

CABRILLO MOLE PHASE II REDEVELOPMENT PROJECT

INITIAL STUDY

Prepared for:

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Prepared by:



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Appendix A – Phase I Cultural Resources Report

INITIAL STUDY

1. Project title:

Mole Phase II Redevelopment 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, PE
Public Works Director
City of Avalon Planning Department
(310) 510-0220

4. Project location:

The proposed project as described herein is comprised of Phase II improvements on the existing Cabrillo Mole and adjacent parking lot, sidewalk and queuing area in the City of Avalon, on Santa Catalina Island, California. Phase II improvements would be restricted to upland and existing developed areas only. No work would occur in the water.

5. Project sponsor's name and address:

Mr. Bob Greenlaw
Public Works Director
410 Avalon Canyon Road
Avalon, CA 90704

6. General Plan designation:

Resort Recreational High Density

7. Zoning:

Low Density Residential and Low Intensity Recreation

8. Description of project:

The Cabrillo Mole (Mole) is a multimodal transportation hub used by cross-channel carrier passengers traveling between the mainland and Avalon and as a gathering place for residents and visitors. It is the primary point of entry; and thus, it serves as the gateway to the City of Avalon and Santa Catalina Island. In addition to serving visitors to Catalina Island, the Mole has a working wharf, an operations and maintenance office and related equipment needed to support harbor operations. Originally constructed in 1968, the Mole is a 46-foot wide by 400-foot long concrete slab structure constructed in a north/south orientation on a rock base that also serves as a breakwater for Avalon Harbor.

Existing improvements on the Cabrillo Mole consist of three, single-story masonry buildings and covered walkways that provide all-weather shelter and pedestrian connectivity to an adjacent parking area, a ground transportation (i.e., taxi, hotel shuttles, vehicles, autoettes and bicycles) pickup/drop-off area and sidewalks along Pebbly Beach Road that connect the Mole with downtown Avalon to the west and recreational areas (i.e., Lover's Cove) along the shoreline to the south. The buildings provide commercial space for passenger ticketing, baggage handling services, kiosks, and restrooms. A restaurant/deli as well as offices for tour/excursion companies and harbor operations are also located within the existing buildings. Five in-water floats serve as temporary mooring points for cross-channel commercial carriers, waterside permit holders, private boats and cruise ship tenders. Passenger and visitor-related services are focused on the west side of the Mole. Harbor operations which includes the wharf, crane and related support equipment are located on the east side of the Mole. The concrete wharf structure is a fixed platform on pilings that extends over the water to facilitate loading/unloading of vessels. Public access for fishing is also provided in this area.

As proposed, Phase II of the redevelopment process would build on Phase I improvements which are scheduled for completion mid-2020. Phase I improvements are comprised of reinforcements to the concrete wharf structure and portions of the concrete slab on the Mole to ensure continued safe and reliable operation. Repairs include reinforcing existing concrete members and steel grates on the wharf, concrete slab repairs on the Mole, railing repairs and installation of pedestrian shade structures on the Mole.

Phase II improvements would replace and reconfigure the structure(s) on the Mole, improve pedestrian/passenger gathering/queuing areas and improve adjacent transportation circulation to better facilitate multimodal connectivity. As envisioned, Phase II improvements would include a new two-story building designed to accommodate existing commercial tenants (i.e., recreational tour services, deli, baggage services, ticketing operations, administrative offices and harbor operations) and new space for a restaurant/bar and similar complementary uses that take advantage of this unique location. The first floor would have approximately 4,678 square feet of leasable and accommodate the existing uses referenced above as well as new public restroom facilities. The second floor would have approximately 4,960 square feet of leasable space and a 13,130 square foot deck. The project would include the development of new shade structures and other thematic elements intended to visually connect the Mole with downtown

Avalon while creating a unique visitor experience. Visitors would access ocean views, fishing areas and other outdoor space on the east side of the Mole using either the existing outdoor ground floor space or second story deck access via elevator or stairway. The ground floor would also provide new all-weather gathering areas, passenger loading queue area, ADA-compliant facilities and new path-of-travel to/from ground transportation.

Circulation improvements would include improved short and long-term parking, a vehicle queuing area and passenger loading area as well as access to public transportation. The area affected would be approximately 11,500 square feet of existing pavement. Improvements would include a new sidewalk, landscape planter and restriped parking area.

These improvements would be designed to ensure existing use of in-water infrastructure such as the mooring floats and access to boating services (i.e., pump-a-head facilities) is not interrupted. All improvements would occur on the surface of the Mole and existing adjacent parking/pedestrian area and Pebbly Beach Road. No in-water work would be required for Phase II.

The goal of Phase II is to create a memorable and iconic sense of place as well as a viable source of commercial lease income for the City of Avalon while efficiently serving all intended functions operating within a holistic system. The project is expected to begin construction in mid-2021 and be completed in late 2022. The site is shown in Figure 1. The proposed improvements are shown in Figure 2.

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

The existing Mole surface is approximately 18,400 square feet and comprises the existing Cabrillo Mole Ferry Terminal and related improvements. The adjacent parking lot, sidewalk and covered queueing area for use by ferry passengers is approximately 11,500 square feet. Land use in the area is Pebbly Beach Road and adjacent hillside to the south, Avalon Harbor to the north, existing revetment, seaplane ramp and the Pacific Ocean to the east/southeast. A sidewalk along the south side of Avalon Harbor from the Mole to downtown Avalon is located to the west.

10. Other public agencies whose approval is required:

Coastal Development Permit – California Coastal Commission



Figure 1—Vicinity Map - Project Site

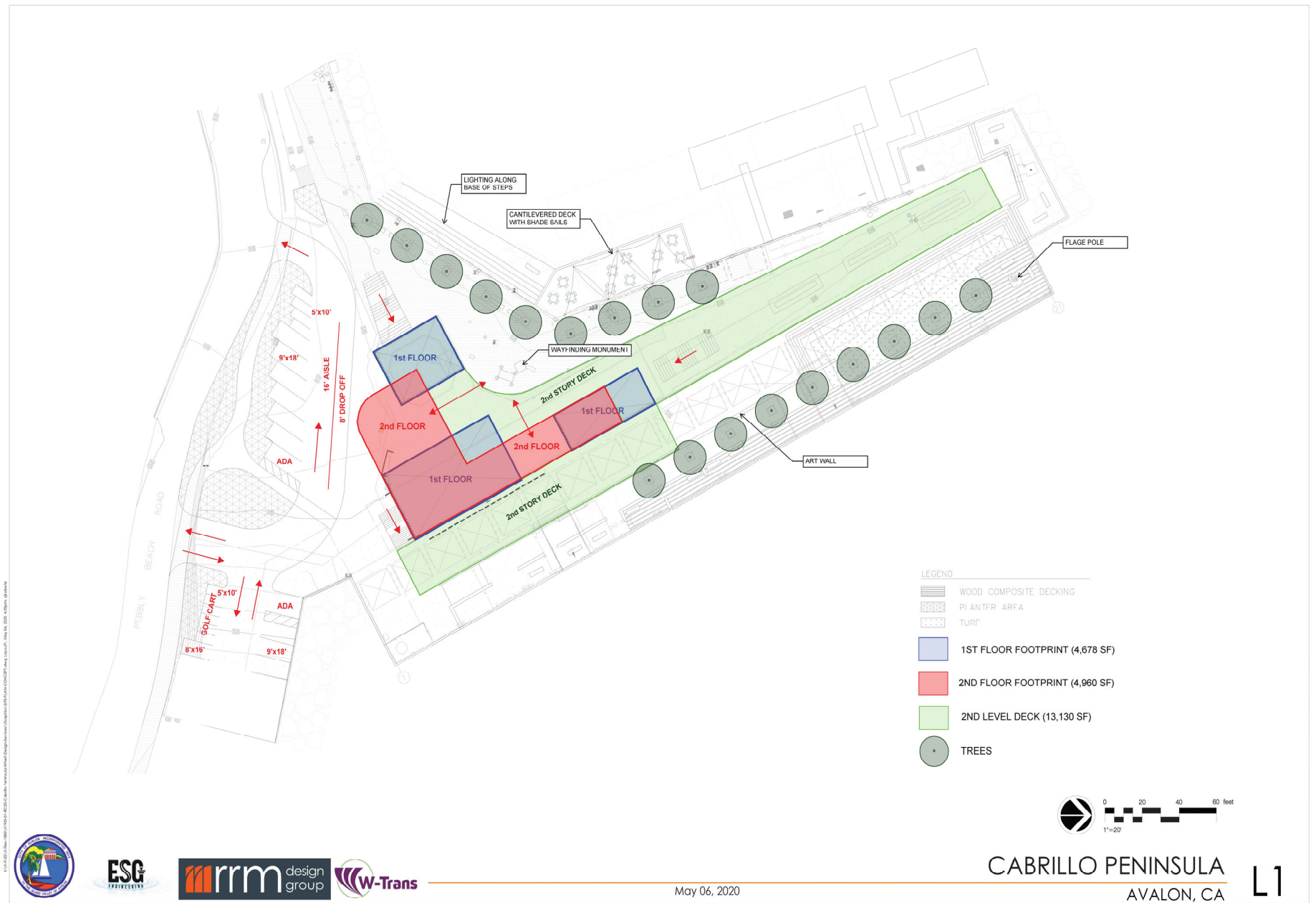


Figure 2—Site Plan

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 Report 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. A total of seven Tribal representatives identified as part of the SLF search were noticed during preparation of the Phase I Cultural Resources Report.

Juan Ochoa, Assistant Tribal Historic Preservation Officer (THPO) of the Pechanga Band of Luiseno Indians responded via telephone on June 5, 2020 stating that he did not have any specific comments, but that Pechanga is interested in the project and will possibly submit comments later. Robert Dorame of the Gabrielino Tongva Indians of California Tribal Council responded via telephone on June 12, 2020 requesting consultation with the City of Avalon in accordance with AB 52.

The City of Avalon mailed notices to those Tribes that have requested consultation per AB 52 on or about July 17, 2020. No responses for formal consultation were received.

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 type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources |
| <input 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 checked="" 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 Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
I. <u>AESTHETICS</u> – would the project:				
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? (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 checked="" type="checkbox"/>	<input type="checkbox"/>

a) Implementation of the project would occur on the existing Mole surface and adjacent parking/queuing area. No additional right of way would be acquired to construct the project. The site is within a currently disturbed area. Views of the site are of the existing Mole structure and related improvements including three single-story concrete block, tile-roofed buildings, covered waiting areas, benches and other features common in public spaces. Views to the east are of the Pacific Ocean. Avalon Harbor and downtown Avalon are to the west. A steep hillside adjacent to Pebbly Beach Road is located to the south.

The proposed project would construct phased improvements as shown in Figure 2 and described in the project description. The project would be designed per City of Avalon design standards and intended to improve the visual appearance and diversify the services available

for people using the Cabrillo Mole to travel between Avalon and the mainland. Currently, the Mole has three concrete block, wood-framed roof buildings that accommodate the existing concessionaires. The buildings are single-story and institutional in appearance and do not facilitate pedestrian circulation around the Mole surface or otherwise complement views of the Pacific Ocean and Avalon Harbor. An image of the design concept is shown in Figure 3. The proposed improvements are intended to enhance the user experience, provide additional amenities and facilitate pedestrian circulation throughout the Mole. Thus, while views of the site would change, the new structure is intended to provide an enhanced visitor experience, expand visual access to the Pacific Ocean and Avalon Harbor and create a visual anchor point for the south side of Avalon Harbor to complement the visually prominent casino building located on the north side the harbor and downtown Avalon to the west. Thus, while views would change, 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 Mole is currently developed with buildings and parking infrastructure. There are no trees or historic structures. Abalone Point is a prominent rock outcropping at Lover's Cove south of the Mole. This would not be affected by the proposed improvements. 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 on the existing Mole surface. Other than components of the existing building, no other structure demolition or vegetation removal would be required to accommodate the improvements. Modifications to the adjacent parking area would be confined to the existing paved surface. Implementation of Phase II would improve the experience of people using the Mole and views of the Pacific Ocean and Avalon Harbor. Views of the site would change; however, the improvements would be designed to facilitate safety, access and enjoyment of Avalon Harbor and the Pacific Ocean. Impacts would be **less than significant**.

d) The project would modify lighting within the new structure and exterior spaces. The lighting would be designed consistent with standards provided in Section 9-7.724 of the Avalon Municipal Code. Thus, while new sources of interior and exterior lighting would be provided, impacts related to light and glare would be **less than significant**.

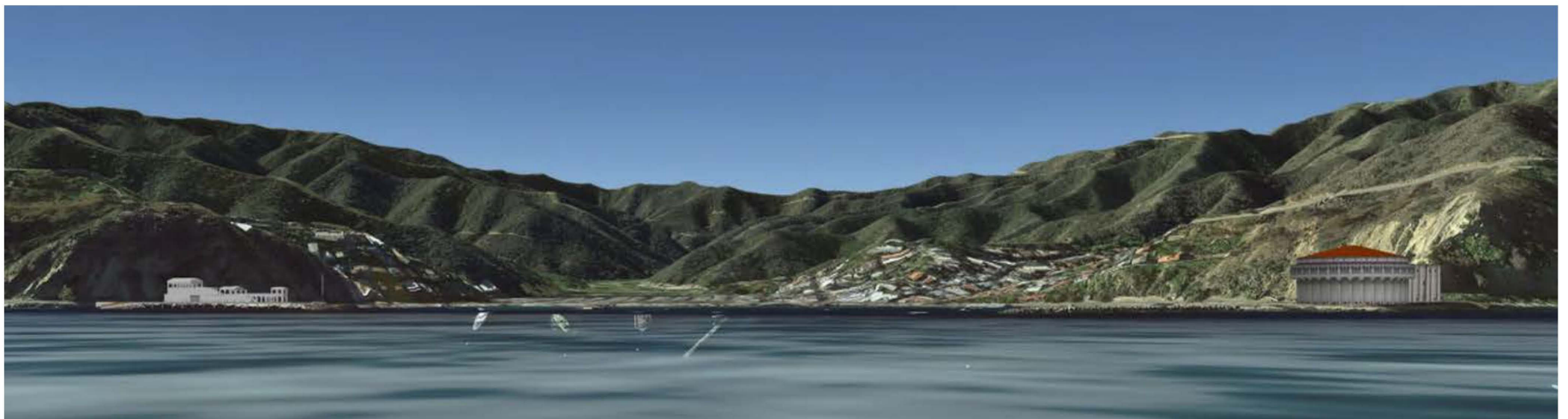


Figure 3—Conceptual Image

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
II. <u>AGRICULTURE AND FOREST RESOURCES</u> -- Would the project:				
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"/>
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 the Cabrillo Mole and adjacent parking lot, public street right of way and adjacent rock revetment 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. No impact 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. **No impact** 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. **No impact** would occur under this threshold.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
III. <u>AIR QUALITY</u> -- Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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.

Localized Significance Thresholds. In addition to the thresholds described above, the SCAQMD has developed Localized Significance Thresholds (LSTs). LSTs were devised in response to

Table 1
SCAQMD Air Quality Significance Thresholds

Mass Daily Thresholds		
Pollutant	Construction	Operation
Nitrogen Oxides (NO _x)	100 lbs/day	55 lbs/day
Reactive Organic Gases (ROG)	75 lbs/day	55 lbs/day
Particulate Matter 10 (PM ₁₀)	150 lbs/day	150 lbs/day
Particulate Matter 2.5 (PM _{2.5})	55 lbs/day	55 lbs/day
SO _x	No standard	150 lbs/day
CO	550 lbs/day	550 lbs/day

^a Ambient air quality thresholds for criteria pollutants based on SCAQMD Rule 1303, unless otherwise stated.

^b Ambient air quality threshold based on SCAQMD Rule 403.

*lbs/day = pounds
per day*

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_x, CO, PM₁₀ and PM_{2.5}. 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 mobile sources using the improved street segments. 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 Version 2016.3.2 (2016) software. Construction emissions modeling for demolition site preparation, grading, building construction, paving, and architectural coating application is based on the overall scope of the proposed development and estimated construction phasing. Construction is expected to begin in early 2022 and be completed in approximately 12 months. In addition to SCAQMD Rule 403 requirements for fugitive dust control, emissions modeling also accounts for the use of low-VOC paint for

striping as required by SCAQMD. CalEEMod output files are on file at the City of Avalon and will be provided for review if requested.

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 2016 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 a new Mole structure and safety and access improvements in the parking area and along Pebbly Beach Road. 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 Vehicle Miles Traveled (VMT). 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.

Construction Emissions

Construction vehicles and equipment operating on construction sites as well as grading/site preparation activities have the potential to generate fugitive dust (PM₁₀ and PM_{2.5}) through the exposure of soil to wind erosion and dust entrainment. Project related construction activities would also emit ozone precursors (oxides of nitrogen (NO_x), 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. However, emissions would also be associated with constructing the improvements (including the application of striping) and paving the parking lot and circulation surfaces.

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 three times daily.

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 for demolition, site preparation, grading, improvement construction, paving and striping application is based on the overall scope of the proposed development and construction phasing which is expected to begin early 2022 and extend through late-2022. For dust control, it was assumed the maximum area would be watered twice times daily where necessary to control fugitive dust generated from disturbed soil in the parking area. 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. Table 2 summarizes the estimated maximum mitigated daily emissions of pollutants occurring during 2022.

Table 2
Estimated Maximum Mitigated Daily Construction Emissions

Construction Phase	Maximum Emissions (lbs/day)					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
2022 Maximum lbs/day	18.7	7.3	8.0	0.01	0.8	0.5
SCAQMD Regional Thresholds	75	100	550	150	150	55
Threshold Exceeded 2020	No	No	No	No	No	No
Threshold Exceeded 2021	No	No	No	No	No	No

As shown in Table 2, construction of the proposed project 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.

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 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. The total area that would be disturbed is approximately 41,400 square feet (i.e., 11,500 square foot parking area and 29,900 square foot Mole). Thus, the associated look up table values for one acre was 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 _x to NO ₂	57	58	68	90	142
CO	585	789	1,180	2,296	7,558
PM ₁₀	4	13	29	61	158
PM _{2.5}	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 720 feet (225 meters) west of the Mole. To compare emissions to the LSTs, the 200-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 225 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.

Operation Emissions

Table 4 summarizes emissions associated with operation of the proposed project. With the exception of a new restaurant, all anticipated uses would be similar in size and scale to existing conditions. Reported emissions are likely conservative primarily because of mobile sources. Vehicles in Avalon are comprised primarily of autoettes and golf carts; however, full-size vehicles would also be used for transport to/from the Mole. ROG emissions would be similar to what occurs under existing conditions and related to evaporative emissions from the asphalt restriping and painting of the structures over the life of the project. As shown in Table 4, the net change in emissions would not exceed the SCAQMD thresholds for the criteria pollutant evaluated.

Therefore, the project's regional air quality impacts (including impacts related to criteria pollutants, sensitive receptors and violations of air quality standards) would be **less than significant**.

c) The nearest sensitive receptor to the project site single-family residences located along Pebbly Beach Village Road west of the project site. As shown above, neither total construction emissions nor operation emissions would exceed the SCAQMD thresholds. 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 increase in vehicle trips would be negligible and associate with residents visiting the Mole. The number of tourists and related trips is not expected to increase. Operation of Pebbly Beach Road and the circulation pattern adjacent to the Mole is expected to improve with installation of the improvements.

Table 4
Estimated Operational Emissions

	Estimated Emissions (lbs/day)					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
<i>Proposed Project</i>						
Area	0.2	0.01	0.01	0.00	0.01	0.01
Energy	0.05	0.3	0.2	0.01	0.02	0.02
Mobile	1.1	4.8	10.5	0.03	2.6	0.7
Maximum lbs/day	1.3	5.1	10.7	0.04	2.6	0.7
SCAQMD Thresholds	55	55	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

*CalEEMod version. 2016.3.2 computer model output for operational emissions. Summer emissions shown.
Note – totals may vary slightly due to rounding.*

Thus, pollutants generated by project improvements would be negligible. The project would not 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, asphalt). 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. These uses are commonly associated with odors. Construction odors would be temporary and as referenced,

construction emissions would not exceed SCAQMD impact thresholds. Short-term odors are not expected to be significant or adversely affect a substantial number of people. During operation, the facility would not generate new odors in excess of baseline conditions. Odor impacts would be **less than significant**.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
IV. <u>BIOLOGICAL RESOURCES</u> --				
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 type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
IV. <u>BIOLOGICAL RESOURCES</u> --				
Would the project:				
impede the use of native wildlife nursery sites?				
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The material presented herein is based on the *Biological Resources Assessment for the Cabrillo Mole Ferry Terminal Revitalization Project, City of Avalon, County of Los Angeles, California*, prepared by Michael Baker International, November 2017.

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 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 roadway surface, existing rock revetment and steep rocky hillsides with sparse ruderal vegetation and shrubs.

The shoreline east and south of the site is part of the Lover's Cove State Marine Conservation Area (SMCA). The Lover's Cove SMCA extends from approximately 1,000 feet south of Abalone Point north to the Cabrillo Mole Ferry Terminal, a distance of approximately 0.4 miles, and seaward to a depth of 188 feet. The SMCA covers a total area of 0.06 square miles. A SMCA is one type of a Marine Protected Area (MPA) which is a type of marine managed area (MPA) where marine or estuarine waters are set aside primarily to protect or conserve marine life and associated habitats. The Lover's Cove SMCA was approved by the California Department of Fish and Wildlife in January 2012. Allowed activities that could result in a take of marine species are 1) the recreational take by hook-and-line from the Cabrillo Mole and 2) take pursuant to maintenance of artificial structures inside the conservation area consistent with any

required federal, state or local permits or as otherwise authorized by the California Department of Fish and Wildlife. No work would occur within the water; thus, no marine resources would be affected by the Phase II redevelopment improvements. Thus, the focus of this discussion is on potential impacts to terrestrial biological resources.

The biological survey area comprised the Mole and surrounding hardscape area that would be affected by project improvements. The area is comprised of developed hardscape on relatively flat land, with scattered ornamental trees and landscaping. It is surrounded to the north and west by Avalon Bay. The Pacific Ocean is located to the east. The project site consists of the Cabrillo Mole (a rock breakwater with a concrete slab surface combined with a concrete wharf structure that extends over the water) and a ferry terminal comprised of three masonry buildings and covered walkways. A crane at the southeast end of the pier is used to load and unload vessels containing supplies and equipment. Pebbly Beach Road (paved) is the southern boundary of the surveyed improvement area. Further south outside the survey area are steep slopes along the west side of Pebbly Beach Road dominated by coastal sage scrub and coastal bluff scrub vegetation.

A California Natural Diversity Database (CNDDDB) search and literature review was conducted. No records for special-status vegetation communities have been documented by the CNDDDB within the vicinity of the survey area. A total of forty-five (45) special-status plant species and nine (9) special-status wildlife species have been recorded within the vicinity of the survey area by the CNDDDB and the California Native Plant Society (CNPS) online inventory.

No special-status plant species were observed on-site during the survey, and none of the 45 special-status plant species known to occur within the vicinity are expected to occur within the survey area as the site is entirely developed or marine habitat. One special-status wildlife species, osprey (*Pandion haliaetus*), was observed perching on a flagpole at the north end of the Mole during the 2017 survey. Nesting opportunities for osprey is tracked on the California Department of Fish and Wildlife (CDFW) Watch List. No nesting opportunities were observed within the survey area.

The nine special-status wildlife species recorded by CNDDDB within the vicinity of the survey area are determined to have a low potential or are not expected to occur on-site because the area lacks suitable habitat. No special-status plants were identified on-site. No changes to the Mole or surrounding area have changed in the interim since the 2017 survey was performed, that would change CNDDDB results. The proposed project is not expected to have an effect on any special-status plant or wildlife species.

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 adjacent to and south of the Mole and along Pebbly Beach Road 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-1, impact to migratory birds would be reduced to **less than significant**.

BIO-1 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.

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.

There are no areas within Santa Catalina Island mapped as USFWS-designated Critical Habitat; the nearest Critical Habitat is over 25 miles to the north on the mainland. 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.

Sensitive Plant/Animal Species and Habitat

Special-status plants were evaluated for their potential to occur within the project area. As referenced, no special-status plant species were observed on-site during the survey, and none of the 45 special-status plant species known to occur within the vicinity are expected to occur within the survey area as the site is entirely developed or marine habitat. As referenced, one special-status wildlife species, osprey (*Pandion haliaetus*), was observed perching on a flagpole at the north end of the mole and ferry terminal during the 2017 survey. Nesting opportunities for osprey is tracked on the California Department of Fish and Wildlife (CDFW) Watch List. No nesting opportunities were observed within the survey area. The nine special-status wildlife species recorded by CNDDB within the vicinity of the survey area are determined to have a low potential or are not expected to occur on-site because the area lacks suitable habitat. No special-status plants were identified on-site. The proposed project is not expected to have an effect on any special-status plant or wildlife species.

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 along Pebbly Beach Road or on the Mole. Existing precipitation runs off or percolates into exposed soil located along the roadside or within landscapes areas. Implementation of Stormwater Management Plan (SWPPP) Best Management Practices (BMPs) would avoid direct impacts to water quality during construction. Post-construction, stormwater would be collected and conveyed through filtration units prior to release into the Pacific Ocean.

There are no wetlands or riparian areas on the project site. There is no riparian vegetation/habitat associated with the presence of natural water features. As referenced, SWPPP BMPs would minimize temporary construction impacts and related affects to water quality. **No impact** would occur under this threshold.

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.

Pebble Beach Road and the Cabrillo Mole have 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 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 west of the project site. 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 Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
V. <u>CULTURAL RESOURCES</u> --				
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"/>

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
V. <u>CULTURAL RESOURCES</u> -- Would the project:				
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 *Phase I Cultural Resource Memorandum for the Cabrillo Mole Phase II Redevelopment Project*, City of Avalon, July 2020, prepared by Anza Resource Consultants, Inc., (Anza) and included herein as Appendix A.

The area of potential effect (APE) of an undertaking is defined in 36 CFR 800.16(d) as the “geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties if any such property exists.” The APE is three-dimensional (depth, length, width) and includes all areas directly and indirectly affected by the proposed construction. The current undertaking would be located on a 46-foot wide by 400-foot long concrete slab structure constructed in a north/south orientation on a rock base that also serves as a breakwater for Avalon Harbor. The undertaking would also extend into the ground transportation pickup/drop-off and parking area, constructed primarily on fill. Project direct effects would occur entirely above the waterline for the portion of the project located on the Mole and construction phase direct effects of ground disturbance to an estimated depth of two feet throughout the land portion of the APE. The indirect APE includes adjacent or nearby properties that may be indirectly affected (e.g., visual change to historic district, vibrational impacts to unreinforced adobe structures) by the proposed undertaking. For the proposed undertaking, the indirect APE is one parcel out in every direction, including parcels across Avalon Bay to account for potential visual effects.

a) Anza requested a records search of the California Historical Resources Information System (CHRIS) at the South Central Coastal Information Center (SCCIC) located at California State University, Fullerton. The search was requested to identify previous cultural resources studies and previously recorded cultural resources within a one-mile radius of the project site. The CHRIS search was conducted on June 26, 2020, and included a review of the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Historic Resources Inventory list. The records search also included a review of all available historic USGS 7.5-, 15- and 30-minute quadrangle maps.

The SCCIC records search identified 29 cultural resources studies that were conducted within a one-mile radius of the project site, eight of which include the project APE (Table 1). Of the eight

that included the project site, seven are general overviews of the island and one (LA-11138) addressed areas offshore area of the island and California mainland. One additional study, Corbett and Guttenberg's (2017) "Phase I Cultural Resources Survey for the Cabrillo Mole Ferry Terminal Revitalization Project City of Avalon, Santa Catalina Island, Los Angeles County, California," regarded the project APE and was not on file at SCCIC but was provided by the City of Avalon. The two studies that include the project APE are discussed individually as follows:

LA-11138. Larry Pierson, Gerald Shiner, and Richard Slater's 1987 "California Outer Continental Shelf, Archaeological Resource Study: Morro Bay to Mexican Border, Final 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.

Corbett and Guttenberg 2017. The "Phase I Cultural Resources Survey for the Cabrillo Mole Ferry Terminal Revitalization Project City of Avalon, Santa Catalina Island, Los Angeles County, California" presented the results of a cultural resources records search, Sacred Lands File search, and pedestrian survey at the Cabrillo Mole Terminal for Phase I improvements to the terminal that are currently under construction. The project was conducted for CEQA compliance with the City of Avalon as lead CEQA agency. Although the Cabrillo Mole Terminal is not formally evaluated for CRHR eligibility in this document, the report does state that "...the Mole itself is modern site-built structure that is not archaeologically or historically significant" and "The structures comprising the terminal are not deemed to be historically significant. (Corbett and Guttenberg 2017:13)." The study included a pedestrian archaeological survey of the current APE and identified no prehistoric or historic resources within the project site (same as current project APE). The study further stated that the revitalization project would have no adverse impacts to previously recorded resources in the vicinity of the project. Corbett and Guttenberg (2017:14) noted about the steeply sloped landform to the west, south, and southeast of the project site that "Its potential to contain archaeological deposits is virtually nonexistent and no indications of such were observed during physical examination of these areas."

As referenced, the Cabrillo Mole Terminal was originally constructed in 1968 and evaluated for eligibility for listing on the California Register of Historical Resources (CRHR) or National Register of Historic Places (NRHP). The Cabrillo Mole Terminal is recommended not eligible for CRHR/NRHP listing and impacts/effects to this property would be not significant/less than adverse. Thus, **no impact** to historical resources would occur as a result of project implementation.

b) As part of the Phase I Cultural Resources Assessment methodology, Anza requested a review of the Sacred Lands File (SLF) by the Native American Heritage Commission (NAHC) on May 25, 2020. The NAHC sent a response on June 9, 2020, stating that the SLF search was positive; the project vicinity is sensitive for Native American cultural resources and recommended that seven Native Americans be contacted for further input. Anticipating this response, Anza

prepared and mailed letters on May 26, 2020, to the seven Native American contacts describing the project and asking if they had knowledge regarding cultural resources of Native American origin within or near the project site.

Juan Ochoa, Assistant Tribal Historic Preservation Officer (THPO) of the Pechanga Band of Luiseno Indians responded via telephone on June 5, 2020. Mr. Ochoa called to ask questions regarding the scope of work of the project. Mr. Hunt confirmed this was a scoping letter, not intended to cover AB 52 consultation, which the City of Avalon will undertake as CEQA lead agency. Mr. Hunt described the project and existing conditions including the disturbed nature of the project APE. Mr. Ochoa stated that he did not have any specific comments at this time, but that Pechanga is interested in the project and will possibly submit comments later.

Robert Dorame of the Gabrielino Tongva Indians of California Tribal Council responded via telephone on June 12, 2020 stating that he is a lineal descendent of Tongva from the island and has family buried there, including his grandfather's great uncle. He further stated that he designates people to conduct Native American monitoring who live on-island. Mr. Dorame added that he was involved in repatriation and reinterments of tribal ancestors on the island including Ralph Glidden collections. These were done with three Gabrielino tribal leaders observing. He has worked with the Catalina Island Conservancy.

Mr. Dorame requested consultation with the City of Avalon in accordance with AB 52. He has Native American monitoring recommendations to provide to the City for projects but only wants to share them if meaningful consultation is conducted.

No additional responses have been received as of July 23, 2020.

Thirteen (16) cultural resources were recorded within one mile of the project APE, none of which was identified within the project site or adjacent to the project APE. The SCCIC records search identified 13 of these resources; the additional three were found through an online search of the California Office of Historic Preservation's Built Environment Resource Directory (BERD).

Conspicuously absent from both the SCCIC and BERD records search results was the Catalina Casino, the single most important and popular landmark in the City of Avalon and along Avalon Harbor. An additional review of NRHP, CRHR, and California Historical Landmarks failed to produce a listing for the Casino. The Catalina Casino is approximately 0.35 mile north of the project APE and directly visible from the site. Because the Casino building is of obvious and significant importance to the residents and visitors of Avalon, for the purposes of this study the Casino will be considered as a locally significant resource.

On July 2, 2020, Anza Principal and Senior Cultural Resources Specialist Kevin Hunt conducted a pedestrian survey of the approximately two-acre project APE. Because of the irregular shape of the APE and very minimal areas of visible sediment within planters, the survey was followed structures and landforms rather than arbitrary transects in cardinal directions. The project site

is entirely paved and largely built over imported rock base or on concrete pilings in the ocean. Sediments were only visible in raised bed planters. Phase I improvements were actively under construction during the survey and the easternmost portion of the APE was fenced off for safety. The APE is generally in good condition but displayed some weathering such as rust and cracked concrete. No archaeological resources were observed within or near the project APE.

The indirect visual APE includes at least two CRHR and NRHP listed resources: The Peter Gano House/Lookout Cottage (P-19-178671; constructed 1890) 718 Crescent Avenue and the Tuna Club of Avalon (P-19-180701; constructed 1916). The Catalina Casino, not listed or determined eligible for the CRHR or NRHP but a recognized local landmark, is also within the indirect visual APE of the Cabrillo Mole Terminal. The existing Mole was not constructed during the period of significance for any of these resources and the improvements to the Mole will not constitute a significant/adverse visual impact/effect to these resources. The Mole will continue serving its intended function in a style that continues to modestly complement the City of Avalon.

Based on information presented above, no impact to archaeological resources are anticipated as a result of implementing Phase II of the Cabrillo Mole Redevelopment Project. Measures to minimize or avoid significant impacts to cultural resources are stated below. With the implementation of measure CR-1 if needed, impacts to cultural resources would be **less than significant**.

CR -1: If previously unidentified cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) must be contacted immediately to evaluate the find. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation may be warranted avoid adverse impacts. In the event that an identified cultural resource is of Native American origin, the qualified archaeologist will consult with the City of Avalon to begin or continue Native American consultation procedures.

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 addition, California Health and Safety Code §7050.5, Public Resources Code § 5097.98, and § 15064.5 of the California Code of Regulations (CEQA Guidelines) mandate procedures to be followed, including that, if human remains are encountered during excavation, all work must halt, and the County Coroner must be notified (Section 7050.5 of the California Health and Safety Code). The coroner will determine whether the remains are of forensic interest. If the coroner, with the aid of the supervising archaeologist, determines that the remains are prehistoric, the coroner will contact the Native American Heritage Commission (NAHC). The NAHC will be responsible for designating the most likely descendant (MLD) responsible for the ultimate disposition of the remains, as required by Section 5097.98 of the Public Resources Code. The MLD should make his/her recommendations within 48 hours of their notification by the NAHC. This recommendation may include A) the non-destructive removal and analysis of human remains and items associated with Native American human remains; (B) preservation of Native

American human remains and associated items in place; (C) relinquishment of Native American human remains and associated items to the descendants for treatment; or (D) other culturally appropriate treatment. Section 7052 of the Health & Safety Code also states that disturbance of Native American cemeteries is a felony. 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?

☐ ☐ ☒ ☐

- b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

☐ ☐ ☐ ☒

a) Project construction would utilize common methods for site preparation, grading 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. The new building would be designed and constructed consistent with Title 24 of the California Energy Code which is intended to improve the overall energy efficiency of new structures. Post-construction, the new building would accommodate the same uses as under existing conditions; however, new uses would also be added. Thus, the new Mole would likely have a greater energy demand than the existing facility. However, as referenced, the project would be designed to meet all current energy codes; thus, minimizing energy demand. A **less than significant** impact would under this threshold.

b) The project would construct various improvements 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 and operational 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 under this threshold.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No 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:				
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?

☐
☐
☐
☒

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 Mole 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, the Phase II improvements would occur on an existing concrete structure located in part on rock revetment. Provided construction of the improvements are consistent with structural recommendations and current California Building Code (CBC) requirements addressing 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 project would be constructed on an existing concrete structure over Avalon Harbor. The adjacent Pebbly Beach Road and parking area is located in part on a cut slope and fill. The project is not expected to make any structural changes to the Mole or adjacent parking area. No subsurface work is

required to implement the improvements. With implementation of geotechnical and structural design recommendations, impacts related to liquefaction would be **less than significant**.

a (iv) The project site is generally flat with a steep slope to the south adjacent to Pebbly Beach Road. The adjacent hillside 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 and no evidence of landslide is present on the slope. 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 Mole is a flat structure. The adjacent parking area is sloped to accommodate runoff and the former seaplane ramp. The disturbance area would be approximately one acre in size; however, there would be no permanent increase in impervious surface. However, 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. As noted, the Mole is located on a structure over rock revetment. The parking area is located on compact fill material. No evidence of subsidence is present in the study area and project improvements would replace the existing improvements with similar infrastructure. Site specific impacts related to subsidence would be **less than significant**.

e) The existing Mole is connected to the City of Avalon wastewater collection system. All improvements would connect to the same infrastructure. 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 an existing over water structure and adjacent parking and street located on compact fill material. The project would not increase the depth of the existing disturbance. **No impact** to paleontological resources would occur with the project.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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"/>

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 (CO₂), methane (CH₄), nitrous oxides (N₂O_x), fluorinated gases, and ozone. GHGs are emitted by both natural processes and human activities. Of these gases, CO₂ and CH₄ are emitted in the greatest quantities from human activities. Emissions of CO₂ are largely by-products of fossil fuel combustion, whereas CH₄ results from off-gassing associated with agricultural practices and landfills. Man-made GHGs, many of which have greater heat-absorption potential than CO₂, include fluorinated gases, such as hydrofluorocarbons (HFCs), perfluorocarbons (PFC), and sulfur hexafluoride (SF₆). 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 CO₂E per year. GHG emissions associated with the project's construction period were estimated using the CalEEMod computer program.

a) Construction activities would generate greenhouse gas (GHG) emissions associated with equipment operation. The project-related construction emissions would be generated over a one-year construction phase extending from early 2022 to late 2022. 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. However, because of the scope and location of the improvements, limited grading would be required. Emissions would be focused on demolition of the existing Mole, construction of the new facility and pavement modifications. 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 70 metric tons of GHG emissions during construction. Amortized over 30 years, the project would generate approximately 2.0 metric tons as shown in Table 5 below.

Table 5 also shows the operational GHG emissions associated with the proposed project. As referenced in Section II, *Air Quality*, air emissions associated with the operation of the project, particularly mobile sources, are conservatively estimated and the overall change would be negligible when compared to existing conditions. Mobile source emissions shown below includes 21 MT CO₂E of nitrogen oxide emission.

Cumulatively, the estimated emissions would not exceed the 3,000 MT CO₂E; thus, GHG emissions would be **less than significant**.

b) The proposed project would entail construction of a new Mole structure with adjacent parking and roadway improvements along Pebbly Beach Road. The increase in traffic would be negligible. Building emissions may increase as the uses diversify. 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.

Table 5
Combined Annual Greenhouse Gas Emissions

Emission Source	Annual Emissions (CO ₂ E)
Construction	2 metric tons
Operational	
Energy	155 metric tons
Solid Waste	8 metric tons
Water	12 metric tons
Mobile	485 metric tons
Total	662 metric tons

See CalEEMod version 2016.3.2 software program output

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 existing Mole structure incorporates wave energy dissipation vents and the rock revetment also reduces potential impacts associated with wave energy. The vent system would remain and no additional methods are proposed to address sea level rise or related affects. 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 Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
IX. <u>HAZARDS AND HAZARDOUS MATERIALS</u> - Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
IX. <u>HAZARDS AND HAZARDOUS MATERIALS</u> - Would the project:				
hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school?				
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 emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a-c) The proposed project would construct various improvements associated with public access to the Mole facility as well as safety and various pedestrian/bicycle and safety enhancements along Pebbly Beach Road. 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 one-mile northwest

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 $\frac{1}{4}$ 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 8 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 require temporary lane closures during construction of the circulation and parking improvements. The area is along the primary route of travel between the Avalon Fire Station and the Avalon Freight Terminal, wastewater treatment plant and other municipal infrastructure. Thus, a Traffic Control Plan would be implemented as a condition of project approval to ensure a route of travel for emergency vehicles as well as other vehicles and pedestrians is maintained throughout construction. All closures would be coordinated per a traffic control plan to ensure emergency access through the project area is maintained. 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 the existing Mole structure including the adjacent parking area and Pebbly Beach Road. 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. (General Plan Update, 2013). The project entails the construction of access and safety improvements to facilitate circulation to/from along Pebbly Beach Road. The Mole is located over the water and the adjacent parking area is located adjacent to a rock slope abutting Pebbly Beach Road. The project area does not contain vegetation or other flammable material that would pose a threat for impact resulting from wildfires. A **less than significant impact** would occur under this threshold.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
X. <u>HYDROLOGY AND WATER QUALITY</u> – Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input 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 which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, or?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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"/>

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
X. <u>HYDROLOGY AND WATER QUALITY</u> – Would the project:				
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a) The project site is currently improved with the existing Mole structure, adjacent parking area and Pebbly Beach Road, existing revetment and rock fall prevention on the slope. There is no existing stormwater channel or infrastructure along Pebbly Beach Road within the project area. Stormwater currently flows from the impervious surfaces into Avalon Harbor or the Pacific Ocean. The amount of impervious surface would not be affected by the project nor would the existing drainage pattern change. The existing parking and circulation area would be reconfigured. While a new structure would be constructed on the Mole, the concrete Mole surface would remain impervious.

As part of the scope of improvements, stormwater would be collected and conveyed into an in-line filter system(s) prior to release into Avalon Harbor. This would remove particulates and other constituents from storm flows. 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, no new impervious surface would be added; thus, on-site drainage would not be modified nor would the project alter the course of an existing stream or river that would result in on- or off-site erosion or siltation. However, storm flows would be captured and conveyed into in-line filtration systems for treatment prior to release into Avalon Harbor. The new system(s) would improve stormwater quality when compared to existing conditions. A **less than significant** impact would occur under this threshold.

(ii) The northern portion of the project area is located within Flood Zone A as depicted in FEMA Flood Insurance Rate Map No. 06037C2204F (September 2008). Flood Zone A is defined as an area without base flood elevation. 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) As referenced, there is no existing stormwater treatment system along Pebbly Beach Road or on the Mole. All water runs off into the Pacific Ocean. The project would install a collection system that would convey flows through an in-line filtration system prior to release. No surface basins, underground vaults or other infrastructure would be constructed to address storm flow runoff. There is no existing system for stormwater control; thus, it will not exceed the capacity of an existing system. The project will not contribute substantial quantities of polluted runoff. A **less than significant** 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. Further, the project site is not located within a 100-year mapped flood zone (FEMA Flood Insurance Rate Maps No. 06037C2204F, September 2008). The project would not redirect on-site drainage patterns nor would it 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 damage to Pebbly Beach Road and the Mole is an objective of the proposed project. The Mole currently uses dissipation vents on the east side to allow water to pass through the structure surface. A similar system would be implemented as part of the Mole Phase II 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 require potable water for operation. 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. Further, an additional allocation of potable water would be required from Southern California Edison for operation of a new restaurant that may be constructed on the second level of the new Mole structure. The project site is not within a groundwater recharge area. **No impact** would occur to groundwater recharge.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XI. <u>LAND USE AND PLANNING</u> --				
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 replace existing improvements on the Cabrillo Mole and construct new access and safety improvements along Pebbly Beach Road and in the adjacent parking lot. The proposed project would utilize the existing street network and all improvements would occur on the Cabrillo Mole surface or adjacent public right of way. The project improvements would enhance use of the Cabrillo Mole and improve adjacent parking and circulation. It 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 California Coastal Commission. 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. 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. While the CDP would be issued by the CCC, the proposed action would be consistent with the terms of the LCP with respect to providing public access to coastal resources and minimizing visual impacts to coastal views.

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 not provide a direct connection to the shoreline; however, it would improve the visitor experience by providing a more diverse range of services and improved public access to the east side of the structure. The viewing deck(s) would better utilize the Mole for public enjoyment of the Pacific Ocean and Avalon Harbor. 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 would create a more pedestrian-friendly circulation area and access to downtown Avalon as well as an improved visitor experience for people using the Mole to access cross-channel transportation or to enjoy the views and services offered by concessionaires. 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 retain the wave dissipation vents on the east side of the Mole to allow waves to flow through the structure surface. No improvements to the marine environment or coastal armoring are proposed. The project would enhance public access to views of the Pacific Ocean and Avalon Harbor. 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 that would be affected by proposed improvements. 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 is in part, intended to enhance the visitor connection to the Pacific Ocean and Avalon Harbor by providing improved access to viewing decks and connectivity to downtown Avalon. Coastal views from downtown Avalon would not be affected. No armoring is proposed. 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 redevelop an existing use. It would not include industrial development. **No impact** would occur under this threshold.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XII. <u>MINERAL RESOURCES</u> --				
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 some aggregate as baseload for concrete surfaces. The material would likely come from the existing quarry. 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 Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XIII. NOISE – Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input 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, September 2018). Based on the FTA's *Transit Noise and Vibration Impact Assessment* and the California Department of Transportation's *Transportation-Related Earthborne Vibration, Technical Advisory* (September 2013), 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 6. 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 6
Typical Construction Equipment Noise Levels

Type of Equipment	Range of Maximum Sound Levels Measured (dBA at 50 feet)	Maximum Sound Levels for Analysis (dBA at 50 feet)
Pile Driver 12,000 to 18,000 ft-lb/blow	81-96	93
Rock Drills	83-99	96
Jack Hammers	75-85	82
Pneumatic Tools	78-88	85
Pumps	74-84	80
Scrapers	83-91	87
Haul Trucks	83-94	88
Cranes	79-86	82
Portable Generators	71-87	80
Rollers	75-82	80
Dozers	77-90	85
Tractors	77-82	80
Front-End Loaders	77-90	86
Hydraulic Backhoe	81-90	86
Hydraulic Excavators	81-90	86
Graders	79-89	86
Air Compressors	76-89	86
Trucks	81-87	86
Trencher	73-80	80

Source: Bolt, Beranek & Newman, *Noise Control for Buildings and Manufacturing Plants*, 1987.

dBA = A-weighted decibels, ft-lb/blow = foot-pounds per blow

Based on the scope of improvements and limited work area on the Mole surface, the work would be completed using smaller sized such as loaders and trucks as well as jackhammers and other demolition tools to remove the existing structures. The new structure would be constructed using standard equipment such as loaders, forklifts, concrete trucks, bobcat tractors and related equipment. The type and duration of equipment use will vary individual phases of construction progress. Noise levels associated with the equipment commonly used will range from 80 to 88 dBA at 50 feet from the source. 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. Assuming two pieces of construction equipment, each producing a noise level of 88 dBA, are operating at one time on the site, the worst-case combined noise level during the site preparation phase of construction is an estimated 91 dBA at a distance of 50 feet from the active construction area.

There are no residential properties located in proximity to the project site; thus, while construction noise could reach 91 dBA or more at various times during the workday depending on the type and proximity of equipment being used, no residences or other sensitive properties would be affected.

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 residential zones located in proximity to the project area and construction activities would be restricted to between 8:00 a.m. and 7:00 p.m. Monday through Saturday. Temporary and substantial noise levels generated during construction of each phase would be **less than significant**.

Operational Noise. The proposed project would improve the Mole for the benefit of residents and visitors as well as improve pedestrian/bicycle and vehicle circulation and connectivity to downtown Avalon. It is not expected to generate noise levels that don't occur with the existing facility nor is it expected to generate more vehicle trips than under existing conditions. There are no receivers located adjacent to Pebbly Beach Road in the area affected by the improvements. Whether a traffic-related noise impact could occur is based on whether the improvements would cause the existing Leq to noticeably increase (+3 dBA). For noise levels to noticeably increase, sound energy would have to increase two-fold either by doubling existing hourly volumes or speeds or halving the distance between the source and receiving properties. The project is not expected to generate additional traffic as noted. Vehicles would operate more efficiently within the area; however, volumes or speeds would not double. No additional marine traffic is expected to occur as a result of the Mole improvements and as discussed, all improvements would occur within the existing road right of way. Operational impacts related to traffic noise, would be **less than significant**.

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. Pebbly Beach Road is the primary truck route used to haul freight from the terminal into the City of Avalon. Existing activities occurring on the Mole structure do not generate vibration, nor are there 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. Assuming vibration levels would be similar to those associated with loaded trucks, typical groundborne vibration levels would be 86 VdB at 25 feet, 80 VdB at 76 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 9.

Construction activities that typically generate substantial groundborne vibration include deep excavation and pile driving. Based on the proposed scope of improvements, this type of construction activity would not occur. General construction associated with the project would be confined to the project site and consist of removal of the existing structure, construction of a new building and improvements to the circulation area along and adjacent to Pebbly Beach Road. Construction would be temporary in duration. As referenced, there are no sensitive receivers located adjacent to the construction area; however, based on the information presented in Table 7, vibration levels could range from 86 to 74 VdB based on distance from the construction area.

As discussed, 100 VdB is the threshold where minor damage can occur in fragile buildings. Vibration levels are projected to be under this threshold and there are no fragile buildings located in proximity to the construction area. No structural damage is expected to occur as a result of construction activities associated with the proposed project.

Table 7
Typical Vibration Source Levels for Construction Equipment

Equipment	Approximate VdB				
	25 Feet	50 Feet	60 Feet	75 Feet	100 Feet
Large Bulldozer	87	81	79	77	75
Loaded Trucks	86	80	78	76	74
Jackhammer	79	73	71	69	67
Small Bulldozer	58	52	50	48	46

Source: Federal Railroad Administration, 1998

As stated, loaded trucks would be required to transport material to/from the site. Maximum vibration levels could reach 86 VdB at 25 feet from the source during truck pass events and will vary as individual pieces of equipment are used throughout the workday. This could be considered a substantial periodic increase in vibration levels; however, there are no receivers in proximity to the site that would be affected. Regardless, 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. A project condition that limits construction to those hours allowed by Avalon Municipal Code would reduce temporary impacts to **less than significant**.

c) Avalon Airport is located approximately 8 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 Significant Unless Mitigation Incorporated	Potentially Significant	Less than Significant Impact	No Impact
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XIV. POPULATION AND HOUSING –

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)?

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	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XIV. <u>POPULATION AND HOUSING</u> – Would the project:				
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 building and access improvements on the Mole surface and along Pebbly Beach Road. 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 jobs; thus, no housing would be needed to accommodate employees. **No impact** related to population growth would result from project implementation.

b) The project site is comprised of existing access and building improvements. 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 Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XV. <u>PUBLIC SERVICES</u>				

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

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XV. <u>PUBLIC SERVICES</u>				
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 is not expected to 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 building and access 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 one-mile northwest 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 total school enrollment for 2016-17 was 605 students. The project 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 park is Avalon Beach which is located approximately ¼ mile west of the Cabrillo Mole Ferry Terminal. The project would not increase the population of Avalon or otherwise affect demand for park facilities. The project would not 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 Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XVI. RECREATION --				
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 building and access improvements at the Mole. It is intended to enhance the recreational experience for residents and visitors to Avalon. 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 Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XVII <u>TRANSPORTATION</u> -- 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 safety and access improvements along Pebbly Beach Road and on the Mole. It would enhance vehicle, pedestrian and bicyclist circulation throughout the project area. 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. The project would improve the facilities on the Cabrillo Mole for residents and visitors using ferry services to access Catalina Island. Visitors accessing the island have several ground transportation options including private vehicles/autoettes, hotel shuttles and taxis. Many elect to walk between the Cabrillo Mole and downtown Avalon which is a short distance. The project would not generate additional ferry

traffic or otherwise increase the number of passengers traveling through the Mole or between the Mole and downtown Avalon. While vehicle circulation and pedestrian safety improvements are proposed as part of the project, the improvements would not increase demand for ground transportation. Thus, the project is not expected to change VMT or impact Level of Service along Pebbly Beach Road. **No impact** would occur under this threshold.

c) The project scope is the construction of a new building and access improvements along Pebbly Beach Road. All road improvements would occur consistent with City public works road design standards. Project design is intended to improve safety. It 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 improve the overall safety and efficiency of the Pebbly Beach Road and the parking/queueing area adjacent to the Mole. Use of Pebbly Beach Road is not expected to be disrupted or otherwise adversely affected by project improvements. However, construction would need to be coordinated to ensure one lane remains open should improvements to Pebbly Beach Road require lanes closures. 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 and surrounding the Mole facility. These include pedestrian, bicycle and vehicle improvements. No inconsistencies with plans related to bicycle or pedestrian access would occur. **No impact** would occur under this threshold.

Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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XVIII. TRIBAL CULTURAL

RESOURCES -- Would the project:

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:

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|--|--------------------------|-------------------------------------|--------------------------|-------------------------------------|
| <p>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</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <p>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.</p> | <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) A Phase I Cultural Resources Report 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. A total of seven Tribal representatives identified as part of the SLF search were noticed during preparation of the Phase I Cultural Resources Report.

Juan Ochoa, Assistant Tribal Historic Preservation Officer (THPO) of the Pechanga Band of Luiseno Indians responded via telephone on June 5, 2020 stating that he did not have any specific comments, but that Pechanga is interested in the project and will possibly submit comments later. Robert Dorame of the Gabrielino Tongva Indians of California Tribal Council responded via telephone on June 12, 2020 requesting consultation with the City of Avalon in accordance with AB 52.

The City of Avalon mailed notices to those Tribes that have requested consultation per AB 52 on or about July 17, 2020. No formal requests for consultation were received.

While no impacts to known Tribal Cultural Resources are anticipated, implementation of Mitigation Measures CR-1 would reduce potential impacts to Tribal Cultural Resources to **less than significant**.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XIX. UTILITIES AND SERVICE SYSTEMS -- Would the project:				
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 checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 would maintain the existing connection to the wastewater collection system.

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. Water would be needed during construction. Post-construction water demand would increase with the expanded Mole structure. Projected water demand would be approximately 2.2 million gallons annually or approximately 6,027 gallons daily. No modifications to the water system are anticipated to address capacity; however, to ensure adequate capacity exists to meet water demand, any new demand for water would require additional allocation approval from Southern California Edison.

As discussed in the project description and Section IX, *Hydrology and Water Quality*, the existing impervious surfaces along Pebbly Beach Road would remain similar to existing conditions. No new impervious surfaces would be constructed; however, as part of the project, stormwater would be captured in a new drain system and conveyed through a filtration system prior to release into the Pacific Ocean.

Southern California Edison electrical lines, telephone/cable lines and utility lines would remain in their current location as part of the project. No improvements or expansion to water, wastewater or other utilities are anticipated as a result of the project. Impacts under this threshold would be **less than significant**.

b) As referenced, it is anticipated that potable water demand would be met with existing capacity for those uses that would be replaced with the project. However, approval of additional water allocation from Southern California Edison would be required prior to authorizing construction of a new restaurant or similar use(s) that would increase water demand above existing demand. Water allocations are made per the Santa Catalina Freshwater Allocation Plan. Those applying for a freshwater allocation are required to submit an application per Rule No. 3, Application for Service. Projected demand is evaluated based on capacity up to the limit of safe annual yield. After submittal of a completed application, the applicant will be placed on Southern California Edison's Fresh Water Allocation List and may be granted a water allocation.

No improvements or expansions to the existing water system are anticipated as a result of the proposed project. However, details would be evaluated as part of the allocation application process. Any required expansion or other off-site improvements would be evaluated for consistency with existing CEQA approvals for Phase II of the Cabrillo Mole improvements when they are identified. Impacts would be **less than significant** under this threshold.

c) As discussed, CalEEMod 2016.3.2 conservatively estimates the project would require approximately 2.2 million gallons of potable water annually. To conservatively estimate sewer

demand, it was assumed that all water consumed to operate the commercial offices, restrooms and the restaurant, would become wastewater less the 0.07 million gallons (70,000 gallons or approximately 3 percent) for landscaping. Sewer demand would be approximately 5,835 gallons per day. Per the City of Avalon Department of Public Works, the existing treatment plant can accommodate the additional demand without the need for upgrades or improvements. Impacts would be **less than significant** under this threshold.

d) The proposed project would generate construction/demolition waste (CDW) and operation of the project is expected to generate approximately 15 tons of solid waste annually. 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 demolition and construction waste would be comprised of asphalt, concrete, metals, wood, landscape and typical domestic material. Domestic waste would be comprised of typical material including food waste. The California Integrated Waste Management Act (CIWMA) of 1989 mandated that all cities and counties in California reduce solid waste disposed at landfills generated within their jurisdictions by 50%. AB 341 increased the recycling goal to 75% by 2020. CDW and domestic waste 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.

XX. WILDFIRES -- Would the project:

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|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Substantially impair an adopted emergency response plan or emergency evacuation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

XX. WILDFIRES -- Would the project:

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?

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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?

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a) The proposed project would construct a new building on the Mole surface and make access and pedestrian improvements within the adjacent parking/sidewalk area along Pebbly Beach Road. The project would not add traffic but rather would improve roadway safety for existing traffic, pedestrians and cyclists using the roadway. The project would not adversely impact traffic operations; and thus, would not impact use of Pebbly Beach Road an evacuation or emergency response route. **No impact** would occur under this threshold.

b) The project is surrounded by the Pacific Ocean and Avalon Harbor to the north, west and east. Pebbly Beach Road and a rock hillside is located to the south. 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. Thus, while the area could be affected by wildfire, there is a large area of non-flammable hardscape to the south that would limit exposure to wildfire occurring to the south of the site. Impacts would be **less than significant**.

c) The proposed project would construct a new building and make various access improvements along Pebbly Beach Road and within the adjacent parking area. As noted, the area is generally void of combustible material and adjacent to a rock slope to the south and Avalon Harbor and the Pacific Ocean to the north, west and east. No additional fire prevention efforts would be required to reduce wildfire 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. **No impact** would occur under this threshold.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XXI. <u>MANDATORY FINDINGS OF SIGNIFICANCE</u> —				
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
a) The project would be comprised of a new building on the Mole and access/circulation improvements in the adjacent parking area and along Pebbly Beach Road. There are no threatened, endangered or sensitive plant or animal species occurring on the site; however, nesting and foraging habitat does occur adjacent to and south of the site. With implementation of Mitigation Measure BIO-1, impacts to biological resources would be less than significant. No				

sensitive marine species or their habitat is located within the area to be disturbed by project improvements.

No impacts to historic resources would occur as a result of the project. Impacts to cultural resources and tribal cultural resources are not anticipated. Impacts to unknown resources associated with unanticipated discoveries would be less than significant with implementation of Mitigation Measure CUL-1.

b) The proposed project would improve the visitor experience as well as safety and access for users of the adjacent parking area and Pebbly Beach Road. 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.

REFERENCES

- Anza Resource Consultants, Inc., *Phase I Cultural Resources Report for the Cabrillo Mole Phase II Redevelopment Project*, City of Avalon, July 2020.
- Birdseye Planning Group. *Cabrillo Mole Phase II Redevelopment Project, Air Quality-Greenhouse Gas CalEEMod Files*, July 2020.
- Bolt, Beranek & Newman, *Noise Control for Buildings and Manufacturing Plants*, 1987
- California Emission Estimator Model, 2016.3.2
- California Environmental Protection Agency (CalEPA) and Department of Toxic Substances Control. *Envirostar database*. <http://www.envirostor.dtsc.ca.gov/public/>
- California Air Pollution Control Officers Association (CAPCOA). *CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act*, January 2008
- California Air Resources Board (CARB). *Proposed Early Actions to Mitigate Climate Change in California*. April 20, 2007
- California Department of Forestry and Fire Protection. *Riverside County West Fire Hazard Severity Map*, November 2007.
- California Department of Transportation Noise. *Vibration, and Hazardous Materials Office*. 2004. *Transportation and Construction Induced Vibration Guidance Manual (Prepared by Jones and Stokes)*, 2004
- California Department of Transportation. *Officially Designated State Scenic Highways*, website visited June 1, 2017.
- California Department of Transportation. *Transportation-Related Earthborne Vibration, Technical Advisory*, 1992
- California Environmental Protection Agency. *Climate Action Team Report to the Governor and Legislature*, April 3, 2006
- City of Avalon, 2030 General Plan/Local Coastal Plan, July 2013
- City of Avalon Department of Public Works, *personal communication*, Bob Greenlaw, PE, Director of Public Works, July 2020.
- Federal Emergency Management Agency. *Flood Insurance Rate Map No. 06037C2204F*, September 2008
- Federal Transit Administrations (FTA). *Transit Noise and Vibration Impact Assessment* (September

2018)

Michael Baker International, *Biological Resources Assessment for the Cabrillo Mole Ferry Terminal Revitalization Project*, City of Avalon, County of Los Angeles, California, November 2017.

RBF Consulting, Inc., *City of Avalon Sewer System Management Plan Update*, June 2014.

South Coast AQMD. *Air Quality Management Plan*. 2016.

Southern California Edison, Catalina Island Water System Fact Sheet, June 2015.

Southern California Edison, Rule No. 3 – Application for Service, effective date August 11, 2014.