Exhibit E

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Tree Resource Assessment
Patterson Residence

Prepared for:

Mr. and Mrs. Anne and Richard Patterson

Prepared by:

Frank Ono
Urban Forester
Member Society of American Foresters #48004
ISA Certified Arborist #536
1213 Miles Avenue
Pacific Grove, CA 93950

February 23, 2017

Owner:

Mr. and Mrs. Anne and Richard Patterson
3900 Via Mar Monte
Carmel, CA 93923

Architect:

William C. Mefford, Architect
PO Box 1072
Pacific Grove, CA 93950

Forester and Arborist

Frank Ono, Member SAF #48004, ISA Certified Arborist #536
F.O. Consulting
1213 Miles Ave
Pacific Grove, CA 93950

SUMMARY

The project proposes a new one story 3090 square foot single family residence with a 590 square foot attached garage on a vacant lot. Development will require removal of six Monterey pines and excavation near several other pines and a Monterey cypress. No landmark sized (24" diameter or greater) trees are to be removed. 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 regarding the project.

INTRODUCTION

This tree assessment/arborist report is prepared for Anne and Richard Patterson, the owners of the property located at the corner of Lopez Road and Forest Way, Pebble Beach CA by Frank Ono, Urban Forester and Certified Arborist (member Society of American Foresters #48004 and International Society of Arboriculture Certified Arborist #536) due to the proposed construction. The Greater Monterey Penninsula Land Use Plan (2010 GMP supplemental policy 3.5) and Monterey County Zoning Ordinance Title 21 identify native Coast live oak, Monterey pine and Monterey cypress trees as species requiring protection and special consideration for management.

ASSIGNMENT/SCOPE OF PROJECT

To ensure protection of the tree resources on site, the property owners, Mr. and Mrs. Richard Patterson, have requested an assessment of the trees in proximity to proposed development areas. The findings of the report are to be documented in an arborist report to work in conjunction with other conditions for approval of the building permit application. 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 William C. Mefford, Architect.
- Make recommendations for alternative methods and preconstruction treatments to facilitate tree retention.
- Create preservation specifications, as it relates to a Tree Location/Preservation Map.
- Determine the quantity of trees affected by construction that meet “Landmark” criteria as defined by the County of Monterey, Title 21 Monterey County 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 dated January 26, 2017 by Mr. William C. Mefford, Architect, 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. It is not the intent of this report to be a monetary valuation of the trees or provide risk assessment for any tree on this parcel, as any tree can fail at any time. No clinical diagnosis was performed on any pest or pathogen that may or may not be present. In addition to an inspection of the property, F.O. Consulting relied on information provided in the preparation of this report (such as, surveys, property boundaries, and property ownership) and must reasonably rely on the accuracy of the information provided. F.O. Consulting shall not be responsible for another's means, methods, techniques, schedules, sequence or' procedures, or for contractor safety or any other related programs; or for another's failure to complete the work in accordance with the plans and specifications.

PURPOSE AND GOAL

This tree assessment report is prepared for this parcel due to proposed construction activities located at Forest Way, Pebble Beach CA. The purpose of the assessment is to determine trees affected by the proposed project and to recommend their treatment. Oak trees, Monterey cypress, and Monterey pine trees are considered protected trees as defined by the County of Monterey, Title 21 Monterey County Zoning Ordinance unless otherwise proven to be an introduced or planted species.

The goal of this report is to protect and maintain the Del Monte Forest Area 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 to aid in planning to offset any 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.

SITE DESCRIPTION

1) Assessor's Parcel Number: 007-692-005-000

2) Location: Forest Way, Pebble Beach CA

3) Parcel size: 12,469 square feet.

4) Existing Land Use: The parcel is zoned residential MDR/B-6-D-RES.

5) Slope: The parcel ranges from mild to somewhat steep slopes. Slopes range from 10 percent to over 15 percent.

6) Soils: The parcel is located on soils classified by the Monterey County Soils report as Narlon Loamy fine sandy soils (NcE 15-30 percent slopes). The soils report states "This is a strongly sloping and moderately steep soil on uplands. It has a profile similar to the one described as representative of the series, but depth to the clay subsoil is 12 to 20 inches. Slopes are mostly 12 to 20 percent. Runoff is medium, and the erosion hazard is moderate. The soil has moderately low productivity for Monterey pine (site index averages about 60 - based on the premise that trees 60 to 90 feet are common with some up to 100 foot heights are attained in 80 to 100 years). The seedling mortality is low, and the wind throw hazard is severe. The equipment limitation is severe".

7) Vegetation: The vegetation on site is composed primarily of a few native Monterey pines, Planted Monterey cypress with oak and ornamental understory.

8) Forest Condition and Health: The stand of trees and health are evaluated with the use of the residual trees combined with surrounding adjacent trees as a complete stand. The site is vacant and surrounding forest canopy is fragmented. The woodland in this area is a closed pine forest. The stand has a mixture of dominant native Monterey pine and planted Monterey cypress in varying condition.

BACKGROUND

Assessment focuses on incorporation of the preliminary location of site improvements coupled with consideration for the general goals of site improvement desired of the landowner. Proposed improvements assessed included preserving existing trees to the greatest extent feasible, maintaining the view shed and general aesthetic quality of the area while complying with Monterey County Codes. The study of individual trees as it relates to this project determined treatments necessary to complete the project and meet the goals of the landowner. Trees within and immediately adjacent proposed development area were located, measured, inspected, flagged 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 vacant with no existing structures or hardscape. My understanding is with the exception of the trees identified for removal, the remaining existing trees are to remain. No landmark size trees are to be removed.
- The site map submitted to me shows excavation and installation of a concrete paver driveway to access the house and be close to trees #22 and #32. These trees appear to be at a distance they will not be affected.
- The building footprint or grading will affect pine trees #23, #24, #27, #28, #29, and #30. Pine tree #31 may be affected by grading and the removal of trees but is to be retained as it is a smaller tree and leans away from the building.

Chart of Trees Observed

ID#	Diameter	Species	Condition	Remove	Comments
22	22	M. Pine	Fair		
23	16	M. Pine	Fair	X	In Building Footprint
24	16	M. Pine	Fair	X	Adjacent Building Footprint
25	8	M. Pine	Fair		
26	16	M. Pine	Fair		
27	8	M. Pine	Poor	X	In Building Footprint, Stem Decay
28	18	M. Pine	Poor	X	In Building Footprint, Exposed Roots, Uplifted Soil
29	16	M. Pine	Poor	X	In Building Footprint, Beetles
30	18	M. Pine	Poor	X	In Building Footprint, Beetles
31	14	M. Pine	Fair		May be Compromised By Removing #30, Beetles
32	18	M. Cypress	Good		
33	30	M. Cypress	Good		

CONCLUSION/PROJECT ASSESSMENT

This proposal to build a single family residence and expand the driveway and garage is planned to maintain the existing forested environment, allowing the forest to continue to exist and regenerate over time. Tree removal for this site (six Monterey pines) is proposed and expected due to construction or grading. Remaining trees are expected to survive if properly protected and monitored. The remainder of the property contains tree cover, which will remain undisturbed. No watercourses are near the planned construction.

Short Term Affects

Site disturbance will occur during building construction. Short term site affects are confined to the construction envelope and immediate surroundings some trees may be trimmed and root systems reduced. The pruning of tree crowns above 30% and reduction of root area may have a short term effects on those trees treated, including a reduction of growth and potential limb dieback.

Long Term Affects

No significant long term affects to the forest ecosystem is anticipated. The site is not heavily forested. The project as proposed is not likely to significantly reduce the availability of wildlife habitat over the long term as there are surrounding forested areas which are to remain untouched. The site was evaluated for the following:

- Soil erosion; Slopes where construction is to occur is gentle to moderate and may be addressed by appropriate measures;
- Water Quality: No water courses are located on the property. The removal of the trees will not substantially lessen the ability for the natural assimilation of nutrients, chemical pollutants, heavy metals, silt and other noxious substances from ground and surface waters;
- Ecological Impacts: The removals will not have a substantial adverse impact upon existing biological and ecological systems, or create climatic conditions which affect these systems. The site is located near a golf course and residential areas, proposed removals will not create conditions which may adversely affect the dynamic equilibrium of surrounding natural associated systems;
- Noise Pollution: The removals will not significantly increase ambient noise levels to the degree that a nuisance is anticipated to occur;
- Air Movement: The removals will not significantly reduce the ability of the existing vegetation to reduce wind velocities to the degree that a nuisance is anticipated to occur;
- Solar shade or sunlight: Canopy coverage on site is open, several of the removals are of trees less dominance or of poor quality trees; their removal will have no significant negative effects to the area;
- Wildlife Habitat: As stated previously the site has an open fragmented canopy. The tree removals does not appear it will significantly reduce available habitat for wildlife existence and reproduction or result in the immigration of wildlife from adjacent or associated ecosystems.

RECOMMENDATIONS

Tree Removal

The following trees are identified as trees which will be impacted by construction and need removal. Tree identified for removal outside the building footprint is a tall slender tree capable of wind throw failure when roots are disturbed.

23	16	M. Pine	Fair	X	In Building Footprint
24	16	M. Pine	Fair	X	Adjacent Building Footprint
27	8	M. Pine	Poor	X	In Building Footprint, Stem Decay
28	18	M. Pine	Poor	X	In Building Footprint, Exposed Roots, Uplifting Soil
29	16	M. Pine	Poor	X	In Building Footprint, Beetles
30	18	M. Pine	Poor	X	In Building Footprint, Beetles

Tree Replacement Planting

Replacement of all protected trees (native trees 6 inches in diameter or greater) to be removed is required unless shown to be a hardship or detrimental to the long term health of the remaining habitat. A one to one ratio (1:1) is recommended for the replanting of pines in order to maintain pine presence on the site. Trees should be planted in those areas with the greatest openings in the stand to allow for minimum plant competition and maximum sunlight. Replacement trees should be five gallon stock and spacing between trees should be at least 8 feet. The site appears to be enough light or room to plant and successfully regenerate at least six trees on the parcel. Occasional deep watering (more than two weeks apart) during the late spring, summer, and fall is recommended during the first two years after establishment.

Success Criteria for Plant Re-establishment

Implementation of the success criteria is recommended to be a condition of project approval to ensure the survivability and proper growth of the replacement or relocation of trees. Replant success criteria will be defined to meet a 100% survival rate or better within one year of project completion. A report shall be prepared by a qualified forester or arborist and submitted to the Planning Department for review and approval of the Director of Planning describing reforestation activities and success rates or adjustments for previous unsuccessful transplanting.

Tree Pruning

It is to be understood that the pruning of retained trees may be expected for this site, especially near the building construction areas. Pruning will include trees with deadwood, minor structural defects or disease that must be compensated, and possibly vehicle or pedestrian clearance. 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. 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 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.

Tree Protection

Prior to the commencement of construction activities:

- Trees located adjacent to construction areas shall be protected from damage by construction equipment by the use of temporary fencing and through wrapping of trunks with protective materials.
- Fencing shall consist of chain link, snowdrift, plastic mesh, hay bales, or field fence. Existing fencing may also be used.
- Fencing must not be to be attached to the tree. It shall be 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.
- Soil compaction, parking of vehicles or heavy equipment, stockpiling of construction materials, and/or dumping of materials should not be allowed adjacent to trees on the property especially within fenced areas.
- Fenced areas and the trunk protection materials must remain in place during the entire construction period.

During grading and excavation activities:

- All trenching, grading or any other digging or soil removal that is expected to encounter tree roots will be monitored by a qualified arborist or forester to ensure against drilling or cutting into or through major roots.
- The project arborist should be on site during excavation activities to direct any minor field adjustments that may be needed.
- Trenching or excavation for walls and driveway located adjacent to any tree should be done by hand where practical and any roots greater than 3-inches diameter should be bridged or pruned appropriately.
- Any roots that must be cut should 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 should be exposed to sound tissue and cut cleanly with a saw.

If at any time potentially significant roots are discovered:

- The project 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..

Best Management Practices to Observe (BMP)

The following best management practices must be adhered to:

A) Tree service Contractors will verify animal or bird nesting prior to tree work. If nesting activity of migratory birds are found, work must stop and a wildlife biologist consulted before commencing work (the typical bird nesting season ranges from February 22 to August 1).
B) 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 rot fungus (Armillaria mellea). As necessary, trees may be protected by boards, fencing or other materials to delineate protection zones.
C) 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.
D) Native live trees 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.
E) 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.
F) Tree material greater than 3 inches in diameter remaining on site more than one month that is not cut and split into firewood must be covered with thick clear plastic that is dug in securely around the pile to discourage infestation and dispersion of bark beetles.
G) A mulch layer up to approximately 4 inches deep should be applied to the ground under selected trees 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.
H) 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.

Report Prepared By:

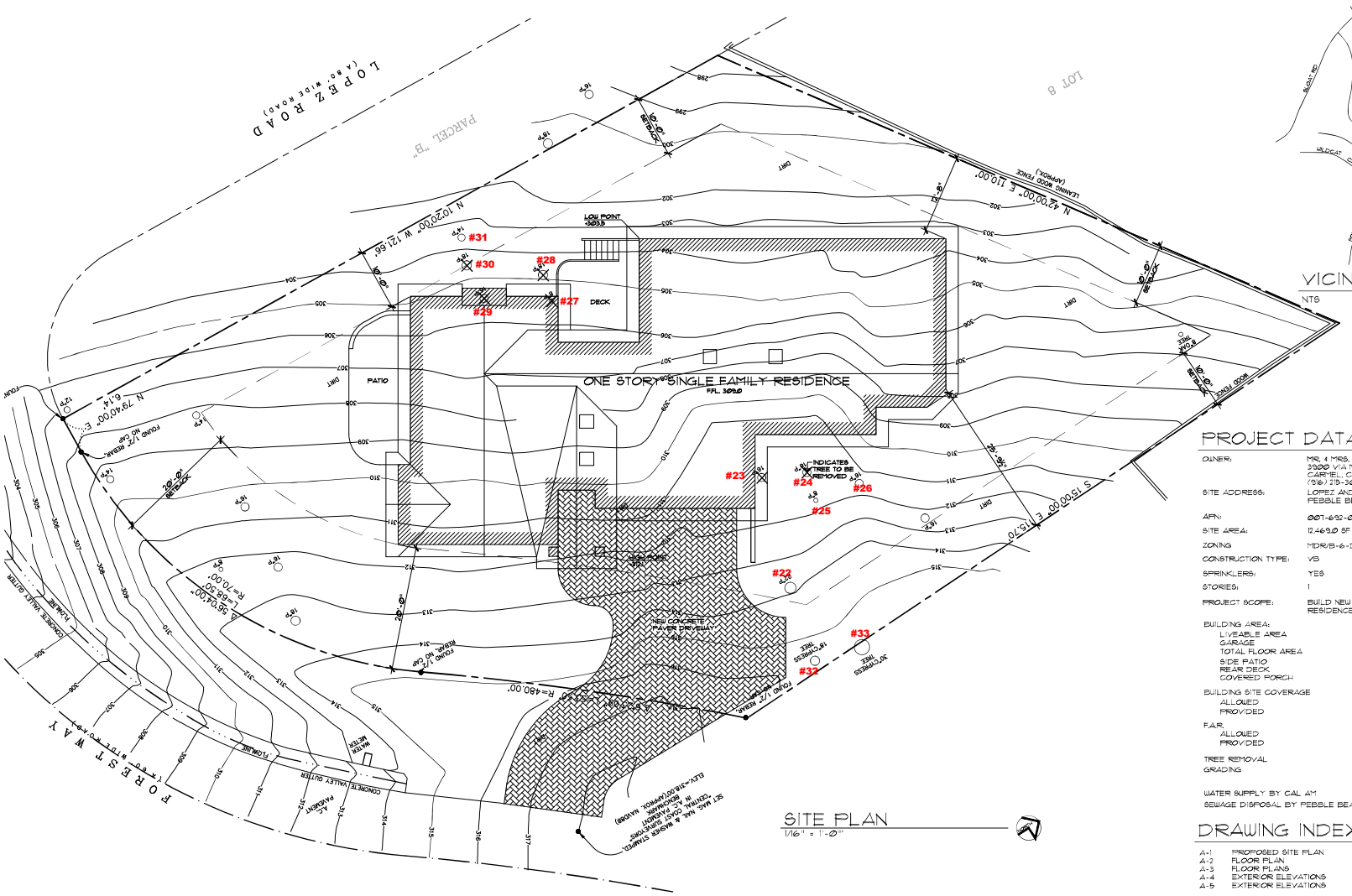
_____ February 23, 2017

Frank Ono, Member SAF #48004 and ISA Certified Arborist #536 Date

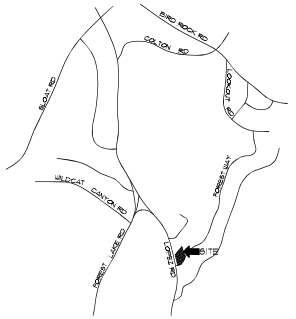
PHOTOGRAPHS

Tree #23 and #24

Trees #27-28



SITE PLAN
1/16" = 1'-0"



VICINITY MAP
NTS

PROJECT DATA

OWNER:	MR. & MRS. RICHARD PATTERSON 3900 VIA MAR MONTE CARMEL, CA 93923 (916) 215-3071
SITE ADDRESS:	LOPEZ AND FOREST WAY PEBBLE BEACH, CA
APN:	007-692-005
SITE AREA:	12,469.0 SF
ZONING	MDR/B-6-D-RES
CONSTRUCTION TYPE:	VB
SPRINKLERS:	YES
STORIES:	1
PROJECT SCOPE:	BUILD NEW 3090 SF ONE STORY, SINGLE FAMILY RESIDENCE INCLUDING 530 SF ATTACHED GARAGE.

BUILDING AREA:		
LIVEABLE AREA		2560.0 SF
GARAGE		530.0 SF
TOTAL FLOOR AREA		3090.0 SF
SIDE PATIO		233.0 SF
REAR DECK		186.0 SF
COVERED PORCH		79.0 SF
BUILDING SITE COVERAGE		
ALLOWED		4364.2 SF (35%)
PROVIDED		3590.0 SF (28.8%)
F.A.R.		
ALLOWED		4364.2 SF (35%)
PROVIDED		3090.0 SF (24.8%)
TREE REMOVAL		MONTEREY PINES 18", 34", 24"
GRADING	CUT	300 CYD
	FILL	15 CYD

WATER SUPPLY BY CAL AM
SEWAGE DISPOSAL BY PEBBLE BEACH COMMUNITY SERVICES DISTRICT

DRAWING INDEX

REVISIONS

NO.	DATE

WILLIAM C. MEFFORD
ARCHITECT
P.O. BOX 1072 PACIFIC GROVE, CA 93950
(831) 373-4567 LICENSE # C-22893

NEW RESIDENCE FOR:
Ann and Rich Patterson
Corner of Lopez and Forest Way Pebble Beach, CA
APN 007-692-005

DATE: 1/26/2017
PROJECT NO. 1700
DRAWN BY:
CHECKED BY:
SHEET TITLE: SITE PLAN

SHEET NO. A-1
OF FIVE SHEETS