

# Exhibit D

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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  
 Arborist & Environmental 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

December 19, 2023

Terranova Residence  
 12167 Saddle Road  
 Carmel Valley, CA 93924  
 APN: 416-122-036-000

Subject: Pre-construction tree removal report for 12167 Saddle Road in Carmel Valley

Per *Monterey County Housing & Community Development Department-Planning Services* requirements, a pre-construction tree impact assessment was recently conducted for the undeveloped but previously disturbed and impacted parcel located at 12167 Saddle Road in Carmel Valley (APN: 416-122-036; refer to attached photos, *Figures 1-6*). Based on this tree evaluation and review of the construction design plans for this new single family home construction project (refer to the corresponding site plans that identifies the location of trees in relation to the proposed construction footprint), it has been determined that 3 Coast Live Oaks (*Quercus agrifolia*; identified as *Tree#s 1-3* on the project site plans) will need to be removed in preparation for property development activities. No other trees that have County protection status are proposed for removal. Several additional oaks on the lot that are in the vicinity of planned property development activities will be adequately protected and are not expected to be adversely affected by proposed construction activities.

The location of the two oak trees proposed for removal, as well as trees to be retained and protected are identified on the project site plans. Photos of this property and two trees planned for removal are located at the end of the report (refer to attached photos, *Figures 1-6*). Findings and recommendations are provided herein.

**I. SITE CHARACTERISTICS, PROJECT DESCRIPTION & TREE REMOVAL**

The subject parcel is 5.13 acres in size and is located in a *wildland-urban interface* (WUI) mixed oak woodland and coastal scrub community that is dominated by native mid- to lower-canopy Coast Live Oaks (*Quercus agrifolia*) and upper-canopy Monterey

Pine (*Pinus radiata*) trees. The proposed project site area has been previously mowed so currently is not densely vegetated and has low fuel loads. In the surrounding steeper woodland areas understory vegetation is dominated by a variety of more densely vegetated native coastal scrub flora and exotic weedy vegetation. Lower growing vegetation in the open clearings and woodland understory areas is primarily composed of non-native annual grasses and exotic broadleaf weeds, such as French Broom, Italian Thistle and Milk Thistle, as well as native coastal scrub type vegetation (e.g., Poison Oak, Coyote Brush, Toyon and Sticky Monkey Flower, among others), herbaceous perennials, annual forbs and some native perennial grasses.

The proposed project site is located in a previously disturbed grassland clearing that is primarily composed of non-native annual grasses and broadleaf weeds. However, there are two fairly small native oaks and one non-native introduced Italian Stone Pine (*Pinus pinea*) that are located in the proposed driveway turn around and parking area, as well as one additional immature oak that is located a short distance to the northeast of the main house that will be impacted by construction activities and should be removed in preparation for property development activities. In a few areas in the vicinity of the home construction site there are several fairly small Coast Live Oaks and a few Monterey Pines that will be retained and protected during project operations (refer to tree protection recommendations and guidelines provided later in this report). As previously noted, prior to property development activities beginning it will be necessary to remove the 3 subject Coast Live Oaks addressed in this report (identified as *Tree#s 1-3* on the project site plans; refer to attached photos, *Figures 1-3 & 6*) due to their location within the proposed construction footprint. The remaining trees in the construction site area will be protected with tree protection fencing to avoid and minimize impacts to the primary root zones of the retained trees.

The relatively small 15 inch DBH Coast Live Oak (*Quercus agrifolia*) identified as *Tree#1* on the construction site plans is proposed for removal due to its location within the driveway turn around and parking area (refer to *Figures 1-3*). This oak has a height of approximately 15 feet and is in good physiological health and fair structural condition. Notable structural deficiencies include multiple co-dominant stem attachments in the trunk and mid-stem of the tree. Per County requirements, one 5 to 15-gallon replacement oak will need to be planted on the property to satisfy tree removal permit conditions.

The small and relatively immature 8 inch DBH single stem Coast Live Oak identified as *Tree#2* on the construction plans is located within a few feet of *Tree#1* and will also need to be removed due to its location within the proposed driveway footprint (refer to *Figures 1-3*). This oak has a height of approximately 10 feet and is in fair physiological health and poor structural condition. This oak is somewhat suppressed by the larger and more dominant oak identified as *Tree#1*. Structural deficiencies include poor canopy balance and symmetry due to its suppressed growth habit. As with *Tree#1*, per County

requirements, one 5 to 15-gallon replacement oak will need to be planted on the subject property to satisfy tree removal permit conditions.

The relatively small and immature 13 inch DBH Coast Live Oak (*Quercus agrifolia*) identified as *Tree#3* on the construction site plans is planned for removal due to its proximity to the main house, which increases construction related impacts and elevates combustible fuel loads and wildland fire hazard concerns to the proposed home (refer to *Figure 6*). This oak has a height of approximately 15 feet and is in generally good physiological health and structural condition. Notable structural deficiencies include co-dominant stem attachments in the mid and upper-stem of the tree. Per County requirements, one 5 to 15-gallon replacement oak will need to be planted on the property to satisfy tree removal permit conditions.

The 15 inch DBH Italian Stone Pine (*Pinus pinea*) that is located in close proximity to the two oaks identified as *Tree#s 1 & 2* (refer to *Figures 1 & 2*) will also need to be removed, but does not require a County tree removal permit due to it being introduced to the property and not native to the region.

It should be noted that at this time biotic disorders (e.g., disease, insect pests, decay) and/or significant structural defects appear to be absent in levels that are detrimental to the health and welfare of trees on the subject property. The 3 oaks proposed for removal, as well as many of the other trees on the property, have fairly dense and healthy canopies consisting of green foliage, which indicates fair to good physiological health and condition. Significant chlorosis or necrosis in the crowns (e.g., limb or branch dieback), which would indicated dead, dying and/or rapidly declining trees, was not observed during the assessment.

The remaining oak and pine trees on the property will be retained and protected from grading and construction activities for the duration of the property development project (refer to tree protection recommendations and guidelines provided in this report). Tree and resource protection measures will be properly inspected and maintained during the project to assist in preserving and protecting ecological resources and minimizing impacts to trees and woodland habitat.

During project operations the trees on the property will be routinely monitored and adequately protected, and in the unlikely event that large primary roots are encountered the project arborist should be notified and consulted to assist in providing guidance and recommendations to minimize impacts to 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, but none of these treatments are anticipated to be necessary.

Landscaping activities associated with property development will be designed and implemented in manner that will avoid and minimize impacts to nearby oaks, reduce water use, and mitigate wildland fire hazard concerns in this WUI community. 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 oak 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, it will be necessary to prune several oak trees that are located in relatively close proximity to the proposed driveway and homesite in order to maintain and preserve tree health, provide adequate clearance around structures, reduce combustible fuel loads (i.e., ladder fuels) and improve defensible space for wildland fire protection. Pruning operations should occur during the proper time of year (preferably fall through early winter) and will utilize proper pruning best management practices (BMP's) to minimize impacts to trees.

The ecological impacts of proposed tree removal will be minimal due to limited tree removal (i.e., the removal of only 3 small oaks) on a woodland lot that has several trees, as well as the planting of 3 replacement oaks to comply with County tree removal permit conditions that will assist in supporting and sustaining the health and character of this mixed oak woodland vegetation community.

It should be noted that if there are any naturally occurring oak seedlings and saplings located within or in close proximity to the project site, these young trees should be protected from construction activities or, alternatively, saved and relocated to a safe and suitable area on the property and cared for until they are properly established.

Tree removal and/or pruning operations should be avoided during the bird nesting season, which in Monterey County may begin as early as February and continue through August. If tree work is necessary during this time period a nesting assessment is advised to determine if any nesting birds are present. A recent tree assessment and site inspection determined that actively nesting birds or raptors are presently not occurring within or directly adjacent to the property development site; however, depending on when tree removal and 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 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.

In regards to tree replacement, three (3) 5 to 15-gallon container size Coast Live Oak (*Quercus agrifolia*) replacement trees of good physiological health and structural condition shall be planted on the subject property to replace the 3 removed oaks and to help preserve and sustain the long-term health, viability and character of this mixed oak woodland environment. The 3 replacement trees should be acquired from a local plant nursery that has a good selection of specimens that are free from harmful pathogens, insect pests and/or significant structural disorders. Furthermore, the replacement oak plantings should be planted during the appropriate time of year (preferably fall or winter) using proper tree planting techniques and best management practices, and should be planted in suitable locations that will support healthy establishment and maturation. The replacement plantings should be provided the necessary irrigation, mulching and protection (i.e., welded wire fence secured with T-posts around the plantings to protect from wildlife) until they are successfully established. Successful completion of this County tree removal permit compliance action shall be achieved when the 3 replacement plantings survive a one-year monitoring period.

## **II. CONSTRUCTION TREE PROTECTION MEASURES**

Per *Monterey County Housing & Community Development Department-Planning Services* requirements and resource preservation BMP's, the following tree and resource protection measures shall be implemented for this property development project that is planned for 12167 Saddle Road in Carmel Valley. 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 project operations and should be provided in case they are needed. The proper implementation of tree and resource preservation 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/or design team and contractor during a scheduled pre-construction meeting, 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 high visibility exclusionary fencing that clearly defines the work area, limits unnecessary disturbance to surrounding areas, and protects the critical root zone (i.e., CRZ area defined by the outermost portion of the canopy dripline, 360 degrees around the tree, or a 10 to 12

distance from the base of the tree, whichever is greater) of individual trees and/or tree groupings. For protecting the canopy dripline and critical root zone (CRZ) areas 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, or in some cases consideration should be given to using a much stronger and more durable chain link fencing to protect the most valuable and important trees located in the vicinity of proposed construction activities (refer to the 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 impacting critical roots. Perform regular monitoring and inspections of tree protection measures, as well as any necessary repairs, modifications and maintenance on a as needed basis for the duration of the project.

**2)** 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.

**3)** If it's necessary to perform grading activities within the canopy dripline and critical root zone (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; and 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.

**4)** If it is necessary to perform grading and construction activities within 5 feet of trees install trunk and stem protection measures (e.g., 2x4 lumber forming protective barrier around circumference of trunk and lower stem of tree). Tree protection measures should be securely installed to 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.

**5)** If it is necessary to temporarily store construction materials or equipment within the canopy dripline (i.e., critical root zone [CRZ]) of nearby trees (which will be avoided), apply 2 to 4 inches of clean and properly sourced woodchip mulch to limit soil disturbance and prevent soil compaction within the critical root zone area. In some cases



a deeper and more protective mulch layer may be necessary.

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 critical root zone (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 grade 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. Tree roots severed or significantly 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.

7) Healthy and young oaks in particular can be fairly tolerant of low to moderate levels of root system impacts; however, they are generally less tolerant to increases (i.e., introduction of fill material) or decreases (i.e., cut slopes) in natural grade. 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..

**8)** Avoid storing construction tools, materials and equipment within the critical root zone (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 critical root zone areas. As previously noted, 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 to prevent soil compaction and root zone disturbance.

**9)** 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, 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 decay, disease and 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 (e.g., disease, decay and/or insect pests) that can adversely affect the health and structural integrity of trees. It should be noted that pruning involving the removal of 30% or more of living canopy material requires a County permit. Additional pruning BMP's and guidelines are available upon request.

**10)** 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 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 in the previous sentence, perform necessary pruning to reduce and mitigate hazard concerns to occupied structures and areas with human activity; and perform necessary pruning to reduce wildland fire hazards and combustible fuel loads, and to improve property protection and defensible space around structures.

11) Perform pre-construction meeting with contractor 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.

### III. CONCLUSION

In conclusion, the 3 Coast Live Oaks addressed in this report (identified as *Tree#s 1-3* on the project site plans) located on the property at 12167 Saddle Road in Carmel Valley are proposed for removal due to impacts associated with property development activities. The remaining trees located in the vicinity of the proposed driveway and homesite will be retained and protected for the duration of the project.

Additionally, in the interest of complying with *Monterey County Housing & Community Development Department-Planning Services* tree removal permit conditions and sustaining the health and character of this mixed oak woodland environment, three 5 to 15-gallon container size Coast Live Oak replacement trees shall be planted in suitable locations on the subject property and survive a one-year monitoring period.

Best regards,

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*12-19-23*  
Date

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THIS REPORT IS BASED ON A LIMITED VISUAL INSPECTION FOR OBVIOUS DEFECTS AND OF TREE CONDITION 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 SUCH 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.

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Figure 1. The two oaks proposed for removal (identified as Tree#s 1 & 2) due to construction impacts are pointed out with yellow arrows. The Italian Stone Pine proposed for removal (red arrow) is non-native and does not require a County tree removal permit.



Figure 2. Two fairly small oaks proposed for removal are to the right and Italian Stone Pine is in center of photo. Other nearby trees will be retained and protected during construction activities.





Figure 3. Two oaks proposed for removal. Tree#1 is to the left and Tree#2 is to the right.



Figure 4. Proposed homesite and a few other oaks that will be retained and protected.





Figure 5. Another view of proposed homesite and trees that will be retained and protected.



Figure 6. The fairly small and immature oak identified as Tree#3 is also proposed for removal.

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