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# MALIBU PARKS PUBLIC ACCESS ENHANCEMENT NATIVE TREE PROTECTION PLAN

*Prepared for:*

## **Mountains Recreation and Conservation Authority**

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JANUARY 2010



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## 1.0 INTRODUCTION

The Santa Monica Mountains Conservancy and the Mountains Recreation and Conservation Authority (MRCA) is proposing the County of Los Angeles Malibu Local Coastal Program Land Use Plan (Coastal LUP) for the Malibu and Santa Monica Mountains area, an improvement program that includes a comprehensive set of policies and development standards, and identifies specific actions and park improvements intended to enhance public access and recreation opportunities for specific park properties and recreation areas within the City of Malibu and Los Angeles County. The Coastal LUP would enhance public access and recreation opportunities by developing an interconnected system of parks, open space, trails, and habitats; to improve alternative methods of transportation between parklands; and to identify recreational facility and program improvements for the park properties, including new parking, camping, day-use and trailhead improvements, to support existing recreational demand and to facilitate an increased level of accessibility for disabled visitors. In overview, the plan area includes, Ramirez Canyon Park, Escondido Canyon Park, Latigo Trail Head, Corral Canyon Park, and Malibu Bluffs Open Space (Figure 1).

This Native Tree Protection Plan provides a summary of Dudek's inventory and evaluation of the trees located within the area proposed for the Coastal LUP (the "Project Site"). Dudek conducted a tree inventory and assessment of the Project Site according to the City of Malibu Local Coastal Program (LCP). Dudek arborists, certified by the International Society of Arboriculture (ISA), performed various functions associated with surveying, inventorying, and evaluating the condition of trees within the project area, as described in the following sections. The purpose of this report is to present the physical characteristics, mapped locations, and impact levels and appropriate mitigation for the proposed project and two alternatives for the project areas' native trees. The project areas are located in the City of Malibu. As such, this report conforms to the regulations and requirements included within the City of Malibu's Certified LCP. The tree quantities and related project impacts (including the proposed project and two alternatives) have been analyzed and are reported in the following sections.

## 1.1 Project Location and Description

The proposed project plan area encompasses public parkland from Ramirez Canyon Park at the westernmost portion of the plan area, and recreation areas that extend from Corral Canyon Park and the Latigo Trailhead in the central portion of the project area to Escondido Creek and the Malibu Bluffs Open Space to the east (Figures 1 and 2). The plan focuses on establishing trail connections to adjacent National Park Service parklands, in addition to trail, and park-specific improvements proposed for the parks and open space. A description of each of the existing parklands within the plan area is provided below.

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## 1.1.1 Ramirez Canyon Park

Ramirez Canyon Park encompasses approximately 22 acres in Ramirez Canyon off the Malibu coastline and is bordered by National Park Service land to the north, and private residential land to the south (Figure 2). The park includes five structures that once served as residences on six separate lots. The park includes a manicured landscape area, as well as areas to the extreme north and southeast that are largely undisturbed.

Because Ramirez Canyon Park has a number of pre-existing structures, gardens, and designed hardscape on a large footprint of the overall property, rather than the open natural habitat typically associated with other park properties, this park serves to provide a range of diverse environmental, cultural, and educational opportunities for both passive and active recreation activities. The more developed nature of the park lends itself well to function as a place for special, pre-arranged activities, events, and functions typically permitted by the State Parks system for the benefit of the community and visitors.

Ramirez Canyon Park is bisected by the City of Malibu-County of Los Angeles jurisdictional boundary. Access to the property is provided by gated vehicular access roads from Pacific Coast Highway via Ramirez Canyon Road or via West Winding Way and Deleplane, and then through a gated entrance at the terminus of Ramirez Canyon Road.

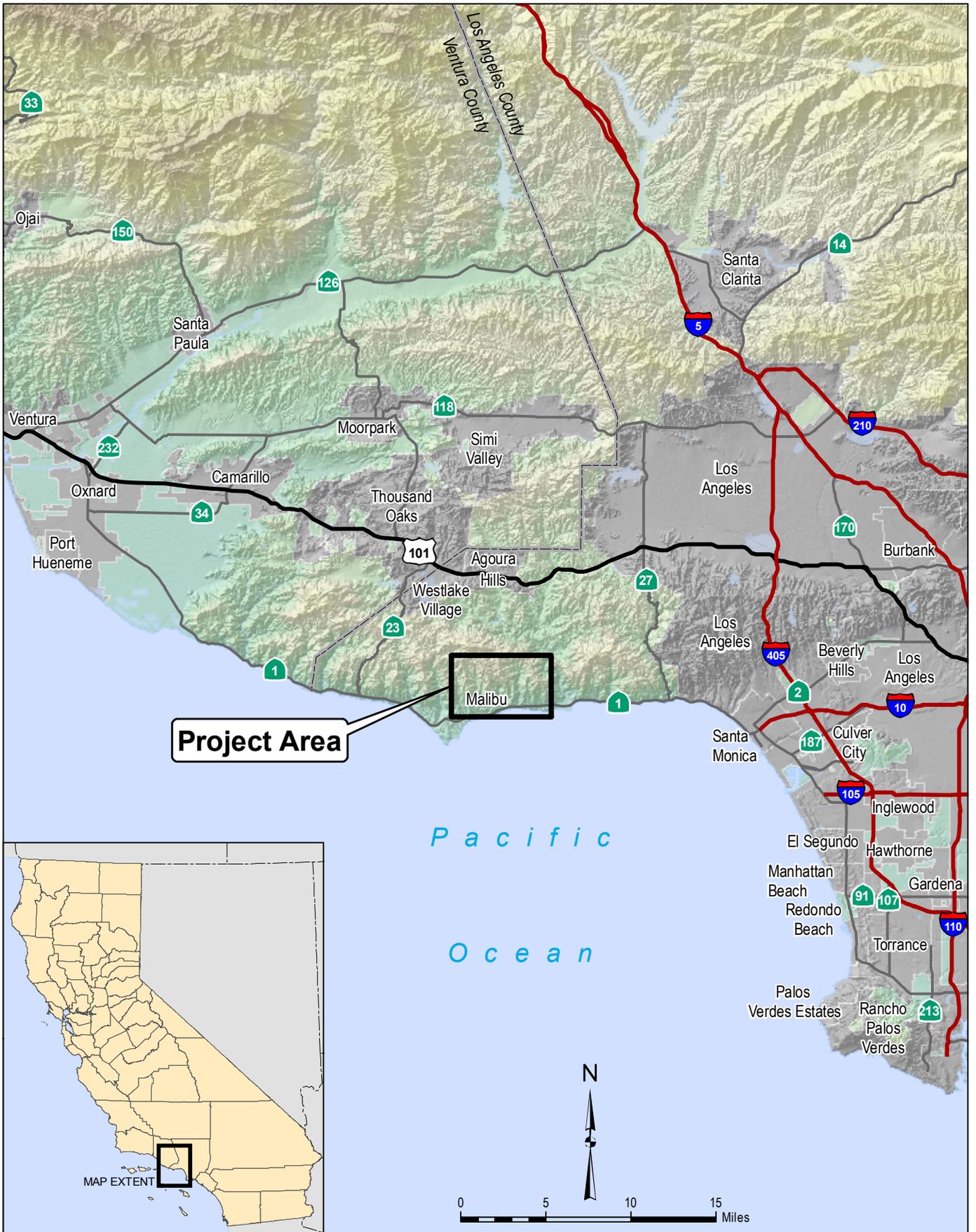
### **Natural Resources**

Ramirez Canyon Park is traversed by Ramirez Canyon Creek within the west and southernmost portions of the property, and encompasses extensive stands of native coastal sage scrub and chaparral habitat along the canyon walls and northern portion of the property which is adjacent to National Park Service land.

## 1.1.2 Escondido Canyon Park

Escondido Canyon Park is located approximately 1 mile east of Kanan Dume Road in the City of Malibu, California (Figure 2). The park is approximately 140 acres in size and is, for the most part, surrounded by privately owned land. The park consists of open land vegetated with a variety of native and non-native plant and tree species.

The park is only accessible by the public via pedestrian access along the road shoulder of East Winding Way from a parking lot located on Winding Way at Pacific Coast Highway, approximately one mile south of the park boundary. A roadside dirt trail then takes access from the terminus of Winding Way onto the park property.

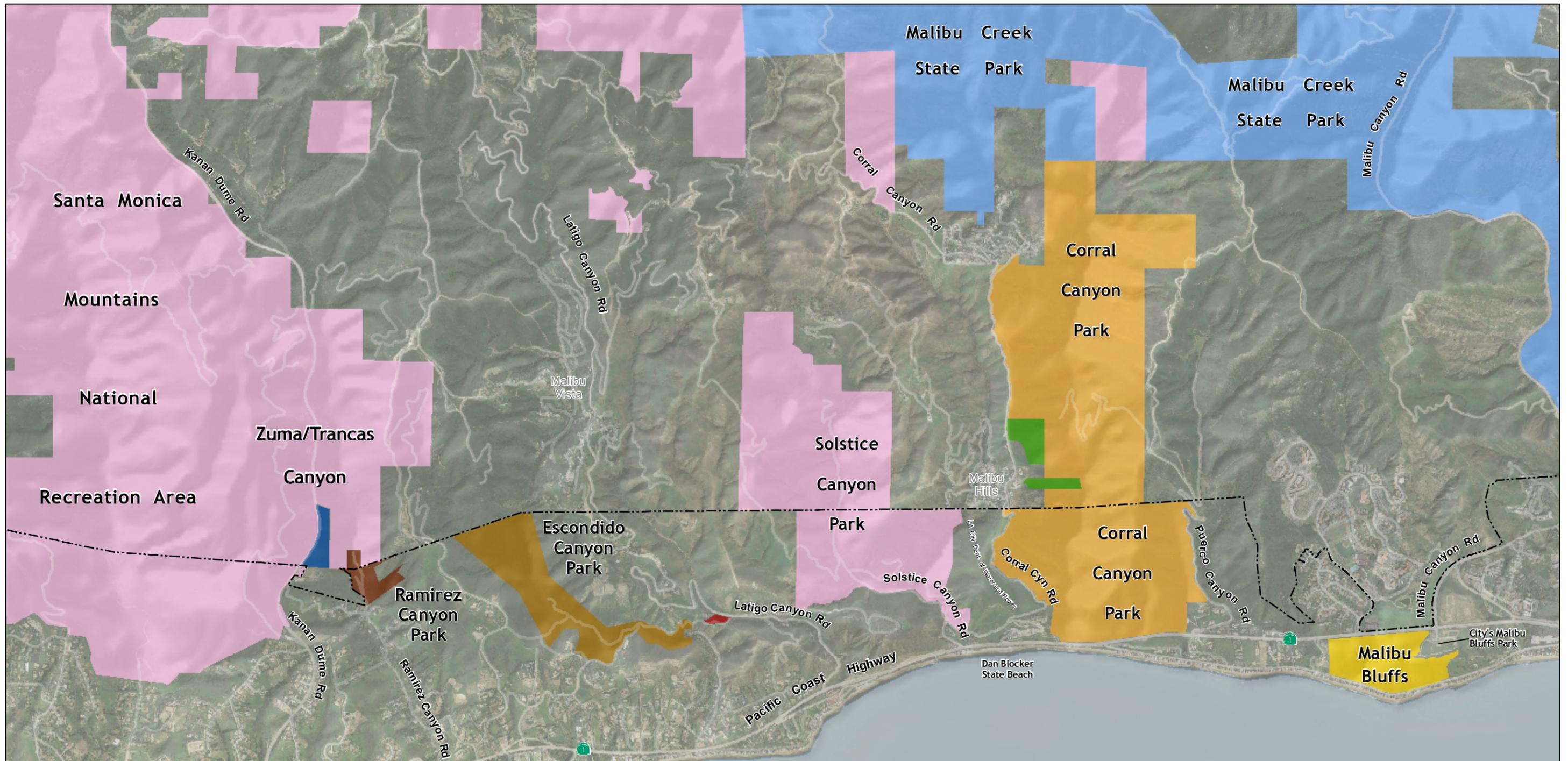


**FIGURE 1**  
Regional Map

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SOURCE: Aerial: DigitalGlobe 2008, MRCA 2009

**FIGURE 2**  
**Vicinity Map**

**Malibu Parks Public Access Enhancement  
Native Tree Protection Plan**

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## Natural Resources

Escondido Canyon Park is in its entirety naturally vegetated with native and non-native plant species. The majority of the park area can be characterized as relatively undisturbed coastal sage scrub habitat. However, Escondido Creek winds its way through the park along which riparian woodland is the dominating habitat. In addition, areas containing a mix of native shrubland and non-native grassland occur in various portions of the park. Various pockets of disturbance along the existing trail are evident through the park. The majority of the park property is designated as an Environmentally Sensitive Habitat Area (ESHA) in the City's LCP

### 1.1.3 Latigo Trailhead Property

The Latigo Trailhead property is approximately 2.4 acres of vegetated and disturbed land located in the City of Malibu (Figure 2). The property is accessed via Latigo Canyon Road and is surrounded by privately owned land, but is within easy walking distance to the easternmost boundary of Escondido Canyon Park. Given its proximity to Escondido Canyon, the property was acquired by MRCA in 2008 with the intent of supporting access to Escondido Canyon Park and the surrounding trail network. The property is designated and zoned Rural Residential (1 unit per 2 acres) in the City of Malibu LCP.

## Natural Resources

The majority of the Latigo Trailhead property is naturally vegetated with native and non-native species, with the exception of highly disturbed areas around the driveway access to the property and the burned-out single family residence location. Vegetation communities on the property include annual grassland, coastal sage scrub, oak woodland, and southern willow scrub. The majority of the park property is designated as an ESHA in the City of Malibu LCP.

### 1.1.4 Corral Canyon Park

Corral Canyon Park is regionally significant in that it encompasses 340 acres of coastal land in the City of Malibu and contains the last undeveloped coastal canyon in Los Angeles County that flows unrestricted to the ocean (Figure 2). The park is surrounded by privately owned land with the exception of where Dan Blocker State Beach lies just south along the shoreline. The park consists of open land vegetated with a variety of native and non-native plant and tree species.

The park is easily accessed directly from Pacific Coast Highway between Malibu Canyon and Kanan Dume Roads and also via public transit as an MTA bus stop is located at the entrance to the park.

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## Natural Resources

Given the unique terrain of Corral Canyon Park, and its proximity to the Pacific Ocean, the park includes a wide variety of habitat, including coastal sage scrub, coastal bluff, native grassland, and the riparian corridor of Corral Creek which includes among other species alder, coast live oak, California sycamore, and willow trees. A pocket of coastal salt marsh is located where Corral Creek meets the Pacific Ocean at the Pacific Coast Highway Bridge. Various pockets of disturbance along the trail are evident in the southernmost portion of the park where a number of structures once existed.

### 1.1.5 Malibu Bluffs Open Space

The Malibu Bluffs Open Space area encompasses 84 acres of blufftop land in the City of Malibu and is characterized by a large expanse of undeveloped open space directly adjacent to Malibu Road and the shoreline (Figure 2). The park is surrounded by privately owned land to the west, the City's 10-acre Malibu Bluffs Park and private land to east, Malibu Road, residential development and the shoreline to the south, and Pacific Coast Highway and Pepperdine University to the north. The park consists of open land heavily vegetated with a variety of native and non-native plant and tree species. The Malibu Bluffs Open Space area is designated and zoned as Public Open Space in the City of Malibu LCP. The Malibu Bluffs Open Space area contains very few support facilities with the exception of limited trailhead improvements (signs, trash receptacles) at key entry locations into the property and picnic areas, although picnic areas, restrooms, sitting benches, and other active recreation areas can be accessed on the adjacent City-owned Malibu Bluffs Park.

## Natural Resources

The Malibu Bluffs Open Space area is in its entirety naturally vegetated with native and non-native plant species. The majority of the park area can be characterized as annual grassland and coastal sage scrub habitat; however, two drainages traverse the open space in a general north-south direction along which southern willow scrub habitat occurs. In addition, areas containing a mix of native and non-native grassland occur in various areas of the park. The majority of the property, particularly along the site's drainages and where large stands of coastal sage scrub occur, is designated as an ESHA in the City of Malibu LCP.

### 1.1.6 Ramirez Canyon Road

The Ramirez Canyon Road area encompasses approximately 1.1 miles of paved roadway in the City of Malibu within the Ramirez Canyon private community (Figure 2). The easement area on either side of Ramirez Canyon Road is inclusive of encroaching vegetation, including native and

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non-native plant species. The road extends from Ramirez Canyon Road in the north to the Pacific Coast Highway to the South.

## 2.0 METHODS

Dudek mapped tree locations within the Project Site using a Trimble Pathfinder Pro XH Global Positioning System (GPS) receiver. The Pathfinder has a horizontal accuracy of 1 meter (1 sigma) using differential code positioning techniques. Since tree canopies and steep canyons can sometimes cause loss of satellite lock by blocking the line-of-sight to satellites, an electronic compass and reflectorless electronic distance measuring (EDM) device was also used in mapping tree locations. The EDM/compass combination operates in concert with the Pathfinder system to position offsets, and offset information is automatically attached to the GPS position data string. The electronic tree locations were then evaluated using ArcView 9.3 software to determine the position of the trees related to the proposed project.

Concurrent with tree mapping efforts, Dudek's International Society of Arboriculture (ISA) Certified Arborists collected tree attribute data including species, trunk diameter, overall height, canopy extent, and general health and structural conditions. Trunk diameters were measured using a diameter tape providing adjusted figures<sup>1</sup> for diameter measurements when wrapping the tape around the trunk circumference. Diameter measurements were collected using standard protocol outlined by the Council of Tree and Landscape Appraisers in the *Guide for Plant Appraisal*, published by the International Society of Arboriculture (Council of Tree and Landscape Appraisers 2000). Trunk diameter measurements were taken at 4.5 feet (54 inches) above the ground along the trunk axis, with a few common exceptions. In cases where a tree's trunk is located on a slope, the 4.5-foot distance was approximated as the average of the shortest and longest sides of the trunk (i.e., the uphill side and downhill side of a tree's trunk, respectively) and the measurement was made at the circumference of the trunk at this point. Tree height measurements were ocular estimates made by experienced field arborists. Tree canopy diameters were typically estimated by "pacing-off" the measurement based on the investigator's knowledge of his stride length or by visually estimating the canopy width. The tree crown diameter measurements were made along an imaginary line intersecting the tree trunk that best approximated the average canopy diameter.

Pursuant to the Guide for Plant Appraisal, tree health and structural condition were evaluated with respect to five distinct tree components: roots, trunk, scaffold branches, small branches, and foliage. Each component of the tree was assessed with regard to health factors such as insect, fungal or pathogen damage, mechanical damage, presence of decay, presence of wilted or dead leaves, and wound closure. Components were graded as *good*, *fair*, *poor*, and *dead* with *good* representing no

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<sup>1</sup> Circumference measurement (inches) divided by 3.14 ( $\pi$ ) provides diameter measurement in inches.

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apparent problems, and *dead* representing a dying and/or dead tree. This method of tree condition rating is comprehensive and results in ratings that are useful for determining the status of trees based on common urban standards. Dudek is cognizant of the fact that trees in natural settings have important habitat value even when they are considered in poor condition. However, this assessment focuses on tree condition with regards to health and structure for purposes of analyzing potential project impacts and where necessary, providing recommendations for mitigating potential hazards.

Finally, the trees within the Project Site were tagged with an aluminum tag bearing a unique identification number. The tags were placed on the trunk of each evaluated tree and these numbers correspond to the tree locations presented in the Tree Location Exhibits in Appendix A and the tree data matrices in Appendix B.

## 2.1 Scope of Work Limitations

No root crown excavations or investigations, or internal probing was performed during the tree assessments. Therefore, the presence or absence of internal decay or other hidden inferiorities in individual trees could not be confirmed. It is recommended that any large tree proposed for preservation in an area that receives human use be thoroughly inspected for internal, or subterranean, decay by a qualified arborist before finalizing preservation plans.

## 3.0 OBSERVATIONS

There is a total of 589 trees representing 37 species located on and adjacent the proposed project survey area, which encompasses the project footprint plus an approximately 20-foot-wide buffer for park campsite areas and a 10-foot-wide buffer along proposed trail alignments (both sides of trails). The trees range from average to good in overall condition rating, with only a few exhibiting poor health and structural conditions. Table 1 provides a summary of the 37 species mapped and evaluated within the survey area.

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**Table 1**  
**Summary of Tree Species from the Project Site**

| Scientific Name                 | Common Name                      | Number of Trees |
|---------------------------------|----------------------------------|-----------------|
| <i>Acer japonicum</i>           | Japanese maple                   | 1               |
| <i>Acer saccharinum</i>         | Silver maple                     | 1               |
| <i>Alnus rhombifolia</i>        | White alder                      | 23              |
| <i>Betula nigra</i>             | River birch                      | 1               |
| <i>Betula papyrifera</i>        | Paper birch                      | 2               |
| <i>Betula spp.</i>              | Birch                            | 1               |
| <i>Citrus spp.</i>              | Citrus                           | 11              |
| <i>Eriobotrya deflexa</i>       | Bronze loquat                    | 1               |
| <i>Erythrina caffra</i>         | Coral tree                       | 3               |
| <i>Eucalyptus cinerea</i>       | Silver dollar gum                | 4               |
| <i>Eucalyptus cladocalyx</i>    | Sugar gum                        | 5               |
| <i>Eucalyptus globulus</i>      | Blue gum                         | 40              |
| <i>Eucalyptus maculata</i>      | Spotted gum                      | 6               |
| <i>Eucalyptus rudis</i>         | Swamp gum                        | 1               |
| <i>Ficus retusa</i>             | Gensing ficus                    | 8               |
| <i>Grevillea robusta</i>        | Silk oak                         | 16              |
| <i>Heteromoles arbutifolia</i>  | Toyon                            | 2               |
| <i>Jacaranda mimosifolia</i>    | Jacaranda                        | 6               |
| <i>Juglans californica</i>      | Southern California black walnut | 19              |
| <i>Liquidambar styraciflua</i>  | Sweetgum                         | 6               |
| <i>Melaleuca quinquenervia</i>  | Paperbark                        | 4               |
| <i>Persea americana</i>         | Avocado                          | 5               |
| <i>Pinus canariensis</i>        | Canary Island pine               | 16              |
| <i>Pinus spp.</i>               | Pine                             | 1               |
| <i>Pinus thunbergiana</i>       | Japanese black pine              | 2               |
| <i>Pittosporum undulatum</i>    | Victorian box                    | 14              |
| <i>Platanus racemosa</i>        | California sycamore              | 134             |
| <i>Podocarpus macrophyllus</i>  | Yew pine                         | 3               |
| <i>Quercus agrifolia</i>        | Coast live oak                   | 191             |
| <i>Salix lasiolepis</i>         | Arroyo willow                    | 9               |
| <i>Salix spp.</i>               | Willow                           | 1               |
| <i>Schinus molle</i>            | California pepper                | 4               |
| <i>Schinus terebinthifolius</i> | Brazilian pepper                 | 17              |
| <i>Sequoia sempervirens</i>     | Coast redwood                    | 23              |
| <i>Syagrus romanzoffiana</i>    | Queen palm                       | 5               |
| <i>Tipuana tipu</i>             | Tipu tree                        | 2               |
| <i>Ulmus parvifolia</i>         | Chinese elm                      | 1               |
| <b>Total</b>                    |                                  | <b>589</b>      |

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A majority of the native trees included in the survey are located within the Ramirez Canyon Park site which is the most forested location within the Project Site. Non-native trees are primarily associated with the existing structures in Ramirez Canyon, with scattered specimens found throughout the property. The remaining study areas include mostly native coast live oak and California sycamore trees, with scattered non-natives. The Tree Location Exhibits in Appendix A presents the location of all trees documented and assessed throughout Ramirez Canyon Park, Escondido Canyon Park, Latigo Trail Head, Corral Canyon Park, Malibu Bluffs Open Space, and Ramirez Canyon Park.

## 4.0 TREE PRESERVATION

### 4.1 Regulatory Definitions and Requirements

The City of Malibu's Certified LCP's Native Tree Protection Chapter guides the preservation of native trees in the City of Malibu. According to the tree preservation policy, individual native oaks (*Quercus* spp.), California walnut (*Juglans californica*), western sycamore (*Platanus racemosa*), alder (*Alnus rhombifolia*), and toyon (*Heteromoles arbutifolia*) are provided protective measures. The regulatory definitions and requirements are presented in the following sections.

#### 4.1.1 City of Malibu LCP Native Tree Protection

According to requirements, Dudek arborists performed a tree by tree inventory of the Project Site's native trees between March 5, 2008, and January 12, 2010. Tree mapping and assessment included individual native trees meeting the City of Malibu's criteria as defined by the LCP's Native Tree Protection Chapter:

...areas containing one or more native oaks (*Quercus* spp.), California walnut (*Juglans californica*), western sycamore (*Platanus racemosa*), alder (*Alnus rhombifolia*), or toyon (*Heteromoles arbutifolia*) tree, that has at least one trunk measuring six inches or more in diameter, or a combination of any two trunks measuring a total of eight inches or more in diameter, measured at four and one-half feet above natural grade.

## 4.2 Results

### 4.2.1 Native Trees

The Project Site (portions of Ramirez Canyon Park, Ramirez Canyon Road, Escondido Park, Latigo Trailhead, Corral Canyon Park, and Malibu Bluffs Open Space along with proposed trail extensions and parking areas) includes a total of 369 native trees that are located within the proposed or alternative project disturbance areas, or within an approximately 50-foot-wide buffer from these

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disturbance areas. All included native trees meet the LCP trunk diameter minimum requirements of at least one trunk measuring 6 inches or more in diameter, or a combination of any two trunks measuring a total of 8 inches or more in diameter measured at 4.5 feet above natural grade

Tables 2 through 6 present the quantity and status of native trees on and adjacent to the project areas by trunk diameter, height, canopy spread, health, and structure.

**Table 2**  
**Trunk Diameter Distribution of Native Trees**  
**meeting the LCP's Native Tree Protection Chapter**

| Trunk Diameter at Breast Height (inches) | Number of Native Trees in Project Area |
|--|--|
| 5-7                                      | 68                                     |
| 8-11                                     | 67                                     |
| 12-15                                    | 68                                     |
| 16-19                                    | 59                                     |
| 20-23                                    | 50                                     |
| 24-27                                    | 18                                     |
| 28-31                                    | 13                                     |
| 32-35                                    | 10                                     |
| 36+                                      | 16                                     |
| Total                                    | 369                                    |

**Table 3**  
**Height Distribution of Native Trees meeting the LCP's Native Tree Protection Chapter**

| Height (feet) | Number of Native in Project Area |
|---------------|----------------------------------|
| < 10          | 7                                |
| 10-20         | 161                              |
| 21-30         | 58                               |
| 31-40         | 36                               |
| 41-50         | 38                               |
| 51-60         | 59                               |
| 61+           | 10                               |
| Total         | 369                              |

**Table 4**  
**Canopy Coverage of Native Trees meeting the LCP's Native Tree Protection Chapter**

| Crown Width (feet) | Number of Native Trees in Project Area |
|--------------------|--|
| < 10               | 30                                     |
| 10-20              | 224                                    |

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|       |     |
|-------|-----|
| 21-30 | 86  |
| 31-40 | 22  |
| 41+   | 7   |
| Total | 369 |

**Table 5**  
**Health of Native Trees meeting the LCP's Native Tree Protection Chapter**

| Health Condition | Number of Native Trees in Proposed Project |
|------------------|--|
| Good             | 265  |
| Fair             | 86   |
| Poor             | 15   |
| Dead             | 3  |
| Total            | 369  |

**Table 6**  
**Structural Assessment of Native Trees meeting the LCP's Native Tree Protection Chapter**

| Structural Condition | Number of Native Trees in Project Area |
|----------------------|--|
| Good                 | 108                                    |
| Fair                 | 238                                    |
| Poor                 | 20                                     |
| Dead                 | 3                                      |
| Total                | 369                                    |

### 4.2.2 Non-Native Trees

Non-native trees are not provided the same protective measures as native trees in the LCP. However, Dudek recognizes the importance of non-native trees for shade, air quality, erosion control, carbon sequestration, screening, and noise attenuation and conducted assessments of them during our surveys. The proposed Project Site includes a total of 220 non-native trees located within or adjacent the proposed project or project alternative improvement areas. For consistency, assessment of non-native trees was conducted using the same methods as used for the native tree assessments. In summary, the trees are generally in fair health and structural condition. Appendix B provides a detailed summary of the 220 non-native trees.

### 4.3 Impacts

Tree impacts were determined through the use of geographic information system (GIS) technology to determine the locations of trees relative to the proposed improvements. Impacts were further determined based on Dudek's experience with native and non-native trees and their typical reactions

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to disturbances such as soil and root damage, compaction, or branch removal. The impact analysis results were utilized for developing appropriate mitigation measures.

Impacts to trees can be classified as either direct or indirect. Direct impacts to trees related to site improvements are typically the result of physical injuries or changes caused by machinery involved with the development process. Direct impacts include tree removal, root damage, soil excavation and compaction, grade changes, loss of canopy, and trunk wounds, amongst others. Indirect impacts to trees are the result of changes to the site that may cause tree decline, even when the tree is not directly injured. Wider-scale alterations to the area near trees as well as specific changes that occur around the trees are important considerations.

In general, there is a great deal of variation in tolerance to construction impacts among tree species, ages, and conditions. It is important to know how a certain tree based on its species, age, and condition would respond to different types of disturbance. The native trees in the proposed project area are of varying ages and conditions. Mature specimens are typically more sensitive to root disturbance and grade changes. In general, healthy trees will respond better to changes in their growing environment. Trees of poor health or stressed conditions may not be vigorous enough to cope with direct or indirect impacts from construction activities.

For the purposes of this report, direct impacts are those associated with tree encroachment within the protected zone (drip line plus 5 feet or 15 feet from trunk, whichever is greater), soil and root disturbance from cut and fill, crown raising over trails, compaction associated with trails and pads, or road widening. Measures to minimize the extent of impact to preserved trees are detailed herein to further reduce the possibility that tree removal will be required. Indirect impacts associated with this project may include changes to the local site that affects soil compaction, percolation rates, or hydrological conditions.

### **4.3.1 Proposed Project**

Impact totals presented herein represent a conservative analysis that considers all trees that may experience encroachment as "impacted," even though most will be preserved in place. Impact totals presented below are based on site plans as of the date of this Tree Protection Plan. As such, the actual number of trees that are subject to direct impacts may be further reduced as the detailed site permitting process proceeds and is defined. Typically, specific circumstances allow some trees to be preserved in place within or adjacent to the disturbance envelope. These trees are often identified at later stages of project design or implementation.

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### 4.3.1.1 Direct Impacts to Native Trees

A total of 184 native trees located within the Proposed Project disturbance areas are considered directly impacted. Direct impact are those associated with removal or canopy/root zone encroachment. Depending on the disturbance levels for each camp area and Ramirez Canyon Road widening, up to 10 of the 184 native trees within the limits of disturbance may require removal. The remaining 174 trees are to be retained on site and measures to protect these retained trees prior to, during, and after construction are provided. Direct impacts to native trees associated with the Proposed Project are presented in Table 7.

**Table 7  
Proposed Project Direct Native Tree Impact Summary**

| Project Area                                    | Native Tree Species                            |   |   |                                       |   |
|---|--|---|---|---------------------------------------|---|
|   | Coast live oak<br>( <i>Quercus agrifolia</i> ) | California walnut<br>( <i>Juglans californica</i> ) | California sycamore<br>( <i>Platanus racemosa</i> ) | Alder<br>( <i>Alnus rhombifolia</i> ) | Toyon<br>( <i>Heteromeles arbutifolia</i> ) |
| <b>Ramirez Canyon Park</b>                      |  |   |   |                                       |   |
| Park and Recreation Support Facilities Impacts  | 16   | 4   | 23  | 4                                     | 0   |
| Creek Restoration Impacts                       | 11   | 2   | 11  | 2                                     | 0   |
| <b>Escondido Canyon Park</b>                    |  |   |   |                                       |   |
| Park and Recreation Support Facilities Impacts  | 5  | 1   | 1   | 0                                     | 2   |
| <b>Latigo Trailhead</b>                         |  |   |   |                                       |   |
| Park and Recreation Support Facilities Impacts  | 13   | 0   | 2   | 0                                     | 0   |
| <b>Corral Canyon Park</b>                       |  |   |   |                                       |   |
| Park and Recreation Support Facilities Impacts  | 0  | 0   | 11  | 0                                     | 0   |
| <b>Conservancy-Owned Malibu Bluffs</b>          |  |   |   |                                       |   |
| Park and Recreation Support Facilities Impacts  | 0  | 0   | 0   | 0                                     | 0   |
| <b>Via Acero Improvements</b>                   |  |   |   |                                       |   |
| Facilities Impacts                              | 1  | 0   | 0   | 1                                     | 0   |
| <b>Ramirez Canyon Road Improvements</b>         |  |   |   |                                       |   |
| Facilities Impacts                              | 21   | 2   | 11  | 0                                     | 0   |
| <b>Trail Segments</b>                           |  |   |   |                                       |   |
| 1a - Kanan Dume to Ramirez Cyn. Park            | 0  | 0   | 0   | 0                                     | 0   |
| 2a3 - Ramirez Cyn. Park to Murphy Way           | 1  | 2   | 0   | 0                                     | 0   |
| 4 - Escondido Cyn. Park to Solstice Cyn. Park   | 28   | 0   | 0   | 0                                     | 0   |
| 11a - Corral Cyn. Park (Beach - Backbone Trail) | 2  | 0   | 0   | 0                                     | 0   |
| 14 - Corral Cyn. Park (Beach - Backbone Trail)  | 7  | 0   | 0   | 0                                     | 0   |
| <b>TOTAL</b>                                    | <b>105</b>                                     | <b>11</b>   | <b>59</b>   | <b>7</b>                              | <b>2</b>                                    |

## Malibu Parks Public Access Enhancement Native Tree Protection Plan

### 4.3.1.2 Indirect Impacts to Native Trees

The remaining 185 native trees included in the field inventory are located outside of the Proposed Project development area and the 20- foot disturbance buffer and are not considered impacted for the purposes of this report. However, due to the proximity of proposed development activity, indirect impacts may occur. All native trees not designated for removal (including both direct and indirect impacts) will be provided protection measures to avoid construction-related impacts. Tree protection measures for all retained trees are presented in Section 5.2. Indirect impacts to native trees associated with the Proposed Project are presented in Table 8.

**Table 8  
Proposed Project Indirect Native Tree Impact Summary**

| Project Area                                    | Native Tree Species                            |   |   |                                       |   |
|---|--|---|---|---------------------------------------|---|
|   | Coast live oak<br>( <i>Quercus agrifolia</i> ) | California walnut<br>( <i>Juglans californica</i> ) | California sycamore<br>( <i>Platanus racemosa</i> ) | Alder<br>( <i>Alnus rhombifolia</i> ) | Toyon<br>( <i>Heteromeles arbutifolia</i> ) |
| <b>Ramirez Canyon Park</b>                      |  |   |   |                                       |   |
| Park and Recreation Support Facilities Impacts  | 51   | 7   | 62  | 13                                    | 0   |
| Creek Restoration Impacts                       | 0  | 0   | 0   | 0                                     | 0   |
| <b>Escondido Canyon Park</b>                    |  |   |   |                                       |   |
| Park and Recreation Support Facilities Impacts  | 3  | 1   | 2   | 0                                     | 0   |
| <b>Latigo Trailhead</b>                         |  |   |   |                                       |   |
| Park and Recreation Support Facilities Impacts  | 2  | 0   | 8   | 0                                     | 0   |
| <b>Corral Canyon Park</b>                       |  |   |   |                                       |   |
| Park and Recreation Support Facilities Impacts  | 0  | 0   | 0   | 2                                     | 0   |
| <b>Conservancy-Owned Malibu Bluffs</b>          |  |   |   |                                       |   |
| Park and Recreation Support Facilities Impacts  | 0  | 0   | 0   | 0                                     | 0   |
| <b>Via Acero Improvements</b>                   |  |   |   |                                       |   |
| Facilities Impacts                              | 2  | 0   | 0   | 1                                     | 0   |
| <b>Ramirez Canyon Road Improvements</b>         |  |   |   |                                       |   |
| Facilities Impacts                              | 1  | 0   | 2   | 0                                     | 0   |
| <b>Trail Segments</b>                           |  |   |   |                                       |   |
| 1a - Kanan Dume to Ramirez Cyn. Park            | 1  | 0   | 0   | 0                                     | 0   |
| 2a3 - Ramirez Cyn. Park to Murphy Way           | 0  | 0   | 0   | 0                                     | 0   |
| 4 - Escondido Cyn. Park to Solstice Cyn. Park   | 10   | 0   | 0   | 0                                     | 0   |
| 11a - Corral Cyn. Park (Beach - Backbone Trail) | 6  | 0   | 0   | 0                                     | 0   |
| 14 - Corral Cyn. Park (Beach - Backbone Trail)  | 10   | 0   | 1   | 0                                     | 0   |
| <b>TOTAL</b>                                    | <b>86</b>                                      | <b>8</b>  | <b>75</b>   | <b>16</b>                             | <b>0</b>                                    |

## Malibu Parks Public Access Enhancement Native Tree Protection Plan

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### 4.3.1.3 Impacts to Non-Native Trees

A total of 109 non-native trees located within the Proposed Project disturbance areas will be encroached upon and are considered to be directly impacted. Depending on the disturbance levels for each camp area and Ramirez Canyon Road widening, up to 14 of the 109 non-native trees within the limits of disturbance may require removal.

A total of 111 non-native trees are located outside of the Proposed Project development area and the 20-foot disturbance buffer, and due to the proximity to proposed development activity, may be subject to indirect impacts. All non-native trees not designated for removal (including both direct and indirect impacts) will be provided protection measures to avoid construction-related impacts. Tree protection measures for all retained trees are presented in Section 5.2.

### 4.3.2 2002 LCP Project Alternative

#### 4.3.2.1 Direct Impacts to Native Trees

A total of 121 native trees located within the LCP Project Alternative disturbance areas are considered directly impacted. Direct impact are those associated with removal or canopy/root zone encroachment. Depending on the disturbance levels for each camp area and Ramirez Canyon Road widening, up to 6 of the 121 native trees within the limits of disturbance may require removal. The remaining 115 trees are to be retained on site and measures to protect these retained trees prior to, during, and after construction are provided. Direct impacts to native trees associated with the LCP Project Alternative are presented in Table 9.

**Table 9  
LCP Project Alternative Direct Native Tree Impact Summary**

| Project Area                                   | Native Tree Species                            |   |   |                                       |   |
|--|--|---|---|---------------------------------------|---|
|  | Coast live oak<br>( <i>Quercus agrifolia</i> ) | California walnut<br>( <i>Juglans californica</i> ) | California sycamore<br>( <i>Platanus racemosa</i> ) | Alder<br>( <i>Alnus rhombifolia</i> ) | Toyon<br>( <i>Heteromeles arbutifolia</i> ) |
| <b>Ramirez Canyon Park</b>                     |  |   |   |                                       |   |
| Park and Recreation Support Facilities Impacts | 11   | 2   | 1   | 0                                     | 0   |
| Creek Restoration Impacts                      | 11   | 2   | 11  | 2                                     | 0   |
| <b>Escondido Canyon Park</b>                   |  |   |   |                                       |   |
| Park and Recreation Support Facilities Impacts | 1  | 2   | 0   | 0                                     | 2   |
| <b>Latigo Trailhead</b>                        |  |   |   |                                       |   |
| Park and Recreation Support Facilities Impacts | 1  | 0   | 0   | 0                                     | 0   |

## Malibu Parks Public Access Enhancement Native Tree Protection Plan

| Project Area                                    | Native Tree Species                            |   |   |                                       |   |
|---|--|---|---|---------------------------------------|---|
|   | Coast live oak<br>( <i>Quercus agrifolia</i> ) | California walnut<br>( <i>Juglans californica</i> ) | California sycamore<br>( <i>Platanus racemosa</i> ) | Alder<br>( <i>Alnus rhombifolia</i> ) | Toyon<br>( <i>Heteromeles arbutifolia</i> ) |
| <b>Corral Canyon Park</b>                       |  |   |   |                                       |   |
| Park and Recreation Support Facilities Impacts  | 0  | 0   | 1   | 0                                     | 0   |
| <b>Conservancy-Owned Malibu Bluffs</b>          |  |   |   |                                       |   |
| Park and Recreation Support Facilities Impacts  | 0  | 0   | 0   | 0                                     | 0   |
| <b>Via Acero Improvements</b>                   |  |   |   |                                       |   |
| Facilities Impacts                              | 0  | 0   | 0   | 0                                     | 0   |
| <b>Ramirez Canyon Road Improvements</b>         |  |   |   |                                       |   |
| Facilities Impacts                              | 21   | 2   | 11  | 0                                     | 0   |
| <b>Trail Segments</b>                           |  |   |   |                                       |   |
| 1a - Kanan Dume to Ramirez Cyn. Park            | 0  | 0   | 0   | 0                                     | 0   |
| 2a3 - Ramirez Cyn. Park to Murphy Way           | 1  | 2   | 0   | 0                                     | 0   |
| 4 - Escondido Cyn. Park to Solstice Cyn. Park   | 28   | 0   | 0   | 0                                     | 0   |
| 11a - Corral Cyn. Park (Beach - Backbone Trail) | 2  | 0   | 0   | 0                                     | 0   |
| 14 - Corral Cyn. Park (Beach - Backbone Trail)  | 7  | 0   | 0   | 0                                     | 0   |
| <b>TOTAL</b>                                    | <b>83</b>                                      | <b>10</b>   | <b>24</b>   | <b>2</b>                              | <b>2</b>                                    |

### 4.3.2.2 Indirect Impacts to Native Trees

The remaining 248 native trees included in the field inventory are located outside of the LCP Project Alternative development area and the 20-foot disturbance buffer and are not considered impacted for the purposes of this report. However, due to the proximity of proposed development activity, indirect impacts may occur. All native trees not designated for removal (including both direct and indirect impacts) will be provided protection measures to avoid construction-related impacts. Tree protection measures for all retained trees are presented in Section 5.2. Indirect impacts to native trees associated with the LCP Project Alternative are presented in Table 10.

**Table 10**  
**LCP Project Alternative Indirect Native Tree Impact Summary**

| Project Area                                   | Native Tree Species                            |   |   |                                       |   |
|--|--|---|---|---------------------------------------|---|
|  | Coast live oak<br>( <i>Quercus agrifolia</i> ) | California walnut<br>( <i>Juglans californica</i> ) | California sycamore<br>( <i>Platanus racemosa</i> ) | Alder<br>( <i>Alnus rhombifolia</i> ) | Toyon<br>( <i>Heteromeles arbutifolia</i> ) |
| <b>Ramirez Canyon Park</b>                     |  |   |   |                                       |   |
| Park and Recreation Support Facilities Impacts | 56   | 9   | 84  | 17                                    | 0   |

## Malibu Parks Public Access Enhancement Native Tree Protection Plan

| Project Area                                    | Native Tree Species                            |   |   |                                       |   |
|---|--|---|---|---------------------------------------|---|
|   | Coast live oak<br>( <i>Quercus agrifolia</i> ) | California walnut<br>( <i>Juglans californica</i> ) | California sycamore<br>( <i>Platanus racemosa</i> ) | Alder<br>( <i>Alnus rhombifolia</i> ) | Toyon<br>( <i>Heteromeles arbutifolia</i> ) |
| Creek Restoration Impacts                       | 0  | 0   | 0   | 0                                     | 0   |
| <b>Escondido Canyon Park</b>                    |  |   |   |                                       |   |
| Park and Recreation Support Facilities Impacts  | 7  | 0   | 3   | 0                                     | 0   |
| <b>Latigo Trailhead</b>                         |  |   |   |                                       |   |
| Park and Recreation Support Facilities Impacts  | 14   | 0   | 10  | 0                                     | 0   |
| <b>Corral Canyon Park</b>                       |  |   |   |                                       |   |
| Park and Recreation Support Facilities Impacts  | 0  | 0   | 10  | 2                                     | 0   |
| <b>Conservancy-Owned Malibu Bluffs</b>          |  |   |   |                                       |   |
| Park and Recreation Support Facilities Impacts  | 0  | 0   | 0   | 0                                     | 0   |
| <b>Via Acero Improvements</b>                   |  |   |   |                                       |   |
| Facilities Impacts                              | 3  | 0   | 0   | 2                                     | 0   |
| <b>Ramirez Canyon Road Improvements</b>         |  |   |   |                                       |   |
| Facilities Impacts                              | 1  | 0   | 2   | 0                                     | 0   |
| <b>Trail Segments</b>                           |  |   |   |                                       |   |
| 1a – Kanan Dume to Ramirez Cyn. Park            | 1  | 0   | 0   | 0                                     | 0   |
| 2a3 - Ramirez Cyn. Park to Murphy Way           | 0  | 0   | 0   | 0                                     | 0   |
| 4 - Escondido Cyn. Park to Solstice Cyn. Park   | 10   | 0   | 0   | 0                                     | 0   |
| 11a - Corral Cyn. Park (Beach - Backbone Trail) | 6  | 0   | 0   | 0                                     | 0   |
| 14 - Corral Cyn. Park (Beach - Backbone Trail)  | 10   | 0   | 1   | 0                                     | 0   |
| <b>TOTAL</b>                                    | <b>108</b>                                     | <b>9</b>  | <b>110</b>  | <b>21</b>                             | <b>0</b>                                    |

### 4.3.2.3 Impacts to Non-Native Trees

A total of 68 non-native trees located within the LCP Alternative Project disturbance areas will be encroached upon and are considered to be directly impacted. Depending on the disturbance levels for each camp area and Ramirez Canyon Road widening, up to 4 of the 68 non-native trees within the limits of disturbance may require removal.

A total of 152 non-native trees are located outside of the LCP Alternative Project development area and the 20-foot disturbance buffer, and due to the proximity to proposed development activity, may be subject to indirect impacts. All non-native trees not designated for removal (including both direct and indirect impacts) will be provided protection measures to avoid construction-related impacts. Tree protection measures for all retained trees are presented in Section 5.2.

## Malibu Parks Public Access Enhancement Native Tree Protection Plan

### 4.3.3 Redesign Project Alternative

#### 4.3.3.1 Direct Impacts to Native Trees

A total of 157 native trees located within the Redesign Project Alternative disturbance areas are considered directly impacted. Direct impact are those associated with removal or canopy/root zone encroachment. Depending on the disturbance levels for each camp area and Ramirez Canyon Road widening, up to 8 of the 157 native trees within the limits of disturbance may require removal. The remaining 149 trees are to be retained on site and measures to protect these retained trees prior to, during, and after construction are provided. Direct impacts to native trees associated with the Redesign Project Alternative are presented in Table 11.

**Table 11  
Redesign Project Alternative Direct Native Tree Impact Summary**

| Project Area                                    | Native Tree Species                            |   |   |                                       |   |
|---|--|---|---|---------------------------------------|---|
|   | Coast live oak<br>( <i>Quercus agrifolia</i> ) | California walnut<br>( <i>Juglans californica</i> ) | California sycamore<br>( <i>Platanus racemosa</i> ) | Alder<br>( <i>Alnus rhombifolia</i> ) | Toyon<br>( <i>Heteromeles arbutifolia</i> ) |
| <b>Ramirez Canyon Park</b>                      |  |   |   |                                       |   |
| Park and Recreation Support Facilities Impacts  | 19   | 4   | 22  | 6                                     | 0   |
| Creek Restoration Impacts                       | 9  | 0   | 9   | 2                                     | 0   |
| <b>Escondido Canyon Park</b>                    |  |   |   |                                       |   |
| Park and Recreation Support Facilities Impacts  | 1  | 1   | 0   | 0                                     | 2   |
| <b>Latigo Trailhead</b>                         |  |   |   |                                       |   |
| Park and Recreation Support Facilities Impacts  | 5  | 0   | 0   | 0                                     | 0   |
| <b>Corral Canyon Park</b>                       |  |   |   |                                       |   |
| Park and Recreation Support Facilities Impacts  | 0  | 0   | 1   | 0                                     | 0   |
| <b>Conservancy-Owned Malibu Bluffs</b>          |  |   |   |                                       |   |
| Park and Recreation Support Facilities Impacts  | 0  | 0   | 0   | 0                                     | 0   |
| <b>Via Acero Improvements</b>                   |  |   |   |                                       |   |
| Facilities Impacts                              | 0  | 0   | 0   | 0                                     | 0   |
| <b>Ramirez Canyon Road Improvements</b>         |  |   |   |                                       |   |
| Facilities Impacts                              | 21   | 2   | 13  | 0                                     | 0   |
| <b>Trail Segments</b>                           |  |   |   |                                       |   |
| 1a – Kanan Dume to Ramirez Cyn. Park            | 0  | 0   | 0   | 0                                     | 0   |
| 2a3 - Ramirez Cyn. Park to Murphy Way           | 1  | 2   | 0   | 0                                     | 0   |
| 4 - Escondido Cyn. Park to Solstice Cyn. Park   | 28   | 0   | 0   | 0                                     | 0   |
| 11a - Corral Cyn. Park (Beach - Backbone Trail) | 2  | 0   | 0   | 0                                     | 0   |
| 14 - Corral Cyn. Park (Beach - Backbone Trail)  | 7  | 0   | 0   | 0                                     | 0   |
| <b>TOTAL</b>                                    | <b>93</b>                                      | <b>9</b>  | <b>45</b>   | <b>8</b>                              | <b>2</b>                                    |

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### 4.3.3.2 Indirect Impacts to Native Trees

The remaining 212 native trees included in the field inventory are located outside of the Redesign Project Alternative development area and the 20- foot disturbance buffer and are not considered impacted for the purposes of this report. However, due to the proximity of proposed development activity, indirect impacts may occur. All native trees not designated for removal (including both direct and indirect impacts) will be provided protection measures to avoid construction-related impacts. Tree protection measures for all retained trees are presented in Section 5.2. Indirect impacts to native trees associated with the Redesign Project Alternative are presented in Table 12.

**Table 12  
Redesign Project Alternative Indirect Native Tree Impact Summary**

| Project Area                                    | Native Tree Species                            |   |   |                                       |   |
|---|--|---|---|---------------------------------------|---|
|   | Coast live oak<br>( <i>Quercus agrifolia</i> ) | California walnut<br>( <i>Juglans californica</i> ) | California sycamore<br>( <i>Platanus racemosa</i> ) | Alder<br>( <i>Alnus rhombifolia</i> ) | Toyon<br>( <i>Heteromeles arbutifolia</i> ) |
| <b>Ramirez Canyon Park</b>                      |  |   |   |                                       |   |
| Park and Recreation Support Facilities Impacts  | 50   | 9   | 65  | 11                                    | 0   |
| Creek Restoration Impacts                       | 0  | 0   | 0   | 0                                     | 0   |
| <b>Escondido Canyon Park</b>                    |  |   |   |                                       |   |
| Park and Recreation Support Facilities Impacts  | 7  | 1   | 3   | 0                                     | 0   |
| <b>Latigo Trailhead</b>                         |  |   |   |                                       |   |
| Park and Recreation Support Facilities Impacts  | 10   | 0   | 10  | 0                                     | 0   |
| <b>Corral Canyon Park</b>                       |  |   |   |                                       |   |
| Park and Recreation Support Facilities Impacts  | 0  | 0   | 10  | 2                                     | 0   |
| <b>Conservancy-Owned Malibu Bluffs</b>          |  |   |   |                                       |   |
| Park and Recreation Support Facilities Impacts  | 0  | 0   | 0   | 0                                     | 0   |
| <b>Via Acero Improvements</b>                   |  |   |   |                                       |   |
| Facilities Impacts                              | 3  | 0   | 0   | 2                                     | 0   |
| <b>Ramirez Canyon Road Improvements</b>         |  |   |   |                                       |   |
| Facilities Impacts                              | 1  | 0   | 0   | 0                                     | 0   |
| <b>Trail Segments</b>                           |  |   |   |                                       |   |
| 1a - Kanan Dume to Ramirez Cyn. Park            | 1  | 0   | 0   | 0                                     | 0   |
| 2a3 - Ramirez Cyn. Park to Murphy Way           | 0  | 0   | 0   | 0                                     | 0   |
| 4 - Escondido Cyn. Park to Solstice Cyn. Park   | 10   | 0   | 0   | 0                                     | 0   |
| 11a - Corral Cyn. Park (Beach - Backbone Trail) | 6  | 0   | 0   | 0                                     | 0   |
| 14 - Corral Cyn. Park (Beach - Backbone Trail)  | 10   | 0   | 1   | 0                                     | 0   |
| <b>TOTAL</b>                                    | <b>98</b>                                      | <b>10</b>   | <b>89</b>   | <b>15</b>                             | <b>0</b>                                    |

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### 4.3.3.2 Impacts to Non-Native Trees

A total of 106 non-native trees located within the Redesign Project Alternative areas will be encroached upon and are considered to be directly impacted. Depending on the disturbance levels for each camp area and Ramirez Canyon Road widening, up to 9 of the 106 non-native trees within the limits of disturbance may require removal.

A total of 114 non-native trees are located outside of the Redesign Project Alternative development area and the 20-foot disturbance buffer, and due to the proximity to proposed development activity, may be subject to indirect impacts. All non-native trees not designated for removal (including both direct and indirect impacts) will be provided protection measures to avoid construction-related impacts. Tree protection measures for all retained trees are presented in Section 5.2.

## 5.0 LOCAL COASTAL PROGRAM MITIGATION

### 5.1 Mitigation Definition

The Certified LCP governs native tree impact mitigation associated with direct tree impacts. According to the LCP, avoidance of tree impacts is given the highest priority. Encroachment into trees' protected zones is the result of avoiding tree removals, but with protective measures, these trees are expected to be only minimally impacted and able to adapt.

According to the LCP, if tree impacts are unavoidable, then they are to be fully mitigated, with priority given to on-site mitigation. The primary mitigation for impacted trees occurs in two forms: (1) trees that are encroached upon within the tree protection zone are to be monitored for a period of 10 years or more, and (2) trees that are removed shall be replaced with seedling plantings at a 10:1 ratio. In addition, protection and retention of native oaks (*Quercus* spp.), California walnut (*Juglans californica*), western sycamore (*Platanus racemosa*), alder (*Alnus rhombifolia*) and toyon (*Heteromeles arbutifolia*) is required, to the maximum extent feasible. The Tree Information Matrix in Appendix B presents the impact status of trees for the proposed project and two alternatives. Tables 7 through 12 present the status of native tree impacts from the proposed project and two project alternatives and the following recommendations address tree monitoring activities for the Project Site, as well as site-specific tree protection standards designed to minimize impacts to retained trees under any project alternative.

### 5.2 Site-Specific Mitigation Recommendations

The following measures are provided to mitigate the potential tree encroachment and enhance the survivability of those trees designated for retention on the project site.

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- Where development encroaches into the root zone of native trees, each affected tree shall be monitored annually for a period of not less than 10 years. An annual monitoring report shall be submitted for review by the MRCA for each of the 10 years. Should any of these trees be lost or suffer worsened health or vigor as a result of the proposed development, the applicant shall mitigate the impacts at a 10:1 ratio with seedling sized trees.
- Protective fencing shall be used around the outermost limits of the protected zones of the native trees within or adjacent to the construction area that may be disturbed during construction activities. Before the commencement of any clearing, grading, or other construction activities, protective fencing shall be placed around each applicable tree. Fencing shall be maintained in place for the duration of all construction. No construction, grading, staging, or materials storage shall be allowed within the fenced exclusion areas or within the protected zones of any of the sites native trees. The fencing shall be installed 5 feet outside of the dripline of each native tree (or edge of canopy for cluster of trees) and shall be staked every 6 feet.
- Any approved development, including grading or excavation, that encroaches into the protected zone of a native tree shall be completed using only hand-held tools or other methods that avoid damage to tree roots such as air spade excavation.
- Any trail or pathway that encroaches under a tree's crown shall be constructed to minimize encroachment to the maximum extent feasible. Construction and trail maintenance crews shall ensure that the natural duff layer under all trees be maintained. This will reduce soil compaction, stabilize soil temperatures in root zones, conserve soil moisture, and reduce erosion. The contractors shall ensure that the mulch be kept clear of the trunk base to avoid creating conditions favorable to the establishment and growth of decay-causing fungal pathogens. Should it become necessary to add organic mulch beneath retained oak trees, packaged or commercial oak leaf mulch shall not be used, as it may contain Oak Root Fungus. Also, the use of Redwood chips shall be avoided as certain inhibitive chemicals may be present in the wood. Other wood chips and crushed walnut shells can be used, but the best mulch that provides a source of nutrients for the tree is its own leaf litter. Any added organic mulch added by the contractor shall be applied to a maximum depth of 4 inches.
- Grade Changes: It is assumed that minor grade changes will be necessary to level camp site pads and to even trail sections that may occur beneath tree crowns. Wherever feasible, grade changes, including adding fill, shall be minimized unless completed by or under supervision by a Certified Arborist.
- Root Pruning: Roots primarily extend in a horizontal direction forming a support base to the tree similar to the base of a wineglass. Where pruning is necessary in areas that contain tree roots, prune the roots using a root pruner that makes clean cuts. All cuts will minimize

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ripping, tearing, and fracturing of the root system.

- **Crown Pruning Cuts:** All pruning shall be completed under the direction of an ISA-certified Arborist and using ISA guidelines. Removal of live branches and associated leaf area can have a negative impact on tree health. When relatively large amounts of leaf area are removed, the capacity of a tree to produce energy for growth and pest resistance is diminished. Pruning should be limited to that amount needed to accomplish the pruning objective. In some cases, it may be best to complete pruning over a 2- or 3-year period rather than do all that is needed in 1 year. Where tree crowns occur over camp site's removal of dead and dying limbs is recommended to occur on a regular basis.
- Remaining trees that are not directly impacted shall be preserved and protected in place. Trees within approximately 20 feet of proposed construction activity shall be temporarily fenced with chain link or other material meeting LCP standards throughout all grading and construction activities. The fencing shall be installed 5 feet outside of the dripline of each native tree (or edge of canopy for cluster of trees) and shall be staked every 6 feet.
- The project arborist shall monitor all soil disturbing activities occurring directly under tree crowns, including demolition, excavation, and installation. This will require the project agent and/or contractor to notify the project arborist well in advance of scheduled work adjacent to protected trees. A preconstruction conference with the arborist and contractor shall occur prior to commencement of activities.

### 6.0 CONCLUSION

The Project Site (portions of Ramirez Canyon, Ramirez Canyon Road, Escondido Creek, Latigo Trailhead, Corral Canyon, and Malibu Bluffs Open Space) includes 369 native trees meeting the certified LCP definition of a protected native tree. Depending on project alternatives, some of these native trees are considered directly impacted (per LCP definition). It is considered unlikely that any tree will require removal from this project. However, up to 10 trees occur close enough to the Proposed Project improvement areas that they could require removal, depending on the extent of the grading/soil disturbances. Based on the Proposed Project plans, the remaining 359 native trees will be protected in place.

This Native Tree Protection Plan provides for the mitigation of impacted native trees to include monitoring for a period of no less than 10 years, as stated in the LCP. The native tree mitigation monitoring is a necessary component of the Native Tree Protection Plan to ensure that disturbed trees successfully survive as they would have pre-disturbance. Any tree requiring removal will be mitigated with 10:1 tree planting at on-site locations and including long-term monitoring for successful establishment.

## **Malibu Parks Public Access Enhancement Native Tree Protection Plan**

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Finally, this Native Tree Protection Plan proposes that undisturbed native trees are subject to protection measures that, when implemented, minimize the possibility that trees are inadvertently damaged during both the pre and post construction process.

APPENDIX A  
*Tree Location Exhibits*





SOURCE: Penfield&Smith 2010

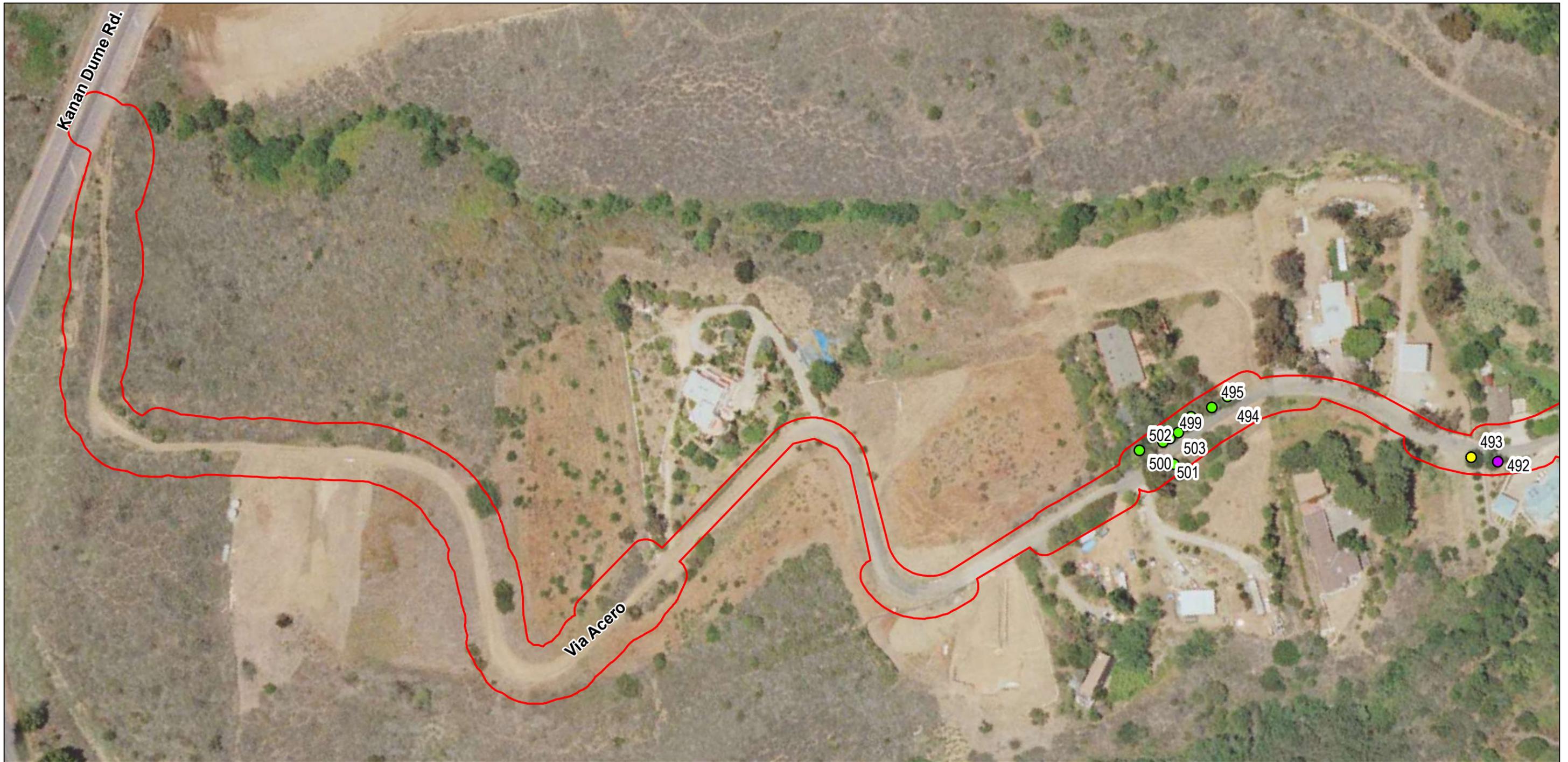


0 50 100 Feet

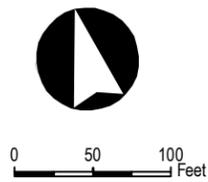


**Tree Location**

- Non-Native Trees
- Coast live oak (*Quercus agrifolia*)
- Western sycamore (*Platanus racemosa*)
- Alder (*Alnus rhombifolia*)
- Toyon (*Heteromoles arbutifolia*)
- California walnut (*Juglans californica*)
- GPS Inventory Area



SOURCE: Penfield&Smith 2010

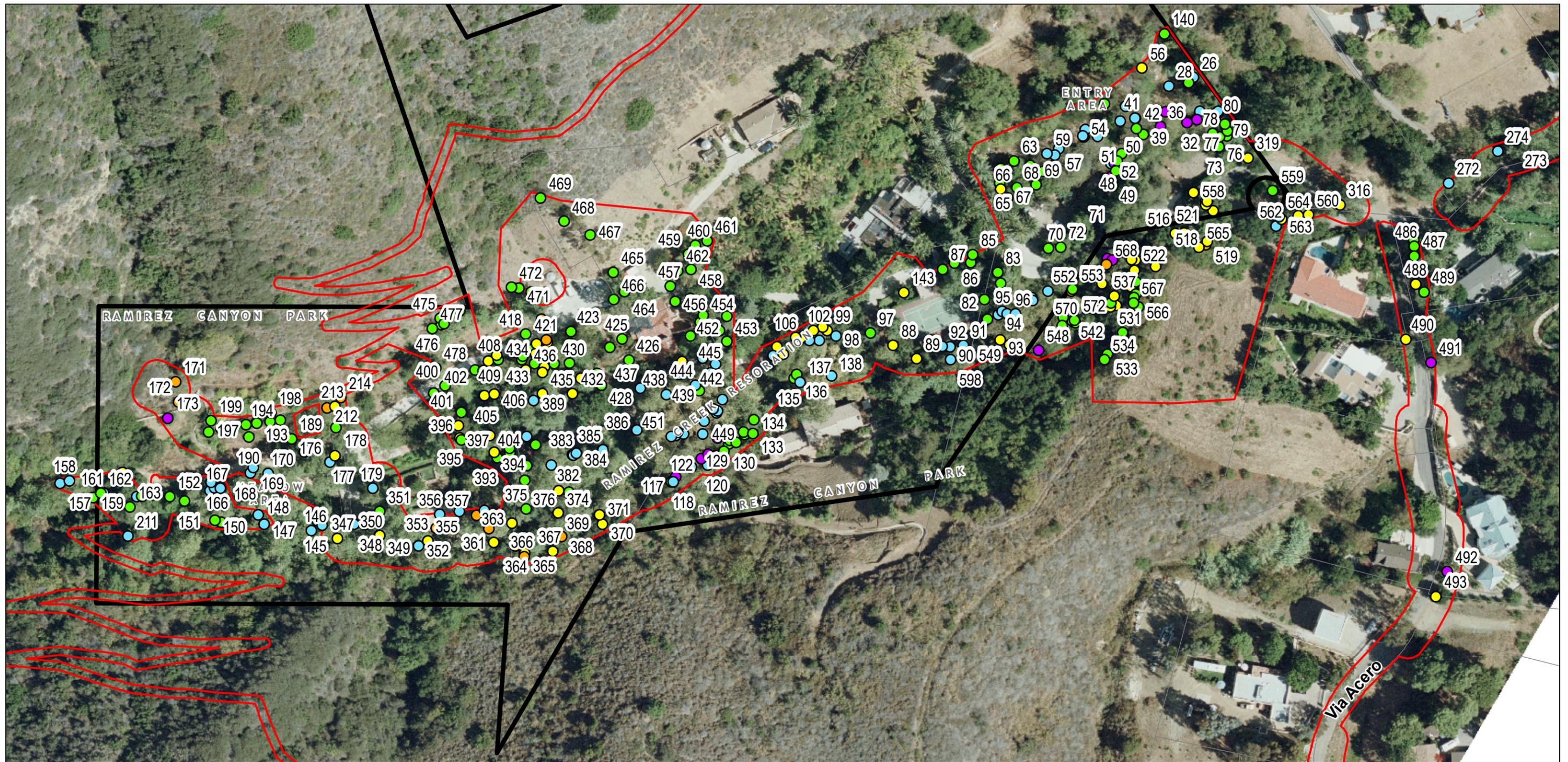


**Tree Location**

- Non-Native Trees
- Coast live oak (*Quercus agrifolia*)
- Western sycamore (*Platanus racemosa*)
- Alder (*Alnus rhombifolia*)
- Toyon (*Heteromoles arbutifolia*)
- California walnut (*Juglans californica*)
- GPS Inventory Area

**FIGURE A-2**

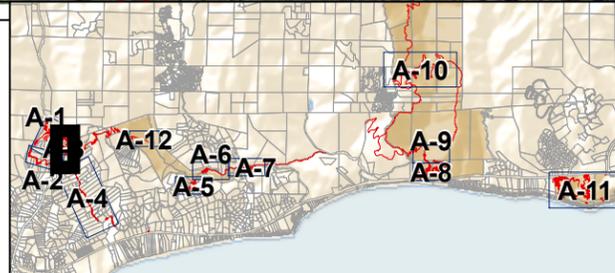
**Tree Location Exhibit - Via Acero**



SOURCE: Penfield&Smith 2010



0 50 100 Feet



**Tree Location**

- Non-Native Trees
- Alder (*Alnus rhombifolia*)
- Toyon (*Heteromoles arbutifolia*)
- Coast live oak (*Quercus agrifolia*)
- Western sycamore (*Platanus racemosa*)
- GPS Inventory Area

**Appendix A-3**  
**Tree Location Exhibit - Ramirez Canyon - Meadow and Entry Areas**



SOURCE: Penfield&Smith 2010

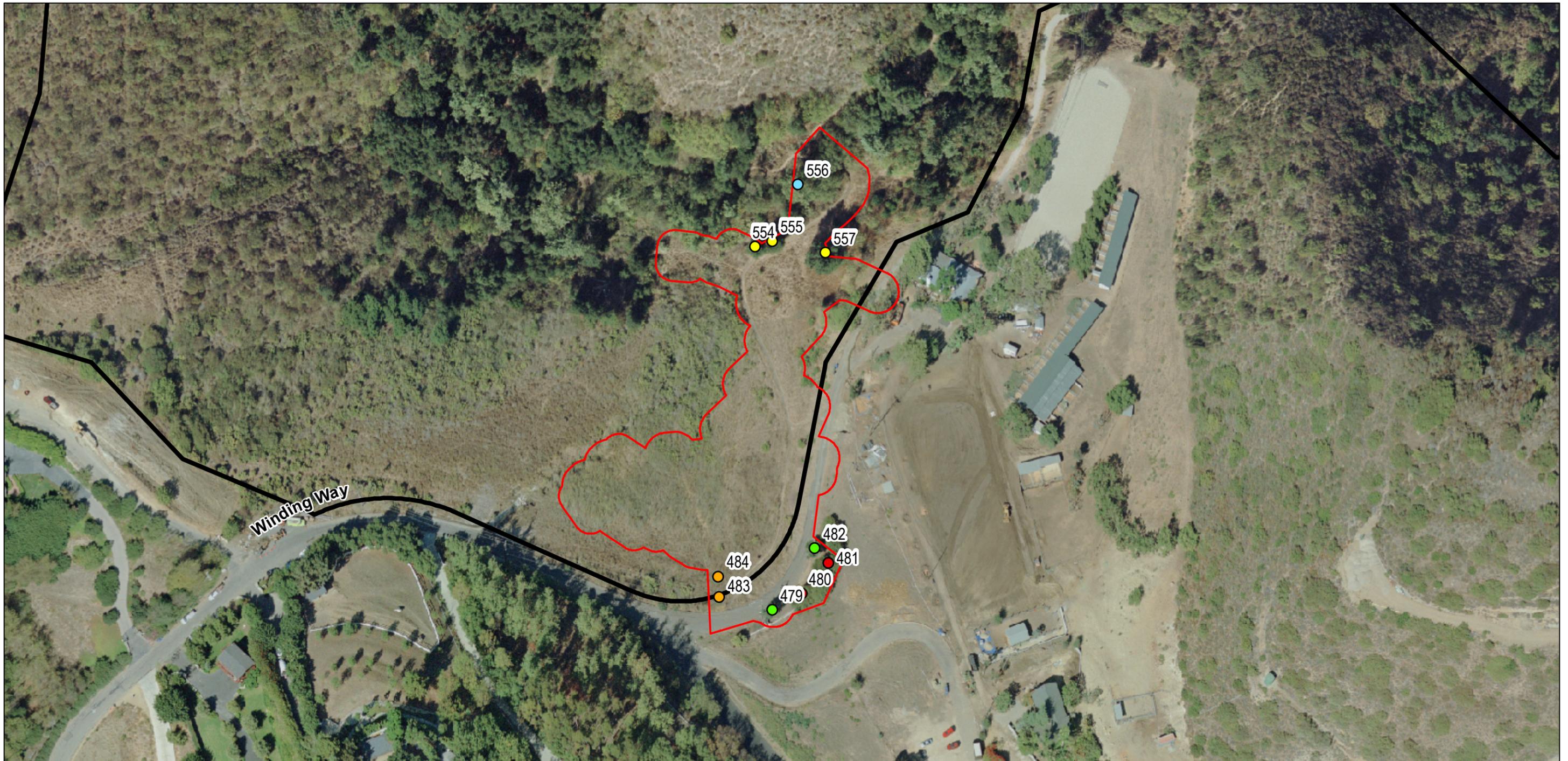


0 100 200 Feet



**Tree Location**

- Non-Native Trees
- Alder (*Alnus rhombifolia*)
- Coast live oak (*Quercus agrifolia*)
- Toyon (*Heteromoles arbutifolia*)
- California walnut (*Juglans californica*)
- Western sycamore (*Platanus racemosa*)
- GPS Inventory Area



SOURCE: Penfield&Smith 2010



0 100 200 Feet



**Tree Location**

- Non-Native Trees
- Coast live oak (*Quercus agrifolia*)
- Western sycamore (*Platanus racemosa*)
- Alder (*Alnus rhombifolia*)
- Toyon (*Heteromoles arbutifolia*)
- California walnut (*Juglans californica*)
- GPS Inventory Area



SOURCE: Penfield&Smith 2010



0 100 200 Feet



**Tree Location**

- Non-Native Trees
- Coast live oak (*Quercus agrifolia*)
- Western sycamore (*Platanus racemosa*)
- Alder (*Alnus rhombifolia*)
- Toyon (*Heteromoles arbutifolia*)
- California walnut (*Juglans californica*)
- GPS Inventory Area



SOURCE: Penfield&Smith 2010



0 100 200 Feet



**Tree Location**

- Non-Native Trees
- Coast live oak (*Quercus agrifolia*)
- Western sycamore (*Platanus racemosa*)
- Alder (*Alnus rhombifolia*)
- Toyon (*Heteromoles arbutifolia*)
- California walnut (*Juglans californica*)
- GPS Inventory Area



SOURCE: Penfield&Smith 2010



0 100 200 Feet



**Tree Location**

- Non-Native Trees
- Coast live oak (*Quercus agrifolia*)
- Western sycamore (*Platanus racemosa*)
- Alder (*Alnus rhombifolia*)
- Toyon (*Heteromoles arbutifolia*)
- California walnut (*Juglans californica*)

GPS Inventory Area



SOURCE: Penfield&Smith 2010



0 100 200 Feet



**Tree Location**

- Non-Native Trees
- Coast live oak (*Quercus agrifolia*)
- Western sycamore (*Platanus racemosa*)
- Alder (*Alnus rhombifolia*)
- Toyon (*Heteromoles arbutifolia*)
- California walnut (*Juglans californica*)
- GPS Inventory Area

Tree Location Exhibit - Corral Canyon Camp Area North



SOURCE: Penfield&Smith 2010



0 100 200 Feet



**Tree Location**

- Non-Native Trees
- Coast live oak (*Quercus agrifolia*)
- Western sycamore (*Platanus racemosa*)
- Alder (*Alnus rhombifolia*)
- Toyon (*Heteromoles arbutifolia*)
- California walnut (*Juglans californica*)
- GPS Inventory Area



SOURCE: Penfield&Smith 2010

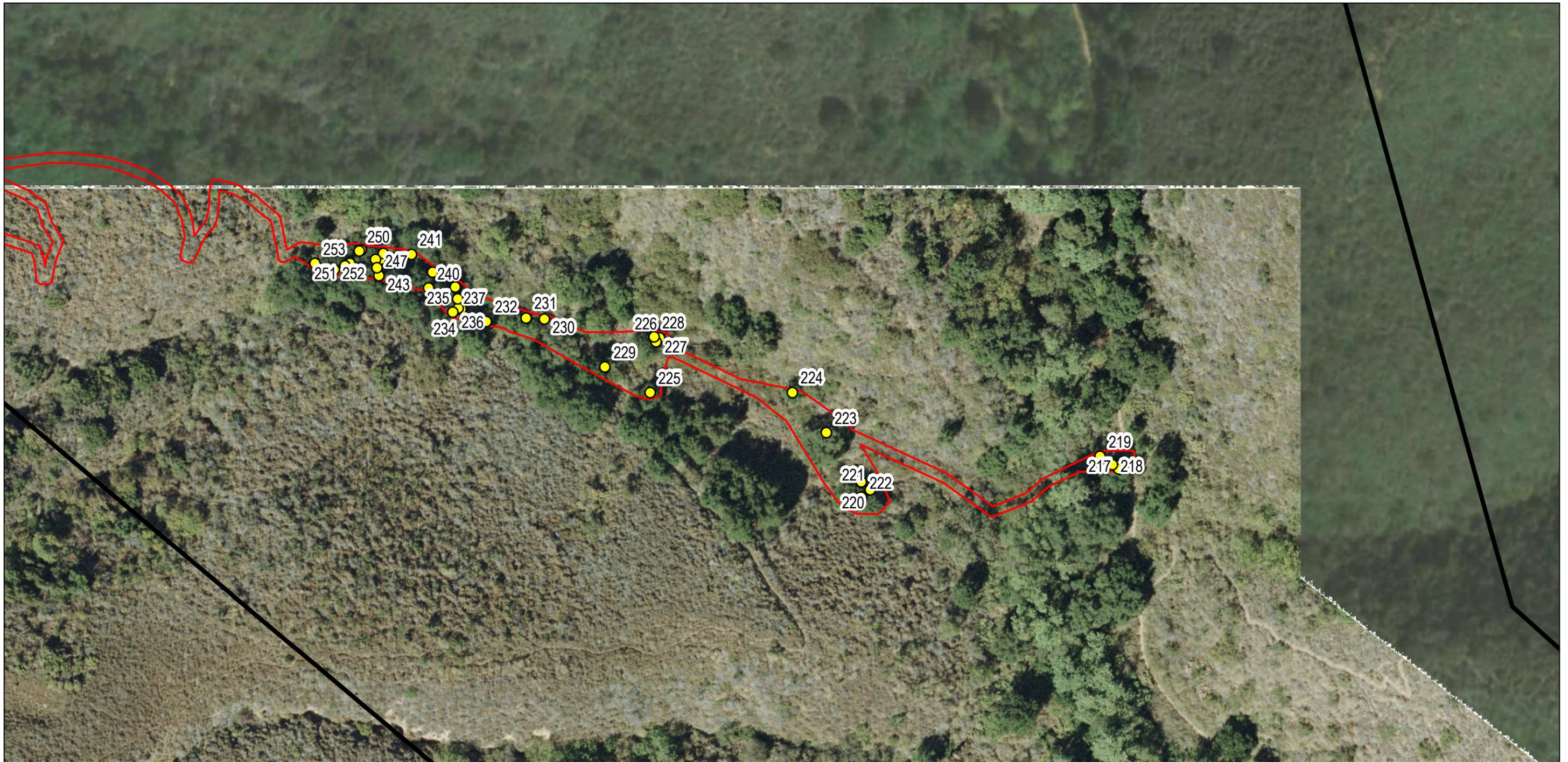


0 100 200 Feet



**Tree Location**

- Non-Native Trees
- Coast live oak (*Quercus agrifolia*)
- Western sycamore (*Platanus racemosa*)
- Alder (*Alnus rhombifolia*)
- Toyon (*Heteromoles arbutifolia*)
- California walnut (*Juglans californica*)
- GPS Inventory Area



SOURCE: Penfield&Smith 2010



0 100 200 Feet



**Tree Location**

- Non-Native Trees
- Coast live oak (*Quercus agrifolia*)
- Western sycamore (*Platanus racemosa*)
- Alder (*Alnus rhombifolia*)
- Toyon (*Heteromoles arbutifolia*)
- California walnut (*Juglans californica*)
- GPS Inventory Area

APPENDIX B  
*Tree Information Matrix*



**Appendix B - Tree Information Matrix - Malibu Park Public Access Enhancement Native Tree Protection Plan**

| Tree Number | Botanical Name                  | Common Name         | Stems | Individual Trunk |    |    |    |    |    | Trunk DBH (inches)* | Height | Canopy | Health | Structure | Notes | Impact Status by Alternative |                         |                               |   |
|-------------|---------------------------------|---------------------|-------|------------------|----|----|----|----|----|---------------------|--------|--------|--------|-----------|-------|------------------------------|-------------------------|-------------------------------|---|
|             |                                 |                     |       | S1               | S2 | S3 | S4 | S5 | S6 |                     |        |        |        |           |       | Proposed Project Impacts     | LCP Alternative Impacts | Re-Design Alternative Impacts |   |
|             |                                 |                     |       |                  |    |    |    |    |    |                     |        |        |        |           |       |                              |                         |                               |   |
| 1           | <i>Eucalyptus globulus</i>      | Blue gum            | 2     | 21               | 19 |    |    |    |    | 28                  | 50     | 30     | fair   | fair      |       | X                            | X                       | X                             |   |
| 2           | <i>Quercus agrifolia</i>        | Coast live oak      | 6     | 9                | 7  | 7  |    | 7  | 5  | 4                   | 16     | 20     | 20     | poor      | fair  | fire damage                  | X                       | X                             | X |
| 3           | <i>Quercus agrifolia</i>        | Coast live oak      | 3     | 16               | 16 | 12 |    |    |    |                     | 26     | 25     | 20     | fair      | fair  | fire damage                  | X                       |                               |   |
| 4           | <i>Quercus agrifolia</i>        | Coast live oak      | 1     | 7                |    |    |    |    |    |                     | 7      | 18     | 12     | fair      | fair  | fire damage                  | X                       |                               | X |
| 5           | <i>Quercus agrifolia</i>        | Coast live oak      | 3     | 7                | 9  | 9  |    |    |    |                     | 15     | 18     | 10     | good      | good  |                              |                         |                               |   |
| 6           | <i>Quercus agrifolia</i>        | Coast live oak      | 2     | 5                | 4  |    |    |    |    |                     | 6      | 10     | 10     | good      | good  |                              |                         |                               |   |
| 7           | <i>Quercus agrifolia</i>        | Coast live oak      | 1     | 23               |    |    |    |    |    |                     | 23     | 25     | 25     | good      | good  |                              | X                       | X                             | X |
| 8           | <i>Eucalyptus maculata</i>      | Spotted gum         | 1     | 5                |    |    |    |    |    |                     | 5      | 25     | 10     | good      | good  |                              |                         |                               |   |
| 9           | <i>Quercus agrifolia</i>        | Coast live oak      | 1     | 5                |    |    |    |    |    |                     | 5      | 8      | 7      | good      | good  |                              | X                       | X                             | X |
| 10          | <i>Quercus agrifolia</i>        | Coast live oak      | 2     | 7                | 5  |    |    |    |    |                     | 9      | 12     | 7      | good      | good  |                              |                         |                               |   |
| 11          | <i>Quercus agrifolia</i>        | Coast live oak      | 2     | 3                | 2  |    |    |    |    |                     | 4      | 9      | 5      | poor      | fair  |                              |                         |                               |   |
| 12          | <i>Quercus agrifolia</i>        | Coast live oak      | 3     | 5                | 5  | 3  |    |    |    |                     | 8      | 15     | 10     | good      | fair  |                              |                         |                               |   |
| 13          | <i>Quercus agrifolia</i>        | Coast live oak      | 2     | 4                | 4  |    |    |    |    |                     | 6      | 10     | 6      | good      | fair  |                              |                         |                               |   |
| 14          | <i>Platanus racemosa</i>        | California sycamore | 1     | 14               |    |    |    |    |    |                     | 14     | 40     | 18     | fair      | fair  |                              | X                       |                               |   |
| 15          | <i>Platanus racemosa</i>        | California sycamore | 5     | 7                | 7  | 5  | 5  | 2  |    |                     | 12     | 20     | 12     | good      | fair  |                              | X                       |                               |   |
| 16          | <i>Platanus racemosa</i>        | California sycamore | 1     | 5                |    |    |    |    |    |                     | 5      | 20     | 6      | good      | fair  |                              | X                       |                               |   |
| 17          | <i>Platanus racemosa</i>        | California sycamore | 2     | 4                | 2  |    |    |    |    |                     | 4      | 18     | 6      | fair      | fair  |                              | X                       |                               |   |
| 18          | <i>Platanus racemosa</i>        | California sycamore | 5     | 5                | 5  | 4  | 3  | 2  |    |                     | 9      | 18     | 10     | good      | fair  |                              | X                       |                               |   |
| 19          | <i>Platanus racemosa</i>        | California sycamore | 3     | 7                | 5  | 2  |    |    |    |                     | 9      | 20     | 10     | good      | fair  |                              | X                       |                               |   |
| 20          | <i>Alnus rhombifolia</i>        | White alder         | 1     | 21               |    |    |    |    |    |                     | 21     | 40     | 18     | good      | fair  |                              |                         |                               |   |
| 21          | <i>Alnus rhombifolia</i>        | White alder         | 1     | 15               |    |    |    |    |    |                     | 15     | 40     | 18     | good      | fair  |                              |                         |                               |   |
| 22          | <i>Salix lasiolepis</i>         | Arroyo willow       | 1     | 15               |    |    |    |    |    |                     | 15     | 25     | 20     | fair      | fair  |                              |                         |                               |   |
| 23          | <i>Platanus racemosa</i>        | California sycamore | 1     | 32               |    |    |    |    |    |                     | 32     | 40     | 20     | fair      | fair  | fire damage                  | X                       |                               |   |
| 24          | <i>Platanus racemosa</i>        | California sycamore | 2     | 35               | 23 |    |    |    |    |                     | 42     | 35     | 25     | fair      | poor  | fire damage                  | X                       |                               |   |
| 25          | <i>Platanus racemosa</i>        | California sycamore | 2     | 13               | 9  |    |    |    |    |                     | 16     | 35     | 25     | fair      | poor  | fire damage                  | X                       |                               |   |
| 26          | <i>Platanus racemosa</i>        | California sycamore | 1     | 14               |    |    |    |    |    |                     | 14     | 60     | 15     | fair      | good  | fire damage                  | X                       |                               | X |
| 27          | <i>Podocarpus macrophyllus</i>  | Yew pine            | 1     | 21               |    |    |    |    |    |                     | 21     | 45     | 20     | good      | good  | fire damage                  | X                       |                               | X |
| 28          | <i>Platanus racemosa</i>        | California sycamore | 1     | 13               |    |    |    |    |    |                     | 13     | 45     | 20     | good      | good  | fire damage                  | X                       |                               | X |
| 29          | <i>Platanus racemosa</i>        | California sycamore | 1     | 17               |    |    |    |    |    |                     | 17     | 50     | 20     | good      | good  | fire damage                  |                         |                               |   |
| 30          | <i>Alnus rhombifolia</i>        | White alder         | 1     | 12               |    |    |    |    |    |                     | 12     | 50     | 15     | good      | good  |                              |                         |                               | X |
| 31          | <i>Platanus racemosa</i>        | California sycamore | 1     | 9                |    |    |    |    |    |                     | 9      | 35     | 10     | good      | good  |                              |                         |                               |   |
| 32          | <i>Alnus rhombifolia</i>        | White alder         | 1     | 14               |    |    |    |    |    |                     | 14     | 50     | 15     | good      | good  |                              |                         |                               |   |
| 33          | <i>Alnus rhombifolia</i>        | White alder         | 1     | 14               |    |    |    |    |    |                     | 14     | 50     | 18     | good      | good  |                              | X                       |                               | X |
| 34          | <i>Schinus terebinthifolius</i> | Brazilian pepper    | 1     | 7                |    |    |    |    |    |                     | 7      | 22     | 10     | good      | good  |                              | X                       |                               | X |
| 35          | <i>Platanus racemosa</i>        | California sycamore | 1     | 19               |    |    |    |    |    |                     | 19     | 60     | 20     | good      | good  |                              | X                       |                               | X |
| 36          | <i>Alnus rhombifolia</i>        | White alder         | 1     | 19               |    |    |    |    |    |                     | 19     | 60     | 25     | good      | good  |                              |                         |                               |   |
| 37          | <i>Platanus racemosa</i>        | California sycamore | 1     | 19               |    |    |    |    |    |                     | 19     | 60     | 25     | fair      | fair  |                              | X                       |                               | X |
| 38          | <i>Platanus racemosa</i>        | California sycamore | 1     | 19               |    |    |    |    |    |                     | 19     | 60     | 30     | fair      | fair  |                              | X                       |                               | X |
| 39          | <i>Salix lasiolepis</i>         | Arroyo willow       | 1     | 7                |    |    |    |    |    |                     | 7      | 20     | 15     | fair      | fair  |                              |                         |                               |   |
| 40          | <i>Alnus rhombifolia</i>        | White alder         | 1     | 14               |    |    |    |    |    |                     | 14     | 60     | 15     | good      | fair  |                              | X                       |                               | X |
| 41          | <i>Platanus racemosa</i>        | California sycamore | 1     | 7                |    |    |    |    |    |                     | 7      | 45     | 10     | good      | fair  |                              | X                       |                               | X |
| 42          | <i>Salix lasiolepis</i>         | Arroyo willow       | 1     | 9                |    |    |    |    |    |                     | 9      | 18     | 10     | poor      | fair  |                              | X                       |                               | X |
| 43          | <i>Schinus terebinthifolius</i> | Brazilian pepper    | 1     | 4                |    |    |    |    |    |                     | 4      | 20     | 10     | good      | fair  |                              |                         |                               |   |
| 44          | <i>Platanus racemosa</i>        | California sycamore | 1     | 9                |    |    |    |    |    |                     | 9      | 60     | 15     | good      | fair  |                              | X                       |                               | X |
| 45          | <i>Platanus racemosa</i>        | California sycamore | 1     | 13               |    |    |    |    |    |                     | 13     | 65     | 25     | good      | fair  |                              | X                       |                               | X |
| 46          | <i>Salix lasiolepis</i>         | Arroyo willow       | 1     | 19               |    |    |    |    |    |                     | 19     | 45     | 20     | fair      | fair  |                              | X                       |                               | X |

**Appendix B - Tree Information Matrix - Malibu Park Public Access Enhancement Native Tree Protection Plan**

| Tree Number | Botanical Name                  | Common Name         | Stems | Individual Trunk |    |    |    |    |    | Trunk DBH (inches)* | Height | Canopy | Health | Structure | Notes | Impact Status by Alternative |                         |                               |
|-------------|---------------------------------|---------------------|-------|------------------|----|----|----|----|----|---------------------|--------|--------|--------|-----------|-------|------------------------------|-------------------------|-------------------------------|
|             |                                 |                     |       | S1               | S2 | S3 | S4 | S5 | S6 |                     |        |        |        |           |       | Proposed Project Impacts     | LCP Alternative Impacts | Re-Design Alternative Impacts |
|             |                                 |                     |       |                  |    |    |    |    |    |                     |        |        |        |           |       |                              |                         |                               |
| 47          | <i>Platanus racemosa</i>        | California sycamore | 1     | 13               |    |    |    |    |    | 13                  | 55     | 10     | fair   | fair      |       |                              |                         |                               |
| 48          | <i>Alnus rhombifolia</i>        | White alder         | 2     | 17               | 16 |    |    |    |    | 23                  | 60     | 25     | good   | fair      |       |                              |                         |                               |
| 49          | <i>Alnus rhombifolia</i>        | White alder         | 2     | 15               | 15 |    |    |    |    | 21                  | 70     | 30     | fair   | fair      |       | X                            |                         | X                             |
| 50          | <i>Schinus terebinthifolius</i> | Brazilian pepper    | 1     | 7                |    |    |    |    |    | 7                   | 18     | 8      | fair   | fair      |       |                              |                         |                               |
| 51          | <i>Schinus terebinthifolius</i> | Brazilian pepper    | 1     | 5                |    |    |    |    |    | 5                   | 18     | 8      | good   | fair      |       |                              |                         |                               |
| 52          | <i>Betula spp.</i>              | Birch               | 2     | 11               | 7  |    |    |    |    | 13                  | 60     | 10     | good   | fair      |       |                              |                         | X                             |
| 53          | <i>Platanus racemosa</i>        | California sycamore | 1     | 15               |    |    |    |    |    | 15                  | 60     | 20     | fair   | fair      |       | X                            |                         | X                             |
| 54          | <i>Platanus racemosa</i>        | California sycamore | 1     | 15               |    |    |    |    |    | 15                  | 55     | 20     | fair   | fair      |       | X                            |                         | X                             |
| 55          | <i>Schinus terebinthifolius</i> | Brazilian pepper    | 1     | 5                |    |    |    |    |    | 5                   | 18     | 10     | good   | fair      |       |                              |                         |                               |
| 56          | <i>Quercus agrifolia</i>        | Coast live oak      | 1     | 7                |    |    |    |    |    | 7                   | 22     | 10     | good   | fair      |       |                              |                         |                               |
| 57          | <i>Platanus racemosa</i>        | California sycamore | 1     | 7                |    |    |    |    |    | 7                   | 55     | 10     | fair   | fair      |       | X                            |                         | X                             |
| 58          | <i>Platanus racemosa</i>        | California sycamore | 1     | 17               |    |    |    |    |    | 17                  | 60     | 20     | good   | fair      |       | X                            |                         | X                             |
| 59          | <i>Platanus racemosa</i>        | California sycamore | 2     | 14               | 14 |    |    |    |    | 20                  | 55     | 25     | good   | fair      |       | X                            |                         | X                             |
| 60          | <i>Podocarpus macrophyllus</i>  | Yew pine            | 1     | 17               |    |    |    |    |    | 17                  | 45     | 25     | good   | fair      |       | X                            |                         | X                             |
| 61          | <i>Podocarpus macrophyllus</i>  | Yew pine            | 4     | 18               | 7  | 7  | 6  |    |    | 21                  | 50     | 25     | good   | fair      |       | X                            |                         | X                             |
| 62          | <i>Pittosporum undulatum</i>    | Victorian box       | 1     | 7                |    |    |    |    |    | 7                   | 35     | 20     | good   | fair      |       | X                            |                         | X                             |
| 63          | <i>Pittosporum undulatum</i>    | Victorian box       | 1     | 15               |    |    |    |    |    | 15                  | 25     | 20     | good   | fair      |       | X                            |                         | X                             |
| 64          | <i>Pittosporum undulatum</i>    | Victorian box       | 2     | 5                | 5  |    |    |    |    | 7                   | 25     | 18     | good   | fair      |       | X                            |                         | X                             |
| 65          | <i>Schinus terebinthifolius</i> | Brazilian pepper    | 1     | 11               |    |    |    |    |    | 11                  | 30     | 18     | fair   | fair      |       | X                            |                         | X                             |
| 66          | <i>Quercus agrifolia</i>        | Coast live oak      | 1     | 11               |    |    |    |    |    | 11                  | 25     | 18     | good   | fair      |       | X                            |                         | X                             |
| 67          | <i>Quercus agrifolia</i>        | Coast live oak      | 1     | 5                |    |    |    |    |    | 5                   | 18     | 12     | good   | fair      |       | X                            |                         | X                             |
| 68          | <i>Schinus terebinthifolius</i> | Brazilian pepper    | 1     | 9                |    |    |    |    |    | 9                   | 20     | 15     | fair   | fair      |       | X                            |                         | X                             |
| 69          | <i>Jacaranda mimosifolia</i>    | Jacaranda           | 1     | 15               |    |    |    |    |    | 15                  | 20     | 20     | fair   | fair      |       | X                            |                         | X                             |
| 70          | <i>Pittosporum undulatum</i>    | Victorian box       | 2     | 9                | 4  |    |    |    |    | 10                  | 20     | 15     | good   | fair      |       | X                            |                         | X                             |
| 71          | <i>Pittosporum undulatum</i>    | Victorian box       | 2     | 9                | 4  |    |    |    |    | 10                  | 20     | 15     | good   | fair      |       | X                            |                         | X                             |
| 72          | <i>Pittosporum undulatum</i>    | Victorian box       | 1     | 5                |    |    |    |    |    | 5                   | 18     | 14     | good   | fair      |       | X                            |                         | X                             |
| 73          | <i>Sequoia sempervirens</i>     | Coast redwood       | 1     | 5                |    |    |    |    |    | 5                   | 18     | 10     | good   | fair      |       |                              |                         |                               |
| 74          | <i>Sequoia sempervirens</i>     | Coast redwood       | 1     | 15               |    |    |    |    |    | 15                  | 50     | 15     | good   | fair      |       | X                            | X                       | X                             |
| 75          | <i>Sequoia sempervirens</i>     | Coast redwood       | 1     | 14               |    |    |    |    |    | 14                  | 45     | 15     | good   | fair      |       |                              |                         |                               |
| 76          | <i>Sequoia sempervirens</i>     | Coast redwood       | 1     | 12               |    |    |    |    |    | 12                  | 45     | 15     | good   | good      |       |                              |                         |                               |
| 77          | <i>Sequoia sempervirens</i>     | Coast redwood       | 1     | 5                |    |    |    |    |    | 5                   | 18     | 10     | good   | good      |       |                              |                         |                               |
| 78          | <i>Sequoia sempervirens</i>     | Coast redwood       | 1     | 9                |    |    |    |    |    | 9                   | 30     | 15     | good   | good      |       | X                            | X                       | X                             |
| 79          | <i>Sequoia sempervirens</i>     | Coast redwood       | 2     | 9                | 6  |    |    |    |    | 11                  | 40     | 15     | good   | good      |       | X                            | X                       | X                             |
| 80          | <i>Sequoia sempervirens</i>     | Coast redwood       | 1     | 13               |    |    |    |    |    | 13                  | 50     | 15     | good   | good      |       | X                            | X                       | X                             |
| 81          | <i>Pittosporum undulatum</i>    | Victorian box       | 1     | 5                |    |    |    |    |    | 5                   | 20     | 8      | fair   | good      |       | X                            | X                       | X                             |
| 82          | <i>Pittosporum undulatum</i>    | Victorian box       | 2     | 12               | 9  |    |    |    |    | 15                  | 55     | 15     | good   | good      |       | X                            |                         | X                             |
| 83          | <i>Pinus canariensis</i>        | Canary Island pine  | 1     | 15               |    |    |    |    |    | 15                  | 65     | 20     | good   | good      |       | X                            |                         | X                             |
| 84          | <i>Pinus canariensis</i>        | Canary Island pine  | 1     | 19               |    |    |    |    |    | 19                  | 65     | 20     | good   | good      |       | X                            |                         | X                             |
| 85          | <i>Pittosporum undulatum</i>    | Victorian box       | 1     | 5                |    |    |    |    |    | 5                   | 35     | 15     | good   | good      |       |                              |                         | X                             |
| 86          | <i>Schinus terebinthifolius</i> | Brazilian pepper    | 1     | 19               |    |    |    |    |    | 19                  | 30     | 15     | fair   | fair      |       | X                            |                         | X                             |
| 87          | <i>Pinus canariensis</i>        | Canary Island pine  | 1     | 19               |    |    |    |    |    | 19                  | 65     | 18     | good   | fair      |       | X                            |                         | X                             |
| 88          | <i>Quercus agrifolia</i>        | Coast live oak      | 1     | 7                |    |    |    |    |    | 7                   | 25     | 15     | good   | fair      |       | X                            |                         | X                             |
| 89          | <i>Quercus agrifolia</i>        | Coast live oak      | 2     | 26               | 21 |    |    |    |    | 33                  | 45     | 30     | good   | fair      |       | X                            | X                       | X                             |
| 90          | <i>Platanus racemosa</i>        | California sycamore | 1     | 19               |    |    |    |    |    | 19                  | 55     | 20     | good   | fair      |       | X                            | X                       | X                             |
| 91          | <i>Platanus racemosa</i>        | California sycamore | 1     | 15               |    |    |    |    |    | 15                  | 55     | 20     | good   | fair      |       | X                            | X                       | X                             |
| 92          | <i>Platanus racemosa</i>        | California sycamore | 1     | 15               |    |    |    |    |    | 15                  | 55     | 20     | good   | fair      |       | X                            | X                       | X                             |

**Appendix B - Tree Information Matrix - Malibu Park Public Access Enhancement Native Tree Protection Plan**

| Tree Number | Botanical Name              | Common Name         | Stems | Individual Trunk |    |    |    |    |    | Trunk DBH (inches)* | Height | Canopy | Health | Structure | Notes | Impact Status by Alternative |                         |                               |
|-------------|-----------------------------|---------------------|-------|------------------|----|----|----|----|----|---------------------|--------|--------|--------|-----------|-------|------------------------------|-------------------------|-------------------------------|
|             |                             |                     |       | S1               | S2 | S3 | S4 | S5 | S6 |                     |        |        |        |           |       | Proposed Project Impacts     | LCP Alternative Impacts | Re-Design Alternative Impacts |
|             |                             |                     |       |                  |    |    |    |    |    |                     |        |        |        |           |       |                              |                         |                               |
| 93          | <i>Quercus agrifolia</i>    | Coast live oak      | 1     | 21               |    |    |    |    |    | 21                  | 55     | 35     | good   | fair      |       | X                            | X                       | X                             |
| 94          | <i>Platanus racemosa</i>    | California sycamore | 1     | 19               |    |    |    |    |    | 19                  | 65     | 30     | good   | fair      |       | X                            | X                       | X                             |
| 95          | <i>Platanus racemosa</i>    | California sycamore | 1     | 21               |    |    |    |    |    | 21                  | 70     | 35     | good   | fair      |       | X                            |                         | X                             |
| 96          | <i>Platanus racemosa</i>    | California sycamore | 1     | 21               |    |    |    |    |    | 21                  | 35     | 20     | good   | fair      |       | X                            |                         | X                             |
| 97          | <i>Sequoia sempervirens</i> | Coast redwood       | 1     | 21               |    |    |    |    |    | 21                  | 60     | 20     | good   | fair      |       | X                            |                         | X                             |
| 98          | <i>Platanus racemosa</i>    | California sycamore | 1     | 19               |    |    |    |    |    | 19                  | 60     | 25     | fair   | fair      |       |                              |                         | X                             |
| 99          | <i>Quercus agrifolia</i>    | Coast live oak      | 1     | 11               |    |    |    |    |    | 11                  | 35     | 25     | good   | fair      |       |                              |                         |                               |
| 100         | <i>Quercus agrifolia</i>    | Coast live oak      | 1     | 11               |    |    |    |    |    | 11                  | 40     | 25     | good   | fair      |       |                              |                         |                               |
| 101         | <i>Quercus agrifolia</i>    | Coast live oak      | 1     | 9                |    |    |    |    |    | 9                   | 35     | 20     | good   | fair      |       |                              |                         |                               |
| 102         | <i>Quercus agrifolia</i>    | Coast live oak      | 1     | 15               |    |    |    |    |    | 15                  | 50     | 20     | good   | fair      |       |                              |                         |                               |
| 103         | <i>Platanus racemosa</i>    | California sycamore | 1     | 15               |    |    |    |    |    | 15                  | 65     | 20     | good   | fair      |       |                              |                         |                               |
| 104         | <i>Platanus racemosa</i>    | California sycamore | 1     | 23               |    |    |    |    |    | 23                  | 65     | 20     | good   | fair      |       |                              |                         |                               |
| 105         | <i>Quercus agrifolia</i>    | Coast live oak      | 1     | 9                |    |    |    |    |    | 9                   | 30     | 18     | good   | fair      |       |                              |                         |                               |
| 106         | <i>Quercus agrifolia</i>    | Coast live oak      | 1     | 9                |    |    |    |    |    | 9                   | 35     | 15     | good   | fair      |       |                              |                         |                               |
| 107         | <i>Quercus agrifolia</i>    | Coast live oak      | 1     | 19               |    |    |    |    |    | 19                  | 40     | 20     | good   | fair      |       |                              |                         |                               |
| 108         | <i>Quercus agrifolia</i>    | Coast live oak      | 1     | 9                |    |    |    |    |    | 9                   | 20     | 10     | good   | fair      |       |                              |                         |                               |
| 109         | <i>Platanus racemosa</i>    | California sycamore | 1     | 23               |    |    |    |    |    | 23                  | 65     | 30     | good   | fair      |       |                              |                         |                               |
| 110         | <i>Platanus racemosa</i>    | California sycamore | 1     | 17               |    |    |    |    |    | 17                  | 60     | 20     | good   | fair      |       |                              |                         |                               |
| 111         | <i>Platanus racemosa</i>    | California sycamore | 2     | 17               | 14 |    |    |    |    | 22                  | 60     | 20     | fair   | fair      |       |                              |                         |                               |
| 112         | <i>Platanus racemosa</i>    | California sycamore | 1     | 12               |    |    |    |    |    | 12                  | 55     | 15     | good   | fair      |       |                              |                         |                               |
| 113         | <i>Platanus racemosa</i>    | California sycamore | 1     | 11               |    |    |    |    |    | 11                  | 50     | 15     | fair   | fair      |       | X                            | X                       | X                             |
| 114         | <i>Platanus racemosa</i>    | California sycamore | 1     | 11               |    |    |    |    |    | 11                  | 55     | 15     | fair   | fair      |       |                              |                         |                               |
| 115         | <i>Platanus racemosa</i>    | California sycamore | 1     | 21               |    |    |    |    |    | 21                  | 65     | 25     | fair   | fair      |       |                              |                         |                               |
| 116         | <i>Alnus rhombifolia</i>    | White alder         | 1     | 21               |    |    |    |    |    | 21                  | 60     | 20     | good   | fair      |       |                              |                         | X                             |
| 117         | <i>Sequoia sempervirens</i> | Coast redwood       | 1     | 16               |    |    |    |    |    | 16                  | 60     | 15     | good   | fair      |       |                              |                         |                               |
| 118         | <i>Platanus racemosa</i>    | California sycamore | 1     | 7                |    |    |    |    |    | 7                   | 55     | 15     | good   | fair      |       |                              |                         |                               |
| 119         | <i>Platanus racemosa</i>    | California sycamore | 1     | 7                |    |    |    |    |    | 7                   | 45     | 15     | fair   | fair      |       | X                            | X                       | X                             |
| 120         | <i>Platanus racemosa</i>    | California sycamore | 1     | 13               |    |    |    |    |    | 13                  | 60     | 15     | fair   | fair      |       |                              |                         |                               |
| 121         | <i>Alnus rhombifolia</i>    | White alder         | 1     | 9                |    |    |    |    |    | 9                   | 55     | 15     | fair   | fair      |       |                              |                         |                               |
| 122         | <i>Alnus rhombifolia</i>    | White alder         | 1     | 7                |    |    |    |    |    | 7                   | 55     | 15     | fair   | fair      |       |                              |                         | X                             |
| 123         | <i>Alnus rhombifolia</i>    | White alder         | 1     | 9                |    |    |    |    |    | 9                   | 55     | 18     | good   | fair      |       | X                            | X                       | X                             |
| 124         | <i>Alnus rhombifolia</i>    | White alder         | 1     | 13               |    |    |    |    |    | 13                  | 55     | 10     | poor   | fair      |       |                              |                         |                               |
| 125         | <i>Alnus rhombifolia</i>    | White alder         | 1     | 11               |    |    |    |    |    | 11                  | 55     | 10     | fair   | fair      |       | X                            | X                       | X                             |
| 126         | <i>Alnus rhombifolia</i>    | White alder         | 1     | 13               |    |    |    |    |    | 13                  | 55     | 10     | fair   | fair      |       |                              |                         |                               |
| 127         | <i>Ficus retusa</i>         | Gensing ficus       | 2     | 11               | 9  |    |    |    |    | 14                  | 30     | 15     | fair   | fair      |       | X                            | X                       | X                             |
| 128         | <i>Ficus retusa</i>         | Gensing ficus       | 3     | 11               | 9  | 5  |    |    |    | 15                  | 35     | 20     | fair   | fair      |       |                              |                         | X                             |
| 129         | <i>Ficus retusa</i>         | Gensing ficus       | 1     | 9                |    |    |    |    |    | 9                   | 55     | 15     | good   | fair      |       | X                            | X                       | X                             |
| 130         | <i>Ficus retusa</i>         | Gensing ficus       | 1     | 15               |    |    |    |    |    | 15                  | 60     | 20     | good   | fair      |       |                              |                         | X                             |
| 131         | <i>Ficus retusa</i>         | Gensing ficus       | 1     | 11               |    |    |    |    |    | 11                  | 50     | 20     | good   | fair      |       | X                            | X                       | X                             |
| 132         | <i>Ficus retusa</i>         | Gensing ficus       | 1     | 5                |    |    |    |    |    | 5                   | 45     | 20     | fair   | fair      |       | X                            | X                       | X                             |
| 133         | <i>Ficus retusa</i>         | Gensing ficus       | 1     | 13               |    |    |    |    |    | 13                  | 45     | 20     | fair   | fair      |       |                              |                         | X                             |
| 134         | <i>Ficus retusa</i>         | Gensing ficus       | 1     | 15               |    |    |    |    |    | 15                  | 50     | 20     | fair   | fair      |       | X                            | X                       | X                             |
| 135         | <i>Betula nigra</i>         | River birch         | 1     | 13               |    |    |    |    |    | 13                  | 55     | 20     | fair   | fair      |       | X                            | X                       | X                             |
| 136         | <i>Betula papyrifera</i>    | Paper birch         | 1     | 7                |    |    |    |    |    | 7                   | 40     | 15     | fair   | fair      |       | X                            | X                       | X                             |
| 137         | <i>Platanus racemosa</i>    | California sycamore | 1     | 29               |    |    |    |    |    | 29                  | 60     | 20     | good   | fair      |       |                              |                         |                               |
| 138         | <i>Platanus racemosa</i>    | California sycamore | 1     | 33               |    |    |    |    |    | 33                  | 60     | 25     | good   | fair      |       | X                            | X                       | X                             |

**Appendix B - Tree Information Matrix - Malibu Park Public Access Enhancement Native Tree Protection Plan**

| Tree Number | Botanical Name                  | Common Name                      | Stems | Individual Trunk |    |    |    |    |    | Trunk DBH (inches)* | Height | Canopy | Health | Structure   | Notes | Impact Status by Alternative |                         |                               |
|-------------|---------------------------------|----------------------------------|-------|------------------|----|----|----|----|----|---------------------|--------|--------|--------|-------------|-------|------------------------------|-------------------------|-------------------------------|
|             |                                 |                                  |       | S1               | S2 | S3 | S4 | S5 | S6 |                     |        |        |        |             |       | Proposed Project Impacts     | LCP Alternative Impacts | Re-Design Alternative Impacts |
|             |                                 |                                  |       |                  |    |    |    |    |    |                     |        |        |        |             |       |                              |                         |                               |
| 139         | <i>Platanus racemosa</i>        | California sycamore              | 2     | 21               | 9  |    |    |    | 23 | 40                  | 20     | fair   | poor   | fire damage | X     |                              |                         |                               |
| 140         | <i>Schinus terebinthifolius</i> | Brazilian pepper                 | 2     | 19               | 13 |    |    |    | 23 | 45                  | 20     | good   | good   | fire damage |       |                              |                         |                               |
| 141         | <i>Pittosporum undulatum</i>    | Victorian box                    | 1     | 7                |    |    |    |    | 7  | 45                  | 15     | good   | good   |             |       |                              | X                       |                               |
| 142         | <i>Pittosporum undulatum</i>    | Victorian box                    | 2     | 26               | 17 |    |    |    | 31 | 45                  | 25     | good   | good   |             | X     |                              | X                       |                               |
| 143         | <i>Quercus agrifolia</i>        | Coast live oak                   | 1     | 7                |    |    |    |    | 7  | 18                  | 15     | good   | good   |             | X     |                              | X                       |                               |
| 144         | <i>Platanus racemosa</i>        | California sycamore              | 1     | 22               |    |    |    |    | 22 | 60                  | 20     | good   | good   |             |       |                              |                         |                               |
| 145         | <i>Platanus racemosa</i>        | California sycamore              | 1     | 22               |    |    |    |    | 22 | 60                  | 25     | good   | fair   |             |       |                              |                         |                               |
| 146         | <i>Platanus racemosa</i>        | California sycamore              | 1     | 37               |    |    |    |    | 37 | 50                  | 30     | good   | fair   |             |       |                              |                         |                               |
| 147         | <i>Platanus racemosa</i>        | California sycamore              | 2     | 21               | 18 |    |    |    | 28 | 55                  | 40     | fair   | fair   |             |       |                              |                         |                               |
| 148         | <i>Platanus racemosa</i>        | California sycamore              | 1     | 28               |    |    |    |    | 28 | 50                  | 35     | fair   | fair   |             |       |                              |                         |                               |
| 149         | <i>Jacaranda mimosifolia</i>    | Jacaranda                        | 2     | 7                | 5  |    |    |    | 9  | 40                  | 15     | fair   | fair   |             |       |                              |                         |                               |
| 150         | <i>Jacaranda mimosifolia</i>    | Jacaranda                        | 2     | 13               | 4  |    |    |    | 14 | 35                  | 15     | fair   | fair   |             |       |                              |                         |                               |
| 151         | <i>Jacaranda mimosifolia</i>    | Jacaranda                        | 1     | 13               |    |    |    |    | 13 | 20                  | 15     | fair   | fair   |             |       |                              |                         |                               |
| 152         | <i>Jacaranda mimosifolia</i>    | Jacaranda                        | 1     | 15               |    |    |    |    | 15 | 20                  | 18     | fair   | fair   |             |       |                              |                         |                               |
| 153         | <i>Jacaranda mimosifolia</i>    | Jacaranda                        | 1     | 15               |    |    |    |    | 15 | 20                  | 18     | fair   | fair   |             | X     | X                            | X                       |                               |
| 154         | <i>Platanus racemosa</i>        | California sycamore              | 1     | 17               |    |    |    |    | 17 | 55                  | 20     | fair   | fair   |             |       |                              |                         |                               |
| 155         | <i>Salix lasiolepis</i>         | Arroyo willow                    | 1     | 9                |    |    |    |    | 9  | 50                  | 10     | fair   | fair   |             |       |                              |                         |                               |
| 156         | <i>Quercus agrifolia</i>        | Coast live oak                   | 2     | 45               | 21 |    |    |    | 50 | 25                  | 30     | fair   | fair   |             |       |                              |                         |                               |
| 157         | <i>Platanus racemosa</i>        | California sycamore              | 1     | 16               |    |    |    |    | 16 | 46                  | 30     | good   | fair   |             |       |                              |                         |                               |
| 158         | <i>Platanus racemosa</i>        | California sycamore              | 1     | 20               |    |    |    |    | 20 | 50                  | 20     | good   | fair   |             |       |                              |                         |                               |
| 159         | <i>Salix lasiolepis</i>         | Arroyo willow                    | 1     | 5                |    |    |    |    | 5  | 25                  | 15     | fair   | fair   |             |       |                              |                         |                               |
| 160         | <i>Platanus racemosa</i>        | California sycamore              | 1     | 7                |    |    |    |    | 7  | 30                  | 15     | fair   | fair   |             |       |                              |                         |                               |
| 161         | <i>Platanus racemosa</i>        | California sycamore              | 1     | 5                |    |    |    |    | 5  | 30                  | 6      | fair   | fair   |             |       |                              |                         |                               |
| 162         | <i>Salix lasiolepis</i>         | Arroyo willow                    | 1     | 5                |    |    |    |    | 5  | 30                  | 6      | good   | fair   |             |       |                              |                         |                               |
| 163         | <i>Salix lasiolepis</i>         | Arroyo willow                    | 1     | 5                |    |    |    |    | 5  | 30                  | 6      | fair   | fair   |             |       |                              |                         |                               |
| 164         | <i>Platanus racemosa</i>        | California sycamore              | 1     | 21               |    |    |    |    | 21 | 60                  | 20     | good   | fair   |             |       |                              |                         |                               |
| 165         | <i>Platanus racemosa</i>        | California sycamore              | 1     | 17               |    |    |    |    | 17 | 60                  | 20     | fair   | fair   |             |       |                              |                         |                               |
| 166         | <i>Platanus racemosa</i>        | California sycamore              | 1     | 19               |    |    |    |    | 19 | 55                  | 25     | good   | fair   |             |       |                              |                         |                               |
| 167         | <i>Platanus racemosa</i>        | California sycamore              | 1     | 19               |    |    |    |    | 19 | 55                  | 25     | good   | fair   |             |       |                              |                         |                               |
| 168         | <i>Platanus racemosa</i>        | California sycamore              | 1     | 21               |    |    |    |    | 21 | 60                  | 30     | good   | fair   |             |       |                              |                         |                               |
| 169         | <i>Platanus racemosa</i>        | California sycamore              | 1     | 21               |    |    |    |    | 21 | 60                  | 30     | good   | fair   |             | X     |                              |                         |                               |
| 170         | <i>Platanus racemosa</i>        | California sycamore              | 1     | 22               |    |    |    |    | 22 | 60                  | 30     | good   | fair   |             | X     |                              |                         |                               |
| 171         | <i>Juglans californica</i>      | Southern California black walnut | 2     | 7                | 4  |    |    |    | 8  | 15                  | 12     | fair   | fair   |             | X     |                              |                         |                               |
| 172         | <i>Juglans californica</i>      | Southern California black walnut | 2     | 5                | 4  |    |    |    | 6  | 15                  | 12     | fair   | fair   |             | X     |                              |                         |                               |
| 173         | <i>Alnus rhombifolia</i>        | White alder                      | 1     | 7                |    |    |    |    | 7  | 18                  | 12     | fair   | fair   |             | X     |                              |                         |                               |
| 174         | <i>Platanus racemosa</i>        | California sycamore              | 1     | 21               |    |    |    |    | 21 | 45                  | 20     | fair   | fair   |             | X     |                              | X                       |                               |
| 175         | <i>Platanus racemosa</i>        | California sycamore              | 1     | 23               |    |    |    |    | 23 | 50                  | 30     | good   | fair   |             | X     |                              | X                       |                               |
| 176         | <i>Platanus racemosa</i>        | California sycamore              | 1     | 21               |    |    |    |    | 21 | 50                  | 25     | good   | fair   |             | X     |                              |                         |                               |
| 177         | <i>Quercus agrifolia</i>        | Coast live oak                   | 2     | 18               | 16 |    |    |    | 24 | 35                  | 30     | good   | fair   |             | X     |                              | X                       |                               |
| 178         | <i>Schinus terebinthifolius</i> | Brazilian pepper                 | 2     | 16               | 12 |    |    |    | 20 | 35                  | 30     | fair   | poor   |             | X     |                              |                         |                               |
| 179         | <i>Platanus racemosa</i>        | California sycamore              | 1     | 19               |    |    |    |    | 19 | 55                  | 20     | good   | fair   |             | X     |                              | X                       |                               |
| 180         | <i>Platanus racemosa</i>        | California sycamore              | 1     | 28               |    |    |    |    | 28 | 55                  | 25     | good   | fair   |             | X     | X                            | X                       |                               |
| 181         | <i>Quercus agrifolia</i>        | Coast live oak                   | 1     | 17               |    |    |    |    | 17 | 25                  | 25     | good   | fair   |             |       |                              |                         |                               |
| 182         | <i>Quercus agrifolia</i>        | Coast live oak                   | 2     | 23               | 6  |    |    |    | 24 | 25                  | 30     | good   | fair   |             |       |                              | X                       |                               |
| 183         | <i>Platanus racemosa</i>        | California sycamore              | 3     | 21               | 6  | 4  |    |    | 22 | 30                  | 15     | poor   | poor   |             |       |                              |                         |                               |
| 184         | <i>Quercus agrifolia</i>        | Coast live oak                   | 1     | 15               |    |    |    |    | 15 | 30                  | 20     | poor   | poor   | fire damage | X     |                              |                         |                               |

**Appendix B - Tree Information Matrix - Malibu Park Public Access Enhancement Native Tree Protection Plan**

| Tree Number | Botanical Name             | Common Name                      | Stems | Individual Trunk |    |    |    |    |    | Trunk DBH (inches)* | Height | Canopy | Health | Structure | Notes             | Impact Status by Alternative |                         |                               |
|-------------|----------------------------|----------------------------------|-------|------------------|----|----|----|----|----|---------------------|--------|--------|--------|-----------|-------------------|------------------------------|-------------------------|-------------------------------|
|             |                            |                                  |       | S1               | S2 | S3 | S4 | S5 | S6 |                     |        |        |        |           |                   | Proposed Project Impacts     | LCP Alternative Impacts | Re-Design Alternative Impacts |
|             |                            |                                  |       |                  |    |    |    |    |    |                     |        |        |        |           |                   |                              |                         |                               |
| 185         | <i>Quercus agrifolia</i>   | Coast live oak                   | 3     | 15               | 13 | 12 |    |    |    | 23                  | 35     | 20     | fair   | poor      | fire damage       |                              |                         |                               |
| 186         | <i>Quercus agrifolia</i>   | Coast live oak                   | 1     | 7                |    |    |    |    |    | 7                   | 20     | 8      | poor   | poor      | fire damage       | X                            |                         |                               |
| 187         | <i>Quercus agrifolia</i>   | Coast live oak                   | 1     | 21               |    |    |    |    |    | 21                  | 30     | 25     | poor   | fair      | fire damage       |                              |                         |                               |
| 188         | <i>Quercus agrifolia</i>   | Coast live oak                   | 1     | 7                |    |    |    |    |    | 7                   | 18     | 15     | dead   | dead      | dead, fire damage | X                            |                         |                               |
| 189         | <i>Citrus spp.</i>         | Citrus                           | 1     | 5                |    |    |    |    |    | 5                   | 8      | 6      | fair   | fair      |                   | X                            |                         |                               |
| 190         | <i>Citrus spp.</i>         | Citrus                           | 1     | 5                |    |    |    |    |    | 5                   | 8      | 5      | fair   | fair      |                   | X                            | X                       | X                             |
| 191         | <i>Citrus spp.</i>         | Citrus                           | 1     | 5                |    |    |    |    |    | 5                   | 8      | 6      | fair   | fair      |                   | X                            | X                       | X                             |
| 192         | <i>Citrus spp.</i>         | Citrus                           | 1     | 5                |    |    |    |    |    | 5                   | 8      | 6      | fair   | fair      |                   | X                            | X                       | X                             |
| 193         | <i>Citrus spp.</i>         | Citrus                           | 1     | 5                |    |    |    |    |    | 5                   | 10     | 10     | fair   | fair      |                   | X                            | X                       | X                             |
| 194         | <i>Citrus spp.</i>         | Citrus                           | 1     | 5                |    |    |    |    |    | 5                   | 8      | 8      | fair   | fair      |                   | X                            | X                       | X                             |
| 195         | <i>Citrus spp.</i>         | Citrus                           | 1     | 5                |    |    |    |    |    | 5                   | 10     | 10     | fair   | fair      |                   | X                            | X                       | X                             |
| 196         | <i>Citrus spp.</i>         | Citrus                           | 1     | 5                |    |    |    |    |    | 5                   | 10     | 10     | fair   | fair      |                   |                              |                         |                               |
| 197         | <i>Citrus spp.</i>         | Citrus                           | 1     | 5                |    |    |    |    |    | 5                   | 8      | 6      | fair   | fair      |                   | X                            |                         |                               |
| 198         | <i>Citrus spp.</i>         | Citrus                           | 1     | 5                |    |    |    |    |    | 5                   | 8      | 6      | fair   | fair      |                   | X                            | X                       | X                             |
| 199         | <i>Citrus spp.</i>         | Citrus                           | 1     | 5                |    |    |    |    |    | 5                   | 8      | 8      | fair   | fair      |                   |                              |                         |                               |
| 200         | <i>Quercus agrifolia</i>   | Coast live oak                   | 5     | 12               | 10 | 7  | 6  | 11 |    | 19                  | 18     | 23     | good   | fair      |                   |                              |                         |                               |
| 210         | <i>Platanus racemosa</i>   | California sycamore              | 1     | 37               |    |    |    |    |    | 37                  | 35     | 20     | fair   | poor      |                   | X                            |                         |                               |
| 211         | <i>Platanus racemosa</i>   | California sycamore              | 1     | 40               |    |    |    |    |    | 40                  | 42     | 30     | good   | fair      |                   | X                            | X                       | X                             |
| 212         | <i>Juglans californica</i> | Southern California black walnut | 6     | 14               | 16 | 14 | 8  | 10 | 7  | 28                  | 22     | 35     | good   | fair      |                   | X                            | X                       | X                             |
| 213         | <i>Quercus agrifolia</i>   | Coast live oak                   | 2     | 5                | 2  |    |    |    |    | 5                   | 15     | 10     | good   | fair      |                   | X                            | X                       | X                             |
| 214         | <i>Juglans californica</i> | Southern California black walnut | 2     | 10               | 6  |    |    |    |    | 12                  | 18     | 20     | good   | fair      |                   | X                            | X                       | X                             |
| 215         | <i>Quercus agrifolia</i>   | Coast live oak                   | 1     | 7                |    |    |    |    |    | 7                   | 12     | 8      | good   | fair      |                   | X                            | X                       | X                             |
| 216         | <i>Quercus agrifolia</i>   | Coast live oak                   | 1     | 14               |    |    |    |    |    | 14                  | 20     | 14     | good   | good      |                   | X                            | X                       | X                             |
| 217         | <i>Quercus agrifolia</i>   | Coast live oak                   | 1     | 5                |    |    |    |    |    | 5                   | 17     | 6      | good   | good      |                   | X                            | X                       | X                             |
| 218         | <i>Quercus agrifolia</i>   | Coast live oak                   | 1     | 7                |    |    |    |    |    | 7                   | 17     | 7      | good   | good      |                   | X                            | X                       | X                             |
| 219         | <i>Quercus agrifolia</i>   | Coast live oak                   | 1     | 9                |    |    |    |    |    | 9                   | 17     | 16     | good   | good      |                   | X                            | X                       | X                             |
| 220         | <i>Quercus agrifolia</i>   | Coast live oak                   | 1     | 8                |    |    |    |    |    | 8                   | 15     | 10     | good   | good      |                   |                              |                         |                               |
| 221         | <i>Quercus agrifolia</i>   | Coast live oak                   | 2     | 7                | 7  |    |    |    |    | 10                  | 16     | 15     | good   | good      |                   |                              |                         |                               |
| 222         | <i>Quercus agrifolia</i>   | Coast live oak                   | 3     | 10               | 10 | 9  |    |    |    | 17                  | 18     | 16     | good   | good      |                   |                              |                         |                               |
| 223         | <i>Quercus agrifolia</i>   | Coast live oak                   | 1     | 58               |    |    |    |    |    | 58                  | 21     | 28     | good   | good      |                   | X                            | X                       | X                             |
| 224         | <i>Quercus agrifolia</i>   | Coast live oak                   | 1     | 10               |    |    |    |    |    | 10                  | 17     | 17     | good   | good      |                   | X                            | X                       | X                             |
| 225         | <i>Quercus agrifolia</i>   | Coast live oak                   | 1     | 14               |    |    |    |    |    | 14                  | 20     | 17     | good   | good      |                   |                              |                         |                               |
| 226         | <i>Quercus agrifolia</i>   | Coast live oak                   | 2     | 11               | 9  |    |    |    |    | 14                  | 20     | 16     | good   | fair      |                   |                              |                         |                               |
| 227         | <i>Quercus agrifolia</i>   | Coast live oak                   | 2     | 11               | 7  |    |    |    |    | 13                  | 21     | 16     | good   | fair      |                   | X                            | X                       | X                             |
| 228         | <i>Quercus agrifolia</i>   | Coast live oak                   | 1     | 6                |    |    |    |    |    | 6                   | 18     | 10     | good   | fair      |                   |                              |                         |                               |
| 229         | <i>Quercus agrifolia</i>   | Coast live oak                   | 3     | 14               | 12 | 12 |    |    |    | 22                  | 21     | 20     | good   | fair      |                   |                              |                         |                               |
| 230         | <i>Quercus agrifolia</i>   | Coast live oak                   | 5     | 9                | 6  | 5  | 5  | 4  |    | 13                  | 18     | 20     | good   | fair      |                   |                              |                         |                               |
| 231         | <i>Quercus agrifolia</i>   | Coast live oak                   | 2     | 10               | 12 |    |    |    |    | 16                  | 18     | 20     | good   | fair      |                   | X                            | X                       | X                             |
| 232         | <i>Quercus agrifolia</i>   | Coast live oak                   | 1     | 12               |    |    |    |    |    | 12                  | 18     | 11     | good   | fair      |                   | X                            | X                       | X                             |
| 233         | <i>Quercus agrifolia</i>   | Coast live oak                   | 1     | 11               |    |    |    |    |    | 11                  | 20     | 15     | good   | fair      |                   | X                            | X                       | X                             |
| 234         | <i>Quercus agrifolia</i>   | Coast live oak                   | 1     | 7                |    |    |    |    |    | 7                   | 19     | 12     | good   | fair      |                   | X                            | X                       | X                             |
| 235         | <i>Quercus agrifolia</i>   | Coast live oak                   | 1     | 14               |    |    |    |    |    | 14                  | 20     | 14     | good   | fair      |                   | X                            | X                       | X                             |
| 236         | <i>Quercus agrifolia</i>   | Coast live oak                   | 1     | 11               |    |    |    |    |    | 11                  | 23     | 12     | good   | fair      |                   | X                            | X                       | X                             |
| 237         | <i>Quercus agrifolia</i>   | Coast live oak                   | 2     | 8                | 7  |    |    |    |    | 11                  | 19     | 14     | good   | fair      |                   | X                            | X                       | X                             |
| 238         | <i>Pinus canariensis</i>   | Canary Island pine               | 1     | 12               |    |    |    |    |    | 12                  | 20     | 16     | good   | fair      |                   |                              |                         |                               |
| 239         | <i>Quercus agrifolia</i>   | Coast live oak                   | 1     | 13               |    |    |    |    |    | 13                  | 20     | 25     | good   | fair      |                   | X                            | X                       | X                             |

**Appendix B - Tree Information Matrix - Malibu Park Public Access Enhancement Native Tree Protection Plan**

| Tree Number | Botanical Name                  | Common Name                      | Stems | Individual Trunk |    |    |    |    |    | Trunk DBH (inches)* | Height | Canopy | Health | Structure | Notes | Impact Status by Alternative |                         |                               |
|-------------|---------------------------------|----------------------------------|-------|------------------|----|----|----|----|----|---------------------|--------|--------|--------|-----------|-------|------------------------------|-------------------------|-------------------------------|
|             |                                 |                                  |       | S1               | S2 | S3 | S4 | S5 | S6 |                     |        |        |        |           |       | Proposed Project Impacts     | LCP Alternative Impacts | Re-Design Alternative Impacts |
|             |                                 |                                  |       |                  |    |    |    |    |    |                     |        |        |        |           |       |                              |                         |                               |
| 240         | <i>Quercus agrifolia</i>        | Coast live oak                   | 1     | 9                |    |    |    |    | 9  | 19                  | 25     | good   | fair   |           | X     | X                            | X                       |                               |
| 241         | <i>Quercus agrifolia</i>        | Coast live oak                   | 1     | 14               |    |    |    |    | 14 | 20                  | 17     | good   | fair   |           |       |                              |                         |                               |
| 242         | <i>Quercus agrifolia</i>        | Coast live oak                   | 1     | 12               |    |    |    |    | 12 | 17                  | 15     | good   | fair   |           | X     | X                            | X                       |                               |
| 243         | <i>Quercus agrifolia</i>        | Coast live oak                   | 3     | 11               | 6  | 4  |    |    | 13 | 19                  | 20     | good   | fair   |           | X     | X                            | X                       |                               |
| 244         | <i>Quercus agrifolia</i>        | Coast live oak                   | 1     | 7                |    |    |    |    | 7  | 17                  | 10     | good   | fair   |           | X     | X                            | X                       |                               |
| 245         | <i>Quercus agrifolia</i>        | Coast live oak                   | 1     | 7                |    |    |    |    | 7  | 17                  | 8      | good   | fair   |           | X     | X                            | X                       |                               |
| 246         | <i>Quercus agrifolia</i>        | Coast live oak                   | 2     | 9                | 8  |    |    |    | 12 | 18                  | 20     | good   | fair   |           | X     | X                            | X                       |                               |
| 247         | <i>Quercus agrifolia</i>        | Coast live oak                   | 1     | 8                |    |    |    |    | 8  | 18                  | 12     | good   | fair   |           | X     | X                            | X                       |                               |
| 248         | <i>Quercus agrifolia</i>        | Coast live oak                   | 1     | 10               |    |    |    |    | 10 | 18                  | 14     | good   | fair   |           | X     | X                            | X                       |                               |
| 249         | <i>Quercus agrifolia</i>        | Coast live oak                   | 2     | 7                | 3  |    |    |    | 8  | 18                  | 12     | good   | fair   |           | X     | X                            | X                       |                               |
| 250         | <i>Quercus agrifolia</i>        | Coast live oak                   | 1     | 10               |    |    |    |    | 10 | 18                  | 12     | good   | fair   |           | X     | X                            | X                       |                               |
| 251         | <i>Quercus agrifolia</i>        | Coast live oak                   | 1     | 10               |    |    |    |    | 10 | 18                  | 12     | good   | fair   |           | X     | X                            | X                       |                               |
| 252         | <i>Quercus agrifolia</i>        | Coast live oak                   | 1     | 10               |    |    |    |    | 10 | 18                  | 12     | fair   | fair   |           |       |                              |                         |                               |
| 253         | <i>Quercus agrifolia</i>        | Coast live oak                   | 1     | 7                |    |    |    |    | 7  | 16                  | 10     | good   | fair   |           | X     | X                            | X                       |                               |
| 254         | <i>Quercus agrifolia</i>        | Coast live oak                   | 3     | 16               | 11 | 9  |    |    | 21 | 16                  | 23     | fair   | fair   |           |       |                              |                         |                               |
| 255         | <i>Quercus agrifolia</i>        | Coast live oak                   | 1     | 11               |    |    |    |    | 11 | 17                  | 10     | fair   | fair   |           | X     | X                            | X                       |                               |
| 256         | <i>Quercus agrifolia</i>        | Coast live oak                   | 1     | 11               |    |    |    |    | 11 | 17                  | 10     | fair   | fair   |           |       |                              |                         |                               |
| 257         | <i>Quercus agrifolia</i>        | Coast live oak                   | 3     | 12               | 11 | 9  |    |    | 19 | 18                  | 16     | fair   | fair   |           |       |                              |                         |                               |
| 258         | <i>Quercus agrifolia</i>        | Coast live oak                   | 1     | 18               |    |    |    |    | 18 | 20                  | 15     | fair   | fair   |           |       |                              |                         |                               |
| 259         | <i>Quercus agrifolia</i>        | Coast live oak                   | 1     | 46               |    |    |    |    | 46 | 20                  | 35     | good   | fair   |           |       |                              |                         |                               |
| 260         | <i>Quercus agrifolia</i>        | Coast live oak                   | 1     | 13               |    |    |    |    | 13 | 18                  | 10     | good   | fair   |           |       |                              |                         |                               |
| 261         | <i>Platanus racemosa</i>        | California sycamore              | 1     | 8                |    |    |    |    | 8  | 18                  | 10     | good   | fair   |           |       |                              |                         |                               |
| 262         | <i>Quercus agrifolia</i>        | Coast live oak                   | 1     | 18               |    |    |    |    | 18 | 20                  | 20     | good   | fair   |           | X     | X                            | X                       |                               |
| 263         | <i>Quercus agrifolia</i>        | Coast live oak                   | 1     | 16               |    |    |    |    | 16 | 20                  | 25     | good   | fair   |           | X     | X                            | X                       |                               |
| 264         | <i>Quercus agrifolia</i>        | Coast live oak                   | 1     | 22               |    |    |    |    | 22 | 20                  | 25     | good   | fair   |           |       |                              |                         |                               |
| 265         | <i>Quercus agrifolia</i>        | Coast live oak                   | 1     | 15               |    |    |    |    | 15 | 16                  | 15     | fair   | fair   |           |       |                              |                         |                               |
| 266         | <i>Quercus agrifolia</i>        | Coast live oak                   | 1     | 12               |    |    |    |    | 12 | 25                  | 17     | fair   | fair   |           | X     | X                            | X                       |                               |
| 267         | <i>Quercus agrifolia</i>        | Coast live oak                   | 1     | 28               |    |    |    |    | 28 | 22                  | 28     | fair   | fair   |           |       |                              |                         |                               |
| 268         | <i>Quercus agrifolia</i>        | Coast live oak                   | 1     | 10               |    |    |    |    | 10 | 17                  | 12     | fair   | fair   |           | X     | X                            | X                       |                               |
| 269         | <i>Quercus agrifolia</i>        | Coast live oak                   | 1     | 35               |    |    |    |    | 35 | 20                  | 25     | fair   | fair   |           |       |                              |                         |                               |
| 270         | <i>Quercus agrifolia</i>        | Coast live oak                   | 1     | 11               |    |    |    |    | 11 | 16                  | 17     | poor   | fair   |           | X     | X                            | X                       |                               |
| 271         | <i>Quercus agrifolia</i>        | Coast live oak                   | 1     | 37               |    |    |    |    | 37 | 25                  | 32     | good   | good   |           | X     | X                            | X                       |                               |
| 272         | <i>Platanus racemosa</i>        | California sycamore              | 1     | 18               |    |    |    |    | 18 | 20                  | 28     | fair   | fair   |           | X     | X                            | X                       |                               |
| 273         | <i>Platanus racemosa</i>        | California sycamore              | 1     | 21               |    |    |    |    | 21 | 15                  | 30     | good   | fair   |           | X     | X                            | X                       |                               |
| 274         | <i>Platanus racemosa</i>        | California sycamore              | 3     | 21               | 19 | 18 |    |    | 34 | 35                  | 32     | good   | fair   |           | X     | X                            | X                       |                               |
| 275         | <i>Quercus agrifolia</i>        | Coast live oak                   | 2     | 10               | 9  |    |    |    | 13 | 16                  | 21     | good   | fair   |           | X     | X                            | X                       |                               |
| 276         | <i>Platanus racemosa</i>        | California sycamore              | 1     | 5                |    |    |    |    | 5  | 11                  | 10     | fair   | fair   |           | X     | X                            | X                       |                               |
| 277         | <i>Platanus racemosa</i>        | California sycamore              | 1     | 7                |    |    |    |    | 7  | 16                  | 10     | fair   | fair   |           | X     | X                            | X                       |                               |
| 278         | <i>Juglans californica</i>      | Southern California black walnut | 3     | 12               | 9  | 9  |    |    | 17 | 16                  | 20     | fair   | fair   |           | X     | X                            | X                       |                               |
| 279         | <i>Schinus terebinthifolius</i> | Brazilian pepper                 | 4     | 15               | 15 | 14 | 13 |    | 29 | 22                  | 30     | fair   | fair   |           |       |                              |                         |                               |
| 280         | <i>Schinus terebinthifolius</i> | Brazilian pepper                 | 2     | 16               | 15 |    |    |    | 22 | 19                  | 30     | fair   | fair   |           |       |                              |                         |                               |
| 281         | <i>Schinus terebinthifolius</i> | Brazilian pepper                 | 2     | 16               | 9  |    |    |    | 18 | 20                  | 20     | fair   | fair   |           | X     | X                            | X                       |                               |
| 282         | <i>Schinus terebinthifolius</i> | Brazilian pepper                 | 4     | 10               | 8  | 7  | 7  |    | 16 | 18                  | 28     | fair   | fair   |           | X     | X                            | X                       |                               |
| 283         | <i>Schinus terebinthifolius</i> | Brazilian pepper                 | 3     | 10               | 9  | 6  |    |    | 15 | 18                  | 17     | fair   | fair   |           | X     | X                            |                         |                               |
| 284         | <i>Quercus agrifolia</i>        | Coast live oak                   | 3     | 17               | 15 | 15 |    |    | 27 | 25                  | 30     | fair   | fair   |           | X     | X                            | X                       |                               |
| 285         | <i>Quercus agrifolia</i>        | Coast live oak                   | 2     | 17               | 15 |    |    |    | 23 | 25                  | 30     | fair   | fair   |           | X     | X                            | X                       |                               |

**Appendix B - Tree Information Matrix - Malibu Park Public Access Enhancement Native Tree Protection Plan**

| Tree Number | Botanical Name             | Common Name                      | Stems | Individual Trunk |    |    |    |    |    | Trunk DBH (inches)* | Height | Canopy | Health | Structure | Notes | Impact Status by Alternative |                         |                               |
|-------------|----------------------------|----------------------------------|-------|------------------|----|----|----|----|----|---------------------|--------|--------|--------|-----------|-------|------------------------------|-------------------------|-------------------------------|
|             |                            |                                  |       | S1               | S2 | S3 | S4 | S5 | S6 |                     |        |        |        |           |       | Proposed Project Impacts     | LCP Alternative Impacts | Re-Design Alternative Impacts |
|             |                            |                                  |       |                  |    |    |    |    |    |                     |        |        |        |           |       |                              |                         |                               |
| 286         | <i>Quercus agrifolia</i>   | Coast live oak                   | 1     | 24               |    |    |    |    |    | 24                  | 20     | 26     | good   | fair      |       | X                            | X                       | X                             |
| 287         | <i>Quercus agrifolia</i>   | Coast live oak                   | 1     | 5                |    |    |    |    |    | 5                   | 12     | 8      | fair   | fair      |       | X                            | X                       | X                             |
| 288         | <i>Eucalyptus maculata</i> | Spotted gum                      | 1     | 5                |    |    |    |    |    | 5                   | 12     | 8      | fair   | fair      |       | X                            | X                       | X                             |
| 289         | <i>Eucalyptus maculata</i> | Spotted gum                      | 1     | 15               |    |    |    |    |    | 15                  | 30     | 20     | fair   | fair      |       | X                            | X                       | X                             |
| 290         | <i>Eucalyptus maculata</i> | Spotted gum                      | 1     | 14               |    |    |    |    |    | 14                  | 30     | 20     | fair   | fair      |       | X                            | X                       | X                             |
| 291         | <i>Eucalyptus maculata</i> | Spotted gum                      | 1     | 11               |    |    |    |    |    | 11                  | 25     | 18     | fair   | fair      |       | X                            | X                       | X                             |
| 292         | <i>Eucalyptus maculata</i> | Spotted gum                      | 1     | 17               |    |    |    |    |    | 17                  | 40     | 20     | good   | fair      |       | X                            | X                       | X                             |
| 293         | <i>Quercus agrifolia</i>   | Coast live oak                   | 1     | 24               |    |    |    |    |    | 24                  | 30     | 25     | fair   | fair      |       | X                            | X                       | X                             |
| 294         | <i>Quercus agrifolia</i>   | Coast live oak                   | 1     | 14               |    |    |    |    |    | 14                  | 18     | 22     | fair   | fair      |       | X                            | X                       | X                             |
| 295         | <i>Tipuana tipu</i>        | Tipu tree                        | 1     | 10               |    |    |    |    |    | 10                  | 20     | 15     | good   | fair      |       | X                            | X                       | X                             |
| 296         | <i>Tipuana tipu</i>        | Tipu tree                        | 2     | 9                | 4  |    |    |    |    | 10                  | 25     | 15     | good   | fair      |       | X                            | X                       | X                             |
| 297         | <i>Quercus agrifolia</i>   | Coast live oak                   | 1     | 15               |    |    |    |    |    | 15                  | 18     | 16     | good   | fair      |       | X                            | X                       | X                             |
| 298         | <i>Quercus agrifolia</i>   | Coast live oak                   | 1     | 38               |    |    |    |    |    | 38                  | 30     | 42     | good   | fair      |       | X                            | X                       | X                             |
| 299         | <i>Quercus agrifolia</i>   | Coast live oak                   | 1     | 28               |    |    |    |    |    | 28                  | 28     | 20     | good   | fair      |       | X                            | X                       | X                             |
| 300         | <i>Platanus racemosa</i>   | California sycamore              | 1     | 23               |    |    |    |    |    | 23                  | 38     | 25     | good   | fair      |       |                              |                         | X                             |
| 301         | <i>Platanus racemosa</i>   | California sycamore              | 1     | 10               |    |    |    |    |    | 10                  | 32     | 18     | fair   | fair      |       | X                            | X                       | X                             |
| 302         | <i>Schinus molle</i>       | California pepper                | 1     | 13               |    |    |    |    |    | 13                  | 24     | 18     | good   | fair      |       | X                            | X                       | X                             |
| 303         | <i>Platanus racemosa</i>   | California sycamore              | 1     | 6                |    |    |    |    |    | 6                   | 15     | 17     | good   | fair      |       | X                            | X                       | X                             |
| 304         | <i>Platanus racemosa</i>   | California sycamore              | 1     | 10               |    |    |    |    |    | 10                  | 24     | 19     | good   | fair      |       | X                            | X                       | X                             |
| 305         | <i>Acer saccharinum</i>    | Silver maple                     | 1     | 15               |    |    |    |    |    | 15                  | 20     | 30     | good   | fair      |       | X                            | X                       | X                             |
| 306         | <i>Quercus agrifolia</i>   | Coast live oak                   | 1     | 15               |    |    |    |    |    | 15                  | 25     | 30     | good   | fair      |       | X                            | X                       | X                             |
| 307         | <i>Salix spp.</i>          | Willow                           | 1     | 10               |    |    |    |    |    | 10                  | 13     | 15     | fair   | fair      |       | X                            | X                       | X                             |
| 308         | <i>Ulmus parvifolia</i>    | Chinese elm                      | 1     | 12               |    |    |    |    |    | 12                  | 28     | 16     | good   | fair      |       | X                            | X                       | X                             |
| 309         | <i>Platanus racemosa</i>   | California sycamore              | 1     | 23               |    |    |    |    |    | 23                  | 26     | 30     | good   | fair      |       | X                            | X                       | X                             |
| 310         | <i>Quercus agrifolia</i>   | Coast live oak                   | 1     | 10               |    |    |    |    |    | 10                  | 16     | 14     | good   | fair      |       | X                            | X                       | X                             |
| 311         | <i>Juglans californica</i> | Southern California black walnut | 1     | 13               |    |    |    |    |    | 13                  | 20     | 18     | good   | good      |       | X                            | X                       | X                             |
| 312         | <i>Quercus agrifolia</i>   | Coast live oak                   | 3     | 13               | 9  | 6  |    |    |    | 17                  | 22     | 17     | good   | good      |       | X                            | X                       | X                             |
| 313         | <i>Quercus agrifolia</i>   | Coast live oak                   | 1     | 10               |    |    |    |    |    | 10                  | 17     | 14     | good   | fair      |       | X                            | X                       | X                             |
| 314         | <i>Quercus agrifolia</i>   | Coast live oak                   | 1     | 7                |    |    |    |    |    | 7                   | 15     | 14     | good   | fair      |       | X                            | X                       | X                             |
| 315         | <i>Quercus agrifolia</i>   | Coast live oak                   | 1     | 25               |    |    |    |    |    | 25                  | 30     | 35     | good   | fair      |       | X                            | X                       | X                             |
| 316         | <i>Quercus agrifolia</i>   | Coast live oak                   | 2     | 11               | 7  |    |    |    |    | 13                  | 16     | 18     | good   | fair      |       | X                            | X                       | X                             |
| 317         | <i>Platanus racemosa</i>   | California sycamore              | 2     | 28               | 9  |    |    |    |    | 29                  | 34     | 26     | good   | fair      |       |                              |                         | X                             |
| 319         | <i>Quercus agrifolia</i>   | Coast live oak                   | 1     | 16               |    |    |    |    |    | 16                  | 20     | 27     | good   | good      |       | X                            | X                       | X                             |
| 320         | <i>Quercus agrifolia</i>   | Coast live oak                   | 1     | 28               |    |    |    |    |    | 28                  | 22     | 28     | poor   | poor      |       | X                            |                         |                               |
| 321         | <i>Platanus racemosa</i>   | California sycamore              | 5     | 19               | 16 | 12 | 12 | 10 |    | 30                  | 40     | 22     | fair   | fair      |       |                              |                         |                               |
| 322         | <i>Quercus agrifolia</i>   | Coast live oak                   | 1     | 21               |    |    |    |    |    | 21                  | 17     | 25     | good   | good      |       |                              |                         |                               |
| 323         | <i>Quercus agrifolia</i>   | Coast live oak                   | 2     | 21               | 15 |    |    |    |    | 26                  | 18     | 23     | fair   | poor      |       | X                            |                         |                               |
| 324         | <i>Quercus agrifolia</i>   | Coast live oak                   | 2     | 13               | 9  |    |    |    |    | 16                  | 18     | 12     | good   | fair      |       |                              |                         |                               |
| 325         | <i>Quercus agrifolia</i>   | Coast live oak                   | 1     | 13               |    |    |    |    |    | 13                  | 15     | 12     | fair   | fair      |       | X                            |                         |                               |
| 326         | <i>Quercus agrifolia</i>   | Coast live oak                   | 1     | 12               |    |    |    |    |    | 12                  | 16     | 14     | good   | good      |       | X                            |                         | X                             |
| 327         | <i>Quercus agrifolia</i>   | Coast live oak                   | 2     | 21               | 14 |    |    |    |    | 25                  | 20     | 22     | good   | fair      |       | X                            |                         | X                             |
| 328         | <i>Quercus agrifolia</i>   | Coast live oak                   | 1     | 6                |    |    |    |    |    | 6                   | 10     | 10     | fair   | good      |       | X                            |                         | X                             |
| 329         | <i>Quercus agrifolia</i>   | Coast live oak                   | 2     | 15               | 10 |    |    |    |    | 18                  | 16     | 12     | fair   | poor      |       | X                            |                         |                               |
| 330         | <i>Eucalyptus globulus</i> | Blue gum                         | 4     | 34               | 10 | 5  | 5  |    |    | 36                  | 50     | 22     | fair   | fair      |       | X                            |                         | X                             |
| 331         | <i>Eucalyptus globulus</i> | Blue gum                         | 1     | 9                |    |    |    |    |    | 9                   | 20     | 8      | fair   | fair      |       | X                            |                         | X                             |
| 332         | <i>Eucalyptus globulus</i> | Blue gum                         | 1     | 7                |    |    |    |    |    | 7                   | 20     | 8      | fair   | fair      |       | X                            |                         | X                             |

**Appendix B - Tree Information Matrix - Malibu Park Public Access Enhancement Native Tree Protection Plan**

| Tree Number | Botanical Name                 | Common Name                      | Stems | Individual Trunk |    |    |    |    |    | Trunk DBH (inches)* | Height | Canopy | Health    | Structure | Notes | Impact Status by Alternative |                         |                               |
|-------------|--------------------------------|----------------------------------|-------|------------------|----|----|----|----|----|---------------------|--------|--------|-----------|-----------|-------|------------------------------|-------------------------|-------------------------------|
|             |                                |                                  |       | S1               | S2 | S3 | S4 | S5 | S6 |                     |        |        |           |           |       | Proposed Project Impacts     | LCP Alternative Impacts | Re-Design Alternative Impacts |
|             |                                |                                  |       |                  |    |    |    |    |    |                     |        |        |           |           |       |                              |                         |                               |
| 333         | <i>Eucalyptus globulus</i>     | Blue gum                         | 4     | 15               | 12 | 10 | 8  |    | 23 | 30                  | 10     | dead   | dead      | dead      | X     | X                            | X                       |                               |
| 334         | <i>Eucalyptus globulus</i>     | Blue gum                         | 2     | 19               | 4  |    |    |    | 19 | 48                  | 15     | fair   | fair      |           | X     | X                            | X                       |                               |
| 335         | <i>Quercus agrifolia</i>       | Coast live oak                   | 1     | 34               |    |    |    |    | 34 | 20                  | 5      | dead   | dead      | dead      | X     |                              |                         |                               |
| 336         | <i>Platanus racemosa</i>       | California sycamore              | 1     | 17               |    |    |    |    | 17 | 50                  | 25     | good   | fair      |           |       |                              |                         |                               |
| 337         | <i>Platanus racemosa</i>       | California sycamore              | 1     | 15               |    |    |    |    | 15 | 48                  | 22     | good   | fair      |           | X     |                              |                         |                               |
| 338         | <i>Platanus racemosa</i>       | California sycamore              | 1     | 32               |    |    |    |    | 32 | 47                  | 20     | fair   | very poor |           |       |                              |                         |                               |
| 339         | <i>Platanus racemosa</i>       | California sycamore              | 3     | 16               | 8  | 5  |    |    | 19 | 50                  | 20     | fair   | poor      |           |       |                              |                         |                               |
| 340         | <i>Platanus racemosa</i>       | California sycamore              | 1     | 17               |    |    |    |    | 17 | 48                  | 15     | poor   | poor      |           |       |                              |                         |                               |
| 341         | <i>Platanus racemosa</i>       | California sycamore              | 2     | 16               | 15 |    |    |    | 22 | 52                  | 17     | poor   | fair      |           |       |                              |                         |                               |
| 342         | <i>Platanus racemosa</i>       | California sycamore              | 2     | 24               | 17 |    |    |    | 29 | 44                  | 28     | fair   | fair      |           |       |                              |                         |                               |
| 343         | <i>Platanus racemosa</i>       | California sycamore              | 2     | 22               | 17 |    |    |    | 28 | 48                  | 24     | good   | fair      |           |       |                              |                         |                               |
| 344         | <i>Platanus racemosa</i>       | California sycamore              | 3     | 21               | 16 | 14 |    |    | 30 | 55                  | 28     | good   | fair      |           | X     |                              |                         |                               |
| 345         | <i>Quercus agrifolia</i>       | Coast live oak                   | 1     | 36               |    |    |    |    | 36 | 28                  | 20     | good   | fair      |           | X     |                              |                         |                               |
| 346         | <i>Quercus agrifolia</i>       | Coast live oak                   | 3     | 18               | 12 | 10 |    |    | 24 | 16                  | 15     | good   | good      |           | X     |                              |                         |                               |
| 347         | <i>Quercus agrifolia</i>       | Coast live oak                   | 1     | 11               |    |    |    |    | 11 | 18                  | 17     | good   | good      |           | X     | X                            | X                       |                               |
| 348         | <i>Platanus racemosa</i>       | California sycamore              | 1     | 32               |    |    |    |    | 32 | 55                  | 30     | good   | good      |           | X     | X                            | X                       |                               |
| 349         | <i>Quercus agrifolia</i>       | Coast live oak                   | 2     | 9                | 6  |    |    |    | 11 | 17                  | 16     | good   | fair      |           | X     | X                            | X                       |                               |
| 350         | <i>Quercus agrifolia</i>       | Coast live oak                   | 1     | 11               |    |    |    |    | 11 | 23                  | 17     | good   | fair      |           | X     | X                            | X                       |                               |
| 351         | <i>Sequoia sempervirens</i>    | Coast redwood                    | 2     | 15               | 13 |    |    |    | 20 | 55                  | 17     | good   | good      |           |       |                              |                         |                               |
| 352         | <i>Platanus racemosa</i>       | California sycamore              | 1     | 19               |    |    |    |    | 19 | 48                  | 26     | good   | fair      |           | X     | X                            | X                       |                               |
| 353         | <i>Juglans californica</i>     | Southern California black walnut | 1     | 5                |    |    |    |    | 5  | 12                  | 15     | good   | fair      |           | X     | X                            | X                       |                               |
| 354         | <i>Platanus racemosa</i>       | California sycamore              | 1     | 12               |    |    |    |    | 12 | 30                  | 17     | good   | fair      |           |       |                              |                         |                               |
| 355         | <i>Quercus agrifolia</i>       | Coast live oak                   | 1     | 7                |    |    |    |    | 7  | 20                  | 19     | good   | fair      |           | X     | X                            | X                       |                               |
| 356         | <i>Platanus racemosa</i>       | California sycamore              | 2     | 21               | 16 |    |    |    | 26 | 38                  | 40     | good   | fair      |           |       |                              |                         |                               |
| 357         | <i>Juglans californica</i>     | Southern California black walnut | 2     | 12               | 7  |    |    |    | 14 | 24                  | 20     | fair   | poor      |           |       |                              |                         |                               |
| 358         | <i>Platanus racemosa</i>       | California sycamore              | 1     | 29               |    |    |    |    | 29 | 70                  | 35     | good   | good      |           |       |                              |                         |                               |
| 359         | <i>Quercus agrifolia</i>       | Coast live oak                   | 1     | 5                |    |    |    |    | 5  | 15                  | 8      | good   | fair      |           | X     | X                            | X                       |                               |
| 360         | <i>Juglans californica</i>     | Southern California black walnut | 1     | 4                |    |    |    |    | 4  | 13                  | 8      | fair   | fair      |           | X     | X                            | X                       |                               |
| 361         | <i>Quercus agrifolia</i>       | Coast live oak                   | 2     | 13               | 5  |    |    |    | 14 | 20                  | 16     | good   | fair      |           | X     | X                            | X                       |                               |
| 362         | <i>Platanus racemosa</i>       | California sycamore              | 1     | 21               |    |    |    |    | 21 | 50                  | 25     | good   | good      |           | X     | X                            | X                       |                               |
| 363         | <i>Quercus agrifolia</i>       | Coast live oak                   | 1     | 16               |    |    |    |    | 16 | 30                  | 25     | good   | fair      |           | X     | X                            | X                       |                               |
| 364         | <i>Juglans californica</i>     | Southern California black walnut | 3     | 9                | 5  | 4  |    |    | 11 | 17                  | 15     | fair   | fair      |           |       |                              |                         |                               |
| 365         | <i>Quercus agrifolia</i>       | Coast live oak                   | 1     | 12               |    |    |    |    | 12 | 20                  | 16     | good   | fair      |           |       |                              |                         |                               |
| 366         | <i>Juglans californica</i>     | Southern California black walnut | 3     | 7                | 6  | 4  |    |    | 10 | 20                  | 10     | dead   | dead      | dead      |       |                              |                         |                               |
| 367         | <i>Quercus agrifolia</i>       | Coast live oak                   | 1     | 15               |    |    |    |    | 15 | 20                  | 24     | good   | good      |           |       |                              |                         |                               |
| 368         | <i>Juglans californica</i>     | Southern California black walnut | 1     | 4                |    |    |    |    | 4  | 13                  | 5      | fair   | fair      |           |       |                              |                         |                               |
| 369         | <i>Quercus agrifolia</i>       | Coast live oak                   | 1     | 18               |    |    |    |    | 18 | 45                  | 35     | good   | fair      |           |       |                              |                         |                               |
| 370         | <i>Quercus agrifolia</i>       | Coast live oak                   | 1     | 20               |    |    |    |    | 20 | 40                  | 53     | good   | good      |           |       |                              |                         |                               |
| 371         | <i>Quercus agrifolia</i>       | Coast live oak                   | 1     | 31               |    |    |    |    | 31 | 23                  | 35     | good   | fair      |           |       |                              |                         |                               |
| 372         | <i>Platanus racemosa</i>       | California sycamore              | 1     | 21               |    |    |    |    | 21 | 38                  | 30     | good   | fair      |           |       |                              |                         |                               |
| 373         | <i>Betula papyrifera</i>       | Paper birch                      | 1     | 4                |    |    |    |    | 4  | 17                  | 8      | good   | fair      |           |       |                              |                         |                               |
| 374         | <i>Quercus agrifolia</i>       | Coast live oak                   | 1     | 33               |    |    |    |    | 33 | 60                  | 38     | good   | fair      |           |       |                              |                         |                               |
| 375         | <i>Sequoia sempervirens</i>    | Coast redwood                    | 2     | 18               | 16 |    |    |    | 24 | 55                  | 18     | good   | good      |           |       |                              |                         |                               |
| 376         | <i>Liquidambar styraciflua</i> | Sweetgum                         | 1     | 4                |    |    |    |    | 4  | 15                  | 8      | good   | fair      |           |       |                              |                         |                               |
| 377         | <i>Sequoia sempervirens</i>    | Coast redwood                    | 1     | 16               |    |    |    |    | 16 | 60                  | 16     | good   | fair      |           |       |                              |                         |                               |
| 378         | <i>Sequoia sempervirens</i>    | Coast redwood                    | 1     | 14               |    |    |    |    | 14 | 50                  | 15     | good   | fair      |           |       |                              |                         |                               |

**Appendix B - Tree Information Matrix - Malibu Park Public Access Enhancement Native Tree Protection Plan**

| Tree Number | Botanical Name                 | Common Name                      | Stems | Individual Trunk |    |    |    |    |    | Trunk DBH (inches)* | Height | Canopy | Health | Structure | Notes | Impact Status by Alternative |                         |                               |
|-------------|--------------------------------|----------------------------------|-------|------------------|----|----|----|----|----|---------------------|--------|--------|--------|-----------|-------|------------------------------|-------------------------|-------------------------------|
|             |                                |                                  |       | S1               | S2 | S3 | S4 | S5 | S6 |                     |        |        |        |           |       | Proposed Project Impacts     | LCP Alternative Impacts | Re-Design Alternative Impacts |
|             |                                |                                  |       |                  |    |    |    |    |    |                     |        |        |        |           |       |                              |                         |                               |
| 379         | <i>Sequoia sempervirens</i>    | Coast redwood                    | 1     | 18               |    |    |    |    |    | 18                  | 35     | 16     | good   | good      |       |                              |                         |                               |
| 380         | <i>Platanus racemosa</i>       | California sycamore              | 1     | 44               |    |    |    |    |    | 44                  | 60     | 40     | good   | fair      |       |                              |                         |                               |
| 381         | <i>Platanus racemosa</i>       | California sycamore              | 2     | 42               | 32 |    |    |    |    | 53                  | 60     | 60     | good   | fair      |       |                              |                         |                               |
| 382         | <i>Platanus racemosa</i>       | California sycamore              | 1     | 10               |    |    |    |    |    | 10                  | 25     | 23     | good   | fair      |       |                              |                         |                               |
| 383         | <i>Platanus racemosa</i>       | California sycamore              | 1     | 26               |    |    |    |    |    | 26                  | 55     | 40     | good   | fair      |       |                              |                         |                               |
| 384         | <i>Platanus racemosa</i>       | California sycamore              | 1     | 23               |    |    |    |    |    | 23                  | 24     | 25     | good   | fair      |       |                              |                         |                               |
| 385         | <i>Platanus racemosa</i>       | California sycamore              | 1     | 26               |    |    |    |    |    | 26                  | 58     | 32     | good   | fair      |       |                              |                         |                               |
| 386         | <i>Platanus racemosa</i>       | California sycamore              | 1     | 38               |    |    |    |    |    | 38                  | 58     | 50     | good   | fair      |       |                              |                         |                               |
| 387         | <i>Quercus agrifolia</i>       | Coast live oak                   | 2     | 21               | 16 |    |    |    |    | 26                  | 35     | 55     | good   | good      |       |                              |                         | X                             |
| 388         | <i>Quercus agrifolia</i>       | Coast live oak                   | 1     | 5                |    |    |    |    |    | 5                   | 13     | 8      | good   | good      |       |                              |                         |                               |
| 389         | <i>Platanus racemosa</i>       | California sycamore              | 3     | 26               | 24 | 20 |    |    |    | 41                  | 50     | 50     | good   | fair      |       |                              |                         |                               |
| 390         | <i>Quercus agrifolia</i>       | Coast live oak                   | 1     | 23               |    |    |    |    |    | 23                  | 32     | 35     | good   | fair      |       |                              |                         |                               |
| 391         | <i>Sequoia sempervirens</i>    | Coast redwood                    | 1     | 25               |    |    |    |    |    | 25                  | 55     | 16     | good   | good      |       |                              |                         |                               |
| 392         | <i>Sequoia sempervirens</i>    | Coast redwood                    | 1     | 16               |    |    |    |    |    | 16                  | 28     | 15     | good   | good      |       |                              |                         |                               |
| 393         | <i>Liquidambar styraciflua</i> | Sweetgum                         | 1     | 3                |    |    |    |    |    | 3                   | 12     | 10     | good   | good      |       |                              |                         |                               |
| 394         | <i>Quercus agrifolia</i>       | Coast live oak                   | 3     | 7                | 4  | 4  |    |    |    | 9                   | 14     | 10     | good   | fair      |       |                              |                         |                               |
| 395         | <i>Quercus agrifolia</i>       | Coast live oak                   | 1     | 16               |    |    |    |    |    | 16                  | 18     | 18     | good   | good      |       |                              |                         |                               |
| 396         | <i>Liquidambar styraciflua</i> | Sweetgum                         | 1     | 10               |    |    |    |    |    | 10                  | 35     | 15     | good   | good      |       |                              |                         |                               |
| 397         | <i>Quercus agrifolia</i>       | Coast live oak                   | 1     | 25               |    |    |    |    |    | 25                  | 35     | 30     | good   | fair      |       |                              |                         |                               |
| 398         | <i>Grevillea robusta</i>       | Silk oak                         | 1     | 15               |    |    |    |    |    | 15                  | 35     | 16     | good   | fair      |       |                              |                         |                               |
| 399         | <i>Pinus spp.</i>              | Pine                             | 1     | 16               |    |    |    |    |    | 16                  | 55     | 13     | fair   | fair      |       |                              |                         |                               |
| 400         | <i>Pinus canariensis</i>       | Canary Island pine               | 1     | 18               |    |    |    |    |    | 18                  | 55     | 16     | fair   | fair      |       |                              |                         |                               |
| 401         | <i>Pinus canariensis</i>       | Canary Island pine               | 1     | 25               |    |    |    |    |    | 25                  | 60     | 16     | good   | fair      |       |                              |                         |                               |
| 402         | <i>Grevillea robusta</i>       | Silk oak                         | 1     | 10               |    |    |    |    |    | 10                  | 28     | 15     | good   | fair      |       |                              |                         |                               |
| 403         | <i>Grevillea robusta</i>       | Silk oak                         | 1     | 8                |    |    |    |    |    | 8                   | 18     | 12     | good   | good      |       |                              |                         |                               |
| 404         | <i>Quercus agrifolia</i>       | Coast live oak                   | 1     | 23               |    |    |    |    |    | 23                  | 35     | 30     | good   | good      |       |                              |                         |                               |
| 405         | <i>Quercus agrifolia</i>       | Coast live oak                   | 1     | 16               |    |    |    |    |    | 16                  | 28     | 22     | good   | good      |       |                              |                         |                               |
| 406         | <i>Quercus agrifolia</i>       | Coast live oak                   | 1     | 16               |    |    |    |    |    | 16                  | 23     | 17     | good   | fair      |       |                              |                         |                               |
| 407         | <i>Quercus agrifolia</i>       | Coast live oak                   | 1     | 5                |    |    |    |    |    | 5                   | 13     | 9      | good   | good      |       |                              |                         |                               |
| 408         | <i>Pinus canariensis</i>       | Canary Island pine               | 1     | 16               |    |    |    |    |    | 16                  | 48     | 15     | fair   | fair      |       | X                            | X                       | X                             |
| 409         | <i>Quercus agrifolia</i>       | Coast live oak                   | 1     | 5                |    |    |    |    |    | 5                   | 9      | 8      | good   | fair      |       | X                            | X                       | X                             |
| 410         | <i>Quercus agrifolia</i>       | Coast live oak                   | 1     | 4                |    |    |    |    |    | 4                   | 9      | 6      | good   | good      |       | X                            | X                       | X                             |
| 411         | <i>Quercus agrifolia</i>       | Coast live oak                   | 1     | 5                |    |    |    |    |    | 5                   | 11     | 10     | good   | good      |       | X                            | X                       | X                             |
| 412         | <i>Pinus canariensis</i>       | Canary Island pine               | 1     | 16               |    |    |    |    |    | 16                  | 60     | 17     | good   | fair      |       | X                            | X                       | X                             |
| 413         | <i>Quercus agrifolia</i>       | Coast live oak                   | 1     | 4                |    |    |    |    |    | 4                   | 13     | 7      | good   | good      |       | X                            | X                       | X                             |
| 414         | <i>Quercus agrifolia</i>       | Coast live oak                   | 1     | 3                |    |    |    |    |    | 3                   | 13     | 7      | good   | good      |       | X                            | X                       | X                             |
| 415         | <i>Pinus canariensis</i>       | Canary Island pine               | 1     | 11               |    |    |    |    |    | 11                  | 45     | 15     | good   | fair      |       | X                            | X                       | X                             |
| 416         | <i>Quercus agrifolia</i>       | Coast live oak                   | 1     | 5                |    |    |    |    |    | 5                   | 11     | 10     | good   | good      |       | X                            | X                       | X                             |
| 417         | <i>Quercus agrifolia</i>       | Coast live oak                   | 1     | 6                |    |    |    |    |    | 6                   | 12     | 10     | good   | good      |       | X                            | X                       | X                             |
| 418         | <i>Liquidambar styraciflua</i> | Sweetgum                         | 1     | 7                |    |    |    |    |    | 7                   | 20     | 10     | fair   | good      |       | X                            | X                       | X                             |
| 419         | <i>Juglans californica</i>     | Southern California black walnut | 1     | 5                |    |    |    |    |    | 5                   | 13     | 12     | fair   | good      |       | X                            | X                       | X                             |
| 420         | <i>Quercus agrifolia</i>       | Coast live oak                   | 1     | 3                |    |    |    |    |    | 3                   | 10     | 8      | good   | fair      |       | X                            | X                       | X                             |
| 421         | <i>Juglans californica</i>     | Southern California black walnut | 1     | 11               |    |    |    |    |    | 11                  | 20     | 15     | fair   | fair      |       | X                            | X                       | X                             |
| 422         | <i>Grevillea robusta</i>       | Silk oak                         | 1     | 9                |    |    |    |    |    | 9                   | 48     | 15     | good   | fair      |       | X                            | X                       | X                             |
| 423         | <i>Pinus canariensis</i>       | Canary Island pine               | 1     | 17               |    |    |    |    |    | 17                  | 60     | 17     | good   | fair      |       | X                            | X                       | X                             |
| 424         | <i>Melaleuca quinquenervia</i> | Paperbark                        | 2     | 10               | 5  |    |    |    |    | 11                  | 18     | 10     | fair   | fair      |       |                              |                         | X                             |

**Appendix B - Tree Information Matrix - Malibu Park Public Access Enhancement Native Tree Protection Plan**

| Tree Number | Botanical Name                 | Common Name         | Stems | Individual Trunk |    |    |    |    |    | Trunk DBH (inches)* | Height | Canopy | Health | Structure | Notes | Impact Status by Alternative |                         |                               |
|-------------|--------------------------------|---------------------|-------|------------------|----|----|----|----|----|---------------------|--------|--------|--------|-----------|-------|------------------------------|-------------------------|-------------------------------|
|             |                                |                     |       | S1               | S2 | S3 | S4 | S5 | S6 |                     |        |        |        |           |       | Proposed Project Impacts     | LCP Alternative Impacts | Re-Design Alternative Impacts |
|             |                                |                     |       |                  |    |    |    |    |    |                     |        |        |        |           |       |                              |                         |                               |
| 425         | <i>Melaleuca quinquenervia</i> | Paperbark           | 2     | 10               | 5  |    |    |    | 11 | 18                  | 10     | fair   | fair   |           |       |                              |                         |                               |
| 426         | <i>Melaleuca quinquenervia</i> | Paperbark           | 2     | 10               | 5  |    |    |    | 11 | 18                  | 10     | fair   | fair   |           |       |                              |                         |                               |
| 427         | <i>Melaleuca quinquenervia</i> | Paperbark           | 1     | 5                |    |    |    |    | 5  | 18                  | 10     | fair   | fair   |           |       |                              |                         |                               |
| 428         | <i>Grevillea robusta</i>       | Silk oak            | 1     | 18               |    |    |    |    | 18 | 60                  | 22     | good   | fair   |           |       |                              |                         |                               |
| 429         | <i>Grevillea robusta</i>       | Silk oak            | 1     | 6                |    |    |    |    | 6  | 13                  | 10     | good   | good   |           | X     | X                            | X                       |                               |
| 430         | <i>Grevillea robusta</i>       | Silk oak            | 1     | 12               |    |    |    |    | 12 | 35                  | 16     | good   | good   |           | X     | X                            | X                       |                               |
| 431         | <i>Quercus agrifolia</i>       | Coast live oak      | 1     | 11               |    |    |    |    | 11 | 12                  | 10     | good   | good   |           | X     | X                            | X                       |                               |
| 432         | <i>Quercus agrifolia</i>       | Coast live oak      | 1     | 3                |    |    |    |    | 3  | 13                  | 9      | good   | fair   |           |       |                              |                         |                               |
| 433         | <i>Pinus canariensis</i>       | Canary Island pine  | 1     | 11               |    |    |    |    | 11 | 36                  | 12     | good   | poor   |           | X     | X                            | X                       |                               |
| 434         | <i>Grevillea robusta</i>       | Silk oak            | 1     | 14               |    |    |    |    | 14 | 50                  | 18     | good   | fair   |           | X     | X                            | X                       |                               |
| 435         | <i>Quercus agrifolia</i>       | Coast live oak      | 1     | 0                |    |    |    |    | 0  | 12                  | 10     | good   | good   |           | X     | X                            | X                       |                               |
| 436         | <i>Quercus agrifolia</i>       | Coast live oak      | 1     | 6                |    |    |    |    | 6  | 10                  | 10     | fair   | fair   |           | X     | X                            | X                       |                               |
| 437         | <i>Platanus racemosa</i>       | California sycamore | 1     | 23               |    |    |    |    | 23 | 60                  | 40     | good   | good   |           |       |                              |                         |                               |
| 438         | <i>Platanus racemosa</i>       | California sycamore | 2     | 35               | 29 |    |    |    | 45 | 50                  | 60     | good   | fair   |           |       |                              |                         |                               |
| 439         | <i>Platanus racemosa</i>       | California sycamore | 1     | 36               |    |    |    |    | 36 | 62                  | 40     | good   | good   |           |       |                              |                         |                               |
| 440         | <i>Quercus agrifolia</i>       | Coast live oak      | 1     | 18               |    |    |    |    | 18 | 22                  | 30     | good   | good   |           |       |                              |                         |                               |
| 441         | <i>Platanus racemosa</i>       | California sycamore | 1     | 9                |    |    |    |    | 9  | 40                  | 13     | good   | good   |           |       |                              |                         |                               |
| 442         | <i>Platanus racemosa</i>       | California sycamore | 1     | 16               |    |    |    |    | 16 | 50                  | 18     | good   | good   |           |       |                              |                         |                               |
| 443         | <i>Platanus racemosa</i>       | California sycamore | 1     | 9                |    |    |    |    | 9  | 35                  | 18     | good   | good   |           |       |                              |                         |                               |
| 444         | <i>Platanus racemosa</i>       | California sycamore | 1     | 32               |    |    |    |    | 32 | 42                  | 40     | good   | fair   |           |       |                              |                         |                               |
| 445         | <i>Liquidambar styraciflua</i> | Sweetgum            | 1     | 10               |    |    |    |    | 10 | 25                  | 15     | good   | good   |           |       |                              |                         |                               |
| 446         | <i>Liquidambar styraciflua</i> | Sweetgum            | 1     | 10               |    |    |    |    | 10 | 25                  | 15     | good   | good   |           |       |                              |                         |                               |
| 447         | <i>Pinus canariensis</i>       | Canary Island pine  | 1     | 16               |    |    |    |    | 16 | 58                  | 15     | good   | good   |           |       |                              |                         |                               |
| 448         | <i>Platanus racemosa</i>       | California sycamore | 2     | 16               | 12 |    |    |    | 20 | 48                  | 30     | fair   | fair   |           |       |                              |                         |                               |
| 449         | <i>Platanus racemosa</i>       | California sycamore | 1     | 10               |    |    |    |    | 10 | 38                  | 12     | good   | fair   |           |       |                              |                         |                               |
| 450         | <i>Platanus racemosa</i>       | California sycamore | 1     | 12               |    |    |    |    | 12 | 34                  | 17     | good   | fair   |           |       |                              |                         |                               |
| 451         | <i>Platanus racemosa</i>       | California sycamore | 1     | 20               |    |    |    |    | 20 | 60                  | 32     | fair   | good   |           |       |                              |                         |                               |
| 452         | <i>Acer japonicum</i>          | Japanese maple      | 4     | 4                | 3  | 3  | 2  |    | 6  | 11                  | 12     | good   | fair   |           |       |                              |                         |                               |
| 453         | <i>Sequoia sempervirens</i>    | Coast redwood       | 1     | 16               |    |    |    |    | 16 | 52                  | 18     | good   | good   |           |       |                              |                         |                               |
| 454         | <i>Sequoia sempervirens</i>    | Coast redwood       | 1     | 28               |    |    |    |    | 28 | 60                  | 18     | good   | good   |           |       |                              |                         |                               |
| 455         | <i>Sequoia sempervirens</i>    | Coast redwood       | 1     | 34               |    |    |    |    | 34 | 60                  | 17     | good   | good   |           |       |                              |                         |                               |
| 456         | <i>Sequoia sempervirens</i>    | Coast redwood       | 1     | 5                |    |    |    |    | 5  | 14                  | 9      | good   | good   |           |       |                              |                         |                               |
| 457         | <i>Erythrina caffra</i>        | Coral tree          | 4     | 19               | 16 | 15 | 12 |    | 31 | 20                  | 22     | good   | fair   |           |       |                              |                         |                               |
| 458         | <i>Syagrus romanzoffiana</i>   | Queen palm          | 1     | 14               |    |    |    |    | 14 | 25                  | 18     | good   | good   |           |       |                              |                         |                               |
| 459         | <i>Syagrus romanzoffiana</i>   | Queen palm          | 1     | 14               |    |    |    |    | 14 | 25                  | 18     | good   | good   |           |       |                              |                         |                               |
| 460         | <i>Syagrus romanzoffiana</i>   | Queen palm          | 1     | 14               |    |    |    |    | 14 | 25                  | 18     | good   | good   |           |       |                              |                         |                               |
| 461         | <i>Syagrus romanzoffiana</i>   | Queen palm          | 1     | 9                |    |    |    |    | 9  | 25                  | 18     | good   | good   |           |       |                              |                         |                               |
| 462         | <i>Syagrus romanzoffiana</i>   | Queen palm          | 1     | 14               |    |    |    |    | 14 | 25                  | 18     | good   | good   |           |       |                              |                         |                               |
| 463         | <i>Erythrina caffra</i>        | Coral tree          | 2     | 12               | 8  |    |    |    | 14 | 13                  | 15     | good   | good   |           |       |                              | X                       |                               |
| 464         | <i>Schinus molle</i>           | California pepper   | 3     | 17               | 15 | 16 |    |    | 28 | 18                  | 22     | good   | fair   |           | X     | X                            | X                       |                               |
| 465         | <i>Schinus molle</i>           | California pepper   | 3     | 12               | 8  | 6  |    |    | 16 | 12                  | 14     | fair   | poor   |           | X     | X                            | X                       |                               |
| 466         | <i>Eucalyptus rudis</i>        | Swamp gum           | 1     | 14               |    |    |    |    | 14 | 35                  | 16     | fair   | good   |           | X     | X                            | X                       |                               |
| 467         | <i>Eucalyptus cladocalyx</i>   | Sugar gum           | 1     | 18               |    |    |    |    | 18 | 42                  | 38     | good   | fair   |           | X     | X                            | X                       |                               |
| 468         | <i>Eucalyptus cladocalyx</i>   | Sugar gum           | 3     | 10               | 4  | 3  |    |    | 11 | 30                  | 20     | fair   | fair   |           | X     | X                            | X                       |                               |
| 469         | <i>Eucalyptus cladocalyx</i>   | Sugar gum           | 2     | 7                | 5  |    |    |    | 9  | 40                  | 18     | good   | good   |           | X     | X                            | X                       |                               |
| 470         | <i>Grevillea robusta</i>       | Silk oak            | 1     | 12               |    |    |    |    | 12 | 35                  | 17     | good   | fair   |           | X     | X                            | X                       |                               |

**Appendix B - Tree Information Matrix - Malibu Park Public Access Enhancement Native Tree Protection Plan**

| Tree Number | Botanical Name                 | Common Name                      | Stems | Individual Trunk |    |    |    |    |    | Trunk DBH (inches)* | Height | Canopy | Health | Structure | Notes | Impact Status by Alternative |                         |                               |
|-------------|--------------------------------|----------------------------------|-------|------------------|----|----|----|----|----|---------------------|--------|--------|--------|-----------|-------|------------------------------|-------------------------|-------------------------------|
|             |                                |                                  |       | S1               | S2 | S3 | S4 | S5 | S6 |                     |        |        |        |           |       | Proposed Project Impacts     | LCP Alternative Impacts | Re-Design Alternative Impacts |
|             |                                |                                  |       |                  |    |    |    |    |    |                     |        |        |        |           |       |                              |                         |                               |
| 471         | <i>Grevillea robusta</i>       | Silk oak                         | 1     | 12               |    |    |    |    |    | 12                  | 35     | 17     | good   | fair      |       | X                            | X                       | X                             |
| 472         | <i>Grevillea robusta</i>       | Silk oak                         | 1     | 12               |    |    |    |    |    | 12                  | 35     | 17     | good   | fair      |       | X                            | X                       | X                             |
| 473         | <i>Grevillea robusta</i>       | Silk oak                         | 1     | 8                |    |    |    |    |    | 8                   | 16     | 10     | good   | good      |       | X                            | X                       | X                             |
| 474         | <i>Grevillea robusta</i>       | Silk oak                         | 1     | 4                |    |    |    |    |    | 4                   | 15     | 10     | good   | fair      |       |                              |                         |                               |
| 475         | <i>Grevillea robusta</i>       | Silk oak                         | 1     | 9                |    |    |    |    |    | 9                   | 18     | 10     | good   | fair      |       |                              |                         |                               |
| 476         | <i>Grevillea robusta</i>       | Silk oak                         | 1     | 6                |    |    |    |    |    | 6                   | 14     | 10     | good   | fair      |       |                              |                         |                               |
| 477         | <i>Grevillea robusta</i>       | Silk oak                         | 1     | 7                |    |    |    |    |    | 7                   | 15     | 9      | good   | fair      |       |                              |                         |                               |
| 478         | <i>Platanus racemosa</i>       | California sycamore              | 1     | 7                |    |    |    |    |    | 7                   | 15     | 12     | good   | good      |       |                              |                         |                               |
| 479         | <i>Eucalyptus cladocalyx</i>   | Sugar gum                        | 1     | 16               |    |    |    |    |    | 16                  | 18     | 17     | good   | fair      |       | X                            | X                       | X                             |
| 480         | <i>Heteromoles arbutifolia</i> | Toyon                            | 4     | 5                | 4  | 3  | 3  |    |    | 8                   | 12     | 15     | good   | fair      |       | X                            | X                       | X                             |
| 481         | <i>Heteromoles arbutifolia</i> | Toyon                            | 3     | 10               | 3  | 3  |    |    |    | 11                  | 15     | 15     | good   | fair      |       | X                            | X                       | X                             |
| 482         | <i>Eucalyptus cladocalyx</i>   | Sugar gum                        | 2     | 18               | 16 |    |    |    |    | 24                  | 18     | 18     | fair   | fair      |       | X                            | X                       | X                             |
| 483         | <i>Juglans californica</i>     | Southern California black walnut | 1     | 1                |    |    |    |    |    | 1                   | 7      | 5      | poor   | poor      |       |                              | X                       |                               |
| 484         | <i>Juglans californica</i>     | Southern California black walnut | 1     | 2                |    |    |    |    |    | 2                   | 9      | 10     | fair   | poor      |       | X                            | X                       | X                             |
| 485         | <i>Schinus molle</i>           | California pepper                | 1     | 9                |    |    |    |    |    | 9                   | 18     | 10     | good   | good      |       |                              |                         |                               |
| 486         | <i>Eriobotrya deflexa</i>      | Bronze loquat                    | 1     | 5                |    |    |    |    |    | 5                   | 10     | 9      | good   | good      |       |                              |                         |                               |
| 487         | <i>Pinus canariensis</i>       | Canary Island pine               | 1     | 17               |    |    |    |    |    | 17                  | 48     | 15     | good   | good      |       |                              |                         |                               |
| 488         | <i>Quercus agrifolia</i>       | Coast live oak                   | 1     | 7                |    |    |    |    |    | 7                   | 14     | 9      | good   | good      |       |                              |                         |                               |
| 489         | <i>Pinus canariensis</i>       | Canary Island pine               | 1     | 17               |    |    |    |    |    | 17                  | 50     | 15     | good   | good      |       |                              |                         |                               |
| 490         | <i>Quercus agrifolia</i>       | Coast live oak                   | 1     | 7                |    |    |    |    |    | 7                   | 14     | 8      | good   | good      |       |                              |                         |                               |
| 491         | <i>Alnus rhombifolia</i>       | White alder                      | 1     | 13               |    |    |    |    |    | 13                  | 30     | 15     | fair   | fair      |       |                              |                         |                               |
| 492         | <i>Alnus rhombifolia</i>       | White alder                      | 1     | 8                |    |    |    |    |    | 8                   | 15     | 15     | fair   | fair      |       | X                            |                         |                               |
| 493         | <i>Quercus agrifolia</i>       | Coast live oak                   | 3     | 13               | 5  | 5  |    |    |    | 15                  | 15     | 15     | good   | good      |       | X                            |                         |                               |
| 494         | <i>Eucalyptus globulus</i>     | Blue gum                         | 4     | 13               | 12 | 12 | 6  |    |    | 22                  | 14     | 12     | fair   | fair      |       | X                            |                         |                               |
| 495         | <i>Eucalyptus globulus</i>     | Blue gum                         | 4     | 6                | 5  | 4  | 4  |    |    | 10                  | 14     | 12     | fair   | fair      |       | X                            |                         |                               |
| 496         | <i>Eucalyptus globulus</i>     | Blue gum                         | 3     | 10               | 10 | 9  |    |    |    | 17                  | 14     | 12     | fair   | fair      |       | X                            |                         |                               |
| 497         | <i>Eucalyptus globulus</i>     | Blue gum                         | 1     | 10               |    |    |    |    |    | 10                  | 14     | 8      | fair   | fair      |       | X                            |                         |                               |
| 498         | <i>Eucalyptus globulus</i>     | Blue gum                         | 2     | 6                | 6  |    |    |    |    | 8                   | 14     | 10     | fair   | fair      |       | X                            |                         |                               |
| 499         | <i>Eucalyptus globulus</i>     | Blue gum                         | 3     | 6                | 6  | 5  |    |    |    | 10                  | 14     | 10     | fair   | fair      |       | X                            |                         |                               |
| 500         | <i>Eucalyptus globulus</i>     | Blue gum                         | 2     | 13               | 6  |    |    |    |    | 14                  | 14     | 10     | fair   | fair      |       | X                            |                         |                               |
| 501         | <i>Eucalyptus globulus</i>     | Blue gum                         | 3     | 12               | 12 | 10 |    |    |    | 20                  | 14     | 10     | fair   | fair      |       | X                            |                         |                               |
| 502         | <i>Erythrina caffra</i>        | Coral tree                       | 5     | 14               | 12 | 10 | 12 | 8  |    | 24                  | 16     | 15     | good   | good      |       | X                            |                         |                               |
| 503         | <i>Eucalyptus globulus</i>     | Blue gum                         | 3     | 18               | 8  | 10 |    |    |    | 22                  | 30     | 16     | good   | good      |       | X                            |                         |                               |
| 504         | <i>Platanus racemosa</i>       | California sycamore              | 2     | 20               | 19 |    |    |    |    | 28                  | 45     | 28     | good   | good      |       | X                            |                         |                               |
| 505         | <i>Platanus racemosa</i>       | California sycamore              | 1     | 15               |    |    |    |    |    | 15                  | 45     | 18     | good   | good      |       |                              |                         |                               |
| 506         | <i>Platanus racemosa</i>       | California sycamore              | 1     | 16               |    |    |    |    |    | 16                  | 50     | 18     | good   | good      |       |                              |                         |                               |
| 507         | <i>Alnus rhombifolia</i>       | White alder                      | 1     | 17               |    |    |    |    |    | 17                  | 40     | 18     | good   | good      |       |                              |                         |                               |
| 508         | <i>Platanus racemosa</i>       | California sycamore              | 1     | 11               |    |    |    |    |    | 11                  | 30     | 15     | good   | good      |       |                              |                         |                               |
| 509         | <i>Quercus agrifolia</i>       | Coast live oak                   | 1     | 14               |    |    |    |    |    | 14                  | 20     | 15     | poor   | poor      |       |                              |                         |                               |
| 510         | <i>Alnus rhombifolia</i>       | White alder                      | 1     | 15               |    |    |    |    |    | 15                  | 25     | 15     | good   | good      |       |                              |                         |                               |
| 511         | <i>Quercus agrifolia</i>       | Coast live oak                   | 1     | 9                |    |    |    |    |    | 9                   | 22     | 10     | good   | good      |       |                              |                         |                               |
| 512         | <i>Quercus agrifolia</i>       | Coast live oak                   | 2     | 9                | 10 |    |    |    |    | 13                  | 17     | 15     | good   | good      |       |                              |                         |                               |
| 513         | <i>Quercus agrifolia</i>       | Coast live oak                   | 2     | 12               | 11 |    |    |    |    | 16                  | 25     | 20     | good   | good      |       |                              |                         |                               |
| 514         | <i>Eucalyptus globulus</i>     | Blue gum                         | 2     | 21               | 20 |    |    |    |    | 29                  | 65     | 18     | good   | good      |       |                              |                         |                               |
| 515         | <i>Eucalyptus globulus</i>     | Blue gum                         | 4     | 12               | 8  | 5  | 5  |    |    | 16                  | 28     | 18     | fair   | fair      |       |                              |                         |                               |
| 516         | <i>Quercus agrifolia</i>       | Coast live oak                   | 1     | 16               |    |    |    |    |    | 16                  | 18     | 20     | good   | good      |       |                              |                         |                               |

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| Tree Number | Botanical Name               | Common Name                      | Stems | Individual Trunk |    |    |    |    |    | Trunk DBH (inches)* | Height | Canopy | Health | Structure | Notes | Impact Status by Alternative |                         |                               |
|-------------|------------------------------|----------------------------------|-------|------------------|----|----|----|----|----|---------------------|--------|--------|--------|-----------|-------|------------------------------|-------------------------|-------------------------------|
|             |                              |                                  |       | S1               | S2 | S3 | S4 | S5 | S6 |                     |        |        |        |           |       | Proposed Project Impacts     | LCP Alternative Impacts | Re-Design Alternative Impacts |
|             |                              |                                  |       |                  |    |    |    |    |    |                     |        |        |        |           |       |                              |                         |                               |
| 517         | <i>Quercus agrifolia</i>     | Coast live oak                   | 1     | 9                |    |    |    |    | 9  | 17                  | 15     | good   | good   |           |       |                              |                         |                               |
| 518         | <i>Juglans californica</i>   | Southern California black walnut | 5     | 12               | 10 | 10 | 9  | 8  | 21 | 15                  | 17     | fair   | fair   |           |       |                              |                         |                               |
| 519         | <i>Quercus agrifolia</i>     | Coast live oak                   | 1     | 7                |    |    |    |    | 7  | 13                  | 10     | good   | good   |           |       |                              |                         |                               |
| 520         | <i>Quercus agrifolia</i>     | Coast live oak                   | 2     | 17               | 9  |    |    |    | 19 | 18                  | 20     | good   | good   |           |       |                              |                         |                               |
| 521         | <i>Quercus agrifolia</i>     | Coast live oak                   | 1     | 21               |    |    |    |    | 21 | 20                  | 25     | good   | good   |           |       |                              | X                       |                               |
| 522         | <i>Quercus agrifolia</i>     | Coast live oak                   | 2     | 15               | 7  |    |    |    | 17 | 20                  | 15     | good   | good   |           |       |                              |                         |                               |
| 523         | <i>Quercus agrifolia</i>     | Coast live oak                   | 1     | 12               |    |    |    |    | 12 | 20                  | 10     | good   | good   |           |       |                              |                         |                               |
| 524         | <i>Eucalyptus globulus</i>   | Blue gum                         | 3     | 13               | 10 | 10 |    |    | 19 | 28                  | 17     | good   | good   |           |       |                              |                         |                               |
| 525         | <i>Eucalyptus globulus</i>   | Blue gum                         | 1     | 9                |    |    |    |    | 9  | 20                  | 12     | fair   | fair   |           |       |                              |                         |                               |
| 526         | <i>Eucalyptus globulus</i>   | Blue gum                         | 1     | 15               |    |    |    |    | 15 | 22                  | 12     | fair   | fair   |           |       |                              |                         |                               |
| 527         | <i>Quercus agrifolia</i>     | Coast live oak                   | 1     | 15               |    |    |    |    | 15 | 20                  | 16     | good   | good   |           |       |                              |                         |                               |
| 528         | <i>Quercus agrifolia</i>     | Coast live oak                   | 1     | 12               |    |    |    |    | 12 | 20                  | 16     | good   | good   |           |       |                              |                         |                               |
| 529         | <i>Quercus agrifolia</i>     | Coast live oak                   | 1     | 18               |    |    |    |    | 18 | 25                  | 26     | good   | good   |           |       |                              |                         |                               |
| 530         | <i>Eucalyptus globulus</i>   | Blue gum                         | 3     | 9                | 9  | 7  |    |    | 15 | 18                  | 12     | fair   | fair   |           |       |                              |                         |                               |
| 531         | <i>Eucalyptus globulus</i>   | Blue gum                         | 2     | 8                | 6  |    |    |    | 10 | 18                  | 13     | fair   | fair   |           |       |                              |                         |                               |
| 532         | <i>Eucalyptus globulus</i>   | Blue gum                         | 2     | 13               | 10 |    |    |    | 16 | 21                  | 15     | fair   | fair   |           |       |                              |                         |                               |
| 533         | <i>Eucalyptus globulus</i>   | Blue gum                         | 1     | 18               |    |    |    |    | 18 | 60                  | 17     | good   | good   |           |       |                              |                         |                               |
| 534         | <i>Eucalyptus globulus</i>   | Blue gum                         | 1     | 17               |    |    |    |    | 17 | 60                  | 15     | good   | good   |           |       |                              |                         |                               |
| 535         | <i>Quercus agrifolia</i>     | Coast live oak                   | 1     | 9                |    |    |    |    | 9  | 18                  | 15     | good   | good   |           |       |                              |                         |                               |
| 536         | <i>Quercus agrifolia</i>     | Coast live oak                   | 1     | 9                |    |    |    |    | 9  | 13                  | 8      | poor   | poor   |           |       |                              |                         |                               |
| 537         | <i>Quercus agrifolia</i>     | Coast live oak                   | 1     | 17               |    |    |    |    | 17 | 25                  | 15     | fair   | fair   |           |       |                              |                         |                               |
| 538         | <i>Persea americana</i>      | Avocado                          | 3     | 4                | 4  | 4  |    |    | 7  | 12                  | 12     | good   | good   |           |       |                              | X                       |                               |
| 539         | <i>Persea americana</i>      | Avocado                          | 5     | 8                | 6  | 9  | 5  | 6  | 15 | 13                  | 15     | good   | good   |           |       |                              | X                       |                               |
| 540         | <i>Persea americana</i>      | Avocado                          | 4     | 7                | 7  | 6  | 5  |    | 13 | 15                  | 16     | good   | good   |           |       |                              | X                       |                               |
| 541         | <i>Persea americana</i>      | Avocado                          | 5     | 8                | 6  | 6  | 5  | 6  | 13 | 15                  | 14     | good   | good   |           |       |                              | X                       |                               |
| 542         | <i>Platanus racemosa</i>     | California sycamore              | 1     | 8                |    |    |    |    | 8  | 20                  | 12     | good   | good   |           |       |                              |                         |                               |
| 543         | <i>Persea americana</i>      | Avocado                          | 2     | 10               | 3  |    |    |    | 10 | 14                  | 12     | fair   | fair   |           |       |                              | X                       |                               |
| 544         | <i>Eucalyptus cinerea</i>    | Silver dollar gum                | 1     | 10               |    |    |    |    | 10 | 16                  | 12     | fair   | fair   |           |       |                              | X                       |                               |
| 545         | <i>Alnus rhombifolia</i>     | White alder                      | 1     | 11               |    |    |    |    | 11 | 30                  | 16     | good   | good   |           |       |                              |                         |                               |
| 546         | <i>Pittosporum undulatum</i> | Victorian box                    | 2     | 9                | 9  |    |    |    | 13 | 25                  | 16     | good   | good   |           |       |                              |                         |                               |
| 547         | <i>Sequoia sempervirens</i>  | Coast redwood                    | 1     | 11               |    |    |    |    | 11 | 28                  | 12     | good   | good   |           |       |                              |                         |                               |
| 548         | <i>Alnus rhombifolia</i>     | White alder                      | 1     | 17               |    |    |    |    | 17 | 47                  | 18     | good   | good   |           |       |                              |                         |                               |
| 549         | <i>Quercus agrifolia</i>     | Coast live oak                   | 1     | 17               |    |    |    |    | 17 | 22                  | 26     | good   | good   |           | X     | X                            | X                       |                               |
| 550         | <i>Quercus agrifolia</i>     | Coast live oak                   | 1     | 22               |    |    |    |    | 22 | 35                  | 18     | fair   | fair   |           | X     | X                            | X                       |                               |
| 551         | <i>Platanus racemosa</i>     | California sycamore              | 1     | 9                |    |    |    |    | 9  | 25                  | 15     | good   | good   |           |       |                              |                         |                               |
| 552         | <i>Juglans californica</i>   | Southern California black walnut | 1     | 6                |    |    |    |    | 6  | 8                   | 10     | poor   | poor   |           |       |                              |                         |                               |
| 553         | <i>Salix lasiolepis</i>      | Arroyo willow                    | 2     | 6                | 6  |    |    |    | 8  | 16                  | 16     | good   | good   |           |       |                              |                         |                               |
| 554         | <i>Quercus agrifolia</i>     | Coast live oak                   | 3     | 10               | 10 | 9  |    |    | 17 | 15                  | 12     | good   | good   |           | X     |                              |                         |                               |
| 555         | <i>Quercus agrifolia</i>     | Coast live oak                   | 4     | 10               | 10 | 10 | 9  |    | 20 | 15                  | 15     | good   | good   |           | X     | X                            | X                       |                               |
| 556         | <i>Platanus racemosa</i>     | California sycamore              | 2     | 17               | 20 |    |    |    | 26 | 55                  | 22     | good   | good   |           |       |                              |                         |                               |
| 557         | <i>Quercus agrifolia</i>     | Coast live oak                   | 2     | 13               | 13 |    |    |    | 18 | 25                  | 20     | good   | good   |           |       |                              |                         |                               |
| 558         | <i>Quercus agrifolia</i>     | Coast live oak                   | 4     | 15               | 16 | 14 | 12 |    | 29 | 25                  | 26     | good   | good   |           | X     | X                            | X                       |                               |
| 559         | <i>Pinus canariensis</i>     | Canary Island pine               | 1     | 18               |    |    |    |    | 18 | 60                  | 18     | good   | good   |           |       |                              |                         |                               |
| 560         | <i>Quercus agrifolia</i>     | Coast live oak                   | 2     | 15               | 11 |    |    |    | 19 | 23                  | 20     | good   | good   |           |       |                              |                         |                               |
| 561         | <i>Quercus agrifolia</i>     | Coast live oak                   | 1     | 10               |    |    |    |    | 10 | 17                  | 15     | good   | good   |           |       |                              |                         |                               |
| 562         | <i>Platanus racemosa</i>     | California sycamore              | 2     | 15               | 11 |    |    |    | 19 | 24                  | 18     | good   | good   |           |       |                              |                         |                               |

**Appendix B - Tree Information Matrix - Malibu Park Public Access Enhancement Native Tree Protection Plan**

| Tree Number | Botanical Name                  | Common Name                      | Stems | Individual Trunk |    |    |    |    |    | Trunk DBH (inches)* | Height | Canopy | Health    | Structure | Notes | Impact Status by Alternative |                         |                               |
|-------------|---------------------------------|----------------------------------|-------|------------------|----|----|----|----|----|---------------------|--------|--------|-----------|-----------|-------|------------------------------|-------------------------|-------------------------------|
|             |                                 |                                  |       | S1               | S2 | S3 | S4 | S5 | S6 |                     |        |        |           |           |       | Proposed Project Impacts     | LCP Alternative Impacts | Re-Design Alternative Impacts |
|             |                                 |                                  |       |                  |    |    |    |    |    |                     |        |        |           |           |       |                              |                         |                               |
| 563         | <i>Quercus agrifolia</i>        | Coast live oak                   | 1     | 6                |    |    |    |    | 6  | 12                  | 8      | good   | good      |           |       |                              |                         |                               |
| 564         | <i>Platanus racemosa</i>        | California sycamore              | 1     | 19               |    |    |    |    | 19 | 50                  | 18     | good   | good      |           |       |                              |                         |                               |
| 565         | <i>Quercus agrifolia</i>        | Coast live oak                   | 1     | 7                |    |    |    |    | 7  | 13                  | 10     | good   | good      |           |       |                              |                         |                               |
| 566         | <i>Eucalyptus globulus</i>      | Blue gum                         | 5     | 12               | 11 | 10 | 8  | 8  | 21 | 25                  | 18     | fair   | fair      |           |       |                              |                         |                               |
| 567         | <i>Eucalyptus globulus</i>      | Blue gum                         | 4     | 9                | 7  | 6  | 6  |    | 14 | 25                  | 18     | fair   | fair      |           |       |                              |                         |                               |
| 568         | <i>Juglans californica</i>      | Southern California black walnut | 2     | 13               | 11 |    |    |    | 17 | 20                  | 16     | fair   | fair      |           |       |                              |                         |                               |
| 569         | <i>Pittosporum undulatum</i>    | Victorian box                    | 1     | 6                |    |    |    |    | 6  | 18                  | 12     | good   | good      |           |       |                              |                         |                               |
| 570         | <i>Pittosporum undulatum</i>    | Victorian box                    | 1     | 6                |    |    |    |    | 6  | 18                  | 12     | good   | good      |           |       |                              |                         |                               |
| 571         | <i>Eucalyptus cinerea</i>       | Silver dollar gum                | 1     | 17               |    |    |    |    | 17 | 20                  | 18     | good   | good      |           | X     | X                            | X                       |                               |
| 572         | <i>Sequoia sempervirens</i>     | Coast redwood                    | 1     | 11               |    |    |    |    | 11 | 30                  | 15     | good   | good      |           |       |                              |                         |                               |
| 573         | <i>Eucalyptus cinerea</i>       | Silver dollar gum                | 1     | 15               |    |    |    |    | 15 | 20                  | 16     | good   | good      |           | X     | X                            | X                       |                               |
| 574         | <i>Platanus racemosa</i>        | California sycamore              | 3     | 11               | 13 | 7  |    |    | 18 | 19                  | 17     | good   | good      |           | X     | X                            | X                       |                               |
| 575         | <i>Platanus racemosa</i>        | California sycamore              | 2     | 8                | 6  |    |    |    | 10 | 19                  | 16     | good   | good      |           | X     | X                            | X                       |                               |
| 576         | <i>Schinus terebinthifolius</i> | Brazilian pepper                 | 2     | 16               | 16 |    |    |    | 23 | 17                  | 18     | good   | good      |           |       |                              |                         |                               |
| 577         | <i>Schinus terebinthifolius</i> | Brazilian pepper                 | 3     | 22               | 19 | 20 |    |    | 35 | 20                  | 20     | fair   | fair      |           | X     | X                            | X                       |                               |
| 578         | <i>Eucalyptus globulus</i>      | Blue gum                         | 1     | 29               |    |    |    |    | 29 | 18                  | 25     | fair   | fair      |           |       |                              |                         |                               |
| 579         | <i>Eucalyptus globulus</i>      | Blue gum                         | 1     | 36               |    |    |    |    | 36 | 28                  | 25     | fair   | fair      |           |       |                              |                         |                               |
| 580         | <i>Eucalyptus globulus</i>      | Blue gum                         | 4     | 26               | 12 | 8  | 8  |    | 31 | 24                  | 17     | poor   | poor      |           |       |                              |                         |                               |
| 581         | <i>Eucalyptus globulus</i>      | Blue gum                         | 1     | 11               |    |    |    |    | 11 | 18                  | 10     | poor   | poor      |           |       |                              |                         |                               |
| 582         | <i>Eucalyptus globulus</i>      | Blue gum                         | 1     | 11               |    |    |    |    | 11 | 18                  | 10     | poor   | poor      |           |       |                              |                         |                               |
| 583         | <i>Eucalyptus globulus</i>      | Blue gum                         | 2     | 15               | 12 |    |    |    | 19 | 20                  | 12     | poor   | very poor |           |       |                              |                         |                               |
| 584         | <i>Eucalyptus globulus</i>      | Blue gum                         | 1     | 7                |    |    |    |    | 7  | 17                  | 5      | dead   | dead      | dead      |       |                              |                         |                               |
| 585         | <i>Eucalyptus globulus</i>      | Blue gum                         | 3     | 16               | 16 | 15 |    |    | 27 | 25                  | 5      | dead   | dead      | dead      |       |                              |                         |                               |
| 586         | <i>Eucalyptus globulus</i>      | Blue gum                         | 1     | 14               |    |    |    |    | 14 | 25                  | 5      | dead   | dead      | dead      |       |                              |                         |                               |
| 587         | <i>Eucalyptus globulus</i>      | Blue gum                         | 1     | 14               |    |    |    |    | 14 | 25                  | 5      | dead   | dead      | dead      |       |                              |                         |                               |
| 588         | <i>Eucalyptus globulus</i>      | Blue gum                         | 1     | 16               |    |    |    |    | 16 | 25                  | 5      | dead   | dead      | dead      |       |                              |                         |                               |
| 589         | <i>Eucalyptus globulus</i>      | Blue gum                         | 1     | 9                |    |    |    |    | 9  | 10                  | 5      | dead   | dead      | dead      |       |                              |                         |                               |
| 590         | <i>Eucalyptus globulus</i>      | Blue gum                         | 1     | 13               |    |    |    |    | 13 | 10                  | 5      | dead   | dead      | dead      |       |                              |                         |                               |
| 591         | <i>Platanus racemosa</i>        | California sycamore              | 1     | 10               |    |    |    |    | 10 | 14                  | 11     | good   | good      |           | X     | X                            | X                       |                               |
| 592         | <i>Pinus thunbergiana</i>       | Japanese black pine              | 1     | 12               |    |    |    |    | 12 | 16                  | 15     | good   | good      |           | X     | X                            | X                       |                               |
| 593         | <i>Eucalyptus cinerea</i>       | Silver dollar gum                | 1     | 11               |    |    |    |    | 11 | 16                  | 15     | good   | good      |           | X     | X                            | X                       |                               |
| 594         | <i>Pinus thunbergiana</i>       | Japanese black pine              | 1     | 12               |    |    |    |    | 12 | 17                  | 15     | good   | good      |           |       |                              |                         |                               |
| 595         | <i>Quercus agrifolia</i>        | Coast live oak                   | 3     | 16               | 9  | 8  |    |    | 20 | 18                  | 20     | good   | good      |           | X     | X                            | X                       |                               |
| 596         | <i>Quercus agrifolia</i>        | Coast live oak                   | 1     | 15               |    |    |    |    | 15 | 17                  | 18     | good   | good      |           | X     | X                            | X                       |                               |
| 597         | <i>Quercus agrifolia</i>        | Coast live oak                   | 1     | 16               |    |    |    |    | 16 | 18                  | 20     | good   | good      |           |       |                              |                         |                               |
| 598         | <i>Platanus racemosa</i>        | California sycamore              | 1     | 16               |    |    |    |    | 16 | 38                  | 16     | fair   | fair      |           | X     | X                            | X                       |                               |
| 599         | <i>Pinus canariensis</i>        | Canary Island pine               | 1     | 6                |    |    |    |    | 6  | 16                  | 10     | good   | good      |           | X     | X                            | X                       |                               |

