Exhibit C

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THOMPSON <u>WILDLAND MANAGEMENT</u>

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

May 2, 2016

Mr. Anthony Nicola 113 San Benancio Road Salinas CA. 93908 APN: 416-221-041-000

Subject: 113 San Benancio Road Forest Management Plan

Per Monterey County permit requirements, an evaluation of trees located at 113 San Benancio Road in Salinas (APN: 416-221-041) was recently conducted to assess tree health, proposed construction impacts, and to document and record trees that are proposed for removal in preparation for home development activities that are currently in the planning stages. More specifically, this assessment involved performing a ground level visual inspection of trees on the property to assess general physiological health and structural condition, determine suitability for retaining trees in the developed landscape, document and record trees that are proposed for removal, 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 trees are candidates for removal, and provide tree protection recommendations and best management practices.

The location of trees proposed for removal are identified by assigned numbers 1-21 on the *Exhibit A* Property Map. The characteristics and condition of these 21 trees are identified in the corresponding *Exhibit B* Tree Removal Spreadsheet. Photos of tree groupings that are proposed for removal are located at the end of the report (refer to *Figures 1-8*). Findings and recommendations are provided herein.

I. SITE CHARACTERISTICS & DESCRIPTION

The subject property at 113 San Benancio Road is located in a suburb community of Salinas off of the Highway 68 corridor. A majority of the homes in this somewhat rural residential community are occurring in relatively close proximity to one another. A

majority of the open-space areas in this region consist of natural habitat communities, such as oak woodland, oak savannah, annual grassland, coastal scrub and chaparral habitat; however introduced vegetation and non-native invasive weeds are ubiquitous.

This particular residential community is located in a oak woodland dominated environment that is significantly influenced by seasonally temperate weather conditions. Native tree species inhabiting this area primarily consist of indigenous mid to lower canopy Coast Live Oak (*Quercus agrifolia*) trees and to a lesser extent mature upper canopy Monterey Pine (*Pinus radiata*) trees, as well introduced species such as Blue Gum Eucalyptus that are also common in the area. Plant composition on this specific undeveloped woodland lot consist of a fairly dense population of mature but fairly small in stature Coast Live Oak trees ranging from 15 to 30 feet in height, and understory vegetation is dominated by non-native annual grasses (e.g., Ripgut Brome) and native forbs, such as Lupine and California Poppy (refer to *Figure 1*).

Soils on the property appear to be stable and sufficient for supporting healthy flora, and wind direction is predominantly out of the southwest. It should be noted that while there are several mature oak trees residing on the property natural recruitment and regeneration of indigenous tree species is currently deficient in this wildland-urban interface environment. Additionally, special status plant and animal species, sensitive habitat, and/ or nesting birds were not observed on the property during the site assessment.

In regards to tree removal, a total of twenty one (21) Coast Live Oak trees (identified as tree#s 1-21) are proposed for removal due to impacts associated with planned home development activities. A majority of these tree are in fair to good health and condition (refer to *Exhibit B* Tree Removal Spreadsheet) but need to removed due to their location within or directly adjacent to the proposed construction footprint (refer to *Exhibit A* Property Map).

II. METHODOLOGY

For this report, a ground level visual assessment of the subject trees 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.

Native specie trees 6 inches DBH (diameter at breast height) or larger are required to be recorded for removal and will require replacement if tree removal is approved.

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

trees.

In regards to attachments included in this report, as previously noted *Exhibit A* is a map and project plans for the lot that shows the location of trees in relation to proposed structures and other property features, and *Exhibit B* is a spreadsheet identifying the tree number, specie, DBH (diameter at breast height), crown class, form, health/vigor class, structural condition, and replacement ratio of the trees proposed for removal. Additionally, photos of tree groupings proposed for removal are located at the end of the report (refer to *Figures 1-8*).

III. TREES PROPOSED FOR REMOVAL & ECOLOGICAL IMPACTS

In regards to tree removal, a total of 21 Coast Live Oak trees that are larger than 6 inch DBH (diameter at breast height) are proposed for removal (refer to *Figures 1-8*). These trees are clearly identified with yellow flagging tape on the property and have been assigned numbers 1-21 (refer to *Exhibit A* Property Map and *Exhibit B* Tree Removal Spreadsheet).

Generally speaking, a majority of the Coast Live Oak trees that dominate this woodland property are in fair to good physiological and structural condition. Biotic and/or abiotic disorders presently appear to be absent in levels that are detrimental to sustaining tree health and viability. Tree removal is due to the subject trees being located within or directly adjacent to the proposed construction footprint, with the exception of one clearly declining 8 inch diameter oak (tree #16) located a short distance outside of the building envelope that should be removed due to its rapidly deteriorating condition. Trees located directly adjacent to proposed construction and grading activities should often be removed due to significant and unavoidable root system impacts that will compromise the health and structural integrity of trees.

The ecological impacts of proposed tree removal will be minimal due to the fact that adjacent stands of oak trees will be retained and protected for the duration of the home construction project. Furthermore, removed oaks will be replaced with 5-gallon size oak plantings at a 1:1 replacement ratio, which will assist in mitigating impacts to woodland habitat.

As previously stated, the 21 Coast Live Oak trees addressed in this report are recommended for removal. Per Monterey County tree preservation ordinances and resource protection best management practices (BMP's), the remaining trees on the property will be retained and protected from development activities (refer to tree protection BMP's provided in this report). Tree and resource protection measures will assist minimizing harmful impacts to trees and woodland habitat, and will assist in preserving and sustaining ecological resources.

IV. RECOMMENDATIONS

A. Tree Removal & Replacement:

For the reasons outlined in the previous sections, permission is being requested to remove 21 Coast Live Oak trees (identified as tree#s 1-21; refer to *Exhibit A* Poperty Map and *Exhibit B* Tree Removal Spreadsheet) that are located within or directly adjacent to the proposed home development footprint. It should be noted that despite the best efforts of the architect and property owner, it is necessary for the subject trees be removed (and replaced with young, healthy trees) in order for the proposed home design to be developed.

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 early August, a nesting assessment is advised to determine if any nesting birds are present. A recent tree and site inspection detected no actively nesting birds occurring within or directly adjacent to the area where tree removal operations are proposed; 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 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, best management practices (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.

Following the completion of construction activities a total of twenty one (21) 5-gallon container size Coast Live Oak (*Quercus agrifolia*) trees of good structural and vascular health shall be planted on the respective property to satisfy *Monterey County* tree replacement requirements, mitigate tree impacts, and to help sustain the long-term health and viability of this oak woodland environment. This replacement number is based on a 1:1 replacement ratio that is mandated by Monterey County Planning Department for native specie trees that are 6-23 inch DBH. Replacement trees shall be acquired from a local native plant nursery with a healthy selection of specimens that are free from harmful pathogens, insect pests and/or structural disorders. Furthermore, the replacement plantings should be planted during the appropriate time of year (i.e., fall or winter) using proper tree planting techniques and best management practices, and should be planted in a suitable location that will support healthy establishment and long-term viability.

Successful completion of this Monterey County tree preservation compliance action shall be achieved when the replacement plantings survive a two-year monitoring period.

B. Construction Tree Protection Measures:

Per Monterey County tree preservation ordinances and resource protection BMP's, the following tree and resource preservation measures shall be implemented for this home construction project. Proper execution of tree and resource protection BMP's and regular construction site monitoring will assist in safeguarding and sustaining the health and welfare of trees and habitat on the property. The location of tree protection measures will be determined on-site by the project arborist and other involved parties, and tree and resource preservation measures will be regularly inspected and properly maintained 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., canopy dripline) of individual trees and tree groupings. Perform necessary repairs, modifications and maintenance on a as needed basis.

2) Install appropriate sedimentation control measures (e.g., silt fence) along downslope perimeter of 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 necessary maintenance and improvements to ensure that erosion & sedimentation control measures are functioning effectively. It should be noted, that erosion problems and sediment deposition around trees can adversely affect tree health and stability.

3) Where grading and construction activities are occurring within 3 feet of trees install trunk and stem protection measures (e.g., 2x4 lumber forming protective barrier around circumference of 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 stress and maximize wound healing.

4) Where possible avoid damaging or severing roots located within the critical root zone (i.e., canopy dripline) of trees, especially roots that are 2 inches diameter or larger. Construction footings should be designed and excavation cuts performed in a manner to minimize impacts to primary roots. If significant roots are encountered efforts should be made to carefully excavate (e.g., tunnel or dig) under or around primary lateral roots. 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.

5) 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. If it is unavoidable and necessary to temporarily store or stockpile materials and equipment within the dripline of trees, apply 3-5 inches of clean and properly sourced woodchip mulch to prevent significant soil compaction and root zone disturbance.

6) Where possible avoid altering the natural grade within the critical root zone of trees to reduce the likelihood of causing stress, decline or mortality. Lowering natural grade can result in significant root damage, and elevating the grade (i.e., introducing fill material, particularly around the lower trunk and root crown) can lead to trunk decay, crown rot, and/or root decay disorders that are detrimental to the health and structural integrity of trees.

7) If tree pruning is necessary it is important to utilize proper pruning BMP's that will assist in minimizing harmful impacts to trees. Tree pruning should ideally be performed during the fall through early winter months. A general principal 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. Excessive pruning stresses trees by depleting energy reserves and reducing food making processes (i.e., photosynthesis), which compromises a trees ability to replenish essential reserves during periods of stress (e.g. root disturbance and drought conditions). Additionally, it creates 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 living canopy material requires a County permit. Additional pruning BMP's and guidelines are available upon request.

8) Regularly perform 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. Additionally, 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.

C. Tree Repair & Replacement:

Per tree care BMP's and tree preservation ordinances, any trees damaged during property improvement operations should be promptly repaired and/or treated per arborist specifications. Remedial or corrective 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, the 21 Coast Live Oak trees addressed in this report that are located on the undeveloped lot at 113 San Benancio Road (APN: 416-221-041) should be granted permission for removal (refer to *Figures 1-8*). These trees require removal in support of proposed home construction operations. Additionally, the necessary tree and resource protection measures shall be installed prior to construction activities commencing and properly maintained for the duration of the project.

Lastly, in the interest of complying with *Monterey County* tree preservation ordinances and supporting woodland habitat and ecological stewardship, twenty one 5-gallon Coast Live Oak (*Quercus agrifolia*) replacement trees of good structural and vascular health shall be planted in appropriate locations on the respective property and monitored for a two-year period.

Thank you and please let me know if you have any questions or need additional information.

Best regards,

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

Thompson Wildland Management (TWM) 57 Via Del Rey Monterey, CA. 93940 Office (831) 372-3796; Cell (831) 277-1419 Email: <u>thompsonwrm@gmail.com</u>; Website: <u>www.wildlandmanagement.com</u> THIS REPORT HAS BEEN PREPARED FOR THE EXCLUSIVE USE OF CLIENT. THOMPSON WILDLAND MANAGEMENT (TWM) ACCEPTS NO RESPONSIBILITY FOR ITS USE BY OTHER PERSONS.

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Figure 1. View of proposed home development site from adjacent roadway. Coast Live Oaks proposed for removal have been assigned numbers and are identified with yellow flagging tape.



Figure 2. Coast Live Oaks #s 1 & 2 are proposed for removal.



Figure 3. Coast Live Oaks #s 3, 4 & 5 are proposed for removal.



Figure 4. Coast Live Oaks #s 6-11 are proposed for removal. Tree #11 is faintly visible in background.



Figure 5. Coast Live Oaks #s 12-17 are proposed for removal. Tree #17 is difficult to see in background.



Figure 6. Coast Live Oak # 18 (left of center) is proposed for removal. Two flagged oaks in center and right of center will be retained.



Figure 7. Coast Live Oaks #s 19 & 20 are proposed for removal.



Figure 8. Coast Live Oak # 21 (left side of photo) is proposed for removal.