement of material, triggered by either static (i.e., gravity) or dynamic (i.e., earthquake) forces. Exposed rock slopes undergo rockfalls, rockslides, or rock avalanches, while soil slopes experience shallow soil slides, rapid debris flows, and deep-seated rotational slides. The proposed project is located in an area with the potential for landslides (Metropolitan Transportation Commission and Association of Bay Area Governments [MTC/ABAG] 2020).

### **Soils and Soil-Related Hazards**

#### **Erosion**

Erosion is the detachment and movement of soil materials through natural processes or human activities. In general, rates of erosion can vary depending on the soil resource's capacity to drain water, slope angle and length, extent of ground cover, and human influence. Soils underlying the project area consist of Denison loam, stabilized dune land, coastal beaches, Elkhorn sandy loam, and Elkhorn sandy loam. These soils have low to very high potential for erosion with the

<sup>8</sup> Moment magnitude is related to the physical size of a fault rupture and movement across a fault. The Richter magnitude scale reflects the maximum amplitude of a particular type of seismic wave. Moment magnitude provides a physically meaningful measure of the size of a faulting event (CGS 2002).

stabilized dune land and Coastal beaches having erosion potential from wind and wave action, respectively (National Resources Conservation Service [NRCS] 2020).

### **Expansive Soils**

Expansive soils are characterized by a characteristic called “shrink-swell.” Over a long time period, structural damage may result, usually from inadequate soil and foundation engineering or the placement of structures directly on expansive soils. Expansive soils consist primarily of clays, which expand in volume when water is absorbed and shrink when dried. Soil resources in the project area have a low to high shrink-swell potential (NRCS 2020).

### **Corrosive Soils**

Corrosive soils can damage underground pipelines and cables, and can weaken roadway structures. The soils in the project area have a low potential to erode concrete and a moderate to high potential to erode steel (NRCS 2020).

### **Land Subsidence**

Subsidence is the gradual lowering of the land surface caused by loss or compaction of underlying materials. Subsidence can result from groundwater, gas, and oil extraction, or from the decomposition of highly organic soils. The soils in the project area have a low potential for subsidence (NRCS 2020).

### ***Paleontological Resources***

Paleontological resources are the fossilized evidence of past life found in the geologic record. Despite the tremendous volume of sedimentary rock deposits preserved worldwide, and the enormous number of organisms that have lived through time, the preservation of plant or animal remains as fossils is extremely rare. Because of the infrequency of fossil preservation, particularly vertebrate fossils, they are considered to be nonrenewable resources. Due to the rarity and scientific information they can provide, fossils are important records of ancient life. The proposed project is in an area (San Mateo County Coastal Zone) where paleontological resources are extremely limited (City of Half Moon Bay 2018).

## **Discussion**

- a.i) **Less than Significant.** The project area is transected by the San Gregorio fault and, as a result, is located within an Alquist-Priolo Fault Zone. However, the proposed project would not result in the construction or operation of any habitable structures or potentially unstable slopes adjacent to habitable structures. In addition, the proposed project would stabilize the trail and upgrade the existing stormwater system, and would not significantly alter the existing trail alignment. Construction methods would be consistent with current codes and standards. Therefore, the proposed project would not increase the exposure of trail users or associated structures to increased risk of loss, injury, or death in the project area due to fault rupture. This impact would be less than significant.
- a.ii) **Less than Significant.** The project area is within an area known to have the potential for strong ground shaking. The San Gregorio fault has a 2.69 percent probability of having an earthquake of moment magnitude 6.7 or greater and the Pilarcitos fault has a

0.50 percent probability of having an earthquake of moment magnitude 6.7 or greater. However, as discussed previously, the proposed project would not result in the construction or operation of any habitable structures or potentially unstable slopes adjacent to habitable structures. In addition, the proposed project would stabilize the trail and upgrade the existing stormwater system, and it would not significantly alter the existing trail alignment. Construction methods would be consistent with current codes and standards. Therefore, the proposed project would not increase the exposure of trail users or associated structures to risk of loss, injury, or death in the project area due to strong seismic ground shaking. This impact would be less than significant.

- a.iii and iv) **Less than Significant.** The project area is within an area known to have the potential for seismic related ground failure, including liquefaction and landslides. Implementation of the proposed project would not create any structures or potentially unstable slopes that could exacerbate existing liquefaction or landslide conditions in the project area. Therefore, the proposed project would not increase the exposure of trail users to an increased risk of loss, injury, or death in the project area from liquefaction or landslides. This impact would be less than significant.
- b) **Less than Significant.** Project construction would involve localized ground disturbance activities (e.g., demolition and removal of existing swale and pipeline, excavation, grading and the construction of shoreline, dunes, and stormwater system improvements). These activities could result in soil erosion.

Construction activities would involve short-term ground disturbance in relatively flat areas on the bluff to demolish and remove the existing swale. Construction activities to connect the new swale with the bioretention basin would be located on a portion of the hillside above the West Trail.

Because the overall footprint of construction activities would exceed 1 acre, the proposed project would be required to comply with the *NPDES General Permit for Discharges of Storm Water Runoff Associated with Construction and Land Disturbance Activities* (Order 2009-0009-DWQ, NPDES No. CAS000002; as amended by Orders 2010-0014-DWQ and 2012-006-DWQ) (Construction General Permit), the San Mateo County grading regulations, and San Mateo County erosion control regulations. These state and local requirements were developed to ensure that stormwater is managed and erosion is controlled on construction sites. The Construction General Permit requires preparation and implementation of a stormwater pollution prevention plan (SWPPP), which requires applications of best management practices (BMPs) to control run-on and runoff from construction work sites. The BMPs could include, but would not be limited to, physical barriers to prevent erosion and sedimentation, construction of sedimentation basins, limitations on work periods during storm events, use of bio-infiltration swales, protection of stockpiled materials, and a variety of other measures that would substantially reduce or prevent erosion from occurring during construction. The San Mateo County Planning and Building Department requires a grading permit for grading activities, unless exempted. The San Mateo County Planning and Building Department also requires the submittal of

an erosion and sediment control plan for review and approval prior to the issuance of any demolition, grading, or building permit that involves site disturbance.

Currently, the trail is overtopped during an approximately 10-year wind wave event coincident with an extreme high tide. The Geomorphic Basis of Design Report (ESA 2020) concluded that design concepts incorporated into the proposed project, such as reducing the wind wave runup to the shore would prevent the trail from being overtopped during 100-year wind wave event. In addition, the inclusion of gravel and rock fingers would protect the trail even if the sand eroded in the future (ESA 2020). Stormwater system improvements would improve the conveyance and containment of stormwater and reduce the potential for erosion by redirecting flows to the bioretention basin and the wetland to the southeast of the trail. For these reasons, and because project construction activities would be subject to numerous requirements discussed above, impacts associated with substantial increases in soil erosion would be less than significant.

- c) **Less than Significant.** The proposed project area has a low to high potential for expansive soils and a low potential for subsidence. Implementation of the proposed project would repair and stabilize the trail and shoreline, and improve the existing stormwater system. Implementation of the proposed project would not exacerbate or increase the subsidence or expansive nature of the project area soils and therefore, impacts would be less than significant.
- e) **No Impact.** The proposed project would not construct or use septic tanks or alternative wastewater systems; therefore, no impact would occur.
- f) **Less than Significant.** The proposed project is in an area (San Mateo County Coastal Zone) where paleontological resources are extremely limited. The proposed project construction would be located in areas that were previously disturbed by past construction of the existing swale, stormwater pipeline, and trail. Other areas where construction activities would occur have sources of sand or soil that have been recently deposited through wetland runoff or deposition of sand from within the harbor. As such, the proposed project is not anticipated to encounter paleontological resources and would not directly or indirectly destroy any unique geologic feature and impacts would be less than significant.

## References

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### 3.2.8 Greenhouse Gas Emissions

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>8. GREENHOUSE GAS EMISSIONS —</b> Would the project:				
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"/>

### Environmental Setting

Greenhouse gases (GHGs) trap heat by preventing some of the solar radiation that hits the earth from being reflected back into space. Some GHGs occur naturally and are needed to keep the earth’s surface habitable. Over the past 100 years, human activities have substantially increased the concentration of GHGs in our atmosphere. This has intensified the natural greenhouse effect, increasing average global temperatures.

Carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O) are the principal GHGs associated with land use projects. GHG associated with construction projects are generated from fossil fuel combustion from heavy equipment, haul trucks, and worker vehicles. CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O occur both naturally and through human activity.

CO<sub>2</sub> is the reference gas for climate change because it is the predominant GHG emitted. The effect that each of the aforementioned gases can have on global warming is a combination of the mass of their emissions and their global warming potential (GWP). GWP indicates, on a pound-for-pound basis, how much a gas contributes to global warming relative to how much the same mass of CO<sub>2</sub> contributes to global warming. CH<sub>4</sub> and N<sub>2</sub>O are substantially more potent GHGs than CO<sub>2</sub>, with 100-year GWPs of 28 and 265 times that of CO<sub>2</sub>, respectively.

In emissions inventories, GHG emissions are typically reported as metric tons of CO<sub>2</sub> equivalents (CO<sub>2</sub>e). CO<sub>2</sub>e are calculated as the product of the mass emitted of a given GHG and its specific GWP. While CH<sub>4</sub> and N<sub>2</sub>O have much higher GWPs than CO<sub>2</sub>, CO<sub>2</sub> is emitted in such higher quantities that it accounts for the majority of GHG emissions in CO<sub>2</sub>e.

### Approach to Analysis

Both the BAAQMD and the California Air Pollution Control Officers Association (CAPCOA) consider GHG impacts to be cumulative impacts (BAAQMD, 2017; CAPCOA, 2008). Therefore, assessment of significance is based on whether a project’s GHG emissions represent a cumulatively considerable contribution to the global atmosphere.

BAAQMD has not established thresholds specifically for construction-related emissions. However, BAAQMD has developed two thresholds of significance for operational emissions: the first for stationary sources that require air permits, equal to 10,000 metric tons CO<sub>2</sub>e per year and

the second for land use development projects (such as residential and commercial development projects), equal to 1,100 metric tons CO<sub>2</sub>e per year. In the absence of a threshold of significance for construction-related GHG emissions, the BAAQMD's threshold of significance of 1,100 metric tons of CO<sub>2</sub>e was used to evaluate the significance of construction emissions from the proposed project for checklist item a).

San Mateo County developed the *San Mateo County Energy Efficiency Climate Action Plan* (CAP) in 2013. The CAP contains measures to reduce GHG emissions within San Mateo County. CAP Measure 15.1: Construction Idling, would be applicable to the construction of the proposed project and includes the following strategies to reduce GHG emissions:

- Minimize idling times either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes.
- Require maintenance of construction equipment per manufacturer specifications.
- County staff working with project applicants to limit GHG emissions from construction equipment by selecting measures identified by the BAAQMD. Such measures could include use of Tier 4 engines or compressed natural gas fuel, or biodiesel, where available (San Mateo County 2013).

## Discussion

### a) **Less than Significant.**

#### **Construction**

GHG emissions from construction activity occur for a relatively short period of time, while GHG emissions are of long-term concern. The BAAQMD has no significance criterion for construction-related emissions of GHGs; therefore, this analysis applies the operational emissions threshold to construction-period emissions. This is a conservative evaluation of GHG construction emissions.

Construction of the proposed project would generate GHG emissions from a variety of sources, including off-road construction equipment and on-road worker and hauling vehicles. Emissions from all of the construction emission sources were estimated using CalEEMod version 2016.3.2. The results of emissions modeling determined that total construction period GHG emissions would be approximately 380 metric tons of CO<sub>2</sub>e, which is well below the operational threshold and impacts would be less than significant.

#### **Operation**

After construction is completed, the trail, upgraded stormwater system, and living shoreline would only require minimal on-going maintenance. In addition, minor operations and maintenance could be needed in response to extreme events and long-term trends. For the stormwater system, maintenance items are expected to be limited to minor clearing of drains and swales of silt and debris. In addition, dune vegetation would require irrigation and maintenance throughout the establishment period.

These activities would involve use of on-road and off-road equipment emitting a minor amount of combustion pollutants, including GHGs. This work would be long-term but not continuous, and emissions are expected to be minimal. Additionally, impacts from the project on traffic levels and associated GHG emissions are also determined to be negligible and impacts would be less than significant.

- b) **Less than Significant.** As discussed previously, San Mateo County has adopted the County CAP, which identifies a number of measures to reduce GHG emissions from construction, listed above. The proposed project would be required to incorporate these GHG reduction measures and would thus be consistent with the County CAP. Therefore, the proposed project would not conflict with any applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions. This would be a less than significant impact.

## References

Bay Area Air Quality Management District (BAAQMD), 2017. *California Environmental Quality Act Air Quality Guidelines*. May 2017. Available: [www.baaqmd.gov/pln/ceqa/ceqa\\_guide.pdf](http://www.baaqmd.gov/pln/ceqa/ceqa_guide.pdf). Accessed May 20, 2020.

California Air Pollution Control Officers Association (CAPCOA), 2008. *CEQA & Climate Change, Evaluating and Addressing Greenhouse Gas Emissions from projects Subject to the California Environmental Quality Act*, January 2008.

San Mateo County, 2013. *Energy Efficiency Climate Action Plan*. June, 2013. Available: [https://planning.smcgov.org/sites/planning.smcgov.org/files/documents/files/SanMateoCounty\\_EECAP\\_FINAL\\_06-04-2013.pdf](https://planning.smcgov.org/sites/planning.smcgov.org/files/documents/files/SanMateoCounty_EECAP_FINAL_06-04-2013.pdf). Accessed May 4, 2020.

### 3.2.9 Hazards and Hazardous Materials

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>9. HAZARDS AND HAZARDOUS MATERIALS —</b> Would the project:				
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 reasonably 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 type="checkbox"/>	<input checked="" 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 or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) 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"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Environmental Setting

The proposed project area is within western San Mateo County, along the western edge of Pillar Point Harbor. The closest school to the proposed project is Picasso Preschool, approximately 1 mile west.

### Hazardous Materials

Materials and waste may be considered hazardous if they are poisonous (toxicity), can be ignited by open flame (ignitability), corrode other materials (corrosivity), or react violently, explode or generate vapors when mixed with water (reactivity). The term “hazardous material” is defined in law as any material that, because of quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment.<sup>9</sup> In some cases, past uses can result in spills or leaks of hazardous materials to the ground, resulting in soil and groundwater contamination. The use, storage, transportation and disposal of hazardous materials are subject to numerous federal, State and local laws and regulations.

<sup>9</sup> State of California, Health and Safety Code, Chapter 6.95, Section 25501(o).

Information about hazardous materials sites in the project area was collected by conducting a review of the California Environmental Protection Agency's (CalEPA) Cortese List Data Resources (Cortese List) and the State Water Resources Control Board's GeoTracker list. The Cortese List includes data resources that provide information regarding the facilities or sites identified as meeting the Cortese List requirements. The Cortese List is updated at least annually, in compliance with California regulations (California Code Section 65964.6(a)(4)) and includes federal superfund sites, State response sites, non-operating hazardous waste sites, voluntary cleanup sites, and school cleanup sites. The GeoTracker list shows Underground Storage Tanks (UST). Based on a review of the Cortese List conducted in May 2019, no active listed sites are located within 0.5 miles of the proposed project (Department of Toxic Substances Control [DTSC] 2020).

### **Fire Suppression**

The proposed project is located within a Local Responsibility Area (LRA) where San Mateo County is responsible for fire suppression for the Project area. The California Department of Forestry and Fire Protection (CAL FIRE) has determined that the project site is located in a Non-Very High Fire Hazard Severity Zone (Non-VHFHSZ) (CAL FIRE 2008).

### **Discussion**

- a,b) **Less than Significant.** Equipment and materials used during project construction activities would include fuels, oils, solvent and lubricants. The routine use or accidental spill of these materials during construction could inadvertently release hazardous materials, which could adversely affect construction workers, the public, and the environment.

Construction activities would be required to comply with numerous hazardous materials regulations. These regulations are enforced to ensure that hazardous materials are transported, used, stored, and disposed of safely to protect worker safety, and to reduce the potential for a release of fuels or other hazardous materials into the environment, including stormwater and downstream receiving water bodies. Construction contractors would be required to acquire coverage under the Construction General Permit, which requires the preparation and implementation of a SWPPP for construction activities. The SWPPP would: list the hazardous materials (including petroleum products) proposed for use during construction; describe spill prevention measures, equipment inspections, equipment, and fuel storage; describe protocols for responding immediately to spills; and describe BMPs for controlling site run-on and runoff.

Transport, use, or disposal of these materials would also follow the U.S. Department of Transportation, Caltrans, and the California Highway Patrol regulations which regulate the transportation of hazardous materials. Together, federal and State agencies determine driver-training requirements, load labeling procedures, and container specifications to minimize the risk of an accidental release.

The proposed project would comply with applicable permits, laws and regulations governing the transportation, use, handling, and disposal of hazardous materials. This compliance would limit the potential for the project to create hazardous conditions caused

- by the use or accidental release of hazardous materials and impacts would be less than significant.
- c) **No Impact.** the proposed project would not result in hazardous emissions or result in the use of acutely toxic materials and there are no schools located within one-quarter mile of the proposed project area. Therefore, there would be no impact.
  - d) **No Impact.** The proposed project area is not on a list of hazardous materials sites compiled under Government Code Section 65962.5 (the Cortese List); therefore, the proposed project would not create a significant hazard to the public or the environment from being locate on a hazardous materials site. No known active hazardous materials exist in the project area and there would be no impact.
  - e) **Less than Significant.** The proposed project area is approximately 0.30 miles southwest of the Half Moon Bay Airport and is located within the Airport Land Use Compatibility Plan (ALUCP) Airport Influence Area (AIA) (Zone 7) (City/County Association of Governments [C/CAG] of San Mateo County 2014). Land uses within the AIA are not restricted because the aircraft accident risk level is considered to be low for both airport operators, residents, or workers on the ground. The AIA zone requires airspace review for objects over 100 feet tall and other restriction on hazards to flight such as wildlife attractants, such as golf courses and wetland restoration projects. The proposed project would not include construction of any structures over 100 feet or result in the new or greater habitat that could attract wildlife above existing conditions and, therefore, would not conflict with and ALUCP safety requirements. Therefore, impacts would be less than significant.
  - f) **Less than Significant.** At any given time, project construction would require an average of 10 employees per day during the construction season. Site access would be from the Cabrillo Highway and West Point Avenue. Construction staging would occur in a portion of the parking lot off of West Point Avenue. The staging area would connect to the proposed project area via the existing gravel trail. West Point Avenue, the access point for the trail and parking lot, would remain open during construction of the proposed project, though it may be reduced to one lane at times during the movement of materials to be stored in the northwestern half of the parking lot. However, the project area has relatively low traffic volumes, construction would be temporary, and access to the project area would be possible from the other side of the beach. In addition, West Point Avenue would remain open and access to the Pillar Point Air Force Station would still be possible. Therefore, the proposed project would not impair or physically interfere with an adopted emergency response or evacuation plan and impacts would be less than significant.
  - g) **Less than Significant.** The project area is designated as a LRA – Non-VHFHSZ by the CAL FIRE (CAL FIRE 2008). The project area is within and adjacent to the Harbor, Half Moon Bay, vegetated wetlands, intertidal flats, and wooded and open bluffs. The vegetation and land use types have a low potential for wildland fires. The proposed project would not introduce increased risk for fire hazards compared to existing

conditions. Therefore, the proposed project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires compare to current conditions and impacts would be less than significant.

## References

California Department of Forestry and Fire Protection (CAL FIRE), 2008. Fire Hazard Severity Zones in SRA, San Mateo County. November 2008.

City/County Association of Governments (C/CAG) of San Mateo County, 2014. Airport Land Use Compatibility Plan for the Environs of Half Moon Bay Airport. September 2014.

Department of Toxic Substances Control (DTSC), 2020. DTSC's Hazardous Waste and Substances Site List – Site Cleanup (Cortese List). Available: [www.dtsc.ca.gov/SiteCleanup/Cortese\\_List.cfm](http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm). Accessed May 13, 2020.

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### 3.2.10 Hydrology and Water Quality

Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>10. HYDROLOGY AND WATER QUALITY —</b> Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<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 or through the addition of impervious surfaces, in a manner which would:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Environmental Setting

### Surface Water Hydrology and Water Quality

The proposed project area has a maritime Mediterranean climate characterized by warm, dry summers and cool, mild winters. Precipitation in the area primarily falls between the months of November and April with rain being the primary source and fog making up a small percentage. The Pillar Point Marsh area receives around 18 inches of precipitation per year (San Mateo County 2002).

The main hydrologic features within the area are San Vicente Creek to the north of the project site; Denniston Creek which drains to Pillar Point Harbor south of the Town of Princeton By The Sea; and Pillar Point Marsh. Water levels in the marsh are affected by recharge in Denniston Creek despite not being directly connected (San Mateo County 2002).

The presence of the San Gregorio fault, which is described in more detail in the *Geology, Soils, and Seismicity* section, directly influences the flow of surface water and groundwater in the

project area. More specifically, groundwater in the Pillar Point Marsh area is restricted to the Half Moon Bay Terrace Formation (San Mateo County 2002).

The Pillar Point Marsh is fed by groundwater and is also subject to tidal inflows. In addition, several man-made alterations of the area have contributed to the current hydrology including the access road to Pillar Point, construction of the Half Moon Bay Airport, and the breakwater within Pillar Point Harbor (San Mateo County 2002). The access road provides a barrier between the salt water marsh and the freshwater marsh and has also resulted in deposition of sediment in the freshwater area of the marsh. The stormwater runoff from the airport is the primary source of fresh water to the marsh. Lastly, the breakwater reduces wave action on the marsh barrier dunes.

Surface water quality in the project area is generally of good quality. Potential sources of water quality degradation include the drainages that drain to the marsh which may include sediment; urban runoff from the nearby town of Princeton; and chemical used by land owners within the vicinity of the project area (San Mateo County 2002). The State Water Board Total Maximum Daily Load (TMDL) programs are implemented pursuant to Clean Water Act Section 303(d) for impaired waterbodies. The TMDL program lists the Pacific Ocean at Pillar Point Beach as impaired for indicator bacteria (State Water Board 2020).

### ***Groundwater Hydrology and Water Quality***

The project area is within the Half Moon Bay Terrace groundwater basin which runs along the California coast from just north of the town of Montara to south of the city of Half Moon Bay. The nearest groundwater depth data point shows water at 1.9 feet below ground surface in the vicinity of the marsh. The nearest groundwater data point also shows a 0.1 foot decrease between the years of 2013 and 2018 (California Department of Water Resources [DWR] 2020). Groundwater is the primary source of water in the marsh; however, in lower elevations salt water intrusion results in brackish water with the exception of seasonal flushing during rain events (San Mateo County 2002).

Groundwater quality in the project area is also generally considered good, although elevated levels of iron and manganese have been present. Salt water intrusion has remained a concern due to the proximity to the ocean (San Mateo County 2002).

### ***Stormwater and Drainage***

As discussed previously, the stormwater from the Half Moon Bay Airport is the largest source of fresh water flows to the marsh. Additionally, stormwater runoff from Airport Road and the ditches that run parallel to it also drain to the eastern side of the marsh. The Pillar Point Ridge Manufactured Housing neighborhood is located north of the project area and stormwater from the neighborhood drains to the northern portion of the marsh. A majority of the precipitation in the area drains via San Vicente Creek. The stormwater runoff drains into the marsh with the water remaining in the marsh providing groundwater recharge (San Mateo County 2002).

## **Discussion**

- a, e) **Less than Significant.** Construction of the proposed project would involve the use of heavy equipment, including, but not limited to: demolition and removal of an existing

swale and pipeline, excavation, grading, the restoration of the trail, shoreline, dunes, and stormwater system improvements. Construction activities have the potential to cause increased rates of erosion that could increase turbidity in the Pillar Point Marsh and Half Moon Bay. In addition, the use of heavy machinery during construction could result in the potential accidental release of fuels, oils, solvents, hydraulic fluid, and other construction-related fluids to the environment, thereby degrading water quality. As described previously, soils in the project area have a low to very high potential for erosion. However, earthmoving and grading activities associated with construction have the potential to cause erosion.

As discussed in the *Geology, Soils, and Seismicity* section, the proposed project would be required to comply with the Construction General Permit, the San Mateo County grading regulations, and San Mateo County erosion control regulations. The Construction General Permit requires preparation and implementation of a SWPPP, which requires applications of best management practices BMPs to control run-on and runoff from construction work sites. The BMPs could include, but would not be limited to, physical barriers to prevent erosion and sedimentation, construction of sedimentation basins, limitations on work periods during storm events, use of bio-infiltration swales, protection of stockpiled materials, and a variety of other measures that would substantially reduce or prevent erosion from occurring during construction. Because the proposed project construction activities would be subject to the numerous regulatory requirements impacts associated with substantial increases in soil erosion during construction would be less than significant.

The proposed project would repair the chronic and ongoing erosion of the coastal trail. Currently, the trail is overtopped during an approximately 10-year wind wave event. The Geomorphic Basis of Design Report (ESA 2020) concluded that design concepts incorporated into the proposed project such as reducing the wave runup to the shore would prevent the trail from being overtopped during a 100-year wind wave event. In addition, the BOD Report concluded the inclusion of gravel and rock fingers would protect the trail even if the sand is eroded (ESA 2020).

Stormwater system improvements would improve the conveyance and containment of stormwater and reduce the potential for erosion. Planting native vegetation along the dune reach would reduce erosion. Routine operation and maintenance activities associated with the trail, upgraded stormwater system, and the living shoreline is anticipated to require minimal on-going maintenance. Dune vegetation would require irrigation and maintenance throughout the establishment period. Routine project operations and maintenance activities are not anticipated to result in substantial soil erosion or loss of topsoil. As such, there would be no significant increase in sediment or other potential pollutants discharged into receiving waters. As a result, impacts to water quality associated with operation and maintenance activities would be less-than-significant.

- b) **Less than Significant.** The proposed project would not require dewatering during construction nor require groundwater during operation and maintenance. In addition, the proposed project would only result in the placement of a minimal amount of impervious

- surfaces in the proposed new swale that would replace existing impervious surfaces. Stormwater would also be allowed to infiltrate the ground once collected in the bioretention basin and Pillar Point Marsh. Therefore, groundwater recharge would not be impeded nor would groundwater supplies be depleted and impacts would be less than significant.
- c.i-iv) **No Impact.** The proposed project would substantially alter the existing drainage pattern of the area. The stormwater system improvements would replace the existing stormwater system to improve conveyance and discharge into a new bioretention basin to collect stormwater once it passes through a new earthen ditch and rock-lined concrete channel. Stormwater would then be conveyed from the bioretention basin into the Pillar Point Marsh for natural conveyance and filtration prior to discharging into Pillar Point Harbor, thereby improving the stormwater system compared to current conditions. The stormwater system improvements would not change the amount or location of drainage and would reduce erosion and siltation. As described previously, the proposed project would not result in substantial erosion or siltation on- or off-site post-construction. Further, the proposed project would not result in impeding or redirecting flood flows. Therefore, the proposed project would have no impact.
- d) **No Impact.** The proposed project would restore the trail, upgrade the existing stormwater system, restore the shoreline, and plant native vegetation. Routine operation and maintenance activities associated with the trail, upgraded stormwater system, and living shoreline is anticipated to require minimal on-going maintenance. As such, the proposed project would not use substantial hazardous materials during operation and maintenance and hazardous materials would not be stored on site and would not be exposed to potential flood or tsunami. Therefore, no impact would occur in relation to the potential risk of release of pollutants due to project inundation.

## References

- California Department of Water Resources (DWR), 2020. Sustainable Groundwater Management Act (SGMA) Data Viewer. Available: <https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer>. Accessed June 17, 2020.
- , 2013. California Water Plan Update 2013 – San Francisco Bay Hydrologic Region.
- San Mateo County, 2002. Fitzgerald Marine Reserve Master Plan. May 2002.
- State Water Board, 2020. Final 2014/2016 California Integrated Report (Clean Water Act Section 303(d) List/305(b) Report). Available: [https://www.waterboards.ca.gov/water\\_issues/programs/tmdl/integrated2014\\_2016.shtml](https://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2014_2016.shtml). Accessed June 17, 2020.

### 3.2.11 Land Use and Planning

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>11. LAND USE AND PLANNING</b> — Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Environmental Setting

The proposed project area is zoned Resource Management - Coastal Zone District (RM-CZ) under San Mateo County's zoning regulations (San Mateo County Planning and Building Department [SMC PBD] 2019), and land uses designated in the General Plan are Open Space, Recreation, and Public Recreation (SMC 2013). The Local Coastal Program classifies the proposed project area as Open Space (SMC PBD 2013). The project parcels that encompass the proposed project area are primarily under the land use authority of the San Mateo County Harbor District (SMCHD), including submerged lands within Pillar Point Harbor granted by the State in 1960 (SMCHD 2014). A small portion of the Pillar Point Marsh is under the land use authority of the San Mateo County Recreation and Parks Department and the West Point Avenue access road is under the land use authority of San Mateo County. Adjacent parcels to the west of the proposed project area are owned by the United States Air Force. Below are more detailed discussions of the lack of conflict and therefore lack of a significant environmental impact related to land use plans, policies, and regulations.

- **Pillar Point Harbor Master Plan.** The Pillar Point Harbor Master Plan guides development in the Pillar Point Harbor (SMCHD and State Coastal Conservancy 1991). The project area is located within the West Shoreline area, which includes land managed by the Harbor District, granted to the District under a state tidelands lease. The Master Plan allows the use of the West Shoreline for public access purposes, habitat mitigation, and otherwise preserves the area as a natural area.
- **San Mateo County Zoning Regulations.**
  - The Resource Management-Coastal Zone (RM-CZ) District zoning describes the maximum forms of development and types of use as well as design and review criteria. Development shall mean the construction of any significant structure on land, or in or under water; the discharge or disposal of any significant dredged material or any gaseous, liquid, solid or thermal waste, which the project would qualify as. Permitted uses include public recreation (p. 36.5).
  - Design Review (DR) – only apply to residential development (p. 28.1.1 of the SMC Zoning Regulations).
  - Coastal Development District (CD) – The CD District is an overlay district, combined with the RM-CZ District. The project would be required to obtain a Coastal Development Permit (CDP) to be constructed in this zoning district.

- **California Coastal Act, Local Coastal Program.** Policies under the Local Coastal Program include providing shoreline access, ensuring public safety of shoreline access, providing parking, and protecting fragile resources.

## Discussion

- a) **No Impact.** The proposed project includes construction of a living shoreline to protect and restore the severely eroded segment of the West Trail. The project would be implemented on lands and waters that are currently designated as Open Space and Recreation, and the project is surrounded by more open space and recreation land as well as the open water of the Harbor. The Pillar Point Air Force Station is located on lands designated Open Space to the west of the project site. The proposed project would not result in construction that would change land use in a way that would divide an established community and there would be no impact.
- b) **No Impact.** The proposed project would not result in any changes to land use, and therefore would not conflict with any land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect. The proposed uses of the site for recreation and open space would be consistent with relevant plans and policies, which include San Mateo County Zoning Regulations, the San Mateo County General Plan, the Local Coastal Program, and the Harbor District Master Plan. Therefore, the proposed project would have no impact with respect to plans and policies adopted for the purpose of avoiding or mitigating an environmental effect.

## References

- San Mateo County Harbor District (SMCHD) and the State Coastal Conservancy, 1991. Pillar Point Harbor Master Plan & Urban Waterfront Restoration Plan. Adopted December 4, 1991.
- San Mateo County Harbor District (SMCHD), 2014. San Mateo County Harbor District Response to 2013-2014 San Mateo County Civil Grand Jury Report. August 22, 2014.
- San Mateo County, 2013. San Mateo County General Plan. January.
- San Mateo County Planning and Building Department (SMC PBD), 2019. Zoning Regulations. August.
- , 2013. Local Coastal Program Policies. June.

### 3.2.12 Mineral Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>12. MINERAL RESOURCES</b> — Would the project:				
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"/>

#### Discussion

- a) There are no mines, mineral plants, oil, gas, or geothermal wells located in or adjacent to the proposed project area (Division of Oil, Gas, and Geothermal Resources (DOGGR) 2018; USGS 2013). The proposed project is not located in an area known to contain minerals that would be of value to the region or residents of the state. Therefore, the proposed project would not result in the loss of availability of a known mineral resource that would be of value to the region; no impact would occur.
- b) Locally important mineral resources are not delineated in any local land use plans for the project area, including the San Mateo County General Plan (San Mateo County, 1986). Therefore, the project would not result in the loss of availability of a locally important mineral resource recovery site; no impact would occur.

#### References

- California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR), 2018. DOGGR Online Mapping System. Accessed March 31, 2020.
- San Mateo County, 1986. General Plan November 1986. <http://www.co.sanmateo.ca.us/planning/genplan/>. Accessed March 31, 2020.
- U.S. Geological Survey (USGS), 2013. Active Mines and Mineral Plants in the U.S. 2003, [mrdata.usgs.gov/mineral-resources/active-mines.html](http://mrdata.usgs.gov/mineral-resources/active-mines.html). Accessed March 31, 2020.

### 3.2.13 Noise

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>13. NOISE</b> — Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or 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 checked="" type="checkbox"/>	<input type="checkbox"/>

### Environmental Setting

Sound is mechanical energy transmitted by pressure waves through a medium such as air. Noise can be defined as unwanted sound. Sound is characterized by various parameters that include the rate of oscillation of sound waves (frequency), the speed of propagation, and the pressure level or energy content (amplitude). In particular, the sound pressure level has become the most common descriptor used to characterize the loudness of an ambient sound level. Sound pressure level is measured in decibels (dB), with 0 dB corresponding roughly to the threshold of human hearing, and 120 to 140 dB corresponding to the threshold of pain.

The typical human ear is not equally sensitive to all frequencies of the audible sound spectrum. As a consequence, when assessing potential noise impacts, sound is measured using an electronic filter that de-emphasizes the frequencies in a manner corresponding to the human ear’s decreased sensitivity to low and extremely high frequencies instead focusing on the frequency mid-range. This method of frequency weighting is referred to as A-weighting and is expressed in units of A-weighted decibels (dBA). All sound pressure levels and sound power levels reported below are A-weighted.

An individual’s noise exposure is a measure of the noise experienced by the individual over a period of time. A noise level is a measure of noise at a given instant in time. However, noise levels rarely persist consistently over a long period of time. In fact, noise varies continuously with time with respect to the contributing sound sources of the noise environment. Noise is primarily the product of many distant noise sources, which constitute a relatively stable background noise exposure, with the individual contributors unidentifiable. Background noise levels change throughout a typical day, but do so gradually, corresponding with the addition and subtraction of distant noise sources and atmospheric conditions. The addition of short duration single event noise sources (e.g., aircraft flyovers, motor vehicles, sirens) makes noise constantly variable throughout a day.

These successive additions of sound to the noise environment vary the noise level from instant to instant requiring the measurement of noise exposure over a period of time to legitimately

characterize a noise environment and evaluate noise impacts. This time-varying characteristic of environmental noise is described using statistical noise descriptors. Different noise descriptors discussed in this analysis are summarized below:

- $L_{eq}$ : The equivalent sound level is used to describe noise over a specified period of time, in terms of a single numerical value. The  $L_{eq}$  is the constant sound level which would contain the same acoustic energy as the varying sound level, during the same time period (i.e., the average noise exposure level for the given time period).
- $L_{dn}$ : The energy average of the A-weighted sound levels occurring during a 24-hour period, and which accounts for the greater sensitivity of most people to nighttime noise by weighting noise levels at night (“penalizing” nighttime noises). Noise between 10 p.m. and seven a.m. is weighted (penalized) by adding 10 dBA to take into account the greater annoyance of nighttime noises.
- CNEL: Similar to the  $L_{dn}$ , the Community Noise Equivalent Level (CNEL) adds a 5-dBA “penalty” for the evening hours between 7:00 p.m. and 10:00 p.m. in addition to a 10-dBA penalty between the hours of 10:00 p.m. and 7:00 a.m.
- $L_{max}$ : The instantaneous maximum noise level measured during the measurement period of interest.

Sound level naturally decreases with more distance from the source. This basic attenuation rate is referred to as the *geometric spreading loss*. The basic rate of geometric spreading loss depends on whether a given noise source can be characterized as a point source or a line source. Point sources of noise, including stationary mobile sources such as idling vehicles or on-site construction equipment, attenuate (lessen) at a rate of 6.0 dBA per doubling of distance from the source. In many cases, noise attenuation from a point source increases to 7.5 dBA for each doubling of distance due to ground absorption and reflective wave canceling. These factors are collectively referred to as *excess ground attenuation*. The basic geometric spreading loss rate is used where the ground surface between a noise source and a receiver is reflective, such as parking lots or a smooth body of water. The excess ground attenuation rate (7.5 dBA per doubling of distance) is used where the ground surface is absorptive, such as soft dirt, grass, or scattered bushes and trees.

### ***Sensitive Receptors***

Human response to noise varies considerably from one individual to another. Effects of noise at various levels can include interference with sleep, concentration, and communication, and can cause stress and hearing loss. Given these effects, some land uses are considered more sensitive to ambient noise levels than others. In general, residences, schools, hotels, hospitals, and nursing homes are considered to be the most sensitive to noise. Places such as churches, libraries, and cemeteries, where people tend to pray, study, and/or contemplate are also sensitive to noise. Commercial and industrial uses are considered the least noise-sensitive.

The proposed project area is located approximately 1,100 feet southwest of the town of Princeton-By-The-Sea. The land uses in this town are a mix of light industrial, business, warehouses, and residences. The closest residence is in the western portion of the town, approximately 1,100 feet northeast of the section of the West Trail that would be stabilized during

the proposed project. The closest point of the activities within the sand borrow area for the proposed project would be located approximately 500 feet from this residence.

a) **Less than Significant.**

**Construction**

The proposed project is located along the western edge of Pillar Point Harbor in western San Mateo County. Construction activities associated with the proposed project would increase noise in the vicinity temporarily. Section 4.88.330 of the San Mateo County Municipal Code contains exterior noise standards for receiving land uses such as single and multiple family residences, schools, hospitals, churches, and public library properties. However, noise sources associated with demolition and construction activities are exempt from these standards as long as these activities do not take place between the hours of 6:00 p.m. and 7:00 a.m. weekdays, 5:00 p.m. and 9:00 a.m. on Saturdays, or at any time on Sundays, Thanksgiving, or Christmas (San Mateo County 2020).

Project construction is expected to begin in fall/early winter of 2020, and last for a period of approximately 4 months. Construction activities would take place primarily during daytime hours from 8:00 a.m. and 5:00 p.m., Monday through Friday. However, some night work may be done to allow for complete parking lot and trail closures that may be needed during hauling/import of materials to the site. Night work would minimize public recreational impacts during hauling. Project construction activities and equipment used are described in detail in Section 2, *Project Description*.

Construction would involve use of equipment that generate substantial noise at, and adjacent to the proposed project area. Noise impacts from construction would depend on the type of activity being undertaken and the distance to the receptor location. **Table NOI-1** shows typical noise levels and usage factors for various types of construction equipment that would be used during proposed project construction activities.

**TABLE NOI-1  
TYPICAL NOISE LEVELS FROM CONSTRUCTION EQUIPMENT**

Type of Equipment	L <sub>max</sub> , dBA at 50 feet	Usage Factor (%)
Excavator	85	40
Dump Truck	84	40
Concrete Mixer Truck	85	40
Concrete Pump Truck	82	20
Flat Bed Truck	84	40
Loader	80	40
Pump	77	50
Roller	85	20

SOURCE: FHWA, 2006

The noise levels shown in the table above represent maximum noise levels. However, each piece of off-road equipment in the proposed project area would not operate at its maximum capacity constantly throughout the day. This is captured in the usage factor for each equipment. Over a typical work day, equipment would operate at different locations on the proposed project area and would not always be operating concurrently. For a conservative approximation of construction noise levels, consistent with the evaluation approach suggested by the Federal Transit Administration in its Transit Noise and Vibration Manual, it is assumed for this analysis, that two of the loudest pieces of construction equipment would be operating at the same time and location in the proposed project area closest to the offsite sensitive receptor (FTA 2018).

Simultaneous operation of an excavator and a truck at the sand excavation area would generate a noise level of approximately 62.8 dBA  $L_{eq}$  at the nearest residence 290 feet away. Simultaneous operation of a concrete truck and a roller at the trail construction site would generate a noise level of approximately 49.2 dBA,  $L_{eq}$  at the nearest residence 1,100 feet away. Noise impacts from construction activities tend to be greatest when construction activities occur during the noise-sensitive times of the day (early morning, evening, or nighttime hours), in areas immediately adjacent to sensitive receptors, or when construction noise lasts for extended periods of time. However, as described above, construction associated with the proposed project would take place primarily during the less-noise sensitive daytime hours consistent with the San Mateo County Municipal Code and would take place at a distance of at least 290 feet from the nearest sensitive receptor. The County does not specify receiving noise standards for construction activities but the attenuated noise levels at the receptors would be below the short-term noise thresholds specified by other agencies such as the FTA's daytime threshold of 90 dBA,  $L_{eq}$  as well as the speech interference threshold of 70 dBA,  $L_{eq}$ . Therefore, though noise from activity at the sand excavation area could be audible over existing ambient daytime noise levels, it would not exceed standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Therefore, the impact of proposed project construction activities on the noise environment at the nearest residences would be less than significant.

Trucks transporting materials to and from the proposed project area would incrementally increase noise levels along haul routes. Approximately 2,470 one-way truck trips are expected to take place over the 4-month duration of project construction. This equates to an average of approximately 15 truck loads and 30 one-way truck trips per day. As a general rule, it takes a doubling of traffic to increase noise by 3 dBA, and approximately a tripling of traffic to increase noise by 5 dBA. A 3-dBA change is considered a just-perceivable difference, but typically does not cause an adverse human response; a change in level of at least 5 dBA is required before any adverse human response would be expected. The addition of 30 truck trips over the 9-hour workday would not cause a noticeable increase in traffic noise levels along the haul routes, and impacts would be less than significant.

## Operation

After construction is completed, it is expected that the trail, upgraded stormwater system, and living shoreline would require minimal on-going maintenance, primarily in response to extreme events and long-term trends. These would include using sand from maintenance dredging to replenish beach erosion during extreme events. For the stormwater system, maintenance items are expected to be limited to minor clearing of drains and swales of silt and debris. With the improved trail and upgraded stormwater system, fewer maintenance activities are anticipated to be needed than currently. Therefore, noise levels associated with these maintenance activities would be less than significant.

- b) **Less than Significant.** Temporary sources of groundborne vibration and noise during construction would result from operation of heavy construction equipment and ground disturbance activities. Construction equipment such as pile drivers and vibratory rollers generate highest levels of vibration. Large bulldozers, caisson drilling, and loaded haul trucks can also generate perceptible vibration in the immediate vicinity. Vibration attenuates rapidly from the source; therefore, the potential for vibration impact would be highest when construction takes place in immediate proximity (within 100 feet) to sensitive receptors. As project-related construction activities would not involve any high vibration generating equipment and would take place over 500 feet from sensitive receptors, vibration levels would attenuate to less-than-significant levels at the nearest sensitive receptors.
- c) **Less than Significant.** The proposed project area is located within 2 miles of the Half Moon Bay Airport, but outside the 65 dBA CNEL contours for the airport (C/CAG of San Mateo County 2014). Therefore, the proposed project would not expose workers at the Project site to excessive noise levels from aircraft operations.

## References

- City/County Association of Governments (C/CAG) of San Mateo County, 2014. Airport Land Use Compatibility Plan for the Environs of Half Moon Bay Airport, September 2014. Available: <https://ccag.ca.gov/wp-content/uploads/2014/10/HAF-ALUCP-Final.pdf>.
- Federal Highway Administration (FHWA), 2006. Construction Noise Handbook – Final Report, Table 9.1 – RCNM Default Noise Emission Reference Levels and Usage Factors, August 2006. Available: [https://www.fhwa.dot.gov/environment/noise/construction\\_noise/handbook/handbook09.cfm](https://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/handbook09.cfm).
- Federal Transit Administration (FTA), 2018. Transit Noise and Vibration Impact Assessment Manual, September 2018. Available: <https://www.transit.dot.gov/regulations-and-guidance/environmental-programs/noise-and-vibration>.
- San Mateo County, San Mateo County Code of Ordinances, 2020. Title 4 – Sanitation and Health, Chapter 4.88 – Noise Control, last updated on January 31, 2020. Available: [https://library.municode.com/ca/san\\_mateo\\_county/codes/code\\_of\\_ordinances?nodeId=TIT4SAHE\\_CH4.88NOCO](https://library.municode.com/ca/san_mateo_county/codes/code_of_ordinances?nodeId=TIT4SAHE_CH4.88NOCO).

### 3.2.14 Population and Housing

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>14. POPULATION AND HOUSING —</b> Would the project:				
a) Induce substantial unplanned 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 people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### Discussion

- a) **No Impact.** The proposed project would not build new homes or businesses in the project area. Though stormwater infrastructure and pedestrian trails would be repaired, the level of service provided would not change such that any population growth would occur directly or indirectly due to the project being implemented. Therefore, the project would have no impact.
  
- b) **No Impact.** No people or housing would be displaced as part of the project and there would be no impact.

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### 3.2.15 Public Services

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>15. PUBLIC SERVICES —</b>				
a) 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 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 following 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 type="checkbox"/>	<input checked="" type="checkbox"/>

### Discussion

a.i) **Less than Significant.** Coastside Fire Protection District (Coastside FPD) provides fire protection and general rescue services for the project area and vicinity, excluding the Pillar Point Air Force Station, which is served by the County (Coastside FPD 2008). In total, Coastside FPD operates three paid fire stations and one Headquarters. The nearest fire station is Fire Station 41, which is located at 531 Obispo Road, El Granada, CA 94018. In the event of a fire emergency in the proposed project area, Fire Station 40 and Station 41 would respond.

Because construction activities would be short-term and would involve a workforce average of 10 construction workers, project construction would not significantly increase demand for fire protection services throughout the project vicinity. Similarly, the proposed project would not change long-term use of the project area such that increased risk of fire would result. For these reasons, the project would not be expected to substantially affect Coastside FPD ability to maintain service ratios, response times, other performance objectives, such that new or physically altered facilities would be required. For these reasons, the project’s impact with respect to the provision of fire service would be less than significant.

a.ii) **Less than Significant.** The Coastside Patrol Bureau of the San Mateo County Sheriff’s Office provides law enforcement services for over 60% of San Mateo County, including the project area. The nearest San Mateo County Sheriff’s office is the Moss Beach Substation, 500 California Avenue, Moss Beach, CA 94038, located approximately 3 miles from the proposed project area (San Mateo County Sherriff’s Office 2018).

For the reasons provided in response to the previous item, the proposed project would not be expected to substantially affect the San Mateo County Sheriff’s Office’s ability to

- maintain service ratios, response times, or other performance objectives such that new or physically altered facilities would be required. Therefore, impacts would be less than significant.
- a.iii) **No Impact.** The proposed project would result in a small temporary increase of construction workers in the project area sourced from existing labor pools in the region that would not be expected to result in family relocations such that area school resources or facilities would be burdened. Project operations would not require hiring new staff or require new or modification of existing school facilities. For these reasons, the project would have no impact.
- a.iv) **Less than Significant.** Other than the proposed project area, the nearest parks or recreational areas include the Fitzgerald Marine Reserve, Pillar Point Bluff, Pillar Point Harbor Beach, and Princeton by the Sea Park. For the reasons described in the previous responses, the proposed project would not result in increased population such that there would be additional demand for parks facilities during or after construction. While the trail would remain open during daylight hours during construction, some would-be trail users may be diverted to other trails in the area. Nevertheless, given the short construction duration and the sufficient amount of parks in the area, any such displacement would not result in substantial impacts on the receiving parks such that there would be need for increased or expanded parks facilities. For these reasons, the proposed project would have a less-than-significant impact.
- a.v) **Less than Significant.** The proposed project would not result in new permanent employees and, therefore, would not increase the use of other public facilities such as libraries or hospitals. Therefore, the proposed project would result in less than significant impacts.

## References

- Coastside Fire Protection District (Coastside FPD), 2008. Coastside Fire Protection District – Response Area. <https://www.coastsidefire.org/response-area>. Accessed March 31, 2020.
- San Mateo County Sheriff's Office, 2018. Coastside Patrol Bureau. <https://www.smcsheriff.com/patrol-services/coastside-patrol-bureau>. Accessed March 31, 2020.

### 3.2.16 Recreation

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>16. RECREATION —</b>				
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 type="checkbox"/>	<input checked="" type="checkbox"/>

### Environmental Setting

The proposed project is located south of the Fitzgerald Marine Reserve and the 2,300-foot-long north-south Pillar Point West Trail is part of the local trail system managed by the County including the Pillar Point Bluffs and the California Coastal Trail. The project area is adjacent to the Pillar Point Marsh.

### Discussion

- a) **Less than Significant.** The proposed project would restore and stabilize the trail to maintain access for recreationists, and upgrade the existing stormwater system to prevent future erosion of the shoreline and trail compared to the effects of the existing stormwater discharge. During construction, the intention is to keep the trail open to the public during daylight hours and have any trail closures occur at night. However, during portions of the construction work window, the section of the trail may be closed to public access and site signage would be posted to inform the public about detours during the trail closures. West Point Avenue, the access point for the trail and parking lot, would be open during construction for the storage of equipment, materials, and the hauling of materials into the project area. Because construction would be temporary and the trail would remain open for the majority of the time, it is not expected to result in deterioration of existing neighborhood parks or facilities because recreationalists could continue to use the West Trail for access to parking for the other trails north of the proposed project area. Therefore, the proposed project would result in less than significant impacts.
- b) **No Impact.** The proposed project would restore and stabilize the existing trail to maintain access for recreationists. The proposed project would not construct new or expand the existing recreational facilities in the area and there would be no impact.

## 3.2.17 Transportation

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>17. TRANSPORTATION —</b> Would the project:				
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Environmental Setting

### Highways

The proposed project is located approximately 0.75 miles from State Route 1 (SR-1), 4 miles from SR-92 and 7.5 miles from Interstate 280 (I-280).

### County Roadways

As described previously, the proposed project is located at Pillar Point Harbor in unincorporated San Mateo County. The roadways in the vicinity of the proposed project area are primarily classified as local streets with two lanes. Access from SR-1 to the proposed project area is via Capistrano Road to Prospect Way, and then by several optional avenues that run through Princeton-by-the-Sea. West Point Avenue provides access to the proposed project area and continues past the project site to the Pillar Point Air Force Station and the end of the Pillar Point peninsula.

### Airports

The nearest airport to the project site is the Half Moon Bay Airport, approximately 0.30 miles northeast.

## Discussion

- a) **Less than Significant.** Importing materials would require hauling materials from a quarry within a 100-mile radius of the proposed project area. Stockpiled sand would be sourced from the nearby Half Moon Bay Airport. The remaining amount of sand would be excavated from within the Harbor. Excavation and grading would require hauling materials to a local landfill. The staging area would be within a portion of the existing parking lot off West Point Avenue. Haul routes would not require alterations to existing circulation systems. Traffic along haul routes to the proposed project area would increase due to the haul trucks and work vehicles, but would be consistent with normal construction traffic patterns and not obstruct or otherwise conflict with local traffic regulations. Therefore, the proposed project would be consistent with existing traffic and circulation plans, ordinances, and policies, and impacts would be less than significant.

- b) **Less than Significant.** Section 15064.3 of the CEQA Guidelines establishes specific considerations for evaluating a project's transportation impacts. The CEQA Guidelines identify vehicle miles traveled (VMT), which is the amount and distance of automobile travel attributable to a project, as the most appropriate measure of transportation impacts. Other relevant considerations may include the effects of the project on transit and non-motorized travel. Construction of the proposed project would last for approximately four months and use the existing regional labor pool to supply construction labor. Construction traffic is not expected to affect local transit routes in the areas between SR-1 and the proposed project area. Operation of the proposed project would require infrequent maintenance trips to and from the proposed project area and would not add a substantial amount of VMT. Therefore, the proposed project would result in a less than significant impact.
- c,d) **Less than Significant.** Importation of cement, cobble, sand, and other construction materials from offsite would be transported using highway approved trucks and trailers. Haul routes would use roadways with little to no sharp curves or uncontrolled intersections. Although there could be a lane closure near the entrance to the Pillar Point West Trail parking lot for short durations when large construction equipment would be brought in or removed from the proposed project area, emergency access along the West Point Avenue would be maintained at all times. Therefore, there would be no substantial increase in hazards due to a design feature or incompatible uses, and no restriction to emergency access and this impact would be less than significant.
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### 3.2.18 Tribal Cultural Resources

Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>18. Tribal Cultural Resources —</b>				
a) 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:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) 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	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) 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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Environmental Setting

As described in the Cultural Resources section, Issue 5 above, ESA staff completed a records search of the project area and a 0.5-mile radius around the project area at the Northwest Information Center (NWIC) of the California Historical Resources Information System on March 17, 2020 (File No. 19-1646) to determine whether known cultural resources have been recorded within or adjacent to the project area. Base maps indicate that there are no previously recorded archaeological resources in the project area that could be considered tribal cultural resources. While there are at least four records of indigenous cultural resources in the general vicinity of the project area, including areas of shell midden and other evidence of use and occupation, these resources are not in areas that will be disturbed by project components (NWIC 2020).

In order to participate in tribal consultation as outlined in PRC Section 21080.3.1, a tribe must request, in writing, to be notified by lead agencies through formal notification of proposed projects in the geographic area with which the tribe is traditionally and culturally affiliated (PRC Section 21080.3.1(b)). There are no tribes that have requested consultation with the Harbor District.

ESA completed a surface survey of the project area on May 17, 2020. No cultural materials or other evidence of past human use or occupation, such as shell, midden soil, or lithic artifacts, was identified during the survey that could potentially be considered as tribal cultural resources.

### Discussion

a.i/ii) **Less than Significant with Mitigation.** Tribal cultural resources are: 1) sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California

Native American tribe that are listed, or determined to be eligible for listing in the California Register of Historical Resources (California Register), or local register of historical resources, as defined in PRC Section 5020.1(k); or, 2) a resource determined by the lead CEQA agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC Section 5024.1(c). For a cultural landscape to be considered a tribal cultural resource, it must be geographically defined in terms of the size and scope of the landscape (PRC Section 21074[b]). A historical resource, as defined in PRC Section 21084.1, unique archaeological resource, as defined in PRC Section 21083.2(g), or non-unique archaeological resource, as defined in PRC Section 21083.2(h), may also be a tribal cultural resource.

Through background research at the Northwest Information Center of the California Historical Resources Information System and a survey, no known archaeological resources that could be considered tribal cultural resources, listed or determined eligible for listing in the California Register, or included in a local register of historical resources as defined in PRC Section 5020.1(k), pursuant to PRC Section 21074(a)(1), would be impacted by the proposed project.

In addition, the San Mateo County Harbor District determined that no tribal cultural resources pursuant to criteria set forth in PRC Section 5024.1(c) could potentially be affected by the proposed project.

If any previously unrecorded archaeological resource were identified during ground-disturbing construction activities and were found to qualify as a tribal cultural resource pursuant to PRC Section 21074(a)(1) (determined to be eligible for listing in the California Register or in a local register of historical resources), any impacts to the resource resulting from the proposed project could be potentially significant. Any such potential significant impacts would be reduced to a less-than-significant level by implementing **Mitigation Measure CUL-1**. This mitigation measure would ensure that work halt in the vicinity of a find until a qualified archaeologist can make an assessment and provide additional recommendations if necessary, including contacting Native American tribes (refer to Section 2.5, Cultural Resources).

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### 3.2.19 Utilities and Service Systems

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>19. UTILITIES AND SERVICE SYSTEMS —</b> Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) 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"/>
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Environmental Setting

The proposed project area is not served by water, wastewater, or other local utility connections. The West Trail parking lot has portable toilets to serve recreational visitors. There are trash receptacles located at the end of the Pillar Point West Trail.

### Discussion

- a) **Less than Significant with Mitigation.** The proposed project would demolish the existing stormwater collection swale and pipeline connection to the existing outfall and construct a new stormwater system to convey stormwater through a bioretention basin before discharging into the Pillar Point Marsh. As discussed in other resource sections of this document, the construction of the stormwater system could result in adverse environmental effects. The specific types of effects and mitigation measures identified to minimize or avoid those impacts are discussed in the subsections of this document corresponding to the affected topic area (e.g., Section 2.4, Biological Resources). Please refer to those sections for specific discussions of potential physical adverse effects on the environment. To reflect the conclusions of those sections, impacts would be at most less than significant with mitigation.
- b) **Less than Significant.** The proposed project would not require water connections to local utilities. Project construction would require water for dust control that would be acquired by the construction contractor(s). Project operations would not result in

- increased water demands because there is no connection to local water utilities proposed for the project. Water used during the establishment period for the vegetation plantings would be hauled in for use to irrigate the plantings as needed. For these reasons, the proposed project would have sufficient water supplies available to serve the project and the impact would be less than significant.
- c) **No Impact.** The proposed project is not served by a wastewater treatment provider and there would be no impact on wastewater demand.
- d,e) **Less than Significant.** To the extent practicable, the project would use excavated soil on site. However, up to an estimated 20 cubic yards of total debris and materials could require off-site disposal at the Corinda Los Trancos Landfill (formerly Ox Mountain), located at 12310 San Mateo Rd (Hwy 92), Half Moon Bay, CA 94019. The landfill has a remaining capacity of 22,180,000 cubic yards as of December 31, 2015 (CalRecycle 2018), the latest date at which remaining capacity estimates were available. The addition of 20 cubic yards would be negligible, and not contribute substantially to landfill capacity reduction. The proposed project would also comply with all applicable local, state, and federal regulations concerning solid waste, including the County's Construction and Demolition (C&D) Debris Ordinance (No. 04099). Therefore, the impact would be less than significant.

## References

CalRecycle, 2018. Facility/Site Summary Details: Corinda Los Trancos Landfill (Ox Mtn) (41-AA-0002). Available: <https://www2.calrecycle.ca.gov/SWFacilities/Directory/41-AA-0002/Detail>. Accessed April 1, 2020.

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### 3.2.20 Wildfire

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>20. WILDFIRE</b> — If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Environmental Setting

The proposed project is located within a Local Responsibility Area (LRA) where San Mateo County is responsible for fire suppression for the Project area. The California Department of Forestry and Fire Protection (CAL FIRE) has determined that the proposed project area is located in a Non-Very High Fire Hazard Severity Zone (Non-VHFHSZ) (CAL FIRE 2008).

a-d) **No Impact.** The proposed project area is not located in or adjacent to a LRA that is classified as VHFHSZ. Therefore, the project would have no impact related to wildfire.

### References

California Department of Forestry and Fire Protection (CAL FIRE), 2008. Fire Hazard Severity Zones in SRA, San Mateo County. November 2008.

### 3.2.21 Mandatory Findings of Significance

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>19. MANDATORY FINDINGS OF SIGNIFICANCE —</b>				
a) Does the project have the potential to substantially 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, substantially 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 checked="" type="checkbox"/>	<input 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"/>

### Discussion

- a) **Less than Significant with Mitigation.** The proposed project would be temporary in nature and involve construction activities to protect and restore the severely eroded segment of the Pillar Point Harbor’s (PPH) West Trail. The proposed project would also address drainage issues in the vicinity of the project by constructing a new stormwater system that would divert stormwater through a more natural system and eliminate the direct discharge into the harbor. The proposed project would not: substantially 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 or restrict the range of rare or endangered plants or animals; or, eliminate important examples of the major periods of California history or prehistory. As discussed in the analyses provided in this Initial Study, adherence to federal, State, and local regulations, and proposed mitigation measures AIR-1, BIO-1a through BIO-1i, CUL-1, and CUL-2 would reduce all potentially significant impacts to air quality, biological, cultural, and tribal cultural resources, as well as to other issue areas analyzed, to less-than-significant levels with mitigation incorporated.
  
- b) **Less than Significant with Mitigation.** As noted throughout this document, the potential impacts of the proposed project are largely restricted to temporary and short-term construction-related impacts and are site-specific. As noted above, all of the potential direct and indirect impacts of the proposed project were determined to be fully avoided or reduced to less than significant with incorporation of mitigation measures AIR-1, BIO-1a through BIO-1i, CUL-1, and CUL-2. As a result, the potential impacts of the proposed

project are not considered cumulatively considerable, and impacts would be less than significant with mitigation incorporated.

- c) **Less than Significant with Mitigation.** The potential impacts of the proposed project are temporary, short-term, and site-specific. These impacts are all localized to the proposed project area and include limited adverse effects on air quality, biological resources, cultural resources, greenhouse gas emissions, and water quality. However, the proposed project would not include any activities or uses that may cause substantial adverse effects on human beings, either directly or indirectly, or on the physical environment. The proposed project has been designed to meet federal and State engineering and design standards for shoreline restoration and stormwater conveyance projects and would adhere to applicable local codes and regulations. Compliance with applicable local, State, and federal standards, as well as incorporation of project mitigation measures, would result in less-than-significant impacts with mitigation incorporated.
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