

# ***SOUTH BEACH RESTORATION AND SHORELINE ACCESS ENHANCEMENT PROJECT***

## **INITIAL STUDY**

### **Prepared for:**

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### **Prepared by:**



October 2024

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- Appendix A – Air Quality/Greenhouse Gas Files
- Appendix B – Biological Resources Report
- Appendix C – Cultural Survey Report

## INITIAL STUDY

**1. Project title:**

South Beach Restoration and Shoreline Access Enhancement Project

**2. Lead agency name and address:**

City of Avalon  
Planning Department  
410 Avalon Canyon Road  
Avalon, CA 90704

**3. Contact person and phone number:**

Bob Greenlaw, P.E.  
CIP Director  
City of Avalon Public Works Department  
(310) 510-0220 ext. 129

**4. Project location:**

The proposed project as described herein is comprised of multiple components that would construct groin wall improvements to avoid future erosion of South Beach, repair/enhance existing shoreline access and replace beach sand. The project work would be limited to the segment of South Beach located between Green Pleasure Pier to the north and the existing revetment along Pebbly Beach Road to the south, a distance of approximately 300 linear feet. (see Figure 1).

**5. Project sponsor's name and address:**

Mr. Bob Greenlaw, P.E.  
CIP Director  
410 Avalon Canyon Road  
Avalon, CA 90704

**6. General Plan designation:**

Resort Recreational

**7. Zoning:**

Resort Recreational

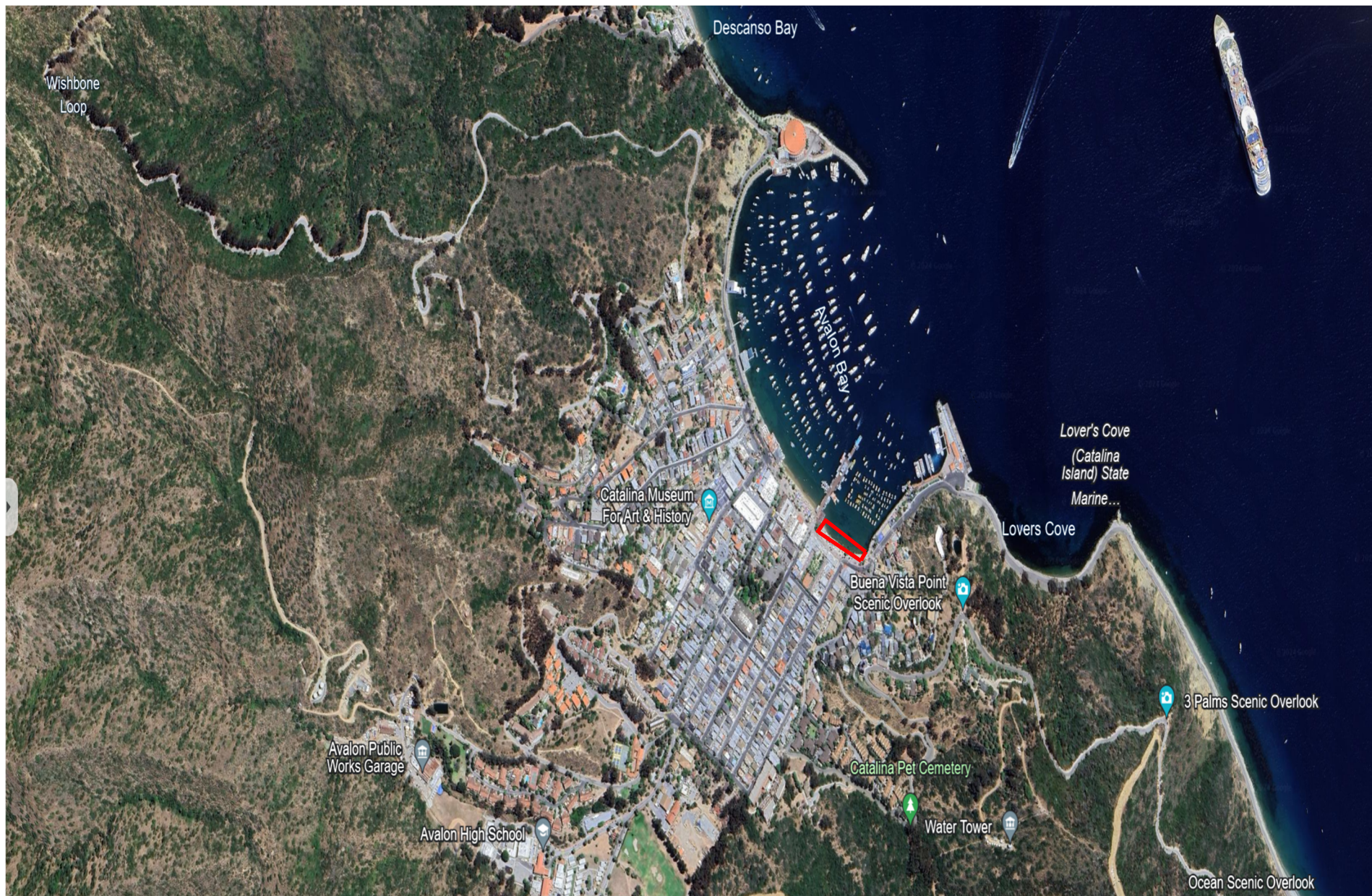


**Figure 1 - Vicinity Map**

- Project Site

## 8. Description of project:

**Background.** The South Beach Restoration and Shoreline Access Enhancement Project is being proposed by the City of Avalon to address the erosive effects of currents within Avalon Harbor. Erosion of the beach sand has been occurring for a period of years and is being caused primarily by failure of the existing groin wall/wingwall which extended from the seawall adjacent to the launch ramp into Avalon Harbor approximately 40 feet. The groin wall/wingwall protected South Beach from currents generated by passenger ferry boats docked at the mole ferry terminal approximately 650 feet to the east, and by the impact of higher-horsepower ferries now operating at the landing within the harbor. Over time, currents generated by propeller/jet wash, which is directed westward to stabilize the boats when docked, has pushed the beach sand into Avalon Harbor. This has exposed the subsurface rock and impacted use of South Beach for recreational purposes. The intent of the project is to replace the groin wall/wingwall to protect the beach from propeller/jet wash, restore the seawall, launch ramp and beach access stairway surfaces and replace the beach sand with approximately 8,000 cubic yards of imported sand.

The proposed project as described herein is comprised of the following four primary components and shown in Figure 2.

**Groin Wall Replacement.** The remnants of the existing groin wall will be removed and a new groin wall will be constructed in its place at the same elevation. The groin wall would be approximately 18 inches wide and may include a 4-ft-wide pedestrian walkway on top, protected by handrails. The proposed wall would be constructed of reinforced concrete, like the existing wall, and extend approximately 60 feet into Avalon Harbor east of and perpendicular to the existing seawall. Construction would require placement of sheet piles into the bedrock, removal of the sea water, installation of rebar or other reinforcement material and placement of the concrete. Construction of the groin wall would require approximately 2 months.

**Seawall Restoration.** The proposed project would restore approximately 100 linear feet of the existing seawall which forms a barrier between the upland promenade east of Crescent Avenue and the Pacific Ocean. The seawall is constructed of reinforced concrete of which approximately five feet is exposed above the water line. A safety railing is located along the length of seawall at the elevation of the existing promenade. The work would restore the majority of the eastern surface of the wall by repairing cracks and other defects as well as refinishing the surface. Approximately 80 feet would be removed and replaced with a new section and access stairs. Ocean access would be maintained during this phase of the project.

**Launch Ramp and Stairway Restoration.** An existing launch ramp for small watercraft (i.e., kayaks and paddle boards) is located at the south end of the beach adjacent to and north of the groin wall. A stairway down to the beach is located near the north end of South Beach. Both of these structures would be repaired/restored to improve the surface and overall safety and function. A would be maintained to the extent feasible, during construction.

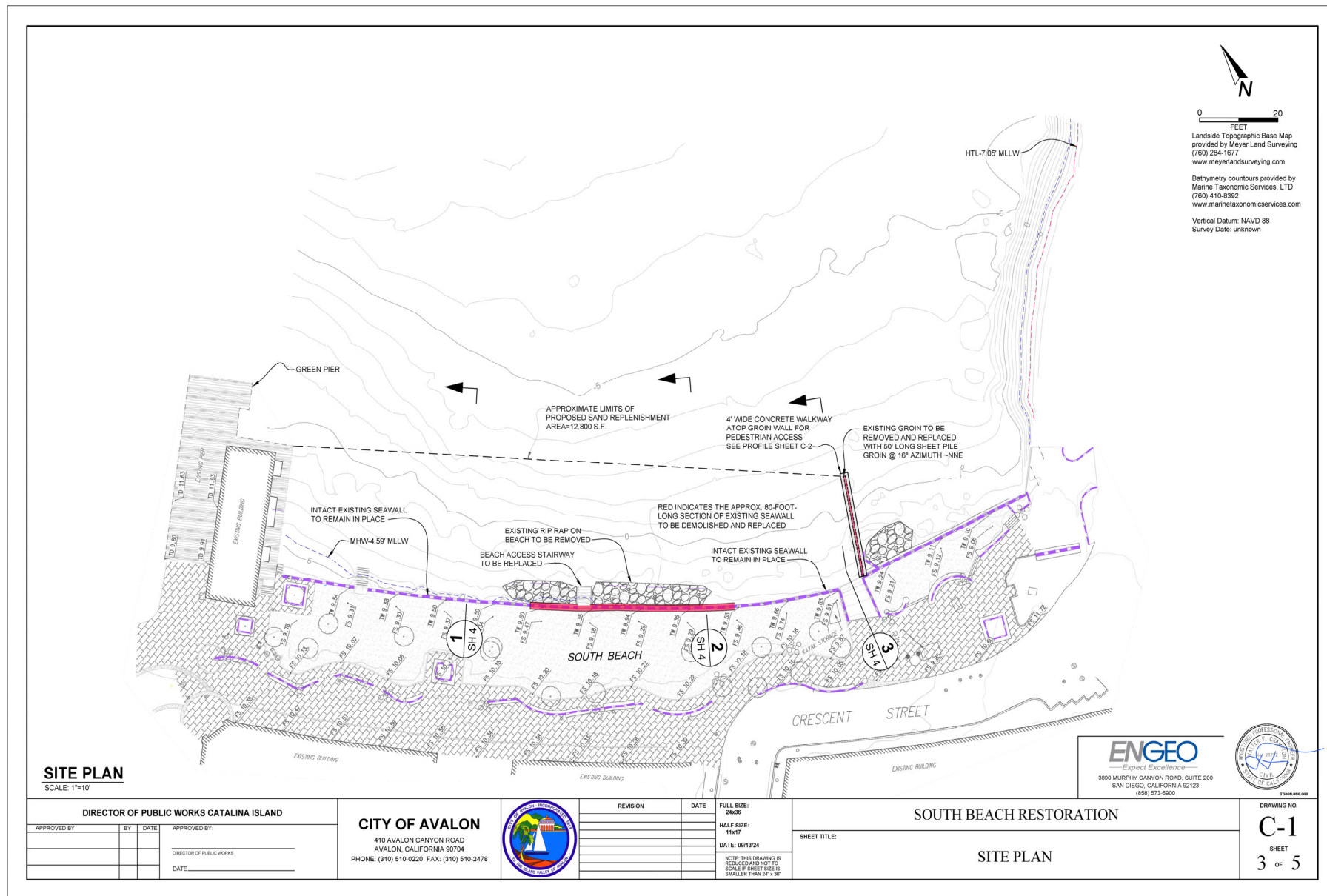


Figure 2— Site Plan

**Replace Beach Sand.** The project would require the placement of approximately 6,000 cubic yards of sand to restore the beach surface. The sand would be transported by barge from the mainland. The preference is to bring the barge directly to South Beach and offload the sand. As an alternative, the sand would be transported to the Avalon Freight Terminal and transported via truck to the beach a distance of approximately one mile, where it would be dumped from the shoreline access point and distributed around the beach using heavy equipment. The details regarding these options and potential effects are addressed herein. Construction staging areas used for equipment and materials storage are proposed would likely occur at both the project site and at the existing Avalon Freight Services terminal located at 40 Pebbly Beach Road. The entire area disturbed by the improvements would be approximately one acre. Construction of the proposed project is expected to begin in early 2025 and be completed by mid-2025.

The Initial Study will be the primary document used to support approval of a Mitigated Negative Declaration (MND). The MND will demonstrate compliance with the California Environmental Quality Act (CEQA) required by the City of Avalon as part of the discretionary review process for the proposed project.

## **9. Surrounding Land Uses and Setting**

South Beach is located east of Crescent Avenue northeast of the intersection with Pebbly Beach Road. It is generally bordered by Pebbly Beach Road to the south, Green Pleasure Pier to the north, Avalon Harbor to the east and the promenade located along the Avalon waterfront. Land use in the area is urban to the west, harbor to the east and waterfront related to the north and south.

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

Coastal Development Permit – City of Avalon

Section 404 Permit – U.S. Army Corps of Engineers

Section 401 Water Quality Certification – Los Angeles Regional Water Quality Control Board

Section 1602 Streambed Alteration Agreement – California Department of Fish and Wildlife

## **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 or is there a plan for consultation?**

A Phase I Cultural Resources Memorandum was prepared for the proposed project. As part of the process, a Sacred Lands File (SLF) search was conducted by the Native American Heritage Commission. Tribal representatives identified as part of the SLF search were noticed during preparation of the Phase I Cultural Resources Report. The Gabrieleno Tongva Indians of California, Rincon Band of Luiseno Indians and Santa Ynez Band of Chumash Indians responded. The Gabrieleno Tongva Indians of California are “highly concerned with respect to tribal cultural resources that are there” and requested monitoring for all ground disturbances. Both the Rincon Band of Luiseno Indians and Santa Ynez Band of Chumash Indians requested

formal government to government consultation. The City of Avalon will conduct Tribal consultation required per AB 52 as part of the Initial Study review process.

## ENVIRONMENTAL FACTORS AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is “Potentially Significant” or “Potentially Significant Unless Mitigation Incorporated” as indicated by the checklist on the following pages.

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

**DETERMINATION:**

On the basis of this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the 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 potential 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.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name

## ENVIRONMENTAL CHECKLIST

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

a) Implementation of the project would occur along South Beach and seaward a maximum of 40 feet from the existing seawall. No additional right of way or area would be acquired to construct the project. The site is within a currently disturbed area. Views of the site are of the existing seawall, Avalon Harbor and the mole ferry terminal to the east, Pebbly Beach Road and a steep hillside to the south, the City of Avalon to the west and waterfront uses to the north. The views are not designated scenic; however, the Pacific Ocean is considered a unique and scenic visual feature. The proposed improvements are intended to improve the overall appearance of the area.

The project would be designed per City of Avalon design standards and intended to improve the stability and safety of the existing seawall and access ramps/stairs while restoring the

recreational function of South Beach and access to the ocean. Views of the site would improve as would public accessibility. No designated scenic views or resources would be adversely affected. Thus, impacts to scenic vistas would be **less than significant**.

b) There are two designated state scenic highways in Los Angeles County as defined by the California Department of Transportation. The nearest state-designated scenic highway to the study area is the 2.5-mile Topanga Canyon State Scenic Highway segment (State Route 27) near downtown Los Angeles. The site is currently developed with street and pedestrian infrastructure improvements. There are no trees or historic structures. Views of Avalon Harbor are prominent from the site. Views would be modified with replacement of the groin wall. There are no other visually prominent features on the site. **No impact** to a designated state scenic highway would occur as a result of project implementation.

c) Implementation of the project would occur within an existing disturbed area. No vegetation would have to be removed to accommodate the improvements. The project area is currently disturbed by exiting pedestrian and beach access improvements. Implementation of the project would improve public access to the shoreline and opportunities to access the Pacific Ocean. Views of the site would change; however, the improvements would be designed to facilitate safety, access and enjoyment of South Beach. Impacts would be **less than significant**.

d) There are existing street and building lights adjacent to and surrounding the project area. Temporary outdoor lighting may be visible during operation of construction equipment; however, construction is expected to occur primarily during daylight hours. No lighting improvements are proposed as part of the project. **No impact** related to light and glare would occur.

|                                                                                                                                                                                                                                             | Potentially<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact | No<br>Impact                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------|------------------------------------|-------------------------------------|
| <b>II. <u>AGRICULTURE AND FOREST RESOURCES</u> -- Would the project:</b>                                                                                                                                                                    |                                      |                                                                    |                                    |                                     |
| a) Convert Prime Farmland, Unique Farmland, 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"/> |

|                                                                                                                                                                                                                                                                                                          | Potentially<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact | No<br>Impact                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------|------------------------------------|-------------------------------------|
| <b>II. <u>AGRICULTURE AND FOREST RESOURCES</u> -- Would the project:</b>                                                                                                                                                                                                                                 |                                      |                                                                    |                                    |                                     |
| c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?               | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input type="checkbox"/>           | <input checked="" type="checkbox"/> |
| d) Result in the loss of forest land or conversion of forest land to non-forest use?                                                                                                                                                                                                                     | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input type="checkbox"/>           | <input checked="" type="checkbox"/> |
| e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?                                                                                                                                            | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input type="checkbox"/>           | <input checked="" type="checkbox"/> |
| a) The project site is a public street right of way and adjacent b4each area. No Prime Farmland, Unique Farmland, or Farmland of Statewide Importance occurs on the project site and these resources would not be affected by project implementation. <b>No impact</b> would occur under this threshold. |                                      |                                                                    |                                    |                                     |
| b) The project site is not enrolled in a Williamson Act contract. The proposed project would not conflict with any zoning designations designed to promote agriculture. <b>No impact</b> would occur under this threshold.                                                                               |                                      |                                                                    |                                    |                                     |
| c-e) Neither the site nor surrounding areas are used for timber production or commercial agriculture. The project would not conflict with any zoning designations designed to preserve timber or agricultural resources. <b>No impact</b> would occur under this threshold.                              |                                      |                                                                    |                                    |                                     |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Potentially<br>Significant<br>Impact                                                                                            | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated                                                              | Less than<br>Significant<br>Impact                                                                                                                               | No<br>Impact                                                                                                                               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| <p>III. <b>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:</p> <p>a) Conflict with or obstruct implementation of the applicable air quality plan?</p> <p>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?</p> <p>c) Expose sensitive receptors to substantial pollutant concentrations?</p> <p>d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?</p> | <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> | <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> | <p><input type="checkbox"/></p> <p><input checked="" type="checkbox"/></p> <p><input checked="" type="checkbox"/></p> <p><input checked="" type="checkbox"/></p> | <p><input checked="" type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> |

The material presented herein is based on the California Emission Estimator Model 2022.1 calculations prepared by Birdseye Planning Group, October 2024 and provided as Appendix A.

The project site is located within the South Coast Air Basin, which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). A significant adverse air quality impact may occur when a project individually or cumulatively interferes with progress toward the attainment of the ozone standard by generating emissions that equal or exceed the established long-term quantitative thresholds for pollutants or exceed a state or federal ambient air quality standard for any criteria pollutant. Table 1 shows the significance thresholds that have been recommended by the SCAQMD for projects within the South Coast Air Basin.

**Table 1**  
**SCAQMD Air Quality Significance Thresholds**

| <b>Mass Daily Thresholds</b>                |                     |                  |
|---------------------------------------------|---------------------|------------------|
| <b>Pollutant</b>                            | <b>Construction</b> | <b>Operation</b> |
| Nitrogen Oxides (NO <sub>x</sub> )          | 100 lbs/day         | 55 lbs/day       |
| Reactive Organic Gases (ROG)                | 75 lbs/day          | 55 lbs/day       |
| Particulate Matter 10 (PM <sub>10</sub> )   | 150 lbs/day         | 150 lbs/day      |
| Particulate Matter 2.5 (PM <sub>2.5</sub> ) | 55 lbs/day          | 55 lbs/day       |
| SO <sub>x</sub>                             | No standard         | 150 lbs/day      |
| CO                                          | 550 lbs/day         | 550 lbs/day      |

<sup>a</sup> Ambient air quality thresholds for criteria pollutants based on SCAQMD Rule 1303, unless otherwise stated.

<sup>b</sup> Ambient air quality threshold based on SCAQMD Rule 403.

**Localized Significance Thresholds.** In addition to the thresholds described above, the SCAQMD has developed Localized Significance Thresholds (LSTs). LSTs were devised in response to concern regarding exposure of individuals to criteria pollutants in local communities. LSTs represent the maximum emissions from a project that will not cause or contribute to an air quality exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest sensitive receptor, taking into consideration ambient concentrations in each source receptor area (SRA), project size and distance to the sensitive receptor. However, LSTs only apply to emissions within a fixed stationary location, including idling emissions during both project construction and operation. LSTs have been developed for NO<sub>x</sub>, CO, PM<sub>10</sub> and PM<sub>2.5</sub>. LSTs are not applicable to mobile sources such as cars on a roadway (Final Localized Significance Threshold Methodology, SCAQMD, June 2003). As such, LSTs for operational emissions do not apply to the proposed project as all emissions would be associated with equipment used to implement the proposed improvements. LSTs have been developed for emissions within areas up to five acres in size, with air pollutant modeling recommended for activity within larger areas.

Regional construction emissions associated with implementing the proposed project were calculated using the CalEEMod 2022.1 software. Construction emissions modeling for construction is based on the overall scope of the proposed development and construction phasing. Construction is expected to begin early 2025 and be completed mid-2025.

a) A project may be inconsistent with the AQMP if it would generate population, housing, or employment growth exceeding forecasts used in the development of the AQMP. The 2022 AQMP, the most recent AQMP adopted by the SCAQMD, incorporates local city General Plans and the Southern California Association of Government's (SCAG) Regional Transportation Plan socioeconomic forecast projections of regional population, housing and employment growth.

The proposed project involves the construction of safety and access improvements along South Beach. All pollutants would be limited to the construction phase. The project would not create housing nor increase housing demand to the extent that new housing would be needed. Further, the project would not increase the number of vehicles operating in the City of Avalon or otherwise increase the vehicle miles traveled. Thus, the project would be consistent with the AQMP. **No impact** would occur under this threshold.

b) Project construction would generate temporary air pollutant emissions. Both construction emissions and vehicle emissions associated with operation of the facility are quantified herein. The CalEEMod files are provided in Appendix A.

#### Construction Emissions

Construction vehicles and equipment operating on the site as well as grading/site preparation activities have the potential to generate fugitive dust (PM<sub>10</sub> and PM<sub>2.5</sub>) through the exposure of soil to wind erosion and dust entrainment. Project related construction activities would also emit ozone precursors (oxides of nitrogen (NO<sub>x</sub>), reactive organic gases (ROG)) as well as carbon monoxide (CO). The majority of construction-related emissions would result from site preparation and the use of heavy-duty construction equipment.

The project would be required to comply with SCAQMD Rule 403, which identifies measures to reduce fugitive dust and is required to be implemented at all construction sites located within the South Coast Air Basin. Rule 403 (2) was included in CalEEMod for site preparation and grading phases of construction. Specifically, modeling assumed the site would be watered twice daily, if needed for dust control.

1. **Minimization of Disturbance.** Construction contractors shall minimize the area disturbed by clearing, grading, earth moving, or excavation operations to prevent excessive amounts of dust.
2. **Soil Treatment.** Construction contractors shall treat all graded and excavated material, exposed soil areas, and active portions of the construction site, including unpaved on-site roadways to minimize fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally safe soil stabilization materials, and/or roll compaction as appropriate. Watering shall be done as often as necessary, and at least three times daily, preferably in the late morning and after work is done for the day.
3. **Soil Stabilization.** Construction contractors shall monitor all graded and/or excavated inactive areas of the construction site at least weekly for dust stabilization. Soil stabilization methods, such as water and roll compaction, and environmentally safe dust control materials, shall be applied to portions of the construction site that are inactive for over four days. If no further grading or excavation operations are planned for the area, the area shall be seeded and watered until landscape growth is evident, or periodically treated

with environmentally safe dust suppressants, to prevent excessive fugitive dust.

4. **No Grading During High Winds.** Construction contractors shall stop all clearing, grading, earth moving, and excavation operations during periods of high winds (20 miles per hour or greater, as measured continuously over a one-hour period).
5. **Street Sweeping.** Construction contractors shall sweep all on-site driveways and adjacent streets and roads at least once per day, preferably at the end of the day, if visible soil material is carried over to adjacent streets and roads.

Construction emissions modeling is based on the overall scope of the proposed development and construction phasing which is expected to begin early 2025 and extend through mid-2025. It is assumed for modeling purposes that the entire one-acre site would be disturbed during construction. For dust control, it was assumed the maximum area would be watered twice daily. In addition to SCAQMD Rule 403 requirements referenced above, emissions modeling also accounts for the use of low-VOC paint (100 g/L for traffic coatings) as required by SCAQMD Rule 1113.

The proposed Project would require the import of approximately 6,000 cubic yards of beach sand for placement on South Beach. The sand would be trucked from the source to a barge dock at or proximal to the Port of Long Beach. One barge could accommodate 2,000 cubic yards of sand. The barge would then be towed by tugboat to Avalon Harbor where the sand would be offloaded and placed on the beach. A total of three trips between Long Beach and Avalon would be required to haul the required 6,000 cubic yards of sand. For the purpose of estimating daily emissions, it was assumed that each truck would haul 10 yards of sand; thus, 200 trucks would be required to fill each barge and each barge would be filled over a two day period (e.g., 100 trucks daily). Thus, a total of 200 two-way trips at 40 miles each way was used to calculate daily heavy truck emissions. Table 2 summarizes the estimated maximum daily emissions of pollutants, including heavy truck emissions, occurring during 2025.

As stated, the sand may be barged to the Avalon Freight Terminal and trucked to South Beach. The total distance is approximately one mile each way. A total of 400 one-way truck trips would be required to offload each barge. These trips would occur on a different day than the loading trips. The emissions estimated by CalEEMod, assuming 100 truck two-way trips per day are also shown in Table 2.

**Table 2**  
**Estimated Maximum Mitigated Daily Construction Emissions**

| Construction Phase             | Maximum Emissions (lbs/day) |                 |           |                 |                  |                   |
|--------------------------------|-----------------------------|-----------------|-----------|-----------------|------------------|-------------------|
|                                | ROG                         | NO <sub>x</sub> | CO        | SO <sub>x</sub> | PM <sub>10</sub> | PM <sub>2.5</sub> |
| 2025 On-Site Equipment         | 0.5                         | 5.12            | 6.9       | 0.01            | 0.21             | 0.20              |
| Off-Site Trucks (Loading)      | 0.12                        | 66.2            | 25.0      | 0.34            | 14.4             | 4.4               |
| Off-Site Trucks (Off Loading)  | 0.006                       | 3.31            | 1.3       | 0.017           | 0.72             | 0.22              |
| SCAQMD Regional Thresholds     | 75                          | 100             | 550       | 150             | 150              | 55                |
| <b>Threshold Exceeded 2025</b> | <b>No</b>                   | <b>No</b>       | <b>No</b> | <b>No</b>       | <b>No</b>        | <b>No</b>         |

As shown in Table 2, construction of the proposed project, including trucking sand to/from Long Beach during barge loading, and to/from the Avalon Freight Terminal and South Beach during off-loading, would not exceed the SCAQMD regional thresholds.

Localized Significance Thresholds. The SCAQMD has published a “Fact Sheet for Applying CalEEMod to Localized Significance Thresholds” (South Coast Air Quality Management District 2011). CalEEMod calculates construction emissions based on the number of equipment hours and the maximum daily disturbance activity possible for each piece of equipment. Construction-related emissions reported by CalEEMod are compared to the localized significance threshold lookup tables. The CalEEMod output in Appendix A shows the equipment assumed for this analysis.

LSTs were devised in response to concern regarding exposure of individuals to criteria pollutants in local communities. LSTs represent the maximum emissions from a project that will not cause or contribute to an air quality exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest sensitive receptor, taking into consideration ambient concentrations in each source receptor area (SRA), project size and distance to the sensitive receptor. However, LSTs only apply to emissions within a fixed stationary location, including idling emissions during both project construction and operation. LSTs have been developed for NO<sub>x</sub>, CO, PM<sub>10</sub> and PM<sub>2.5</sub>. LSTs are not applicable to mobile sources such as cars on a roadway (Final Localized Significance Threshold Methodology, SCAQMD, June 2003). As such, LSTs for operational emissions do not apply to the proposed development as all the emissions would be generated by vehicle operation.

LSTs have been developed for emissions within areas up to five acres in size, with air pollutant modeling recommended for activity within larger areas. The SCAQMD provides lookup tables for project sites that measure one, two, or five acres. As referenced, a total of one acre is conservatively assumed to be disturbed daily during construction; thus, the associated lookup table values for one acre were used to provide a conservative evaluation of potential impacts. The project site is located in Source Receptor Area 4 (SRA-4, South Coastal Los Angeles

County). LSTs for construction related emissions in the SRA 4 at varying distances between the source and receiving property are shown in Table 3.

**Table 3**  
**SCAQMD LSTs for Construction**

| Pollutant                                                | Allowable emissions as a function of receptor distance in meters from a one-acre site (lbs/day) |     |       |       |       |
|----------------------------------------------------------|-------------------------------------------------------------------------------------------------|-----|-------|-------|-------|
|                                                          | 25                                                                                              | 50  | 100   | 200   | 500   |
| Gradual conversion of NO <sub>x</sub> to NO <sub>2</sub> | 57                                                                                              | 58  | 68    | 90    | 142   |
| CO                                                       | 585                                                                                             | 789 | 1,180 | 2,296 | 7,558 |
| PM <sub>10</sub>                                         | 4                                                                                               | 13  | 29    | 61    | 158   |
| PM <sub>2.5</sub>                                        | 3                                                                                               | 5   | 10    | 26    | 93    |

Source: <http://www.aqmd.gov/CEQA/handbook/LST/appC.pdf>, October 2009.

The nearest sensitive receptors to the project site are located approximately 80 feet (24 meters) west of the project area. To compare emissions to the LSTs, the 25-meter thresholds are used. As discussed, LSTs apply to on-site uses only and do not include off-site vehicle trips and emissions. LSTs are compared to estimated project emissions in Table 3. As shown, the emissions in Table 2 would not exceed the LSTs shown in Table 3 for sensitive receptors located 25 meters from the project area. Thus, the on-site mitigated emissions are not provided. Construction would not cause an adverse air quality impact per threshold (b) referenced above.

**Marine Vessel Emissions.** The tugboat that would haul the barge to/from Long Beach and Avalon, like all marine vessels licensed to operate in California waters, is equipped with Tier 3 compliant propulsion and auxiliary engines. Tier 3 standards were introduced by the International Maritime Organization (IMO) as part of an ongoing effort to reduce the environmental impact of shipping. Tier 3 standards apply to new engines installed on ships operating in designated Emission Control Areas (ECAs), which include all of southern California. The Tier 3 standards include stringent limits on nitrogen oxide (NO<sub>x</sub>) emissions which requires operators to incorporate advanced technologies to achieve compliance. Key components and technologies involved in Tier 3 engines include exhaust gas recirculation (EGR) systems, and other after-treatment elements. These technologies work together to significantly reduce NO<sub>x</sub> emissions, ensuring that vessels meet the required emission limits.

Marine vessel engines that meet Tier 3 standards are also deemed compliant with the California Air Resources Board (CARB) Commercial Harbor Craft Regulation. Adopted in October 2008, the purpose of the regulation is to reduce emissions of diesel particulate matter (diesel PM) and nitrogen oxides (NO<sub>x</sub>) from diesel engines used on commercial harbor craft operated in California Regulated Waters, which includes the waters between Long Beach and Avalon.

As stated, the proposed Project would require the use of a tugboat to make three round trips between Long Beach and Avalon. The propulsion and auxiliary engines exceed CARB regulation regulatory and emission standards and is fully compliant for operating in southern California waters. Thus, marine vessel emissions would not result in an adverse environmental impact related to air quality.

#### Operation Emissions

The proposed project would not require ongoing maintenance, generate traffic or otherwise generate emissions. No operational impacts would occur.

c) The nearest sensitive receptor to the project site hotels located west of the site. As shown above, total construction emissions would not exceed the SCAQMD thresholds and the project would not generate operational emissions. . In addition to quantifying emissions, SCAQMD recommends performing a local CO hotspot analysis if an intersection meets one of the following criteria: 1) the intersection is at Level of Service (LOS) D or worse and where the project increases the volume to capacity ratio by 2 percent, or 2) the project decreases LOS at an intersection to D or worse. A CO hotspot is a localized concentration of CO that is above the state or national 1-hour or 8-hour CO ambient air standards. Localized CO “hotspots” can occur at intersections with heavy peak hour traffic. Specifically, hotspots can be created at intersections where traffic levels are sufficiently high such that the local CO concentration exceeds the federal AAQS of 35.0 parts per million (ppm) or the state AAQS of 20.0 ppm. As referenced in Section XVI, *Transportation/Traffic*, the project is intended to improve South Beach. It would not generate new vehicle trips or affect traffic operation.

Thus, pollutants generated by project construction would be negligible. The project would not generate traffic or otherwise cause or contribute to traffic conditions that would create a CO hotspot with adverse health risks. Therefore, impacts would be **less than significant**.

d) The proposed project would generate odors from construction (i.e., diesel exhaust). These odors would be limited to periods of time when there is active construction. The project does not involve construction of an industrial or agricultural processing facility that are typically associated with odors. Construction odors would be temporary. As referenced, construction emissions would not exceed SCAQMD impact thresholds; thus, short-term odors are not expected to be significant or adversely affect a substantial number of people. During operation, the beach improvements would not generate new odors in excess of baseline conditions. Odors impacts would be **less than significant**.

|                                                                                                                                                                                                                                                                                                                  | Potentially<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact  | No<br>Impact                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------|-------------------------------------|-------------------------------------|
| <b>IV. <u>BIOLOGICAL RESOURCES</u> --</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, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?                                                           | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input checked="" 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 checked="" type="checkbox"/>                                | <input 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 type="checkbox"/>            | <input checked="" 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"/> |

|  |                                      |                                                                    |                                    |              |
|--|--------------------------------------|--------------------------------------------------------------------|------------------------------------|--------------|
|  | Potentially<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact | No<br>Impact |
|--|--------------------------------------|--------------------------------------------------------------------|------------------------------------|--------------|

#### IV. BIOLOGICAL RESOURCES --

Would the project:

- 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"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

The material presented herein is based on the *Avalon South Beach Restoration Project: Marine Biological Resources Report and Essential Fish Habitat Assessment*, prepared by Marine Taxonomic Services, LTD, July 2024. The report is provided herein as Appendix B.

a) The project site is not located within the boundaries of a MSHCP, NCCP or other document addressing the preservation of species and their habitat. There are no listed marine or upland species occurring in the area that would be impacted by the project. Thus, no specific avoidance, minimization, and mitigation measures for terrestrial species are required. All upland areas in the project area are comprised of paved pedestrian/roadway surface, the existing seawall with ornamental vegetation along the promenade. Thus, the focus on this discussion is on potential impacts to marine biological resources.

A marine biological assessment was completed on May 15, 2024. A SCUBA diver survey was used to identify habitat types and species that occupy the Project area. During the survey, the diver swam throughout the Project area, inspecting the seafloor and existing structures. Photos were taken of marine species observed in the area. A detailed assessment was conducted to determine any sensitive species holding special or protected status that may occur within, or adjacent to, the designated Project site. An analysis of the range and habitat preferences of those species was conducted through literature review. An Essential Fish Habitat (EFH) assessment was conducted through EFH GIS mapping software regularly maintained and updated by NOAA Fisheries. Analysis of the requirements of those habitats was performed via literature review.

Marine habitats observed during the SCUBA survey within the Project site are defined as four distinct categories: intertidal hard substrate, subtidal hard substrate, soft-bottom with sporadic boulders and cobble; and moorings and debris. Notable fauna observed included nine unique species of marine vertebrates, eight unique species of marine invertebrates, and 22 unique species of marine macroalgae.

**Hard Substrate – Intertidal.** Intertidal hard substrate was defined by any hard substrate above the mean lower low water level. This substrate type was observed on the beach and along the riprap wall. Invertebrate species observed included owl limpet, volcano limpet and sola anemone. The upper intertidal rocks were dominated by green turf algae. Other algae present in the intertidal region were bubble algae, feather boa kelp, red turf algae, brown algae, nori. and sea lettuce.

**Hard Substrate – Subtidal.** Subtidal hard substrate was defined by any hard substrate below the mean lower low water level. This substrate type was observed along the riprap revetment. Vertebrate species observed in subtidal riprap included kelp bass, California sheephead, garibaldi, blacksmith, rock wrasse, blue banded goby, and halfmoon. Invertebrate species observed included pyrosomes and California spiny lobster. Macralgae included giant kelp, feather boa kelp, bubble algae, articulated coralline algae, banded fanweed, brown algae, jellyweed, and red algae. Additionally, a large intake pipe resides in the nearshore area of riprap and supports similar species.

**Soft Bottom with Sporadic Boulders and Cobbles.** The majority of the Project area surveyed consisted of soft-bottom habitat with sand of a medium grain size (~0.25 mm). The sandy areas were mostly barren with diatomaceous mats, drift algae, tubeworms, pyrosomes, kelp bass, few thornback rays, and a single shovelnose guitarfish. Within the soft-bottom habitat there were sporadic small boulders which were host to macroalgal communities and cobble which were host to microalgal communities. Macroalgal species on boulders included red algae, beanweed, filamentous brown algae, sea lettuce, articulated coralline algae, and juvenile giant kelp.

**Moorings and Debris.** The row of moorings nearest to shore were observed for species composition as well as other anthropogenic debris present in the site. Chains, lines, and mooring balls were host to similar algal species seen on nearby hard substrate. Algal species included filamentous brown algae, beanweed, spaghetti algae, bubble algae, articulated coralline algae, red algae and brown algae. Kelp bass were also seen near mooring lines and hydroids were observed on chains and lines.

### **Sensitive Species**

Protected, rare, threatened, or endangered species that may occur within the region include green sea turtle, (Federally Threatened), the Western snowy plover and the California brown pelican (Protected under Migratory Bird Treaty Act and California Fish and Game Code). Mammals protected under the Marine Mammal Protection Act with potential to occur in southern Avalon Bay (Bay) include harbor seal and California sea lion. None were observed in the project area. The California brown pelican is likely to occur in the project area. It is possible that the Western snowy plover can also occur. No sensitive marine species were observed within the study area.

**Essential Fish Habitat Evaluation.** This discussion addresses managed species and fisheries with the potential to occur within the designated study area as well as Habitat Areas of

Particular Concern (HAPCs) known to occur within the study area. The EFH assessment for the proposed project was prepared in accordance with the 1996 amendments to the Magnuson-Stevens Fishery Management and Conservation Act (MSA). The MSA defines EFH as “those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity.” As such, the EFH assessment includes an analysis of species managed by the Pacific Fishery Management Council (PFMC) that are known to utilize EFH within the study area. Federal action agencies which fund, permit, or carry out activities that may adversely impact EFH are required to consult with the National Marine Fisheries Service (NMFS) regarding the potential effects of their actions on EFH. While the proposed project is not a federal action, the EFH analysis is summarized herein to assist in determining the potential significance of impacts to marine habitat and species associated with the proposed project.

A total of 92 fish species managed by the PFMC fall under the Coastal Pelagic Species Fisheries Management Plan (FMP), which includes the Finfish FMP and under the Pacific Groundfish FMP. Additionally, 14 species specific FMPs are listed for the project region. During the project survey, no species managed by PFMC were observed in the Project site. However, topsmelt were observed, which have been designated by the fishery management plan as ecosystem component species along with Pacific herring.

**Habitat Areas of Particular Concern Observed Within the Project Site.** HAPCs are a discreet subset of habitats within an EFH that are distinguished by characteristics including their high ecological value and vulnerability to anthropogenic stressors. HAPCs are considered high priority areas for conservation, management, or research because they are rare, sensitive, stressed by development, or important to ecosystem function. The HAPC designation does not necessitate additional protections or restrictions upon an area, but help to prioritize and focus conservation efforts. Although these habitats are particularly important for healthy fish populations, other EFH areas that provide suitable habitats are also necessary to support and maintain sustainable fisheries and a healthy ecosystem. Current HAPC types are estuaries, canopy kelp, seagrass, and rocky reefs. The Project site does not contain any HAPCs.

### **Construction-Related Impacts**

In general, construction activities from implementation of the proposed Project could cause construction-induced noise, increases in turbidity and release of particulates and chemicals of concern into U.S. and State waters.

**Temporary Construction Noise.** The use of large equipment and in particular the use of vibratory and pile driving methods for installation of sheet pile could result in construction-induced noise impacts. Construction-induced noise impacts from landside construction activity and overwater construction activities such as pile-driving could disrupt the behavior of piscivorous birds, marine mammals, and turtles. In-water construction associated with the proposed Project could generate enough underwater noise to physically injure marine mammals, sea turtles, and fishes, should impact hammer or vibratory pile driving occur. In-

water impact hammer or vibratory driving methods could potentially generate enough underwater noise to injure (Level A Harassment) or alter behavior (Level B Harassment) for marine mammals, green sea turtles, and fishes. It is unlikely that marine mammals or turtles will inhabit the area; however, noise can impact the foraging behavior of local piscivorous birds such as the California brown pelican. This impact is considered significant without mitigation.

**Temporary Water Quality Impacts.** Construction activities associated with pile driving activities and potential vessel use could increase levels of turbidity in waters within Avalon Bay in the absence of mitigation. This could occur either during activities such as pile driving, incidentally during vessel contact with bottom substrate, and by propeller wash in shallower water. Increases in water turbidity may occur as a result of displaced sediment from pile installation or removal. Increased sedimentation and turbidity can also be accompanied by lower dissolved oxygen content. In general, increased turbidity could limit the ability of sensitive piscivorous avian species to locate prey.

Construction activities could potentially result in impacts on protected species by the inadvertent introduction of pollutants such as fuel, oil, and/or other industrial and mechanical fluids into waters of the U.S., either from construction equipment, landside construction vehicles, construction vessels, and from partially completed structures. Additionally, the placement of sheet piles may involve pouring and curing concrete in the water if steel sheet piles with a concrete cap are used. Recently-cast concrete is known to increase the pH level of water it contacts, which has the potential to harm marine species. However, given the small amount of concrete to be poured, there will be no measurable and no significant alteration of pH. Thus, impacts of the small amount of concrete used for this Project are less than significant.

**Temporary Construction Impacts on Benthic Species.** Direct impacts to the benthic community would include the loss or mortality of any benthic infauna and epifauna within areas of sand deposition. The area is not host to any particularly unique or sensitive species and adjacent soft-bottom habitat would be expected to provide alternative foraging habitat for motile species following the bottom disturbance. It is anticipated that the disturbed areas would be re-colonized by adult migration from adjacent areas as well as colonization by larval recruitment. As such, the impact of sand deposits on the beach are **less than significant** without mitigation.

**Migratory Birds.** The Migratory Bird Treaty Act (MBTA) of 1918 (16 USC 703-711) is an international treaty that makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). Sections 3503, 3503.5, and 3800 of the California Department of Fish and Wildlife Code prohibit the take, possession, or destruction of birds, their nests, or eggs. The MBTA requires that project-related disturbance at active nesting territories be reduced or eliminated during critical phases of the nesting cycle (February 1 through August 31). Disturbance that causes nest abandonment and/or loss of reproductive effort (e.g., killing or abandonment of eggs or young) or loss of habitat upon which the birds depend could be considered “take” and constitute a violation of the MBTA.

Migratory birds include common, sensitive and listed species. No active nests or birds displaying nesting behavior were observed during the site investigation. However, the shrubs located on the hillside west of the project area and promenade provide minimal foraging and nesting habitat for year-round and seasonal avian residents, as well as migrating songbirds that could occur in the area that area adapted to urban environments. Because potential habitat is present within the proposed area of potential effect and project construction may occur within the nesting cycle, potentially significant impacts to migratory and other bird species may occur. No candidate, sensitive or special status species listed in local or regional plans, policies or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service are known to occur in the area. With implementation of Mitigation Measure BIO-7, impact to migratory birds would be reduced to **less than significant**.

### **Mitigation Measures**

The following measures are recommended to reduce potential construction-related impacts to sensitive marine species and water quality to **less than significant**.

**BIO-1.** When these activities occur, a qualified biologist shall monitor for sensitive species within 200 meters of the activity. The monitor shall have the ability to reduce or temporarily stop noise producing activities if those activities were believed to impact or otherwise alter behavior of sensitive avian, marine mammal, or turtle species. The Project applicant shall take specific actions to reduce or temporarily stop noise-producing activities if the qualified biologist identifies that the activities are impacting the foraging behavior of sensitive avian species. These actions shall include but not be limited to, the installation of sound barriers, reducing intensity of pile driving, and restricting pile driving to periods when sensitive avian species are not present.

**BIO-2.** A qualified biologist shall monitor for hauled out marine mammals wherever noise generating activities are in excess of 90 dB root mean square (RMS) for harbor seals and 100 dB RMS for non-harbor seals (sea lions) or if the haul out is within 200 meters of the noise source. If marine mammals are hauled out within the zone where sound thresholds are exceeded, then the biological monitor shall notify the contractor to halt or alter the noise generating activity such that construction noise is at or below 90 dB RMS or 100 dB RMS for harbor seals and non-harbor seals, respectively.

**BIO-3.** A qualified biologist shall monitor conditions that generate in water noise such as impact hammer and vibratory pile driving. The biological monitor shall monitor for marine mammals and sea turtles when in the water within 200 meters of the sound source. The biological monitor shall have the authority to halt or modify work based on animal observations relative to the monitoring zone.

**BIO-4.** Impact hammer and vibratory pile driving shall utilize a soft start for pile driving. This generally means performance of three pile strikes at reduced (approximately 50%) force, then waiting 30 seconds. This shall be repeated three times

before starting pile driving at full force. This measure provides time for marine mammals, green sea turtles, and fishes to disperse from the sound source area in the event that the sound is a source of stress for the animal.

**BIO-5.** A qualified biologist shall provide contractor education and implementation of the following best management practices:

- Vessel operators shall be instructed regarding the impacts of propeller wash with respect to erosion of sediment and suspension of fine particulates. This will allow vessel operators opportunity to adjust operations, when possible, in ways that lessen the impact;
- All vessels shall be required to use depth sounders which are routinely checked to ensure vessels are positioned to avoid shallow water areas to the extent practical; and.
- When construction involves necessary bottom disturbance such as pile driving, silt curtains shall be placed around the activity to limit the spread of any turbidity generated during the bottom disturbing activity.

**BIO-6.** Construction crews shall have appropriate spill kits on site and shall not fuel or clean equipment on site unless a spill containment structure is in place.

### **Critical Habitat**

Under the federal Endangered Species Act, “Critical Habitat” is designated at the time of listing of a species or within one year of listing. Critical Habitat refers to specific areas within the geographical range of a species at the time it is listed that include the physical or biological features that are essential to the survival and eventual recovery of that species. Maintenance of these physical and biological features requires special management considerations or protection, regardless of whether individuals of the species are present or not. All federal agencies are required to consult with the United States Fish and Wildlife Service (USFWS) regarding activities they authorize, fund, or permit which may affect a federally listed species or its designated Critical Habitat. The purpose of the consultation is to ensure that projects will not jeopardize the continued existence of the listed species or adversely modify or destroy its designated Critical Habitat. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing is on federal lands, uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highways Administration or a CWA Permit from the Corps). If there is a federal nexus, then the federal agency that is responsible for providing the funding or permit would consult with the USFWS.

The project site is not located within local, state or federally designated Critical Habitat. Therefore, the loss or adverse modification of Critical Habitat from site development will not occur and consultation with the USFWS will not be required for implementation of the proposed project. **No impact** to designated critical habitats would occur.

## Migratory Birds

The Migratory Bird Treaty Act (MBTA) of 1918 (16 USC 703-711) is an international treaty that makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). Sections 3503, 3503.5, and 3800 of the California Department of Fish and Wildlife Code prohibit the take, possession, or destruction of birds, their nests, or eggs. The MBTA requires that project-related disturbance at active nesting territories be reduced or eliminated during critical phases of the nesting cycle (February 1 through August 31). Disturbance that causes nest abandonment and/or loss of reproductive effort (e.g., killing or abandonment of eggs or young) or loss of habitat upon which the birds depend could be considered “take” and constitute a violation of the MBTA.

Migratory birds include common, sensitive and listed species. No active nests or birds displaying nesting behavior were observed; however, the shrubs located on the hillside south of the project area and promenade provide minimal foraging and nesting habitat for year-round and seasonal avian residents, as well as migrating songbirds that could occur in the area that area adapted to urban environments. Because potential habitat is present within the proposed area of potential effect and project construction may occur within the nesting cycle, potentially significant impacts to migratory and other bird species may occur. No candidate, sensitive or special status species listed in local or regional plans, policies or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service are known to occur in the area. With implementation of Mitigation Measure BIO-7, impact to migratory birds would be reduced to **less than significant**.

**BIO-7 Nesting Bird Surveys and Avoidance.** To avoid the destruction of active nests and to protect the reproductive success of birds protected by MBTA, nesting bird surveys shall be performed not more than 14 days prior to the scheduled construction in areas adjacent to trees suitable for nesting. In the event that active nests are discovered, a suitable buffer should be established around such active nests and no construction within the buffer allowed until a qualified biologist has determined that the nest is no longer active (e.g. the nestlings have fledged and are no longer reliant on the nest). No ground disturbing activities shall occur within this buffer until the qualified biologist has confirmed that breeding/nesting is completed and the young have fledged the nest. Survey results shall be presented in a letter report and submitted to the City of Avalon. Nesting bird surveys are not required for construction activities occurring between September 1 and January 31.

b and c) The project site is located within the Santa Catalina Island-Frontal San Pedro Channel Watershed, specifically in the Santa Catalina Island subwatershed area (Hydrologic Unit Code [HUC] # 180701070002). There are no storm channel features located within the project area.

Existing precipitation within the upland area runs off into the municipal stormwater system, or percolates into exposed soils. Implementation of Stormwater Management Plan (SWPPP) Best Management Practices (BMPs) would avoid direct impacts to water quality during construction; however, based on the scope of improvements, the project is not subject to post-construction stormwater controls.

**Construction Impacts.** While there are no wetlands or riparian areas within the project area, construction would occur with Avalon Harbor which is a non-wetland water resource under both state and federal jurisdiction. Implementation of Mitigation Measure BIO-5 and BIO-6 would reduce water quality impacts during construction to less than significant. Impacts may occur to benthic and epibenthic fauna during installation of sheet piles; however, this area is not home to any particularly sensitive or ecologically important species. Adjacent habitat would be expected to provide alternative foraging habitat for motile species following bottom disturbance. It is anticipated that the disturbed areas would be re-colonized by adult migration from adjacent areas as well as colonization by larval recruitment. As such, the impact of drilling and diver excavation is minimal, temporary, and therefore considered not significant.

**Operational Impacts.** Operational impacts are permanent impacts caused by construction such as the increase in overwater cover or increase in ocean fill. Construction of the new groin wall would cause a permanent disturbance to the sea bed and placement of imported upland sediment onto the beach could result in a temporary loss of benthic and epibenthic species. These impacts are considered less than significant because of the nearby soft-bottom habitat which provides means for swift recolonization of the area. As stated, this area is not home to any particularly sensitive or ecologically important species; thus, impacts would be **less than significant**.

d) Habitat linkages provide connections between larger habitat areas that are separated by development. Wildlife corridors are similar to linkages but provide specific opportunities for animals to disperse or migrate between areas. A corridor can be defined as a linear landscape feature of sufficient width to allow animal movement between two comparatively undisturbed habitat fragments. Adequate cover is essential for a corridor to function as a wildlife movement area. It is possible for a habitat corridor to be adequate for one species yet still inadequate for others. Wildlife corridors are features that allow for the dispersal, seasonal migration, breeding, and foraging of a variety of wildlife species. Additionally, open space can provide a buffer against both human disturbance and natural fluctuations in resources.

The project area is urbanized and has not been identified as a wildlife corridor or linkage. The proposed improvements will be confined to existing areas that have been heavily disturbed by existing roadway/pedestrian improvements and surrounded by development. The project site is isolated from regional wildlife corridors and linkages, and there are no riparian corridors, creeks, or useful patches of stepping-stone habitat (natural areas) within or connecting the project site to any identified wildlife corridors or linkages. As a result, implementation of the proposed project will not disrupt or have any adverse effects on any migratory corridors or linkages in the

surrounding area. **No impact** to wildlife movement corridors would occur with project implementation.

e-f) There are non-native or ornamental trees suitable for nesting located on the hillside south of the site and along the promenade. Thus, the project would be subject to compliance with the Migratory Bird Treaty Act if work that could disturb nesting bird species were proposed during nesting season as referenced above. The project site was evaluated for the presence/absence of species and/or their habitat covered under a MSHCP/NCCP. No conservation documents are applicable to the project area. No threatened, endangered or sensitive species or their habitat occurs on-site as described above. **No impact** would occur under this threshold.

|                                                                                                                 | Potentially<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact  | No<br>Impact                        |
|-----------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------|-------------------------------------|-------------------------------------|
| <b>V. <u>CULTURAL RESOURCES</u> --</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 as defined in §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 type="checkbox"/>                                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

The following information is based in part on the results of a *Cultural Survey Report for the South Beach Restoration and Shoreline Access Enhancement Project*, City of Avalon, July 2024, prepared by South Environmental, Inc., and included herein as Appendix C.

a) South Environmental requested a search of cultural resource records housed at the California Historical Resources Information System (CHRIS), South Central Coastal Information Center (SCCIC) located at California State University, Fullerton for the proposed project. This search included their collections of mapped prehistoric and historic archaeological resources and historic built-environment resources, State of California Department of Parks and Recreation Series 523 forms (DPR forms), technical reports, archival resources, and ethnographic references. Additional consulted sources include historical maps of the study area, the NRHP, the CRHR, the lists of California State Historical Landmarks, California Points of Historical Interest, and the Archaeological Determinations of Eligibility list. The records search included the project site and a one-half-mile radius. The SCCIC records search results indicate that one

previously conducted cultural resource study (L-0111 intersects the project site. Seven previous studies were overviews conducted of the entire island. An additional 13 studies identified were outside the project site within the half-mile records search radius.

The SCCIC records search identified 19 cultural resources studies that were conducted within a 0.5-mile radius of the Pebbly Beach Road Shoreline Improvement Project site. Six of the studies are general overviews or broad studies within vague or no maps; 11 studies are outside the project alignment but within 0.5 mile; and two of the studies – LA-09887 and LA-11138 are proximal to the project alignment.

**LA-11138.** This report presented a database and predictive modeling for offshore prehistoric sites and shipwrecks along the southern California coast and Channel Islands. The report identified no resources within or near the current project APE.

**South Beach Seawall Historic Evaluation.** The South Beach Seawall is located to the southeast of the Green Pleasure Pier and terminates at the water channel to the southeast generally proximal to and north/northeast of the Pebbly Beach Road and Crescent Avenue intersection. It was originally constructed with poured concrete that utilized large-scale aggregate. The Seawall features three staircases, a boat ramp, and a groin wall. In front of the Seawall is a small strip of beach where rubble stone has been placed to control erosion. Some stones appear to be native to the area as they are consistent with the local geology, while others are rubble concrete with large gravel and cobble inclusions. There are multiple access points to the beach and water that are part of the Seawall. On the southernmost end of the Seawall is the boat ramp. It was constructed with poured concrete and angled to allow for the loading and unloading of boats into the water. The boat ramp shows evidence of deterioration, spalling, erosion, and concrete patchwork. There are also modern metal railings installed around the boat ramp for safety purposes. Where the boat ramp meets the beach, there is also a poured concrete groin wall that is set perpendicular to the Seawall. The groin wall appears to be slightly shorter than the Seawall and features a bracing element on the east side that connects back to the Seawall for stability. The groin wall shows evidence of deterioration, erosion, and spalling. There are also three pedestrian access staircases that are part of the seawall. The southernmost staircase is made of poured concrete and features nine steps. There is evidence of repatching and new concrete pours on the steps. There are remnants of wooden railings present on the staircase that matches in color and materials to the other staircases. Due to a structural failure and failed repairs with the stairs and the surrounding Seawall, this staircase is closed for safety. The remaining staircases are located further north down the Seawall and feature poured concrete steps with wooden railings. The remaining staircases also show signs of concrete patchwork and repairs over time.

The South Beach Seawall and its associated infrastructure (i.e., stairs, boat ramp, and groin wall) were constructed over 45 years ago and were therefore evaluated for historical significance in consideration of California Register of Historic Resources (CRHR) and National Register of Historic Places (NRHP) designation criteria. As a result of the evaluation, all infrastructure was found not eligible for designation due to a lack of important historical associations and

architectural merit, and compromised integrity. Therefore, the South Beach Seawall is not considered a historical resource under CEQA or a historic property under Section 106 of the NHPA. No additional measures are recommended for built environment resources. **No impact** to historic resources would occur.

b) As part of the Phase I Cultural Resources Assessment methodology, a Native American Heritage Commission (NAHC) Sacred Lands File search was requested by South Environmental on May 3, 2024. The NAHC responded to the request on May 23, 2024, and reported positive results. The NAHC recommended contacting multiple Native American tribes for additional information or knowledge they may have regarding the presence of cultural resources that may be impacted by the proposed project. On May 3 and May 28, 2024, South Environmental sent letters to each contact provided by the NAHC.

Three tribal organizations have responded to the outreach letters to date. No archaeological, historical, or tribal cultural resources were identified within the project site as a result of coordination with tribes, however the project site and the South Beach area have been identified as being located within ancestral territory, in the vicinity of sacred sites, and the immediate area was identified as culturally sensitive/significant. The Gabrielino Tongva Indians of California, the Rincon Band of Luiseno Indians, and the Santa Ynez Band of Chumash Indians have requested to consult with the lead agency and have requested to have a tribal monitor present during all soil disturbing activities. The Rincon Band of Luiseno Indians, and the Santa Ynez Band of Chumash Indians have requested consultation with the City of Avalon per AB 52.

On May 10, 2024, South Environmental staff conducted an intensive-level survey of the project site for both archaeological and historic built environment resources. No archaeological resources were identified within the project site as a result of the intensive-level survey. However, built environment resources over 45 years old were identified that required recordation and evaluation for historical significance, as described above.

No archaeological resources were identified within the project site as a result of the intensive-level survey. Although no archaeological resources were identified within the project site, a review of the SCCIC records search results, archaeological literature, receipt of a positive Sacred Lands File search from the NAHC, and responses from Native American contacts indicates that the project site is within an area that is highly sensitive for prehistoric archaeological resources. Historic aerial photographs of the project site confirm that the upper levels on soil within the project site were previously disturbed by the construction of the seawall and surrounding development. Nonetheless, it is always possible to encounter resources during project-related ground disturbance. Implementation of Mitigation Measures CR-1 and CR-2, including archaeological and Native American monitoring during ground disturbance occurring below 1-foot in depth, will ensure that any cultural resources or human remains identified during construction are handled appropriately such that impacts to archaeological resources and human remains are **less than significant**/would result in no adverse effects to historic properties.

**CR-1.** A qualified archaeologist and a Native American Monitor should be retained to monitor all ground disturbance associated with the proposed project occurring at depths greater than one foot below the ground surface, understanding that the proposed project is within an area that has already been heavily disturbed by people, boats, waves, erosion, etc. These ground disturbing activities include, but are not limited to, demolition of the existing groin wall, new construction occurring below one foot in depth, and sand dredging. Within 90 days of conclusion of all monitoring activities, an archaeological monitoring report should be prepared and submitted to the appropriate local and federal agencies

**CR-2.** Should archaeological resources (sites, features, or artifacts) be exposed during construction activities for the proposed project, the monitors shall halt all construction work occurring within 100 feet of the find until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, can evaluate the significance of the find. Depending on the significance of the find, the archaeologist may simply record the find and allow work to continue. In the event that an identified cultural resource is of Native American origin, the qualified archaeologist will consult with the project Applicant and the City of Avalon to implement Native American consultation procedures. If the discovery proves significant under CEQA or Section 106 of the NHPA, additional work such as preparation of an archaeological treatment plan, testing, or data recovery may be warranted.

c) The potential for encountering human remains at the project site is low. No known burial sites have been identified on the site or in the vicinity. In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are found, the County Coroner shall be notified within 24 hours of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined, within two working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the remains are determined to be Native American, the Coroner shall notify the NAHC in Sacramento within 24 hours. In accordance with California Public Resources Code, Section 5097.98, the NAHC must immediately notify those persons it believes to be the Most Likely Descendant (MLD) from the deceased Native American. The MLD shall complete their inspection within 48 hours of being granted access to the site. The MLD would then determine, in consultation with the property owner, the disposition of the human remains. With adherence to these existing regulations, impacts would be **less than significant**.

**VI. ENERGY** – would the project:

- a) Result in potentially significant adverse 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 type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

a) Project construction would utilize common methods for site preparation and installation of the proposed improvement. Techniques are not expected to be wasteful or otherwise result in inefficient use of fuels or other sources of energy. Some construction materials may be sourced on the island; however, materials would need to be imported. Further, beach sand would likely be imported as it is a simpler and more cost effective method for beach replacement than dredging displaced sand from the harbor. Post-construction, the project would not consume any energy. A **less than significant** impact would under this threshold.

b) The project would construct various repairs as identified in the project description. The project would utilize heavy equipment that meets CARB registration requirements for energy efficiency and emission reduction. The City of Avalon does not have an approved Climate Action Plan; thus, consistency with plans/policies focuses on project consistency with the 3,000-metric ton annual emission threshold provided by South Coast Air Quality Management District (SCAQMD) and referenced in Section VIII, *Greenhouse Gas*, below. The project would generate construction emissions; however, these emissions would not exceed the 3,000 metric ton threshold. The project would not conflict with a state or local plan regarding renewable energy or energy efficiency. **No impact** would occur under this threshold.

|  | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Potentially<br>Significant | Less than<br>Significant<br>Impact | No<br>Impact |
|--|--------------------------------------------------------------------|----------------------------|------------------------------------|--------------|
|--|--------------------------------------------------------------------|----------------------------|------------------------------------|--------------|

**VII. GEOLOGY AND SOILS** –

Would the project:

- a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

|                                                                                                                                                                                                                         | Potentially<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact  | No<br>Impact                        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------|-------------------------------------|-------------------------------------|
| <b>VII. GEOLOGY AND SOILS –</b>                                                                                                                                                                                         |                                      |                                                                    |                                     |                                     |
| Would the project:                                                                                                                                                                                                      |                                      |                                                                    |                                     |                                     |
| 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? | <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 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 1-B of the Uniform Building Code, 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 wastewater disposal systems where sewers are not available for the disposal of wastewater?                                      | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?                                                                                                                 | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

a (i-ii) Avalon is not located within an Alquist-Priolo Fault-Rupture Hazard Zone; and therefore, is not subject to surface rupture. However, six active and potentially active faults are located within 25 miles of Avalon. An active fault is defined as a fault showing evidence of surface displacement during Holocene time (within the last approximately 11,700 years). A potentially active fault is defined as a fault showing evidence of surface displacement during Quaternary time (within the last approximately 2.6 million years). Active faults include the Palos Verdes, Cabrillo and San Diego Trough. Potentially active faults include San Pedro Basin, Newport Inglewood and San Clemente.

The Cabrillo Fault located on the Palos Verde Peninsula approximately 20 miles northeast of Avalon is the closest active fault to the study area. Although no known faults are located within Avalon, the fault systems referenced above could cause property damage, possibly resulting in injury and loss of life in the event of a major earthquake due to ground motion. The level of impact resulting from any seismic activity will depend on factors such as distance from epicenter, earthquake magnitude, soil characteristics and subsurface geology.

During the life of the proposed improvements, the site will likely experience moderate to occasionally high ground shaking from known faults, as well as background shaking from other seismically active areas of the Southern California region. However, site preparation and construction of the improvements consistent with geotechnical recommendations and current California Building Code (CBC) requirements would address seismic concerns and related structural impacts associated with ground shaking. Impacts would be **less than significant**.

a (iii) Liquefaction typically occurs within the upper 50 feet of the surface, when saturated, loose, fine- to medium-grained soils (sand and silt) are present. Earthquake shaking suddenly increases pressure in the water that fills the pores between soil grains, causing the soil to lose strength and behave as a liquid. When liquefaction occurs, the strength of the soil decreases, reducing the ability of the underlying soil to support foundations for buildings and other structures. The type of geologic process that created a soil deposit has a strong influence on its liquefaction susceptibility. Saturated soils that have been created by sedimentation in rivers and lakes can be very susceptible to liquefaction.

As referenced in the General Plan Update, groundwater in Avalon is typically at sea level and the liquefaction potential in the City of Avalon is considered low. The only improvement requiring construction would be the groin wall. The wall footing would be constructed on bedrock. Thus, there would be no liquefaction potential. Impacts related to liquefaction would be **less than significant**.

a (iv) The project site is generally flat. The hillside to the south does have various rock-slide prevention measures in place. There are two known landslide areas in Avalon. Neither are located in proximity to the project site. Slopes located south of the site are vegetated and/or developed. No evidence of landslide is located in this area. The improvements would not affect the toe of the slopes, destabilize existing slopes or create steep slopes that could increase the potential for landslides. Impacts related to landslides would be **less than significant**.

b) As noted, the site is generally flat which limits erosion potential. The disturbance area is greater than one acre in size; thus, the project would be subject to State Water Resources Control Board General Construction Permit during construction to minimize soil erosion. For additional information, see Section IX, *Hydrology and Water Quality*. With implementation of Best Management Practices (BMPs) specified in the Stormwater Pollution Prevention Plan (SWPPP) prepared for the project, soil erosion hazard impacts would be **less than significant**.

c, d) Land subsidence is defined as the sinking or settling of land to a lower level. Causes can include: (1) earth movements; (2) lowering of ground water level; (3) removal of underlying supporting materials by mining or solution of solids, either artificially or from natural causes; (4) compaction caused by wetting (hydro-compaction); (5) oxidation of organic matter in soils; or (6) added load on the land surface.

Per the General Plan Update, subsidence is usually localized and does not appear to present a threat to the City of Avalon. No evidence of subsidence is present in the study area and project improvements would replace the beach sand and make improvements to existing infrastructure. Site specific impacts related to subsidence would be **less than significant**.

e) The proposed project is comprised of erosion control, safety and access improvements. The improvements would not generate wastewater. No septic systems would be installed. **No impact** would occur under this threshold.

f) No specific paleontological sensitivity information is provided for the project site and no known paleontological resources occur in the area. The area affected is the seabed and adjacent improved upland infrastructure. The project would not increase the depth of the existing disturbance. **No impact** to paleontological resources would occur with the project.

|  | Potentially<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact | No<br>Impact |
|--|--------------------------------------|--------------------------------------------------------------------|------------------------------------|--------------|
|--|--------------------------------------|--------------------------------------------------------------------|------------------------------------|--------------|

### VIII. GREENHOUSE GAS EMISSIONS

Would the project:

- a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
- b) Conflict with any 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"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Gases that trap heat in the atmosphere are often referred to as greenhouse gases (GHGs), analogous to the way in which a greenhouse retains heat. Common GHG include water vapor, carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxides (N<sub>2</sub>O<sub>x</sub>), fluorinated gases, and ozone. GHGs are emitted by both natural processes and human activities. Of these gases, CO<sub>2</sub> and CH<sub>4</sub> are emitted in the greatest quantities from human activities. Emissions of CO<sub>2</sub> are largely by-products of fossil fuel combustion, whereas CH<sub>4</sub> results from off-gassing associated with agricultural practices and landfills. Man-made GHGs, many of which have greater heat-absorption potential than CO<sub>2</sub>, include fluorinated gases, such as hydrofluorocarbons (HFCs), perfluorocarbons (PFC), and sulfur hexafluoride (SF<sub>6</sub>). The accumulation of GHGs in the atmosphere regulates the earth's temperature. Without the natural heat trapping effect of GHGs, Earth's surface would be about 34° C cooler. However, it is believed that emissions from human activities, particularly the consumption of fossil fuels for electricity production and transportation, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations (Cal EPA, 2006).

Pursuant to the requirements of SB 97, the *CEQA Guidelines* were amended to include feasible mitigation of GHG emissions and analysis of the effects of GHG emissions. The adopted *CEQA Guidelines* provide regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts.

The majority of individual projects do not generate sufficient GHG emissions to create a project-specific impact through a direct influence to climate change; therefore, the issue of climate change typically involves an analysis of whether a project's contribution towards an impact is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15355).

Potential GHG impacts are evaluated per the SCAQMD's recommended/preferred option threshold for all land use types of 3,000 metric tons CO<sub>2</sub>E per year. GHG emissions associated with the project's construction period were estimated using the CalEEMod computer program. CalEEMod input parameters and output files are shown in Appendix A.

a) Construction activities would generate greenhouse gas (GHG) emissions associated with equipment operation. The project-related construction emissions would be generated over several months extending from early to mid-2025. The most extensive improvements would occur during construction of the groin wall and placement of beach sand. Thus, related emissions are used herein to define the significance of impacts related to GHG emissions. Site preparation and grading typically generate the greatest emission quantities because the use of heavy equipment is greatest during this phase of construction. Emissions associated with the construction period were estimated based on the projected maximum amount of equipment that would be used onsite at one time. Air districts such as the SCAQMD have recommended amortizing construction-related emissions over a 30-year period to calculate annual emissions.

Construction of the project would generate approximately 210 metric tons of GHG emissions during construction. Amortized over 30 years, the project would generate seven metric tons as shown in Table 4 below.

Table 4 also shows the operational GHG emissions associated with the proposed project. As referenced in Section II, *Air Quality*, there would be no anticipated air emissions associated with the operation of the project. As discussed, the project would not increase vehicle trips, increase the length of any commute or otherwise contribute to increased vehicle miles traveled within the City of Avalon.

**Table 4**  
**Combined Annual Greenhouse Gas Emissions**

| Emission Source     | Annual Emissions<br>(CO <sub>2</sub> E) |
|---------------------|-----------------------------------------|
| <b>Construction</b> | 7 metric tons                           |
| <b>Operational</b>  |                                         |
| Energy              | 0.0 metric tons                         |
| Solid Waste         | 0.0 metric tons                         |
| Water               | 0.0 metric tons                         |
| <b>Mobile</b>       | 0.0 metric tons                         |
| <b>Total</b>        | <b>7.0 metric tons</b>                  |

*See Appendix A for CalEEMod software program output*

Cumulatively, the estimated emissions would not exceed the 3,000 MT CO<sub>2</sub>E; thus, GHG emissions would be **less than significant**.

b) The proposed project would entail construction and safety and access improvements along South Beach. As discussed, the project would not exceed the thresholds of significance established for the evaluation of individual projects for GHG emissions. With respect to consistency with plans or policies related to GHG emissions, the City of Avalon does not have an approved Climate Action Plan. Thus, consistency with plans/policies focuses on project consistency with the 3,000-metric ton annual emission threshold provided by SCAQMD and used by the City of Avalon to determine project specific GHG impacts.

As discussed in Section IV, *Conservation Element*, of the Avalon General Plan Update, potential sea-level rise associated with global climate change is a concern city-wide given potential impacts to beaches, commercial areas and infrastructure. The proposed project is in part, intended to reinforce the seawall to minimize future wave damage during storm events as well as encroachment associated with sea level rise. The project would be consistent with goals and related policies in the General Plan Update addressing global climate change. Impacts would be **less than significant**.

|                                                                                                                                                                                                                                                                                     | Potentially<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact  | No<br>Impact                        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------|-------------------------------------|-------------------------------------|
| <b>IX. <u>HAZARDS AND HAZARDOUS MATERIALS</u> - Would the project:</b>                                                                                                                                                                                                              |                                      |                                                                    |                                     |                                     |
| 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 ¼ mile of an existing or proposed school?                                                                                                                               | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| d) Be located on a site which is included on a list of hazardous material 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 type="checkbox"/>            | <input checked="" type="checkbox"/> |
| f) Impair implementation of or physically interfere with an adopted emergency response plan or                                                                                                                                                                                      | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

|  | Potentially<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact | No<br>Impact |
|--|--------------------------------------|--------------------------------------------------------------------|------------------------------------|--------------|
|--|--------------------------------------|--------------------------------------------------------------------|------------------------------------|--------------|

**IX. HAZARDS AND HAZARDOUS MATERIALS - Would the project:**

emergency evacuation plan?

- g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

☐
☐
☐
☒

a-c) The proposed project would construct safety and various safety enhancements along and adjacent to South Beach. The only hazardous materials stored on-site would be fuel and other petroleum products (i.e., motor oil, hydraulic fluid, etc.) used in the construction equipment. The project would not contain fuel tanks or otherwise sell or store hazardous materials.

The Avalon K-12 School is located at 200 Falls Canyon Road approximately 0.5 miles southwest of the Cabrillo Mole Ferry Terminal. Construction of the proposed project would involve the use of fuel, lubricants, and chemicals that may be considered hazardous. This material would be used in heavy equipment and not stored on-site. Impacts related to accidental spills or other releases would be minimized or avoided by using mobile refueling and lubrication services. These services would utilize fueling pads and related methods to absorb any accidental spills during refueling or fluid/lubricant replacement. While the school would be approximately ¼ mile from the construction area, potential impacts related to hazardous materials used during construction would not be significant or adverse. No hazardous materials would be associated with operation of the proposed improvements. Based on these factors, a **less than significant** impact would occur under these thresholds.

d) According to the Geotracker (State Water Board) and Envirostor (Department of Toxic and Substance Control) databases, no uses or activities that could have caused or contributed to a release of hazardous chemicals or materials on the property occur or have occurred on the site. There is no visible evidence of hazardous environmental conditions on the project site. **No impact** would occur under this threshold.

e) Avalon Airport is located approximately 6 miles northwest of the project site. The proposed project is not located within the Avalon Airport land use boundary, within 2 miles of a public use airport in proximity to a private airstrip. **No impact** would occur.

f) The proposed project would not require temporary lane closures during construction as no work would occur on or proximal to a local street. Post construction, the improvements will not affect emergency access; thus, the project will not impact evacuation routes or otherwise impair

evacuation during emergencies. A **less than significant** impact would occur under this threshold.

g) The project site is located in a developed area along the Avalon waterfront. The project site, as is all of Santa Catalina Island, is located in a Very High Fire Hazard Severity Zone as designated by the California Department of Forestry and Fire Protection (CalFire website accessed July 2024). The project site is located within a Local Responsibility Area; thus, wildfires within the City of Avalon is the responsibility of Los Angeles County. The project entails the construction of erosion control, access and safety improvements along South Beach. No new structures or other improvements that could be damaged during a fire would be constructed. **No impact** would occur under this threshold.

|                                                                                                                                                                                                                        | Potentially<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact | No<br>Impact                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------|------------------------------------|-------------------------------------|
| <b>X. <u>HYDROLOGY AND WATER QUALITY</u> – Would the project:</b>                                                                                                                                                      |                                      |                                                                    |                                    |                                     |
| a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?                                                                             | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input 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 type="checkbox"/>           | <input checked="" 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 surveys, in a manner which would: |                                      |                                                                    |                                    |                                     |
| 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 water runoff which would result in flooding on- or off-site?                                                                                                  | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input type="checkbox"/>           | <input checked="" type="checkbox"/> |
| iii) Create or contribute runoff water                                                                                                                                                                                 | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input type="checkbox"/>           | <input checked="" type="checkbox"/> |

|                                                                                                                                                      | Potentially<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact | No<br>Impact                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------|------------------------------------|-------------------------------------|
| <b>X. <u>HYDROLOGY AND WATER QUALITY</u> – Would the project:</b>                                                                                    |                                      |                                                                    |                                    |                                     |
| which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, or? |                                      |                                                                    |                                    |                                     |
| iv) Otherwise 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 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 type="checkbox"/>           | <input checked="" type="checkbox"/> |

a) The project site is currently improved with a public promenade, seawall and beach access ramps/stairs. There is no existing stormwater channel; however, municipal stormwater infrastructure is located within the area. The amount of impervious surface would not be affected by the project nor would the drainage pattern. As stated, the project would affect more than one acre; and thus, would require a State Water Resources Control Board General Construction Permit during construction to minimize soil erosion and related water quality impacts. Further, as stated in Section IV, *Biological Resources*, Mitigation Measures BIO-5 and BIO-6 would reduce potential water quality impacts to less than significant. Thus, with mitigation, the project would not substantially degrade water quality or otherwise violate discharge standards. Impacts would be **less than significant**.

b) Southern California Edison provides water service to Catalina Island. The City of Avalon is located within the East End water distribution system. The primary source of fresh water comes from the aquifer connected to the Middle Ranch Reservoir. The reservoir has a capacity of about 1,149-acre feet. Fresh ground water is drawn from the aquifer via three groundwater wells in Middle Ranch. The water is aerated and chlorinated and then pumped to Wrigley Reservoir for distribution to the city of Avalon and other users within the island's East End. The water supply is not dependent on groundwater pumped from the project area nor would improvements affect any groundwater recharge that may occur in the project area. **No impact** to groundwater resources would occur as a result of the project.

c)(i) As referenced, the project would implement standard stormwater control requirements per the State Water Resources Control Board General Construction Permit. No new impervious surfaces would be required nor would improvements alter the course of an existing stream or river that would result in on- or off-site erosion or siltation. **No impact** would occur under this threshold.

(ii) The project area is located within Flood Zone AE as depicted in FEMA Flood Insurance Rate Map No. 06037C2202F (September 2008). Areas with an AE designation have a one percent annual chance of flooding. The project would not redirect on-site drainage patterns nor would it impede or redirect flood flows. Drainage would be unaffected by the project. The project would not expose people or structures to greater flood hazard than what occurs under existing conditions. The drainage would not be changed; thus, **no impact** would occur under this threshold.

(iii) Municipal stormwater infrastructure is located proximal to the project area; however, it would not be affected by the project nor would improvements affect stormwater infrastructure. The project will not contribute substantial quantities of polluted runoff or exceed the capacity of the stormwater system. **No impact** would occur under this threshold.

(iv) As referenced, the project would not modify on-site drainage through construction of new stormwater treatment and conveyance features. The project would not result in the discharge of material into surface waters beyond what may occur as a result stormwater runoff. While the site is located within Flood Zone AE per Flood Insurance Rate Map No. 06037C2202F, September 2008); thus, improvements would not be affected by flooding if it were to occur nor would the improvements redirect on-site drainage patterns or impede or redirect flood flows. **No impact** would occur under this threshold.

d) Seiches are oscillations of the surface of inland bodies of water that vary in period from a few minutes to several hours. Seismic excitations can induce such oscillations. Tsunamis are large sea waves produced by submarine earthquakes or volcanic eruptions. The City of Avalon is located within an area that could be affected by a tsunami. Those areas most vulnerable are located in proximity to Avalon Harbor. The project site is located along the shoreline; and thus, could be exposed to tsunami waves.

As referenced in the General Plan Update, strong winds generated by northeasterly windstorms have the potential to cause large waves along the eastern side of the island. As referenced, preventing or minimizing further wave and current damage to the seawall is a benefit of the proposed project. No mudflows are known to have occurred within the project in the area and the project would not increase the potential for mudflow events to occur. **No impact** would occur under this threshold

e) The project would require water use during construction for dust control and related purposes. Post construction, the project would not require potable water with the exception of

water used for cleaning surfaces. The proposed project would be required to comply with federal, State and local plans, policies and regulations and Executive Order B-29-15, which requires reduction of potable water use during construction and implementation of Best Management Practices concerning water conservation, both for potable and non-potable uses. The project site is not within a groundwater recharge area. **No impact** would occur to groundwater recharge.

|                                                                                                                                                                                        | Potentially<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact | No<br>Impact                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------|------------------------------------|-------------------------------------|
| <b>XI. LAND USE AND PLANNING --</b>                                                                                                                                                    |                                      |                                                                    |                                    |                                     |
| Would the proposal:                                                                                                                                                                    |                                      |                                                                    |                                    |                                     |
| 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"/> |

a) The proposed project would construct infrastructure improvements along South Beach. The proposed project would utilize the existing promenade and all improvements would occur on the beach, adjacent seabed or within the existing right of way. The project would not construct improvements that would physically divide an existing community or otherwise impact circulation on public roads surrounding the site. **No impact** would occur under this threshold.

b) The proposed project would be consistent with the current General Plan Update (2013) as referenced above. The project would not conflict with existing zoning or land use designations. The project would require a Coastal Development Permit which would be issued by the City of Avalon through the Local Coastal Program. The project was evaluated for consistency with the seven Coastal Resource and Management Policies provided in Chapter 3 of the California Coastal Act. Chapter 3 contains the standards used by the California Coastal Commission in the review of coastal development permits and Local Coastal Programs. The chapter's seven articles govern all development along the coastline and mandate protection of public access, recreational opportunities, and marine and land resources. The articles and project consistency are addressed as follows:

**Article 1.** States that Chapter 3 shall be used as the standard against which the legality of LCPs and development permits will be measured.

**Discussion.** Article 1 establishes standards and procedures for the review of Local Coastal Programs (LCP). The City of Avalon General Plan Update and LCP (2013) was approved by the California Coastal Commission; and thus, is used as the guiding document for decisions regarding approval of Coastal Development Permits within the City of Avalon. The project would be consistent with Article 1.

**Article 2.** Mandates that development shall not interfere with the public's right to access the sea and coastal beaches.

**Discussion.** The proposed improvements would facilitate safe access to coastal resources along the seawall and South Beach. These include improvements to the existing access ramp/stairs. The project would be consistent with Article 2.

**Article 3.** Addresses recreation, placing a priority on coastal dependent public and private recreation over residential development.

**Discussion.** The proposed project doesn't include residential development. The project restore the South Beach sand or make access and safety improvements to the existing seawall and launch ramp/stairs. This would enhance public access to the shoreline. The project would be consistent with Article 3.

**Article 4.** Addresses protection of the marine environment, including water quality issues, wetlands protections and coastal armoring.

**Discussion.** The project would enhance coastal armoring by repairing the seawall and constructing the groin wall to minimize future erosion and wave damage. Further, the project would protect against future damage and provide for enhanced public access via improvements to beach access. No sensitive marine habitat or species would be adversely affected by the project. The project would be consistent with Article 4.

**Article 5** addresses protections for environmentally sensitive habitat, agriculture and archeological resources.

**Discussion.** No environmentally sensitive habitat, agricultural resources or archaeological resources occur or are known to occur within the study area. Article 5 does not apply to the proposed project.

**Article 6** addresses development and issues such as protection of coastal views, limitations on coastal armoring and landform alteration, and geologic hazards.

**Discussion.** The scope of development associated with the project includes seawall restoration, construction of a new groin wall and replacement of the beach sand. Coastal views would not be affected. Armoring is a benefit of the improvements and would protect the upland promenade from future storm damage and sea level rise. No landforms would be altered nor are there geological hazards that would impact the project. The project would be consistent with Article 6.

**Article 7** addresses industrial development.

**Discussion.** No industrial development is proposed as part of the project. Article 7 is not applicable.

As referenced, the project would be consistent with the General Plan Update. Further, the proposed improvements would be consistent with those Articles in Chapter 3 of the California Coastal Act that apply. **No impact** would occur under this threshold.

|                                                                                                                                                                        | Potentially<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact | No<br>Impact                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------|------------------------------------|-------------------------------------|
| <b>XII. <u>MINERAL RESOURCES</u> --</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"/> |

a, b) Per the City of Avalon General Plan Update, there are areas within the City that contain mineral resources and are appropriate for mineral extraction. The existing rock quarry is located within the City's Sphere of Influence boundary. It produces crushed rock or aggregate primarily for construction uses. Historically, silver, lead and zinc mining have occurred on Catalina Island. The City of Avalon is not designated as a Mineral Resource Zone (MRZ). The proposed project may require use of excavated rock from the existing quarry; however, no other minerals would be required nor would construction result in the loss of availability of any known regional or local mineral resources. Therefore, **no impact** to mineral resources would occur.

|                                                                                                                                                                                                                                                                                                           | Potentially<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact | No<br>Impact                        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------|------------------------------------|-------------------------------------|
| <b>XIII. <u>NOISE</u></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 checked="" type="checkbox"/>                                | <input type="checkbox"/>           | <input type="checkbox"/>            |
| b) Generation of excessive groundborne vibration or groundborne noise levels?                                                                                                                                                                                                                             | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input 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 type="checkbox"/>           | <input checked="" type="checkbox"/> |

Noise levels (or volume) are generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound power levels consistent with the human hearing response, which is most sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz).

Sound pressure level is measured on a logarithmic scale with the 0 dB level based on the lowest detectable sound pressure level that people can perceive (an audible sound that is not zero sound pressure level). Based on the logarithmic scale, a doubling of sound energy is equivalent to an increase of 3 dB, and a sound that is 10 dB less than the ambient sound level has no effect on ambient noise. Because of the nature of the human ear, a sound must be about 10 dB greater than the reference sound to be judged as twice as loud. In general, a 3 dB change in community noise levels is noticeable, while 1-2 dB changes generally are not perceived. Quiet suburban areas typically have noise levels in the range of 40-50 dBA, while those along arterial streets are in the 50-60+ dBA range. Normal conversational levels are in the 60-65 dBA range, and ambient noise levels greater than 65 dBA can interrupt conversations.

In addition to the instantaneous measurement of sound levels, the duration of sound is important since sounds that occur over a long period of time are more likely to be an annoyance or cause direct physical damage or environmental stress. One of the most frequently used noise metrics that considers both duration and sound power level is the equivalent noise level ( $L_{eq}$ ). The  $L_{eq}$  is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time (essentially, the average noise level). Typically,  $L_{eq}$  is summed over a one-hour period.

The time period in which noise occurs is also important since noise that occurs at night tends to be more disturbing than that which occurs during the daytime. Two commonly used noise metrics – the Day-Night average level ( $L_{dn}$ ) and the Community Noise Equivalent Level (CNEL) recognize this fact by weighting hourly  $L_{eq}$  over a 24-hour period. The  $L_{dn}$  is a 24-hour average noise level that adds 10 dB to actual nighttime (10:00 PM to 7:00 AM) noise levels to account for the greater sensitivity to noise during that time period. The CNEL is identical to the  $L_{dn}$ , except it also adds a 5-dB penalty for noise occurring during the evening (7:00 PM to 10:00 PM).

Vibration is sound radiated through the ground. The rumbling sound caused by the vibration of room surfaces is called ground borne noise. Ground borne vibration is almost exclusively a concern inside buildings and is rarely perceived as a problem outdoors. Ground-borne vibration related to human annoyance is generally related to velocity levels expressed in vibration decibels (VdB). However, construction-related groundborne vibration in relation to its potential for building damage can also be measured in inches per second (in/sec) peak particle velocity (PPV) (Federal Transit Administration, May 2006). Based on the FTA's *Transit Noise and Vibration Impact Assessment* and the California Department of Transportation's 1992 *Transportation-Related Earthborne Vibration, Technical Advisory*, vibration levels decrease by 6 VdB with every doubling of distance.

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. Residences, hospitals, schools, guest lodging, libraries, and parks are most sensitive to noise intrusion; and therefore, have more stringent noise exposure standards than commercial or industrial uses that are not subject to impacts such as sleep disturbance. Sensitive land uses generally should not be subjected to noise levels that would be considered intrusive in character. Therefore, the location, hours of operation, type of use, and extent of development warrant close analysis in an effort to ensure that noise sensitive receptors are not substantially affected by noise.

## **Noise Standards**

**Federal Noise Policies.** There are no federal noise requirements or regulations that apply directly to the City of Avalon. However, there are federal regulations that influence the audible landscape, especially for projects where federal funding is involved. For example, the FHWA requires abatement of highway traffic noise for highway projects through rules in the Code of Federal Regulations (23 CFR Part 772), the Federal Transit Administration (FTA), and Federal Railroad Administration (FRA). Each agency recommends thorough noise and vibration

assessments through comprehensive guidelines for any highway, mass transit, or high-speed railroad projects that would pass by residential areas.

Federal Vibration Policies. The Federal Transit Administration (FTA) has published guidelines for assessing the impacts of groundborne vibration associated with construction activities, which have been applied by other jurisdictions to other types of projects. The FTA measure of the threshold of architectural damage for non-engineered timber and mason buildings (e.g., residential units) is 0.2 in/sec PPV. The threshold of perception of vibration is 0.01 in/sec PPV (Federal Transit Administration, Office of Planning and the Environment, 2006).

State Noise Policies. Title 24, Section 3501 et. seq. of the California Code of Regulations codifies California Noise Insulation Standards. This code section uses the Community Noise Equivalency Level (CNEL) as its primary noise evaluation measurement. The CNEL measurement assesses noise variation during different times of the day for the purposes of averaging noise over a 24-hour period. Essentially, CNEL takes average sound levels at an observation point and adds a weighted penalty to those sounds that occur during the evening (+5 dBA) and nighttime hours (+10 dBA). An interior noise level of 45 dBA CNEL is often considered the desirable noise exposure level for single-family residential units. An exterior noise level of 65 dBA is generally considered an acceptable level for residential and other noise-sensitive land uses.

State Vibration Policies. There are no state standards for traffic-related vibrations. California Department of Transportation's (Caltrans) position is that highway traffic and construction vibrations generally pose no threat to buildings and structures. For continuous (or steady-state) vibrations; however, Caltrans considers the architectural damage risk level to be somewhere between 0.2 and 2.0 inches/second (California Department of Transportation, 2002).

City of Avalon Noise Ordinance. Chapter 13, Section 5-13.05 of the Avalon Municipal Code prohibits the operation of construction equipment within five hundred (500') feet of any residential zone or of a hotel or motel, between the hours of 7:00 pm and 8:00 am Monday through Saturday or anytime on Sunday.

a) **Construction Noise.** Temporary, construction-related noise would occur during construction of the proposed project. The noise levels associated with the operation of common construction equipment are shown in Table 5. The noise levels are provided for reference purposes; not all equipment shown would be used for the proposed project. Noise levels are expected to occur within the ranges shown.

**Table 5**  
**Typical Maximum (Lmax) Construction Equipment Noise Levels**

| Equipment Onsite | Typical Maximum Level (dBA) 25 Feet from the Source | Typical Maximum Level (dBA) 50 Feet from the Source | Typical Maximum Level (dBA) 100 Feet from the Source |
|------------------|-----------------------------------------------------|-----------------------------------------------------|------------------------------------------------------|
| Pile Driver      | 99                                                  | 93                                                  | 87                                                   |
| Air Compressor   | 86                                                  | 80                                                  | 74                                                   |

**Table 5**  
**Typical Maximum (Lmax) Construction Equipment Noise Levels**

| Equipment Onsite  | Typical Maximum Level (dBA) 25 Feet from the Source | Typical Maximum Level (dBA) 50 Feet from the Source | Typical Maximum Level (dBA) 100 Feet from the Source |
|-------------------|-----------------------------------------------------|-----------------------------------------------------|------------------------------------------------------|
| Backhoe           | 86                                                  | 80                                                  | 74                                                   |
| Bobcat Tractor    | 86                                                  | 80                                                  | 74                                                   |
| Concrete Mixer    | 91                                                  | 85                                                  | 79                                                   |
| Loader            | 86                                                  | 80                                                  | 74                                                   |
| Bulldozer         | 91                                                  | 85                                                  | 79                                                   |
| Jack Hammer       | 94                                                  | 88                                                  | 82                                                   |
| Pavement Roller   | 91                                                  | 85                                                  | 79                                                   |
| Street Sweeper    | 88                                                  | 82                                                  | 76                                                   |
| Man Lift          | 81                                                  | 75                                                  | 69                                                   |
| Dump Truck        | 90                                                  | 84                                                  | 78                                                   |
| Mobile Crane      | 89                                                  | 83                                                  | 77                                                   |
| Excavator/Scraper | 91                                                  | 85                                                  | 79                                                   |

Source: FTA Noise and Vibration Impact Assessment Manual (September 2018), Table 7-1.

Noise levels are based on actual maximum measured noise levels at 50 feet (Lmax).

Noise levels are based on a noise attenuation rate of 6 dBA per doubling of distance.

Construction of the proposed improvements would require heavy equipment; however, the majority of the work would be accomplished using hand tools. Construction of the groin wall may require pile driving for sheet pile installation, a concrete mixer and a pump for concrete placement. Loading equipment would be required for movement of beach sand. Noise levels associated with the equipment commonly used will range from 74 to 82 dBA at 100 feet from the source. However, if a pile driver is needed, noise levels could reach 93 dBA during use. A doubling of sound energy yields an increase of three decibels, so multiple pieces of equipment operating together may cause relatively small but noticeable increases in noise levels above that associated with one piece of equipment. The closest sensitive receivers appear to be on the second floor of the building located at 615 Crescent Avenue, approximately 100 feet west of the construction area. Construction noise could reach 87 dBA at this location during use of a pile driver. Noise levels associated with commonly used equipment would or more at various times during the workday depending on the type and proximity of equipment being used.

Construction noise is regulated by local jurisdictions. It is not subject to the State Noise Policy referenced above. As referenced, Chapter 13, Section 5-13.05 of the Avalon Municipal Code prohibits the operation of construction equipment within five hundred (500') feet of any residential zone or of a hotel or motel, between the hours of 7:00 pm and 8:00 am Monday through Saturday or anytime on Sunday. There are no known residences in proximity to the project area; however, as stated, second floor hotel rooms are located approximately 100 feet west of the construction area. Construction activities would be limited to between 8:00 a.m. and

7:00 p.m. Monday through Saturday. Temporary and substantial noise levels affecting people would be **less than significant**.

As stated in Section IV, *Biological Resources*, the use of large machinery for construction and installation of sheet piles may result in construction-induced noise impacts that could alter the behavior of protected upland and marine species. Construction-induced noise impacts from landside construction activity and overwater construction activities could disrupt the behavior of piscivorous birds, marine mammals, turtles. It is unlikely that marine mammals or turtles will inhabit the area; however, construction noise can impact the foraging behavior of piscivorous birds such as the California brown pelican and nesting birds on the hillside south of the project area. Without mitigation, this impact could be **significant**. Implementation of Mitigation Measures BIO-1 through BIO-4 and BIO-7 would reduce potential noise-related impacts on marine species to **less than significant**.

**Operational Noise.** The proposed project would improve public safety and restore South Beach. The project would not generate vehicle trips or operational noise. No impacts related to traffic or other operational sources would occur.

b) Vibration is a unique form of noise because its energy is carried through buildings, structures, and the ground, whereas noise is simply carried through the air. Thus, vibration is generally felt rather than heard. Some vibration effects can be caused by noise; e.g., the rattling of windows from truck pass-bys. This phenomenon is caused by the coupling of the acoustic energy at frequencies that are close to the resonant frequency of the material being vibrated. Typically, groundborne vibration generated by manmade activities attenuates rapidly as vibration rapidly diminishes in amplitude with distance from the source. In the U.S., the ground motion caused by vibration is measured as particle velocity in inches per second and is referenced as vibration decibels (VdB).

The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. If a roadway is smooth, the groundborne vibration from traffic is barely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration velocity, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings. There are no activities observed in the area that generate perceptible groundborne vibration.

Construction activity on the project site would be temporary and any vibration would likely not persist for long periods. Construction activities that typically generate substantial groundborne vibration include deep excavation and pile driving. Based on the proposed scope of improvements, pile driving may be required to drive sheet piles required for groin wall construction. As referenced, there are no sensitive receivers located adjacent to the construction area; however, based on the information presented in Table 6, typical vibration levels for pile driving could be approximately 0.644 PPV or 104 VdB based on distance from the construction area. As discussed, 100 VdB is the threshold where minor damage can occur in fragile buildings.

Assuming an attenuation rate of 6 dBA per doubling of distance, 104 VdB at 25 feet would attenuate to approximately 92 VdB at the nearest receiver. Vibration levels are projected to be under the threshold associated with damage to fragile buildings. Other common vibration levels would be similar to those associated with loaded trucks which are 86 VdB at 25 feet and 74 VdB at 100 feet, based on the Federal Transit Administration's (FTA's) *Transit Noise and Vibration Impact Assessment* (September 2018) as shown in Table 6.

**Table 6**  
**Vibration Source Levels for Construction Equipment**

|                                                                                                        | Peak Particle Velocity<br>(inches/second) at 25 feet | Approximate Vibration Level<br>LV (dVB) at 25 feet |
|--------------------------------------------------------------------------------------------------------|------------------------------------------------------|----------------------------------------------------|
| Pile driver (impact)                                                                                   | 1.518 (upper range)                                  | 112                                                |
|                                                                                                        | 0.644 (typical)                                      | 104                                                |
| Pile driver (sonic)                                                                                    | 0.734 upper range                                    | 105                                                |
|                                                                                                        | 0.170 typical                                        | 93                                                 |
| Clam shovel drop (slurry wall)                                                                         | 0.202                                                | 94                                                 |
| Hydromill                                                                                              | 0.008 in soil                                        | 66                                                 |
| (slurry wall)                                                                                          | 0.017 in rock                                        | 75                                                 |
| Vibratory Roller                                                                                       | 0.21                                                 | 94                                                 |
| Hoe Ram                                                                                                | 0.089                                                | 87                                                 |
| Large bulldozer                                                                                        | 0.089                                                | 87                                                 |
| Caisson drill                                                                                          | 0.089                                                | 87                                                 |
| Loaded trucks                                                                                          | 0.076                                                | 86                                                 |
| Jackhammer                                                                                             | 0.035                                                | 79                                                 |
| Small bulldozer                                                                                        | 0.003                                                | 58                                                 |
| Source: Transit Noise and Vibration Impact Assessment, Federal Transit Administration, September 2018. |                                                      |                                                    |

Construction activities occurring within the time period referenced in Chapter 13, Section 5-13.05, would limit vibration to the time of day which is least sensitive to sleep disturbance. Compliance with construction hours stipulated in the Avalon Municipal Code would reduce temporary impacts to **less than significant**. With respect to vibration impacts on wildlife, as stated in Section IV, Biological Resources, Mitigation Measures BIO-1, BIO-2, BIO-3 and BIO-4 would reduce potential noise and vibration impacts to **less than significant**.

c) Avalon Airport is located approximately 6 miles northwest of the project site. There are no private airstrips in proximity to the site. The proposed project is located outside the Airport Land Use Compatibility Zone. While some overflights may occur and be audible, the project is not a noise sensitive use. **No impact** would occur under this threshold.

|                                                                                                                                                                                                                     | Potentially<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact | No<br>Impact                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------|------------------------------------|-------------------------------------|
| <b>XIV. <u>POPULATION AND HOUSING</u> –</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"/> |

a) The proposed project is comprised of safety and restoration improvements along South Beach. The proposed project would not require the removal of housing to accommodate improvements. The project would not induce population growth directly as a result of new development or indirectly through the extension of utility infrastructure to a currently unserved area. The project would not generate temporary construction jobs; however, workers would be housed in existing hotels. No housing would be needed to accommodate workers. **No impact** related to population growth would result from project implementation.

b) The project site is comprised of an existing pedestrian promenade, seawall, beach access ramp/stairs and South Beach. Project implementation would not result in the removal of existing housing or the displacement of residents that would require the construction of replacement housing elsewhere. **No impact** would occur under this threshold.

|  | Potentially<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact | No<br>Impact |
|--|--------------------------------------|--------------------------------------------------------------------|------------------------------------|--------------|
|--|--------------------------------------|--------------------------------------------------------------------|------------------------------------|--------------|

**XV. PUBLIC SERVICES**

- a) Would the project result in substantial adverse physical impacts associated with the provision of new or

|                                                                                                                                                                                                                                                                                                                        | Potentially<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact | No<br>Impact                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------|------------------------------------|-------------------------------------|
| <b>XV. <u>PUBLIC SERVICES</u></b>                                                                                                                                                                                                                                                                                      |                                      |                                                                    |                                    |                                     |
| physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: |                                      |                                                                    |                                    |                                     |
| i) Fire protection?                                                                                                                                                                                                                                                                                                    | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input type="checkbox"/>           | <input checked="" type="checkbox"/> |
| ii) Police protection?                                                                                                                                                                                                                                                                                                 | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input type="checkbox"/>           | <input checked="" 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 type="checkbox"/>           | <input checked="" type="checkbox"/> |
| v) Other public facilities?                                                                                                                                                                                                                                                                                            | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input type="checkbox"/>           | <input checked="" type="checkbox"/> |

a (i-v) The Avalon Fire Department provides fire and emergency medical services to the City of Avalon. The Avalon Fire Station is located at 420 Avalon Canyon Road adjacent to the project area. The Avalon Fire Department operates out of a single station located at 420 Avalon Canyon Road. The facility is a single-story station with 8 apparatus bays, living quarters, equipment and utility areas attached. This station has been in service since 2004. The Avalon Fire Department is served by 11 Full-Time Professional Firefighter positions and a 30-member Reserve Firefighting staff.

Given the nature of the project, it would not cause an increase in demand for fire and/or emergency medical service. Response times would not be affected with the proposed improvements. The project would not require the construction of a new station or expansion of the existing facility to maintain service ratios.

Law enforcement services are provided by the Los Angeles County Sheriff Department. The Avalon station is located at 215 Sumner Avenue. The project is comprised of access and safety improvements and is not expected to generate increased demand for law enforcement services. The project would not increase the population beyond what was anticipated in the Avalon General Plan. The project would not require the construction of new or expanded Police Department facilities.

The Avalon K-12 School was established in its current location at 200 Falls Canyon Road in 1924. It is located approximately 0.5 miles southwest of the project area. Avalon K-12 School is part of Long Beach Unified School District and the only school on Santa Catalina Island. Elementary, middle, and high school students share the same campus. The project would provide access, safety and restoration improvements along South Beach. It would have no effect on students, faculty or staff, affect demand for school services or require the construction of new schools.

The Avalon Branch Library which is part of the Los Angeles County Library system provides library services to city residents. The library is located at 215 Sumner Avenue in the City of Avalon. The project would not increase the population of Avalon or otherwise affect demand for library services. No new or expanded library services would be required.

The nearest recreation area is South Beach. The project would not increase the population of Avalon or otherwise affect demand for park facilities. The project would restore South Beach rather than remove park or recreational facilities that would require replacement elsewhere.

The project would not require the provision of new or physically altered governmental facilities to maintain acceptable levels of service. As noted, no increase in demand for fire, police or other government services are anticipated. **No impact** to public services would occur with the proposed project.

|                                                                                                                                                                                                                | Potentially<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact | No<br>Impact                        |
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| <b>XVI. 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 type="checkbox"/>           | <input checked="" 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"/> |

a-b) The project would be comprised of restoration, safety and access improvements along South Beach. This would enhance recreational opportunities and access to the shoreline. The project would not contribute to an increase in the Avalon population as referenced above otherwise affect demand for recreational resources. **No impact** would occur under this

threshold.

|                                                                                                                                                                                                       | Potentially<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact | No<br>Impact                        |
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| <b>XVII <u>TRANSPORTATION</u></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 type="checkbox"/>           | <input checked="" type="checkbox"/> |
| b) Would the project conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision?                                                                                              | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input type="checkbox"/>           | <input checked="" type="checkbox"/> |
| c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?                                       | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input type="checkbox"/>           | <input checked="" type="checkbox"/> |
| d) Result in inadequate emergency access?                                                                                                                                                             | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input type="checkbox"/>           | <input checked="" type="checkbox"/> |
| e) Conflict with adopted policies, plans, or programs regarding public transit, bikeways, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities? | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input type="checkbox"/>           | <input checked="" type="checkbox"/> |

a) No inconsistencies with General Plan Circulation Element policies would occur. As referenced, the project would provide restoration, safety and access improvements along South Beach. No roadway improvements would occur. Vehicle, pedestrian and bicyclist circulation throughout the project area would not be affected. No inconsistencies with plans related to bicycle or pedestrian access would occur. **No impact** would occur under this threshold.

b) CEQA Guidelines Section 15064.3 state that traffic impact analyses should be performed using the vehicle-miles traveled (VMT) metric beginning July 1, 2020, unless the lead agency elects to be regulated by previous iterations of this section. In this case, the project would have no effect on adjacent roadways or traffic circulation. The project would not generate project

trips. It will not increase VMT or otherwise affect operations along Crescent Avenue or Pebbly Beach Road. **No impact** would occur under this threshold.

c) The project scope is the restoration of South Beach and construction of adjacent safety and access improvements. All construction would occur consistent with City public works road design standards. The project would not increase hazards or otherwise adversely impact public safety by introducing incompatible equipment. **No impact** would occur.

d) The proposed project would not alter emergency access routes. Pebbly Beach Road is the only access from downtown Avalon to the Avalon Freight Terminal and public works infrastructure located south of downtown. The project would not affect Pebbly Beach Road, Crescent Avenue or otherwise impact traffic circulation. Post-construction, project improvements would have no adverse effects on emergency access. **No impact** would occur.

e) No inconsistencies with General Plan Circulation Element policies would occur. The project is intended to improve access and safety within the study area. No inconsistencies with plans related to bicycle or pedestrian access would occur. **No impact** would occur under this threshold.

|                                      |                                                                    |                            |                                    |              |
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|                                      | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Potentially<br>Significant | Less than<br>Significant<br>Impact | No<br>Impact |
| Potentially<br>Significant<br>Impact |                                                                    |                            |                                    |              |

## XVIII. TRIBAL CULTURAL

### RESOURCES -- Would the project:

- a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in the Public Resource 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:

- a. Listed or eligible for listing in the California Register of Historic Places, or in a local register of historical resources as defined in Public Resource Code section 5020.1(k), or

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|                                                                                                                                                                                                                                                                                                                                                                                                                 | Potentially<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact | No<br>Impact             |
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| <b>XVIII. TRIBAL CULTURAL RESOURCES -- Would the project:</b>                                                                                                                                                                                                                                                                                                                                                   |                                      |                                                                    |                                    |                          |
| b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resource Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code 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"/> |

a) As referenced in Section V, *Cultural Resources*, there are no historic resources occurring within or in proximity to the proposed study area that are eligible for California Register of Historic Resources or National Register of Historic Places listing. **No impact** to historic resources would occur.

b) As discussed in Section V, *Cultural Resources*, a NAHC Sacred Lands File search was requested by South Environmental on May 3, 2024. The NAHC responded to the request on May 23, 2024, and reported positive results. The NAHC recommended contacting the Native American tribes for additional information or knowledge they may have regarding the presence of cultural resources that may be impacted by the proposed project. On May 3 and May 28, 2024, South Environmental sent letters to each contact provided by the NAHC.

As discussed, three tribal organizations have responded to the outreach letters to date. No archaeological, historical, or tribal cultural resources were identified within the project site as a result of coordination with tribes; however, the project site and the South Beach area have been identified as being located within ancestral territory, in the vicinity of sacred sites, and the immediate area was identified as culturally sensitive/significant. The Gabrielino Tongva Indians of California requested construction monitoring. The Rincon Band of Luiseno Indians, and the Santa Ynez Band of Chumash Indians have requested to consult with the lead agency and have requested to have a tribal monitor present during all soil disturbing activities. Implementation of Recommendations CR-1 and CR-2 would ensure Native American occurs during ground

disturbing activities greater than one foot. Recommendation CR-3 would avoid impacts to previously undiscovered human remains. Impacts to Tribal Cultural Resources would be **less than significant**.

|                                                                                                                                                                                                                                                                                                                             | Potentially<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact  | No<br>Impact                        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------|-------------------------------------|-------------------------------------|
| <b>XIX. UTILITIES AND SERVICE SYSTEMS -- Would the project:</b>                                                                                                                                                                                                                                                             |                                      |                                                                    |                                     |                                     |
| a) Require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities or expansion of existing facilities, the construction or relocation of which could cause significant environmental effects? | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input checked="" 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 type="checkbox"/>            | <input checked="" 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"/>            |

a) The Avalon sewer collection system consists of approximately 9 miles of gravity mains ranging in size from 6-inch to 18-inch. The sewer collection system also includes two sewer pump stations and approximately 1.2 miles of 12-inch and 16-inch force mains. All flows are conveyed to the wastewater treatment plant located at 123 Pebbly Beach Road (RBF 2014). The

project improvements would not result in the need for construction of new or modified wastewater systems.

Southern California Edison has been providing water service to Catalina Island since 1962. Currently, the water infrastructure includes wells, storage, water treatment and distribution, and a desalination plant. The City of Avalon is located within the East End water distribution system. The primary source of fresh water comes from the aquifer connected to the Middle Ranch Reservoir. The reservoir has a capacity of about 1,149-acre feet. Fresh ground water is drawn from the aquifer via three groundwater wells in Middle Ranch. The water is aerated and chlorinated and then pumped to Wrigley Reservoir for distribution to the city of Avalon and other users within the island's East End. Some water would be needed during construction; however, post-construction, the project would not require potable water. No modifications to the water system would be needed to address capacity limitations.

As discussed in the project description and Section IX, *Hydrology and Water Quality*, the existing impervious surfaces along the promenade west of South Beach would remain as they are under existing conditions. No new impervious surfaces would be constructed as part of the project. No new stormwater infrastructure would be installed.

Southern California Edison electrical lines, telephone/cable lines and utility lines would remain in their current location as part of the project. No additional capacity would be required as a result of project improvements. Impacts under this threshold would be **less than significant**.

b) The project would construct restoration, safety and access improvements along South Beach. It would not result in the construction of new uses or the modification of existing uses that would increase demand for potable water. No improvements to the existing water system would be required as a result of the proposed project. **No impact** would occur under this threshold.

c) As discussed, the project would construct restoration, safety and access improvements along South Beach. It would not affect the capacity of the existing wastewater system or ability of the service provider to treat wastewater. **No impact** would occur under this threshold.

d) The proposed project would generate construction/demolition waste (CDW). Solid waste within the City of Avalon is managed by Avalon Environmental Services, a CR&R Incorporated, company. Collected material is transported to the Material Recovery Facility (MRF) where it is sorted. The recovered materials are baled and barged back to the mainland where it is transported to recyclers. The remaining material compacted in a baler and placed in the landfill. The Pebbly Beach Landfill is located on 7.7 acres in size with approximately 5.6 acres of landfill area. Greenwaste is recycled using a windrow composting system.

It is presumed that construction waste would be comprised of construction debris including concrete, metals and wood. The California Integrated Waste Management Act (CIWMA) of 1989 mandates that all cities and counties in California reduce solid waste disposed at landfills

generated within their jurisdictions by 75% by 2020 and each year thereafter per AB 341. CDW associated with the proposed project will be recycled to the extent practicable with the remainder sent to the landfill. A **less than significant impact** would occur under this threshold.

|                                                                                                                                                                                                                                                                    | Potentially<br>Significant<br>Impact | Less Than<br>Significant<br>With<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact | No<br>Impact                        |
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| <b>XX. WILDFIRES</b> -- 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"/> |
| 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"/> |

a) The proposed project would make restoration, safety and access improvements along South Beach. The project would not adversely impact traffic operations; and thus, would not impact use of the Pebbly Beach Road/Crescent Avenue intersection as an evacuation or emergency response route. A **less than significant impact** would occur under this threshold.

b) The project is surrounded by developed land and Avalon Harbor to the east. Prevailing wind

is from the west and the project is downslope of lands to the west. No native habitat or vegetation communities are located adjacent to the project area. If a wildfire were to occur, the area could be affected; however, there is nothing combustible on the site that would expose users to a higher risk resulting from surrounding slopes or prevailing winds than what occurs under existing conditions. Further, no upland structures are part of the project; and thus, the improvements would likely be unaffected if a wildfire were to occur. Impacts would be **less than significant**.

c) The proposed project would restore South Beach and make safety repairs/improvements to the adjacent seawall, launch ramp/stairs. construct roadway, revetment and pedestrian/bicyclist improvements. The site is currently an active pedestrian area. As noted, the area is void of combustible material and adjacent to a hardscape pedestrian promenade, Pebbly Beach Road corridor and Avalon Harbor. No additional fire prevention efforts would be required to reduce fire risk. **No impact** would occur under this threshold.

d)The site is located downslope from a steep rock slope to the south. If a fire were to occur in the area, it would not increase the risk of landslide or mudflow that could affect the project area. **No impact** would occur under this threshold.

|                                                                                                                                                                                                                                                                                                                                                                                                       | Potentially<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact  | No<br>Impact             |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------|-------------------------------------|--------------------------|
| <b>XXI. <u>MANDATORY FINDINGS OF SIGNIFICANCE</u> —</b>                                                                                                                                                                                                                                                                                                                                               |                                      |                                                                    |                                     |                          |
| a) Does the project have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self- sustaining levels, eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>            | <input type="checkbox"/> |
| b) Does the project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?                                                                                                                                                                                                                                                                | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

c) 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)?

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

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a) The project would be comprised of South Beach restoration and related safety and access improvements. As stated, implementation of Mitigation Measures BIO-1, BIO-2, BIO-3 and BIO-4 and BIO-7 would reduce potential noise impacts to marine and uplands species to **less than significant**. Mitigation Measures BIO-5 and BIO-6 would reduce potential water quality impacts to marine species during construction to less than significant. The project would not require the remove ruderal vegetation and non-native ornamental species prior to construction. There are no threatened, endangered or sensitive plant or animal species occurring on the site; however, nesting and foraging habitat does occur on-site and on adjacent properties. No sensitive marine species or their habitat is located within the area to be disturbed by project improvements.

The Rincon Band of Luiseno Indians, and the Santa Ynez Band of Chumash Indians have requested to consult with the lead agency and have requested to have a tribal monitor present during all soil disturbing activities. While no resources are known to occur in the project area, implementation of Recommendation CR-1 and CR-2 at the City’s discretion would ensure Native American occurs during ground disturbing activities greater than one foot. A response was provided to both respondents indicating the City of Avalon would be conducting consultation separately as part of AB 52. If required, Recommendation CR-3 would be implemented to address any previously undiscovered human remains during construction.

b) The proposed project would improve the safety and access for users of South Beach. Construction of the project would occur consistent with state and local regulations regarding the type of project proposed. This would be consistent with the state’s long-term environmental goals by providing new infrastructure consistent with applicable regulations. A **less than significant** impact would occur.

c) As presented in the discussion of environmental checklist Sections I through XX, the project would have no impact, a less than significant impact, or a less than significant impact after

mitigation with respect to all environmental issues. With mitigation measures, potentially significant impacts would be reduced to **less than significant**. Based on the limited scope of direct physical impacts to the environment associated with the proposed project, the impacts are project-specific in nature. Consequently, the project along with other cumulative projects would result in a **less than significant** cumulative impact with respect to all environmental issues.

d) In general, impacts to human beings are associated with air quality, hazards and hazardous materials and noise. As presented in the environmental checklist discussions, the project would have no impact or a less than significant impact with respect to these environmental issues. Therefore, the project would have a **less than significant** impact on human beings.

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