

# Exhibit D

This page intentionally left blank.

Tree Assessment/  
Forest Management Plan  
Konig Residence

Prepared for:

Chadd Konig

Prepared by:

Frank Ono

Forester

Society of American Foresters I.D.# 48004

Certified Arborist #536

1213 Miles Avenue

Pacific Grove, CA 93950

April 17, 2019

Owner:

Mr. Chadd Konig  
PO Box 28  
Petrolia, CA 95558

Architect:

Studio Carver  
P.O. Box 2684  
Carmel, CA 93921

Forester and Arborist

Frank Ono, Society of American Foresters # 048004, Certified Arborist #536  
F.O. Consulting  
1213 Miles Ave  
Pacific Grove, CA 93950

## **SUMMARY**

Development is proposed for this site located at 46199 Clear Ridge Road in Big Sur CA. Because native trees forest this site, a tree assessment/arborist report has been prepared that identifies and addresses the affects that the project will have to the existing tree resources on site as well as a list of recommendations for the project.

The project proposes to build a new single-family home, attached garage, swimming pool and septic system which require the pruning and removal of trees located on site and protection of others identified for retention. In studying the project, five (5) trees are proposed for removal with this project. Remaining trees that are adjacent to the proposed construction some which are considered to range from poor to fair condition both structurally and in health are to be protected and retained. This report works in concert with the biological assessment prepared by Mr. Fred Ballerini dated December 4, 2018.

## **ASSIGNMENT/SCOPE OF PROJECT**

To ensure protection of the tree resources on site, the property owner, Mr. Chadd Konig has requested an assessment of the trees in proximity to proposed development areas and an arborist report for trees that are adjacent to these areas on this property. To accomplish this assignment, the following tasks have been completed;

- Evaluate health, structure and preservation suitability for each tree within or adjacent (15 feet or less) to proposed development of trees greater than or equal to six diameter inches at 24 inches above grade.
- Review proposed building site plans as provided by Studio Carver Architects.
- Make recommendations for alternative methods and preconstruction treatments to facilitate tree retention.
- Create preservation specifications, as it relates to numbered trees keyed to an annotated Tree Location Map.
- Determine the quantity of trees affected by construction that meet “Landmark” criteria as defined by the County of Monterey, Title 20 Monterey County Coastal Zoning Ordinance; as well as mitigation requirements for those to be affected.
- Document findings in the form of a report as required by the County of Monterey Planning Department.

## **LIMITATIONS**

This assignment is limited to the review of plans submitted to me by Studio Carver dated March 22, 2019 to assess affects from potential construction to trees within or adjacent to construction activities. The assessment has been made of these plans specifically and no other plans were reviewed. Only minor grading and erosion details are discussed in this report as it relates to tree health.

## **PURPOSE AND GOAL**

This tree assessment/forest management report is prepared for this parcel due to proposed construction activities intent on improving the property located at 46199 Clear Ridge Road in Big Sur CA. The purpose for the assessment of the existing trees is to determine if any of the trees will be affected by the proposed project. Native trees are considered protected trees as defined by the County of Monterey, Title 20 Monterey County Coastal Zoning Ordinance.

The goal of this plan is to protect and maintain the Big Sur forested resources through the adherence of development standards, which allow the protection, and maintenance of its forest resources. Furthermore, it is the intended goal of this report and management plan to aid in planning to offset potential effects of proposed development on the property while encouraging forest stability and sustainability, perpetuating the forested character of the property and the immediate vicinity.

## INTRODUCTION

This forest management plan is prepared for Mr. Chadd Konig, owner of the lot located at 46199 Clear Ridge Road in Big Sur CA by Frank Ono, Urban Forester and Certified Arborist, S.A.F. Member #48004 and ISA #536 due to construction. Monterey County's Coastal Implementation Plan Sec. 20.145.060 requires a forest management plan when tree removal is necessary of native trees six inches diameter or greater so as to preserve and maintain the forest and its beneficial uses.

## SITE DESCRIPTION

- 1) Assessor's Parcel Number: 419-221-004-000
- 2) Location: 46199 Clear Ridge Road, Big Sur, CA 93920
- 3) Parcel size: 5.00 Acres
- 4) Existing Land Use: The parcel is vacant and is zoned VSC-D(CZ) for residential use is a visually sensitive area in the Coastal Zone.
- 5) Slope: The parcel is mid-slope below the ridge, with terraced flats. Slopes range from 2% to over 50%.
- 6) Soils: The parcel is located on soils classified as "Los Osos clay loam" between 24 and 39 inches deep. Clay subsoil is found generally at a depth of 20 to 32 inches. Runoff is very high and erosion hazard is moderate to high.
- 7) Vegetation: Per the biological assessment prepared by Mr. Fred Ballerini the vegetation is a transitional area between native perennial grassland, redwood forestland and Coastal oak woodland. Species observed were Coast live oak (*Quercus agrifolia*), Shreve's oak (*Quercus parvula* var. *shrevei*), Tanoak (*Lithocarpus densiflora*) California bay (*Umbellularia californica*), and coast redwood (*Sequoia sempervirens*). For more detailed vegetation information see the biological assessment prepared by Mr. Fred Ballerini.
- 8) Forest Condition and Health: The forest condition and health is evaluated with the use of the residual trees and those of the surrounding oak woodland and redwood forest as a stand. The forest stand observed is semi-mature with some mortality observed in the oak population from what appears to be sudden oak death. The redwood trees are healthy in their natural environment and the hillside the building site is located on, was not damaged by the Soberanes fire of 2016.

## **BACKGROUND/PROJECT DESCRIPTION**

On March 21, 2019 I (Frank Ono, F.O. Consulting) I was contacted by Mr. Paul Mattingly of Studio Carver Architects who requested that I visit the site owned by Mr. Chadd Konig for an assessment of trees adjacent or within the proposed construction areas. Mr. Mattingly requested the findings from the review and assessment of trees that occupy the land at 46199 Clear Ridge Road in Big Sur CA that are adjacent to the proposed design development be prepared and documented in a report that would work in conjunction with other conditions for approval of the building permit application.

A site visit was taken to the property on April 11, 2019 where trees were assessed for health and condition at that time. The assessment focused on incorporating the preliminary location of site improvements coupled with consideration for the general goals of site improvement desired of the landowner. During this site visit, the proposed improvements assessed included preserving trees to the greatest extent feasible, maintaining the view shed and general aesthetic quality of the area while complying with county codes. A study of the individual trees was made to determine the treatments necessary to complete the project and meet the goals of the landowner. As a result trees within and immediately adjacent to the proposed development area were located, measured, inspected, and recorded. The assessment of each tree concluded with an opinion of whether the tree should be removed, or preserved, based on the extent and effect of construction activity to the short and long term health of the tree. All meetings and field review were focused on the area immediately surrounding the proposed development.

## **OBSERVATIONS/DISCUSSION**

The following list includes observations made while on site, and summarizes details discussed during this stage of the planning process.

- The site is forested mainly with oak species; Coast live oak, Shreve's oak, and Tanoak.
- Five (5) trees are proposed for removal:
  - Tree #368 is a 24 inch diameter dead Coast Live Oak.
  - Tree #369 is a 24 inch diameter Coast Live Oak in poor condition with decay in the root collar that will be further affected by grading.
  - Tree #370 is a 12 inch diameter Coast live oak that is dead.
  - Tree #371 is a 30 inch diameter California bay tree in poor condition. This tree is in the proposed building footprint.
  - Tree #372 is an eight (8) inch diameter Coast live oak in fair condition within the proposed building envelope.
- One (1) tree is proposed for major pruning to accommodate construction. This tree #373 is a 21 inch diameter Coast live oak that will need two large limbs removed to accommodate the proposed house roof line.
- No alternate building sites were considered for this assessment as the site constrained by pre-existing conditions and lack of available space on developable areas.

## TREE CHART

The following trees are trees identified for treatment adjacent the development area:

ID#	Diameter	Species	Condition	Remove	Comments
368	24	Oak	Dead	x	
369	24	Oak	Poor	x	Grading
370	12	Oak	Dead	x	
371	30	Bay	Poor	x	In building footprint
372	8	Oak	Fair	x	In building footprint
373	21	Oak	Fair		Prune two large limbs for building

## PROJECT ASSESSMENT/CONCLUSION

This proposal to build a single-family residence and driveway is planned to maintain the existing forested environment and will allow the forest to continue to exist and regenerate over time. The vast majority of the property contains tree cover, which will remain undisturbed. No watercourses are near the planned construction.

Whenever construction activities take place near trees, there is the potential for those trees to experience decline in the long-term as well. The greatest attempt has been made to identify and remove those trees likely to experience such a decline.

### Short Term Impacts

Site disturbance will occur during driveway and home construction. Approximately 2778 square feet of the parcel will be occupied by the improvements planned (home site, driveway, and leach line). This is approximately 1.27% of the parcel size. Short term site impacts are confined to the construction envelope and immediate surroundings where trees will be removed and trimmed and root systems reduced. The pruning of tree crowns above 30% and reduction of root area may have a short term impact on those trees treated, including a reduction of growth, dieback, and potentially death. Every attempt has been made to recommend removing those trees likely to experience severe decline and death as a result of planned activities.

### Long Term Impacts

No significant long-term impacts to the forest ecosystem are anticipated due to the large amount of area forested and the relatively small amount of area that will be occupied by the proposed residence and driveway. Approximately 1.27% of the parcel will be permanently altered by the project. The project as proposed is not likely to significantly reduce the availability of wildlife habitat over the long-term.

## **RECOMMENDATIONS**

### **Tree Removal or Pruned**

There are five (5) trees to be removed with the design as stated in the previous tree removal chart. An additional tree is to have several larger diameter limbs pruned to accommodate the structure height.

Trees to be removed:

- Tree #368 is a 24 inch diameter dead Coast Live Oak.
- Tree #369 is a 24 inch diameter Coast Live Oak in poor condition with decay in the root collar that will be further affected by grading.
- Tree #370 is a 12 inch diameter Coast live oak that is dead.
- Tree #371 is a 30 inch diameter California bay tree in poor condition. This tree is in the proposed building footprint.
- Tree #372 is an eight (8) inch diameter Coast live oak in fair condition within the proposed building envelope.

The one tree to have larger diameter limbs to accommodate construction:

- Tree #373 is a 21 inch diameter Coast live oak that will need two large limbs removed to accommodate the proposed house roof line.

Tree removal contractor shall verify absence of active animal or bird nesting sites prior to any tree removal. If any active animal or bird nesting sites are found prior to tree removal, work shall be stopped until a qualified biologist is consulted for further recommendations.

### **Tree Planting**

Because it is recommended that replacement of removed trees be undertaken replacement planting is necessary. The County requires a 2:1 replacement for removed trees protected by code which measure 24" or larger in diameter at breast height and/or a 1:1 ratio replacement for trees measuring less than 24" in diameter. It is therefore recommended replanting be with eight five gallon Coast live oak in locations with the greatest opening in the stand to allow for a minimum of competition and maximum sunlight (if five gallon is unavailable, smaller sizes may be substituted). Spacing between trees should be at least 8 feet. Occasional deep watering (more than two weeks apart) during the late spring, summer, and fall is recommended during the first two years after establishment.

## Best Management Practices (BMP)s

The health of trees remaining should not be affected if the following practices are adhered to:

- A) Do not deposit any fill around trees, which may compact soils and alter water and air relationships. Avoid depositing fill, parking equipment, or staging construction materials near existing trees. Covering and compacting soil around trees can alter water and air relationships with the roots. Fill placed within the drip-line may encourage the development of oak root fungus (*Armillaria mellea*). As necessary, trees may be protected by boards, fencing or other materials to delineate protection zones.
- B) Pruning shall be conducted so as not to unnecessarily injure the tree. General principals of pruning include placing cuts immediately beyond the branch collar, making clean cuts by scoring the underside of the branch first, and for live oak, avoiding the period from February through May.
- C) Native live oaks are not adapted to summer watering and may develop crown or root rot as a result. Do not regularly irrigate within the drip line of oaks. Native, locally adapted, drought resistant species are the most compatible with this goal.
- D) Root cutting should occur outside of the springtime. Late June and July would likely be the best. Pruning of the live crown should not occur February through May.
- E) Oak material greater than 3 inches in diameter remaining on site more than one month that is not cut and split into firewood should be covered with black plastic that is dug in securely around the pile. This will discourage infestation and dispersion of bark beetles.
- F) A mulch layer up to approximately 4 inches deep should be applied to the ground under selected oaks following construction. Only 1 to 2 inches of mulch should be applied within 1 to 2 feet of the trunk, and under no circumstances should any soil or mulch be placed against the root crown (base) of trees. The best source of mulch would be from chipped material generated on site.
- G) If trees along near the development are visibly declining in vigor, a Professional Forester or Certified Arborist should be contacted to inspect the site to recommend a course of action.

## Tree Protection Standards

Prior to the commencement of any construction activity the following tree protection measures shall be implemented and approved by a qualified arborist or forester:

- Trees located adjacent to the construction area shall be protected from damage by construction equipment by the use of temporary fencing and through wrapping of trunks with protective materials. No stripping of top soil or grubbing of understory shall occur in tree preservation zones.
- Fenced areas and the trunk protection materials shall remain in place during the entire construction period. Should access to the area be necessary a Professional Forester or Certified Arborist must be contacted to inspect the site for a recommended a course of action.
- Fencing shall consist of chain link, snowdrift, plastic mesh, hay bales, or field fence. Existing fencing if appropriate may also be used.
- Fencing is not to be attached to the tree but free standing or self-supporting so as not to damage trees. Fencing shall be rigidly supported and shall stand a minimum of height of four feet above grade and placed to the farthest extent possible from the trees base to protect the area within the trees drip line (typically 10-12 feet away from the base of a tree).
- In cases where access or space is limited for tree protection it is permissible to protect the tree within the 10-12 foot distance after determination and approval by a qualified forester or arborist.
- Soil compaction, parking of vehicles or heavy equipment, stockpiling of construction materials, cleaning of concrete or plaster, and/or dumping of spoils or materials shall not be allowed adjacent to trees on the property especially within or near fenced areas.

During grading and excavation activities:

- All trenching, grading or any other digging or soil removal that is expected to encounter tree roots should be monitored by a qualified arborist or forester to ensure against drilling or cutting into or through major roots. Again, no stripping of top soil or grubbing of understory shall occur in tree preservation zones.
- The project architect and qualified arborist should be on site during excavation activities to direct any minor field adjustments that may be needed.
- Trenching for retaining walls or footings located adjacent to any tree shall be done by hand where practical and any roots greater than 3-inches diameter shall be bridged or pruned appropriately.
- Any roots that must be cut shall be cut by manually digging a trench and cutting exposed roots with a saw, vibrating knife, rock saw, narrow trencher with sharp blades, or other approved root pruning equipment.
- Any roots damaged during grading or excavation shall be exposed to sound tissue and cut cleanly with a saw.

If at any time potentially significant roots are discovered:

- The arborist/forester will be authorized to halt excavation until appropriate mitigation measures are formulated and implemented.
- If significant roots are identified that must be removed that will destabilize or negatively affects the target trees negatively, the property owner will be notified immediately and a determination for removal will be assessed and made as required by law for treatment of the area that will not risk death decline or instability of the tree consistent with the implementation of appropriate construction design approaches to minimize affects, such as hand digging, bridging or tunneling under roots, etc..

## **Tree Pruning**

It is understood that the pruning of retained trees will be expected for this site, especially where the building is to be constructed. Pruning will also include the trees that have deadwood or are exhibiting some minor structural defect or minor disease that must be compensated. Those trees that may require pruning and possible monitoring are the closest to the proposed structure improvements. Trees should be monitored on occasion for health and vigor after pruning. Should the health and vigor of any tree decline it will be treated as appropriately recommended by a certified arborist or qualified forester.

The following are offered as guidelines when pruning

- In general the trees will be pruned first for safety, next for health, and finally for aesthetics.
- Type of pruning is determined by the size of branches to be removed. General guidelines for branch removal are:
  1. Fine Detail pruning- limbs under 2 inch diameter are removed
  2. Medium Detail Pruning – Limbs between 2 and 4 inch diameter
  3. Structural Enhancement – limbs greater than 4 inch diameter.
  4. Broken and cracked limbs-removed will be removed in high traffic areas of concern.

Remedial pruning should occur prior to construction. Following construction, any above ground tree pruning/trimming should be delayed until one year after completion of construction. Following construction, a qualified forester/arborist should monitor trees adjacent to the improvements area and if any decline in health that is attributable to the construction is noted, additional trees should be planted on the site.

## Fire Defensible Space (PRC 4291)

In addition to any pruning for construction or aesthetics, California's Department of Forestry and Fire Protection (CalFire) has instituted a set of rules and guidelines for vegetation management and fire safety for homes in the wildland-urban interface (WUI). These rules have been adopted to reduce the fuels around homes and allow firefighters a better chance to combat the increasing wildfires that have been occurring in California. The law (Public Resource Code 4291) is as follows. With the recent fires and the steep slopes this property is located on special attention must be paid to fire defensible space and vegetation management.

(a) A person who owns, leases, controls, operates, or maintains a building or structure in, upon, or adjoining a mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or land that is covered with flammable material, shall at all times do all of the following:

- A) Maintain around and adjacent to the building or structure a firebreak made by removing and clearing away, for a distance of not less than 30 feet on each side of the building or structure or to the property line, whichever is nearer, all flammable vegetation or other combustible growth. This subdivision does not apply to single specimens of trees or other vegetation that is well-pruned and maintained so as to effectively manage fuels and not form a means of rapidly transmitting fire from other nearby vegetation to any building or structure.
- B) Maintain around and adjacent to the building or structure additional fire protection or firebreak made by removing all brush, flammable vegetation, or combustible growth that is located within 100 feet from the building or structure or to the property line or at a greater distance if required by state law, or local ordinance, rule, or regulation. Grass and other vegetation located more than 30 feet from the building or structure and less than 18 inches in height above the ground may be maintained where necessary to stabilize the soil and prevent erosion.
- C) Remove that portion of any tree that extends within 10-feet of the outlet of a chimney or stovepipe.
- D) Maintain any tree adjacent to or overhanging a building free of dead or dying wood.
- E) Maintain the roof of a structure free of leaves, needles, or other dead vegetative growth.
- F) Provide and maintain at all times a screen over the outlet of every chimney or stovepipe that is attached to any fireplace, stove, or other device that burns any solid or liquid fuel. The screen shall be constructed of nonflammable material with openings of not more than one-half inch in size.

## Agreement by Landowner

The following standard conditions are made a part of all Monterey County Forest Management Plans:

### A. Management Objectives

1. Minimize erosion in order to prevent soil loss and siltation.
2. Preserve natural habitat including native forest, understory vegetation and associated wildlife.
3. Prevent forest fire.
4. Preserve scenic forest canopy as located within the Critical View shed (any public viewing area).
5. Preserve landmark trees to the greatest extent possible as defined below.

### B. Management Measures

1. Tree Removal: No tree will be removed without a Forest Management Plan or an Amended Forest Management Plan.
2. Application Requirements: Trees proposed for removal will be conspicuously marked by flagging or by paint. Proposed removal of native trees greater than six inches will be the minimum necessary for the proposed development. Removal not necessary for the proposed development will be limited to that required for the overall health and long term maintenance of the forest, as verified in this plan or in subsequent amendments to this plan.
3. Landmark Trees: All landmark trees will be protected from damage if not permitted to be removed as a diseased tree, which threatens to spread the disease to nearby healthy trees or as a dangerous tree, which presents an immediate danger to human life or structures. Landmark oaks are trees that are visually, historically, or botanically significant specimens or are greater than 24 inches or more in diameter at breast height (DBH), or more than 1.000 years old.
4. Dead Trees: Because of their great value for wildlife habitat (particularly as nesting sites for insect eating birds) large dead trees will normally be left in place. Smaller dead trees will normally be removed in order to reduce the fire hazard. Dead trees may be removed at the convenience of the owner.
5. Thinning: Trees less than six inches diameter breast height may be thinned to promote the growth of neighboring trees, without first developing a Forest Management Plan.
6. Protection of Trees: All trees other than those approved for removal shall be retained and maintained in good condition. Trimming, where not injurious to the health of the tree, may be performed wherever necessary in the judgment of the owner, particularly to reduce personal safety and fire hazards. Retained trees which are located close to the construction site shall be protected from inadvertent

damage by construction equipment through wrapping of trunks with protective materials, bridging or tunneling under major roots where exposed in foundation or utility trenches and other measures appropriate and necessary to protect the well-being of the retained trees.

7. Fire prevention: In addition to any measures required by the local California Department of Forestry fire authorities, the owner will;

- A) Maintain a spark arrester screen atop each chimney.
- B) Maintain spark arresters on gasoline-powered equipment.
- C) Establish a "greenbelt" by keeping vegetation in a green growing condition to a distance of at least 50 feet around the house.
- D) Break up and clear away any dense accumulation of dead or dry underbrush or plant litter, especially near landmark trees and around the greenbelt.

8. Use of fire (for clearing, etc.): Open fires will be set or allowed on the parcel only as a forest management tool under the direction of the Department of Forestry authorities, pursuant to local fire ordinances and directives.

9. Clearing Methods: Brush and other undergrowth, if removed, will be cleared through methods, which will not materially disturb the ground surface. Hand grubbing, crushing and mowing will normally be the methods of choice

10. Irrigation: In order to avoid further depletion of groundwater resource, prevent root diseases and otherwise maintain favorable conditions for the native forest, the parcel will not be irrigated except within developed areas. Caution will be exercised to avoid over watering around trees.

11. Exotic Plants: Care will be taken to eradicate and to avoid introduction of the following pest species:

- A) Pampas grass
- B) Genista (Scotch broom, French broom)
- C) Eucalyptus (large types)

## **Amendments**

The Monterey County Director of Planning may approve amendments to this plan, provided that such amendments are consistent with the provisions of the discretionary permit or building submittal. Amendments to this Forest Management Plan will be required for proposed tree removal not shown as part of this Plan, when the proposed removal falls within the description of a Forest Management Plan or Amendment to an existing Forest Management Plan.

### **Amended Forest Management Plan**

A) An amended forest Management Plan shall be required when:

1. The Monterey County Director of Planning has previously approved a Forest Management Plan for the parcel.
2. The proposed tree removal as reviewed as part of a development has not been shown in the previously approved Forest management plan

B) At a minimum, the Amended Forest Management Plan shall consist of:

1. A plot showing the location, type and size of each tree proposed for removal, as well as the location and type of trees to be replanted,
2. A narrative describing reasons for the proposed removal, alternatives to minimize the amount and impacts of the proposed tree removal, tree replanting information and justification for removal of trees outside of the developed area if proposed.

## **Compliance**

It is further understood that failure to comply with this Plan will be considered as failure to comply with the conditions of the Use Permit.

**Transfer of Responsibility**

This plan is intended to create a permanent forest management program for the site. It is understood, therefore, that in the event of a change of ownership, this plan shall be as binding on the new owner as it is on the present owner. As a permanent management program, this Plan will be conveyed to the future owner upon sale of the property.

Report Prepared By:

  
Frank Ono, SAF Forester #48004, ISA Certified Arborist #536

April 18, 2019  
Date

Recommendations Agreed to by landowner:

\_\_\_\_\_  
Landowner

\_\_\_\_\_  
Date

Forest Management Plan approved by:

\_\_\_\_\_  
Director of Planning

\_\_\_\_\_  
Date

**PHOTOGRAPHS**



Tree #368 is proposed for removal



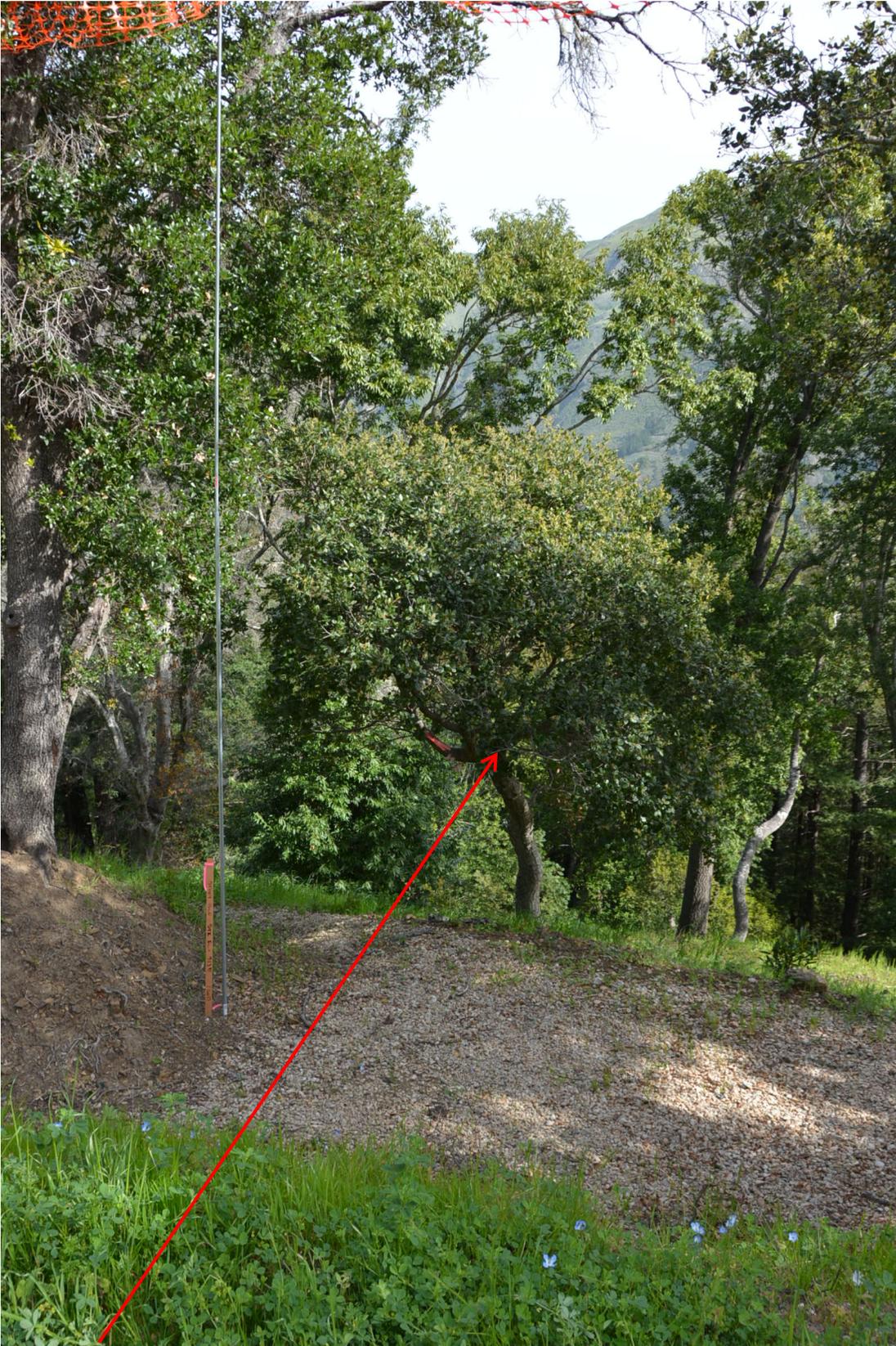
Tree #369 is proposed for removal



Tree #370 is proposed for removal



Tree #371 is proposed for removal



Tree #372 is proposed for removal



Tree #373 will need two large limbs removed to accommodate the proposed structure.

