

Exhibit B

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THOMPSON
WILDLAND MANAGEMENT

Environmental Management & Conservation Services
International Society of Arboriculture Certified Arborist # WE-7468A
Department of Pesticide Regulation Qualified Applicator Lic. #QL50949 B
Environmental & Arborist Assessments, Protection, Restoration, Monitoring & Reporting
Wildland Fire Property Protection, Fuel Reduction & Vegetation Management
Invasive Weed Control, and Habitat Restoration & Management
Soil Erosion & Sedimentation Control
Resource Ecologist

October 2, 2025

Nunnelee Residence
3144 Spruance Road
Pebble Beach, CA. 93953
APN: 008-501-004-000

Subject: 3144 Spruance Road Pre-construction Tree Impact Assessment

Per *Monterey County Housing & Community Development Department-Planning Services* (MCHCD) permit requirements, an arborist-conducted pre-construction evaluation of trees located on the property at 3144 Spruance Road (APN: 008-501-004) in Pebble Beach was recently performed to assess tree health and condition, potential construction related impacts, and to provide tree removal, preservation and replacement recommendations in preparation for the proposed property development project. More specifically, this assessment involved performing a ground level visual inspection of Monterey pine (*Pinus radiata*) trees located on this undeveloped parcel to assess general physiological health and structural condition, determine suitability for incorporating specific trees into the developed landscape, and provide recommendations for retaining, protecting and removing trees based on tree health, condition, location and construction related impacts. This assessment will assist in identifying tree characteristics and conditions, determine which pine trees will need to be removed in preparation for property development activities, and provide tree protection guidelines and replacement recommendations, which will assist in preserving and sustaining woodland health and character.

Per the project plans, 61 greater than 6 inch DBH (diameter at breast height) Monterey pine trees were recorded and evaluated in preparation for the proposed property development project, which will involve the construction of a main house, paved driveway and two detached structures (i.e., an ADU and a garage). These pines were assigned metal tag numbers 360-420 that were affixed to the trees and are referred to in this report as *Tree#s 360-420*. Forty (40) of these pines are proposed for removal due to construction related impacts and the 21 remaining pines that were tagged and recorded will be retained and protected, but will likely experience some impacts due to their fairly close proximity to planned grading and construction activities. However, these 21 retained and protected pines that are located closer to the building footprint

are expected to tolerate and withstand construction related impacts given the proper implementation of tree protection and monitoring best management practices (BMP's). Twenty-five (25) additional pines located on the subject property that were not tagged and evaluated due to their safe distance away from proposed construction activities are not expected to be impacted or adversely affected by project operations and will also be protected with tree protection fencing.

The location of trees proposed for removal (i.e., pine trees located within or directly adjacent to the construction footprint), as well as trees to be retained and protected are identified on the attached *Exhibit A: Tree Location & Tree Protection Fencing Map* and project plans. For more information regarding the trees proposed for removal, refer to the *Exhibit B: Tree Impact Assessment & Removal Spreadsheet*. Photos of the project site and several of the trees located on this Monterey pine woodland lot are located at the end of the report (refer to attached photos, *Figures 1-9*). Findings and recommendations are provided herein.

I. SITE CHARACTERISTICS & DESCRIPTION

This undeveloped property located at 3144 Spruance Road in Pebble Beach is approximately 1 acre in size and is located in a Monterey pine (*Pinus radiata*) dominated woodland residential community (refer to attached photos, *Figures 1-9*). This street to street parcel (i.e., Spruance Road to the northeast and Deer Path to the southwest) is in a *wildland-urban interface* (WUI) community with sizable natural open space occurring in nearby areas of Del Monte Forest. This woodland lot is surrounded by two developed lots to the northwest and southeast, Deer Path road to the southwest and Spruance Road to the northeast. Prevailing winds are predominantly out of a westerly direction and soils on this relatively flat to moderately sloped property appear to be stable and sufficient for supporting property development operations and woodland habitat.

This Monterey pine woodland environment is significantly influenced by seasonally temperate coastal environmental conditions. On this particular lot, as with the other surrounding and nearby parcels, larger and more conspicuous Monterey pines are the most dominant and prevalent tree specie (refer to *Figures 1-9*). Additionally, young pine seedlings and saplings, as well as a few young coast live oak (*Quercus agrifolia*) saplings are also occurring on the property. The only other mature tree specie occurring on the parcel are non-native invasive golden wattle acacias (*Acacia longifolia*), which can be classified as a lower-canopy large shrub or small tree (refer to *Figure 5*). It should be noted that mature coast live oaks and Monterey cypress trees that are common in this area are not inhabiting this particular property.

The Monterey pines are a coniferous cone and needle bearing evergreen that dominate this parcel and this area of Del Monte Forest. They have a crown class ranging from suppressed to dominant, with a co-dominant canopy class being the most common. Pine tree density and canopy cover is moderate to high depending on the area of the lot, with a few small to moderate sized woodland clearings where most of the property development activities will be taking place (refer to *Figures 1-9*). The occurrence of understory vegetation on the property is low and

insignificant due to past vegetation clearing and fuel reduction operations. The health and condition of the mature and overly-mature pines occurring on the parcel ranges from poor to good physiological health and structural condition, with a majority of the pines generally being in poor to fair health and structural condition (refer to the *Exhibit B: Tree Impact Assessment & Removal Spreadsheet*). It should be noted that 2 of the tagged and evaluated pines that are proposed for removal due to construction related impacts (identified as *Tree#s 389 & 394*) are clearly dead or dying, with several of the other recorded trees being in poor and declining health and condition (refer to the corresponding *Exhibit B spreadsheet* for tree health information).

Most of the recorded and evaluated pines that will be or have the potential of being impacted by proposed grading and construction activities are non-landmark status trees ranging from 7 to 23 inch DBH, with 7 of the tagged pines being landmark status trees that are greater than 24 inch DBH. Three (3) of these landmark status pines are proposed for removal, with the remaining 4 being retained and protected for the duration of the project.

Woodland understory vegetation is sparse and limited on the subject parcel due to past vegetation removal and fuel reduction operations (refer to *Figures 1-9*). Native understory flora observed includes the following species: Poison oak (*Toxicodendron diversilobum*), coyote brush (*Baccharis pilularis*), woolly leaf manzanita (*Arctostaphylos tomentosa*), sticky monkey flower (*Mimulus aurantiacus*), Pacific blackberry (*Rubus ursinus*), Douglas iris (*Iris douglasiana*), California aster (*Symphyotrichum chilense*) and a few species of native bunch grasses. Non-native invasive plant species observed on the lot was limited to golden wattles (*Acacia longifolia*), which can be described as large shrubs or small trees, as well as a few species of exotic grasses. Non-native invasive plants can be harmful and degrading to habitat and should be controlled, managed and, where possible, eradicated.

It should be noted that natural recruitment and regeneration of native specie trees (e.g., primarily Monterey pine seedlings) is occurring on the subject parcel; however, additional planting will be necessary to further assist in sustaining the long-term health, viability and character of this woodland environment, as well as to satisfy MCHCD tree removal permit conditions. Additionally, it should be noted that special status plant and animal species, sensitive habitat and actively nesting birds or raptors that have protection status were not observed on the subject property during the site assessment; however, an additional nesting bird and raptor assessment should be conducted if tree removal operations occur during the nesting season, which in Monterey County may begin as early as February and continue through August.

II. METHODOLOGY

For this report, a ground level visual assessment of Monterey pine trees and woodland habitat was recently conducted. In regards to inspecting trees, no aerial (climbing) inspections, woody tissue testing and/or root excavations were performed or requested as part of this evaluation.

Per MCHCD requirements, native specie trees that are 6 inch DBH (diameter at breast height) or

larger at 48 inches above grade are required to be documented and recorded if impacted by construction or development related activities. For this project 61 Monterey pine trees that are protected by MCHCD ordinances were recorded and evaluated (i.e., assigned tag#s 360-420) in preparation for property development activities. Forty (40) of these pines are proposed for removal due to construction related impacts, with the remaining trees on the lot being retained and protected for the duration of the project.

Recommendations are based on the overall general health, vigor and condition of subject trees and habitat; the impact that property development activities may have on trees and natural resources; the hazard level trees present to proposed occupied structures and/or areas with human activity; and the impacts that tree removal and management activities may have on sensitive natural resources, wildlife habitat and nearby healthy trees.

In regards to attachments and exhibits included in this report, *Exhibit A* is a property map and project site plan that shows the location of the 61 trees recorded and evaluated in relation to proposed structures and other property features. This includes the location of the 40 trees proposed for removal, as well as the several remaining trees that will be retained and protected. The *Exhibit B: Tree Impact Assessment & Removal Spreadsheet* provides general tree information and characteristics of the 61 recorded and evaluated trees, such as the assigned tag numbers, species, diameter at breast height (DBH), general physiological health and structural condition, and level of impact from proposed construction activities. Additionally, photographs depicting property features, characteristics and trees impacted or proposed for removal are located at the end of the report (refer to attached photos, *Figures 1-9*).

III. CONSTRUCTION RELATED IMPACTS TO TREES & HABITAT

As stated earlier in the report, a total of 61 mature and senescing Monterey pines, identified as *Tree#s 360-420*, that are greater than 6 inch DBH (diameter at breast height) were recorded and evaluated during a recent pre-construction tree impact assessment of the undeveloped parcel located at 3144 Spruance Road (refer to the attached *Exhibit A: Tree Location & Tree Protection Fencing Map* and project plans, the corresponding *Exhibit B: Tree Impact Assessment & Removal Spreadsheet* and the attached photos, *Figures 1-9*). Forty (40) of these pines, most of which are in declining physiological health and structural condition, are proposed for removal in preparation for the construction of a main house, paved driveway and two detached structures (i.e., an ADU and a garage). The remaining 21 pines recorded and evaluated will be retained and protected for the duration of the project, and given the proper installation, maintenance and monitoring of tree protection measures and BMP's, such as properly positioned and maintained tree protection fencing, are expected to remain in similar health and condition as they are now and physiologically and structurally sound during the project and following the completion of property development operations. There are also an additional 25 mature pines located on the property that were not tagged due to their safe distance away from proposed construction activities, and these 25 trees are not expected to be significantly impacted or adversely affected

by project operations, which will result in a total of 46 mature pines being retained and protected during this home construction project.

Of the 40 pines proposed for removal, twenty-three (23) are located within the proposed construction footprint, which will require their removal. The remaining 17 pines recommended for removal is due to their close proximity to planned grading and construction activities, which would significantly impact and adversely affect the health and structural integrity of these trees if they were to be retained (refer to the attached *Exhibit A: Tree Location & Tree Protection Fencing Map* and project plans, as well as the corresponding *Exhibit B: Tree Impact Assessment & Removal Spreadsheet*). Additionally, several of these 17 pines (as well as many of the 23 pines located within the building footprint) are also in poor and declining physiological health and structural condition. This along with significant construction related impacts would result in a further decline in tree health and a greater likelihood of structural failures if they were retained, which would increase hazard concerns to the subject property. Trees located too close to proposed development activities, particularly aging and declining trees that are not in good health and condition, are often recommended for removal due to these trees being more vulnerable to construction related impacts and less likely to be able to tolerate, withstand and adapt to altered site conditions and changes in natural grade that has resulted from property development activities. It should be noted that 2 of the tagged and recorded pines that are proposed removal due to construction related impacts (identified as *Tree#s 389 & 394*) are clearly dead or dying.

Some of the Monterey pine trees located on the subject property are exhibiting clear and obvious signs and symptoms of physiological stress and structural decline, and are at increased risk of mortality and structural failure that could adversely affect nearby healthier trees and property development activities. Biotic disorders that affect pine trees and habitat on the subject property and in the surrounding pine forest community include Pine Pitch Canker (*Fusarium circinatum*; an often deadly fungal born pathogen); *Diplodia pinea* (fungal disease blight that can cause significant branch die back); Red Turpentine Beetle, Engraver Beetle(*Ips*) and other wood boring bark beetle activity (secondary insect pests that attack stressed and weakened trees [e.g., drought stressed] that can potentially transmit fungal born diseases [e.g., Pitch Canker] to other trees); and Western Gall Rust (a fungus that often results in large and conspicuous cankers that can cause significant structural defects). These biotic disorders are often related to and exacerbated by severe drought (an abiotic condition), which has contributed to a large number of various tree species in the region (particularly Monterey pine) declining and dying directly or indirectly from drought related factors.

Additionally, a number of pines on the property have problematic structural deficiencies and anomalies, such as prominent cankers, bows, crooks, leans, poor trunk & stem taper, poor canopy balance & symmetry, top heavy crowns, decay features and co-dominant attachments in the trunks and stems, which increases the probability of structural failures and physiological decline. It should be noted that numerous pine trees in Del Monte Forest and the greater Monterey Peninsula area have fallen in recent years primarily due to high intensity storm events

that have impacted the central coast region. Overly-mature and aging Monterey pines are the most common and likely type and specie of tree in the region to experience significant structural failures that can increase hazard concerns to life and property.

The ecological impacts of proposed tree removal operations will be fairly insignificant due to the overall poor health and condition of several of the pines that are proposed for removal, as well as the planting of 43 replacement trees (i.e., mitigation plantings) to assist in sustaining woodland health and character and to comply with County permit conditions (refer to replacement planting recommendations provided later in this report). Additionally, retained trees will be effectively protected with tree protection BMP's for the duration of the project, which will reduce and minimize impacts to trees and habitat. Furthermore, the removal of several aging, declining and unhealthy pines will benefit adjacent healthier trees that will be retained, promote the healthy establishment and maturation of nearby smaller and younger trees, and reduce combustible fuel loads that will assist in protecting property, woodland habitat and the surrounding community from potentially destructive wildland fire events.

Prior to construction activities beginning, a pre-construction meeting shall occur with the project contractor and design team to discuss tree protection and potential construction related impacts. Tree and resource protection measures shall be properly positioned and installed, such as tree protection fencing and perimeter silt fence sedimentation control measures. The location of tree protection BMP's will be determined on-site by the project arborist working with the general contractor and/or project design team. Tree and resource preservation measures will be monitored and maintained for the duration of the project and, if necessary, modified and improved to ensure they are functioning properly and effectively protecting trees and ecological resources. Given the proper implementation of grading activities, as well as the tree and resource protection BMP's provided in this report, retained and protected trees and woodland habitat are not expected to be significantly impacted or harmed by construction operations.

It should be pointed out that the project design team is aware of concerns related to tree impacts and removal, and has made efforts to produce a property development plan that attempts to minimize impacts to trees. The design team has stated that the proposed construction site is the most suitable and sensible location for property development to occur and, unfortunately, tree removal will be necessary and unavoidable in order for construction operations to proceed. However, as noted earlier, a total of 46 mature pines will be retained and protected on the lot, which will be sufficient for maintaining woodland health and character during and following the completion of this home construction project.

It should also be stated that individual trees and groups of trees vary in their suitability for being retained and protected on a development site. Species tolerance, along with tree health and condition will assist in determining the type or level of impact a tree or group of trees can tolerate with minimal adverse affects, which will assist in determining which trees should be removed or retained. Based on the health, condition and location of the 40 trees proposed for removal (many of which are aging and declining trees), it has been determined that 23 of these

pinus will need to be removed due to their location within the proposed building footprint, with the remaining 17 pinus recommended for removal due to their close proximity to grading and construction activities, which makes them unsuitable for retention due to significant construction related impacts.

IV. RECOMMENDATIONS

A. Tree Removal, Replacement, Care & Management:

For the reasons provided in this report and despite the best efforts of the project design team to minimize tree removal, a total of 40 greater than 6 inch DBH Monterey pine trees that are located within the building footprint or in close proximity to proposed construction activities are planned for removal in preparation for property development operations (refer to the attached *Exhibit A: Tree Location & Tree Protection Fencing Map* and project plans, the corresponding *Exhibit B: Tree Impact Assessment & Removal Spreadsheet* and the attached photos, *Figures 1-9*). Tree removal will address the following project related factors and concerns: **1)** In order for construction operations to proceed the 23 pinus that are located within the building footprint will need to be removed and the 17 pinus that are located adjacent to proposed grading and construction activities are also recommended for removal (totaling 40 trees) due to significant construction related impacts; **2)** Several of the 17 pinus recommended for removal due to their close proximity to proposed construction activities are aging and declining trees with physiological and/or structural deficiencies that are compromising health and structural integrity. If retained, these trees would likely decline further and more rapidly and would be a hazard concern to the new home; **3)** Aging and declining pinus tend to be less tolerant of impacts and disturbance associated with grading and construction activities; **4)** The removal of several senescing and declining trees will provide a safer environment for proposed construction operations and eventual property settlement by removing potential hazard concerns; and **5)** Tree removal will reduce combustible fuel loads and wildland fire hazard concerns, which will assist in improving defensible space and protecting property from wildland fire threats, as well as increase the likelihood that the property owners will be able to obtain and retain property insurance coverage.

For these reasons, tree removal is warranted and justified in preparation for property development operations. Tree removal will be mitigated by protecting the 46 remaining trees that will be retained, as well as planting the 43 replacement seedlings or saplings on the subject parcel (refer to the tree replacement recommendations provided in this report). Aging or declining pinus located in close proximity to construction and grading operations, such as many of the trees addressed in this report, are often recommended for removal due to significant and unavoidable tree and root system impacts that will compromise the health and structural integrity of the trees.

In regards to pre-construction tree removal and as previously discussed, 23 of the Monterey pinus identified for removal are located within the proposed building and construction footprint,

which will require removal in order for project operations to proceed. The remaining 17 pines proposed for removal are located adjacent to planned grading and construction activities and are recommended for removal due significant construction related impacts that would severely impact and compromise the health and/or structural integrity of these trees if they were retained (refer to the attached *Exhibit A: Tree Location Map* and project plans and the corresponding *Exhibit B: Tree Impact Assessment & Removal Spreadsheet*). It should be noted that several of the 17 trees recommended for removal due to their close proximity to proposed construction activities are in poor and declining physiological health and/or structural condition, and would not likely tolerate and withstand construction related impacts if they were to be retained. If retained, most if not all of these 17 pines would likely rapidly decline and die within a period of a few years due to significant root loss and other construction related impacts, which would be further compounded by the already declining health and condition of several of these trees. Consequently, aging, declining and unhealthy trees that are locate too close to grading and construction activities are recommended for removal prior to the project beginning and will be adequately mitigated (i.e., young replacement trees will be planted) following the completion of property development operations.

Per MCHCD tree preservation ordinances and permit conditions, the several remaining pines on the property (i.e., 21 tagged and evaluated trees that are located in the vicinity of proposed construction activities, as well as 25 additional mature pines on the lot that were not tagged and recorded due to their safe distance away from project operations) will be retained and protected from development activities for the duration of the project (refer to tree protection BMP's provided in this report and the approximate location of tree protection fencing shown on the *Exhibit A: Tree Location & Tree Protection Fencing Map*). Tree and resource protection measures will assist in preserving and sustaining ecological resources and minimizing harmful impacts to trees and woodland habitat.

As shown in the corresponding *Exhibit B: Tree Impact Assessment Spreadsheet & Removal Spreadsheet*, the recent pre-construction assessment has determined that construction related impacts to the 21 recorded and evaluated pines that will be retained and protected is expected to be generally moderate and insignificant. These 21 trees are expected to tolerate and withstand construction related impacts and remain viable and sound during and following the completion of property development activities. Construction impacts are not expected to adversely affect or be detrimental to the health and welfare of these retained and protected trees, and properly installed tree protection fencing will assist in preserving the health and welfare of trees and habitat.

In regards to tree replacement and mitigation, a total of 43 replacement plantings (i.e., 23 one to five-gallon or larger native Monterey pine seedlings or saplings and 20 one to five-gallon or larger coast live oak and/or Monterey cypress seedlings or saplings [container size depends on availability and quality of nursery stock]) shall be planted in suitable and appropriate locations on the subject parcel to mitigate tree removal impacts associated with property development activities, as well as to comply with MCHCD tree removal permit conditions, which will assist in

sustaining and supporting woodland health and character. Monterey County permit conditions require a 1:1 replacement ratio for non-landmark status native specie trees (e.g., pines, oaks and cypress) removed that are 6 to 23 inches DBH, and a 2:1 replacement ratio for landmark status trees that are 24 inch DBH or larger. Based on the current design plan, 37 non-landmark pines are proposed for removal, as well as 3 landmark status pines.

Replacement mitigation plantings should not only consist of Monterey pines, but should also include indigenous Coast live oak (*Quercus agrifolia*) and/or Monterey cypress (*Hesperocyparis macrocarpa*) trees that are native to Del Monte Forest and are appropriate to this mixed woodland environment. Planting pines and oaks, in particular, is advised to assist in supporting and sustaining mixed woodland habitat and to improve native tree diversity on the subject lot. The proper execution of this tree replacement and mitigation action will adequately address and mitigate tree removal impacts and will assist in preserving and sustaining the health, viability and character of this woodland vegetation community. Successful completion of this *Monterey County HCD* tree_removal permit condition shall be achieved when the replacement plantings survive a one-year monitoring period.

The 43 replacement plantings should be acquired from a local native plant nursery that has a good selection of specimens that are free from harmful pathogens, insect pests and/or structural disorders. The planting of young seedlings or saplings should ideally be performed during the appropriate time of year (i.e., fall through winter season when there is good soil moisture, cooler temperatures and adequate rainfall) using proper tree planting techniques and BMP's, and should be planted in suitable locations that will support healthy establishment and maturation. Young plantings should be properly cared for (e.g., mulched and provided supplemental watering) and protected (e.g., below ground gopher baskets and wildlife protection fencing) until successfully established and, as stated above, shall survive a one-year monitoring period.

It should be noted, there are naturally occurring young pine seedlings and saplings located on the subject parcel that will assist in sustaining woodland health and character if they are allowed to grow and develop into mature trees. In the event there are young seedlings or saplings located within the building and construction footprint consideration should be given to relocating to a safe and suitable area on the property. Relocated seedlings or saplings should ideally be transplanted during the wet season following sufficient rainfall, which will assist in minimizing transplant stress. As mentioned in the previous paragraph, young tree plantings (including any relocated seedlings) should be properly cared for (e.g., provided mulch and irrigation) and protected to aid in healthy establishment and maturation. Where possible, undeveloped areas where young seedlings and/or saplings are occurring should be avoided and adequately protected and preserved during construction operations.

Prior to any tree removal or disturbance that is performed during the bird nesting season, which in Monterey County may begin as early as February and continue through August, a nesting assessment is required to determine if any nesting birds or raptors are present. A recent tree and site inspection determined there are currently no actively nesting birds or other young rearing

wildlife occurring within or directly adjacent to the proposed property development site. However, depending on when construction activities begin (i.e., February-August), it may be necessary to perform an additional assessment.

When tree removal operations commence, removal should be performed by licensed and insured tree workers trained in accordance with ANSI Z133.1 safety regulations, as required by OSHA. If necessary, tree protection measures should be installed to nearby trees that could potentially be damaged or impacted during removal operations. Additionally, if substantial soil disturbance occurs at the removal site it may be necessary to install erosion and sedimentation control measures to effectively stabilize exposed soil surfaces and contain sediment runoff. Furthermore, BMP's involved with tree removal, disposal, and the cleaning and sterilization of tools and equipment should be implemented to minimize the chance of biotic disorders that may be present spreading to other areas.

Any landscaping activities associated with project operations will be designed and implemented in manner that will avoid and minimize impacts to nearby trees. For example, landscaping and grading should be avoided or limited within the critical root zone area (i.e., canopy dripline) of trees, with minimal soil disturbance, grading, irrigation, planting and introduction of soil or other landscaping materials. Landscaping plants should be drought tolerant and lower combustibility vegetation that is appropriate to woodland habitat. Lower density, lower growing and properly irrigated, spaced and maintained plants and planting configurations should be utilized that are less flammable and more fire resistant.

Additionally, several trees that are located in relatively close proximity to the proposed project site will likely need to be pruned to assist in maintaining and preserving tree health, providing adequate clearance around structures, improving aesthetics, reducing combustible fuel loads (i.e., ladder fuels) and improving defensible space for wildland fire protection. Pruning operations should occur during the proper time of year (preferably fall through early winter) and utilize proper pruning BMP's in order to minimize impacts to trees.

As stated earlier, prior to construction activities beginning a pre-construction meeting shall occur with the project contractor and design team to discuss tree protection and potential construction related impacts. Tree and resource protection measures shall be properly positioned and installed, such as tree protection fencing and perimeter silt fence sedimentation control measures. The location of tree protection BMP's will be determined on-site by the project arborist working in collaboration with the general contractor and/or project design team. Tree and resource preservation measures will be monitored and maintained for the duration of the project and, if necessary, modified and improved to ensure they are functioning properly and effectively protecting trees and ecological resources. Given the proper implementation of grading activities, as well as the tree and resource protection BMP's provided in this report, retained and protected trees and woodland habitat are not expected to be significantly impacted or harmed by construction operations.

B. Critical Root Zone Protection & Preservation:

In the event that large primary roots are encountered that are 2 inch diameter or larger the project arborist should be notified and consulted to assist in providing guidance and recommendations that will help to minimize impacts to retained and protected trees. If trees exhibit any signs or symptoms of stress and decline due to possible construction related impacts or any other factors (e.g., biotic and/or abiotic disorders), specific treatments can be performed (e.g., supplemental deep watering, radial or vertical mulching, growth regulator treatments, among others) to assist in mitigating adverse impacts and to aid in the recovery of impacted trees. However, if construction tree protection measures and BMP's are properly implemented and complied with none of these treatments should be necessary.

Where possible, significant soil disturbance (i.e., grading and landscaping activities) should be avoided and kept to a minimum within the canopy dripline and critical root zone (CRZ) of retained and protected trees. The area around trees that is protected with exclusionary fencing during grading and construction operations is commonly referred to as the *Tree Protection Zone* (TPZ), and ideally the CRZ should be well within the fenced TPZ. The CRZ area typically extends beyond the canopy dripline, especially in naturally growing trees. The minimum CRZ area where impacts should be avoided is the radius from the trunk in feet that is 5X the DBH of a tree or the inner half of a tree's canopy dripline, whichever provides a greater protective radius from the trunk. This is the minimum root zone area that should be protected; however, where possible, the area with no or minimal construction related disturbance should extend to the canopy dripline (i.e., the outer most portion of the canopy edge furthest away from the trunk, 360 degrees around the tree) or beyond. However, given design and spacial considerations at the site, some encroachment and development within the canopy dripline of trees should be acceptable if certain protective measures, practices and precautions are properly implemented and adhered to, such as regular construction site monitoring by the project arborist and other BMP's that are provided in the construction tree protection measures section of this report.

Based on the DBH and overall size of the pines reviewed for this assessment, as well as experience of where the most critical and significant roots are likely to occur within the CRZ, grading and construction related disturbance should be avoided within the radius from the trunk that is provided in the *Recommended Root Protection Zone* column of the *Exhibit B: Tree Impact Assessment Spreadsheet*. Generally speaking, most trees should not be closer than a 15 to 20 foot distance from proposed structures or preferably a greater distance, and larger and more significant landmark trees should have a greater protective radius with minimal disturbance. A minimum 15 to 20 foot distance from structures for most trees is not only advised for minimizing impacts to critical roots and canopy, but is also necessary for reducing combustible fuel loads near structures and abating wildland fire hazard concerns. Trees located within a 15 to 20 foot distance from structures should be adequately pruned on a as needed basis in order to provide sufficient clearance and protection around buildings.

As previously stated, grading and construction activities should be avoided and minimized within the canopy dripline and CRZ of nearby trees, which includes landscaping, hardscaping and any other operations that alter soil conditions, natural grade and drainage patterns that could adversely affect tree health. The naturally occurring pines on the lot are an important aesthetic and ecological value to the property, and the tree protection BMP's provided in this report should be properly implemented in order to prevent and minimize impacts to retained trees. The project arborist should be notified and consulted prior to any grading activities occurring within the canopy dripline of the trees, and should be present at the site if it is necessary to grade any closer than the distances provided in the *Recommended Root Protection Zone* column of the *Exhibit B* spreadsheet, or if large diameter roots 2 inch diameter or greater are encountered or are expected to be encountered. In the CRZ areas where significant roots are more likely to be uncovered, careful and judicious grading and excavating via hand digging, air spading and/or light mechanized equipment is advised to assist in preventing severe damage (i.e., tearing and shredding) to primary lateral roots that often occurs during more traditional and conventional grading operations using heavy mechanized equipment.

C. Construction Tree Protection Measures:

Per MCHCD and resource preservation BMP's, the following tree and resource protection measures shall be implemented for this home development project located at 3144 Spruance Road in Pebble Beach. It should be noted that not all of these tree protection measures may be necessary or applicable to this specific project, but may come in useful at some point during the project and should be provided in case they are needed. The proper implementation of tree and resource protection BMP's and regular construction site monitoring will assist in protecting and preserving the health and welfare of trees, habitat and surrounding ecological resources. The location of tree protection measures will be determined on-site by the project arborist and project design team, and tree and resource preservation measures will be regularly inspected and properly maintained for the duration of the project to ensure they are functioning effectively:

1) Prior to commencing with grading and construction activities install a durable and highly visible tree protection fencing that clearly defines the work area, limits unnecessary disturbance to surrounding areas, and protects the critical root zone (CRZ) of individual trees and/or tree groupings. Generally speaking, the CRZ area is defined by the outermost portion of the canopy dripline 360 degrees around the tree. Ideally, the entire canopy dripline and CRZ area should be protected with exclusionary fencing, or alternatively, but less desirable in terms of tree preservation, installing exclusionary fencing to a radial distance from the trunk that protects at least half of the interior canopy dripline and CRZ area is often an acceptable alternative, particularly on smaller or more densely wooded lots. As noted earlier in the report, another method for determining the most sensitive area of the CRZ is by identifying a protective radius that is a minimum of five times (5X) the diameter (DBH) of a subject tree, which often works out to be approximately the inner half or more of a tree's canopy dripline. If grading is occurring within the *Recommended Root Protection Zone Area* provided in the *Exhibit B: Tree Impact Assessment Spreadsheet* the project arborist should be notified and consulted.

2) For effectively protecting the canopy dripline and CRZ of trees use a more durable and heavier duty orange exclusionary fencing (e.g., *Resinet Heavy Duty Square Mesh Access Control Barrier Fence*) anchored in with steel T-posts to protect trees located in the vicinity of proposed construction activities (refer to the *Exhibit A: Tree Location Map* and project plans that shows the location of tree protection fencing). Where possible, tree protection fencing will be installed along the outer portion of the canopy dripline (i.e., the CRZ area) or beyond the canopy dripline of trees located within and/or adjacent to the project site to avoid and minimize impacting critical roots. As noted earlier, the area that is protected by tree protection fencing is identified as the *Tree Protection Zone (TPZ)*, which ideally should include the entire canopy dripline and CRZ area. Perform regular monitoring and inspections of tree protection measures, as well as any necessary repairs, maintenance and improvements to tree protection measures on a as needed basis for the duration of the project.

3) Install appropriate sedimentation control measures (e.g., silt fence) along downslope perimeter of construction site and, if necessary, apply soil stabilization and source control measures (e.g., rice straw mulch, erosion control blankets, all-weather surfaces) to exposed soil surfaces to prevent erosion problems and sediment runoff during rain events. Perform routine monitoring, as well as the necessary maintenance, modifications and improvements on a as needed basis to ensure that erosion & sedimentation control and resource protection measures are functioning effectively. It should be noted that erosion problems and sediment deposition around trees can adversely affect tree health and stability.

4) If it's necessary to perform grading activities within the canopy dripline and CRZ area of trees the following practices should be implemented: 1) Try to maintain natural grade as much as possible; 2) Where feasible use permeable surface materials at final grade; 3) Avoid cut (i.e., lowering grade) and fill (i.e., raising grade with fill material) operations (particularly lowering grade) within the CRZ that could result in significant root loss or damage to large primary roots that are important to supporting and sustaining tree health and structural stability; and 4) If necessary, apply 2 to 4 inches of clean and properly sourced woodchip mulch (or in some cases a thicker mulch layer may be necessary) to limit soil disturbance and prevent soil compaction.

5) Notify the project arborist if grading and construction activities is required within the *Recommended Root Protection Zone* area that is provided in the *Exhibit B* spreadsheet. If this is necessary, the arborist should be present during grading and excavation activities to assist in minimizing impacts to large primary roots that will likely be encountered. Additionally, prior to construction activities occurring within 5 feet of trees, which is not anticipated for this project, install trunk and stem protection measures (e.g., 2x4 lumber forming protective barrier around circumference of trunk and lower stem of tree) that will need to be secured to the trees with rope and high visibility exclusionary fencing. If it is necessary to perform any pruning use proper tree pruning practices to minimize impacts and maximize wound healing.

6) Where possible, avoid damaging or cutting roots located within the critical root zone (i.e., canopy dripline) of trees, especially roots that are 2 inches diameter or larger, and to the extent possible avoid grading or significant soil disturbance within a radius that is a minimum five times (5X) the diameter (DBH) of the subject trees, which is the most sensitive portion of a tree's CRZ area. It should be noted that, where possible, root zone disturbance should ideally be avoided within the entire CRZ and canopy dripline area (i.e., the outer most portion of the canopy dripline 360 degrees around the tree) and even expanded to the area beyond the canopy dripline and primary root zone. Construction footings should be designed and excavation activities performed in a manner to minimize impacts to primary roots, or alternative foundation designs (e.g., pier and beam) that are less impactful to critical root systems should be considered. If significant roots are encountered efforts should be made to carefully excavate (e.g., tunnel or dig) under or around primary lateral roots. Grading or trenching operations that may occur within the critical root zone of retained trees should be performed under the guidance and monitoring of the project arborist.

7) Tree roots severed or damaged during grading and excavating operations should be cleanly cut and promptly covered with moist burlap fabric or equivalent until roots are permanently covered with backfill material or until the exposed grading cut and soil profile is permanently stabilized and protected. If burlap covered cut roots are exposed to the outside environment for an extended period of time a project attendant shall be assigned the task of regularly wetting burlap covered roots to prevent root desiccation. Additionally, in the absence of rain during the wet season, it may be necessary to perform supplemental watering (i.e., regular deep irrigating throughout the remaining portions of the critical root zone) to construction impacted trees. Frequency, quantity and duration of supplemental watering should be determined by the project arborist or a qualified landscape professional or tree care professional with similar experience.

8) Healthy trees, particular younger trees, can be fairly tolerant of low to moderate levels of root system impacts. However, they are generally less tolerant to increases in grade (i.e., introduction of fill material around the root crown and trunk) or decreases in natural grade (i.e., cut slopes). Where possible, avoid altering the natural grade (particularly lowering grade) within the CRZ to reduce the likelihood of causing root loss and tree stress, decline and/or mortality. Lowering natural grade can result in significant root loss or damage and raising the grade (i.e., introducing fill material, particularly around the lower trunk and root crown) can lead to trunk and root decay disorders that are detrimental to the health and structural integrity of trees. Where possible, root loss and root system impacts should be avoided and minimized to the greatest extent possible, and this important factor should be considered when developing a construction design plan. It should be noted that root loss or root system impacts does not always result in an immediate or significant decline in tree health, but instead often occurs slowly and gradually over a period of several years or decades. Per the site assessment and analysis of the project plans, it appears that trees in the vicinity of proposed construction operations will likely tolerate grading activities with minimal to moderate impacts and are suitable for being retained, protected and preserved.

9) Avoid storing construction tools, materials and equipment within the CRZ (i.e., canopy dripline) of trees, and do not wash out or dispose of excess materials (e.g., paint, plaster, concrete, or other potentially harmful substances) within CRZ areas. If it is unavoidable and necessary to temporarily store or stockpile materials and equipment within the CRZ of trees, apply 2 to 4 inches of clean and properly sourced woodchip mulch (or in some cases a thicker mulch layer may be necessary) to limit soil disturbance and prevent soil compaction.

10) In regards to site restoration, retain and properly store and stockpile top soil that is native to the site, and where possible, preserve or relocate drought and fire resistant native perennial grasses and other indigenous flora that may be occurring within or adjacent to the construction site.

11) If tree pruning is necessary, it is important to utilize proper pruning BMP's that will assist in minimizing harmful impacts to trees. In most cases, tree pruning should ideally be performed during the fall through early winter months when the trees are at a lower level of physiological activity and nesting birds are unlikely to be present, the exception being deadwood removal or minor pruning, which can occur during any time of year. A general principle to follow is that it is important to make proper pruning cuts, keeping them as small as possible while removing as few living branches as necessary to achieve the objective. Large pruning wounds often do not completely heal over with wound wood callus tissue, which creates a permanently exposed entry point for problematic biotic disorders, such as decay, disease and/or insect pests. Excessive pruning can stress, injure and harm trees by depleting energy reserves and reducing food making processes (i.e., photosynthesis), which can compromise a trees ability to perform essential physiological functions and to recover and replenish essential reserves during periods of stress (e.g. root disturbance and drought conditions). As noted above, excessive pruning can create an abundance of exposed wounds providing entry points for potentially harmful biotic disorders that can adversely affect the health and structural integrity of trees. It should be noted that significant pruning involving the removal of 30% or more of living canopy material or the removal of sizable healthy limbs requires a County permit. Additional pruning BMP's and guidelines are available upon request.

12) The primary objective of pruning operations should be as follows: To remove dead and unhealthy limbs and branches (i.e., deadwood removal); improve canopy balance and symmetry and to maintain natural form; thin out overly dense and heavy portions of the canopy; and, if necessary, perform targeted and selective weight reduction pruning of the canopy and large limbs (i.e., end weight reduction pruning) to assist in preventing significant structural failures that could be detrimental to tree health and potentially hazardous to property and areas with human activity. As suggested above, perform necessary pruning to reduce and mitigate hazard concerns to occupied structures and areas with human activity. Additionally, pruning should be conducted to reduce wildland fire hazards and combustible fuel loads, and to improve property protection and defensible space around structures.

13) Prior to the property development project beginning a pre-construction meeting should be arranged with the project arborist, general contractor and/or others involved with the project to ensure that tree and resource protection measures are properly located, positioned and installed. Additionally, perform regular construction site inspections for the duration of the project to monitor the condition of tree and resource protection measures, and to determine if any repairs, adjustments or modifications are necessary. Trees impacted by site development should be periodically monitored and assessed during and following the project to determine if any tree care and management actions are necessary, and to make certain trees do not present a hazard to property and/or nearby structures.

D. Tree Repair & Replacement:

Per tree care and tree preservation BMP's, if any trees are damaged during construction operations they should be promptly repaired and/or treated per arborist specifications. Remedial or mitigation treatments may vary and will depend largely on the damage or injury sustained, as well as the condition of specific trees at the time of injury. As previously noted, trees impacted by project operations should be periodically monitored and assessed by the project arborist during and following the project to determine if any tree care and management actions are necessary that will assist in preserving and improving tree health, and/or preventing tree hazards. Prescribed treatments will be determined on a case by case basis.

V. CONCLUSION

In conclusion, 61 mature and senescing Monterey pine trees were recorded and evaluated (i.e., assigned tag#s 360-420 and referred to in this report as *Tree#s 360-420*) during a recent pre-construction tree impact assessment for the property located at 3144 Spruance Road in Pebble Beach (refer to the attached *Exhibit A: Tree Location & Tree Protection Fencing Map* and project plans, the corresponding *Exhibit B: Tree Impact Assessment & Removal Spreadsheet* and the attached photos, *Figures 1-9*). Of these 61 pines, 40 are proposed for removal in preparation for home construction and property development activities due to their location within the building footprint (i.e., 23 trees) or their location adjacent to proposed grading and construction operations (i.e., 17 pines are located too close to planned construction activities and are recommended for removal). Several of these aging pines are in declining physiological health and structural condition and have notable deficiencies that are compromising health and structural integrity (refer to the *Exhibit B: Tree Impact Assessment & Removal Spreadsheet*), which is another justification for removal on a property where home construction and occupation will be occurring.

In regards to retained and protected trees, 21 of the 61 tagged and evaluated pines will be retained and protected. These 21 trees will likely be impacted due to their fairly close proximity to proposed grading and construction activities, but given the proper installation and maintenance of tree protection measures, these 21 pines are expected to tolerate and withstand project related impacts and remain viable and sound during and following the completion of

property development activities. Additionally, there are 25 additional pines located on the subject property that were not tagged and recorded due to their safe distance away from proposed construction activities that will also be retained and protected during this project. These 25 trees are not expected to be significantly impacted or adversely affected by grading and construction activities. In total, there will be 46 mature pines that will be retained and protected, which will assist in maintaining and preserving woodland health and character.

Additionally, in order to protect and preserve the retained pines and surrounding woodland habitat, the necessary tree and resource protection measures (i.e., tree protection fencing) shall be installed prior to construction activities beginning and properly monitored and maintained for the duration of the project. Tree and resource protection BMP's will assist in preserving and protecting ecological resources and minimizing impacts to trees and habitat.

Lastly, in the interest of complying with *Monterey County Housing & Community Development Department-Planning Services* permit conditions and preserving and sustaining the health and character of woodland habitat, 43 replacement trees (i.e., 23 one to five-gallon native Monterey pine seedlings or saplings and 20 one to five-gallon coast live oak and/or Monterey cypress seedlings or saplings) shall be planted on the subject property and survive a one-year monitoring period.

Best regards,

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ISA Certified Arborist # WE-7468A
Resource Ecologist

10-2-25
Date

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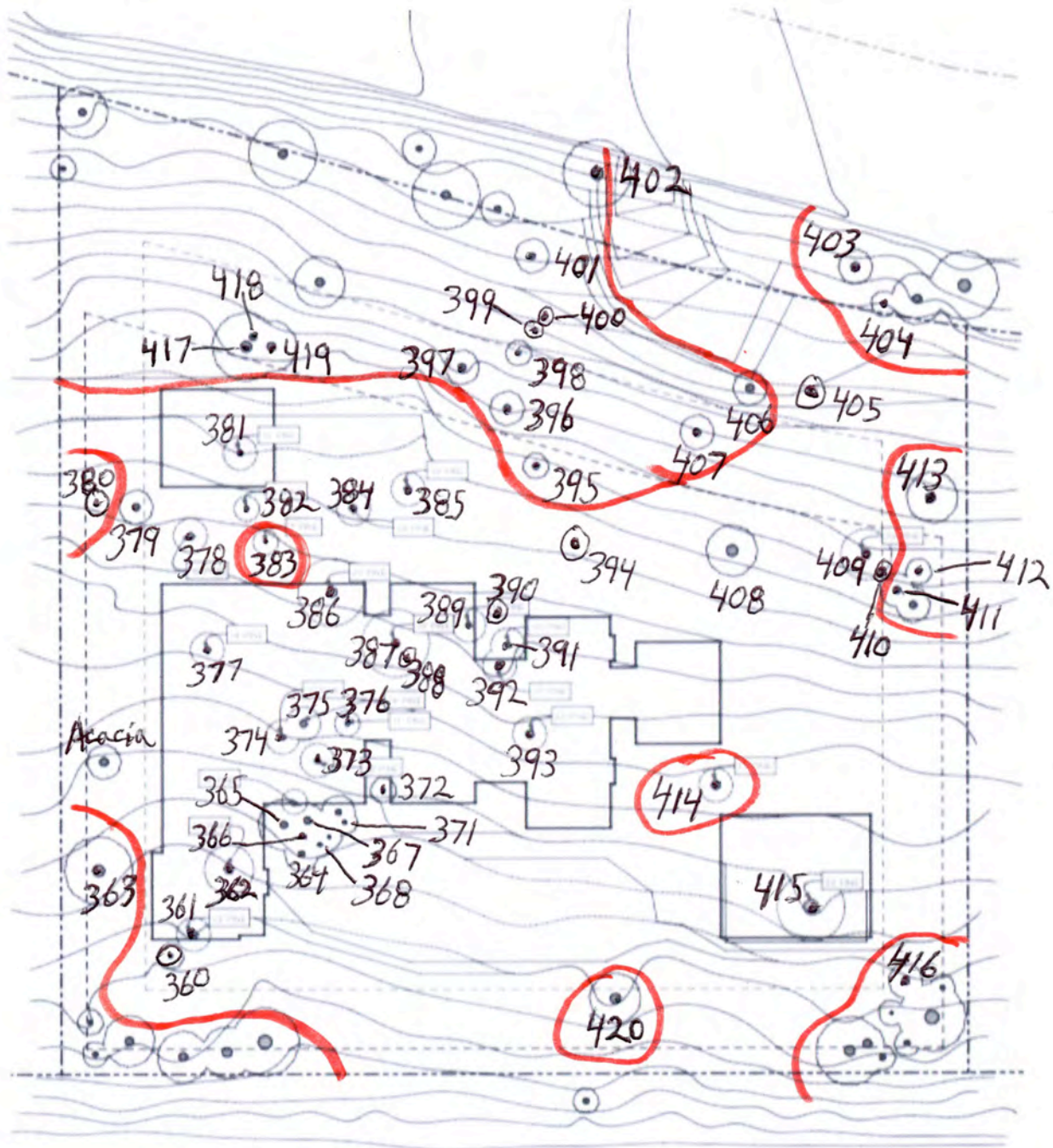
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THIS REPORT IS BASED ON A LIMITED VISUAL INSPECTION OF TREE HEALTH AND CONDITION AND FOR OBVIOUS STRUCTURAL DEFECTS FROM GROUND LEVEL. IT IS NOT A COMPLETE HEALTH AND HAZARD EVALUATION, AS SOME HEALTH AND HAZARD CONDITIONS ARE NOT VISIBLE AND CANNOT BE CONFIRMED BY A LIMITED INSPECTION. A COMPREHENSIVE HEALTH AND HAZARD ASSESSMENT WOULD INCLUDE OTHER INVESTIGATION MEASURES INCLUDING, BUT NOT LIMITED TO, CORE SAMPLES, TISSUE ANALYSIS, ROOT COLLAR EXCAVATION, SOIL ANALYSIS, AND VISUAL INSPECTION OF THE ENTIRE TREE VIA CLIMBING. ESTIMATES FOR THIS WORK ARE AVAILABLE UPON REQUEST.

BE ADVISED THAT TREES AND/OR LIMBS MAY FAIL UNDER CERTAIN CONDITIONS, AND THAT THE RECOMMENDATIONS IN THIS REPORT ARE BASED ON GENERAL STANDARDS OF TREE CARE AND BMP's. TREES, INCLUDING TREES THAT APPEAR HEALTHY AND STRUCTURALLY SOUND, MAY FAIL UNEXPECTEDLY WITHOUT ANY VISIBLE SIGNS OF BEING PHYSIOLOGICALLY AND/OR STRUCTURALLY UNSOUND AND COMPROMISED, PARTICULARLY DURING PERIODS OF INCLEMENT WEATHER, BUT TREES MAY ALSO FAIL DURING PERIODS OF FAIR WEATHER. THIS REPORT IS PREPARED WITH THE UNDERSTANDING THAT NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESSED OR IMPLIED, ARE GIVEN THAT ANY TREES REFERRED TO IN THE REPORT OR LOCATED ON OR ADJACENT TO THE SUBJECT PROPERTY ARE GUARANTEED TO BE SOUND OR SAFE.

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⊗ SITE PLAN - TREE REMOVAL
SCALE 1/8" = 1'-0"

Exhibit A: Tree Location & Tree Protection Fencing Map shows the location of 61 Monterey pine trees that were tagged and evaluated during a pre-construction impact assessment. This includes 40 pines proposed for removal, as well as several pines that will be retained and protected during property development activities. The red lines identifies the approximate location of tree protection fencing that will be installed to protect trees for the duration of the project.



Figure 1. The proposed home and property development construction site is located in a Monterey pine woodland community.



Figure 2. Another view of the proposed homesite, as well as a small ADU site (located right of center) from Deer Path Road.



Figure 3. Close view of a portion of the proposed homesite located in a fairly densely wooded area of the lot. 40 pine trees are proposed for removal in preparation for property development activities and 46 will be retained and protected.



Figure 4. Another view of proposed homesite from Deer Path road. This parcel is dominated by mature and aging Monterey pines, several of which are in poor and declining physiological health and structural condition.



Figure 5. In addition to mature pine trees, which dominate the property, there are also several large non-native invasive acacias (a few are visible in this photo) that are located on the northwest side of the lot.



Figure 6. View of this pine woodland lot up towards the northeast Spruance Road side of the property.



Figure 7. Another view of proposed homesite area from the Spruance Road side of the lot. The detached garage is flagged on the right side area of the photo.



Figure 8. View from area where the proposed paved driveway will access the property. The detached garage will be located in the center area of the photo.



Figure 9. The detached ADU is proposed for this location towards the south end of the lot near Deer Path road and will involve the removal of the forked double stem pine (i.e., a co-dominant trunk) visible in center of photo. The grouping of pines in the background will be retained and protected. In total, 40 Monterey pines are proposed for removal due to construction related impacts, and a total of 46 pines will be retained and protected for the duration of the project.

3144 Spruance Road, Exhibit B: Tree Impact Assessment Spreadsheet

Date: October 1, 2025

Prepared by Rob Thompson, ISA Certified Arborist

Note: Below are 61 native specie Monterey pines, identified in the field by tag#s 360-420, that were recorded and evaluated in preparation for proposed property development activities. These trees will be impacted or have the potential of being impacted by construction operations. Forty (40) of these pines are proposed for removal due to construction related impacts. 23 of these removals are located within the proposed building footprint and 17 are located adjacent to planned grading and construction activities and are recommended for removal due to significant construction related impacts. The remaining 21 recorded and evaluated pines are retained and protected for the duration of the project.

Note: The *Critical Root Zone* (CRZ) area can extend beyond the canopy dripline, especially in naturally growing trees. The **minimum** CRZ area that should be protected is the distance from the trunk in feet that is 5X the DBH (diameter at breast height)

or the inner half radius of the canopy dripline (whichever is greater), **but this is a minimum** and ideally should be extended further away from the tree. **Where possible avoid disturbing or impacting area within canopy dripline** or even area immediately beyond the canopy dripline.

The **Recommended Root Protection Zone Area** provided in the column below is a **minimum** and should be greater if possible. If disturbance is planned within this zone the project arborist should be notified and consulted.

# of Trees	Tree & Tag #s	Tree Specie	DBH (inches)	Crown Class	Balance & Symmetry	Physiological Condition	Structural Condition	Retain or Remove	Construction Impacts	Minimum Recommended Root Protection Zone (approximate radius measured from trunk in feet)	Comments & Observations
1	360	Monterey pine	8	Suppressed	Poor	Fair	Fair	Remove	Remove	0 feet, remove	Tree is proposed for removal due to construction impacts.
2	361	Monterey pine	22	Codominant	Fair	Fair	Fair	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
3	362	Monterey pine	23	Codominant	Fair	Poor-Fair	Poor	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
4	363	Monterey pine	32	Codominant	Fair-Good	Fair-Good	Good	Retain	Moderate-High	15 feet	Construction related impacts are expected to be moderate to high, but not detrimental to tree health.
5	364	Monterey pine	13	Intermediate	Poor	Poor	Poor	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
6	365	Monterey pine	17	Intermediate	Fair	Poor	Poor	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
7	366	Monterey pine	7	Suppressed	Fair	Poor	Poor	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
8	367	Monterey pine	18	Codominant	Poor	Fair	Poor-Fair	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
9	368	Monterey pine	11	Intermediate	Poor	Poor-Fair	Poor	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
10	369	Monterey pine	12	Codominant	Fair	Poor	Poor	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
11	370	Monterey pine	14	Intermediate	Poor	Poor-Fair	Poor	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
12	371	Monterey pine	11	Suppressed	Poor	Poor-Fair	Poor	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
13	372	Monterey pine	9	Intermediate	Poor	Poor-Fair	Poor	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
14	373	Monterey pine	17	Codominant	Poor	Fair	Poor-Fair	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
15	374	Monterey pine	14	Intermediate	Poor-Fair	Poor-Fair	Poor-Fair	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
16	375	Monterey pine	19	Codominant	Fair	Poor-Fair	Poor-Fair	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
17	376	Monterey pine	12	Intermediate	Poor	Poor-Fair	Poor	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
18	377	Monterey pine	16	Codominant	Fair	Fair	Fair	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
19	378	Monterey pine	19	Codominant	Fair	Poor-Fair	Fair	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
20	379	Monterey pine	13	Intermediate	Poor	Poor	Poor	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
21	380	Monterey pine	18	Codominant	Fair	Fair	Fair	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate and not significantly harmful to tree health.
22	381	Monterey pine	15	Codominant	Fair	Poor-Fair	Fair	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
23	382	Monterey pine	11	Intermediate	Fair	Fair	Fair	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
24	383	Monterey pine	8	Intermediate	Fair	Fair	Fair	Retain	Moderate-High	10 feet	Construction related impacts are expected to be moderate to high, but not detrimental to tree health.
25	384	Monterey pine	21	Codominant	Fair	Poor-Fair	Fair	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
26	385	Monterey pine	20	Codominant	Fair	Fair	Fair	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
27	386	Monterey pine	28	Codominant	Fair-Good	Fair	Fair	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
28	387	Monterey pine	21	Codominant	Fair	Fair	Poor-Fair	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
29	388	Monterey pine	12	Intermediate	Poor	Fair	Poor	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
30	389	Monterey pine	19	Codominant	Poor	Dying	Poor	Remove	Remove	0	Tree is proposed for removal due to construction impacts and it is clearly dying.
31	390	Monterey pine	15	Codominant	Poor-Fair	Poor-Fair	Poor-Fair	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
32	391	Monterey pine	17	Codominant	Poor-Fair	Poor-Fair	Fair	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
33	392	Monterey pine	16	Suppressed	Poor	Fair	Poor	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
34	393	Monterey pine	23	Codominant	Fair	Fair	Poor-Fair	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
35	394	Monterey pine	20	Codominant	Fair	Dying	Poor	Remove	Remove	0	Tree is proposed for removal due to construction impacts and it is clearly dying.
36	395	Monterey pine	16	Intermediate	Poor-Fair	Fair	Fair	Retain	Moderate-High	10 feet	Construction related impacts are expected to be moderate to high, but not detrimental to tree health.
37	396	Monterey pine	19	Codominant	Fair	Fair	Fair	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate and not significantly harmful to tree health.
38	397	Monterey pine	19	Codominant	Fair	Poor-Fair	Fair	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate and not significantly harmful to tree health.
39	398	Monterey pine	15	Codominant	Poor	Poor	Poor	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
40	399	Monterey pine	10	Intermediate	Poor	Poor	Poor	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
41	400	Monterey pine	10	Intermediate	Poor	Poor	Poor	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
42	401	Monterey pine	16	Codominant	Fair	Poor-Fair	Fair	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate and not significantly harmful to tree health.
43	402	Monterey pine	33	Codominant	Poor-Fair	Fair	Fair	Retain	Moderate-High	15 feet	Construction related impacts are expected to be moderate to high, but not detrimental to tree health.
44	403	Monterey pine	21	Codominant	Poor-Fair	Fair	Poor-Fair	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate and not significantly harmful to tree health.
45	404	Monterey pine	13	Intermediate	Poor	Fair	Poor	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate and not significantly harmful to tree health.
46	405	Monterey pine	15	Intermediate	Poor-Fair	Poor-Fair	Poor	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
47	406	Monterey pine	16	Codominant	Fair	Fair	Fair	Retain	Moderate-High	10 feet	Construction related impacts are expected to be moderate to high, but not detrimental to tree health.
48	407	Monterey pine	19	Codominant	Fair	Fair	Fair	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate and not significantly harmful to tree health.
49	408	Monterey pine	30	Dominant	Fair	Poor-Fair	Fair	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
50	409	Monterey pine	21	Codominant	Poor	Fair	Poor	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
51	410	Monterey pine	15	Codominant	Poor-Fair	Poor-Fair	Poor	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
52	411	Monterey pine	17	Codominant	Poor-Fair	Poor-Fair	Poor	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate and not significantly harmful to tree health.
53	412	Monterey pine	15	Suppressed	Poor	Poor-Fair	Poor	Retain	Low-Moderate	10 feet	Potentially impacted by project operations, but impacts are expected to be minor to moderate and insignificant.
54	413	Monterey pine	25	Codominant	Fair	Fair	Fair	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate and not significantly harmful to tree health.
55	414	Monterey pine	20	Intermediate	Fair	Fair	Poor-Fair	Retain	Moderate-High	10 feet	Construction related impacts are expected to be moderate to high, but not detrimental to tree health.
56	415	Monterey pine	38	Codominant	Fair	Fair	Poor-Fair	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
57	416	Monterey pine	19	Codominant	Fair	Fair	Poor-Fair	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate and not significantly harmful to tree health.
58	417	Monterey pine	30	Codominant	Poor-Fair	Poor-Fair	Poor	Retain	Moderate	15 feet	Construction related impacts are expected to be moderate and not significantly harmful to tree health.
59	418	Monterey pine	16	Codominant	Poor	Poor-Fair	Poor	Retain	Low-Moderate	10 feet	Potentially impacted by project operations, but impacts are expected to be minor to moderate and insignificant.
60	419	Monterey pine	22	Codominant	Poor-Fair	Fair	Fair	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate and not significantly harmful to tree health.
61	420	Monterey pine	23	Codominant	Fair	Fair	Fair	Retain	Low-Moderate	10 feet	Potentially impacted by project operations, but impacts are expected to be minor to moderate and insignificant.

A total of 61 native specie Monterey pines that are greater than 6 inch DBH were recorded and evaluated and 40 of these pines are proposed for removal due to construction related impacts.

MCHCD tree removal permit conditions will require the planting of 43 replacement/mitigation trees that should consist of 23 1 to 5 gallon container size Monterey pine seedlings or saplings and 20 1 to 5 gallon coast live oak and/or Monterey cypress seedlings or saplings.

THOMPSON
WILDLAND MANAGEMENT

Environmental Management & Conservation Services
International Society of Arboriculture Certified Arborist # WE-7468A
Department of Pesticide Regulation Qualified Applicator Lic. #QL50949 B
Environmental & Arborist Assessments, Protection, Restoration, Monitoring & Reporting
Wildland Fire Property Protection, Fuel Reduction & Vegetation Management
Invasive Weed Control, and Habitat Restoration & Management
Soil Erosion & Sedimentation Control
Resource Ecologist

February 13, 2026

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APN: 008-501-004-000

Subject: 3144 Spruance Road Pre-construction Tree Impact Assessment

Per *Monterey County Housing & Community Development Department-Planning Services* (MCHCD) permit requirements, an arborist-conducted pre-construction evaluation of trees located on the property at 3144 Spruance Road (APN: 008-501-004) in Pebble Beach was recently performed to assess tree health and condition, potential construction related impacts, and to provide tree removal, preservation and replacement recommendations in preparation for the proposed property development project. More specifically, this assessment involved performing a ground level visual inspection of Monterey pine (*Pinus radiata*) trees located on this undeveloped parcel to assess general physiological health and structural condition, determine suitability for incorporating specific trees into the developed landscape, and provide recommendations for retaining, protecting and removing trees based on tree health, condition, location and construction related impacts. This assessment will assist in identifying tree characteristics and conditions, determine which pine trees will need to be removed in preparation for property development activities, and provide tree protection guidelines and replacement recommendations, which will assist in preserving and sustaining woodland health and character.

Per the project plans, 61 greater than 6 inch DBH (diameter at breast height) Monterey pine trees were recorded and evaluated in preparation for the proposed property development project, which will involve the construction of a main house, paved driveway and two detached structures (i.e., an ADU and a garage). These pines were assigned metal tag numbers 360-420 that were affixed to the trees and are referred to in this report as *Tree#s 360-420*. Twenty-one (21) of these pines are proposed for removal due to construction related impacts and the 40 remaining pines that were tagged and recorded will be retained and protected, but will likely experience some impacts due to their fairly close proximity to planned grading and construction activities. However, these 40 retained and protected pines that are located in relatively close

proximity to the building footprint are expected to tolerate and withstand construction related impacts given the proper implementation of tree protection and monitoring best management practices (BMP's). Twenty-five (25) additional pines located on the subject property that were not tagged and evaluated due to their safe distance away from proposed construction activities are not expected to be impacted or adversely affected by project operations and will also be protected with tree protection fencing. In total, 65 greater than 6 inch DBH pines will be retained and protected.

The location of trees proposed for removal (i.e., pine trees located within or directly adjacent to the construction footprint), as well as trees to be retained and protected are identified on the attached *Exhibit A: Tree Location & Tree Protection Fencing Map* and project plans. For more information regarding the trees proposed for removal, refer to the *Exhibit B: Tree Impact Assessment & Removal Spreadsheet*. Photos of the project site and several of the trees located on this Monterey pine woodland lot are located at the end of the report (refer to attached photos, *Figures 1-9*). Findings and recommendations are provided herein.

I. PROPERTY DESCRIPTION & CHARACTERISTICS

This undeveloped property located at 3144 Spruance Road in Pebble Beach is approximately 1-acre in size and is located in a Monterey pine (*Pinus radiata*) dominated woodland residential community (refer to attached photos, *Figures 1-9*). This street to street parcel (i.e., Spruance Road to the northeast and Deer Path to the southwest) is in a *wildland-urban interface* (WUI) community with sizable natural open space occurring in nearby areas of Del Monte Forest. This woodland lot is surrounded by two developed lots to the northwest and southeast, Deer Path road to the southwest and Spruance Road to the northeast. Prevailing winds are predominantly out of a westerly direction and soils on this relatively flat to moderately sloped property appear to be stable and sufficient for supporting property development operations and woodland habitat.

This Monterey pine woodland environment is significantly influenced by seasonally temperate coastal environmental conditions. On this particular lot, as with the other surrounding and nearby parcels, larger and more conspicuous Monterey pines are the most dominant and prevalent tree specie (refer to *Figures 1-9*). Additionally, young pine seedlings and saplings, as well as a few young coast live oak (*Quercus agrifolia*) saplings are also occurring on the property. The only other mature tree specie occurring on the parcel are non-native invasive golden wattle acacias (*Acacia longifolia*), which can be classified as a lower-canopy large shrub or small tree (refer to *Figure 5*). It should be noted that mature coast live oaks and Monterey cypress trees that are common in this area are not inhabiting this particular property.

The Monterey pines are a coniferous cone and needle bearing evergreen that dominate this parcel and this area of Del Monte Forest. They have a crown class ranging from suppressed to dominant, with a co-dominant canopy class being the most common. Pine tree density and canopy cover is moderate to high depending on the area of the lot, with a few small to moderate sized woodland clearings where most of the property development activities will be taking place

(refer to *Figures 1-9*). The occurrence of understory vegetation on the property is low and insignificant due to past vegetation clearing and fuel reduction operations. The health and condition of the mature and overly-mature pines occurring on the parcel ranges from poor to good physiological health and structural condition, with a majority of the pines generally being in poor to fair health and structural condition (refer to the *Exhibit B: Tree Impact Assessment & Removal Spreadsheet*). It should be noted that 2 of the tagged and evaluated pines that are proposed for removal due to construction impacts (identified as *Tree#s 389 & 394*) are clearly dying and nearly dead, with several of the other recorded trees being in poor and declining health and condition (refer to the corresponding *Exhibit B spreadsheet* for tree health information).

Most of the recorded and evaluated pines that will be or have the potential of being impacted by proposed grading and construction activities are non-landmark status trees ranging from 7 to 23 inch DBH, with 7 of the tagged pines being landmark status trees that are greater than 24 inch DBH. One (1) of these landmark status pines are proposed for removal, with the remaining 6 being retained and protected for the duration of the project.

Woodland understory vegetation is sparse and limited on the subject parcel due to past vegetation removal and fuel reduction operations (refer to *Figures 1-9*). Native understory flora observed includes the following species: Poison oak (*Toxicodendron diversilobum*), coyote brush (*Baccharis pilularis*), woolly leaf manzanita (*Arctostaphylos tomentosa*), sticky monkey flower (*Mimulus aurantiacus*), Pacific blackberry (*Rubus ursinus*), Douglas iris (*Iris douglasiana*), California aster (*Symphyotrichum chilense*) and a few species of native bunch grasses. Non-native invasive plant species observed on the lot was limited to golden wattles (*Acacia longifolia*), which can be described as large shrubs or small trees, as well as a few species of exotic grasses. Non-native invasive plants can be harmful and degrading to habitat and should be controlled, managed and, where possible, eradicated.

It should be noted that natural recruitment and regeneration of native specie trees (e.g., primarily Monterey pine seedlings) is occurring on the subject parcel; however, additional planting will be necessary to further assist in sustaining the long-term health, viability and character of this woodland environment, as well as to satisfy MCHCD tree removal permit conditions. Additionally, it should be noted that special status plant and animal species, sensitive habitat and actively nesting birds or raptors that have protection status were not observed on the subject property during the site assessment; however, an additional nesting bird and raptor assessment should be conducted if tree removal operations occur during the nesting season, which in Monterey County may begin as early as February and continue through August.

II. METHODOLOGY

For this report, a ground level visual assessment of Monterey pine trees and woodland habitat was recently conducted. In regards to inspecting trees, no aerial (climbing) inspections, woody tissue testing and/or root excavations were performed or requested as part of this evaluation.

Per MCHCD requirements, native specie trees that are 6 inch DBH (diameter at breast height) or larger at 48 inches above grade are required to be documented and recorded if impacted by construction or development related activities. For this project 61 Monterey pine trees that are protected by MCHCD ordinances were recorded and evaluated (i.e., assigned tag#s 360-420) in preparation for property development activities. Twenty-one (21) of these pines are proposed for removal due to construction related impacts, with the remaining trees on the lot being retained and protected for the duration of the project.

Recommendations are based on the overall general health, vigor and condition of subject trees and habitat; the impact that property development activities may have on trees and natural resources; the hazard level trees present to proposed occupied structures and/or areas with human activity; and the impacts that tree removal and management activities may have on sensitive natural resources, wildlife habitat and nearby healthy trees.

In regards to attachments and exhibits included in this report, *Exhibit A* is a property map and project site plan that shows the location of the 61 trees recorded and evaluated in relation to proposed structures and other property features. This includes the location of the 21 trees proposed for removal, as well as the several remaining trees that will be retained and protected. The *Exhibit B: Tree Impact Assessment & Removal Spreadsheet* provides general tree information and characteristics of the 61 recorded and evaluated trees, such as the assigned tag numbers, species, diameter at breast height (DBH), general physiological health and structural condition, and level of impact from proposed construction activities. Additionally, photographs depicting property features, characteristics and trees impacted or proposed for removal are located at the end of the report (refer to attached photos, *Figures 1-9*).

III. CONSTRUCTION RELATED IMPACTS TO TREES & HABITAT

As stated earlier in the report, a total of 61 mature and senescing Monterey pines, identified as *Tree#s 360-420*, that are greater than 6 inch DBH (diameter at breast height) were recorded and evaluated during a recent pre-construction tree impact assessment of the undeveloped parcel located at 3144 Spruance Road (refer to the attached *Exhibit A: Tree Location & Tree Protection Fencing Map* and project plans, the corresponding *Exhibit B: Tree Impact Assessment & Removal Spreadsheet* and the attached photos, *Figures 1-9*). Twenty-one (21) of these pines, most of which are in declining physiological health and structural condition, are proposed for removal in preparation for the construction of a main house, paved driveway and two detached structures (i.e., an ADU and a garage). The remaining 40 pines recorded and evaluated will be retained and protected for the duration of the project, and given the proper installation, maintenance and monitoring of tree protection measures and BMP's, such as properly positioned and maintained tree protection fencing, are expected to remain in similar health and condition as they are now, and physiologically and structurally sound during the project and following the completion of property development operations. There are also an additional 25 mature pines located on the property that were not tagged due to their safe distance away from proposed construction activities. These 25 trees are not expected to be significantly impacted or adversely

affected by project operations, which will result in a total of 65 mature pines being retained and protected during this home construction project.

The 21 pines proposed for removal due to their location within or adjacent to planned grading and construction activities are in declining health (i.e., ranging from poor to fair physiology health and structural condition [refer to the corresponding *Exhibit B* spreadsheet]), with 2 of these 21 pines (identified as *Tree#s 389 & 394*) clearly dying and nearly dead. Retaining aging and declining pines that are located in close proximity to grading and construction operations is not advised since it would significantly impact and adversely affect the health and structural integrity of these already stressed and declining trees. If retained, project related impacts to senescing and declining pines would result in a further decline in tree health and a greater likelihood of structural failures, which would increase hazard concerns to the subject property. Trees located too close to proposed development activities, particularly aging pine trees that are in declining health and condition, are often recommended for removal due to these trees being more vulnerable and sensitive to construction related impacts, and less likely to be able to tolerate, withstand and adapt to altered site conditions and changes in natural grade that has resulted from property development operations.

Some of the Monterey pine trees located on the subject property are exhibiting clear and obvious signs and symptoms of physiological stress and structural decline, and are at increased risk of mortality and structural failure that could adversely affect nearby healthier trees and property development activities. Biotic disorders that affect pine trees and habitat on the subject property and in the surrounding pine forest community include Pine Pitch Canker (*Fusarium circinatum*; an often deadly fungal born pathogen); *Diplodia pinea* (fungal disease blight that can cause significant branch die back); Red Turpentine Beetle, Engraver Beetle(*Ips*) and other wood boring bark beetle activity (secondary insect pests that attack stressed and weakened trees [e.g., drought stressed] that can potentially transmit fungal born diseases [e.g., Pitch Canker] to other trees); and Western Gall Rust (a fungus that often results in large and conspicuous cankers that can cause significant structural defects). These biotic disorders are often related to and exacerbated by severe drought (an abiotic condition), which has contributed to a large number of various tree species in the region (particularly Monterey pine) declining and dying directly or indirectly from drought related factors.

Additionally, a number of pines on the property have problematic structural deficiencies and anomalies, such as prominent cankers, bows, crooks, leans, poor trunk & stem taper, poor canopy balance & symmetry, top heavy crowns, decay features and co-dominant attachments in the trunks and stems, which increases the probability of structural failures and physiological decline. It should be noted that numerous pine trees in Del Monte Forest and the greater Monterey Peninsula area have fallen in recent years primarily due to high intensity storm events that have impacted the central coast region. Overly-mature and aging Monterey pines are the most common and likely type and specie of tree in the region to experience significant structural failures that can increase hazard concerns to life and property.

The ecological impacts of proposed tree removal operations will be fairly insignificant due to the overall poor health and condition of several of the pines that are proposed for removal, as well as the planting of 22 replacement trees (i.e., mitigation plantings) to assist in sustaining woodland health and character and to comply with County permit conditions (refer to replacement planting recommendations provided later in this report). Additionally, the 65 retained trees will be effectively protected with tree protection BMP's for the duration of the project, which will reduce and minimize impacts to trees and habitat. Furthermore, the removal of several aging, declining and unhealthy pines will benefit adjacent healthier trees that will be retained; will promote the healthy establishment and maturation of nearby smaller and younger trees; and will reduce combustible fuel loads that will assist in protecting property, woodland habitat and the surrounding community from potentially destructive wildland fire events.

Prior to construction activities beginning, a pre-construction meeting shall occur with the project contractor and design team to discuss tree protection and potential construction related impacts. Tree and resource protection measures shall be properly positioned and installed, such as tree protection fencing and perimeter silt fence sedimentation control measures. The location of tree protection BMP's will be determined on-site by the project arborist working with the general contractor and/or project design team. Tree and resource preservation measures will be monitored and maintained for the duration of the project and, if necessary, modified and improved to ensure they are functioning properly and effectively protecting trees and ecological resources. Given the proper implementation of grading activities, as well as the tree and resource protection BMP's provided in this report, retained and protected trees and woodland habitat are not expected to be significantly impacted or harmed by construction operations.

It should be pointed out that the project design team is aware of concerns related to tree impacts and removal, and has made efforts to produce a property development plan that attempts to minimize impacts to trees. The design team has stated that the proposed construction site is the most suitable and sensible location for property development to occur and, unfortunately, tree removal will be necessary and unavoidable in order for construction operations to proceed. However, as noted earlier, a total of 65 mature pines will be retained and protected on the lot, which will be sufficient for maintaining woodland health and character during and following the completion of this home construction project.

It should also be stated that individual trees and groups of trees vary in their suitability for being retained and protected on a development site. Species tolerance, along with tree health and condition, will help to determine the type or level of impact a tree or group of trees can tolerate with minimal adverse affects, which will assist in ascertaining which trees should be removed or retained. Based on the health, condition and location of the 21 trees proposed for removal (many of which are aging and declining, and 2 are clearly dying), it has been determined that these trees will need to be removed due to their location within or adjacent to the proposed building footprint, which makes them unsuitable for being retained during property development.

IV. RECOMMENDATIONS

A. Tree Removal, Replacement, Care & Management:

For the reasons provided in this report and despite the best efforts of the project design team to minimize tree removal, a total of 21 greater than 6 inch DBH Monterey pine trees that are located within the building footprint or in close proximity to proposed grading and construction activities are planned for removal in preparation for property development operations (refer to the attached *Exhibit A: Tree Location & Tree Protection Fencing Map* and project plans, the corresponding *Exhibit B: Tree Impact Assessment & Removal Spreadsheet* and the attached photos, *Figures 1-9*). Tree removal will address the following project related factors and concerns: **1)** In order for construction operations to proceed, these 21 pines that are located within or adjacent to the proposed building footprint will need to be removed due to significant construction related impacts; **2)** Most of these proposed removals are aging and declining trees with physiological and/or structural deficiencies that are compromising health and structural integrity, which makes them more susceptible and sensitive to construction related impacts; **3)** Aging and declining pines tend to be less tolerant of impacts and disturbance associated with grading and construction activities, which often results in removal being necessary; **4)** The removal of several senescing and declining trees will provide a safer environment for proposed construction operations and eventual property settlement by removing potential hazard concerns; and **5)** Tree removal will reduce combustible fuel loads and wildland fire hazard concerns, which will assist in improving defensible space and protecting property from wildland fire threats, as well as increase the likelihood that the property owners will be able to obtain and retain property insurance coverage.

If the Monterey pines located in close proximity to grading and construction activities were to be retained (most of which are aging and in declining condition) they would likely go into a more significant and rapid state of decline, which would result in pre-mature tree mortality occurring (probably within a period of 2 to 5 years) due to root loss and other construction related impacts. Consequently, the aging and declining pines that are locate too close to grading and construction activities are recommended for removal prior to project operations beginning, and will be adequately mitigated (i.e., 22 young replacement trees will be planted) following the completion of property development operations.

As outlined above, tree removal will be necessary in preparation for property development operations and will be mitigated by adequately protecting the 65 remaining trees that will be retained, as well as planting the 22 replacement seedlings or saplings on the subject parcel (refer to the tree replacement recommendations provided in this report). Aging or declining pines located in close proximity to construction and grading operations, such as many of the trees addressed in this report, are often recommended for removal due to significant and unavoidable tree and root system impacts that will compromise the health and structural integrity of the trees.

Per MCHCD tree preservation ordinances and permit conditions, the 65 remaining pines on the property (i.e., 40 tagged and evaluated trees that are located in the vicinity of proposed construction activities, as well as 25 additional mature pines on the lot that were not tagged and recorded due to their safe distance away from project operations) will be retained and protected for the duration of the project (refer to tree protection BMP's provided in this report and the approximate location of tree protection fencing shown on the *Exhibit A: Tree Location & Tree Protection Fencing Map*). Tree and resource protection measures will assist in preserving and sustaining ecological resources and minimizing harmful impacts to trees and woodland habitat.

As shown in the corresponding *Exhibit B: Tree Impact Assessment Spreadsheet & Removal Spreadsheet*, the recent pre-construction assessment has determined that construction related impacts to the 40 recorded and evaluated pines that will be retained and protected is expected to be generally moderate and insignificant. These 40 trees are expected to tolerate and withstand construction related impacts and remain viable and sound during and following the completion of property development activities. Construction impacts are not expected to adversely affect or be detrimental to the health and welfare of retained and protected trees, and properly installed tree protection fencing will assist in preserving the health and welfare of trees and habitat.

In regards to tree replacement and mitigation, a total of 22 replacement plantings (i.e., 12 one to five-gallon or larger native Monterey pine seedlings or saplings and 10 one to five-gallon or larger coast live oak and/or Monterey cypress seedlings or saplings [container size depends on availability and quality of nursery stock]) shall be planted in suitable and appropriate locations on the subject parcel to mitigate tree removal impacts associated with property development activities, as well as to comply with MCHCD tree removal permit conditions, which will assist in sustaining and supporting woodland health and character. Monterey County permit conditions require a 1:1 replacement ratio for non-landmark status native species trees (e.g., pines, oaks and cypress) removed that are 6 to 23 inches DBH, and a 2:1 replacement ratio for landmark status trees that are 24 inch DBH or larger. Based on the current design plan, 20 non-landmark pines are proposed for removal, as well as 1 landmark status pine.

Replacement mitigation plantings should not only consist of Monterey pines, but should also include indigenous Coast live oak (*Quercus agrifolia*) and/or Monterey cypress (*Hesperocyparis macrocarpa*) trees that are native to Del Monte Forest and are appropriate to this mixed woodland environment. Planting pines and oaks, in particular, is advised to assist in supporting and sustaining mixed woodland habitat and to improve native tree diversity on the subject lot. The proper execution of this tree replacement and mitigation action will adequately address and mitigate tree removal impacts and will assist in preserving and sustaining the health, viability and character of this woodland vegetation community. Successful completion of this *Monterey County HCD* tree removal permit condition shall be achieved when the 22 replacement plantings survive a one-year monitoring period.

The 22 replacement plantings should be acquired from a local native plant nursery that has a good selection of specimens that are free from harmful pathogens, insect pests and/or structural

disorders. The planting of young seedlings or saplings should ideally be performed during the appropriate time of year (i.e., fall through winter season when there is good soil moisture, cooler temperatures and adequate rainfall) using proper tree planting techniques and BMP's, and should be planted in suitable locations that will support healthy establishment and maturation. Young plantings should be properly cared for (e.g., mulched and provided supplemental watering) and protected (e.g., below ground gopher baskets and wildlife protection fencing) until successfully established and, as stated above, shall survive a one-year monitoring period.

It should be noted, there are naturally occurring young pine seedlings and saplings located on the subject parcel that will assist in sustaining woodland health and character if they are allowed to grow and develop into mature trees. In the event there are young seedlings or saplings located within the building and construction footprint consideration should be given to relocating to a safe and suitable area on the property. Relocated seedlings or saplings should ideally be transplanted during the wet season following sufficient rainfall, which will assist in minimizing transplant stress. As mentioned in the previous paragraph, young tree plantings (including any relocated seedlings) should be properly cared for (e.g., provided mulch and irrigation) and protected to aid in healthy establishment and maturation. Where possible, undeveloped areas where young seedlings and/or saplings are occurring should be avoided and adequately protected and preserved during construction operations.

Prior to any tree removal or disturbance that is performed during the bird nesting season, which in Monterey County may begin as early as February and continue through August, a nesting assessment is required to determine if any nesting birds or raptors are present. A recent tree and site inspection determined there are currently no actively nesting birds or other young rearing wildlife occurring within or directly adjacent to the proposed property development site. However, depending on when construction activities begin (i.e., February-August), it may be necessary to perform an additional assessment.

When tree removal operations commence, removal should be performed by licensed and insured tree workers trained in accordance with ANSI Z133.1 safety regulations, as required by OSHA. If necessary, tree protection measures should be installed to nearby trees that could potentially be damaged or impacted during removal operations. Additionally, if substantial soil disturbance occurs at the removal site it may be necessary to install erosion and sedimentation control measures to effectively stabilize exposed soil surfaces and contain sediment runoff. Furthermore, BMP's involved with tree removal, disposal, and the cleaning and sterilization of tools and equipment should be implemented to minimize the chance of biotic disorders that may be present spreading to other areas.

Any landscaping activities associated with project operations will be designed and implemented in manner that will avoid and minimize impacts to nearby trees. For example, landscaping and grading should be avoided or limited within the critical root zone area (i.e., canopy dripline) of trees, with minimal soil disturbance, grading, irrigation, planting and introduction of soil or other landscaping materials. Landscaping plants should be drought tolerant and lower combustibility

vegetation that is appropriate to woodland habitat. Lower density, lower growing and properly irrigated, spaced and maintained plants and planting configurations should be utilized that are less flammable and more fire resistant.

Additionally, several trees that are located in relatively close proximity to the proposed project site will likely need to be pruned to assist in maintaining and preserving tree health, providing adequate clearance around structures, improving aesthetics, reducing combustible fuel loads (i.e., ladder fuels) and improving defensible space for wildland fire protection. Pruning operations should occur during the proper time of year (preferably fall through early winter) and utilize proper pruning BMP's in order to minimize impacts to trees.

As stated earlier, prior to construction activities beginning a pre-construction meeting shall occur with the project contractor and design team to discuss tree protection and potential construction related impacts. Tree and resource protection measures shall be properly positioned and installed, such as tree protection fencing and perimeter silt fence sedimentation control measures. The location of tree protection BMP's will be determined on-site by the project arborist working in collaboration with the general contractor and/or project design team. Tree and resource preservation measures will be monitored and maintained for the duration of the project and, if necessary, modified and improved to ensure they are functioning properly and effectively protecting trees and ecological resources. Given the proper implementation of grading activities, as well as the tree and resource protection BMP's provided in this report, retained and protected trees and woodland habitat are not expected to be significantly impacted or harmed by construction operations.

B. Critical Root Zone Protection & Preservation:

In the event that large primary roots are encountered that are 2 inch diameter or larger the project arborist should be notified and consulted to assist in providing guidance and recommendations that will serve to minimize impacts to retained and protected trees. If trees exhibit any signs or symptoms of stress and decline due to possible construction related impacts or any other factors (e.g., biotic and/or abiotic disorders), specific treatments can be performed (e.g., supplemental deep watering, radial or vertical mulching, growth regulator treatments, among others) to assist in mitigating adverse impacts and to aid in the recovery of impacted trees. However, if construction tree protection measures and BMP's are properly implemented and complied with none of these treatments should be necessary.

Where possible, significant soil disturbance (i.e., grading and landscaping activities) should be avoided and kept to a minimum within the canopy dripline and critical root zone (CRZ) of retained and protected trees. The area around trees that is protected with exclusionary fencing during grading and construction operations is commonly referred to as the *Tree Protection Zone* (TPZ), and ideally the CRZ should be well within the fenced TPZ. The CRZ area typically extends beyond the canopy dripline, especially in naturally growing trees. The minimum CRZ area where impacts should be avoided is the radius from the trunk in feet that is 5X the DBH of a

tree or the inner half of a tree's canopy dripline, whichever provides a greater protective radius from the trunk. This is the minimum root zone area that should be protected; however, where possible, the area with no or minimal construction related disturbance should extend to the canopy dripline (i.e., the outer most portion of the canopy edge furthest away from the trunk, 360 degrees around the tree) or beyond. However, given design and spacial considerations at the site, some encroachment and development within the canopy dripline of trees should be acceptable if certain protective measures, practices and precautions are properly implemented and adhered to, such as regular construction site monitoring by the project arborist and other BMP's that are provided in the construction tree protection measures section of this report.

Based on the DBH and overall size of the pines reviewed for this assessment, as well as experience of where the most critical and significant roots are likely to occur within the CRZ, grading and construction related disturbance should be avoided within the radius from the trunk that is provided in the *Recommended Root Protection Zone* column of the *Exhibit B: Tree Impact Assessment Spreadsheet*. Generally speaking, most trees should not be closer than a 15 to 20 foot distance from proposed structures or preferably a greater distance, and larger and more significant landmark trees should have a greater protective radius with minimal disturbance. A minimum 15 to 20 foot distance from structures for most trees is not only advised for minimizing impacts to critical roots and canopy, but is also necessary for reducing combustible fuel loads near structures and abating wildland fire hazard concerns. Trees located within a 15 to 20 foot distance from structures should be adequately pruned on a as needed basis in order to provide sufficient clearance and protection around buildings.

As previously stated, grading and construction activities should be avoided and minimized within the canopy dripline and CRZ of nearby trees, which includes landscaping, hardscaping and any other operations that alter soil conditions, natural grade and drainage patterns that could adversely affect tree health. The naturally occurring pines on the lot are an important aesthetic and ecological value to the property, and the tree protection BMP's provided in this report should be properly implemented in order to prevent and minimize impacts to retained trees. The project arborist should be notified and consulted prior to any grading activities occurring within the canopy dripline of the trees, and should be present at the site if it is necessary to grade any closer than the distances provided in the *Recommended Root Protection Zone* column of the *Exhibit B* spreadsheet, or if large diameter roots 2 inch diameter or greater are encountered or are expected to be encountered. In the CRZ areas where significant roots are more likely to be uncovered, careful and judicious grading and excavating via hand digging, air spading and/or light mechanized equipment is advised to assist in preventing severe damage (i.e., tearing and shredding) to primary lateral roots that often occurs during more traditional and conventional grading operations using heavy mechanized equipment.

C. Construction Tree Protection Measures:

Per MCHCD and resource preservation BMP's, the following tree and resource protection measures shall be implemented for this home development project located at 3144 Spruance

Road in Pebble Beach. It should be noted that not all of these tree protection measures may be necessary or applicable to this specific project, but may come in useful at some point during the project and should be provided in case they are needed. The proper implementation of tree and resource protection BMP's and regular construction site monitoring will assist in protecting and preserving the health and welfare of trees, habitat and surrounding ecological resources. The location of tree protection measures will be determined on-site by the project arborist and project design team, and tree and resource preservation measures will be regularly inspected and properly maintained for the duration of the project to ensure they are functioning effectively:

1) Prior to commencing with grading and construction activities install a durable and highly visible tree protection fencing that clearly defines the work area, limits unnecessary disturbance to surrounding areas, and protects the critical root zone (CRZ) of individual trees and/or tree groupings. Generally speaking, the CRZ area is defined by the outermost portion of the canopy dripline 360 degrees around the tree. Ideally, the entire canopy dripline and CRZ area should be protected with exclusionary fencing, or alternatively, but less desirable in terms of tree preservation, installing exclusionary fencing to a radial distance from the trunk that protects at least half of the interior canopy dripline and CRZ area is often an acceptable alternative, particularly on smaller or more densely wooded lots. As noted earlier in the report, another method for determining the most sensitive area of the CRZ is by identifying a protective radius that is a minimum of five times (5X) the diameter (DBH) of a subject tree, which often works out to be approximately the inner half or more of a tree's canopy dripline. If grading is occurring within the *Recommended Root Protection Zone Area* provided in the *Exhibit B: Tree Impact Assessment Spreadsheet* the project arborist should be notified and consulted.

2) For effectively protecting the canopy dripline and CRZ of trees use a more durable and heavier duty orange exclusionary fencing (e.g., *Resinet Heavy Duty Square Mesh Access Control Barrier Fence*) anchored in with steel T-posts to protect trees located in the vicinity of proposed construction activities (refer to the *Exhibit A: Tree Location Map* and project plans that shows the location of tree protection fencing). Where possible, tree protection fencing will be installed along the outer portion of the canopy dripline (i.e., the CRZ area) or beyond the canopy dripline of trees located within and/or adjacent to the project site to avoid and minimize impacting critical roots. As noted earlier, the area that is protected by tree protection fencing is identified as the *Tree Protection Zone (TPZ)*, which ideally should include the entire canopy dripline and CRZ area. Perform regular monitoring and inspections of tree protection measures, as well as any necessary repairs, maintenance and improvements to tree protection measures on a as needed basis for the duration of the project.

3) Install appropriate sedimentation control measures (e.g., silt fence) along downslope perimeter of construction site and, if necessary, apply soil stabilization and source control measures (e.g., rice straw mulch, erosion control blankets, all-weather surfaces) to exposed soil surfaces to prevent erosion problems and sediment runoff during rain events. Perform routine monitoring, as well as the necessary maintenance, modifications and improvements on a as needed basis to ensure that erosion & sedimentation control and resource protection measures are functioning

effectively. It should be noted that erosion problems and sediment deposition around trees can adversely affect tree health and stability.

4) If it's necessary to perform grading activities within the canopy dripline and CRZ area of trees the following practices should be implemented: 1) Try to maintain natural grade as much as possible; 2) Where feasible use permeable surface materials at final grade; 3) Avoid cut (i.e., lowering grade) and fill (i.e., raising grade with fill material) operations (particularly lowering grade) within the CRZ that could result in significant root loss or damage to large primary roots that are important to supporting and sustaining tree health and structural stability; and 4) If necessary, apply 2 to 4 inches of clean and properly sourced woodchip mulch (or in some cases a thicker mulch layer may be necessary) to limit soil disturbance and prevent soil compaction.

5) Notify the project arborist if grading and construction activities is required within the *Recommended Root Protection Zone* area that is provided in the *Exhibit B* spreadsheet. If this is necessary, the arborist should be present during grading and excavation activities to assist in minimizing impacts to large primary roots that will likely be encountered. Additionally, prior to construction activities occurring within 5 feet of trees, which is not anticipated for this project, install trunk and stem protection measures (e.g., 2x4 lumber forming protective barrier around circumference of trunk and lower stem of tree) that will need to be secured to the trees with rope and high visibility exclusionary fencing. If it is necessary to perform any pruning use proper tree pruning practices to minimize impacts and maximize wound healing.

6) Where possible, avoid damaging or cutting roots located within the critical root zone (i.e., canopy dripline) of trees, especially roots that are 2 inches diameter or larger, and to the extent possible avoid grading or significant soil disturbance within a radius that is a minimum five times (5X) the diameter (DBH) of the subject trees, which is the most sensitive portion of a tree's CRZ area. It should be noted that, where possible, root zone disturbance should ideally be avoided within the entire CRZ and canopy dripline area (i.e., the outer most portion of the canopy dripline 360 degrees around the tree) and even expanded to the area beyond the canopy dripline and primary root zone. Construction footings should be designed and excavation activities performed in a manner to minimize impacts to primary roots, or alternative foundation designs (e.g., pier and beam) that are less impactful to critical root systems should be considered. If significant roots are encountered efforts should be made to carefully excavate (e.g., tunnel or dig) under or around primary lateral roots. Grading or trenching operations that may occur within the critical root zone of retained trees should be performed under the guidance and monitoring of the project arborist.

7) Tree roots severed or damaged during grading and excavating operations should be cleanly cut and promptly covered with moist burlap fabric or equivalent until roots are permanently covered with backfill material or until the exposed grading cut and soil profile is permanently stabilized and protected. If burlap covered cut roots are exposed to the outside environment for an extended period of time a project attendant shall be assigned the task of regularly wetting burlap covered roots to prevent root desiccation. Additionally, in the absence of rain during the wet

season, it may be necessary to perform supplemental watering (i.e., regular deep irrigating throughout the remaining portions of the critical root zone) to construction impacted trees. Frequency, quantity and duration of supplemental watering should be determined by the project arborist or a qualified landscape professional or tree care professional with similar experience.

8) Healthy trees, particular younger trees, can be fairly tolerant of low to moderate levels of root system impacts. However, they are generally less tolerant to increases in grade (i.e., introduction of fill material around the root crown and trunk) or decreases in natural grade (i.e., cut slopes). Where possible, avoid altering the natural grade (particularly lowering grade) within the CRZ to reduce the likelihood of causing root loss and tree stress, decline and/or mortality. Lowering natural grade can result in significant root loss or damage and raising the grade (i.e., introducing fill material, particularly around the lower trunk and root crown) can lead to trunk and root decay disorders that are detrimental to the health and structural integrity of trees. Where possible, root loss and root system impacts should be avoided and minimized to the greatest extent possible, and this important factor should be considered when developing a construction design plan. It should be noted that root loss or root system impacts does not always result in an immediate or significant decline in tree health, but instead often occurs slowly and gradually over a period of several years or decades. Per the site assessment and analysis of the project plans, it appears that trees in the vicinity of proposed construction operations will likely tolerate grading activities with minimal to moderate impacts and are suitable for being retained, protected and preserved.

9) Avoid storing construction tools, materials and equipment within the CRZ (i.e., canopy dripline) of trees, and do not wash out or dispose of excess materials (e.g., paint, plaster, concrete, or other potentially harmful substances) within CRZ areas. If it is unavoidable and necessary to temporarily store or stockpile materials and equipment within the CRZ of trees, apply 2 to 4 inches of clean and properly sourced woodchip mulch (or in some cases a thicker mulch layer may be necessary) to limit soil disturbance and prevent soil compaction.

10) In regards to site restoration, retain and properly store and stockpile top soil that is native to the site, and where possible, preserve or relocate drought and fire resistant native perennial grasses and other indigenous flora that may be occurring within or adjacent to the construction site.

11) If tree pruning is necessary, it is important to utilize proper pruning BMP's that will assist in minimizing harmful impacts to trees. In most cases, tree pruning should ideally be performed during the fall through early winter months when the trees are at a lower level of physiological activity and nesting birds are unlikely to be present, the exception being deadwood removal or minor pruning, which can occur during any time of year. A general principle to follow is that it is important to make proper pruning cuts, keeping them as small as possible while removing as few living branches as necessary to achieve the objective. Large pruning wounds often do not completely heal over with wound wood callus tissue, which creates a permanently exposed entry point for problematic biotic disorders, such as decay, disease and/or insect pests. Excessive pruning can stress, injure and harm trees by depleting energy reserves and reducing food making

processes (i.e., photosynthesis), which can compromise a tree's ability to perform essential physiological functions and to recover and replenish essential reserves during periods of stress (e.g. root disturbance and drought conditions). As noted above, excessive pruning can create an abundance of exposed wounds providing entry points for potentially harmful biotic disorders that can adversely affect the health and structural integrity of trees. It should be noted that significant pruning involving the removal of 30% or more of living canopy material or the removal of sizable healthy limbs requires a County permit. Additional pruning BMP's and guidelines are available upon request.

12) The primary objective of pruning operations should be as follows: To remove dead and unhealthy limbs and branches (i.e., deadwood removal); improve canopy balance and symmetry and to maintain natural form; thin out overly dense and heavy portions of the canopy; and, if necessary, perform targeted and selective weight reduction pruning of the canopy and large limbs (i.e., end weight reduction pruning) to assist in preventing significant structural failures that could be detrimental to tree health and potentially hazardous to property and areas with human activity. As suggested above, perform necessary pruning to reduce and mitigate hazard concerns to occupied structures and areas with human activity. Additionally, pruning should be conducted to reduce wildland fire hazards and combustible fuel loads, and to improve property protection and defensible space around structures.

13) Prior to the property development project beginning a pre-construction meeting should be arranged with the project arborist, general contractor and/or others involved with the project to ensure that tree and resource protection measures are properly located, positioned and installed. Additionally, perform regular construction site inspections for the duration of the project to monitor the condition of tree and resource protection measures, and to determine if any repairs, adjustments or modifications are necessary. Trees impacted by site development should be periodically monitored and assessed during and following the project to determine if any tree care and management actions are necessary, and to make certain trees do not present a hazard to property and/or nearby structures.

D. Tree Repair & Replacement:

Per tree care and tree preservation BMP's, if any trees are damaged during construction operations they should be promptly repaired and/or treated per arborist specifications. Remedial or mitigation treatments may vary and will depend largely on the damage or injury sustained, as well as the condition of specific trees at the time of injury. As previously noted, trees impacted by project operations should be periodically monitored and assessed by the project arborist during and following the project to determine if any tree care and management actions are necessary that will assist in preserving and improving tree health, and/or preventing tree hazards. Prescribed treatments will be determined on a case by case basis.

V. CONCLUSION

In conclusion, 61 mature and senescing Monterey pine trees were recorded and evaluated (i.e., assigned tag#s 360-420 and referred to in this report as *Tree#s 360-420*) during a recent pre-construction tree impact assessment for the property located at 3144 Spruance Road in Pebble Beach (refer to the attached *Exhibit A: Tree Location & Tree Protection Fencing Map* and project plans, the corresponding *Exhibit B: Tree Impact Assessment & Removal Spreadsheet* and the attached photos, *Figures 1-9*). Of these 61 pines, 21 are proposed for removal in preparation for home construction and property development activities due to their location within or adjacent to proposed construction operations, and the remaining pine trees will be retained and protected. Trees located in close proximity to grading and construction activities, particularly aging and declining Monterey pines, are often recommended for removal due to unavoidable construction related impacts (e.g., root loss, soil compaction and/or altering of natural grade within the CRZ area) that will adversely affect and compromise tree health and structural integrity. Several of the aging pines proposed for removal are in declining physiological health and structural condition and have notable deficiencies that are compromising health and structural integrity (refer to the *Exhibit B: Tree Impact Assessment & Removal Spreadsheet*), which is another justification for removal on a property where home construction and occupation will be occurring.

In regards to retained and protected trees, 40 of the 61 tagged and evaluated pines will be retained and protected. These 40 trees will likely be impacted due to their fairly close proximity to proposed grading and construction activities, but given the proper installation and maintenance of tree protection measures, these pines are expected to tolerate and withstand project related impacts and remain viable and sound during and following the completion of property development activities. Additionally, there are 25 additional pines located on the subject property that were not tagged and recorded due to their safe distance away from proposed construction activities that will also be retained and protected during this project. These 25 trees are not expected to be significantly impacted or adversely affected by grading and construction activities. In total, 65 mature pines will be retained and protected, which will assist in maintaining and preserving woodland health and character.

Additionally, in order to protect and preserve the retained pines and surrounding woodland habitat, the necessary tree and resource protection measures (i.e., tree protection fencing) shall be installed prior to construction activities beginning and properly monitored and maintained for the duration of the project. Tree and resource protection BMP's will assist in preserving and protecting ecological resources and minimizing impacts to trees and habitat.

Lastly, in the interest of complying with *Monterey County Housing & Community Development Department-Planning Services* permit conditions and preserving and sustaining the health and character of woodland habitat, 22 replacement trees (i.e., 12 one to five-gallon native Monterey pine seedlings or saplings and 10 one to five-gallon coast live oak and/or Monterey cypress

seedlings or saplings) shall be planted on the subject property and survive a one-year monitoring period.

Best regards,

Rob Thompson
ISA Certified Arborist # WE-7468A
Resource Ecologist

2-13-26
Date

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CLIENT ACKNOWLEDGES THAT THIS REPORT, AND ANY OPINIONS, ADVICE OR RECOMMENDATIONS EXPRESSED OR GIVEN, ARE BASED ON THE INFORMATION SUPPLIED BY CLIENT AND ON THE DATA, INSPECTIONS, MEASUREMENTS AND ANALYSIS CARRIED OUT AND OBTAINED BY TWM.

THIS REPORT IS BASED ON A LIMITED VISUAL INSPECTION OF TREE HEALTH AND CONDITION AND FOR OBVIOUS STRUCTURAL DEFECTS FROM GROUND LEVEL. IT IS NOT A COMPLETE HEALTH AND HAZARD EVALUATION, AS SOME HEALTH AND HAZARD CONDITIONS ARE NOT VISIBLE AND CANNOT BE CONFIRMED BY A LIMITED INSPECTION. A COMPREHENSIVE HEALTH AND HAZARD ASSESSMENT WOULD INCLUDE OTHER INVESTIGATION MEASURES INCLUDING, BUT NOT LIMITED TO, CORE SAMPLES, TISSUE ANALYSIS, ROOT COLLAR EXCAVATION, SOIL ANALYSIS, AND VISUAL INSPECTION OF THE ENTIRE TREE VIA CLIMBING. ESTIMATES FOR THIS WORK ARE AVAILABLE UPON REQUEST.

BE ADVISED THAT TREES AND/OR LIMBS MAY FAIL UNDER CERTAIN CONDITIONS, AND THAT THE RECOMMENDATIONS IN THIS REPORT ARE BASED ON GENERAL STANDARDS OF TREE CARE AND BMP's. TREES, INCLUDING TREES THAT APPEAR HEALTHY AND STRUCTURALLY SOUND, MAY FAIL UNEXPECTEDLY WITHOUT ANY VISIBLE SIGNS OF BEING PHYSIOLOGICALLY AND/OR STRUCTURALLY UNSOUND AND COMPROMISED, PARTICULARLY DURING PERIODS OF INCLEMENT WEATHER, BUT TREES MAY ALSO FAIL DURING PERIODS OF FAIR WEATHER. THIS REPORT IS PREPARED WITH THE UNDERSTANDING THAT NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESSED OR IMPLIED, ARE GIVEN THAT ANY TREES REFERRED TO IN THE REPORT OR LOCATED ON OR ADJACENT TO THE SUBJECT PROPERTY ARE GUARANTEED TO BE SOUND OR SAFE.

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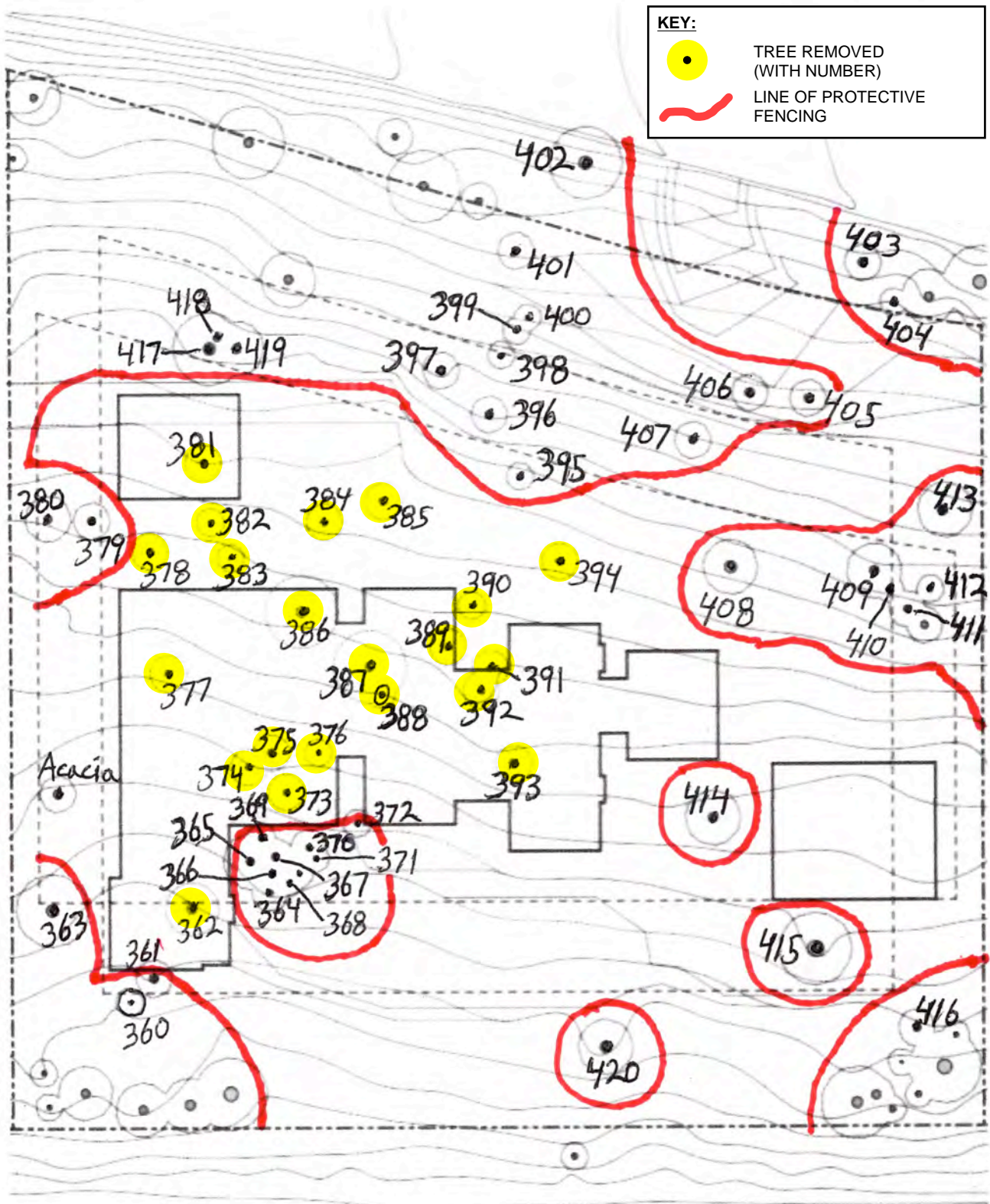
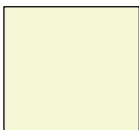










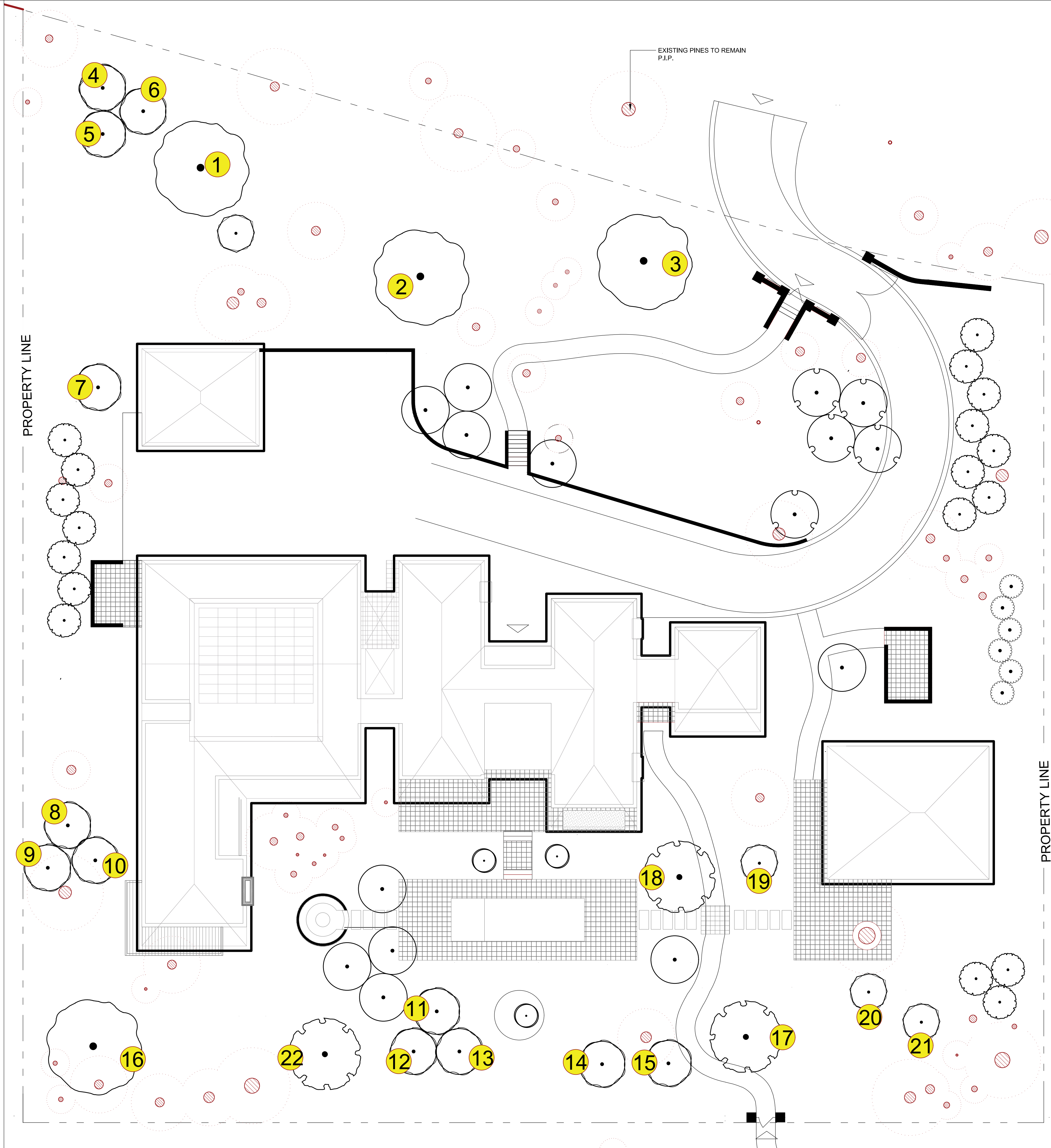
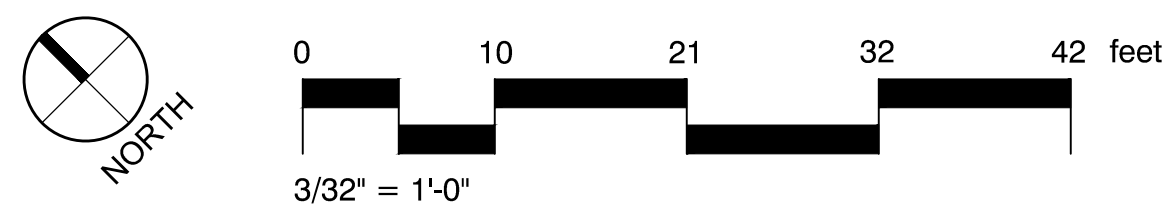
Exhibit A: Tree Location & Tree Protection Fencing Map shows the location of 61 Monterey pine trees that were tagged and evaluated during a pre-construction impact assessment. This includes 21 pines proposed for removal due to construction related impacts, as well as 40 pines that will be retained and protected during property development activities. In addition to these 40 retained pines, 25 additional pines that were not tagged and recorded due to their location a safe distance away from proposed construction activities will also be preserved and protected, for a total of 65 retained and protected trees. The red lines identifies the approximate location of tree protection fencing that will be installed; however, the final location of tree protection measures will be determined during a pre-construction site visit with the project contractor and design team.

TREE REPLACEMENT KEY

 NATIVE TREES/SHRUBS TO BE ADDED AS PER PEBBLE BEACH STANDARDS (QTY: 42)

PLANT SCHEDULE			
SYMBOL	BOTANICAL / COMMON NAME	SIZE	QTY
TREES			
	ACER PALMATUM 'BLOODGOOD' / BLOODGOOD JAPANESE MAPLE	15 GAL.	10
	ACER PALMATUM 'SANGO-KAKU' / CORAL BARK JAPANESE MAPLE	15 GAL.	6
	ARBUTUS MENZIESII / PACIFIC MADRONE	24"	3
	ARCTOSTAPHYLOS X 'HOWARD MCMINN' / HOWARD MCMINN MANZANITA	15 GAL.	4
	CEANOTHUS THYRSIFLORUS 'SNOW FLURRY' / SNOW FLURRY BLUEBLOSSOM	5 GAL.	19
	CEDRUS ATLANTICA 'GLAUCA PENDULA' / WEEPING BLUE ATLAS CEDAR	24"	3
	HESPEROCYPARIS MACROCARPA / MONTEREY CYPRESS	24"	4
	PINUS RADIATA / MONTEREY PINE	24"	12

1 #1-#22 NATIVE TREES REQUIRED TO BE REPLACED AS EXISTING APPROVED PINES ARE REMOVED.



CARMEI POINT LANDSCAPES

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PROJECT:
DEER PATH RESIDENCE
 3144 SPRUANCE RD
 PEBBLE BEACH, CA

OWNER/ CLIENT:
NUNNELEE

SCOPE:

LANDSCAPE PACKET

PROGRESS ISSUE NAME:

PROGRESS SUBMIT:	DATE:
AH DRAFT 1	8/27/25
AH DRAFT 5	2/17/26
AH DRAFT 6	5/1/26
AH DRAFT 7	5/11/26

NOTES FOR CONSTRUCTION:

DISCLAIMER:
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SHEET TITLE:
TREE REPLACEMENT PLAN

SCALE: 3/32" = 1' MAY 2026

SHEET NUMBER:
LA - 1.03



Figure 1. The proposed home and property development construction site is located in a Monterey pine woodland community.



Figure 2. Another view of the proposed homesite, as well as a small ADU site (located right of center) from Deer Path Road.



Figure 3. Close view of a portion of the proposed homesite located in a fairly densely wooded area of the lot. 21 pine trees are proposed for removal in preparation for property development activities and a total of 65 pines will be retained and protected.



Figure 4. Another view of proposed homesite from Deer Path road. This parcel is dominated by mature and aging Monterey pines, several of which are in poor and declining physiological health and structural condition.



Figure 5. In addition to mature pine trees, which dominate the property, there are also several large non-native invasive acacias (a few are visible in this photo) that are located on the northwest side of the lot.



Figure 6. View of this pine woodland lot up towards the northeast Spruance Road side of the property.



Figure 7. Another view of proposed homesite area from the Spruance Road side of the lot. The detached garage is flagged on the right side area of the photo.



Figure 8. View from area where the proposed paved driveway will access the property. The detached garage will be located in the center area of the photo.



Figure 9. The detached ADU is proposed for this location towards the south end of the lot near Deer Path road. No trees are proposed for removal in preparation for the ADU. As outlined in this report, a total 21 Monterey pines are proposed for removal due to construction related impacts and 40 nearby tagged and recorded pines will be retained and protected for the duration of the project. An additional 25 pines that were not recorded due to their safe distance and location away from proposed construction activities will also be retained, for a total of 65 pines retained and protected.

3144 Spruance Road, Exhibit B: Tree Impact Assessment Spreadsheet

Date: February 11, 2026

Prepared by Rob Thompson, ISA Certified Arborist

Note: Below are 61 native specie Monterey pines, identified in the field by tag#s 360-420, that were recorded and evaluated in preparation for proposed property development activities. These trees will be impacted or have the potential of being impacted by construction operations.

Note: 21 of these pines are proposed for removal due to construction related impacts. The remaining 40 recorded and evaluated pines will be retained and protected for the duration of the project.

Note: The *Critical Root Zone* (CRZ) area can extend beyond the canopy dripline, especially in naturally growing trees. The minimum CRZ area that should be protected is the distance from the trunk in feet that is 5X the DBH (diameter at breast height)

or the inner half radius of the canopy dripline (whichever is greater), but this is a minimum and ideally should be extended further away from the tree. Where possible avoid disturbing or impacting area within canopy dripline or even area immediately beyond the canopy dripline.

The Recommended Root Protection Zone Area provided in the column below is a minimum and should be greater if possible. If disturbance is planned within this zone the project arborist should be notified and consulted.

# of Trees	Tree Tag #	Tree Specie	DBH (inches)	Crown Class	Balance & Symmetry	Physiological Condition	Structural Condition	Retain or Remove	Construction Impacts	Minimum Recommended Root Protection Zone (proximate radius measured from trunk in ft)	Comments & Observations
1	360	Monterey pine	8	Suppressed	Poor	Fair	Poor	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate to high, but not detrimental to tree health.
2	361	Monterey pine	22	Codominant	Fair	Fair	Fair	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate to high, but not detrimental to tree health.
3	362	Monterey pine	23	Codominant	Fair	Poor-Fair	Poor	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
4	363	Monterey pine	32	Codominant	Fair-Good	Fair-Good	Good	Retain	Moderate-High	15 feet	Construction related impacts are expected to be moderate to high, but not detrimental to tree health.
5	364	Monterey pine	13	Intermediate	Poor	Poor	Poor	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate to high, but not detrimental to tree health.
6	365	Monterey pine	17	Intermediate	Fair	Poor	Poor	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate to high, but not detrimental to tree health.
7	366	Monterey pine	7	Suppressed	Fair	Poor	Poor	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate to high, but not detrimental to tree health.
8	367	Monterey pine	18	Codominant	Poor	Fair	Poor-Fair	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate to high, but not detrimental to tree health.
9	368	Monterey pine	11	Intermediate	Poor	Poor-Fair	Poor	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate to high, but not detrimental to tree health.
10	369	Monterey pine	12	Codominant	Fair	Poor	Poor	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate to high, but not detrimental to tree health.
11	370	Monterey pine	14	Intermediate	Poor	Poor-Fair	Poor	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate to high, but not detrimental to tree health.
12	371	Monterey pine	11	Suppressed	Poor	Poor-Fair	Poor	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate to high, but not detrimental to tree health.
13	372	Monterey pine	9	Intermediate	Poor	Poor-Fair	Poor	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate to high, but not detrimental to tree health.
14	373	Monterey pine	17	Codominant	Poor	Fair	Poor-Fair	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
15	374	Monterey pine	14	Intermediate	Poor-Fair	Poor-Fair	Poor-Fair	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
16	375	Monterey pine	19	Codominant	Fair	Poor-Fair	Poor-Fair	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
17	376	Monterey pine	12	Intermediate	Poor	Poor-Fair	Poor	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
18	377	Monterey pine	16	Codominant	Fair	Fair	Fair	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
19	378	Monterey pine	19	Codominant	Fair	Poor-Fair	Fair	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
20	379	Monterey pine	13	Intermediate	Poor	Poor	Poor	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate to high, but not detrimental to tree health.
21	380	Monterey pine	18	Codominant	Fair	Fair	Fair	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate and not significantly harmful to tree health.
22	381	Monterey pine	15	Codominant	Fair	Poor-Fair	Fair	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
23	382	Monterey pine	11	Intermediate	Fair	Fair	Fair	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
24	383	Monterey pine	8	Intermediate	Fair	Fair	Fair	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
25	384	Monterey pine	21	Codominant	Fair	Poor-Fair	Fair	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
26	385	Monterey pine	20	Codominant	Fair	Fair	Fair	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
27	386	Monterey pine	28	Codominant	Fair-Good	Fair	Fair	Remove	Remove	0	Tree is proposed for removal due to construction impacts. Replace at a 2:1 replacement ratio.
28	387	Monterey pine	21	Codominant	Fair	Fair	Poor-Fair	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
29	388	Monterey pine	12	Intermediate	Poor	Fair	Poor	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
30	389	Monterey pine	19	Codominant	Poor	Dying	Poor	Remove	Remove	0	Tree is proposed for removal due to construction impacts and it is clearly dying.
31	390	Monterey pine	15	Codominant	Poor-Fair	Poor-Fair	Poor-Fair	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
32	391	Monterey pine	17	Codominant	Poor-Fair	Poor-Fair	Fair	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
33	392	Monterey pine	16	Suppressed	Poor	Fair	Poor	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
34	393	Monterey pine	23	Codominant	Fair	Fair	Poor-Fair	Remove	Remove	0	Tree is proposed for removal due to construction impacts.
35	394	Monterey pine	20	Codominant	Fair	Dying	Poor	Remove	Remove	0	Tree is proposed for removal due to construction impacts and it is clearly dying.
36	395	Monterey pine	16	Intermediate	Poor-Fair	Fair	Fair	Retain	Moderate-High	10 feet	Construction related impacts are expected to be moderate to high, but not detrimental to tree health.
37	396	Monterey pine	19	Codominant	Fair	Fair	Fair	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate and not significantly harmful to tree health.
38	397	Monterey pine	19	Codominant	Fair	Poor-Fair	Fair	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate and not significantly harmful to tree health.
39	398	Monterey pine	15	Codominant	Poor	Poor	Poor	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate to high, but not detrimental to tree health.
40	399	Monterey pine	10	Intermediate	Poor	Poor	Poor	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate to high, but not detrimental to tree health.
41	400	Monterey pine	10	Intermediate	Poor	Poor	Poor	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate to high, but not detrimental to tree health.
42	401	Monterey pine	16	Codominant	Fair	Poor-Fair	Fair	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate and not significantly harmful to tree health.
43	402	Monterey pine	33	Codominant	Poor-Fair	Fair	Fair	Retain	Moderate-High	15 feet	Construction related impacts are expected to be moderate to high, but not detrimental to tree health.
44	403	Monterey pine	21	Codominant	Poor-Fair	Fair	Poor-Fair	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate and not significantly harmful to tree health.
45	404	Monterey pine	13	Intermediate	Poor	Fair	Poor	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate and not significantly harmful to tree health.
46	405	Monterey pine	15	Intermediate	Poor-Fair	Poor-Fair	Poor	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate to high, but not detrimental to tree health.
47	406	Monterey pine	16	Codominant	Fair	Fair	Fair	Retain	Moderate-High	10 feet	Construction related impacts are expected to be moderate to high, but not detrimental to tree health.
48	407	Monterey pine	19	Codominant	Fair	Fair	Fair	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate and not significantly harmful to tree health.
49	408	Monterey pine	30	Dominant	Fair	Poor-Fair	Fair	Retain	Moderate	15 feet	Construction related impacts are expected to be moderate to high, but not detrimental to tree health.
50	409	Monterey pine	21	Codominant	Poor	Fair	Poor	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate to high, but not detrimental to tree health.
51	410	Monterey pine	15	Codominant	Poor-Fair	Poor-Fair	Poor	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate to high, but not detrimental to tree health.
52	411	Monterey pine	17	Codominant	Poor-Fair	Poor-Fair	Poor	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate and not significantly harmful to tree health.
53	412	Monterey pine	15	Suppressed	Poor	Poor-Fair	Poor	Retain	Low-Moderate	10 feet	Potentially impacted by project operations, but impacts are expected to be minor to moderate and insignificant.
54	413	Monterey pine	25	Codominant	Fair	Fair	Fair	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate and not significantly harmful to tree health.
55	414	Monterey pine	20	Intermediate	Fair	Fair	Poor-Fair	Retain	Moderate-High	10 feet	Construction related impacts are expected to be moderate to high, but not detrimental to tree health.
56	415	Monterey pine	38	Codominant	Fair	Fair	Poor-Fair	Retain	Moderate	15 feet	Construction related impacts are expected to be moderate and not significantly harmful to tree health.
57	416	Monterey pine	19	Codominant	Fair	Fair	Poor-Fair	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate and not significantly harmful to tree health.
58	417	Monterey pine	30	Codominant	Poor-Fair	Poor-Fair	Poor	Retain	Moderate	15 feet	Construction related impacts are expected to be moderate and not significantly harmful to tree health.
59	418	Monterey pine	16	Codominant	Poor	Poor-Fair	Poor	Retain	Low-Moderate	10 feet	Potentially impacted by project operations, but impacts are expected to be minor to moderate and insignificant.
60	419	Monterey pine	22	Codominant	Poor-Fair	Fair	Fair	Retain	Moderate	10 feet	Construction related impacts are expected to be moderate and not significantly harmful to tree health.
61	420	Monterey pine	23	Codominant	Fair	Fair	Fair	Retain	Low-Moderate	10 feet	Potentially impacted by project operations, but impacts are expected to be minor to moderate and insignificant.

A total of 61 native specie Monterey pines that are greater than 6 inch DBH were recorded and evaluated and 21 of these pines are proposed for removal due to construction related impacts.

MCHCD tree removal permit conditions will require the planting of 22 replacement/mitigation trees that should consist of 12 1 to 5 gallon container size Monterey pine seedlings or saplings and 10 1 to 5 gallon coast live oak and/or Monterey cypress seedlings or saplings.

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