Addendum to the Final La Paz Development Agreement Environmental Impact Report

Cross Creek Road/Pacific Coast Highway Intersection Improvements

(Coastal Development Permit No. 14-036)

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INTRODUCTION

This document is an Addendum to the La Paz Development Agreement Final Environmental Impact Report (EIR - SCH# 2003011131), which was certified by the Malibu City Council in November 2008. The Addendum analyzes the environmental effects of the proposed Cross Creek Road and Pacific Coast Highway (PCH) intersection improvements, which involves road construction along Pacific Coast Highway at its intersection with Cross Creek Road in accordance with mitigation measure K-2 contained in the La Paz Final Environmental Impact Report (Final EIR). The intersection improvements would occur within the existing Caltrans right-of-way and would generally include construction of a westbound right-turn lane along Pacific Coast Highway at the Cross Creek intersection, re-alignment of the PCH/Cross Creek intersection within the PCH right-of-way to the south towards Malibu Lagoon State Beach Park, construction of a retaining wall along the southern project boundary (2-4 feet in height), and other minor intersection improvements. These improvements would require the removal of one (1) existing 41" sycamore tree located southeast of the Pacific Coast Highway/Cross Creek intersection and five (5) existing eucalyptus trees located southwest of the Pacific Coast Highway/Cross Creek intersection.

This Addendum has been prepared in accordance with relevant provisions of the California Environmental Quality Act (CEQA) of 1970 (as amended) and the *CEQA Guidelines*. According to Section 15164 of the *CEQA Guidelines*, an addendum to a previously certified EIR or Negative Declaration is the appropriate environmental document in instances when "only minor technical changes or additions are necessary" and when the new information does not involve new significant environmental effects beyond those identified in the previous EIR.

As discussed in detail below, the Cross Creek Road/PCH intersection improvement project is consistent with the previously approved Coastal Development Permit (CDP) Nos. 05-106 and 05-107 for the La Paz Development Agreement Project in so far as it implements the required Mitigation Measure K-2 contained in the Final EIR. As such, it is within the parameters considered in the Final EIR. In addition, as supported by the analysis below and the analysis contained within the Initial Study (included as Appendix A of this Addendum), the proposed intersection improvement project would have no new significant environmental effects beyond those identified in the La Paz Development Agreement Final EIR. As discussed below, mitigation measures identified in the Final EIR and required compliance with relevant provisions of the Malibu Municipal Code (M.M.C) and Malibu Local Coastal Plan/Local Implementation Plan, and the City of Malibu Coastal Development Permit standard conditions of approval will apply to the proposed intersection improvement project.

This Addendum describes the currently proposed project and compares its impacts to those identified in the La Paz Development Agreement Final EIR.

BACKGROUND AND PROJECT DESCRIPTION

Project Site Location

The proposed project would involve intersection improvements at the intersection of Pacific Coast Highway and Cross Creek Road within the existing Pacific Coast Highway right-of-way. The primary improvements would occur at the intersection and the necessary transition work would extend approximately 700 feet east nd 500 feet west of the intersection.

Figure 1. Project Location

The project area is bordered by Malibu Lagoon State Beach, an existing private golf course, and existing single-family residential development to the south; existing commercial uses to the north; and existing Pacific Coast Highway intersection improvements to the east and west.

Background

The proposed project (Coastal Development Permit No. 14-036) has been submitted to implement Mitigation Measure K-2 of the certified Final Environmental Impact Report for the La Paz Project (State Clearinghouse Number 2003011131). Mitigation Measure K-2 requires widening of PCH in order to provide a westbound right turn lane at Cross Creek Road/PCH and a deepening of the left turn pocket for the eastbound approach to Cross Creek Road/PCH.

Pacific Coast Highway (PCH, SR-1) is a state route that travels east and west through the project area. To the east in the City of Santa Monica, PCH turns into the Santa Monica Freeway (I-10) providing access to the greater Los Angeles basin. Access to PCH within the project area

is provided via the signalized intersections at Cross Creek Road. At this intersection, PCH provides four travel lanes (two in each direction). At the westbound approach, two through lanes and one left hand turn lane (into Malibu Creek State Park) are provided. At the eastbound approach, two through lanes are provided.

Given its topographical and safety constraints, PCH in the City is limited to four lanes and is designated as a modified major arterial. PCH is posted with a speed limit of 50 mph west of Malibu Canyon Road and 45 mph east of Malibu Canyon Road.

Traffic volumes on PCH, as recorded by Caltrans, range from approximately 58,000 vehicles per day east of Topanga Canyon Boulevard to approximately 30,000 vehicles per day east of Kanan Dume Road. In the vicinity of the project site, PCH carries approximately 46,000 vehicles per day east of Cross Creek Road. PCH is designated as a route in the Los Angeles County Congestion Management Plan (CMP).

Cross Creek Road is a north-south local street with one lane in each direction. North of the project area, Cross Creek Road is a public road that provides access to the abutting commercial development and connects to Pacific Coast Highway.

The existing PCH/Cross Creek Road intersection is currently operating at a Level of Service A during the AM peak hour, Level of Service C during the PM peak hour, and a Level of Service C on Saturday (mid-day) (Whole Foods Draft EIR, 2015).

The study intersection of Pacific Coast Highway and Cross Creek Road is located within 200 feet of a designated Environmentally Sensitive Habitat Area (ESHA), situated near the southeast intersection corner and occurring within the Malibu Lagoon State Beach. Vegetation occurring within the project area and within 200 feet north and south of Pacific Coast Highway consists of native habitat recently planted as part of the Malibu Lagoon restoration project, native vegetation planted within the existing Malibu Lagoon State Beach parking area, and ornamental landscaping planted as part of the Perenchio Golf Course. In addition, 19 individual eucalyptus trees are located along the southern side of PCH and west of the PCH/Cross Creek Road intersection and one sycamore tree is located east of the PCH/Cross Creek Road intersection.

Proposed Project

The proposed project involves improvements to the PCH/Cross Creek Road intersection in conformance with Mitigation Measure K-2 of the certified Final Environmental Impact Report for the La Paz Project (State Clearinghouse Number 2003011131). Specifically, the following improvements are proposed:

PCH Improvements (East of Cross Creek Road)

- Construct a 14 foot wide right-turn lane along the north side of PCH within the eastbound approach to Cross Creek Road (315 feet in length);
- Construct new curb and gutter along the north side of PCH, joining with Cross Creek Road;

- Relocate drain inlets, fire hydrant, street light pole, and traffic signal pole along the north side of PCH, east of Cross Creek Road;
- Restripe a 4 foot wide bike lane along north side of PCH, east of Cross Creek Road (315 feet in length);
- Restripe an 11 foot wide left turn lane on PCH within the eastbound approach to Cross Creek Road (145 feet in length);
- Restripe/Construct two westbound though lanes along the south side of PCH, east of PCH/Cross Creek Intersection
- Restripe/Construct an 8 foot shoulder and curb/gutter along south side of PCH, east of PCH/Cross Creek Intersection;
- Construct a new 6.5 foot sidewalk along the south side of PCH, east of the PCH/Cross Creek Intersection;
- Construct a retaining wall (2-4 feet in height) along the south side of PCH, east of the PCH/Cross Creek Intersection;
- Remove the existing 41-inch diameter western sycamore tree along the south side of PCH, east of the PCH/Cross Creek Intersection;
- Relocate the traffic signal cabinet, water main, blower vent, street light poles, and traffic signal poles along the south side of PCH, east of the PCH/Cross Creek Intersection;
- Construct a wheel chair ramp along the north side of PCH, at join with Cross Creek Road;
- Construct a wheel chair ramp along the south side of PCH, at join with Malibu Lagoon State Beach parking lot entrance;

PCH Improvements (West of Cross Creek Road)

- Construct an 8 foot shoulder along the south side of PCH, west of the PCH/Cross Creek Intersection;
- Restripe an 11 foot wide turn lane on PCH within the westbound approach to Cross Creek Road (315 feet in length);
- Remove 5 existing eucalyptus trees along the south side of PCH, west of the PCH/Cross Creek Intersection;
- Relocate the gas vault and electric vault along the south side of PCH;
- Re-construct the wheel chair ramp along the south side of PCH as necessary, at join with Malibu Lagoon State Beach parking lot entrance;

The existing parallel parking spaces located on the south side of PCH, west of the PCH/Cross Creek Road intersection would not be affected by the proposed project.

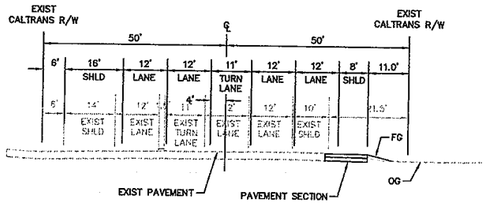
A Native Tree Protection Plan has been proposed as part of the project. This plan details the planting of 10 1-gallon western sycamore trees within the La Paz commercial shopping center parking lot landscaping area. In addition, the amended Native Tree Protection Plan proposes to plant 10 1-gallon western sycamore trees within Malibu Lagoon State Beach Park. The planting of the trees as would be supervised by a qualified biologist and the progress of the planting efforts would be monitored for a period of 5 years. The photographs below illustrate the environmental setting of the project area.

Photo 1 – View West From South Side of PCH

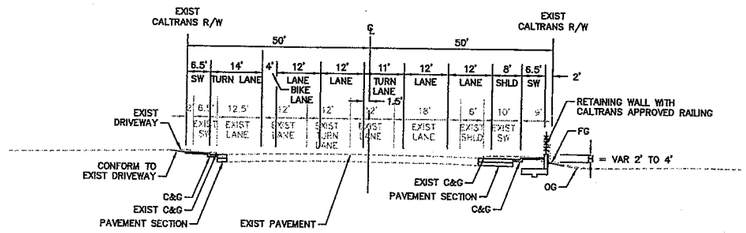
Photo 2 – View West from PCH/Malibu Lagoon State Beach Park Entrance

Photo 3 – View West from South Side of PCH (West of Intersection)

Photo 4 – View West from South Side of PCH (East of Intersection



CROSS SECTION OF PCH
STA 40+00 ±



CROSS SECTION OF PCH
STA 41+50 ±

LEGEND:

- CENTERLINE
- EXIST R/W
- PROPOSED STRIPING
- RETAINING WALL
- REMOVE TREE
- (XX') EXIST LANE/SHLD WIDTH (APPROXIMATE)
- XX MPH * POSTED SPEED LIMIT
- PROPOSED WHEELCHAIR RAMP

ABBREVIATIONS:

C&G	CURB & GUTTER
EP	EDGE OF PAVEMENT
ES	EDGE OF SHOULDER
ETW	EDGE OF TRAVELED WAY
EXIST	EXISTING
FG	FINISHED GRADE
HP	HINGE POINT
MH	MANHOLE
OG	ORIGINAL GROUND
R/W	RIGHT-OF-WAY
SHLD	SHOULDER
SW	SIDEWALK

NOTES:

1. APPROPRIATE MITIGATION MEASURES WILL BE PROVIDED PER THE CITY OF MALIBU.
2. CONSTRUCT/REPAIR AND REPLACE EXISTING WALK AND WHEELCHAIR RAMPS AS NECESSARY.
3. ADDITIONAL UTILITY RELOCATIONS ARE ANTICIPATED.

CONSTRUCTION NOTES:

1. REMOVE EUCALYPTUS TREE (SEE NOTE 1)
2. RELOCATE STREET LIGHT POLE
3. RELOCATE SIGNAL POLE
4. RELOCATE DRAINAGE INLET
5. RELOCATE FIRE HYDRANT
6. RELOCATE GENERAL TELEPHONE & ELECTRIC MH

NORTH

GRAPHIC SCALE IN FEET
0 30 60 120

REGISTERED PROFESSIONAL ENGINEER
MAN-SAN CHIO
C 64463
EXP. 6/30/15
CIVIL
STATE OF CALIFORNIA

LA PAZ TRAFFIC MITIGATION
CONCEPT PLAN
CROSS CREEK ROAD
INTERSECTION LAYOUT

09/25/2014
UPDATED 10/15/2014

Kimley»Horn

Oct 15, 2014 - 5:13pm K:\LOS_CIVIL\99394000 La Paz\Design\CADD\Exhibits\Cross Creek Intersection Layout.dwg

LA PAZ DEVELOPMENT AGREEMENT CEQA PROCESS/EIR

The City of Malibu prepared a Project EIR for the La Paz Development Agreement Project in accordance with the requirements of CEQA and the CEQA Guidelines. A Notice of Preparation (NOP) was filed with the California Office of Planning and Research and was distributed to involved public agencies and interested parties for a 30-day public review period on January 24, 2003. The Draft EIR was circulated to State agencies for review through the State Clearinghouse, Office of Planning and Research. During the public review period, the City received comments from public agencies and private citizens. These comment letters, as well as the response to comments, were included in the Final EIR, which was certified by the Malibu City Council on November 10, 2008.

The EIR addressed the potential environmental effects of development of the La Paz Development Agreement EIR. The scope of the EIR included environmental issues determined to be potentially significant based on the Initial Study and responses to the NOP.

The following issues were addressed in detail in the EIR:

- *Aesthetics*
- *Air Quality*
- *Biological Resources*
- *Cultural Resources*
- *Geology and Soils*
- *Hydrology and Water Quality*
- *Land Use and Planning*
- *Noise*
- *Public Services/Utilities*
- *Traffic and Circulation*

The EIR considered the environmental impacts associated with development of up to 132,058 square feet (sf) of commercial uses on approximately 15.2 acres of land in the Civic Center area of the City of Malibu, Los Angeles County, California. The EIR also considered a range of alternatives to the proposed La Paz Development Agreement project, as required by CEQA.

ENVIRONMENTAL IMPACTS OF THE LA PAZ DEVELOPMENT AGREEMENT PROJECT AND CROSS CREEK ROAD/PCH INTERSECTION IMPROVEMENTS

This section addresses each of the environmental issues discussed in the La Paz Development Agreement Final EIR to determine whether or not the proposed Cross Creek Road/PCH intersection improvement project has the potential to create new significant impacts or a substantial increase in the significance of a significant impact as compared to what was identified in the La Paz Development Agreement EIR.

Aesthetics

Scenic Resources, Scenic Vistas, and Visual Character

The La Paz Development Agreement Final EIR concluded that impacts to scenic resources and scenic vistas from existing view corridors such as Civic Center Way, Cross Creek Road, PCH, and Malibu Canyon Road would be less than significant. Changes to the aesthetic character of the La Paz Project Site from these locations were not considered significant adverse changes because the immediate project area is developed and the proposed building heights are consistent with existing commercial development. Furthermore, the La Paz Site does not contain any unique scenic resources, such as trees, rock outcroppings, or historic buildings.

The La Paz site would be visible from portions of public areas such as City streets and the Santa Monica Mountains; however it would not obstruct any scenic views (e.g. ocean, coastline, hillsides, and canyons) from these viewing locations. The impacts described above would be reduced to less than significant levels by implementing the mitigation measure listed in the La Paz Development Agreement Final EIR Mitigation Monitoring Program (Mitigation Measure A-1).

Light and Glare

The La Paz Development Agreement Final EIR concluded that light and glare impacts would be potentially significant but mitigable. In response to comments received on the Draft EIR concerning privacy and light trespass on the adjacent residential property, the La Paz Project was revised to include a Conceptual Landscaping Plan, which provided additional landscape cover to buffer the Project Site from the adjoining residential property to the northeast. In addition, additional language was been added to Mitigation Measure V.A-1 to require the planting of a row of sycamore trees 15 feet apart on center and Australian willow and coast live oak around buildings 10 and 11, west of the road. In addition, the impacts described above would be reduced by the mitigation measures listed in the La Paz Development Agreement Final EIR Mitigation Monitoring Program (Mitigation Measures A-2 and A-3).

Summary of Potential Impacts – Cross Creek Road/PCH intersection Improvement Project

As described in the Initial Study prepared for the Cross Creek Road/PCH Improvement Project, the existing roadway topography would not be substantially altered and the majority of intersection improvements would occur at the ground level, including the proposed 2-4 foot high retaining wall. Moreover, the proposed retaining wall would occur in an area already planted with vegetation designed to screen the Malibu Lagoon State Park parking lot. Therefore, the proposed intersection improvements would not block views of the Pacific Ocean or the Santa Monica Mountains as seen from vehicles traveling on Pacific Coast Highway, or from pedestrians utilizing existing sidewalks/trails along PCH. No impact would occur.

The proposed removal of one 41-inch western sycamore tree and five eucalyptus trees would create additional lines of sight north towards the Santa Monica Mountains (from the Malibu Lagoon State Beach parking lot) and south toward the Pacific Ocean, as seen from vehicles traveling along PCH or from pedestrian utilizing existing sidewalks or trails along PCH or

Malibu Lagoon State Beach Park. Moreover, a substantial amount of vegetation would remain along the project boundary, and thus the overall quality of views through the project site would be retained. Therefore, the proposed project would not have an adverse effect on scenic vistas. Impacts on scenic resources and scenic vistas would be less than significant.

PCH is eligible to be nominated as a State Scenic Highway, but the roadway has not been officially designated. Nonetheless, the City's Local Coastal Program (LCP) identifies both PCH and Malibu Canyon Road as a "Scenic Road." The proposed project would involve removal of mature trees, including a 41" western sycamore and five existing eucalyptus trees. However, the trees proposed for removal are surrounded by other existing native and non-native vegetation and thus constitute a small portion of PCH's overall scenic quality. The overall quality of the views from the project boundary would remain given the quantity and quality of this remaining native and non-native vegetation. Moreover, the proposed planting of 10 1-gallon sycamore trees within the Malibu Lagoon State Beach Park would further offset view impacts associated with the proposed removal of the 41-inch sycamore tree. Impacts would be less than significant.

The proposed project involves the construction of intersection improvements within the existing PCH right-of-way. The intersection improvements would be constructed at ground level and thus the physical improvements would not significantly alter the visual character of the project site or its surroundings. The project would require the removal of one western sycamore and five eucalyptus trees on the south side of PCH, adjacent to Malibu Lagoon State Park. Although the removal of a sycamore tree and eucalyptus trees would alter the visual character of the project site, as seen from vehicles traveling along PCH and from pedestrians utilizing existing sidewalks/trails located along PCH, and from within Malibu Lagoon State Beach, the degradation of views would be minimal due to the quantity and quality of existing vegetation that would remain within the project area and the immediately surrounding areas. Impacts would be less than significant.

The proposed project involves the construction of ground level intersection improvements, the retention of existing vehicle parking spaces, and the relocation of existing street lights and traffic signals. The project would not involve construction of new uses. Therefore, the proposed project would not create any new sources of light or glare. No impact would occur.

No new significant impacts would be created, nor would the severity of any impacts identified in the La Paz Development Agreement Final EIR be increased.

Agricultural Resources

Agricultural Resources were not assessed as part of the La Paz Development Agreement Final EIR.

Summary of Potential Impacts – Cross Creek Road/PCH Intersection Improvement Project

The proposed intersection improvement project site is not used for agriculture and is not zoned for agricultural uses. Therefore, the proposed construction of intersection improvements within the PCH right-of-way would not impact agricultural resources.

No new significant impacts would be created, nor would the severity of any impacts identified in the La Paz Development Agreement Final EIR be increased.

Air Quality

Construction Impacts

The La Paz Development Agreement Final EIR concluded that construction-related air quality impacts would be less than significant. Daily PM_{10} emissions assume proper implementation of SCAQMD Rule 403 (see discussion on "Fugitive Dust Abatement", below).[1] Implementation of Mitigation Measures B-1 through B-10 would ensure proper implementation of Rule 403 and that construction-related impacts would remain less-than-significant.

Operational Impacts

The La Paz Development Agreement Final EIR concluded that operational air quality impacts would be less than significant. Mobile emissions were estimated using trip generation statistics, average trip length statistics, and CARB emission factors. The results, shown in Table V.B-8 of the La Paz Development Agreement EIR, indicate that the La Paz Project would not exceed any of the SCAQMD significance thresholds for criteria pollutants.

Carbon Monoxide Hot Spots

The La Paz Development Agreement Final EIR concluded that Carbon Monoxide impacts would be less than significant. The USEPA micro-scale dispersion model was used to calculate CO concentrations for proposed project. As indicated, one-hour CO concentrations under "Proposed Project" conditions would range from approximately 5.4 ppm to 7.1 ppm during the weekday and from approximately 6.1 ppm to 6.6 ppm during the weekend at worst-case sidewalk receptors. "Proposed Project" eight-hour CO concentrations are anticipated to range from approximately 3.3 ppm to 4.3 ppm during the weekday and from approximately 3.7 ppm to 4.0 ppm during the weekend. The State one- and eight-hour standards of 20.0 ppm and 9.0 ppm, respectively, would not be exceeded at worst-case sidewalk receptor locations at the study intersections under "Proposed Project" conditions.

[1] Implementation of Rule 403 is estimated to reduce dust and PM_{10} emissions by approximately 62 percent during the grading/excavation phase for the Proposed Project. The larger reduction in PM_{10} emissions during the grading phase is due to the heightened level of activity that would occur during this phase, which includes the use of construction vehicles, earthmoving activities, and haul truck trips. The resulting daily PM_{10} emissions, shown in Table V.B-6, would not exceed the SCAQMD significance threshold of 150 pounds per day.

Air Quality Policy Consistency

The La Paz Development Agreement Final EIR concluded that air quality policy consistency impacts would be less than significant. Criteria for determining consistency with the AQMP are defined in Chapter 12, Section 12.2 and Section 12.3 of the South Coast Air Quality Management District's CEQA Air Quality Handbook. These indicators are discussed below.

- **Consistency Criterion No. 1:** The La Paz Project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

The SCAQMD has identified CO as the best indicator pollutant for determining whether air quality violations would occur since it is most directly related to automobile traffic. The CO analysis in the Final EIR indicates that the La Paz Project would not exacerbate existing violations of the State one- and eight-hour CO concentration standards, and that no significant adverse impacts would occur.

- **Consistency Criterion No. 2:** The La Paz project would not exceed the assumptions in the AQMP in 2010 or increments based on the year of project build-out phase.

The AQMP growth assumptions are generated by SCAG. SCAG derives its assumptions, in part, based on the General Plans of cities located within the SCAG region. Therefore, if a project does not exceed the growth projections in the General Plan, then it is consistent with the growth assumptions in the AQMP.

The City of Malibu General Plan designates the La Paz Project Site as CC (Community Commercial). The La Paz Project would construct retail and office uses, which would be consistent with the City of Malibu General Plan. Since the La Paz Project is consistent with the City of Malibu General Plan, it is assumed that implementation of the La Paz Project would not exceed the growth projections in the General Plan or the growth projections established by SCAG. Thus, the La Paz Project complies with Consistency Criterion No. 2.

Although impacts were considered less than significant, mitigation measures B-1 through B-3 were adopted as part of the La Paz Development Agreement Final EIR Mitigation Monitoring Program to ensure compliance with Rule 403.

Summary of Potential Impacts – Cross Creek Road/PCH Intersection Improvement Project

The proposed project would include intersection improvements within the existing PCH right-of-way. Therefore, the proposed project would not generate any new population-related demand. Consequently, the project would not contribute to an exceedance of the projected population growth forecast in the AQMP. No impact would occur.

Table 1, Unmitigated Construction Emissions, presents the estimated maximum daily emissions associated with the proposed project. Construction emissions include all emissions associated with the construction equipment, grading activities including fill material import, worker trips, and on-road diesel trucks.

Table 1
Unmitigated Construction Emissions

Construction Year	Maximum Emissions in Pounds per Day					
	VOC	NO_X	CO	SO_X	PM10	PM2.5
2015	3.32	26.25	21.43	0.04	2.75	2.10
SCAQMD Threshold:	**75**	**100**	**550**	**150**	**150**	**55**
Exceeds Threshold?	NO	NO	NO	NO	NO	NO

Source: Rincon Consultants Inc., 2015. Emissions calculations are provided in Initial Study Appendix A.
Note: Totals in the table may not appear to add exactly due to rounding in the computer model calculations. An equivalent land use of "parking lot" was used to estimate the temporary construction emissions associated with the intersection improvement project.

As indicated above, emissions would not exceed the SCAQMD's significance thresholds during construction. Impacts from construction emissions would be less than significant.

The proposed project would involve temporary construction activities that are anticipated to occur over a 60 day period. The temporary construction activities would result in the release of relatively small quantities of criteria pollutants. These emissions would be below the applicable SCAQMD standards for construction activities and the activities would be temporary. Therefore, the projects contribution to quantities of ozone, PM_{10}, $PM_{2.5}$, NO_2 and lead would not be cumulatively considerable. Therefore, impacts would be less than significant.

The closest sensitive receptors to the project site are the residences at Malibu Colony located approximately 700 feet to the south at 23449, 23445, and further the east. The distance between the construction area and the nearest sensitive receptors combined with the existing physical barriers would limit the dispersion of higher than normal concentrations of particulate matter as well as exhaust emissions from construction vehicles would not occur. No impact would occur.

The use of heavy equipment within 700 feet of the nearest sensitive receptor has not been identified by the Bay Area Air Quality Management District as a significant generator of odors as part of their California Environmental Quality Act Air Quality Guidelines (May 2011). No impact would occur.

No new significant impacts would be created, nor would the severity of any impacts identified in the La Paz Development Agreement Final EIR be increased.

Biological Resources

Vegetation

The La Paz Development Agreement Final EIR concluded that with mitigation for the removal of the on-site coastal sage scrub (CSS) and the removal of on-site sycamore trees, impacts would be less than significant. The loss of coastal sage scrub was considered a potentially adverse and significant impact due to the limited and isolated extent of CSS on-site.

The loss of sycamore trees on-site was considered a potentially significant impact as their removal would conflict with the Malibu LIP Chapter 5. However, the La Paz Project was required to plant western sycamore (*Platanus racemosa*) trees on-site at a 10:1 ratio. This action provided sufficient mitigation to render the impact temporary and less-than-significant.

The loss of annual non-native grassland was considered a less than significant impact. Landscaping within the resulting undeveloped areas would offset any adverse impacts to non-native grasslands. The removal of eucalyptus and other invasive non-native trees and vegetation (castor bean, mustard, etc.) was considered a beneficial impact.

No sensitive flora was identified on the La Paz Project site. Further, no wetlands or other jurisdictional features were identified. Therefore, no significant impacts to these resources were identified.

The impacts described above would be reduced to less than significant levels by the mitigation measures listed in the La Paz Development Agreement Final EIR Mitigation Monitoring Program (Mitigation Measures C-1 through C-8). With mitigation, impacts would be less-than-significant.

Special Status Wildlife Species

No endangered or threatened wildlife were observed on the La Paz Development Agreement Project Site, therefore, no impacts to protected species would occur. Nevertheless, the construction of the La Paz Development Agreement Project would disturb all wildlife which currently resides or utilizes the subject property. Impacts were considered less than significant. The presence of nesting birds was not observed at the time of the field surveys completed for the La Paz Development Agreement Project Site; however the absence of nesting birds at the time of observation did not preclude the possibility for nesting birds to be present at the time of construction activities. As such, any inadvertent destruction of active bird nests during the construction period would result in a significant and adverse environmental impact as such an action would be in conflict with the Migratory Bird Treaty Act and the Fish and Game Code. The impacts described above would be reduced to less than significant levels by the mitigation measures listed in the La Paz Development Agreement Final EIR Mitigation Monitoring Program (Mitigation Measures C-1 through C-8).

Summary of Potential Impacts – Cross Creek Road/PCH Intersection Improvement Project

The proposed project involves the construction of intersection improvements along with associated tree removal activities within the PCH right-of-way. Although sensitive plant and animal species inhabit the adjacent Malibu Lagoon State Park area, the proposed intersection improvement activities would be confined to the PCH right-of-way, which is comprised of existing pavement and other roadway improvements (curb, gutter, sidewalk, stop lights, signage, etc.) and unimproved dirt pathways. All soil disturbance activities have the potential to result in erosion and sedimentation in downstream areas, which if not addressed could indirectly impact candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. However, the proposed project is primarily confined to the existing paved

areas of Pacific Coast Highway and only limited soil disturbance would occur. The proposed construction plans were reviewed by the City's Public Works Department who recommended the use of standard Best Management Practices defined in Chapter 17 of the City of Malibu Local Implementation Plan. Compliance with standard conditions of approval would ensure that impacts would be less than significant.

The mature trees proposed for removal as part of the intersection improvement project consist of one sycamore tree and five eucalyptus trees. The eucalyptus trees are non-native and thus are not protected by the City of Malibu General Plan, the Malibu Local Coastal Plan, the City's Municipal Code, or the California Department of Fish and Wildlife or the US Fish and Wildlife Service. However, the western sycamore (*Platanus racemosa*) tree is protected under LIP Chapter 5. Based upon field visits to the project area, the eucalyptus trees, the sycamore tree, the dirt pathways, road surfaces, and urban uses do not support identified candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. However, the eucalyptus trees and sycamore tree could support nesting birds, which are protected under the federal Migratory Bird Treaty Act and Section 3503 of the state Fish and Game Code. Impacts to nesting birds were discussed in Section V.C. of the La Paz Development Agreement EIR (SCH No. 2003011131) and were considered less than significant after implementation of Mitigation Measure C-1.

The proposed removal of the sycamore tree requires compliance with Section 5.5 of the LIP, which defines the requirements for tree replacement. The application materials submitted for the proposed project include a Native Tree Protection Plan in accordance LIP Section 5.5. This plan proposes to plant 10 replacement 1-gallon sycamore trees within the La Paz parking lot landscaping area. In addition, the plan proposes to plant 10 replacement 1-gallon sycamore trees within the Malibu Lagoon State Beach Park. Therefore, impacts would be less than significant.

The Malibu Lagoon State Beach Park and its associated sensitive habitat is located immediately south of the existing PCH right-of-way. This area does contain candidate, sensitive or special status species. However, the proposed intersection improvement area would not occur on the Malibu Lagoon State Beach Park property and habitat for any sensitive or special status species is not located within the intersection improvement area. Therefore, less than significant impacts to candidate, sensitive or special status species would occur.

The proposed intersection improvements would occur within the PCH right-of-way, which is comprised of existing pavement and unimproved dirt pathways. No wetlands or other similar habitat under the jurisdiction of state and/or federal agencies occur within this right-of-way (PCR, Site Survey, August 2014). Other minor roadway/utility improvements would occur near the entrance to Malibu Lagoon State Beach, which have already been improved for vehicle access. Therefore, the project would not directly remove, fill, hydrologically interrupt, or otherwise impact federally protected wetlands. No impact would occur.

The proposed intersection improvement project boundary is surrounded by urban development and although there is an abundance of native habitat present within the Malibu Lagoon State Beach Park, there is very limited native biological habitat (a sycamore tree), and no riparian

habitat present on-site. The project would not result in the removal of any riparian habitat or other sensitive natural community. In addition, no federal-or-state-listed endangered, threatened, rare, or otherwise sensitive flora or fauna were observed at the project site (PCR, Site Survey, August 2014). No impact would occur.

The proposed intersection improvements would occur primarily within the PCH right-of-way, which is comprised of pavement and unimproved dirt pathways. These improvements and other urban development in the immediate vicinity form a barrier to wildlife movement. Due to the extent of urban development within the vicinity of the proposed project, the roadway construction activities would not interfere with wildlife movement. No impact would occur.

Site development would necessitate the removal of one western sycamore tree, a protected tree species under the City's LCP. A Native Tree Protection Plan has been prepared and approved by the City Biologist. This plan proposes the planting of 10 1-gallon western sycamores in the previously approved landscaping plan for the La Paz commercial shopping center. In addition, the Native Tree Protection Plan proposes the planting of an additional 10 1-gallon western sycamore trees in the Malibu Lagoon State Beach Park restoration area. This proposed tree replacement program would be consistent with LIP Section 5.5.1 (A). Therefore, impacts would be less than significant.

No new significant impacts would be created, nor would the severity of any impacts identified in the La Paz Development Agreement Final EIR be increased.

Cultural Resources

Historic or Prehistoric Archaeological Resources

Archaeological field surveys conducted by Chester King (1995) and ERA (1999) concluded that there are no observable cultural resources, including artifacts or altered soil indicating the presence of prehistoric archaeological remains on the La Paz Development Agreement Site. Archeological records searches, conducted by Chester King in 1995 and by CAJA in 2003, revealed that no archaeological or historic sites exist on the La Paz Development Agreement Site. Additionally, no adverse physical or aesthetic impacts would occur to prehistoric or historic building or structures as no such structures exist on the Project Site. Nevertheless, the potential still exists to uncover unknown archaeological remains during excavation and/or surface grading activities. The impacts described above would be reduced to less than significant levels by the mitigation measures listed in the La Paz Development Agreement Final EIR Mitigation Monitoring Program (Mitigation Measures D-1 and D-2).

Summary of Potential Impacts – Cross Creek Road/PCH Intersection Improvement Project

A Phase 1 cultural resources survey was prepared for the Cross Creek Road/PCH intersection improvement area by ASM Affiliates, Inc. in 2014. It was determined that while no sites or traditional cultural places had been identified within the project area, the NAHC expressed concern given the proximity of the project to the location of the National Register-listed site of prehistoric/historic village of Humaliwu. Therefore, a Phase 1 field survey was conducted in

August 2014, with parallel transects spaced at 15 meter intervals. No significant cultural resources were discovered within the study area during the research effort or the Phase I field survey. As a result, the intersection improvement project would not have an adverse impact on cultural resources or cause substantial adverse changes as defined by CEQA.

In the unlikely event that archaeological or paleontological resources are unearthed during construction, applicable regulatory requirements pertaining to the handling and treatment of such resources would be followed. Work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (NPS 1983) must be contacted immediately to evaluate the find. If the discovery proves to be significant under NHPA, additional work such as data recovery excavation may be warranted. This is consistent with the mitigation measures listed in the La Paz Development Agreement Final EIR Mitigation Monitoring Program (Mitigation Measures D-1 and D-2).

No new significant impacts would be created; the severity of any impacts identified in the La Paz Development Agreement Final EIR would not be increased.

Geology and Seismicity

Ground Shaking/Fault Rupture

The La Paz Development Agreement Final EIR concluded that the project would increase the potential for human health hazards and destruction of property to occur on the project site during a sizable seismic event. Adherence to all applicable building codes and regulations and site-specific engineering specifications would reduce such impacts to less than significant levels.

Surface rupture potential were considered low to moderate, and the impacts were considered significant but mitigatable. Engineering studies using state-of-the-practice techniques were required and therefore the impacts from ground rupture were accounted for with setbacks and foundation designs, which accommodate several inches of movement.

Secondary Effects of the Proposed On-Site Wastewater Treatment System

The OWTS would effectively treat and dispose of wastewater generated by the La Paz Project while minimizing impacts to the greatest degree feasible. The OWTS included a network of underground wastewater treatment tanks proposed to effectively remove solids and floatable oil and grease containing materials from the waste stream prior to discharging effluent on site. The effluent would be processed to meet the minimum requirements of the City of Malibu Uniform Plumbing Code and disposed into a system of leach fields and subsurface drip disposal areas. The project's secondary impacts from the proposed OWTS were reduced to less than significant with the implementation of the stated mitigation measures.

The impacts described above would be reduced to less than significant levels by the mitigation measures listed in the La Paz Development Agreement Final EIR Mitigation Monitoring Program (Mitigation Measures E-1 through E-9).

Summary of Potential Impacts – Cross Creek Road/PCH Intersection Improvement Project

The proposed intersection improvements would occur within the PCH right-of-way and the proposed project does not include the construction of new permanent land uses. Therefore, the proposed project would not expose people or structures to adverse effects from ground rupture, ground shaking, ground failure, liquefaction, or landslides. The proposed project does not involve activities to stabilize the slopes of a landslide. No impact would occur.

Removal of the existing road improvements and the construction of intersection improvements could temporarily expose erodible soils to rainfall and significant wind events which could lead to erosion. However, the exposed soils would occur within an environment that is relatively flat and would be subject to the City of Malibu's standard conditions of approval requiring the implementation of a Local Storm Water Pollution Prevention Plan. This plan would include an Erosion and Sediment Control Plan that includes the appropriate level of Best Management Practices to prevent soil erosion. Compliance with this standard condition of approval would reduce the potential for erosion and thus impacts would be less than significant.

The construction of intersection improvements would occur in an environment that has been previously graded flat and thus would not cause soil instability that would potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse. Therefore, no impact would occur.

The proposed intersection improvement project would not construct any new habitable land uses. Therefore, no life or property would be exposed to construction on expansive soils. No impact would occur.

The proposed project does not involve the construction of new habitable uses that would require wastewater disposal. Septic systems would not be used. No impact would occur.

No new significant impacts would be created, nor would the severity of any impacts identified in the La Paz Development Agreement Final EIR be increased.

Greenhouse Gas (GHG) Emissions

GHG emissions were not assessed as part of the La Paz Development Agreement Final EIR, as the impact was not considered under CEQA at the time.

Summary of Potential Impacts – Cross Creek Road/PCH Intersection Improvement Project

The proposed intersection improvement project does not involve any construction of new uses. Therefore, there would be no operational emissions (stationary or mobile sources) associated with the project. However, there would be temporary emissions related to the operation of vehicles and equipment used during construction.

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 City of Malibu has not adopted GHG significance thresholds. Although not yet adopted, the SCAQMD has a recommended quantitative Tier 3 threshold of 3,000 metric tons CO_2E /year for all land use types (SCAQMD, September 2010). As shown in Appendix B, the proposed intersection improvement project would result in temporary construction related greenhouse gas emissions of approximately 25 metric tons. Therefore impacts from greenhouse gas were considered less than significant.

No new significant impacts would be created, nor would the severity of any impacts identified in the La Paz Development Agreement Final EIR be increased.

Hazards and Hazardous Materials

Construction Impacts

The La Paz Development Agreement Final EIR concluded that construction related risk of upset impacts would be less than significant. Public record research of the project boundary concluded that no potential environmental hazards which could be upset during construction activities are present on the La Paz Project Site. The site is not listed on any federal, State, or local databases compiled in accordance with Government Code Section 65962.5.

Groundwater Impacts

The La Paz Development Agreement Final EIR concluded that impacts to groundwater would be potentially significant but mitigable. An analysis of groundwater samples at the La Paz Project Site concluded that total petroleum hydrocarbons (TPH) was not detected (ND). Concentrations of benzene and ethylbenzene ranged from ND to microgram per liter (1 µg/l). Concentrations of toluene were detected at 1 µg/l and concentrations of xylenes ranged from ND to 4 µg/l. All of these concentrations were below the State drinking water standards and, therefore, were not considered to be significant. However, pumped groundwater could potentially draw higher concentrations of contaminants onto the Project site and thus impacts were considered less than significant after mitigation. The impacts described above would be reduced to less than significant levels by Mitigation Measure L-1 listed in the La Paz Development Agreement Final EIR Mitigation Monitoring Program.

Asbestos Impacts

The La Paz Development Agreement Final EIR concluded that impacts from asbestos would be potentially significant but mitigable. The structures on the La Paz Project Site may have been built prior to the federal banning of asbestos containing materials (ACMs). Therefore, the existing structures on the La Paz Project may have been constructed with building materials containing lead-based paint and/or ACMs. The potential release of ACMs was considered a significant impact.

The impacts described above would be reduced to less than significant levels by Mitigation Measure L-2 listed in the La Paz Development Agreement Final EIR Mitigation Monitoring Program.

Lead Impacts

The La Paz Development Agreement Final EIR concluded that impacts from lead would be potentially significant but mitigable. It is possible that the existing structures on the La Paz Project Site contain lead-based materials which could be released into the environment during demolition activities. The impacts described above would be reduced to less than significant levels by Mitigation Measure L-3 listed in the La Paz Development Agreement Final EIR Mitigation Monitoring Program.

Polychlorinated Biphenyl (PCB) Impacts

The La Paz Development Agreement Final EIR concluded that impacts from PCBs would be potentially significant but mitigable. Within the existing on-site structures, fluorescent light ballasts manufactured prior to 1978 may contain small quantities of PCBs. It is possible that PCBs could be released into the environment during demolition activities. The impacts described above would be reduced to less than significant levels by Mitigation Measure L-4 listed in the La Paz Development Agreement Final EIR Mitigation Monitoring Program.

Summary of Potential Impacts – Cross Creek Road/PCH Intersection Improvement Project

The proposed intersection improvement project involves roadway construction and tree removal activities and would not introduce any unusual hazardous materials to the area. During construction, the project would be required to implement a Local Storm Water Pollution Prevention Plan, which would include Best Management Practices for waste, including material delivery and storage, stockpile management, spill prevention and control, solid waste management, concrete waste management, and sanitary/septic waste management. Upon compliance with these standard conditions of approval, impacts would be less than significant.

The intersection improvement project site is not located within ¼ mile of an existing school. In addition, the proposed project does not involve any construction or new uses and therefore operation of the project would not involve the use or transport of hazardous materials. With adherence to the regulations listed above in part (a), the proposed project would not release asbestos-containing materials or lead-based paint. No impact would occur.

The following databases were checked for known hazardous materials contamination on the project site or in its vicinity:

- *Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database*
- *Geotracker search for leaking underground storage tanks, Spills-Leaks-Investigations-Cleanups (SLIC) and Landfill sites*
- *California, State of, Department of Toxic Substances Control EnviroStor database*
- *Cortese list of Hazardous Waste and Substance Sites*
- *EPA Brownfields List*

The project site is not listed on any of these databases. However, the project is located within ¼ mile of a site previously containing a leaking underground storage tank. The soil contamination is located at the Malibu Shell Station (corner of Cross Creek Road/PCH) and is currently being

remediated under the supervision of the Regional Water Quality Control Board (Case No. 902650052B). This case only involves soil contamination on the Shell Station property and did not impact groundwater. Moreover, the upper 10 feet of soil was found to be free of contamination. The proposed intersection construction project would not generate significant quantities of soil during excavation/grading and thus construction would not involve the establishment of any new uses capable of releasing hazardous materials and no persons would be exposed to hazards. No impact would occur.

No new significant impacts would be created, nor would the severity of any impacts identified in the La Paz Development Agreement Final EIR be increased.

Hydrology and Water Quality

Hydrology/Flooding

The La Paz Development Agreement Final EIR concludes that the La Paz project site is located in an area that is prone to flooding up to depths of two feet (Parcel A), and portions of Parcels B and C are in areas prone to flooding up to depths of one foot. Impacts were considered potentially significant but mitigable. The Project design incorporates finished floor heights raised well above the flood levels determined by FEMA for the development areas and, as such, would not result in significant flooding impacts. Potential flooding impacts would therefore be avoided through site design and remedial grading activities.

The impacts described above would be reduced to less than significant levels by Mitigation Measure F-4 listed in the La Paz Development Agreement Final EIR Mitigation Monitoring Program.

On-Site Drainage

The on-site drainage system designed for the La Paz Development Agreement Project includes a 48-inch (maximum) reinforced concrete pipe (RCP) along the east side of the La Paz Project Site and a 24-inch (maximum) RCP along the west side of the La Paz Project Site. The storm drain system and the debris basin have been designed to accommodate water flow and debris from the watershed area north of the Project Site during a 50-year storm. The final drainage plan is required to be reviewed and approved during approval of the proposed grading and drainage plans. Approval of these plans would ensure all flooding and drainage impacts would be less than significant.

The impacts described above would be reduced to less than significant levels by the mitigation measures listed in the La Paz Development Agreement Final EIR Mitigation Monitoring Program (Mitigation Measures F-1 through F-3 and F-5 through F-8).

Water Quality/Construction

The La Paz Development Agreement Final EIR concluced that potentially significant but mitigable impacts on water quality would occur during grading and construction activities, as there will a potential for surface water runoff to carry sediment and small quantities of

pollutants into the storm water system. The National Pollution Discharge Elimination System (NPDES) requires that a Notice of Intent (NOI) be filed with the State Water Resources Control Board (SWRCB) for construction activities greater than 1 acre (effective March 1, 2003). A Stormwater Pollution Prevention Plan (SWPPP) was required and will be reviewed and approved by the City of Malibu prior to any on-site grading activities. The SWPPP will identify BMPs such as sandbag barriers, temporary desilting basins near inlets, gravel driveways, dust controls, employee training, and general good housekeeping practices that help prevent water quality contamination.

The impacts described above would be reduced to less than significant levels by the mitigation measures listed in the La Paz Development Agreement Final EIR Mitigation Monitoring Program (Mitigation Measure F-1 through F-3 and F-5 through F-8).

Operation

The La Paz Development Agreement Final EIR concluded that post-development storm water runoff has the potential to contribute pollutants to the storm water conveyance system and ultimately to the ocean. The City requires approval of the WQMP and SUSMP prior to the issuance of any building permits. Compliance with these Plans and City Ordinance 157 would ensure that the proposed project would not result in any significant water quality impacts. In addition, the proposed man-made wetlands, which are proposed to control runoff from developed and paved surfaces, would also serve to minimize the introduction of pollutants of concern to off-site water bodies.

The impacts described above would be reduced to less than significant levels by the mitigation measures listed in the La Paz Development Agreement Final EIR Mitigation Monitoring Program (Mitigation Measure F-1 through F-3 and F-5 through F-8).

Summary of Potential Impacts – Cross Creek Road/PCH Intersection Improvement Project

The proposed intersection improvement project only involves roadway construction and tree removal and would not exceed one-acre in disturbed area. Nevertheless, the project would be required to develop a Local Stormwater Pollution Prevention Plan (SWPPP) to control water pollution during construction. With adherence to existing regulations, impacts to water quality would be less than significant.

Regional water demand is primarily a function of population growth. The project would not increase the region's population and, in turn, the regional demand for potable water. The proposed project also would not substantially interfere with groundwater recharge because the proposed project would not substantially increase the amount of impermeable surface at the site. Therefore, the project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table. No impact would occur.

The proposed intersection improvement project does not involve any new construction that would substantially alter drainage patterns. The proposed project would not involve alternation

of a stream or river and would not create erosion or siltation on or off-site. The proposed project would involve intersection improvements within the PCH right-of-way, which has already been previously graded flat and contains drainage improvements. Moreover, the implementation of Best Management Practices as part of the Local Stormwater Pollution Prevention Plan would prevent future erosion. Impacts would be less than significant.

No new significant impacts would be created, nor would the severity of any impacts identified in the La Paz Development Agreement Final EIR be increased.

Land Use and Planning

General Plan Policy Consistency

The La Paz Development Agreement EIR concluded that land use consistency impacts would be less than significant. The La Paz Project was considered substantially consistent with the Community Commercial land use designation of the General Plan Land Use Element. The La Paz Project was also considered substantially consistent with the allowable uses and development standards for the Community Commercial zoning designation, including the minimum parking requirements.

Zoning Ordinance Consistency

The La Paz Development Agreement EIR concluded that Malibu Zoning Ordinance consistency impacts would be less than significant. The La Paz Project was considered substantially consistent with the allowable uses and development standards for Community Commercial zoning designation.

Malibu Local Coastal Plan Consistency

The La Paz Development Agreement EIR concluded that Malibu Local Coastal Program consistency impacts would be less than significant. The Malibu LCP includes numerous basic goals and policies to ensure that development within the City that falls within the Coastal Zone is consistent and compatible with the unique characteristics of coastal resources. The La Paz Project would be substantially consistent with these basic policies and goals. Specifically, the La Paz Project would not interfere with the public's access to the sea, significantly interfere with the traffic circulation system, affect marine resources, or affect environmentally sensitive habitat area.

Summary of Potential Impacts – Cross Creek Road/PCH Intersection Improvement Project

The proposed intersection improvement project is located within the Pacific Coast Highway right-of-way and therefore retains no formal zoning or land use designation within the City of Malibu. The proposed project would improve the functionality of the Cross Creek/PCH intersection, which is consistent with the City's General Plan Circulation Element. Moreover, the project implements Mitigation Measure K-2 of the certified Final Environmental Impact Report for the La Paz Project (State Clearinghouse Number 2003011131). Therefore, the

proposed project would have no impact relating to the consistency with applicable land use plans, policies, or regulations.

No new significant impacts would be created, nor would the severity of any impacts identified in the La Paz Development Agreement Final EIR be increased.

Mineral Resources

Mineral Resources were not assessed as part of the La Paz Development Agreement Final EIR, as the impact was not considered under CEQA at the time.

Summary of Potential Impacts – Cross Creek Road/PCH Intersection Improvement Project

The proposed intersection improvement project site is not used for mining and is not zoned for mining uses. Further, the proposed construction of roadway improvements within the PCH right-of-way would not affect mineral resources. No impact would occur.

No new significant impacts would be created, nor would the severity of any impacts identified in the La Paz Development Agreement Final EIR be increased.

Noise

Construction Impacts

The La Paz Development Agreement Final EIR concludes that construction noise impacts would be significant and unavoidable. Construction of the La Paz Project would result in temporary increases in ambient noise levels in the project area on an intermittent basis. The new ambient noise level during the construction phase of the La Paz Project (with the use of mufflers) would be at least 17 decibels (a weighted) (dBA) greater than the existing ambient noise level at Receptor 1 and at least 9 dBA greater than existing ambient noise levels at Receptors 2 and 3 (see Figure V.H-1, Noise Monitoring Locations). At Receptor 4, an incremental increase of less than 1 dBA is anticipated during construction. The new ambient noise levels at Receptors 1, 2, and 3 would exceed the significance threshold of a 5 dBA or more increase over the existing ambient noise level, even with the use of mufflers. The impacts described above would be partially reduced by the mitigation measures listed in the La Paz Development Agreement Final EIR Mitigation Monitoring Program (Mitigation Measure H-1 through H-4).

Operational Impacts

The La Paz Development Agreement Final EIR concludes that operational noise impacts would be less than significant during weekdays and weekends.

Summary of Potential Impacts – Cross Creek Road/PCH Intersection Improvement Project

The proposed intersection improvement project does not involve any construction of new land uses. Therefore, there will be no operational noise and no increase in noise above ambient

levels. Further, the proposed project does not involve any residential uses; therefore, no persons would be exposed to noise in excess of standards. No impact would occur.

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. Most perceptible indoor vibration is caused by sources within buildings such as operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration in the vicinity of the proposed project are construction equipment, traffic on rough roads, and heavy duty vehicle traffic on roadways. 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 (Federal Transit Administration, 2006). Table 2 identifies various vibration velocity levels for the types of equipment that would operate at the project site during demolition.

Table 2
Vibration Source Levels for Construction Equipment

Equipment	Approximate VdB					
	25 Feet	50 Feet	100 Feet	200 Feet	400 feet	800 feet
Large Bulldozer	87	81	75	69	63	57
Loaded Trucks	86	80	74	68	62	56
Small Bulldozer	58	52	46	40	34	28

Source: FTA, May 2006

Based on the information presented in Table 2, vibration levels would temporarily be perceived between 63 and 57 VdB at the residences that are located within 700 feet of the project area. This would not exceed the groundborne velocity threshold level of 80 VdB established by the Federal Railway Administration for residences where people normally sleep. Therefore, impacts would be less than significant.

Temporary noise levels associated with project construction shown in Table 3 would not affect the existing residential uses, which are situated approximately 700 feet away from the project boundary.

Table 3
Noise Source Levels for Construction Equipment

Equipment	Average Noise Level at 50 Feet (dBA)	Average Noise Level at 100 Feet (dBA)	Average Noise Level at 200 Feet (dBA)	Average Noise Level at 400 Feet (dBA)	Average Noise Level at 800Feet (dBA)
Grader	85	79	73	67	61
Trucks	88	82	76	70	64
Backhoe	80	74	68	62	58
Bulldozer	85	79	73	67	61

As shown in Table 3, noise levels could reach up to 70 dBA at a distance of 400 feet. Construction and grading would be over 400 feet away from the residences. Therefore, impacts would be less than significant.

No new significant impacts would be created, nor would the severity of any impacts identified in the La Paz Development Agreement Final EIR be increased.

Population and Housing

Population and Housing was not assessed as part of the La Paz Development Agreement Final EIR.

Summary of Potential Impacts – Cross Creek Road/PCH Intersection Improvement Project

The proposed intersection improvement project involves temporary construction activities. The proposed project does not include the construction of residential units. Because the project does not include the construction of residential units or any permanent job-creating uses, no increase in the City's population would occur. The project would therefore have no impact related to inducing substantial population growth or require the construction of housing.

No new significant impacts would be created, nor would the severity of any impacts identified in the La Paz Development Agreement Final EIR be increased.

Public Services/Utilities

Fire Service

The La Paz Development Agreement Final EIR concludes that fire service impacts would be potentially significant but mitigable. The La Paz Project would increase the level of human occupancy and activity on the La Paz Project Site, and this level of activity could result in a likely increase in the number of emergency calls received. According to the LACFD, additional service provisions, including staff, equipment, and stations are already needed. Therefore, development of the La Paz Project could create a potentially significant environmental impact by exacerbating already insufficient service ratios and standards. Mitigation measures are required. The La Paz Site Plan identifies two access roadways. Both access driveways would be developed in accordance with all applicable fire access codes and standards and the proposed development plans will require approval by the LACFD prior to construction.

The impacts described above would be reduced to less than significant levels by the mitigation measures listed in the La Paz Development Agreement Final EIR Mitigation Monitoring Program (Mitigation Measures J-1 through J-9).

Police Service

The La Paz Development Agreement Final EIR concludes that impacts on police servcies would be potentially significant but mitigable. Los Angeles County Sheriff Department (LACSD) service requirements would increase over the existing demands during the construction phase of the La Paz Project. The potential for vandalism and theft would increase due to the presence of construction equipment and building materials, increasing Sheriff's service demands for property protection.

The impacts described above would be reduced to less than significant levels by the mitigation measures listed in the La Paz Development Agreement Final EIR Mitigation Monitoring Program (Mitigation Measure J-10 through J-11).

Electrical Service

The La Paz Development Agreement Final EIR concludes that impacts to electrical service would be less than significant impact. The La Paz Project does not currently support any uses that consume electricity resources. Therefore, the La Paz Project would result in an increase in the amount of electricity consumed. Upon completion, the La Paz Project is anticipated to consume approximately 4,773 kilowatt hours of electricity per day. The existing electricity infrastructure in the project vicinity is not experiencing any problems or deficiencies and the proejct would not exceed infrastructure design capacities. According to the Southern California Edison Company, the existing infrastructure would be able to handle the electricity demand of the La Paz Project.

Natural Gas Services

The La Paz Development Agreement Final EIR conclues that impacts to natural gas service would be less than significant. The La Paz Project is anticipated to consume approximately 11,137 cubic feet (cf) of natural gas per day. According to The Gas Company, natural gas service to the La Paz Project can be provided without any significant impact on the environment.

Water Service

The La Paz Development Agreement Final EIR concludes that water demand impacts would be potentially significant but mitigable. The La Paz Project is expected to generate a demand of approximately 43,370 gallons per day (gpd) of water. While adequate water supply in the project area exists, existing distribution infrastructure cannot serve the La Paz Project. Water mains for the La Paz Project do not exist, and therefore would need to be constructed.

The impacts described above would be reduced to less than significant levels by the mitigation measures listed in the La Paz Development Agreement Final EIR Mitigation Monitoring Program (Mitigation Measure I-18 through I-24).

Wastewater Service

The La Paz Development Agreement Final EIR concludes that impats to wastewater service would be less than significant. The La Paz Project will be served by a proposed onsite wastewater treatment system. As such the La Paz will be self-efficient with regard to waterwater treatment and will not result in any impacts upon local public waterwater treatment utility providers.

Solid Waste – Construction

The La Paz Development Agreement Final EIR concludes that impacts to solid waste disposal during construction would be less than significant. Much of the solid waste generated during the construction phase such as wood, metal scrap, and formed construction board (cement and dry wall board) would be recycled and salvaged to the maximum feasible extent. Materials not recycled would be disposed of at local landfills, and possibly a Class III landfill for any hazardous materials. With the recycling of most of the solid waste generated by the construction phase of the Proposed Project, short-term construction impacts to landfills and solid waste service would be less than significant.

Solid Waste – Operational

The La Paz Development Agreement Final EIR concludes that imapcts to solid waste disposal during operation would be less than significant. Upon full occupancy of the project, daily solid waste associated with the project would be approximately 794 pounds of solid waste per day. Solid waste generated on-site would be disposed of in accordance with all applicable federal, State, and local regulations related to solid waste. Correspondence with the G.I. Rubbish Company has suggested that the La Paz Project would utilize a waste pick up service three times a week, using three trash bins, each three cubic yards in size and a recycling pick up service two times a week, using two trash bins of the same size. This level of service is expected to accommodate the solid waste generated by the Project, and impacts would thus be less than significant.

Summary of Potential Impacts – Cross Creek Road/PCH Intersection Improvement Project

The proposed intersection improvement project would not lead to any increase in population or jobs and thus would not create new demand for or increase the use of fire facilities, police facilities, schools, parks, or other public facilities. No impact would occur.

The proposed intersection improvement project would involve road construction and tree removal and would not generate wastewater. No impact associated with the need for additional wastewater generation and treatment would occur.

The proposed intersection improvement project would require the construction of flat work (roadway pavement, slabs, concrete, retaining walls, etc.). Therefore, the amount of permeable surfaces would increase compared to existing conditions. However, the proposed project also involves minor drainage improvements as part of the construction activities. Existing storm drain facilities would not be adversely affected by the proposed project. No impact would occur.

The proposed intersection improvement project would involve roadway construction and tree removal and would not create any water-consuming uses. The project does not involve the construction of residences or commercial uses that would increase the region's population and, in turn, the regional demand for potable water. Therefore, no impact would occur.

The proposed intersection improvement project would include the removal of existing pavement and other debris. Once demolished, the demolition waste would need to be transported to a landfill and thus there would be a temporary increase in solid waste at area landfills. The solid waste generated by the project would not be a substantial increase. Impacts would be less than significant.

No new significant impacts would be created, nor would the severity of any impacts identified in the La Paz Development Agreement Final EIR be increased.

Transportation and Traffic

Intersection/Roadway Segment Impacts

The La Paz Development Agreement Final EIR concludes that roadway segment impacts would be potentially significant and unavoidable. Under the future with Project conditions, which considers cumulative impacts in conjunction with the La Paz Project, significant impacts would occur at five of the nine study intersections analyzed herein. The level of project impacts were determined for the Weekday a.m. and p.m. peak hour periods and during the Saturday midday period. The five impacted intersections, all of which are located in the City of Malibu, include the following:

- Malibu Canyon Road & Pacific Coast Highway (PCH) (both weekday peak hours)
- Webb Way & PCH (weekday afternoon peak hour and Saturday peak hour)
- Cross Creek Road & PCH (both weekday peak hours and Saturday peak hour)
- Webb Way & Civic Center Way (weekday afternoon peak hour only)
- Cross Creek Road & Civic Center Way (weekday afternoon peak hour only)

The impacts described above would be partially reduced by the mitigation measures listed in the La Paz Development Agreement Final EIR Mitigation Monitoring Program (Mitigation Measure K-1 through K-3). Implementation of the mitigation improvements would be effective in mitigating project impacts at three of the five intersection locations identified in the analysis for the weekday cumulative plus project conditions. However, significant and unavoidable traffic impacts would still remain at two intersection locations, namely: the intersection of Malibu Canyon Road & PCH during the weekday a.m. and p.m. periods, and the intersection of Cross Creek Road and Civic Center Way during the weekday p.m. period. No feasible mitigation measures are available for the roadway segment of Malibu Canyon Road between the Hughes Research Lab and Piuma Road.

Los Angeles County Congestion Management Plan (CMP)

The La Paz Development Agreement Final EIR concludes that CMP impacts would be less than significant.

Vehicle Parking

The La Paz Development Agreement Final EIR concludes that vehicle parking impacts would be less than significant. The number of parking spaces proposed was determined to be consistent with the minimum number of parking spaces required by the zoning code.

Summary of Potential Impacts – Cross Creek Road/PCH Intersection Improvement Project

The proposed intersection improvement project would involve road construction and tree removal and would not construct any new uses that would generate traffic. The proposed project would ultimately improve traffic flow in accordance with the City of Malibu's General Plan Circulation Element and required as part of the La Paz Development Agreement Final EIR Mitigation Measure No. K-2. Impacts would be less than significant.

Construction workers and haul trucks would be traveling to and from the project site during construction. According to construction trip generation rates built into CalEEMod, the proposed project would generate less than 50 worker trips per day. The vehicle trips associated with construction activities would be temporary and therefore impacts would be less than significant.

No new significant impacts would be created, nor would the severity of any impacts identified in the La Paz Development Agreement Final EIR be increased.

CONCLUSION

The proposed Cross Creek Road/PCH intersection improvement project is consistent with the City of Malibu General Plan and would implement Mitigation Measure K-2 required as part of the La Paz Development Agreement Final EIR that was certified by the City in November 2008. Consequently, the proposed Cross Creek Road/PCH intersection improvement project would not create any new significant impacts or increase the severity of impacts as compared to those that were identified in the La Paz Development Agreement Final EIR. No new information of substantial importance shows that mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative. In addition, no information shows that mitigation measures which are considerably different from those analyzed in the La Paz Development Agreement Final EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measures or alternative. Therefore, in accordance with CEQA Guidelines Section 15164 and Section 15162, an addendum is the appropriate environmental document under CEQA.

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Appendix A

Initial Study

Initial Study

Cross Creek Road/Pacific Coast Highway Intersection Improvements

(Coastal Development Permit No. 14-036)

Prepared by:

City of Malibu
23825 Stuart Ranch Road
Malibu, CA 90265

Prepared with the assistance of:

Rincon Consultants, Inc.
180 North Ashwood Avenue
Ventura, California 93003

April 2015

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INITIAL STUDY

Project Title	Cross Creek Road/Pacific Coast Highway Intersection Improvements
Lead Agency	City of Malibu Planning Department 23825 Stuart Ranch Road Malibu, CA 90265
Contact Person	Jasch Janowicz Contract Planner 310-456-2489 x 345
Project Location	The proposed project would involve roadway improvements at the intersection of Pacific Coast Highway and Cross Creek Road within the existing Pacific Coast Highway right-of-way. The primary improvements would occur at the intersection and the necessary transition work would extend approximately 700 feet east and 500 feet west of the intersection.
Project Sponsor's Name and address	Schmitz and Associates, Inc. 5234 Chesebro Road, Suite 201 Agoura Hills, CA 91301
General Plan Designations	N/A – Roadway Improvements
Zoning	N/A – Roadway Improvements

Surrounding Land Uses and Setting

The project area is bordered by Malibu Lagoon State Beach and existing single-family residential development to the south, existing commercial uses to the north and existing Pacific Coast Highway roadway improvements to the east and west.

Background and Existing Conditions

Coastal Development Permit No. 14-036 has been submitted to implement Mitigation Measure K-2 of the certified Final Environmental Impact Report for the La Paz Project (State Clearinghouse Number 2003011131). Mitigation Measure K-2 requires widening of PCH in order to provide a westbound right turn lane at Cross Creek Road/PCH and a deepening of the left turn pocket for the eastbound approach to Cross Creek Road/PCH.

Pacific Coast Highway (PCH, SR-1) is a state route that travels east and west through the project area. To the east in the City of Santa Monica, PCH turns into the Santa Monica Freeway

(I-10) providing access to the greater Los Angeles basin. Access to PCH within the project area is provided via the signalized intersections at Cross Creek Road. At this intersection, PCH provides four travel lanes (two in each direction). At the westbound approach, two through lanes and one left hand turn lane (into Malibu Creek State Park) are provided. At the eastbound approach, two through lanes are provided.

Given its topographical and safety constraints, PCH in the City is limited to four lanes and is designated as a modified major arterial. PCH is posted with a speed limit of 50 mph west of Malibu Canyon Road and 45 mph east of Malibu Canyon Road.

Traffic volumes on PCH, as recorded by Caltrans, range from approximately 58,000 vehicles per day east of Topanga Canyon Boulevard to approximately 30,000 vehicles per day east of Kanan Dume Road. In the vicinity of the project site, PCH carries approximately 46,000 vehicles per day east of Cross Creek Road. PCH is designated as a route in the Los Angeles County Congestion Management Plan (CMP).

Cross Creek Road is a north-south local street with one lane in each direction. North of the project area, Cross Creek Road is a public road that provides access to the abutting commercial development and connects to Pacific Coast Highway.

The existing PCH/Cross Creek Road intersection is currently operating at a Level of Service A during the AM peak hour, Level of Service C during the PM peak hour, and a Level of Service C on Saturday (mid-day) (Whole Foods Draft EIR, 2015).

The study intersection of Pacific Coast Highway and Cross Creek Road is located within 200 feet of a designated Environmentally Sensitive Habitat Area (ESHA), situated near the southeast intersection corner and occurring within the Malibu Lagoon State Beach. Vegetation occurring within the project area and within 200 feet north and south of Pacific Coast Highway consists of native habitat recently planted as part of the Malibu Lagoon restoration project, native vegetation planted within the existing Malibu Lagoon State Beach parking area, ornamental landscaping planted as part of the Perenchio Golf Course. In addition, 19 individual eucalyptus trees are located along the southern side of PCH and west of the PCH/Cross Creek Road intersection and one sycamore tree is located east of the PCH/Cross Creek Road intersection.

Project Description

The proposed project involves improvements to the PCH/Cross Creek Road intersection in conformance with Mitigation Measure K-2 of the certified Final Environmental Impact Report for the La Paz Project (State Clearinghouse Number 2003011131). Specifically, the following improvements are proposed:

PCH Improvements (East of Cross Creek Road)

- Construct a 14 foot wide right-turn lane along the north side of PCH within the eastbound approach to Cross Creek Road (315 feet in length);

- Construct new curb and gutter along the north side of PCH, joining with Cross Creek Road;
- Relocate drain inlets, fire hydrant, street light pole, and traffic signal pole along the north side of PCH, east of Cross Creek Road;
- Restripe a 4 foot wide bike lane along north side of PCH, east of Cross Creek Road (315 feet in length);
- Restripe an 11 foot wide left turn lane on PCH within the eastbound approach to Cross Creek Road (145 feet in length);
- Restripe/Construct two westbound though lanes along the south side of PCH, east of PCH/Cross Creek Intersection
- Restripe/Construct an 8 foot shoulder and curb/gutter along south side of PCH, east of PCH/Cross Creek Intersection;
- Construct a new 6.5 foot sidewalk along the south side of PCH, east of the PCH/Cross Creek Intersection;
- Construct a retaining wall along the south side of PCH, east of the PCH/Cross Creek Intersection;
- Remove an existing 41 inch diameter western sycamore tree along the south side of PCH, east of the PCH/Cross Creek Intersection;
- Relocate the traffic signal cabinet, water main, blower vent, street light poles, and traffic signal poles along the south side of PCH, east of the PCH/Cross Creek Intersection;
- Construct a wheel chair ramp along the north side of PCH, at join with Cross Creek Road;
- Construct a wheel chair ramp along the south side of PCH, at join with Malibu Lagoon State Beach parking lot entrance;

PCH Improvements (West of Cross Creek Road)

- Construct an 8 foot shoulder along the south side of PCH, west of the PCH/Cross Creek Intersection;
- Restripe an 11 foot wide turn lane on PCH within the westbound approach to Cross Creek Road (315 feet in length);
- Remove 5 existing eucalyptus trees along the south side of PCH, west of the PCH/Cross Creek Intersection;
- Relocate the gas vault and electric vault along the south side of PCH;
- Re-construct the wheel chair ramp along the south side of PCH as necessary, at join with Malibu Lagoon State Beach parking lot entrance;

The existing parallel parking spaces located on the south side of PCH, west of the PCH/Cross Creek Road intersection would not be affected by the proposed project.

A Native Tree Protection Plan has been proposed as part of the project. This plan details the planting of 10 1-gallon western sycamore trees on the property located at 23465 Civic Center Way as part of the previously approved La Paz commercial project. In addition, 10 1-gallon western sycamore trees would be planted within the Malibu Lagoon State Beach Park restoration area. The planting of the trees as mitigation would be supervised by a qualified biologist and the progress of the planting efforts would be monitored for a period of 5 years.

Figure 1. Project Location

Other Public Agencies Whose Approval is Required

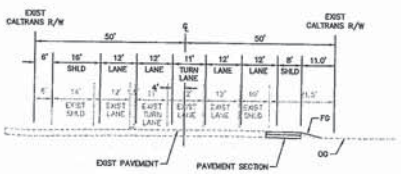
An encroachment permit from the California Department of Transportation will be required to allow construction of the roadway improvements proposed within the PCH right-of-way.

Photo 1 – View West From South Side of PCH

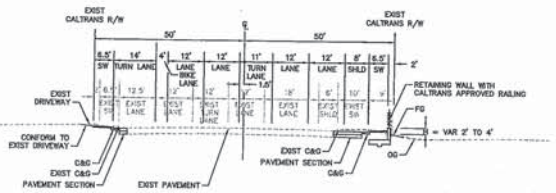
Photo 2 – View West from PCH/Malibu Lagoon State Beach Park Entrance

Photo 3 – View West from South Side of PCH (West of Intersection)

Photo 4 – View West from South Side of PCH (East of Intersection



CROSS SECTION OF PCH
STA 40+00 ±



CROSS SECTION OF PCH
STA 41+50 ±

LEGEND:

- CENTERLINE
- EXIST R/W
- PROPOSED STRIPING
- RETAINING WALL
- REMOVE TREE
- (XX') EXIST LANE/SHLD WIDTH (APPROXIMATE)
- XX MPH * POSTED SPEED LIMIT
- PROPOSED WHEELCHAIR RAMP

ABBREVIATIONS:

C&G	CURB & GUTTER
EP	EDGE OF PAVEMENT
ES	EDGE OF SHOULDER
ETW	EDGE OF TRAVELED WAY
EXIST	EXISTING
FG	FINISHED GRADE
HP	HINGE POINT
MH	MANHOLE
OG	ORIGINAL GROUND
R/W	RIGHT-OF-WAY
SHLD	SHOULDER
SW	SIDEWALK

NOTES:

1. APPROPRIATE MITIGATION MEASURES WILL BE PROVIDED PER THE CITY OF MALIBU.
2. CONSTRUCT/REPAIR AND REPLACE EXISTING WALK AND WHEELCHAIR RAMPS AS NECESSARY.
3. ADDITIONAL UTILITY RELOCATIONS ARE ANTICIPATED.

CONSTRUCTION NOTES:

1. REMOVE EUCALYPTUS TREE (SEE NOTE 1)
2. RELOCATE STREET LIGHT POLE
3. RELOCATE SIGNAL POLE
4. RELOCATE DRAINAGE INLET
5. RELOCATE FIRE HYDRANT
6. RELOCATE GENERAL TELEPHONE & ELECTRIC MH

NORTH

GRAPHIC SCALE IN FEET
0 30 60 120

REGISTERED PROFESSIONAL ENGINEER
MAN-SAN CHIO
C 64463
EXP. 6/30/15
CIVIL
STATE OF CALIFORNIA

LA PAZ TRAFFIC MITIGATION CONCEPT PLAN CROSS CREEK ROAD INTERSECTION LAYOUT

09/25/2014
UPDATED 10/15/2014

Kimley»Horn

Oct 15, 2014 - 8:13pm K:\LOS_CIVIL\69394000 La Paz\Design\CADD\Exhibits\Cross Creek Intersection Layout.dwg

ENVIRONMENTAL FACTORS POTENTIALLY 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.

☐ Aesthetics	☐ Agriculture and Forest Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology/Soils
☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials	☐ Hydrology/Water Quality
☐ Land Use/Planning	☐ Mineral Resources	☐ Noise
☐ Population/Housing	☐ Public Services	☐ Recreation
☐ Transportation/Traffic	☐ Utilities/Service Systems	☐ Mandatory Findings of Significance

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 an addendum thereto pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or addendum thereto, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Jasch Janowicz, Contract Planner
City of Malibu Planning Department

4/16/2015
Date

ENVIRONMENTAL CHECKLIST

		Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
I.	**AESTHETICS**				
	-- Would the Project:				
a)	Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

The area in the immediate vicinity of the project site contains a mix of land uses. Commercial uses and civic center offices are located north of the project site, across PCH. This commercial and civic area is contained within the Malibu Land Use Plan Civic Center Overlay Boundary. Malibu Creek also extends to the north adjacent to the project site. Adjacent to the east is Malibu Lagoon, and further east within Malibu Lagoon State Beach, is the National Register-listed historic Adamson House. Immediately to the south of the project site is a fenced private golf course, and further to the southwest is a strip of medium density single-family residences with beach frontage (Malibu Colony). Additional recreational uses are located to the south at Malibu Lagoon State Beach/Surfrider Beach and the Pacific Ocean. Photographs 1-4 above show the visual character of the project site. Photographs 5-12 below show the visual character of the project site and views from surrounding locations within Malibu Lagoon State Park. In addition, the red circles indicate the trees proposed for removal and the extent to which views would be altered (1 sycamore tree and 5 eucalyptus trees).

Photo 5 – View Southeast From North Side PCH, Near Malibu Lumberyard

Photo 6 – View Southeast From North Side of PCH, at PCH/Cross Creek Intersection

Photo 7 – View North from Malibu Lagoon State Park Parking Lot

Photo 8 – View North from Malibu Lagoon State Park, East of Parking Lot

Photo 9 – View Northwest From Malibu Lagoon State Park Parking Lot

Photo 10 – View North From Malibu Lagoon State Park Observation Area

Photo 11 – View Northwest From Malibu Lagoon State Park Observation Area

Photo 12 – View North From Malibu Lagoon State Observation Area

a. The proposed roadway improvements would occur within the existing Pacific Coast Highway right-of-way, which does provide views of the Pacific Ocean and the Santa Monica Mountains within the project boundary. Photographs 5-12 above document the views from the project site towards the Santa Monica Mountains and the Pacific Ocean and from within Malibu Lagoon State Park and along PCH. As shown in Figure 2, the existing roadway topography would not be substantially altered and the majority of roadway improvements would occur at the ground level, including the proposed 2-4 foot high retaining wall. Moreover, the proposed retaining wall would occur in area already planted with vegetation designed to screen the Malibu Lagoon State Park parking lot. Therefore, the proposed roadway improvements would not block views of the Pacific Ocean or the Santa Monica Mountains as seen from vehicles traveling on Pacific Coast Highway, from pedestrians utilizing existing sidewalks/trails along PCH. **No impact would occur.**

As shown in photographs 5-12 above, the proposed removal of one 41-inch western sycamore tree and five eucalyptus trees would create additional lines of sight north towards the Santa Monica Mountains and south toward the Pacific Ocean, as seen from vehicles traveling along PCH or from pedestrian utilizing existing sidewalks or trails along PCH or Malibu Lagoon State Beach. Therefore, the proposed project would not have an adverse effect on a scenic vista. **No impact would occur.**

b. PCH is eligible to be nominated as a State Scenic Highway, but the roadway has not been officially designated. Nonetheless, the City's Local Coastal Program (LCP) identifies both PCH and Malibu Canyon Road as a "Scenic Road." The proposed project would involve removal of mature trees, including a 41" western sycamore and five existing eucalyptus trees. However, the trees proposed for removal are surrounded by other existing native and non-native vegetation and thus constitute a small portion of PCH's overall scenic quality. **Therefore, impacts would be less than significant.**

c. The proposed project involves the construction of roadway improvements within the existing PCH right-of-way. The roadway improvements would be constructed at ground level and thus the physical improvements would not alter the visual character of the project site or its surroundings. As described above in Section (b), the project would require the removal of one western sycamore and five eucalyptus trees on the south side of PCH, adjacent to Malibu Lagoon State Park. Although tree removal would alter the visual character of the project site, as seen from vehicles traveling along PCH and from pedestrians utilizing existing sidewalks/trails located along PCH and from within Malibu Lagoon State Beach, the degradation of views would be minimal due to the quantity and quality of existing vegetation that would remain within the project area and the surroundings. **Therefore, impacts would be less than significant.**

d. The proposed project involves the construction of ground level roadway improvements, the retention of existing vehicle parking spaces, and the relocation of existing street lights and traffic signals. The project would not involve construction of new uses. Therefore, the proposed project would not create any new sources of light or glare. **No impact would occur.**

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
II. AGRICULTURE AND FOREST RESOURCES				
-- In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. -- Would the Project:				
a) Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) 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))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
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?	☐	☐	☐	☒

a-e. The City of Malibu is a developed suburban area surrounded by hillsides to the west,

northeast and northwest and the Pacific Ocean to the south. Commercial uses are focused in the southern portion of the City along Pacific Coast Highway, while some agricultural lands, including vineyards are located in the northern portion of the City. The proposed roadway improvements would occur within the designated PCH right-of-way and are not located near any agricultural resources. **Therefore, no impact would occur**.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
III. AIR QUALITY				
-- Would the Project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒

The federal and state governments have been empowered by the federal and state Clean Air Acts to regulate emissions of airborne pollutants and have established ambient air quality standards for the protection of public health. Federal and state ambient air quality standards have been established for six criteria pollutants, including ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulates less than 10 and 2.5 microns in diameter (PM_{10} and $PM_{2.5}$), and lead (Pb). Table 1 lists the current federal and state standards for these criteria pollutants.

Table 1
Current Federal and State Ambient Air Quality Attainment Standards

Pollutant	Federal Standard	California Standard
Ozone	0.075 ppm (8-hr avg)	0.09 ppm (1-hr avg) 0.07 ppm (8-hr avg)
Carbon Monoxide	9.0 ppm (8-hr avg) 35.0 ppm (1-hr avg)	9.0 ppm (8-hr avg) 20.0 ppm (1-hr avg)
Nitrogen Dioxide	0.100 ppm (1-hr avg) 0.053 ppm (annual avg)	0.18 ppm (1-hr avg) 0.03 ppm (annual avg)
Sulfur Dioxide	0.075 ppm (1-hr avg)	0.25 ppm (1-hr avg) 0.04 ppm (24-hr avg)
Lead	0.15 $\mu g/m^3$ (3-mo avg)	1.5 $\mu g/m^3$ (30-day avg)
Particulate Matter (PM_{10})	150 $\mu g/m^3$ (24-hr avg)	50 $\mu g/m^3$ (24-hr avg) 20 $\mu g/m^3$ (annual avg)
Particulate Matter ($PM_{2.5}$)	12 $\mu g/m^3$ (annual avg) 35 $\mu g/m^3$ (24-hr avg)	12 $\mu g/m^3$ (annual avg)

ppm= parts per million $\mu g/m^3$ = micrograms per cubic meter
Source: California Air Resources Board, http://www.arb.ca.gov/research/aaqs/aaqs2.pdf, June 2013

California air quality standards are identical to or stricter than federal standards for all criteria pollutants. California has also set ambient standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles.

The project site is within the South Coast Air Basin (the Basin), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). As the local air quality management agency, the SCAQMD is required to monitor air pollutant levels to ensure that state and federal air quality standards are met and, if they are not met, to develop strategies to meet the standards.

Depending on whether or not the standards are met or exceeded, the Basin is classified as being in "attainment" or "nonattainment." The part of the Basin within which the project site is located is in nonattainment for the federal standards for ozone, $PM_{2.5}$ and lead (Pb) and the state standards for ozone, PM_{10}, $PM_{2.5}$, NO_2 and lead (California Air Resources Board, Area Designations Maps/State and National, June 2013;). Thus, the Basin currently exceeds several state and federal ambient air quality standards and is required to implement strategies to reduce pollutant levels to recognized acceptable standards. This non-attainment status is a result of several factors, the primary ones being the naturally adverse meteorological conditions that limit the dispersion and diffusion of pollutants, the limited capacity of the local airshed to eliminate pollutants from the air, and the number, type, and density of emission sources within the Basin.

The SCAQMD thresholds for temporary construction-related pollutant emissions are shown in Table 2. These thresholds are utilized for the project specific analysis as well as determining whether the project would contribute a cumulatively considerable increase to emissions.

Table 2
SCAQMD Air Quality Significance Thresholds

Pollutant	Mass Daily Thresholds
	Construction Thresholds
NO_X	100 lbs/day
ROG[1]	75 lbs/day
PM_{10}	150 lbs/day
$PM_{2.5}$	55 lbs/day
SO_X	150 lbs/day
CO	550 lbs/day
Lead	3 lbs/day

[1] Reactive Organic Gases (ROG) are formed during combustion and evaporation of organic solvents. ROG are also referred to as Volatile Organic Compounds (VOC).
Source: SCAQMD, http://www.aqmd.gov/ceqa/handbook/signthres.pdf, March 2011.

a. Vehicle use, energy consumption, and associated air pollutant emissions are directly related to population growth. Generally, a project would conflict with or potentially obstruct implementation of an air quality management plan (AQMP) if it would contribute to population growth in excess of that forecasted in the AQMP. The proposed project would only involve the construction of intersection improvements and tree removal. Therefore, the proposed project would not generate any new population-related demand. Consequently, the project would not contribute to an exceedance of the projected population growth forecast in the AQMP. **No impact would occur.**

b. Construction activities such as the operation of vehicles and equipment have the potential to generate fugitive dust (PM_{10}) through the exposure of soil to wind erosion and dust entrainment. Table 3, Unmitigated Construction Emissions, presents the estimated maximum daily emissions associated with the proposed project. Construction emissions include all emissions associated with the construction equipment, grading activities including fill material import, worker trips, and on-road diesel trucks. The estimated emissions are considered to be conservative; that is, the emissions presented below in Table 3 likely over-predict the actual emissions that would occur during project construction. This is due to the model's worst-case assumption that all construction equipment is operating simultaneously for the entire day during each day of the construction period. In reality, construction equipment often operates only for a portion of the workday, and is not necessarily used every day so that at any given time only some pieces of the total fleet are operating.

Table 3
Unmitigated Construction Emissions

Construction Year	Maximum Emissions in Pounds per Day					
	VOC	NO_X	CO	SO_X	PM10	PM2.5
2015	3.32	26.25	21.43	0.04	2.75	2.10
SCAQMD Threshold:	**75**	**100**	**550**	**150**	**150**	**55**
Exceeds Threshold?	NO	NO	NO	NO	NO	NO

Source: Rincon Consultants Inc., 2015. Emissions calculations are provided in Appendix B.
Note: Totals in the table may not appear to add exactly due to rounding in the computer model calculations.

As indicated above, emissions would not exceed the SCAQMD's significance thresholds during construction. **Impacts from construction emissions would be less than significant.**

Since the proposed project involves roadway construction activities and does not involve construction of new uses, no new area source or mobile emissions would occur. The proposed project may involve landscape maintenance as part of the Native Tree Protection Plan. However, maintenance activities would be intermittent and infrequent. Potential landscape maintenance activities would not generate operational emissions such that an exceedance of an air quality standard would occur or a cumulatively considerable net increase of a criteria pollutant would occur. **No impact would occur.**

c). The part of the South Coast Air Basin within which the project site is located is in nonattainment for the federal standards for ozone, $PM_{2.5}$ and lead (Pb) and the state standards for ozone, PM_{10}, $PM_{2.5}$, NO_2 and lead. The proposed project would involve temporary construction activities. The temporary construction activities would result in the release of relatively small quantities of criteria pollutants. These emissions would be below the applicable SCAQMD standards for construction activities and the activities would be temporary. Therefore, the projects contribution to quantities of ozone, PM_{10}, $PM_{2.5}$, NO_2 and lead would not be cumulatively considerable. **Therefore, impacts would be less than significant.**

d. Certain population groups are considered particularly sensitive to air pollution. Sensitive receptors include health care facilities, retirement homes, school and playground facilities, and residential areas. The closest sensitive receptors to the project site are the residences at Malibu Colony located approximately 700 feet to the south at 23449, 23445, and further the east. Due to the approximately 700 separation of construction activities to the nearest sensitive receptors, higher than normal concentrations of particulate matter as well as exhaust emissions from construction vehicles would not occur. **No impact would occur.**

e. The proposed intersection construction project would require the temporary use of heavy equipment typically used in roadway construction during normal business hours. The use of heavy equipment within 700 feet of the nearest sensitive receptor has not been identified by the Bay Area Air Quality Management District as a significant generator of odors as part of their California Environmental Quality Act Air Quality Guidelines (May 2011). **No impact would occur.**

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES				
-- 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 Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

The study intersection of Pacific Coast Highway and Cross Creek Road and its associated eastbound and westbound approaches are located within 200 feet of a designated Environmentally Sensitive Habitat Area (ESHA) and located adjacent to the main entrance to Malibu Lagoon State Beach and Malibu's civic center area. The proposed roadway

improvement area is located within the Pacific Coast Highway right-of-way. The Perenchio Golf Course (enclosed within a chain link fenced and 10 foot stone wall) is situated to the southwest of the roadway improvement boundary. The northern portion of PCH is primarily occupied by retail shopping centers and other commercial uses. Legacy Park is located further northwest of the project site.

Within the Santa Monica Mountains, a number of plant species are considered sensitive and have been assigned varying degrees of sensitivity by federal and state resources agencies and the California Native Plant Society (CNPS). Thirty-three (33) sensitive plant species were reported in the current edition of the California Department of Fish and Wildlife natural Diversity Database from the Malibu Beach quadrangle and surrounding USGS quadrangles. Of these 33 species, 28 do not have the potential to occur onsite to the absence of soil types/ habitats capable of supporting them and/or their association with specific geographic localities far removed from the site. The remaining plant species, Braunton's mil-vetch, southern tarplant, decumbent goldenbush, Coulter's goldfields, and California Orcutt grass are associated with habitats found within the study area. Of these five plant species, Braunton's milk-vetch is federally endangered and California Orcutt grass is listed as federally and state endangered.

A wide range of invertebrates, fish, amphibians, reptiles, birds, and mammals are known from the Santa Monica Mountains and surrounding region, a number of which have been given legal protected status or special status designation by federal and state wildlife agencies. Thirty-eight (38) special status animal species have been recorded within the Malibu Beach and surrounding USGS quadrangles. Of these, suitable habitat does not exist on site or the known occurrences of 30 of these species are far removed from the site vicinity. Of the remaining eight species that have the potential to occur on site, the American peregrine falcon has full protection by the state. The two-striped garter snake and San Diego desert woodrat are listed as state Species of Special Concern. Raptors are also considered sensitive.

Vegetation bordering the southern portion of the project site consists of: (1) Atriplex lentiformis alliance (0.8 acres) , (2) Salix exigua-Baccharis salicifolia woodland/forest association (0.2 acres), (3) Distichlis spicata herbaceaous alliance (0.5 acres) (4) Baccharis salicifolia riparian association (0.1 acres), (5) Platanus racemosa woodland/forest alliance (0.3 acres); (7) Artemisia californica-Eriogonum fasciculatum shrubland alliance (1.0 acre); (8) California annual grassland/herbaceous alliance (1.3 acres); (9) Platanus racemosa-Salix lasiolepis woodland/forest association (0.6 acres); and (10) Ornamental landscaping (4.2 acres). For an expanded discussion of plant and wildlife habitat within the vicinity of the proposed project, please refer to the Biological Resources Assessment, included as Appendix D.

a. The proposed project involves the construction of intersection improvements along with associated tree removal activities within the PCH right-of-way. Although sensitive plant and animal species inhabit the adjacent Malibu Lagoon State Park area, the proposed intersection improvement activities would be confined to the PCH right-of-way, which is comprised of existing pavement and other roadway improvements (curb, gutter, sidewalk, stop lights, signage, etc.) and unimproved dirt pathways. All soil disturbance activities have the potential to result in erosion and sedimentation in downstream areas, which if not addressed could impact candidate, sensitive, or special status species in local or regional plans, policies, or

regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. However, the project work is primarily confined to the existing paved areas and previously graded areas of Pacific Coast Highway and thus standard Best Management Practices defined in the City's Local Implementation Plan and standard conditions of approval would ensure that impacts would remain less than significant.

The mature trees proposed for removal consist of one sycamore tree and five eucalyptus trees. The eucalyptus trees are non-native and thus are not protected by the City of Malibu General Plan, the Malibu Local Coastal Plan, the City's Municipal Code, or the California Department of Fish and Wildlife or the US Fish and Wildlife Service. However, the western sycamore (*Platanus racemosa*) is protected under LIP Chapter 5. Based upon field visits to the project area, the eucalyptus trees, the sycamore tree, the immediately surrounding dirt pathways, the road surfaces, and the surrounding urban uses do not support candidate, sensitive or special status species. Therefore, the project would not conflict with local or regional plans, policies, or regulations adopted by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. The eucalyptus trees and sycamore tree could support nesting birds, which are protected under the federal Migratory Bird Treaty Act and Section 3503 of the state Fish and Game Code. Impacts to nesting birds were discussed in Section V.C. of the La Paz Development Agreement EIR (SCH No. 2003011131) and were considered less than significant after implementation of mitigation measure C-1**. Impacts to nesting birds resulting from the proposed project would be less than significant.**

The proposed removal of the sycamore tree requires compliance with Section 5.5 of the LIP, which defines the required mitigation measures. The application materials submitted for the proposed project include a Native Tree Protection Plan in accordance with LIP Section 5.5, which proposes to plant an additional 10 replacement 1-gallon sycamore trees within the previously approved restoration plan for Malibu Lagoon State Park and 10 replacement 1-gallon sycamore trees within the parking lot and landscaping areas of the La Paz commercial shopping center. This Native Tree Protection Plan has been reviewed and approved by the City of Biologist. Impacts to protected trees were discussed in Section V.C of the La Paz Development Agreement EIR (SCH No. 2003011131) and were considered less than significant after implementation of mitigation measure C-6. **Compliance with the tree replacement standards included in Section 5.5 of the LIP would ensure that tree removal impacts would be less than significant.**

The Malibu Lagoon State Park and its associated sensitive habitat is located immediately south of the existing PCH right-of-way. However, the proposed roadway improvement area would not extend onto Malibu Lagoon State Beach Park property and very limited habitat for any sensitive or special status species (a sycamore tree) is located within the project boundary. Therefore, less than significant impacts to candidate, sensitive or special status species would occur.

b. As described above, the project site is surrounded by urban development and although there is an abundance of native habitat present within the Malibu Lagoon State Park, there is minimal native biological habitat and no riparian habitat present on-site. The project would not result in the removal of any riparian habitat or other sensitive natural community. In addition, no federal-or-state-listed endangered, threatened, rare, or otherwise sensitive flora or fauna were observed at the project site (PCR, Site Survey, August 2014). **No impact would occur**.

c. The project site is located in the vicinity of Malibu Creek and Malibu Lagoon. However, the proposed roadway improvements would occur primarily within the PCH right-of-way, which is comprised of existing roadway improvements and unimproved dirt pathways. Other minor roadway/utility improvements would occur near the entrance to Malibu Lagoon State Beach, which has already been improved for vehicle access. Therefore, the project would not directly remove, fill, hydrologically interrupt, or otherwise impact federally protected wetlands. **Therefore, no impact would occur.**

d. The project site is located in the vicinity of Malibu Creek and Malibu Lagoon, which does provide for wildlife movement. However, the proposed roadway improvements would occur primarily within the PCH right-of-way, which is comprised of paved surfaces and unimproved dirt pathways. These improvements and other urban development in the immediate vicinity form a barrier to wildlife movement. Due to the extent of urban development within the vicinity of the proposed project, the roadway construction activities would not interfere with wildlife movement. **No Impact would occur.**

e. Site development would require the removal of one western sycamore tree and five eucalyptus trees. The western sycamore tree is a protected tree species under the City of Malibu LCP/LIP. A Native Tree Protection Plan has been prepared as part of the proposed project and has been approved by the City Biologist. This plan proposes the planting of 10 western sycamores within the La Paz commercial shopping center project landscaping and 10 western sycamores within the native habitat restoration area currently within Malibu Lagoon State Beach Park. This proposed tree replacement program would be consistent with LIP Section 5.5.1 (A). **Therefore, impacts would be less than significant.**

f. The proposed project does not conflict with any adopted habitat conservation plans, natural community conservation plans, or other local, regional, or state habitat conservation plans because none have been defined for the location including the project site. **No impact would occur.**

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
V. CULTURAL RESOURCES				
-- Would the Project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	☐	☐	☒	☐

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
V. CULTURAL RESOURCES				
-- Would the Project:				
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

a-d. A Phase 1 cultural resources survey was prepared by ASM Affiliates, Inc. in 2014. The following is based on that analysis, which can be found in Appendix C. The study included a records search conducted by the South Central Coast Information Center (SCCIC) in July 2014. In addition, a search of the Native American Heritage Commission (NAHC) Sacred Lands File was completed on July 24, 2014. These investigations determined that the study area had been previously surveyed. While no sites or traditional cultural places had been identified within the project area, the NAHC expressed concern given the proximity of the project to the location of the National Register-listed site of prehistoric/historic village of Humaliwu.

A Phase 1 field survey was conducted in August 2014, with parallel transects spaced at 15 meter intervals. No significant cultural resources were discovered within the study area during the research effort or the Phase I field survey. **As a result, the project would not have an adverse impact on cultural resources or cause substantial adverse changes as defined by CEQA.**

In the unlikely event that archaeological or paleontological resources are unearthed during construction, applicable regulatory requirements pertaining to the handling and treatment of such resources would be followed. Work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (NPS 1983) must be contacted immediately to evaluate the find. If the discovery proves to be significant under NHPA, additional work such as data recovery excavation may be warranted. **Compliance with applicable regulations would ensure that impacts would be less than significant.**

The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the Los Angeles County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the NAHC, which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native

American burials. **Upon compliance with these regulations, impacts would be less than significant.**

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
VI. GEOLOGY AND SOILS				
-- Would the Project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code, creating substantial risks to life or property?	☐	☐	☐	☒
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?	☐	☐	☐	☒

a (i-iv). The proposed project involves demolition of existing roadway improvements and reconstruction within the existing PCH right-of-way. The proposed project does not involve the construction of any new land uses. Therefore, the proposed project would not expose people or structures to adverse effects from ground rupture, ground shaking, ground failure, liquefaction, or landslides. The proposed project does not involve activities to stabilize the slopes of a landslide. **No impact would occur.**

b. The proposed project involves the demolition and reconstruction of roadway improvements in the coastal zone, which contain potentially erodible soils. Removal of the existing roadway improvements could temporarily expose erodible soils to rainfall and significant wind events which could lead to erosion. However, the proposed project would temporarily expose soil in an environment that is relatively flat and would be subject to the City of Malibu Public Works Department's standard conditions of approval requiring the implementation of a Local Storm Water Pollution Prevention Plan. This plan would include an Erosion and Sediment Control Plan that includes the appropriate level of Best Management Practices to prevent soil erosion. **Compliance with the City's standard conditions of approval would reduce the potential for erosion and thus impacts would be less than significant.**

c. Demolition of existing roadway improvements and reconstruction as shown on the roadway improvement plans would occur within previously graded areas which are flat. Therefore, the proposed construction would not cause instability that would potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse. **Therefore, no impact would occur.**

d. The proposed project involves the construction of roadway construction and no new land uses. Therefore, no life or property would be exposed to construction on expansive soils. **No impact would occur.**

e. The proposed project does not involve the construction of new uses that would require wastewater disposal. Septic systems would not be used. **No impact would occur.**

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
VII. GREENHOUSE GAS EMISSIONS				
-- Would the Project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

a, b. The proposed project does not involve the construction of new land uses. Therefore, there would be no operational emissions (stationary or mobile sources) associated with the project. However, there would be temporary emissions related to the operation of vehicles and equipment used during the demolition and construction process.

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 City of Malibu has not adopted GHG significance thresholds. Although not yet adopted, the SCAQMD has a recommended quantitative Tier 3 threshold of 3,000 metric tons CO_2E /year for all land use types (SCAQMD, September 2010). As shown in CalEEMOD air quality modeling results included in Appendix B, annual emissions from the proposed project would not exceed 3,000 metric tons CO_2E /year. **The proposed roadway improvement project would only result in temporary construction related air emissions, and therefore impacts from greenhouse gas would be less than significant.**

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS				
-- Would the Project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle 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?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard for people residing or working in the Project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the Project result in a safety hazard for people residing or working in the Project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency	☐	☐	☐	☒

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS				
-- Would the Project:				
response plan or emergency evacuation plan?				
h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

a, b. The proposed project involves roadway construction and tree removal and would not introduce any unusual hazardous materials to the area. During construction, the project would be required to implement a Local Storm Water Pollution Prevention Plan, which would include Best Management Practices for the management of waste, including material delivery and storage, stockpile management, spill prevention and control, solid waste management, concrete waste management, and sanitary/septic waste management. **Compliance with these standard conditions of approval would ensure that impacts would be less than significant.**

c. The project site is not located within ¼ mile of an existing school. In addition, the proposed project does not involve any construction or new uses and therefore operation of the project would not involve the use or transport of hazardous materials. With adherence to the regulations listed above in part (a), the proposed project would not release asbestos-containing materials or lead-based paint. **No impact would occur.**

d. The following databases were checked for known hazardous materials contamination on the project site or in its vicinity:

- *Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database*
- *Geotracker search for leaking underground storage tanks, Spills-Leaks-Investigations-Cleanups (SLIC) and Landfill sites*
- *California, State of, Department of Toxic Substances Control EnviroStor database*
- *Cortese list of Hazardous Waste and Substance Sites*
- *EPA Brownfields List*

The project site was not listed on any of these databases. The project site is not included on any list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. However, the proposed project is located within ¼ mile of a site previously containing a leaking underground storage tank. The soil contamination is located at the Malibu Shell Station (corner of Cross Creek Road/PCH) and is currently being remediated under the supervision of the

Regional Water Quality Control Board (Case No. 902650052B). This case only involves soil contamination on the Shell Station property and did not impact groundwater. Moreover, the upper 10 feet of soil was found to be free of contamination. The proposed roadway construction project would not generate significant quantities of soil during excavation/grading and thus construction would not involve the establishment of any new uses capable of releasing hazardous materials and no persons would be exposed to hazards. **No impact would occur.**

e, f. The project site is not located in the vicinity of a public or private airstrip. **No impact** would occur**.**

g. The proposed roadway improvement project does not include the modification of any underlying slopes. In addition, PCH would remain open during construction and would not interfere with an adopted emergency response or evacuation plan. **No impact would occur**.

h. The proposed project does not involve construction or new uses and therefore would not expose people or structures to wildland fire hazards. **No impact would occur.**

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY				
-- Would the Project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering or the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-	☐	☐	☒	☐

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY				
-- Would the Project:				
site?				
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

a, f. The City is within the jurisdiction of the Los Angeles Regional Water Quality Control Board (RWQCB). The RWCQB has municipal and construction permits to control the amount of pollution discharged into drainage areas, watersheds, and waterways during construction. The proposed project only involves roadway improvements and would not exceed one-acre in disturbed area. Nevertheless, the project would be required to develop a Local Stormwater Pollution Prevention Plan (SWPPP) to control water pollution during construction. **Compliance with these existing regulations would ensure that impacts to water quality would be less than significant.**

b. Regional water demand is primarily a function of population growth. The project would not increase the region's population and, in turn, the regional demand for potable water. (Please refer to Section XVI, *Utilities and Service Systems,* for further discussion of this impact.) The proposed project also would not substantially interfere with groundwater recharge because the proposed project would not substantially increase the amount of impermeable surface at the site. Therefore, the project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table. **No impact would occur.**

c, d, e. The proposed project does not involve any new construction that would substantially alter drainage patterns. The proposed project would not involve alteration of a stream or river and would not create erosion or siltation on or off-site. The proposed project would involve roadway improvements within the PCH right-of-way, which has already been previously graded flat. Moreover, the implementation of Best Management Practices as part of the Local Stormwater Pollution Prevention Plan would prevent future erosion. **Impacts would be less than significant.**

g-h. The project would not involve any housing and would not involve construction of a structure that would impede flood flows. **No impact would occur.**

i-j. The project site is adjacent to Malibu Lagoon and the Pacific Ocean. However, the project does not involve construction of any new uses. Therefore, the proposed project would not expose additional people or structures to inundation by seiche, tsunami, or mudflow. **No impact would occur.**

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
X. LAND USE AND PLANNING				
-- Would the Project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with an applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

a. The proposed project does not involve any construction or new uses that would divide an established community. **No impact would occur.**

b. The project site is within the Pacific Coast Highway right-of-way and therefore retains no formal zoning or land use designation within the City of Malibu. The proposed project would improve the functionality of the Cross Creek/PCH intersection, which is consistent with the City's General Plan circulation element. Moreover, the project implements Mitigation Measure K-2 of the certified Final Environmental Impact Report for the La Paz Project (State

Clearinghouse Number 2003011131). **Therefore, the proposed project would have no impact related to consistency with applicable land use plans, policies, or regulations.**

c. The project site is not subject to an adopted habitat conservation plan or natural community conservation plan. **No impact would occur.**

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XI. MINERAL RESOURCES -- 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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

a, b. The project site is not used for mining and is not zoned for mining uses. Further, the proposed construction of roadway improvements within the PCH right-of-way would not affect mineral resources. **No impact would occur.**

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XII. NOISE -- Would the Project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☒
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
c) A substantial permanent increase in ambient noise levels above levels existing without the Project?	☐	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?	☐	☐	☒	☐
e) For a project located within an airport land				

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XII. NOISE				
-- Would the Project result in:				
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?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the Project expose people residing or working in the Project area to excessive noise?	☐	☐	☐	☒

a, c. The proposed project does not involve any construction of new land uses. Therefore, there would be no operational noise and no increase in noise above ambient levels. Further, the proposed project does not involve any residential uses; therefore, no persons would be exposed to noise in excess of standards. **No impact would occur.**

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

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. Most perceptible indoor vibration is caused by sources within buildings such as operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration in the vicinity of the proposed project are construction equipment, traffic on rough roads, and heavy duty vehicle traffic on roadways. 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 (Federal Transit Administration, 2006).

Table 4 identifies various vibration velocity levels for the types of equipment that would operate at the project site during demolition.

Table 4
Vibration Source Levels for Construction Equipment

Equipment	Approximate VdB					
	25 Feet	50 Feet	100 Feet	200 Feet	400 feet	800 feet
Large Bulldozer	87	81	75	69	63	57
Loaded Trucks	86	80	74	68	62	56
Small Bulldozer	58	52	46	40	34	28

Source: FTA, May 2006

Based on the information presented in Table 4, vibration levels could temporarily range between 63 and 57 VdB at the residences that are located within 700 feet of the project area. The vibration would be intermittent and would only occur during normal business hours. The vibration levels would not exceed the groundborne velocity threshold level of 65 VdB for human perception established by the Federal Railway Administration. Moreover, vibration levels would not damage any nearby structures. **Therefore, impacts would be less than significant.**

d. Temporary noise levels associated with project construction shown in Table 5 would not affect the existing residential uses which are situated approximately 700 feet away from the project boundary.

Table 5
Noise Source Levels for Construction Equipment

Equipment	Average Noise Level at 50 Feet (dBA)	Average Noise Level at 100 Feet (dBA)	Average Noise Level at 200 Feet (dBA)	Average Noise Level at 400 Feet (dBA)	Average Noise Level at 800Feet (dBA)
Grader	85	79	73	67	61
Trucks	88	82	76	70	64
Backhoe	80	74	68	62	58
Bulldozer	85	79	73	67	61

As shown in Table 5, noise levels could temporarily reach up to 70 dBA at a distance of 400 feet and up to 64 dBA at a distance of 800 feet. The construction and grading activities would be located approximately 700 feet away from the residences and would only occur during normal business hours. **Therefore, impacts would be less than significant.**

e, f. The project site is not in the vicinity of any public or private airport. **Therefore, no impact would occur**.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XIII. POPULATION AND HOUSING				
-- Would the Project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

a-c. The proposed project involves temporary construction as part of intersection improvement activities. The proposed project does not include the construction of residential units. Because the project does not include the construction of residential units or any permanent job-creating uses, no increase in the City's population would occur. **No impact would occur.**

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XIV. PUBLIC SERVICES				
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 times or other performance objectives for any of the public services:				
i) Fire protection?	☐	☐	☐	☒
ii) Police protection?	☐	☐	☐	☒
iii) Schools?	☐	☐	☐	☒
iv) Parks?	☐	☐	☐	☒
v) Other public facilities?	☐	☐	☐	☒

a (i-v). The project would not increase population or create permanent jobs in the City of Malibu and thus would not create new demand for or increase the use of fire facilities, police facilities, schools, parks, or other public facilities. **No impact would occur.**

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XV. 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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

a, b. The proposed project would not include any housing and would not increase the population in the City (discussed above under Section XIII, *Population and Housing)*. As such, the project would not increase the use of parks and would not require the development of new park facilities. **No impact would occur.**

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XVI. TRANSPORTATION/TRAFFIC				
-- Would the Project:				
a) Conflict with an applicable plan, ordinance or policy establishing a measure of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) 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?	☐	☐	☒	☐

a, b, f. The proposed project involves the construction of intersection improvements and would not involve any construction of new uses that would generate traffic. The proposed project would ultimately improve traffic flow in accordance with the City of Malibu's General Plan Circulation Element and required as part of the La Paz Development Agreement Certified Final EIR Mitigation Measures No. K-2. Impacts are considered beneficial.

Construction workers and haul trucks would be traveling to and from the project site during construction. According to construction trip generation rates built into CalEEMod, the proposed project would generate less than 50 worker trips per day. The proposed project would also involve hauling trips to remove building materials, vegetation, and trees from the project site. However, these trips would be minimal. In addition, the deconstruction activities would be temporary. Therefore, the proposed would not result in significant traffic impacts. **Impacts would be less than significant**.

c. The proposed project involves temporary construction activity as part of intersection improvements and would not affect air traffic patterns. **No impact would occur.**

d, e. The proposed project does not involve the construction of new uses; all construction activities would occur within the PCH/Cross Creek road right-of-way. Therefore, it would not increase hazards, create any incompatible uses, or result in inadequate emergency access. **No impact would occur.**

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XVII. UTILITIES AND SERVICE SYSTEMS				
-- Would the Project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the Project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e) Result in a determination by the wastewater treatment provider 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?	☐	☐	☐	☒

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XVII. UTILITIES AND SERVICE SYSTEMS				
f) Be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

a, b, e. The proposed project would involve the construction of intersection improvements and would not generate wastewater. **No impact would occur.**

c. The proposed project would require the construction of road improvements (roadway pavement, slabs, concrete, retaining walls, etc.). Therefore, the amount of permeable surfaces would increase compared to existing conditions. However, the proposed project involves minor on-site drainage improvements as part of the construction activities. The project is also required to comply with the City of Malibu Public Works Department standard conditions of approval for the management of stormwater and drainage. Therefore, existing storm drain facilities would not be adversely affected by the proposed project. **No impact would occur.**

d. The project would involve intersection improvements and would not construct any water-consuming uses. The project does not involve the construction of residences or commercial uses that would increase the region's population and, in turn, the regional demand for potable water. **No impact would occur.**

f, g. The project would include demolition of existing pavement and other debris. Once demolished, the demolition waste would need to be transported to a landfill and property disposed of. There would be a temporary increase in solid waste at area landfills. However, the solid waste generated by the project would not be substantial. **Impacts would be less than significant.**

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE				
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	☐	☐	☒	☐

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE				
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?				
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☐	☒
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

a. The proposed project would not significantly degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California prehistory. **Impacts would be less than significant.**

b. The proposed project would require partial demolition of the existing roadway improvements and construction of new intersection improvements within the PCH right-of-way. It does not involve any construction or addition of new uses. Therefore, impacts would not be cumulatively considerable. **No cumulative impacts would occur**.

c. The proposed project would require partial demolition of existing roadway improvements and construction of new intersection improvements within the PCH right-of-way. Construction noise and vibration impacts were considered less than significant for nearby sensitive receptors. **Therefore, impacts would be less than significant.**

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Appendix B

Air Quality Modeling Results

PCH/Cross Creek Widening

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Parking Lot	22	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Utility Company**	Pacific Gas & Electric Company
Climate Zone	8	**Precipitation Freq (Days)**	33		

1.3 User Entered Comments

Project Characteristics -

Land Use -

Construction Phase - No building construction... this is for retaining wall construction

Demolition -

Architectural Coating - no architectural coatings

Vehicle Trips - This is for roadway construction only. No vehicle trips related to land use

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	3.72	26.25	21.43	0.04	1.08	1.67	2.75	0.43	1.67	2.10	0.00	3,768.07	0.00	0.34	0.00	3,775.11
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	3.72	26.25	21.43	0.04	0.77	1.67	2.44	0.43	1.67	2.10	0.00	3,768.07	0.00	0.34	0.00	3,775.11
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.58	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Total	**0.58**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**		**0.00**		**0.00**	**0.00**	**0.00**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.58	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Total	**0.58**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**		**0.00**		**0.00**	**0.00**	**0.00**

3.0 Construction Detail

3.1 Mitigation Measures Construction

3.2 Demolition - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.01	0.00	0.01	0.00	0.00	0.00						0.00
Off-Road	1.69	12.02	9.21	0.02		0.84	0.84		0.84	0.84		1,476.12		0.15		1,479.31
Total	**1.69**	**12.02**	**9.21**	**0.02**	**0.01**	**0.84**	**0.85**	**0.00**	**0.84**	**0.84**		**1,476.12**		**0.15**		**1,479.31**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.06	0.06	0.66	0.00	0.15	0.01	0.16	0.01	0.01	0.01		123.87		0.01		124.01
Total	**0.06**	**0.06**	**0.66**	**0.00**	**0.15**	**0.01**	**0.16**	**0.01**	**0.01**	**0.01**		**123.87**		**0.01**		**124.01**

3.2 Demolition - 2015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.01	0.00	0.01	0.00	0.00	0.00						0.00
Off-Road	1.69	12.02	9.21	0.02		0.84	0.84		0.84	0.84	0.00	1,476.12		0.15		1,479.31
Total	**1.69**	**12.02**	**9.21**	**0.02**	**0.01**	**0.84**	**0.85**	**0.00**	**0.84**	**0.84**	**0.00**	**1,476.12**		**0.15**		**1,479.31**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.06	0.06	0.66	0.00	0.01	0.01	0.01	0.01	0.01	0.01		123.87		0.01		124.01
Total	**0.06**	**0.06**	**0.66**	**0.00**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**		**123.87**		**0.01**		**124.01**

3.3 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.09	0.00	0.09	0.00	0.00	0.00						0.00
Off-Road	1.50	10.70	8.62	0.01		0.65	0.65		0.65	0.65		1,402.64		0.13		1,405.45
Total	**1.50**	**10.70**	**8.62**	**0.01**	**0.09**	**0.65**	**0.74**	**0.00**	**0.65**	**0.65**		**1,402.64**		**0.13**		**1,405.45**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.03	0.03	0.33	0.00	0.08	0.00	0.08	0.00	0.00	0.01		61.94		0.00		62.01
Total	**0.03**	**0.03**	**0.33**	**0.00**	**0.08**	**0.00**	**0.08**	**0.00**	**0.00**	**0.01**		**61.94**		**0.00**		**62.01**

3.3 Site Preparation - 2015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.09	0.00	0.09	0.00	0.00	0.00						0.00
Off-Road	1.50	10.70	8.62	0.01		0.65	0.65		0.65	0.65	0.00	1,402.64		0.13		1,405.45
Total	**1.50**	**10.70**	**8.62**	**0.01**	**0.09**	**0.65**	**0.74**	**0.00**	**0.65**	**0.65**	**0.00**	**1,402.64**		**0.13**		**1,405.45**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.03	0.03	0.33	0.00	0.00	0.00	0.01	0.00	0.00	0.01		61.94		0.00		62.01
Total	**0.03**	**0.03**	**0.33**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.01**		**61.94**		**0.00**		**62.01**

3.4 Grading - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.75	0.00	0.75	0.41	0.00	0.41						0.00
Off-Road	1.69	12.02	9.21	0.02		0.84	0.84		0.84	0.84		1,476.12		0.15		1,479.31
Total	**1.69**	**12.02**	**9.21**	**0.02**	**0.75**	**0.84**	**1.59**	**0.41**	**0.84**	**1.25**		**1,476.12**		**0.15**		**1,479.31**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.06	0.06	0.66	0.00	0.15	0.01	0.16	0.01	0.01	0.01		123.87		0.01		124.01
Total	**0.06**	**0.06**	**0.66**	**0.00**	**0.15**	**0.01**	**0.16**	**0.01**	**0.01**	**0.01**		**123.87**		**0.01**		**124.01**

3.4 Grading - 2015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.75	0.00	0.75	0.41	0.00	0.41						0.00
Off-Road	1.69	12.02	9.21	0.02		0.84	0.84		0.84	0.84	0.00	1,476.12		0.15		1,479.31
Total	**1.69**	**12.02**	**9.21**	**0.02**	**0.75**	**0.84**	**1.59**	**0.41**	**0.84**	**1.25**	**0.00**	**1,476.12**		**0.15**		**1,479.31**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.06	0.06	0.66	0.00	0.01	0.01	0.01	0.01	0.01	0.01		123.87		0.01		124.01
Total	**0.06**	**0.06**	**0.66**	**0.00**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**		**123.87**		**0.01**		**124.01**

3.5 Building Construction - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.86	13.57	10.61	0.02		0.80	0.80		0.80	0.80		1,945.40		0.17		1,948.92
Total	**1.86**	**13.57**	**10.61**	**0.02**		**0.80**	**0.80**		**0.80**	**0.80**		**1,945.40**		**0.17**		**1,948.92**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.05	0.56	0.36	0.00	0.04	0.02	0.06	0.00	0.02	0.02		111.19		0.00		111.25
Worker	0.05	0.05	0.60	0.00	0.14	0.00	0.14	0.01	0.00	0.01		111.48		0.01		111.61
Total	**0.10**	**0.61**	**0.96**	**0.00**	**0.18**	**0.02**	**0.20**	**0.01**	**0.02**	**0.03**		**222.67**		**0.01**		**222.86**

3.5 Building Construction - 2015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.86	13.57	10.61	0.02		0.80	0.80		0.80	0.80	0.00	1,945.40		0.17		1,948.92
Total	**1.86**	**13.57**	**10.61**	**0.02**		**0.80**	**0.80**		**0.80**	**0.80**	**0.00**	**1,945.40**		**0.17**		**1,948.92**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.05	0.56	0.36	0.00	0.00	0.02	0.02	0.00	0.02	0.02		111.19		0.00		111.25
Worker	0.05	0.05	0.60	0.00	0.01	0.00	0.01	0.01	0.00	0.01		111.48		0.01		111.61
Total	**0.10**	**0.61**	**0.96**	**0.00**	**0.01**	**0.02**	**0.03**	**0.01**	**0.02**	**0.03**		**222.67**		**0.01**		**222.86**

3.6 Paving - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.04	12.88	9.62	0.02		1.01	1.01		1.01	1.01		1,408.52		0.18		1,412.36
Paving	0.12					0.00	0.00		0.00	0.00						0.00
Total	**2.16**	**12.88**	**9.62**	**0.02**		**1.01**	**1.01**		**1.01**	**1.01**		**1,408.52**		**0.18**		**1,412.36**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.10	0.10	1.19	0.00	0.28	0.01	0.29	0.01	0.01	0.02		222.97		0.01		223.22
Total	**0.10**	**0.10**	**1.19**	**0.00**	**0.28**	**0.01**	**0.29**	**0.01**	**0.01**	**0.02**		**222.97**		**0.01**		**223.22**

3.6 Paving - 2015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.04	12.88	9.62	0.02		1.01	1.01		1.01	1.01	0.00	1,408.52		0.18		1,412.36
Paving	0.12					0.00	0.00		0.00	0.00						0.00
Total	**2.16**	**12.88**	**9.62**	**0.02**		**1.01**	**1.01**		**1.01**	**1.01**	**0.00**	**1,408.52**		**0.18**		**1,412.36**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.10	0.10	1.19	0.00	0.01	0.01	0.02	0.01	0.01	0.02		222.97		0.01		223.22
Total	**0.10**	**0.10**	**1.19**	**0.00**	**0.01**	**0.01**	**0.02**	**0.01**	**0.01**	**0.02**		**222.97**		**0.01**		**223.22**

3.7 Architectural Coating - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.00					0.00	0.00		0.00	0.00						0.00
Off-Road	0.41	2.57	1.90	0.00		0.22	0.22		0.22	0.22		281.19		0.04		281.96
Total	**0.41**	**2.57**	**1.90**	**0.00**		**0.22**	**0.22**		**0.22**	**0.22**		**281.19**		**0.04**		**281.96**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.01	0.01	0.13	0.00	0.03	0.00	0.03	0.00	0.00	0.00		24.77		0.00		24.80
Total	**0.01**	**0.01**	**0.13**	**0.00**	**0.03**	**0.00**	**0.03**	**0.00**	**0.00**	**0.00**		**24.77**		**0.00**		**24.80**

3.7 Architectural Coating - 2015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.00					0.00	0.00		0.00	0.00						0.00
Off-Road	0.41	2.57	1.90	0.00		0.22	0.22		0.22	0.22	0.00	281.19		0.04		281.96
Total	**0.41**	**2.57**	**1.90**	**0.00**		**0.22**	**0.22**		**0.22**	**0.22**	**0.00**	**281.19**		**0.04**		**281.96**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.01	0.01	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00		24.77		0.00		24.80
Total	**0.01**	**0.01**	**0.13**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**		**24.77**		**0.00**		**24.80**

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Unmitigated	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
NaturalGas Unmitigated	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Parking Lot	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Total		**0.00**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**		**0.00**		**0.00**	**0.00**	**0.00**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Parking Lot	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Total		**0.00**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**		**0.00**		**0.00**	**0.00**	**0.00**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.58	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Unmitigated	0.58	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.14					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.44					0.00	0.00		0.00	0.00						0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	**0.58**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**		**0.00**		**0.00**		**0.00**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.14					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.44					0.00	0.00		0.00	0.00						0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	**0.58**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**		**0.00**		**0.00**		**0.00**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

PCH/Cross Creek Widening

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Parking Lot	22	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Utility Company**	Pacific Gas & Electric Company
Climate Zone	8	**Precipitation Freq (Days)**	33		

1.3 User Entered Comments

Project Characteristics -

Land Use -

Construction Phase - No building construction... this is for retaining wall construction

Demolition -

Architectural Coating - no architectural coatings

Vehicle Trips - This is for roadway construction only. No vehicle trips related to land use

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2015	0.03	0.21	0.17	0.00	0.00	0.01	0.02	0.00	0.01	0.02	0.00	25.00	25.00	0.00	0.00	25.05
Total	**0.03**	**0.21**	**0.17**	**0.00**	**0.00**	**0.01**	**0.02**	**0.00**	**0.01**	**0.02**	**0.00**	**25.00**	**25.00**	**0.00**	**0.00**	**25.05**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2015	0.03	0.21	0.17	0.00	0.00	0.01	0.02	0.00	0.01	0.02	0.00	25.00	25.00	0.00	0.00	25.05
Total	**0.03**	**0.21**	**0.17**	**0.00**	**0.00**	**0.01**	**0.02**	**0.00**	**0.01**	**0.02**	**0.00**	**25.00**	**25.00**	**0.00**	**0.00**	**25.05**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.10	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waste						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**0.10**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.10	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waste						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**0.10**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

3.1 Mitigation Measures Construction

3.2 Demolition - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.00	0.02	0.02	0.00		0.00	0.00		0.00	0.00	0.00	2.68	2.68	0.00	0.00	2.68
Total	**0.00**	**0.02**	**0.02**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**2.68**	**2.68**	**0.00**	**0.00**	**2.68**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.21	0.00	0.00	0.21
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.21**	**0.21**	**0.00**	**0.00**	**0.21**

3.2 Demolition - 2015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.00	0.02	0.02	0.00		0.00	0.00		0.00	0.00	0.00	2.68	2.68	0.00	0.00	2.68
Total	**0.00**	**0.02**	**0.02**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**2.68**	**2.68**	**0.00**	**0.00**	**2.68**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.21	0.00	0.00	0.21
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.21**	**0.21**	**0.00**	**0.00**	**0.21**

3.3 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.00	0.03	0.03	0.00		0.00	0.00		0.00	0.00	0.00	3.82	3.82	0.00	0.00	3.82
Total	**0.00**	**0.03**	**0.03**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**3.82**	**3.82**	**0.00**	**0.00**	**3.82**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.16	0.00	0.00	0.16
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.16**	**0.16**	**0.00**	**0.00**	**0.16**

3.3 Site Preparation - 2015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.00	0.03	0.03	0.00		0.00	0.00		0.00	0.00	0.00	3.82	3.82	0.00	0.00	3.82
Total	**0.00**	**0.03**	**0.03**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**3.82**	**3.82**	**0.00**	**0.00**	**3.82**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.16	0.00	0.00	0.16
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.16**	**0.16**	**0.00**	**0.00**	**0.16**

3.4 Grading - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.00	0.03	0.02	0.00		0.00	0.00		0.00	0.00	0.00	3.35	3.35	0.00	0.00	3.35
Total	**0.00**	**0.03**	**0.02**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**3.35**	**3.35**	**0.00**	**0.00**	**3.35**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.27	0.00	0.00	0.27
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.27**	**0.27**	**0.00**	**0.00**	**0.27**

3.4 Grading - 2015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.00	0.03	0.02	0.00		0.00	0.00		0.00	0.00	0.00	3.35	3.35	0.00	0.00	3.35
Total	**0.00**	**0.03**	**0.02**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**3.35**	**3.35**	**0.00**	**0.00**	**3.35**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.27	0.00	0.00	0.27
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.27**	**0.27**	**0.00**	**0.00**	**0.27**

3.5 Building Construction - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.01	0.04	0.03	0.00		0.00	0.00		0.00	0.00	0.00	5.29	5.29	0.00	0.00	5.30
Total	**0.01**	**0.04**	**0.03**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**5.29**	**5.29**	**0.00**	**0.00**	**5.30**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.30	0.00	0.00	0.30
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.29	0.00	0.00	0.29
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.59**	**0.59**	**0.00**	**0.00**	**0.59**

3.5 Building Construction - 2015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.01	0.04	0.03	0.00		0.00	0.00		0.00	0.00	0.00	5.29	5.29	0.00	0.00	5.30
Total	**0.01**	**0.04**	**0.03**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**5.29**	**5.29**	**0.00**	**0.00**	**5.30**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.30	0.00	0.00	0.30
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.29	0.00	0.00	0.29
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.59**	**0.59**	**0.00**	**0.00**	**0.59**

3.6 Paving - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.01	0.07	0.05	0.00		0.01	0.01		0.01	0.01	0.00	7.03	7.03	0.00	0.00	7.05
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**0.01**	**0.07**	**0.05**	**0.00**		**0.01**	**0.01**		**0.01**	**0.01**	**0.00**	**7.03**	**7.03**	**0.00**	**0.00**	**7.05**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05	1.05	0.00	0.00	1.06
Total	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.05**	**1.05**	**0.00**	**0.00**	**1.06**

3.6 Paving - 2015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.01	0.07	0.05	0.00		0.01	0.01		0.01	0.01	0.00	7.03	7.03	0.00	0.00	7.05
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**0.01**	**0.07**	**0.05**	**0.00**		**0.01**	**0.01**		**0.01**	**0.01**	**0.00**	**7.03**	**7.03**	**0.00**	**0.00**	**7.05**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05	1.05	0.00	0.00	1.06
Total	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.05**	**1.05**	**0.00**	**0.00**	**1.06**

3.7 Architectural Coating - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.00	0.01	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.51	0.51	0.00	0.00	0.51
Total	**0.00**	**0.01**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**0.51**	**0.51**	**0.00**	**0.00**	**0.51**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.04	0.00	0.00	0.04
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.04**	**0.04**	**0.00**	**0.00**	**0.04**

3.7 Architectural Coating - 2015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.00	0.01	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.51	0.51	0.00	0.00	0.51
Total	**0.00**	**0.01**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**0.51**	**0.51**	**0.00**	**0.00**	**0.51**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.04	0.00	0.00	0.04
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.04**	**0.04**	**0.00**	**0.00**	**0.04**

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unmitigated	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NaturalGas Mitigated	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NaturalGas Unmitigated	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	tons/yr										MT/yr					
Parking Lot	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total		**0.00**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	tons/yr										MT/yr					
Parking Lot	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total		**0.00**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Parking Lot	0					0.00	0.00	0.00	0.00
Total						**0.00**	**0.00**	**0.00**	**0.00**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Parking Lot	0					0.00	0.00	0.00	0.00
Total						**0.00**	**0.00**	**0.00**	**0.00**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.10	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unmitigated	0.10	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.03					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.08					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**0.11**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.03					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.08					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**0.11**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

7.0 Water Detail

7.1 Mitigation Measures Water

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					0.00	0.00	0.00	0.00
Unmitigated					0.00	0.00	0.00	0.00
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Parking Lot	0 / 0					0.00	0.00	0.00	0.00
Total						**0.00**	**0.00**	**0.00**	**0.00**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Parking Lot	0 / 0					0.00	0.00	0.00	0.00
Total						**0.00**	**0.00**	**0.00**	**0.00**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					0.00	0.00	0.00	0.00
Unmitigated					0.00	0.00	0.00	0.00
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Parking Lot	0					0.00	0.00	0.00	0.00
Total						**0.00**	**0.00**	**0.00**	**0.00**

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Parking Lot	0					0.00	0.00	0.00	0.00
Total						**0.00**	**0.00**	**0.00**	**0.00**

9.0 Vegetation

Appendix C

Phase 1 Cultural Resources Assessment

Phase I Cultural Resources Survey, PCH Intersection Improvement Project, Malibu, Los Angeles County, California

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PN 22750

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MANAGEMENT SUMMARY

ASM Affiliates, Inc. (ASM) conducted a Phase I cultural resources survey for the Pacific Coast Highway–Cross Creek Road intersection improvement project, Malibu, Los Angeles County, California. The study area is located on the 1995 USGS Malibu Beach 7.5-minute topographic quadrangle in Township 1 South, Range 17 West, within the unsectioned Rancho Topanga Malibu Sequit land grant area. David S. Whitley, Ph.D., RPA, served as Principal Investigator for the project. Background studies and fieldwork for the survey were completed in July and August 2014. This study was conducted assist with regulatory requirements for compliance with the California Environmental Quality Act (CEQA).

The study included a records search site files and maps, conducted by the South Central Coastal Information Center (SCCIC), located at California State University, Fullerton, on July 22, 2014. In addition, a search of the Native American Heritage Commission (NAHC) *Sacred Lands File* was completed on July 24, 2014. These investigations determined that the study area had been previously surveyed. Further, it was determined that while no sites or traditional cultural places had been identified within the project area, the NAHC expressed concern given the proximity of the project to the location of the National Register-listed site of the prehistoric/historic village of *Humaliwu*.

The Phase I survey fieldwork was conducted on August 12, 2014, with parallel transects spaced at 15-m intervals walked across the study area, which was determined to be the area of direct impact (ADI) for the project. The entire project ADI falls with previously disturbed Caltrans right-of-way.

No significant historical resources were discovered within the study area during the pre-field research or the intensive Phase I survey. As such, the project will not have an adverse impact on an important cultural resource or cause substantial adverse changes as defined by CEQA. No further archaeological studies are recommended. Based on these findings, the development or use of the project study area does not have the potential to result in adverse impacts to significant historical resources, and no additional archaeological studies are recommended.

1. INTRODUCTION AND REGULATORY CONTEXT

ASM Affiliates, Inc. (ASM) was retained by Schmitz & Associates to conduct a Phase I cultural resources survey for the Pacific Coast Highway–Cross Creek Road intersection improvement project, in Malibu, Los Angeles County, California (Figure 1).

PROJECT DESCRIPTION

Coastal Development Permit (CDP) No. 14-036 has been filed, proposing roadway improvements along Pacific Coast Highway (PCH) at the Cross Creek Road Intersection (23350.5 Pacific Coast Highway) (Figure 2). The project will entail reconstruction of PCH at the Cross Creek Road intersection per traffic mitigation measures for the proposed La Paz mixed-use center on Civic Center Way, including existing vegetation removal. All reconstruction will be within the Caltrans right-of-way; no construction will transpire outside of the Caltrans right-of-way.

REGULATORY CONTEXT

The City of Malibu has requested an Initial Cultural Resources Evaluation to determine whether or not the proposed project could potentially impact cultural resources, to include a review of relevant documents and a field survey of the project site to verify the presence (or absence) and condition of previously recorded cultural resources and to identify any previously unrecorded cultural resources. If the evaluation reveals that the project will not have an adverse impact on an important cultural resource or cause substantial adverse changes as defined by the California Environmental Quality Act (CEQA), no further Cultural Resources Review shall be required. If potential impacts were to be identified, additional analysis would be required in accordance with Section 11.3 of the Malibu Local Implementation Plan.

As such, the purpose of this archaeological investigation was to assist with CEQA compliance; specifically, to ensure that significant impacts to historical resources do not occur as a result of the proposed project.

Significant impacts under CEQA occur when "historically significant" or "unique" cultural resources are adversely impacted. Historically significant cultural resources are defined by eligibility for or by listing in the California Register of Historical Resources (CRHR). Under CEQA, significant impacts to cultural resources are those that alter or destroy prehistoric or historical archaeological sites, features and artifacts, and historical properties (e.g., buildings) that are themselves determined to be significant or unique.

Significant archaeological resources and historical properties are defined by CEQA as those that:

(A) Are associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

(B) Are associated with the lives of persons important in our past;

(C) Embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual, or possess high artistic values; or

(D) Have yielded, or may be likely to yield, information important in prehistory or history.

Unique resources under CEQA, in slight contrast, are those that represent:

> an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

(1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.

(2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.

(3) Is directly associated with a scientifically recognized important prehistoric or historic event or person (PRC § 21083.2 (g)).

This current investigation was intended to:

- Provide a background records search and literature review to determine if any known archaeological sites were present in the project zone and/or whether the area had been previously and systematically studied by archaeologists;
- Provide a search of the NAHC *Sacred Lands File* to determine if any traditional cultural places or cultural landscapes have been identified within the area;
- Conduct an on-foot, intensive inventory of the study area to identify and record previously undiscovered cultural resources and to examine known sites; and
- To undertake a preliminary assessment of such resources, should any be found within the subject property.

This study was conducted by ASM Affiliates, Inc., of Tehachapi, California, during July and August 2014. David S. Whitley, Ph.D., RPA, served as principal investigator, and Sherri Andrews, M.A., J.D., RPA, completed the fieldwork and co-authored this report.

This manuscript constitutes a report on this Phase I survey. Subsequent sections provide background to the investigation; the findings of the archival records search; a summary of the field surveying techniques employed; and the results of the fieldwork. We conclude with management recommendations for the study area.

Figure 1. PCH intersection improvement project vicinity map.

Figure 2. PCH intersection improvement project location map.

(*Source: Malibu Beach, Calif. 7.5'-minute USGS Quadrangle*)

2. PROJECT AREA BACKGROUND

ENVIRONMENTAL BACKGROUND

The Pacific Coast Highway—Cross Creek Road intersection improvement project is located in a developed portion of the City of Malibu, just north and west of Malibu Lagoon State Beach. The study area is depicted on the 1995 USGS Malibu Beach 7.5-minute topographic quadrangle in Township 1 South, Range 17 West, within the unsectioned Rancho Topanga Malibu Sequit land grant area (see Figure 2). The elevations at the study area is approximately 10 feet (3 m) above mean sea level (amsl).

The project area of direct impact (ADI) is entirely within the already disturbed Caltrans right of way along PCH. The surrounding area is almost entirely developed or altered, primarily by commercial establishments and Legacy Park to the north of PCH, with the Malibu Lagoon State Beach and Perenchio Golf Course adjacent the south side of PCH.

The project site is located in the City at the base of the Santa Monica Mountains on an uplifted, wave-cut marine terrace overlooking the Pacific Ocean. It is located to the west of Malibu Creek and Malibu Creek State Park, and north of Malibu Lagoon State Beach. No clearly original vegetation remains in the study area.

ETHNOGRAPHIC BACKGROUND

The study area lies near the southeastern limit of the territory of the Ventureño dialect of the Chumash ethnolinguistic group (Kroeber 1925). The Chumash were Hokan speaking people who occupied the area from Topanga Canyon northwest to approximately San Carpojo Creek. Because of their location in an area of early Spanish missionization, Chumash culture and lifeways were heavily disrupted prior to any modern efforts at ethnographic research, hence our knowledge of them is limited. However, based on fragmentary records and various means of inferential and analogical studies, a certain amount can be reconstructed about their way of life.

The Chumash followed a hunting-gathering-fishing subsistence pattern, which incorporated a heavy reliance on maritime resources, including pelagic and littoral fishes, and shellfish. Indeed, the bountiful sea resources that they exploited may have been a key factor in their evolutionary success (Landberg 1965): at the time of the arrival of the Spanish the Chumash had reached levels of population density, and complexities in social organization, unequaled worldwide by other non-farming groups (Moratto 1984:118). These included permanent coastal villages along the Channel Islands area containing as many as 1,000 inhabitants (Brown 1967), as well as a hierarchical sociopolitical organization consisting of at least two major chiefdoms (Whitley and Beaudry 1991). Further, based on recent reconstructions using mission registers, the Chumash appear to be have a matrilocal, and perhaps matrilineal, clan-based society (Johnson 1988).

The Malibu to Ventura region was an area of relatively intensive Chumash occupation. One reflection of this fact is the large number of indigenous place-names recorded for this coastal zone. Fewer were recorded in the Santa Monica Mountains, but occasional inland names are known. In the general Malibu region, Applegate (1975; see also King 1975) lists the following from J. P. Harrington's notes:

> 'alqilko'wi - "white of the eye" - village in Little Sycamore Canyon;
> humaliwo - "[the surf] sounds loudly" - village at Malibu (*just east of the project area*);
> kas'elew - "the tongue" - a canyon west of Malibu;
> lisiqishi - ? - village at Arroyo Sequit;

lohostohni - ? - village at Trancas Canyon;
niko - "water" - place east of Point Dume;
seqis - "beachworm" - Arroyo Sequit; and
sumo - "abundance" - village at Zuma Canyon.

With regard to the study area, the historic/prehistoric village of *Humaliwo* is located to the east of the project area, separated from the project by Malibu Creek.

ARCHAEOLOGICAL BACKGROUND

The chronology of the regional prehistoric record was first defined by D. B. Rogers (1929), working on the Channel Islands and the Santa Barbara coastline. At a later date, Rogers' scheme was modified in terminology and improved with additional and more detailed data and radiocarbon dates by W. J. Wallace (1955). More recently, King (1981, 1990) has suggested refinements to roughly the later half of Wallace's proposed framework. Currently, Wallace's originally chronology, as recently modified, provides the only complete cultural-historical sequence for the Chumash region, inasmuch as his is the only scheme that includes the earliest portions of the archaeological record.

Wallace's chronology for southern coastal California includes four time periods, the earliest of which (Early Man/Big Game Hunting period) was considered speculative, and thought to correlate with the end of the Pleistocene. Recent evidence from along the coast, the Channel Islands, and San Luis Obispo County (e.g., see Erlandson et al. 1987; Jones et al. 2002) demonstrates that the occupation of the coastal region occurred during this period. Given the currently available data, this appears to have emphasized marine exploitation rather than big-game hunting, leading to the hypothesis that it may reflect a coastal migration into the Americas. However, the characteristic geomorphological instability of the California coastline, combined with the major change in erosional/degradational regimes that occurred at the end of the Pleistocene, does not favor the preservation of remains from this period.

The transition toward a modern environment started approximately 9,000 to 10,000 years ago; however, an adaptation referred to as the Early Millingstone period or horizon began and is evident in the archaeological record. Most sites of this stage date between 8,500 and 3,500 years in age, and are dominated by assemblages containing large numbers of ground stone artifacts, along with crude choppers and other core/cobble tools (see Greenwood 1972). These are thought to represent an adaptation to gathered foods, especially a reliance on hard-shelled seeds.

More recently, it has been suggested that scraper planes, in particular, may have served in the processing of agave (Kowta 1969; Salls 1985); that the association of ground stone and core/cobble tools represents a generalized plant processing toolkit, rather than one emphasizing hard-seeds, per se (Whitley 1979), and one that was used in appropriate environmental settings throughout the prehistoric past; that is, that the so-called 'early millingstone toolkit' is environmentally rather than chronologically specific and reflects localized exploitation patterns, rather than a wide-ranging adaptational strategy (Leonard 1971). However, on the coastal strip, there continues to be evidence that such ground stone-dominated sites date to the earlier end of the time-frame, and they are generally located on terraces and mesas, above the coastal verge.

Recent studies by Erlandson (1988; see also Erlandson and Colton 1991), finally, provide evidence of a significant, even if small, population of coastal hunter-gatherers in the region before 7,000 years ago, or at the beginning of the Early Millingstone period. Erlandson has shown that these were neither "big game" hunters, nor specialized, hard-seed gatherers, but instead generalized foragers that relied on a variety of different kinds of terrestrial, coastal and marine resources, and that they were adapted to estuarine embayments that have long since disappeared from the local environment. Further, his evidence indicates that their primary protein sources were shellfish and other marine resources. Extending a pattern first

identified by Meighan (1959) on the Channel Islands, in other words, this suggests that the adaptation to the seashore is a very ancient and long-lived tradition in local prehistory.

Following the Early Millingstone, a transitional stage, referred to as the Intermediate (or Middle) Period, occurred. It is believed to have gotten underway about 3,500 years ago, and to have lasted until about A.D. 1200. It is marked on the coast by a growing exploitation of marine resources, the appearance of the hopper mortar and stone bowl/mortar, and a diversification and an increase in the number of chipped stone tools. Projectile points, in particular, are more common at sites than previously, while artifacts such as fish hooks and bone gorges also appear. Further, there is substantial evidence that it was at the beginning of this Intermediate period that inland sites, such as those found in the Conejo Corridor on the north side of the Santa Monica Mountains, and those on the Cuyama River Valley (see Horne 1981) and in the Carrizo Plain (Whitley et al. 2007), were first established and occupied, suggesting the exploitation of more varied environments and perhaps an increase in population (Whitley and Beaudry 1991), as well as a movement of coastal sites down towards the beaches. In general, however, the Intermediate period can be argued to have set the stage for the accelerated changes that took place immediately following it.

With the transition to the Late Prehistoric period at A.D. 1200, which followed the introduction of the bow and arrow at about A.D. 600, and is represented by a major reduction in the size of projectile points, we can correlate local prehistory with Chumash society as described (even if in abbreviated form) by early chroniclers and missionaries. However, this is not to suggest that society was in any way static, for the transition to the Late Prehistoric period was marked by the evolution and eventual dominance of a sophisticated maritime economy. Further, the rise in Chumash social complexity has been shown to have been associated with the development of craft specialization, involving the use of standardized micro-drills to mass produce shell beads on Santa Cruz Island (Arnold 1987), and to have occurred during the Late Prehistoric period.

Traditional Chumash society was altered irrevocably with the onset of the missionization and Spanish colonization of the coastal region. First contact with European culture occurred relatively early on: Juan Rodriguez Cabrillo stopped in the general Chumash area in A.D. 1542 while exploring the coast, and Sebastían Vizcaíno sailed by in 1602 (Bancroft 1963), with Pedro de Unamuno (in 1587) and Sebastian Rodriguez Cermeño (in 1595) both visiting the central coast, per se (Robinson 1957). However, the historical period effectively began with the passing of the Gaspar de Portolá expedition through the area in 1769-1770 (Bolton 1971; Boneu 1983). It was shortly thereafter, with the establishment of the Missions of San Luis Obispo de Tolosa in 1772, Santa Barbara in 1786, and La Misión de La Purísima Concepción de la Santísima Virgen María La Purísimeño Concepción in the Lompoc Valley in 1787, which marked the true end of the aboriginal period.

3. ARCHIVAL RESEARCH RESULTS

RECORDS SEARCH

In order to determine whether the study area had been previously surveyed for cultural resources, and/or whether any such resources were known to exist on it, an archival records search was conducted at the South Central Coastal Information Center (SSCIC) on July 22, 2014. This study is summarized below.

The records search was completed to determine: (i) if prehistoric or historical archaeological sites had previously been recorded within the study area; (ii) if the project area had been systematically surveyed by archaeologists prior to the initiation of this field study; and/or (iii) whether the region of the field project was known to contain archaeological sites and to thereby be archaeologically sensitive. Records examined included archaeological site files and maps, the NRHP, Historic Property Data File, California Inventory of Historic Resources, and the California Points of Historic Interest.

The records search was conducted for an area encompassing 0.5 mile around the proposed project area (Appendix A). According to the IC records, 74 previous archaeological surveys had been completed within the 0.5-mile radius; 10 reports are related to work that intersects or overlaps at least some portion of the project area (Table 1). Only LA-1538 appears to have fully encompassed the project area. None of these projects resulted in the documentation of any resources within or adjacent the ADI.

Table 1. Previous Surveys within Project Area

IC Report No. (LA-)	Date	Author	Title
01538	1986	Dillon, Brian D.	Malibu Wastewater Facilities Plan: Archaeological Analysis Survey Report
03294	1996	Demcak, Carol R.	Cultural Resources Assessment for Malibu Civic Center Specific Plan, City of Malibu, County of Los Angeles, California
03391	1994	Taylor, Thomas T.	Archaeological Monitoring Plan Pacific Coast Hwy Malibu Lagoon Bridge Electrical Utility Undergrounding Project, City of Malibu, California
04041	1989	Kane, Diane, and John Romani	Malibu Bridge Replacement Project Route La-1, in Malibu, California
05387	1996	Demcak, Carol R.	Cultural Resource Assessment for Malibu Civic Center Specific Plan (Revised), City of Malibu, County of Los Angeles, California
05655	2001	McKenna, Jeanette A., and David Brunzell	A Phase I Cultural Resource Investigation of the Malibu Bay Company Development Project Area, Malibu, Los Angeles County, California
09294	2008	Tumamait, Patrick	Archaeological Monitoring Report: Cross Creek Road Improvements Project, City of Malibu, Los Angeles County, California
10409	2006	Robinson, Mark	Malibu Lagoon Restoration and Enhancement Plan Final Environmental Impact Report (EIR)
11151	2003	Romani, John, and Dan Larson	Results of a Cultural Resource Phase I Assessment and Extended Phase I Shovel Test Program for the Proposed Heart-of-the-Park Shuttle Demonstration Project, Santa Monica Mountains National Recreation Area
11152	2002	Mason, Roger	Santa Monica Mountains National Recreation Area, Heart-of-the-Park Shuttle Demonstration Project Draft Environmental Assessment/Initial Study

While no resources have been recorded within the study area, the records search indicated that there have been 10 archaeological resources recorded within the 0.5-mile radius around the study area (Table 2). Three are historic structures or properties, with the remaining seven being prehistoric sites, two of which also have historic components.

Table 2. Resources Recorded within 0.5-Mile Radius

Primary # (P-19-)	Trinomial (CA-LAN-)	Resource Name	Age	Attribute Codes	Date (Recorded by)
000264	000264/H	Malibu Site, *Humaliwo* (Chumash Name)	Prehistoric, Historic	AH12 (Graves/cemetery); AP02 (Lithic scatter); AP09 (Burials); AP15 (Habitation debris)	1959 (R. S. Watson); 1963 (Blackburn); 1975 (C. Meighan); 1976 (John J. Judge); 2001 (C. Zepeda)
000267	000267	Sweetwater Mesa site, Winnikoff Property; Voided - 19-003125; Other - Boeing #1	Prehistoric	AP02 (Lithic scatter); AP14 (Rock shelter/cave); AP15 (Habitation debris)	1961 (Chester King, M. Glassow); 1972 (Coleman); 1981 (Clay A. Singer); 1999 (Clay A. Singer, C.A. Singer & Associates); 2003 (Robert J. Wlodarski and Dan Larson, HEART)
001417	001417	Malibu Road #1	Prehistoric	AP02 (Lithic scatter); AP05 (Petroglyphs); AP15 (Habitation debris)	1988 (Robert J. Wlodarski and Dan Larson, HEART)
001449	001449	Malibu Shores Motel (MSM) Site	Prehistoric	AP02 (Lithic scatter); AP15 (Habitation debris)	1988 (Dan Larson, John Romani, Kote Lotah, A-lul'koy Lotah)
001991	001991	MH-1	Prehistoric	AP15 (Habitation debris)	1991 (Kenneth M. Becker, RMW Paleo Associates); 1991 (Kenneth M. Becker)
002936	002936/H	ML-1	Prehistoric, Historic	AH04 (Privies/dumps/trash scatters); AP02 (Lithic scatter); AP15 (Habitation debris)	2001 (K. Shabel, C. Zepeda, Dept. of Parks & Rec)
003766	003766	Malibu Pier Parking Lot Deposit; Other - Malibu Pier Sewer Trench	Prehistoric	AP02 (Lithic scatter); AP15 (Habitation debris) – Shellfish Remains	2003 (Jennifer Parker, Cal Dept. of Parks & Rec)
177472	-	Adamson House; OHP Property Number - 028150; CHL 966; Other - Adamson House on "Vaquero Hill"; Other - Adamson House at Malibu Lagoon State Park	Historic	HP02 (Single family property)	1976 (J. Merrick, Malibu Historical Society & Malibu Township Council); 1989 (S. Elder)
186261	-	Malibu Pier OHP Property Number - 090799	Historic	HP39 (Other) - Pier	1985
189451	-	Stevens House OHP Property Number - 174302	Historic	-	2011

The nearest resource to the ADI is CA-LAN-264/H, site of the historic/prehistoric village of *Humaliwo*. As mapped, it lies about 100 m east of eastern extent of the project area, and is separated from the project area by Malibu Creek. The site has been documented several times, and was tested by UCLA in the mid-1970s. The site has been listed on the National Register of Historic Places; it was listed in 1976 under #76000492. Prehistoric site LAN-1417 is located approximately 250 m west of the western extent of the project area, along Malibu Road just west of its intersection with Webb Way. This site was discovered during roadside construction monitoring, having been buried under 4-5 feet of fill and alluvium.

NAHC SACRED LANDS SEARCH

ASM also requested a search of the *Sacred Lands File* (SLF) by the Native American Heritage Commission (NAHC) to identify any areas of Native American heritage significance located within the study area. The NAHC response was generated on July 24, 2014; the letter stated that search of their files did indicate the presence of Native American traditional sites/places, including a major archaeological feature and burial sites (Appendix B). As such, they are concerned about the potential for subsurface discoveries.

4. FIELD METHODS AND RESULTS

Fieldwork comprised an intensive pedestrian survey of the ADI for the project, and was designed to meet all professional requirements, including the Secretary of the Interior's *Standards and Guidelines*, and current CEQA protocols.

Survey was conducted at 15-m transect intervals by ASM Senior Archaeologist Sherri Andrews on August 12, 2014. The entire ADI has been previously disturbed by road construction and other development along PCH. At the intersection of PCH and Cross Creek Road, the north side of PCH is developed with commercial establishments (Figures 3 and 4). Various commercial establishments and the Perenchio Golf Course are found along the south side of PCH west of Cross Creek Road (Figure 5), while Cross Creek Road marks the entrance to Malibu Lagoon State Beach which lies along the south side of PCH to the east of the intersection (Figure 6). Any locations in or adjacent the ADI exhibiting ground surface were investigated for any sign of cultural materials.

No evidence of archaeological remains were found within the ADI.

Figure 3. View west-northwest of north side of PCH toward intersection with Cross Creek Road from bridge over Malibu Lagoon.

Figure 4. View west along north side of PCH from intersection with Cross Creek Road.

Figure 5. View east along south side of PCH toward intersection with Cross Creek Road.

Figure 6. View east along south side of PCH from intersection with Cross Creek Road.

5. SUMMARY AND RECOMMENDATIONS

An intensive phase I archaeological survey was conducted for the project study area at the intersection of Pacific Coast Highway and Cross Creek Road, located in Malibu, Los Angeles County, California. This involved an archival records search of site maps and files at the California State University, Fullerton, Archaeological Information Center; a background review of existing literature and studies; a search of the Sacred Lands Files by the NAHC; and an intensive, on-foot examination of the study area.

Review of the records search results revealed that while the project area had been previously subject to survey, no resources had been documented.

No evidence for the presence of cultural resources were observed during the intensive Phase I survey. As such, the project will not have an adverse impact on an important cultural resource or cause substantial adverse changes as defined by CEQA. No further archaeological studies are recommended.

However, given the possibility that subsurface deposits undiscernible by surface investigation may exist, ASM recommends the presence of a qualified archaeologist or Native American monitor during any ground-disturbing activity.

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APPENDICES

Appendix D

Biological Resources Assessment

BIOLOGICAL RESOURCES ASSESSMENT

INTERSECTION IMPROVEMENT AT PACIFIC COAST HIGHWAY AND CROSS CREEK ROAD

MALIBU, CALIFORNIA

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SEPTEMBER 2014

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INTRODUCTION

The purpose of this report is to provide technical information on biological resources to the City of Malibu as part of its environmental review of the Pacific Coast Highway and Cross Creek Road intersection improvement in the City of Malibu, Los Angeles County, California, referred to herein as the "Site". The findings contained herein are based on: a review of the City of Malibu Local Coastal Plan and accompanying ESHA Map; a review of the California Department of Fish and Wildlife Natural Heritage Division *California Natural Diversity Database* (CNDDB) (August 2014), inclusive of the Point Dume, Thousand Oaks, Calabasas, Canoga Park, Malibu Beach, and Topanga USGS 7.5 minute quadrangles; a review of the California Native Plant Society's online *Inventory of Rare and Endangered Vascular Plants of California* (August 2014); a pedestrian site survey conducted on August 12, 2014; and base topography and aerial photography.

CHARACTERISTICS OF THE SITE

Physical Characteristics

Location

The study intersection of Pacific Coast Highway and Cross Creek Road within the Civic Center of the City of Malibu and is located within 200 feet a designated Environmentally Sensitive Habitat Area (ESHA), see **Figure 1**, *Project Site Location in Relation to ESHAs*, situated at the southeast intersection corner and occurring with the Malibu Lagoon State Beach. The road improvements will be located within Pacific Coast Highway, extending east of Cross Creek Road to Malibu Creek Bridge and west of Cross Creek Road about 800 feet, **Figure 2**, *Site Map*. Malibu Lagoon State Beach is located southeast of the Site. The Perenchio Golf Course, enclosed with a chain link fence and 10 foot tall stone wall is situated to the southwest of the Site. The northern portion of Pacific Coast Highway is primarily occupied by retail shopping centers and business buildings. Further northwest of the Site is Legacy Park, a restored city park containing marked trails.

Biological Resources

Vegetation

Vegetation occurring along the study intersection and within 200 feet north and south of Pacific Coast Highway consists of 1) *Atriplex lentiformis* alliance; 2) *Salix exigua–Baccharis salicifolia* woodland/forest association; 3) *Distichlis spicata* herbaceous alliance; 4) *Baccharis salicifolia* riparian association; 5) *Platanus racemosa* woodland/forest alliance; 6) *Salix lasiolepis* woodland/forest alliance; 7) *Artemisia californica–Eriogonum fasciculatum* shrubland alliance; 8) California annual grassland/herbaceous alliance; and 9) *Platanus racemosa–Salix lasiolepis* woodland/forest association; and 10) Ornamental landscaping, see **Figure 3**, *Natural Communities*. Summary descriptions of Site vegetation and representative site photographs are provided in Exhibits A and B, respectively.

***Atriplex lentiformis* alliance** type is dominated by big saltbush (*Atriplex lentiformis*), mule fat (*Baccharis salicifolia*), California sea lavender (*Limonium californicum*), and salt heliotrope (*Heliotropium curassavicum*). This alliance is located in the recently-planted Malibu Lagoon restoration area. Approximately 0.8 acre occurs within the study area.

***Salix exigua–Baccharis salicifolia* woodland/forest association** supports sandbar willow (*Salix exigua*), mule fat, coyotebrush (*Baccharis pilularis*), and mugwort (*Artemisia douglasiana*). This association is located in several locations within the Malibu Lagoon entrance and parking area. Approximately 0.2 acre occurs within the study area.

***Distichlis spicata* herbaceous alliance** is dominated by saltgrass (*Distichlis spicata*), pickleweed (*Salicornia depressa*), alkali heath (*Frankenia salina*), common cattail (*Typha latifolia*), and California bulrush (*Scirpus californicus*). This alliance is located along the edge of open water in the Malibu Lagoon restoration area. Approximately 0.5 acre occurs within the study area.

***Baccharis salicifolia* riparian association** community type is dominated by mule fat, blue elderberry (*Sambucus nigra* ssp. *caerulea*), toyon (*Heteromeles arbutifolia*), western ragweed (*Ambrosia psilostachya*), and Menzies' goldenbush (*Isocoma menziesii*). This vegetation type is found along the Malibu Lagoon State Beach parking area fence line parallel to Pacific Coast Highway, east of the parking area entrance. Approximately 0.1 acre occurs within the study area.

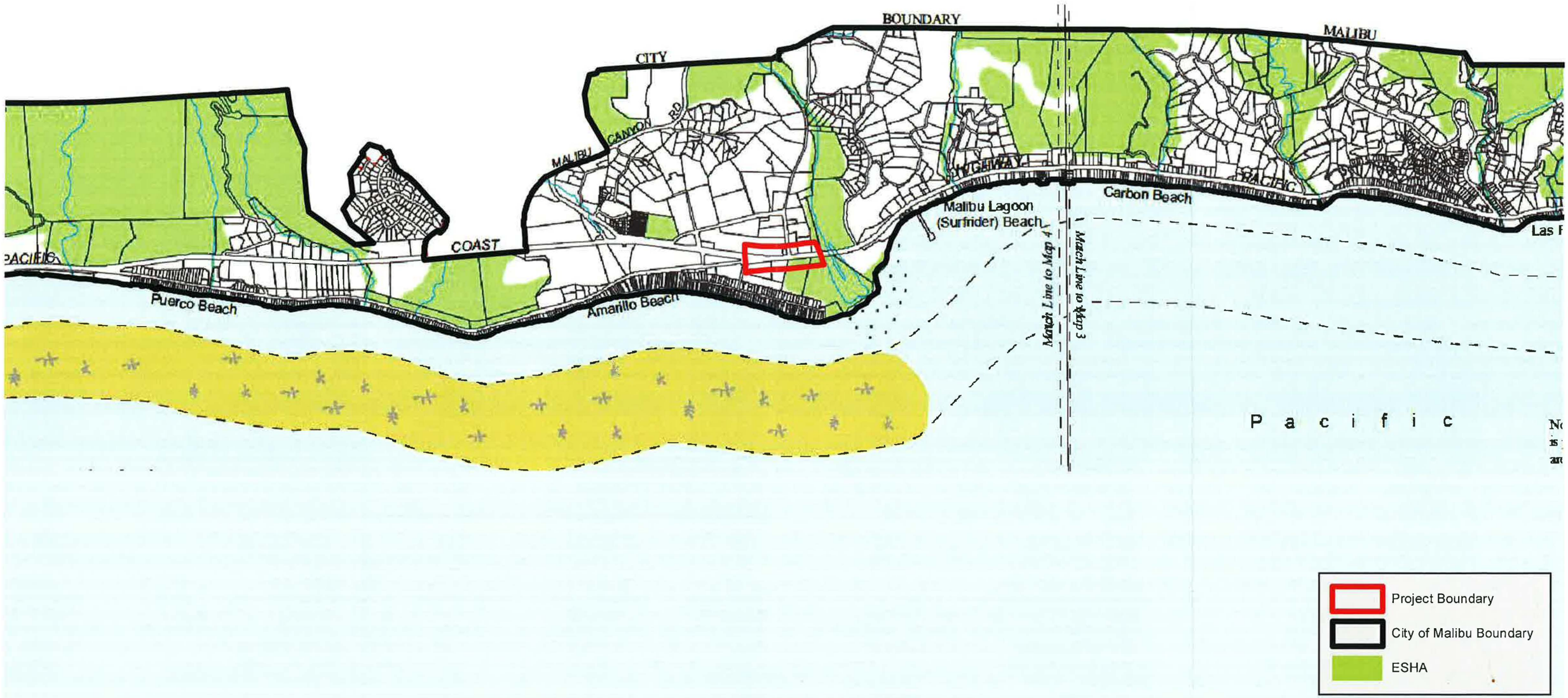
***Platanus racemosa* woodland/forest alliance** supports California sycamore (*Platanus racemosa*), western ragweed, giant wild rye (*Elymus condensatus*), California sagebrush (*Artemisia californica*), California blackberry (*Rubus ursinus*), mugwort, and yerba mansa (*Anemopsis californica*). This alliance is located within the Malibu Lagoon State Beach parking area, primarily in the northwest corner. Approximately 0.3 acre occurs within the study area.

***Salix lasiolepis* woodland/forest alliance** community type is dominated by arroyo willow (*Salix lasiolepis*), California sycamore, and toyon. This alliance is a part of the on-going restoration work located in Malibu Lagoon State Beach. Approximately 0.3 acre occurs within the study area.

***Artemisia californica–Eriogonum fasciculatum* shrubland alliance** supports a co-dominance of California sagebrush (*Artemisia californica*) and California buckwheat (*Eriogonum fasciculatum*). Other native plants species in the alliance include sawtooth goldenbush (*Hazardia squarrosa*), coyotebrush, California brittlebush (*Encelia californica*), purple sage (*Salvia leucophylla*), black sage (*Salvia mellifera*), chaparrel bushmallow (*Malacothamnus fasciculatus*), and bitter gooseberry (*Ribes amarum*). This diverse shrubland alliance is located north of Pacific Coast Highway in the restored Legacy Park. Approximately 1.0 acre occurs within the study area.

California annual grassland/herbaceous alliance type is dominated by foothill needle grass (*Stipa lepida*), tocalote (*Centaurea melitensis*), wild oats (*Avena* sp.), foxtail chess (*Bromus madritensis*), common fiddleneck (*Amsinckia menziesii* var. *intermedia*), and California poppy (*Eschscholzia californica*). This alliance is still in the process of being restored in Legacy Park. Approximately 1.3 acres occur within the study area.

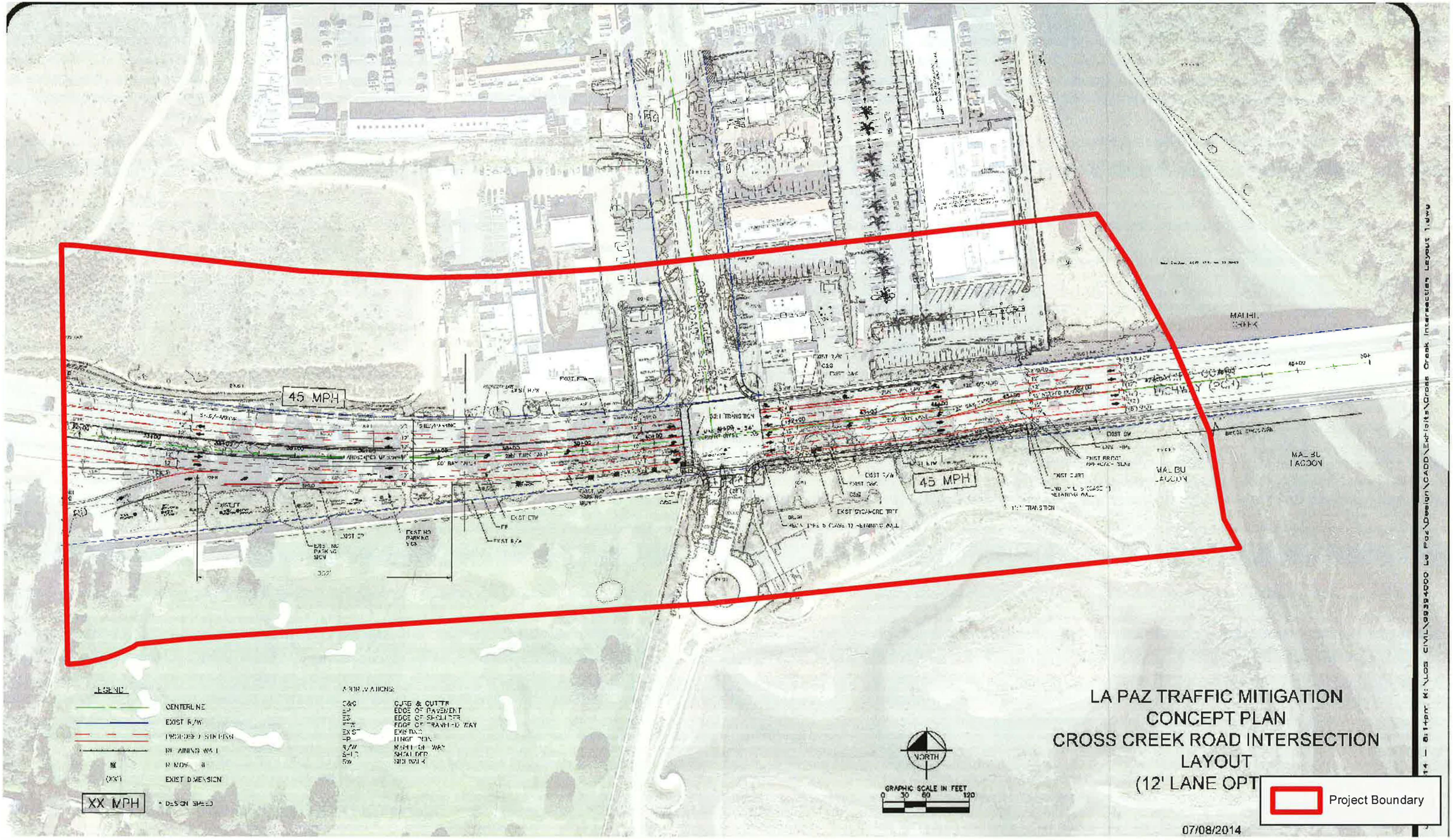
***Platanus racemosa–Salix lasiolepis* woodland/forest association** is a restoration area located adjacent to Malibu Creek north of Pacific Coast Highway. The dominant species in the restoration area include California sycamore, arroyo willow, mule fat, deergrass (*Muhlenbergia rigens*), California blackberry, yerba mansa, and giant wild rye. Approximately 0.6 acre occurs within the study area.



Project Site Location in Relation to ESHAs

PCH Cross Creek Improvement Project
Source: City of Malibu - LCP, 2014; PCR Services Corporation, 2014.

FIGURE
1



PCR

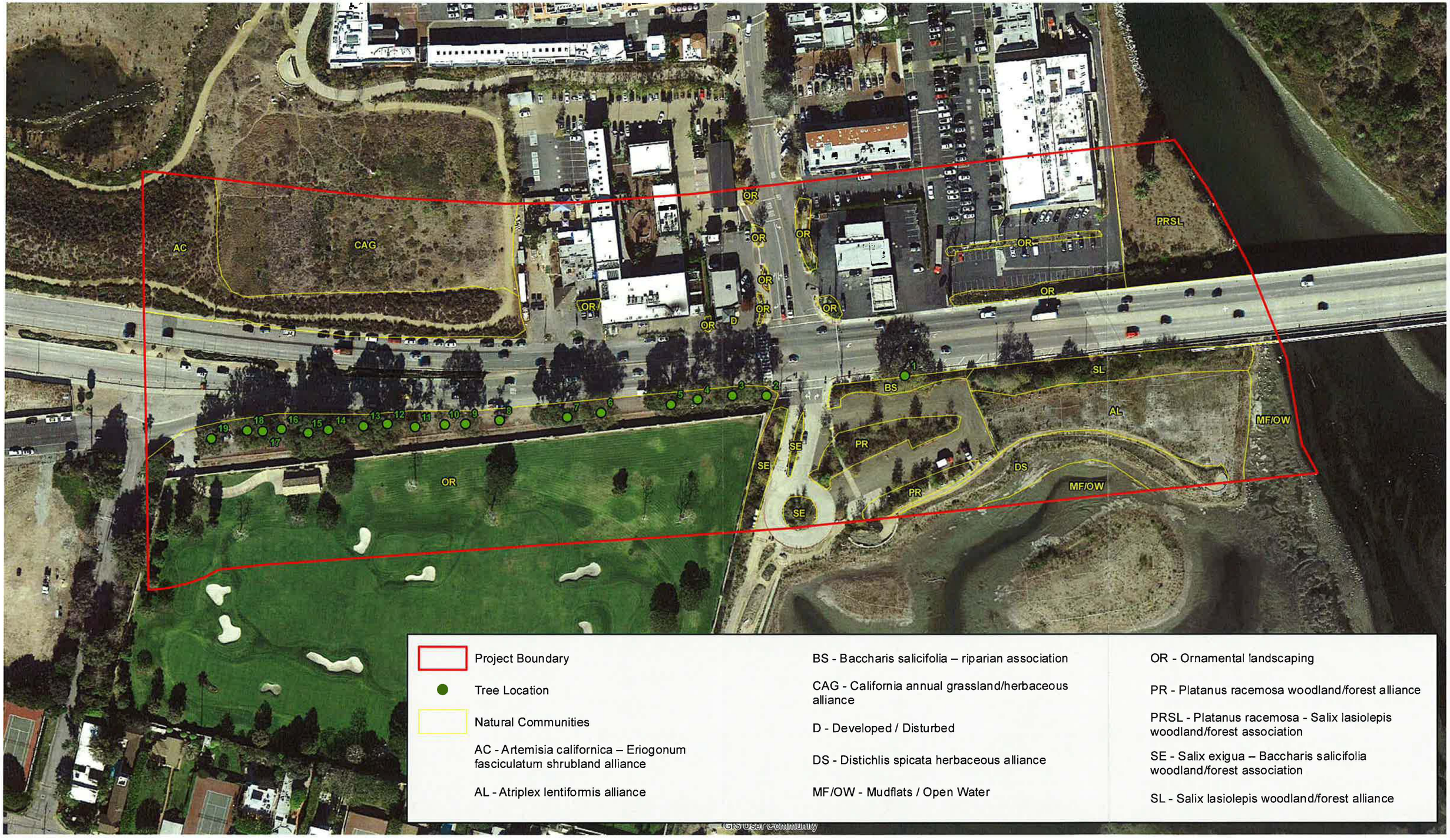
0 125 250 Feet

Site Plan

PCH Cross Creek Improvement Project

Source: Google Earth, 2013-12-10 (Aerial); Kimley & Horn, 2014; PCR Services Corporation, 2014.

FIGURE
2



PCR

Natural Communities

PCH Cross Creek Improvement Project

Source: Google Earth, 2013-12-10 (Aerial); PCR Services Corporation, 2014.

FIGURE 3

Ornamental landscaping areas are primarily non-native vegetation planted along parking lots, sidewalks, road medians, and within the golf course. The dominant species in these areas include African fountain grass (*Pennisetum setaceum*), Mexican fan palm (*Washingtonia robusta*), bougainvillea (*Bougainvillea buttiana*), blue gum (*Eucalyptus globulus*), and French lavender (*Lavandula stoechas*). Approximately 4.2 acres occur within the study area, including the golf course. In addition, there is about 8 acres of developed areas within the shopping center north of Pacific Coast Higwhay.

A list of plant species observed as common or otherwise noteworthy on site is provided in Exhibit C. This list is not intended to be exhaustive and certainly many more species may be found on site. Rather, the list is representative of the plant species characterizing the vegetation on site. In addition, only a few of the ornamental landscape species are included.

Wildlife

Observations of wildlife of the Site and adjacent areas were made during the site investigation. These are listed in Exhibit C along with other expected species. Due to the proximity of Malibu Lagoon State Beach and Legacy Park adjacent to the Pacific Coast Highway, more wildlife species than those listed undoubtedly could be observed on site as well. Moreover, the species listed in Exhibit C are representative of the various taxonomic groups that use the on-site vegetation as habitat. The status of the major wildlife taxonomic groups expected on site is described below.

No amphibians were observed or otherwise detected. However, a stream flows through Legacy Park which could potentially support amphibian species. This stream is located more than 150 feet away from the edge of Pacific Coast Highway and separated by a dry *Artemisia californica–Eriogonum fasciculatum* shrubland community.

Reptiles species observed on site consisted of two common lizard species. Several other reptile species are expected, particularly in the dense *Artemisia californica–Eriogonum fasciculatum* shrubland and California annual grassland/herbaceous communities in Legacy Park. In general, reptile populations on site are expected to be low due to disturbed nature of the area and abundant vehicular and pedestrian traffic in the vicinity.

A number of bird species characteristic of estuarine, upland, and sage scrub habitats were observed or heard. Within Malibu Lagoon State Beach, numerous shorebirds and riparian avian species were observed frequenting the various restoration areas and additional species are expected as the habitats continue to improve over time. The same is expected in the restoration areas in Legacy Park. In particular, the *Artemisia californica–Eriogonum fasciculatum* shrubland along the north side of Pacific Coast Highway is relatively dense and could potentially be a significant nesting area for numerous bird species.

Similarly for mammals, observations of individuals or evidence of the presence of several species were made during the site visit. A few other species are also expected. The abundance and diversity of mammals on site are expected to be low due to the disturbed nature of the area and the abundant vehicular and pedestrian traffic in the vicinity.

Sensitive Species and Habitats

While none of the natural communities listed above are considered sensitive habitats, the California Department of Fish and Wildlife Natural Diversity Database from the Malibu Beach and surrounding USGS quadrangles lists Southern California Coastal Lagoon as a sensitive habitat. All proposed work will be within the Pacific Coast Highway Caltrans right-of-way; hence, no direct impacts to the sensitive habitat within Malibu Lagoon State Beach will occur.

The Project Site plant communities are comprised of a wide array of plant species which often overlap several community types. Within the Santa Monica Mountains a number of these plant species are considered sensitive and have been assigned varying degrees of sensitivity by federal and State resources agencies and the California Native Plant Society (CNPS), depending on their rarity and threats to their habitats and populations. Thirty-three sensitive plant species were reported in the current edition of the California Department of Fish and Wildlife Natural Diversity Database from the Malibu Beach and surrounding USGS quadrangles. Of these thirty-three species, twenty-eight do not have the potential to occur on site due to the absence of soil types/habitats capable of supporting them and/or their being known to be endemic to specific geographical localities far removed from the site (six quadrangle search encompassed a large geographical area). The remaining plant species, **Braunton's milk-vetch** (*Astragalus brauntonii*), favors chaparral, coastal scrub and valley and foothill grassland; **southern tarplant** (*Centromadia parryi* ssp. *australis*)(CNPS 1B.1) can occur in marsh and swamp, salt marsh, valley and foothill grassland, and wetland habitat types; **decumbent goldenbush** (*Isocoma menziesii var. decumbens*) (CNPS 1B.2) favors coastal scrub and chaparral habitats; **Coulter's goldfields** (*Lasthenia glabrata* ssp. *coulteri*) (CNPS 1B.1) inhabits alkali playa, marsh and swamp, salt marsh, vernal pool, and wetland habitats; and **California Orcutt grass** (*Orcuttia californica*) favors vernal pool and wetland areas. Of these five plant species, Braunton's milk-vetch is federally endangered and California Orcutt grass is listed as federally and state endangered. Although there is a very low potential for these species to occur on site, their presence will likely not occur in areas proposed for vegetation removal or trimming along the edge of the highway. These species require adequate sunlight to grow and bloom which is precluded by the dense canopy cover along the boundaries of Malibu Lagoon State Beach and Legacy Park.

A wide range of invertebrates, fish, amphibians, reptiles, birds, and mammals are known from the Santa Monica Mountains and surrounding region, a number of which have been given legal protected status or special status designation by federal and state wildlife agencies. Thirty-eight special status animal species have been recorded within the Malibu Beach and surrounding USGS quadrangles. Of these, suitable habitat does not exist on site or the known occurrences of thirty of these species are far removed from the site vicinity; therefore, these thirty species are not expected. Of the remaining four species that have the potential to occur on site, the **American peregrine falcon** (*Falco peregrines anatum*) has full protection by the state; the **two-striped garter snake** (*Thamnophis hammondii*) and **San Diego desert woodrat** (*Neotoma lepida intermedia*) are listed as state Species of Special Concern (SSC); and the **monarch butterfly** (*Danaus plexippus*) has no formal federal or state protection.

As a taxonomic group, raptorial birds are also considered to be sensitive. Based on an examination of the trees along Pacific Coast Highway, in particular the eucalyptus and sycamore trees proposed for removal, no raptor nesting or roosting occurs on site or in the immediate vicinity.

No federal or state-listed threatened or endangered wildlife species were observed, are reported, or are expected to occur on site.

CHARACTERISTICS OF THE SURROUNDING AREA

Surrounding Land Uses

Existing land uses in the immediate vicinity of the site consists of commercial development with ornamental landscaping and a golf course. The Malibu Lagoon State Beach is the primary natural habitat in the area along with Malibu Creek and this area is a rich reserve supporting avian and aquatic biological resources.

POTENTIAL IMPACTS

The assessment of impacts to vegetation and habitats was based on an evaluation of the extent and sensitivity of natural communities to be potentially affected by the road improvements up to 200 feet from the proposed construction area.

Impacts to Vegetation and Wildlife

The primary impacts to biological resources associated with clearing and construction will be the removal of a double-trunked sycamore and six eucalyptus trees along the south side of Pacific Coast Highway. In addition, native vegetation, mostly consisting of toyon and lemonadeberry (*Rhus integrifolia*), along the northern fenced boundaries of Malibu Lagoon State Beach adjacent to Pacific Coast Highway could be impacted from the construction of a retaining wall. Direct loss or displacement of wildlife due to vegetation removal or trimming will depend on a particular species' mobility but will be minimal based on the project design of the work area being confined to the existing Pacific Coast Highway right-of-way. Nesting birds may be impacted if construction activities occur during nesting season (February 15 to August 31 for songbirds; January 15 to August 31 for raptors).

Impacts to Sensitive Resources

As discussed above, no State or federal rare, endangered or threatened plant species were observed or are expected to occur on Site. Therefore, no impacts to these "highest sensitivity" resources are expected.

Similarly, no State or federal rare, endangered or threatened animal species were observed or expected to occur on Site. Therefore, no impacts to these "highest sensitivity" resources are expected.

Potential Impacts to Downstream Aquatic Habitats

All soil surface disturbance activities have the potential to result in erosion and sedimentation in downstream areas. Project work is principally confined to the existing paved areas of Pacific Coast Highway and standard Best Management Practices (BMPs) for compliance with construction-related water quality protection will be required. In addition, the potential increase of impervious surfaces could incrementally increase storm flows from the highway into the storm drain system. The proximity of the proposed construction activities to Malibu Creek and Malibu Lagoon State Beach could result in deleterious sedimentation of adjacent riparian habitats that would mandate the use of BMPs for sediment control.

RECOMMENDED MITIGATION MEASURES

The analysis presented above accurately characterizes the impacts from the proposed project as being less than significant, in a regional context. It is recognized that Malibu Creek and Malibu Lagoon State Beach are important resources for which protection from sedimentation will be implemented. At the least, it is recommended that the following measures be incorporated into the proposed projects' development.

Erosion Control

1. Best management practices should be implemented to control erosion from construction areas and to avoid sedimentation in adjacent or downstream drainages, particularly Malibu Creek and Malibu Lagoon.

2. In order to minimize the potential introduction of non-native, invasive species, sterile straw waddles or other filtering material should be installed across areas cleared of vegetation as part of the erosion control measures.

Biological Resources

1. If construction activities will occur within January 15 to August 31, a pre-construction nesting bird survey should be conducted within 200 feet of the construction area no more than 3 days prior to project commencement. Although not observed during the field study, the trees along the construction area maintain potential for nesting birds and raptors.

2. Any clearing or thinning of native vegetation for retaining wall construction along Pacific Coast Highway immediately north of the Malibu Lagoon State Beach fence line should be replaced at a ratio of 1:1.

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EXHIBIT A

Site Photographs

Photograph 1: Sycamore to be removed, southeast corner of PCH-Cross creek

Photograph 2: Eucalyptus row south side of PCH.

Photograph 3: Looking west along the Legacy Park trail, north of PCH.

PCR

Site Photographs

PCH Cross Creek Project, Malibu
Source: PCR Services Corporation, 2014.

EXHIBIT
A

EXHIBIT B

Site Photographs

Photograph 4: Ornamental landscaping between shopping center parking lot and PCH, facing east.

Photograph 5: Vegetation along the fence line between PCH and Malibu Lagoon

Photograph 6: Coast sagebrush community in Legacy Park, north of PCH.

EXHIBIT C

Floral and Faunal Compendium

Exhibit C: Floral and Faunal Compendium

ANGIOSPERMS (DICOTYLEDONS)

SCIENTIFIC NAME	COMMON NAME
Adoxaceae	**Muskroot Family**
Sambucus nigra ssp. *caerulea*	blue elderberry
Aizoaceae	**Aizoon Family**
* *Aptenia cordifolia*	blue elderberry
Anacardiaceae	**Sumac Family**
Malosma laurina	laurel sumac
Rhus integrifolia	lemonade berry
Asteraceae	**Aster Family**
Ambrosia chamissonis	silver beachweed
Ambrosia psilostachya	western ragweed
Artemisia californica	California sagebrush
Artemisia vulgaris	mugwort
Baccharis pilularis	coyotebrush
Baccharis salicifolia	mule fat
Brickellia californica	California brickelbush
* *Centaurea melitensis*	tocalote
* *Centaurea solstitialis*	yellow star thistle
* *Conyza canadensis*	Canadian horseweed
Corethrogyne filaginifolia	common sandaster
Encelia californica	California encelia
Encelia farinosa	brittlebush
Hazardia squarrosa	sawtooth goldenbush
Isocoma menziesii	Menzies' goldenbush
Jaumea carnosa	marsh jaumea
Logfia filaginoides	California cottonrose
Malacothrix saxatilis	cliff aster
Stephanomeria virgata	rod wirelettuce
Boraginaceae	**Borage Family**
Amsinckia menziesii var. *intermedia*	common fiddleneck
Heliotropium curassavicum	salt heliotrope
Brassicaceae	**Mustard Family**
* *Hirschfeldia incana*	shortpod mustard
Chenopodiaceae	**Goosefoot Family**
Atriplex lentiformis	big saltbush
Salicornia depressa	Virginia glasswort
Suaeda californica	California seablite

* Non-native

ANGIOSPERMS (DICOTYLEDONS)

SCIENTIFIC NAME	COMMON NAME
Cleomaceae	**Cleome Family**
Peritoma arborea	bladderpod
Cuscutaceae	**Dodder Family**
Cuscuta californica	California dodder
Euphorbiaceae	**Spurge Family**
* *Euphorbia terracina*	geraldton carnation weed
* *Ricinus communis*	castor bean
Fabaceae	**Legume Family**
* *Melilotus albus*	sweet white clover
* *Melilotus indicus*	annual yellow sweetclover
Fagaceae	**Oak Family**
Quercus berberidifolia	scrub oak
Frankeniaceae	**Frankenia Family**
Frankenia salina	alkali heath
Grossulariaceae	**Gooseberry Family**
Ribes amarum	bitter gooseberry
Hydrophyllaceae	**Waterleaf Family**
Eucrypta chrysanthemifolia	common eucrypta
Lamiaceae	**Mint Family**
* *Lavandula stoechas*	French lavender
Salvia apiana	white sage
Salvia leucophylla	purple sage
Salvia mellifera	black sage
* *Stachys byzantina*	woolly hedgenettle
Malvaceae	**Mallow Family**
Malacothamnus fasciculatus	chaparrel bushmallow
Melastomataceae	**Melastome Family**
* *Tibouchina grandifolia*	princess flower
Myrtaceae	**Myrtle Family**
* *Eucalyptus globulus*	blue gum
Nyctaginaceae	**Four O'Clock Family**
* *Bougainvillea buttiana*	bougainvillea
Onagraceae	**Evening Primose Family**
Oenothera elata	Hooker's evening primose
Papaveraceae	**Poppy Family**
Eschscholzia californica	California poppy

* Non-native

ANGIOSPERMS (DICOTYLEDONS)

SCIENTIFIC NAME	COMMON NAME
Platanaceae	**Sycamore Family**
Platanus racemosa	California sycamore
Plumbaginaceae	**Leadwort Family**
Limonium californicum	California sealavender
Polygonaceae	**Buckwheat Family**
Eriogonum fasciculatum	California buckwheat
Eriogonum parvifolium	sea cliff buckwheat
Rosaceae	**Rose Family**
Heteromeles arbutifolia	toyon
Rubus ursinus	California blackberry
Salicaceae	**Willow Family**
Populus balsamifera ssp. *trichocarpa*	black cottonwood
Salix exigua	sandbar willow
Salix laevigata	red willow
Salix lasiolepis	arroyo willow
Saururaceae	**Lizard's-Tail Family**
Anemopsis californica	yerba mansa
Solanaceae	**Nightshade Family**
Datura wrightii	jimson weed
Verbenaceae	**Verbain Family**
* *Lantana montevidensis*	trailing lantana
Verbena lasiostachys	common verbena

ANGIOSPERMS (MONOCOTYLEDONS)

SCIENTIFIC NAME	COMMON NAME
Agavaceae	**Agave Family**
* *Agave americana*	century plant
Arecaceae	**Palm Family**
* *Washingtonia robusta*	Mexican fan palm
Asparagaceae	**Asparagus Family**
* *Liriope muscari*	lily turf
Cyperaceae	**Sedge Family**
Scirpus californicus	California bulrush
Juncus	**Rush Family**
Juncus effusus	common bog rush

* Non-native

ANGIOSPERMS (MONOCOTYLEDONS)

SCIENTIFIC NAME	COMMON NAME
Poaceae	**Grass Family**
* *Avena* sp.	wild oats
* *Bromus madritensis*	foxtail chess
* *Cynodon dactylon*	Bermuda grass
Distichlis spicata	saltgrass
Elymus condensatus	giant wild rye
Muhlenbergia rigens	deergrass
* *Pennisetum setaceum*	African fountain grass
Spartina foliosa	California cordgrass
Stipa lepida	foothill needle grass
Typhaceae	**Cattail Family**
Typha latifolia	common cattail

INVERTEBRATES

SCIENTIFIC NAME	COMMON NAME
Insecta (Order Lepidoptera)	**Butterflies and Moths**
Papilio rutulus	western tiger swallowtail

REPTILES

LACERTILIA	**LIZARDS**
Phrynosomatidae	**Zebratail, Earless, Horned, Spiny, Fringe-Toed Lizards**
Sceloporus occidentalis	western fence lizard
Xantusiidae	**Night Lizards**
Xantusia henshawi	granite night lizard

BIRDS

SCIENTIFIC NAME	COMMON NAME
PODICIPEDIFORMES	
Podicipedidae	**Grebes**
Podilymbus podiceps	pied-billed grebe

* Non-native

BIRDS

SCIENTIFIC NAME	COMMON NAME
SULIFORMES	
Phalacrocoracidae	**Cormorants**
Phalacrocorax auritus	double-crested cormorant
PELECANIFORMES	
Ardeidae	**Herons**
Egretta thula	snowy egret
GRUIFORMES	
Rallidae	**Rails and Gallinules**
Fulica americana	American coot
CHARADRIIFORMES	
Charadriidae	**Plovers**
Charadrius vociferus	killdeer
Laridae	**Gulls and Terns**
Larus occidentalis	western gull
COLUMBIFORMES	
Columbidae	**Pigeons and Doves**
Zenaida macroura	mourning dove
PASSERIFORMES	
Tyrannidae	**Tyrant Flycatchers**
Myiarchus cinerascens	ash-throated flycatcher
Sayornis nigricans	black phoebe
Corvidae	**Jays and Crows**
Corvus brachyrhynchos	American crow
Hirundinidae	**Swallows**
Hirundo rustica	barn swallow
Aegithalidae	**Bushtits**
Psaltriparus minimus	bushtit
Sturnidae	**Starlings**
* *Sturnus vulgaris*	European starling

MAMMALS

SCIENTIFIC NAME	COMMON NAME
Sciuridae	**Squirrels and Chipmunks**
Spermophilus beecheyi	California ground squirrel

* Non-native

Appendix E

Native Tree Protection Plan

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BioReg Consulting
Julia Strong
365 E. Avenida De Los Arboles, Suite 222
Thousand Oaks, CA 91360
(805) 657-2265

April 14, 2015

Mr. Dave Crawford
City Biologist – Planning Department
23825 Stuart Ranch Road
Malibu, CA 90265

Re: **Native Tree Protection Plan (February 12, 2015) Addendum (April 14, 2015) for the Malibu La Paz Ranch Intersection Improvement Project (CDP#14-036) for the Intersection of Cross Creek Road and PCH**

Dear Mr. Crawford,

On behalf of Malibu La Paz Ranch, LLC, BioReg Consulting is submitting this letter addendum to the previously prepared Native Tree Protection Plan (NTPP) for the Malibu La Paz Ranch Intersection Improvement Project. Below is a summary of the City requested changes to the plan, which shall be immediately effective and hereby incorporated into the approved plan, prepared on February 12, 2015.

Per the City of Malibu referral letter issued on March 31, 2015, the ten mitigations trees provided for in the NTPP will be comprised of 1-gallon seedlings thereby replacing the proposed large boxed trees as described in the prepared NTPP. Any previously stated references to large boxed trees in the plan should be replaced with 1-gallon seedlings. This change shall become effective immediately so that the protocols for native tree replacement are consistent with the City's Local Coastal Program (LCP) requirements. This does not change any of the previous findings, recommendations and other protocols for mitigation and monitoring.

The primary location of the mitigation shall remain at 23465 PCH (La Paz Property), The City of Malibu, California, 90265. In addition, ten 1-gallon seedlings will be planted onto the adjacent State Parks property (Malibu Lagoon & Surfrider Beach Property.) La Paz will coordinate with State Parks to appropriately locate, install, and maintain these ten trees per all mitigation and monitoring protocols as required by the City of Malibu.

We understand that there have been some questions related to the previously prepared tree report (early 2014.) The original report contemplated the possibility of retaining the single, two-trunk sycamore tree and was dependent upon Cal Trans permitting non-standard lane widths for PCH as specified in the La Paz EIR mitigation measures. However, after approximately a year of efforts by the applicant, preservation of the tree was determined to be infeasible and impermissible by Cal Trans. In order to retain standard lane widths, provide bike lanes, provide standard shoulder curb and gutters, and provide a dedicated right turn lane consistent with the State's Highway Design Manual, the applicant was required to widen the highway to the south. The southern widening was contemplated in the FEIR for La Paz' project and necessitates the removal of the Sycamore Tree.

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Following the determination from Cal Trans that the tree shall be removed, the applicant modified the design plans and resubmitted to Cal Trans and the City of Malibu. In February 2015, our office submitted a prepared an updated NTPP reflecting the removal of the Sycamore tree, which included the required mitigation and monitoring. The report on file with the City dated February 12, 2015 supersedes the previously prepared TPP (early 2014) therefore the 2014 report is no longer applicable to the project.

If you have any questions about the contents of this addendum letter, please feel free to contact me via email at jstrong@bioregconsulting.net or phone at (805) 657-2265.

Sincerely,

Julia Strong

Julia Strong
BioReg Consulting

365 E. Avenida de los Arboles | Suite 222 | Thousand Oaks, CA 91360 | 805.657.2265 | jstrong@bioregconsulting.net

Native Tree Protection Plan

23465 Civic Center Way
Malibu, California, 90265

Prepared For:

Malibu La Paz Ranch LLC
c/o Schmitz & Associates, Inc.
5234 Chesebro Road
Agoura Hills, CA 91301
Attn: Chris Deleau, AICP Special Projects Manager
(818) 338-3636

Prepared By:

BioReg Consulting
365 E. Ave. De Los Arboles, Ste.222
Thousand Oaks, CA, 91360
Contact: Julia Strong
(805) 657-2265

February 12, 2015

LIST OF FIGURES

Appendices

Appendix A – Full Set of Landscape Plans

Native Tree Protection Plan
23465 Civic Center Way
Malibu, California, 90265

INTRODUCTION

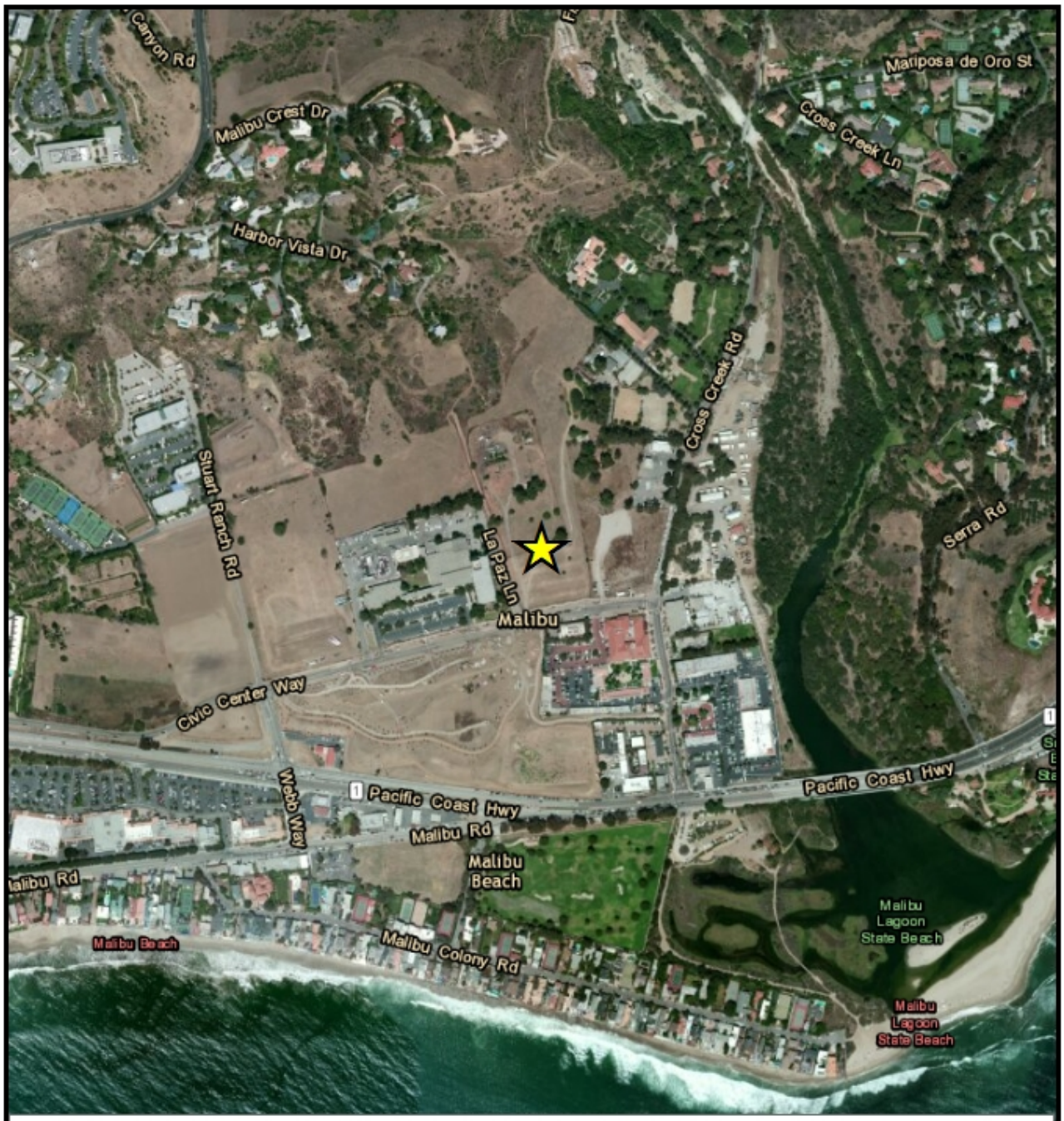
The purpose of this Native Tree Protection Plan is to provide the Malibu La Paz Ranch LLC, c/o Schmitz & Associates with information necessary to successfully mitigate for the loss of one, two trunk Western Sycamore (*Platanus racemosa*) tree located at 23350.5 Pacific Coast Highway in the City of Malibu. Pacific Coast Highway (PCH) improvements (CDP 14-036, CE 14-062) will require the removal of this tree. Per the City of Malibu Local Coastal Implementation Plan (LIP), the loss of the protected tree will require mitigation. The proposed mitigation includes planting of ten box Sycamore trees on the 23465 Civic Center Way commercial development with city hall (**Figure 1. Project Location**.) Additionally, this site will serve as mitigation for impacts to native trees that occur due to the development of the proposed listed project (CDP 05-107/CUP 05-004/LLA 05-004.) Native tree protection and mitigation and monitoring per the City of Malibu standards for the loss of this one, two trunk Sycamore tree *only* will be outlined in this report. Details regarding the Sycamore tree proposed for removal are included in a protected tree report prepared by Tree Life Concern, January 2014.

Project Location

As discussed above, the protected tree mitigation is located at 23465 Civic Center Way in the City of Malibu. (**Figure 1. Project Location**.) The property is located north of the PCH near Civic Center Way and Cross Creek Road on La Paz Lane.

Project Description

As discussed above the project outlined in this report details the required mitigation and monitoring for one, two trunk Western Sycamore tree which will be removed due to PCH improvements as part of the Cal Trans PCH widening project. Avoidance of removal of this two trunk Sycamore tree is not feasible in this situation due to the Cal Trans right of conditions for widening the highway in this location. Widening of the PCH to accommodate preserving this tree is not available in all directions (FEIR and MMRP – CDP 05-107.) It is per the requirement of Cal Trans that the tree be removed in order to properly widen the proposed highway expansion within this zone. In addition, public safety requirements per the FEIR for the La Paz project are set in place in accordance with traffic mitigation measures for the project. The highway must be expanded to full width, which encroaches upon the current location of the Sycamore tree (please see full submitted plans for the La Paz project illustrating the proposed highway expansion), located at Cross Creek Road and the PCH. Per the City of Malibu LIP, Chapter 5, projects that impact one or more native protected tree require mitigation and



LEGEND

Project Site ★

N

0 0.125 0.25 0.5
Kilometers

Figure 1: Project Location- Native Tree Protection Plan

Site Address: 3700 La Paz Lane, Malibu, CA. 90265
Applicant: Schmitz & Associates
Project Type: Commercial Development/with City Hall
Project Number: CDP 05-107/CUP 05-004/LLA 05-004
Project Planner: Stephanie Edmondson

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Source: ESRI; City of Malibu GIS, January 2015

monitoring. The proposed mitigation for the loss of the Sycamore tree described in this report includes the planting of ten western sycamore trees onto the 23465 Civic Center Way commercial development. This plan describes the mitigation and monitoring measures for those ten trees only. The total sycamore trees proposed for planting on the 23465 Civic Center Way property is 70, 60 of which are mitigation for other native tree impacts (**Figure 2. Proposed Sycamore Tree Planting Locations**.) Please see the full set of submitted landscape plans for the details and locations for the proposed tree plantings. Since preserving the Sycamore tree in its current location is not feasible, this off-site mitigation will be utilized to offset the impacts to the proposed removal of the Sycamore tree. Per the City of Malibu LIP Chapter 5, Section 5.5.1 and Section 5.5.2, an off-site mitigation and monitoring program shall be implemented.

MITIGATION/RESTORATION COMPONENTS

Biological Supervision/Inspection

Malibu La Paz Ranch, LLC will acquire a qualified biologist to oversee native planting activities associated with the protection of native trees within the City of Malibu. The biologist will also monitor the progress of the planting efforts for a period of five years, starting from the date of installation of plantings. A yearly monitoring report prepared by the biologist shall be submitted to the City each year. The monitor will be a specialist in recognizing native species and know how to identify progress or problems with relation to the western sycamore species. As needed, the biological monitor will work with landscape contractors and crew to provide recommendations for this species in efforts to ensure successful growth of ten western sycamore trees.

Schedule

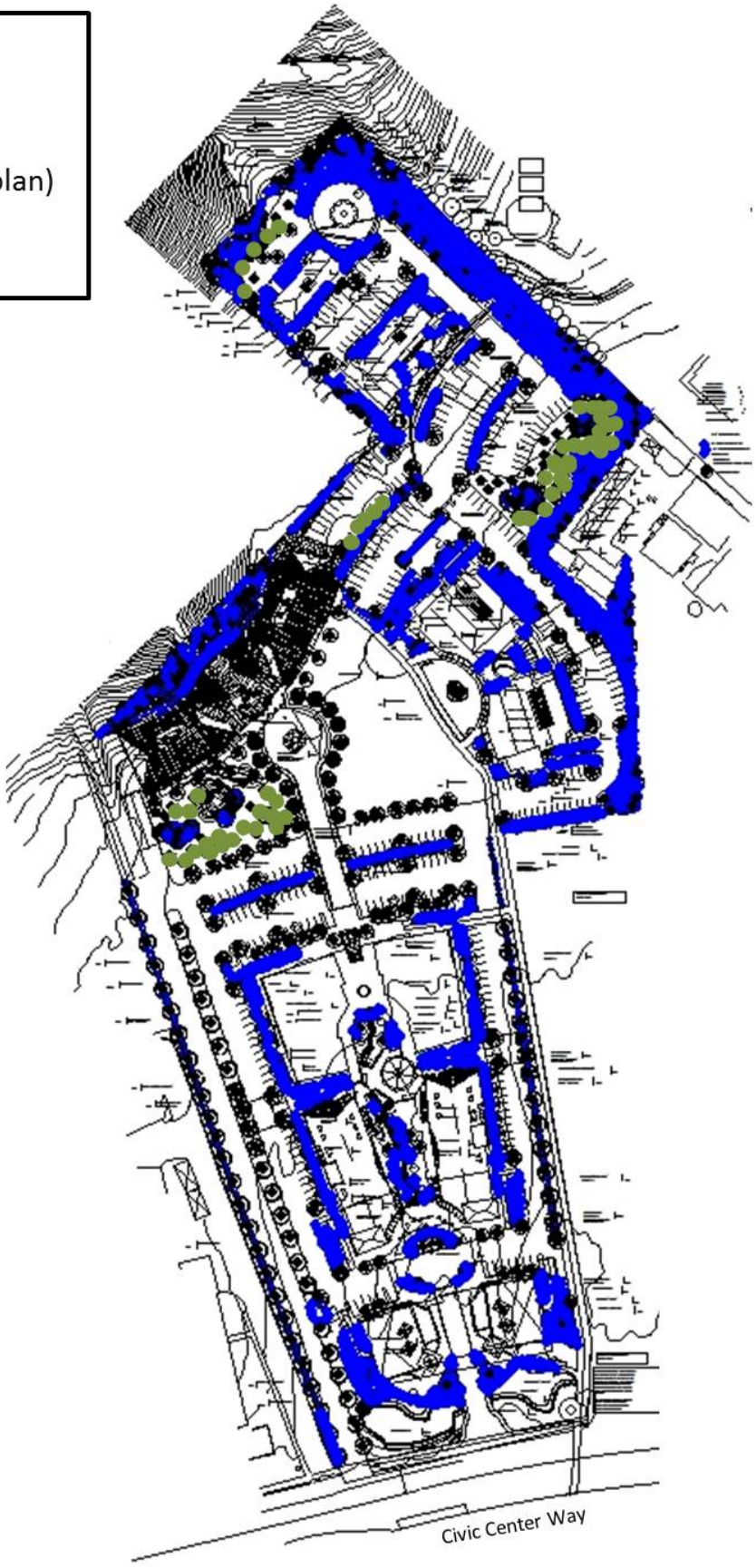
The project will be conducted in four separate phases. First, the 23465 Civic Center Way commercial development will commence as the PCH improvements begin. With the PCH improvements, the tree to mitigated for will be removed completely. Once the 23465 Civic Center Way development has competed and landscape is to begin, the mitigation program will begin. The mitigation program will start with plantings of ten western sycamore trees, seven will be 48 inch box trees and three will be 24 inch box trees. This starts the monitoring program for which quarterly visits to the mitigation location will be conducted. Each year a tree monitoring report will be submitted to the City describing the planted tree growth aesthetics, and health. The report will also include diagrams, photographs and any recommendations for the following year to increase tree growth success

Long-Term Protection

A landscape contractor or other qualified crew such as restoration contractors knowledgeable in local native species designated by Malibu La Paz Ranch, LLC shall be designated to maintain the mitigation site for the five-year monitoring and reporting period. The contractors designated by Malibu La Paz Ranch, LLC will be responsible for implementing the program outlined in this report, pursuant to the

LEGEND

- Proposed Sycamore Tree Locations (70 Trees Total)
- Proposed Vegetation (not part of this plan)
- Drip Irrigation System



N

0 1.25 2.5 5
Kilometers

Source: Wynn Landscape Architects, Inc. January 2015
Disclaimer: For diagrammatic purposes

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Figure 2: Proposed Sycamore Tree Locations- Native Tree Protection Plan

Site Address: 3700 La Paz Lane, Malibu, CA. 90265
Applicant: Schmitz & Associates
Project Type: Commercial Development/with City Hall
Project Number: CDP 05-107/CUP 05-004/LLA 05-004
Project Planner: Stephanie Edmonson

City of Malibu Native Tree Protection Mitigation and Monitoring guidelines. In addition, the contractors will be required to complete all requests for work recommended by the biological monitor and approved by Malibu La Paz Ranch, LLC. Particularly within the first few months and even years after planting, it is possible that the plantings would be vulnerable to external interferences. The first three years will require coordination with the acquired qualified biologist and landscape crew per Malibu La Paz Ranch, LLC designation.

Pre-Construction Measures and Protection of Existing Resources

Construction fencing shall be placed around any adjacent protected trees and vegetation at least five feet outside of their dripline for trees to be preserved, throughout the duration of the project.

To the extent feasible, heavy equipment shall not be operated on site during bird nesting season, which generally occurs between as early as February 1st and September 15th, or as determined by a qualified biologist in accordance with state and federal nesting bird survey protocols. In the event that any areas need equipment other than hand tools, the site shall be surveyed by a qualified biologist prior to any site preparation activities, to determine if active bird nests are present. If an active bird nest is located, the nest site shall be protected by installing temporary construction fencing, at the direction of the project biologist in all directions from the nest, until it is determined by the biologist that the nest is no longer active. Any other common and/or special status species surveys should be conducted prior to any construction activities. Surveys to be conducted should be determined by a qualified biologist.

Silt fencing must be properly installed around any areas of fresh or salt water, with the exception of those areas where approved work is being conducted

Proper installation of silt fencing involves burying the bottom of the silt fence six inches below the surface while bending the bottom of the fabric toward any uphill side and then backfilling over the bottom and maintaining lateral taut.

A biological monitor will be present during site preparation activities as needed to ensure that sensitive and preserved habitat areas will be protected.

MAINTENANCE

A landscape contractor or others designated by the responsible party will maintain the mitigation site for the five-year monitoring and reporting period. The contractors will be responsible for implementing the program outlined in this report. In addition, the contractors will be required to complete all requests for work that may be recommended by the acquired qualified biologist in order to ensure that

Malibu La Paz Ranch, LLC has upheld the responsibilities per the City of Malibu standards for protected tree replacement mitigation.

Irrigation

A temporary irrigation program will be implemented to ensure adequate water supply to specific areas of site, should the natural system lack necessary moisture. Duration of water flow and schedule will depend upon existing environmental conditions throughout the five-year monitoring period. The monitoring biologist will be aware of this and recommend a watering schedule.

PERFORMANCE STANDARDS

Performance standards are used to evaluate progress and success of the plantings, as well as express the objectives of the Native Tree Protection Plan in a measurable and objective format. Field measurements falling below these standards signal that the goals of the plan have not been reached. Dependent upon natural conditions and native propagation, data collected during monitoring may warrant adjustments to the performance standards.

This plan intends to establish 80 percent survivorship of planted sycamore tree species within five years. Plantings will be monitored for survivorship and replanted until approximately 80 percent survivorship of the original plantings is attained. Weed establishment and potential erosion problems will be frequently monitored and problems will be rectified as soon as identified. Identification of the reason for the failure to meet any of the performance criteria would be sought prior to corrective action being taken. Otherwise, corrective action may fail.

MONITORING

A monitoring program will be implemented to document performance of the tree plantings relative to a performance criteria, and to identify any shortcomings or problems in the restoration areas. Early detection of problems or other unforeseen issues allows for adaptive management and mid-course adjustments to be implemented that will maximize the likelihood of success.

Monitoring will generally include evaluations of site hydrology, tree establishment and vigor, indicators of use by wildlife, indicators of functional processes, site photographs, and any problems associated with trash disposal, herbivory, erosion caused by factors other than normal geophysical processes, or vandalism. Monitoring and performance standards are based on how well the tree planting and growth is occurring.

As-Built

As discussed, a dripline system will be implemented to ensure adequate water supply to specific areas of the mitigation site, should the natural system lack necessary moisture. At the time of completion of irrigation installation, an “as-built” native tree planting plan can be created to illustrate conditions of year one, implementation of mitigation. This “as-built” can include plant species and locations, and mapped irrigation lines. The monitoring biologist will assess the efficiency of the recommended watering regime throughout the first year’s monitoring period. Each year thereafter, adjustments may be made to the temporary irrigation system. The goal of the temporary irrigation system is to establish native sycamore tree species growth within the commercial development property. If species have established, they will sustain growth with no temporary irrigation for a period of two years (generally the last two years of the five-year monitoring period.)

Biological

A qualified biologist shall conduct biological monitoring. Tree plantings monitoring shall consist of monitoring individual trees for growth and survival, and overall tree composition. Monitoring will be performed on each individual tree. Individual trees will be measured for growth and health. This data will be used to determine whether performance standards on the growth and health of the initial tree plantings are being met and whether the plantings are performing in a similar manner to the existing associated habitat and those identical tree species populations. Mortality of species will be determined from this sampling and the need for replacement assessed.

Photo Stations

Permanent photo stations at specific locations within the plantings areas of these ten trees will be established at the time of planting. These “stations” incorporate a GPS’d location that can be identified on an aerial photograph and current landscape plans. These locations serve as situational data so that the photographs can be viewed in a “time-lapsed” manor in order to illustrate proper growth, which ensures the monitoring for five years has been successful. Site photographs will be taken from the photo stations during each monitoring session over the quarterly visits over the five-year monitoring period.

Reporting Schedule

Monitoring reports shall document the progress toward meeting the performance standards. This is a general list of what shall be included in the reports. Specific information to be included in the reports will be outlined in the first annual report. This information may or may not be included in the list below. Upond delivery of the first annual report to the City, the responsible party shall be open to suggestion of any other monitoring methods or criteria that the City of Malibu may require. Those revised measures shall be included into each year of monitoring for the ten Sycamore trees that will be

included in this plan on the La Paz Ranch property. The general contents of the monitoring reports can include the following:

- Methods and results of field data collection regarding the physical state of the site, evidence of hydrology, plant establishment, vigor, survival, and recruitment;
- Vegetation cover data, plant survivorship, and invasive vegetation cover percentages;
- Comparison of current site conditions with previous conditions (i.e., results of baseline and earlier monitoring);
- Performance of site restoration relative to success criteria;
- Problems with the restoration areas and any recommended remedial actions;
- Maintenance activities performed during the previous monitoring cycle; and

  Photographs from established photo stations.

An annual monitoring report summarizing results shall be submitted to The City of Malibu, on or before February 1st, beginning the year after completion of planting installations and continuing throughout the monitoring period. Results to date, success or failure in meeting the criteria for the year and any further actions necessary will be discussed in the reports. The reports will present and analyze data collected during monitoring, and summarize all methods utilized and their effectiveness. Photo documentation from standardized sites, contingency actions, irrigation, and erosion events and repair would also be discussed.

Completion of Mitigation

Upon completion of the mitigation, a final report would be prepared and provided to The City of Malibu on or before February 1st, or a determined date by the City biologist, of the fifth year of data collection.

Adaptive Management and Contingency Strategy

It is the intent of this native tree protection plan to establish healthy western sycamore trees that are self-sustaining and require little maintenance. Monitoring will provide the direction necessary to carry the mitigation process from initial planting on to establishment. The site will be monitored at prescribed intervals for five years from the initial planting date. Quantitative and qualitative data may be collected and compared to a series of performance criteria that target each phase of the enhancement process.

If the quantitative vegetation sampling indicates that site plant growth has fallen below performance standards and unaided recovery is not likely, action would need to be taken. First, the cause of the failure to meet standards must be evaluated. Box tree stock death and poor growth may be symptoms of poor soil, dry soil, weed growth, disease, or disturbance. Once the problem has been identified, a

strategy for correcting the problem would be developed and then implemented. After verifying the correction of the problem, replanting or seeding may need to be performed.

Appendix F

Caltrans Correspondence

DEPARTMENT OF TRANSPORTATION
100 SOUTH MAIN STREET
LOS ANGELES, CA 90012
PHONE (213) 897-0362
FAX (213) 897-0360

Flex your power!
Be energy efficient!

October 16, 2014

Jasch Janowicz
Contract Planner, City of Malibu
23825 Stuart Ranch Road
Malibu, CA 90265-4861

PLANNING DEPT.

Re: Coastal Development Permit (CDP) No. 14-036 – Proposed roadway improvements along Pacific Coast Highway at the Cross Creek Road intersection

Dear Mr. Janowicz:

This is in reference to your June 23, 2014 letter to Mr. Joseph Meisinger of Schmitz and Associate, requesting review and approval of the proposed improvements at the intersection of Cross Creek Road and Pacific Coast Highway, in the City of Malibu.

As you are aware, the proposed improvements at this intersection are part of the mitigation measures that Malibu La Paz Ranch LLC (La Paz) is obligated to perform in order to alleviate the negative impacts of their development.

The attached plan that shows this specific required mitigation at the subject intersection has conceptually been approved for submittal and Caltrans has no objection to these improvements being implemented. The improvements and modifications have been designed in accordance with the current State Standards to the extent possible under the prevailing constraints and once constructed would enhance public safety and improve efficiency in traffic operations.

Should you have any questions, please feel free to contact me.

Sincerely,

Omid Ghaemi, PE
Acting, District Permit Engineer
213-897-3667

Attachment: 09-25-2014, updated 10-16-2014 LA PAZ mitigation concept plans, Cross Creek Rd int. Layout

DEPARTMENT OF TRANSPORTATION
DISTRICT 7
100 S. MAIN STREET, SUITE 100
LOS ANGELES, CA 90012
PHONE (213) 897-0362
FAX (213) 897-0360
TTY 711
www.dot.ca.gov

Serious drought.
Help save water!

RECEIVED
MAY 29 2014
PLANNING DEPT

May 9, 2014

Joyce Parker- Bozylinski
Planning Director, City of Malibu / Coastal Commission Delegate
23825 Stuart Ranch Road,
Malibu, CA 90265

RE: Pacific Coast Highway (PCH) - Malibu La Paz Ranch LLC (La Paz) Development

Dear Ms. Bozylinski

This letter is in reference to the Malibu La Paz Ranch LLC (La Paz) proposed commercial development (Project) in the City of Malibu, the Project's traffic impacts on PCH along with Caltrans' required mitigation measures along impacted intersections on PCH. Issuance of this letter shall serve as Caltrans input to one element affected by these mitigations; which is the removal of certain sycamore trees at the intersection of Pacific Coast Highway (PCH) and Cross Creek Road.

Malibu La Paz Ranch LLC proposes to develop a 15.29 acres commercial property at 22465 Civic Center Way containing 132,058 sq. ft. Commercial and Civic Center Complex. La Paz is required to provide mitigations to a segment of PCH that includes the intersections of PCH and Webb Way as well as Cross Creek Road. The mitigation measure at Cross creek Road is to add a right turn lane on westbound PCH. One of the elements impacted by this improvement is the sycamore trees within existing Caltrans right-of-way on the south side of PCH, east of the subject intersection, hindering the implementation of this portion of the mitigations.

La Paz will file for a Coastal Commission Permit to remove the subject trees in order to design and construct the required mitigation in accordance with the current State Standards. Caltrans has "no objection" to the removal of these trees. The required improvements, once constructed to design standards, would not only alleviate the negative impacts at this intersection, but also enhance public safety and improve efficiency in traffic operation for all users including bicyclists and pedestrians.

Should you have any questions, please call Omid Ghaemi at 213.897.3667.

Sincerely,

Sam Alameddine
Interim, District Permit Engineer
District 7 - Division of Traffic Operations

Appendix G

La Paz Development Agreement Final EIR Mitigation Monitoring Program

X. MITIGATION MONITORING PROGRAM

INTRODUCTION

This section reflects the mitigation monitoring and reporting program (MMRP) requirements of Public Resources Code Section 21081.6. CEQA Guidelines Section 15097 states:

> *"…In order to ensure that the mitigation measures and project revisions identified in the EIR or negative declaration are implemented, the public agency shall adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects. A public agency may delegate reporting or monitoring responsibilities to another public agency or to a private entity which accepts the delegation; however, until mitigation measures have been completed the lead agency remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with the program."*

ENFORCEMENT

In accordance with CEQA, the primary responsibility for making a determination with respect to potential environmental effects rests with the lead agency rather than the Monitor or preparer of the EIR. As such, the City of Malibu is identified as the enforcement agency for this Mitigation Monitoring and Reporting Program.

PROGRAM MODIFICATION

After review and approval by the lead agency, minor changes to the MMRP are permitted but can only be made by the City of Malibu. No deviations from this program shall be permitted unless the MMRP continues to satisfy the requirements of Section 21081.6 of the California Environmental Quality Act (CEQA), as determined by the Lead Agency.

MITIGATION MONITORING AND REPORTING PROGRAM

The organization of the MMRP follows the subsection formatting style as presented within the La Paz Development Agreement Draft EIR. Subsections of all of the environmental chapters presented in the Draft EIR are provided below in Table X-1. For environmental issue areas where no mitigation measures were required, the MMRP is noted accordingly.

Table X-1
Mitigation Monitoring Program

Mitigation Measure/Condition of Approval	Action Required	Monitoring Phase	Responsible Agency or Party	Compliance Verification		
				Initial	Date	Comments
V.A Aesthetics/Views						
(A-1) All open areas not used for buildings, driveways, parking areas, or walkways shall be attractively landscaped and maintained in accordance with a landscape plan, with native plant species, to the satisfaction of the City Planning Department. The final Landscape Plan shall be in substantial compliance with the Conceptual Landscaping Plan illustrated in Figure V.A-6 and shall include a row of sycamore trees, which shall be planted 15 feet apart trunk to trunk on center along the northeasterly property boundary and Australian willow and coast live oak around buildings 10 and 11, west of the road.	• Plan approval	• Prior to construction.	City of Malibu Environmental and Community Development Department			
(A-2) Outdoor lighting shall incorporate low-level lighting fixtures and shall be designed and installed with directional shields so that the light source cannot be seen from adjacent land uses.	• Plan approval	• Prior to construction.	City of Malibu Environmental and Community Development Department			
(A-3) The exterior of the proposed buildings shall be constructed of non-reflective	• Plan approval	• Prior to construction	City of Malibu Environmental			

Mitigation Measure/Condition of Approval	Action Required	Monitoring Phase	Responsible Agency or Party	Compliance Verification		
				Initial	Date	Comments
building materials.			and Community Development Department			
V.B Air Quality						
(B-1) The construction area and vicinity (500-foot radius) shall be swept (preferably with water sweepers) and watered at least twice daily.	• Field check to confirm measures are implemented.	• During construction.	City of Malibu Department of Engineering Services			
(B-2) All unpaved roads, parking and staging areas shall be watered at least once every two hours of active operations.	• Field check to confirm measures are implemented.	• During construction.	City of Malibu Department of Engineering Services			
(B-3) Site access points shall be swept/washed of visible dirt deposition at the end of each workday	• Field check to confirm measures are implemented.	• During construction.	City of Malibu Department of Engineering Services			
(B-4) On-site stockpiles of debris, dirt or rusty material shall be covered or watered at least twice daily.	• Field check to confirm measures are implemented.	• During construction.	City of Malibu Department of Engineering Services			

Mitigation Measure/Condition of Approval	Action Required	Monitoring Phase	Responsible Agency or Party	Compliance Verification		
				Initial	Date	Comments
B-5) All haul trucks hauling soil, sand, and other loose materials shall either be covered or maintain two feet of freeboard.	• Field check to confirm measures are implemented.	• During construction.	City of Malibu Department of Engineering Services			
(B-6) All haul trucks shall have a capacity of no less than twelve and three-quarter (12.75) cubic yard.	• Field check to confirm measures are implemented.	• During construction.	City of Malibu Department of Engineering Services			
(B-7) At least 80 percent of all inactive disturbed surface areas shall be watered on a daily basis when there is evidence of wind-driven fugitive dust.	• Field check to confirm measures are implemented.	• During construction.	City of Malibu Department of Engineering Services			
(B-8) Operations on any unpaved surfaces shall be suspended when winds exceed 25 mph.	• Field check to confirm measures are implemented.	• During construction.	City of Malibu Department of Engineering Services			
(B-9) Traffic speeds on unpaved roads shall be limited to 15 miles per hour.	• Field check to confirm measures are implemented.	• During construction.	City of Malibu Department of Engineering Services			

Mitigation Measure/Condition of Approval	Action Required	Monitoring Phase	Responsible Agency or Party	Compliance Verification		
				Initial	Date	Comments
(B-10) Operations on any unpaved surfaces shall be suspended during first and second stage smog alerts.	• Field check to confirm measures are implemented.	• During construction.	City of Malibu Department of Engineering Services			
V.C Biological Resources						
(C-1) Nesting birds are protected by both the California Department of Fish and Game (CDFG) Code and the federal Migratory Bird Treaty Act (MBTA). Removal of, or encroachment into existing on-site vegetation, should be restricted to off-peak bird nesting season, which typically occurs between February 1 and August 30. Should vegetation/tree removal be required during this period, the Applicant shall obtain the services of a qualified biologist, approved by the City, to conduct a series of nesting bird surveys consistent with CDFG recommended nesting bird surveys protocol methods in effect at the time. Any active nests shall be marked and exclusionary fencing shall be placed at a 10-foot radius around the nest (300 feet for raptors). The exclusionary fencing shall remain in place until such time that the biologist determines that the nest is no longer active. All equipment and human activity shall be excluded from	• Grading permit approval	• Prior to site grading/tree removal	City of Malibu Department of Environmental and Community Development			

Mitigation Measure/Condition of Approval	Action Required	Monitoring Phase	Responsible Agency or Party	Compliance Verification		
				Initial	Date	Comments
these areas during active nesting without exception. Should the actual construction of nests be observed by the project biologist, he/she may, with direction from the regional CDFG wildlife biologist, remove the nesting materials and/or dissuade further construction of the nest provided no egg-laying has begun						
(C-2) All disturbed and non-vegetated areas of the site must be watered daily during vegetation clearance and grading to minimize the generation of fugitive dust	• Field check to confirm measures are implemented.	• During site preparation and grading	City of Malibu Department of Engineering Services			
(C-3) Prior to the initiation of vegetation clearance and grading, a qualified biologist or ecologist shall monitor the site and attempt to clear the proposed grading area of wildlife. The monitor will be present while all vegetation is removed, and shall direct the equipment operator to avoid impacts to wildlife through normal minimization techniques.	• Field check to confirm measures are implemented.	• Prior to/during site preparation and grading	City of Malibu Department of Environmental and Community Development			
(C-4) Native vegetation shall be used in the landscaping pallet to the greatest extent feasible as required by the City of Malibu in the project's landscaping plan pursuant to mitigation measure A-1 at page V.A-14.	• Plan approval	• Prior to construction	City of Malibu Department of Environmental and Community Development			

Mitigation Measure/Condition of Approval	Action Required	Monitoring Phase	Responsible Agency or Party	Compliance Verification		
				Initial	Date	Comments
(C-5) The lighting plan should be designed in consultation with the City Biologist or a qualified ecologist familiar with best management building practices. All lighting should be of low luminescence, directed downward or toward structures, and shielded to the extent necessary to protect nocturnal biological resources, pursuant to mitigation measure A-2 at page V.A-15.	• Plan approval	• Prior to construction	City of Malibu Department of Environmental and Community Development			
(C-6) Native protected tree species (i.e., sycamore) removed on-site shall be replaced in accordance with the Tree Mitigation Plan approved by the City Biologist. The approved plan includes the removal of 6 trees and a replacement on-site at a better than 10:1 ratio.	• Plan approval	• Prior to construction	City of Malibu Department of Environmental and Community Development			
(C-7) Contribution to a restoration program for CSS in the Santa Monica Mountains to an established conservation organization or governmental agency on a 1:1 creation (2:1 enhancement) per/acre basis; or	• Plan approval	• Prior to construction	City of Malibu Department of Environmental and Community Development			
(C-8) Contribution to an established conservation organization or governmental agency in the Santa Monica Mountains to assist with purchase and set-aside of existing CSS habitat in the Santa Monica Mountains on	• Plan approval	• Prior to construction	City of Malibu Department of Environmental and Community			

Mitigation Measure/Condition of Approval	Action Required	Monitoring Phase	Responsible Agency or Party	Compliance Verification		
				Initial	Date	Comments
a 2:1 per/acre basis.			Development			
V.D Cultural Resources						
(D-1) In the event that archaeological resources are encountered during the course of grading or construction, all development must temporarily cease in these areas until the resources are properly assessed and subsequent recommendations are determined by a qualified consultant.	• Field check to confirm measures are implemented.	• During construction.	City of Malibu Department of Environmental and Community Development			
(D-2) In the event that human remains are discovered, there shall be no disposition of such human remains, other than in accordance with the procedures and requirements set forth in California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98. These code provisions require notification of the County Coroner and the Native American Heritage Commission, who in turn must notify those persons believed to be most likely descended from the deceased Native American for appropriate disposition of the remains. Excavation or disturbance may continue in other areas of the Project Site that are not reasonably suspected to overlie adjacent remains or cultural resources. If undiscovered evidence of prehistoric artifacts is	• Field check to confirm measures are implemented.	• During site preparation, grading and soils excavation.	City of Malibu Department of Environmental and Community Development			

Mitigation Measure/Condition of Approval	Action Required	Monitoring Phase	Responsible Agency or Party	Compliance Verification		
				Initial	Date	Comments
discovered construction activities in the affected areas shall not proceed until written authorization is granted by the City of Malibu Planning Manager						
V.E Geology and Soils						
(E-1) The proposed project shall be constructed in accordance with the geotechnical engineering recommendations as presented in the Engineering Geological and Geotechnical Engineering Reports (and subsequent Responses to City Comments), for the Proposed Malibu-La Paz Ranch, LLC, Civic Center Way, City of Malibu California, by Gold Coast GeoServices, Inc.	• Field check to confirm measures are implemented.	• During construction.	City of Malibu Department of Engineering Services			
(E-2) All uncertified fill material placed within the fault trenches shall be removed and replaced as 90 percent compacted fill during the planned site preparations and rough grading.	• Field check to confirm measures are implemented.	• During site preparation and grading.	City of Malibu Department of Engineering Services			
(E-3) Temporary dewatering and discharge activities shall be monitored by the dewatering contractor and conducted in strict accordance with the Los Angeles Regional Water Quality Control Board's Order No. R4-2003-0111 (Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in	• Field check to confirm measures are implemented.	• During grading, soils excavation and construction.	City of Malibu Department of Engineering Services			

Mitigation Measure/Condition of Approval		Action Required	Monitoring Phase	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
	Coastal Watersheds of Los Angeles and Ventura Counties (General Permit No. CAG994004).						
(E-4)	As recommended by the Project Geotechnical Engineer, all structures located within the "moderate and high" risk surface manifestation hazard areas that are not situated atop parking structures shall be provided with a minimum 10-foot thick 90% compacted fill blanket It is recommended that the compacted fill blanket be reinforced with Tensar BX1200 geogrid or equivalent placed at two-foot vertical intervals up to two feet below the planned finish rough grade pad. Recommendations addressing over-excavation, installation of geogrid and backfilling of these areas shall be provided during the plan check approval process that addresses temporary stability of construction excavations and bottoms.	• Plan approval; Field check to confirm measures are implemented.	• Prior to construction; During construction.	City of Malibu Department of Engineering Services			
(E-5)	The structural engineer shall provide a letter along with supporting information, prior to plan check approval, indicating that the proposed buildings can tolerate the anticipated total and differential movements, or that site-specific geotechnical recommendations will be required	• Plan approval.	• Prior to construction.	City of Malibu Department of Engineering Services			

Mitigation Measure/Condition of Approval	Action Required	Monitoring Phase	Responsible Agency or Party	Compliance Verification		
				Initial	Date	Comments
(E-6) The proposed structures should be constructed utilizing post-tensioned foundation systems and post-tensioned slabs-on-grade designed by the project structural engineer.	• Plan approval.	• Prior to construction.	City of Malibu Department of Engineering Services			
(E-7) The Project Geotechnical Consultant shall provide appropriate geotechnical recommendations for restrained walls and include recommendations for damp-proofing or waterproofing and means for removing any water collected (e.g., sump pump), in accordance with the City's Geotechnical Guidelines.	• Plan approval.	• Prior to construction	City of Malibu Department of Engineering Services			
(E-8) Complete grading plans that include the existing and proposed grades, grading yardages, proposed subterranean parking, the limits and depths of removals under the structures and flatwork areas, and grading cross-sections have been submitted to City Geotechnical staff for review. Remedial grading to mitigate liquefaction and other geotechnical hazards must be clearly defined in grading yardages, and illustrated on the Plans. Such plans submitted during final plan check shall reflect the concept plans in this EIR	• Plan approval	• Prior to construction.	City of Malibu Department of Engineering Services			
(E-9) The Applicant shall obtain final construction plan approval (CDP) for the proposed onsite wastewater treatment systems (OWTS) from the City	• Plan approval	• During construction.	City of Malibu Department of Engineering			

Mitigation Measure/Condition of Approval	Action Required	Monitoring Phase	Responsible Agency or Party	Compliance Verification		
				Initial	Date	Comments
Environmental Health Administrator. Final approval of construction plans is subject to the conditions enumerated in the October 4, 2006 Conformance Review by the City's Environmental Health Administrator. The Environmental Health Administrator found that the OWTS is feasible and meets the City's requirements. The final design must be engineered to meet the effluent limits specified in WDRs, taking into account the Malibu Lagoon bacteria and nutrient total maximum daily load (TMDL) requirements of the Regional Water Quality Control Board (RWQCB) and the United States Environmental Protection Agency (USEPA).			Services			
V.F Hydrology/Water Quality						
(F-1) The project shall comply with all requirements of the National Pollutant Discharge Elimination System (NPDES) General Permit.	• Plan approval; Field check to confirm measures are implemented.	• Prior to construction	City of Malibu Department of Engineering Services			

Mitigation Measure/Condition of Approval	Action Required	Monitoring Phase	Responsible Agency or Party	Compliance Verification		
				Initial	Date	Comments
(F-2) The contractor shall contact the local California State Water Resources Board with any questions concerning Resolution No 2001-046 and to determine if the Project Site will require storm water sampling during construction activities.	• Contact WRB; Field check to confirm measures are implemented.	• During construction.	Applicant; City of Malibu Department of Engineering Services			
(F-3) The Proposed Project shall conform to its WQMP as reviewed by the City of Malibu in concept and comply with the BMPs in the Jensen Design and Survey and the October 2006 approval of the City's Environmental Health Coordinator.	• Field check to confirm measures are implemented.	• Prior to and during construction.	City of Malibu Department of Engineering Services			
(F-4) The Proposed Project shall meet the requirements of the City of Malibu's Flood Plain Management Ordinance, Ordinance No. 110.	• Plan approval	• Prior to construction.	City of Malibu Department of Engineering Services			

Mitigation Measure/Condition of Approval	Action Required	Monitoring Phase	Responsible Agency or Party	Compliance Verification		
				Initial	Date	Comments
(F-5) A Water Quality Mitigation Plan is required to reduce pollutants from the sites. Best Management Practices (BMPs) are required and may include, but are not limited to, the following. Additionally BMPs can be found in the California Storm Water Best Management Practice Handbooks for Municipal and Commercial Activities, dated March 1993. a. Public education b. Good housekeeping practices c. Storm drain stenciling and signs d. Catch basin/storm drain cleaning e. Sweep/vacuum parking and drive areas f. Material storage control. The drainage plan in the WQMP shall substantially conform to the concept grading and drainage plan in Figures V.F-2 and V.F-3. The WQMP shall be implemented through a maintenance covenant and submitted to the City for review on an annual basis for the life of the project.	• Field check to confirm measures are implemented; Annual submittal of a maintenance covenant to the City of Malibu.	• Post-Construction.	City of Malibu Department of Engineering Services			
(F-6) A detention basin shall be provided that is properly designed and maintained to meet both County SUSMP requirements and City Ordinance 157 to retain or	• Plan approval.	• Prior to construction.	City of Malibu Department of Engineering			

Mitigation Measure/Condition of Approval	Action Required	Monitoring Phase	Responsible Agency or Party	Compliance Verification		
				Initial	Date	Comments
filter initial rainfall.			Services			
(F-7) Ongoing BMPs outlined in the approved Water Quality Mitigation Plan shall be implemented by owners and tenants	• Notification to owners/tenants regarding obligation to implement BMP's.	• Post-construction.	City of Malibu Department of Engineering Services			
(F-8) Long-term, regular maintenance of treatment wetlands shall be required indefinitely. Maintenance should include cleaning of pretreatment areas (dredging of sediment forebays, trash removal, backwashing of sand filters, etc.), harvesting of plant biomass, removal of exotic species and replanting of desired species. All maintenance work shall be scheduled to avoid critical breeding and nesting periods for wetlands species.	• Annual review of a maintenance covenant.	• Post-construction.	City of Malibu Department of Engineering Services			

Mitigation Measure/Condition of Approval	Action Required	Monitoring Phase	Responsible Agency or Party	Compliance Verification		
				Initial	Date	Comments
(F-9) The Applicant has obtained final feasibility approval for the proposed onsite wastewater treatment systems (OWTS) for Parcel A, Parcel B, and the City Hall Projects from the City Environmental Health Specialist. In accordance with Chapter 18.4(D) of the City's Local Coastal Plan- Local Implementation Plan (LCP-LIP) the proposed OWTS shall be engineered to meet the effluent limits specified in WDRs, taking into account the Malibu Lagoon bacteria and total maximum daily load requirements (TDMLs) of the RQWCB and the USEPA.	• Plan approval	• Pre-construction.	City of Malibu Department of Engineering Services			
V.G Land Use and Planning						
(G-1) Grading and Drainage Plans shall be submitted to the Environmental Building and Safety Division for approval with the final Site Plan and Building Plans. No grading permits shall be issued until final building plans have been approved.	• Plan approval	• Pre-construction.	City of Malibu Department of Environmental and Community Development			
(G-2) All wastewater shall be treated and managed on-site by the project operators in accordance with all applicable rules and regulations of the County of Los Angeles Health Department. The location of all proposed and abandoned wastewater treatment systems shall be depicted on	• Plan approval	• Pre-construction.	City of Malibu Department of Engineering Services t			

Mitigation Measure/Condition of Approval		Action Required	Monitoring Phase	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
	the final building plans for the City's approval.						
(G-3)	The projects shall be developed in accordance with all site-specific hydrologic, geologic studies and final recommendations from the City Geologist or City Engineer.	• Plan approval	• Pre-construction.	City of Malibu Department of Engineering Services			
(G-4)	Approval of the Proposed Project shall be contingent on approval of a Coastal Development Permit from the City of Malibu, approval of a Zone Text Amendment, and upon effective certification of the Development Agreement by the CCC.	• CDP approval; Development Agreement certification.	• Pre-construction.	City of Malibu Department of Environmental and Community Development			
V.H Noise							
(H-1)	Construction contracts shall specify that all construction equipment shall be equipped with mufflers and other suitable noise attenuation devices.	• Include requirement for noise attenuation in all construction contracts.	• Pre-construction.	Applicant			
(H-2)	All residential units located within 700 feet of the construction site shall be sent a notice regarding the construction schedule of the Proposed Project. A sign, legible at a distance of 50 feet shall also be posted at the construction site. All notices and the signs shall indicate the dates and duration of construction activities, as well as provide a telephone number where residents can inquire about the	• Notification of construction schedule to adjacent residents.	• Pre-construction.	City of Malibu Department of Environmental and Community Development			

Mitigation Measure/Condition of Approval		Action Required	Monitoring Phase	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
	construction process and register complaints.						
(H-3)	The Project Developer shall designate a "noise disturbance coordinator" who shall be responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and would be required to implement reasonable measures such that the complaint is resolved. All notices that are sent to residential units within 700 feet of the construction site and all signs posted at the construction site shall list the telephone number for the disturbance coordinator.	• Designation of a noise disturbance coordinator.	• Pre-construction.	Applicant			
(H-4)	Consistent with the City of Malibu Noise Ordinance (Section 4204 G), construction shall be limited to the hours of 7:00 a.m. to 7:00 p.m. on weekdays and 8:00 a.m. to 5:00 p.m. on Saturdays, and prohibited on Sundays and holidays. Special circumstances may arise where construction activities are permitted during prohibited hours by expressed written permission of the City Manager, or if construction is necessary to preserve life or property when such necessity arises (Section 4205 D).	• Limit hours of construction	• During construction.	City of Malibu Department of Environmental and Community Development			

Mitigation Measure/Condition of Approval	Action Required	Monitoring Phase	Responsible Agency or Party	Compliance Verification		
				Initial	Date	Comments
V.I-1 Public Utilities (Electricity)						
(I-1) If connection of electricity services will result in a service disruption to surrounding properties, this connection must be done at a time of day that is the least inconvenient	• Schedule service disruptions	• During construction	Applicant			
(I-2) If a disruption to electricity services must occur, notice shall be provided to all affected properties of the service disruption	• Provide notice	• During construction	Applicant			
(I-3) High-efficiency air conditioning controlled by a computerized energy-management system shall be installed	• Plan approval	• Pre-construction	City of Malibu Department of Engineering Services			
(I-4) Built-in appliances and space-conditioning equipment should exceed the minimum efficiency levels mandated by Title 24.	• Plan approval	• Pre-construction	City of Malibu Department of Engineering Services			
(I-5) Air shall be cascade ventilated from high-priority areas before being exhausted, thereby decreasing the volume of ventilation air required.	• Plan approval	• Pre-construction	City of Malibu Department of Engineering Services			

Mitigation Measure/Condition of Approval	Action Required	Monitoring Phase	Responsible Agency or Party	Compliance Verification		
				Initial	Date	Comments
(I-6) Lighting system heat shall be recycled for space heating during cool weather.	•	•				
(I-7) Low and medium static-pressure terminal units and ductwork shall be installed, and buildings shall be well sealed, to reduce energy consumption by air-distribution systems.	• Plan approval	• Pre-construction	City of Malibu Department of Engineering Services			
(I-8) A performance check of the installed space conditioning system shall be completed prior to the issuance of a certificate of occupancy.	• Building Inspector sign-off	• Construction	City of Malibu Department of Engineering Services			
(I-9) Exterior walls shall be finished with light-colored materials and high-emissivity characteristics to reduce cooling loads.	• Plan approval	• Pre-construction	City of Malibu Department of Environmental and Community Development			
(I-10) White reflective roofing material shall be used to meet standards and reflect heat.	• Plan approval	• Pre-construction	City of Malibu Department of Engineering Services			
(I-11) Thermal installation shall be installed in walls and ceilings which exceeds Title 24 regulations.	• Plan approval	• Pre-construction	City of Malibu Department of Engineering			

Mitigation Measure/Condition of Approval	Action Required	Monitoring Phase	Responsible Agency or Party	Compliance Verification		
				Initial	Date	Comments
			Services			
(I-12) Window systems shall be designed to reduce thermal gain and loss, and shall be fitted with heat-rejecting window treatments, thus reducing cooling loads during warm weather and heating loads during cool weather.	• Plan approval	• Pre-construction	City of Malibu Department of Engineering Services			
(I-13) Fluorescent and high-intensity-discharge (HID) lamps shall be installed inside as well as outside.	• Plan approval	• Pre-construction	City of Malibu Department of Engineering Services			
(I-14) Photo sensitive controls and dimmable electronic ballasts shall be installed to maximize the use of natural daylight and thus reduce the artificial lighting load.	• Plan approval	• Pre-construction	City of Malibu Department of Engineering Services			
(I-15) Occupant controlled light switches and thermostats shall be installed.	• Plan approval	• Pre-construction	City of Malibu Department of Engineering Services			
(I-16) Time controlled interior and exterior lighting shall be installed.	• Plan approval	• Pre-construction	City of Malibu Department of Engineering Services			

Mitigation Measure/Condition of Approval	Action Required	Monitoring Phase	Responsible Agency or Party	Compliance Verification		
				Initial	Date	Comments
(I-17) Passive solar inset of windows or windowless walls shall be incorporated	• Plan approval	• Pre-construction	City of Malibu Department of Engineering Services			
V.I-2 Public Utilities (Natural Gas)						
No mitigation measures are required.	N/A	N/A	N/A	N/A	N/A	N/A
V.I-3 Public Utilities (Water)						
(I-18) The Applicant shall comply with the requirements of Water District 29 and the LACFD by providing the infrastructure needed to connect to the existing 12-inch water main located in the centerline of Civic Center Way, "T" off from that main and extend new water mains onto and within the project site to serve hydrants throughout the project in accordance with the provisions of the LACFD Code (Title 32) and the specifications listed in the Existing Fire Department Fire Flow/Hydrant Location and Access approvals (see Figure V.J-2 Fire Accessibility Site Plan) and any applicable regulations of the Water District 29.	• Plan approval	• Pre-construction	City of Malibu Department of Engineering Services			

Mitigation Measure/Condition of Approval	Action Required	Monitoring Phase	Responsible Agency or Party	Compliance Verification		
				Initial	Date	Comments
(I-19) The Project Applicant shall be responsible for any fees adopted by the City of Malibu and generally and uniformly imposed by the City of Malibu's Environmental and Building Safety Department for construction of new water supply and distribution facilities.	• Plan approval	• Pre-construction	City of Malibu Department of Engineering Services; Los Angeles County Waterworks District 29, and the Los Angeles County Fire Department.			
(I-20) Automatic sprinkler systems shall be set to irrigate landscaping during early morning hours or during the evening to reduce water loss from evaporation. Care must be taken to reset sprinklers to water less often in cooler months and during the rainfall season to avoid wasting water by excessive landscape irrigation.	• Irrigation management	• Operation	Property Owner			
(I-21) Selection of native, drought-tolerant, low water consuming plant varieties shall be used to reduce irrigation water consumption to the maximum extent feasible, as reflected in the project's landscape plan; Mitigation Measure A-1, at page V.A-14.	• Plan approval	• Pre-construction	City of Malibu Department of Environmental and Community Development			
(I-22) Reclaimed irrigation via the OWTS and/or recycled water shall be used where possible for irrigation of	• Plan approval	• Pre-construction	City of Malibu Department of			

Mitigation Measure/Condition of Approval	Action Required	Monitoring Phase	Responsible Agency or Party	Compliance Verification		
				Initial	Date	Comments
landscaping.			Environmental and Community Development			
V.I-4 Public Utilities (Wastewater)						
(I-23) Detailed plans for the OWTS shall be submitted to the City of Malibu Environmental and Building Safety Department for review and approval.	• Plan approval	• Pre-construction	City of Malibu Environmental and Building Safety Department			
(I-24) The project Applicant shall obtain a Waste Discharge Permit from the Los Angeles Regional Water Quality Control Board (LARWQCB) prior to building permit issuance.	• Obtain permit	• Pre-construction	Los Angeles Regional Water Quality Control Board (LARWQCB)			
(I-25) The project Applicant shall obtain an Operating Permit from the City of Malibu Environmental and Building Safety Department prior to construction.	• Obtain permit	• Pre-construction	City of Malibu Environmental and Building Safety Department			
(I-26) Effluent for gray water/re-use irrigation in designated areas on-site shall at all times be a disinfected, high quality,	• Comply with requirements of RWQCB for	• Operation	Los Angeles Regional Water Quality Control			

Mitigation Measure/Condition of Approval		Action Required	Monitoring Phase	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
	filtered reclaimed water and shall not exceed the effluent quality limits of the RWQCB's Total Daily Maximum Load (TDML) requirements for the Malibu Creek Watershed.	reclaimed water		Board (LARWQCB)			
V.I-5 Public Utilities (Solid Waste)							
(I-27)	The Proposed Project shall recycle all construction debris in a practical, available, and accessible manner, to the maximum extent feasible, during the demolition and construction phases.	• Recycle	• Pre-construction and Construction	City of Malibu Department of Environmental and Community Development			
(I-28)	Where economically feasible, the Proposed Project shall incorporate the use of recycled materials in building materials, furnishing operations and building maintenance	• Plan Approval; Permit Approval	• Construction and Operation	City of Malibu Department of Environmental and Community Development			
(I-29)	The design of the Proposed Project shall allocate space for a recycling collection area for use by both on-site employees and visitors.	• Plan Approval	• Pre-construction	City of Malibu Department of Environmental and Community Development			
V.J-1 Public Services (Fire Protection)							

Mitigation Measure/Condition of Approval	Action Required	Monitoring Phase	Responsible Agency or Party	Compliance Verification		
				Initial	Date	Comments
(J-1) The Project shall comply with all applicable code and ordinance requirements for construction, emergency access, water main fire flows and fire hydrants.	• Plan Approval	• Pre-construction	Los Angeles County Fire Department			
(J-2) The Applicant shall pay a uniformly applied developer fee or an in-kind consideration in lieu of developer fees, to provide funds for fire protection facilities which are required by new commercial, industrial or residential development in an amount proportionate to the demand created by the Proposed Project. Currently, the developer fee is a set amount per square foot of building space, adjusted annually, and is due and payable at the time a building permit is issued.	• Pay fee	• Pre-construction	City of Malibu Environmental and Building Safety Department			
(J-3) Development may require fire flows up to 2,625 gallons per minute at 20 pounds per square inch residual pressure for up to a two-hour duration, and as specified by the Los Angeles County Fire Department. Final fire flows will be based on the size of the buildings, their relationships to other structures, property lines, and types of construction used.	• Plan Approval	• Pre-construction	Los Angeles County Fire Department			
(J-4) Fire hydrant spacing shall be 300 feet and shall meet the following requirements: a) No portion of lot frontage shall be more than 200 feet via vehicular	• Plan Approval	• Pre-construction	Los Angeles County Fire Department			

Mitigation Measure/Condition of Approval	Action Required	Monitoring Phase	Responsible Agency or Party	Compliance Verification		
				Initial	Date	Comments
access from a public fire hydrant. a) No portion of a building shall exceed 400 feet via vehicular access from a properly spaced public fire hydrant. Additional hydrants will be required if hydrant spacing exceeds specified distances.						
(J-5) Turning radii shall not be less than 32 feet. This measurement shall be determined at the centerline of the road. A Fire Department approved turning area shall be provided for all driveways exceeding 150 feet in length and at the end of all cul-de-sacs. The on-site driveway is to be within 150 feet of all portions of the exterior walls of the first story of any building. All on site driveways shall provide a minimum unobstructed width of 26 feet, clear-to-sky. The 26 foot width will be increased to: a) 34 feet in width when parallel parking is allowed on one side of the access roadway/driveway. Preference is that such parking is not adjacent to the structure. b) 42 feet in width when parallel parking is allowed on each side of the access roadway/driveway.	• Plan Approval	• Pre-construction	Los Angeles County Fire Department			
(J-6) "Fire Lanes" are any ingress/egress, roadway/driveway with paving less than 34 feet in width, and will be clear-to-sky. All "Fire Lanes" will be depicted	• Plan Approval	• Pre-construction	Los Angeles County Fire			

Mitigation Measure/Condition of Approval		Action Required	Monitoring Phase	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
	on the final map.			Department			
(J-7)	For streets and driveways with parking restrictions, the entrance to the street/driveway and intermittent spacing distances of 150 feet shall be posted with Fire Department approved signs stating "NO PARKING – FIRE LANE" in three-inch high letters. Driveway labeling is necessary to ensure Fire Department access.	• Plan approval	• Pre-construction	City of Malibu Environmental and Building Safety Department			
(J-8)	All proposals for traffic calming measures (speed humps/bumps, traffic circles, roundabouts, etc.) shall be submitted to the Fire Department for review prior to implementation.	• Plan approval	• Pre-construction	Los Angeles County Fire Department			
(J-9)	As required by Section 1117.2.1 of the County Fire Code, a Fuel Modification Plan, a landscape plan and an irrigation plan shall be submitted to the LACFD prior to construction. Said plans shall be reviewed and approved by the Forestry Division of the County of Los Angeles Fire Department for reasonable fire safety	• Plan approval	• Pre-construction	Los Angeles County Fire Department			
V.J-2 Public Services (Police Protection)							
(J-10)	During construction, the Proposed Project shall: (1) implement a security system; (2) hire private security personnel; and (3) erect perimeter fencing.	• Plan approval	• Pre-construction	City of Malibu Environmental and Building Safety			

Mitigation Measure/Condition of Approval	Action Required	Monitoring Phase	Responsible Agency or Party	Compliance Verification		
				Initial	Date	Comments
			Department			
(J-11) A 6-foot high wrought iron fence shall be constructed along the northern perimeter of the property sufficient to prevent or discourage pedestrians from accessing the Malibu Knolls neighborhood on foot via the hillside.	• Plan approval	• Pre-construction	City of Malibu Department of Environmental and Community Development			
V.K. Transportation and Circulation						
(K-1) Webb Way & PCH - Mitigating project impacts at the intersection of Webb Way & PCH would entail re-striping/widening Webb Way between PCH and Civic Center Way to provide a six-lane cross-section with three lanes in each direction. The northbound departure currently provides two travel lanes and widening along the east side of Webb Way north of PCH would be necessary to accommodate the additional northbound lane. The widening of Webb Way to provide a six-lane cross-section would increase the storage capacity on Webb Way in an effort to minimize the potential for overflow conditions. The addition of dual left turn lanes to the eastbound approach on PCH is also recommended; this would entail	• Plan approval	• Pre-construction	Los Angeles County Department of Transportation			

Mitigation Measure/Condition of Approval		Action Required	Monitoring Phase	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
	narrowing the raised center median. The existing travel lanes on PCH at this intersection are substandard (i.e., less than 12 feet wide). This mitigation can fit within the existing traveled way with substandard lane widths (less than 12 feet); the resulting lane configuration would consist of a raised median, an 11- and 10-foot left turn lane, one 11-foot through lane, two 10-foot through lanes, and one 11-foot right-turn lane. Shifting the east and west legs of the intersection (approach and departure) several feet to the north would allow the standard width lanes with this mitigation. Additionally, a guide sign shall be posted facing the eastbound dual left turns from PCH onto Webb Way, so that motorists who wish to make a subsequent right turn onto east bound Civic Center Way would be directed to the "Number 2" left turn lane. The sign may have to be mounted overhead.						
(K-2)	Cross Creek Road & PCH - The impact of project traffic on the intersection of Cross Creek Road & PCH could be mitigated by the addition of a right-turn lane westbound on PCH. This mitigation would improve the traffic movement along westbound PCH. If Caltrans does not approve of non-	• Plan approval	• Pre-construction	Los Angeles County Department of Transportation; Caltrans			

Mitigation Measure/Condition of Approval		Action Required	Monitoring Phase	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
	standard narrower lane widths, then roadway widening on the south side of PCH on the approach and departure legs would allow the standard width lanes for this mitigation measure.						
(K-3)	Webb Way & Civic Center Way – Mitigating the project impact would entail installing a new traffic signal and widening Webb Way to a six-lane cross section south of the intersection of Civic Center Way. The northbound approach and the eastbound approach would each be re-striped to include one left-turn lane, one through lane, and one right-turn lane. The southbound approach would be widened to provide one left-turn lane and one shared through/right lane. Widening the east side of Webb Way between PCH and Civic Center Way would be necessary for the proposed six-lane cross section. Results of this signal warrant are provided in the project traffic study (see Appendix G)..	• Plan approval	• Pre-construction	Los Angeles County Department of Transportation			
V.L. Environmental Hazards							
(L-1)	The Project Developer shall obtain all necessary permits from the RWQCB prior to the installation of any temporary and/or permanent dewatering systems. Procurement of all applicable RWQCB permits will ensure the water	• Obtain permit	• Pre-construction	RWQCB			

Mitigation Measure/Condition of Approval		Action Required	Monitoring Phase	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
	quality of groundwater discharge into the storm drain infrastructure.						
(L-2)	A demolition-level asbestos survey by a licensed contractor shall be conducted for the existing on-site structures. If the survey reveals that these structures contain ACMs, the structures shall be stabilized, removed, and disposed of in accordance with applicable regulations, including but not limited to, SCAQMD Rule 1403 and Cal/OSHA requirements.	• Obtain permit	• Pre-demolition	SCAQMD; City of Malibu Environmental and Building Safety Department			
(L-3)	During the demolition of existing structures, building materials shall be handled and disposed of in accordance with applicable local, State, and federal regulations regarding lead-containing materials.	• Obtain permit	• Pre-demolition	City of Malibu Environmental and Building Safety Department			
(L-4)	Fluorescent light ballasts not specifically labeled as not to contain PCBs shall be presumed to contain them and shall be disposed of in accordance with applicable regulations, including but not limited to, Cal/OSHA requirements.	• Obtain permit	• Pre-demolition	City of Malibu Environmental and Building Safety Department			