

Exhibit E

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Construction Impact Analysis 2 Arrowmaker Trace

Prepared for:

Kimberly Ventre and Marty Neese

Prepared by:

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PO Box 508
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March 3, 2022

(Amended June 23, 2022)

Current Owner:

Kimberly Ventre and Marty Neese
715 Fremont Street
Menlo Park, CA 94025

Architect:

Feldman Architecture
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San Francisco, CA 94109

Forester and Arborist

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SUMMARY

Development is planned for this site located at 2 Arrowmaker Trace. Because protected trees forest this site, a tree assessment/ construction impact analysis has been prepared that identifies and addresses the effects that a future project may have on the existing tree resources on-site as well as a list of recommendations for possible projects.

The project will consist of building a new single-family home near protected trees which will require the pruning and removal of trees located on-site and protection of others identified for retention. The remaining trees are considered to range anywhere from poor to good condition both structurally and in health and are to be protected and retained. The proposed design would require the removal of 11 native oak trees.

- Two (2) Valley oaks (*Quercus lobata*) – One (1) landmark tree (Larger than 24-inches diameter)
- Nine (9) Coast live oaks (*Quercus agrifolia*) – Four (4) landmark trees (Larger than 24-inches diameter)

ASSIGNMENT/SCOPE OF PROJECT

To ensure the protection of the tree resources on-site, the property owners, Kimberly Ventre, and Marty Neese have 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;

- The survey assesses and evaluates the health, structure, and preservation suitability for each tree within or adjacent (15 feet or less) to the proposed development of trees greater than or equal to six diameter inches at 24 inches above grade.
- Review proposed surveys as provided by Feldman Architecture.
- Create preservation specifications, as it relates to numbered trees keyed to an annotated Tree Location Map.
- Determine the number of trees possibly affected by future 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 Santa Lucia Preserve and the County of Monterey Planning Department.

LIMITATIONS

This assignment is limited to the review of surveys submitted to me by Feldman Architecture dated June 24, 2022, to assess effects from potential construction to trees within the property’s homeland envelope directly adjacent to the proposed home and driveway. The assessment has been made of these plans specifically and no other plans were reviewed. Ono Consulting and its representatives are not designers, engineers, or surveyors and this report is explicitly based on the plans given to us. 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 a 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, Ono Consulting relied on information provided in the preparation of this report (such as surveyed tree sizes, property boundaries, and property ownership) and must reasonably rely on the accuracy of the information provided. Ono Consulting shall not be responsible for another's means, methods, techniques, schedules, sequence or' procedures, contractor safety, or any other related programs; or another's failure to complete the work per the plans and specifications.

GOAL

The goal of this plan is to protect and maintain the Greater Monterey Peninsula Area’s forested resources through adherence to 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 the proposed development on the property while encouraging forest stability and sustainability, perpetuating the forested character of the property and the immediate vicinity.

PURPOSE

This Construction impact analysis report is prepared for this parcel due to proposed construction activities that are intended on improving the vacant lot located at 2 Arrowmaker Trace, Carmel, CA 93923. The purpose of the site visit was to give an independent assessment of the existing trees that are on-site and to determine if any of the trees will be affected by planned development. Native oak trees greater than 6-inches in diameter are considered protected trees as defined by the County of Monterey, Title 21 Monterey County Zoning Ordinance, and the Santa Lucia Preserve Design Guidelines and Regulations Sec 2.16.

INTRODUCTION

This Construction impact analysis is prepared for Kimberly Ventre and Marty Neese, owners of the lot located at 2 Arrowmaker Trace, Carmel, CA 93923. This report was prepared by Justin Ono, Urban Forester, and Consulting Arborist to address proposed construction. Monterey County's Zoning Ordinance Sec. 21.64.260D requires a forest management plan when tree removal is necessary of native trees six inches diameter or greater to preserve and maintain the forest and its beneficial uses. The County identifies native oak species as native tree species that require special consideration for management.

SITE DESCRIPTION

- 1) Assessor's Parcel Number: 239-051-008-000.
- 2) Location: 2 Arrowmaker Trace, Carmel, CA 93923.
- 3) Parcel size: 6.82 Acres.
- 4) Existing Land Use: The parcel is undeveloped land zoned RC/40-D-S for residential use.
- 5) Slope: The parcel is on a ridge. Slopes range from 10% to over 30%.
- 6) Soils: The parcel is located on soils classified by the National Resource Conservation Service as "Sheridan coarse sandy loam" about 40 inches deep. Paralithic bedrock is found generally from a depth of 39 to 43 inches. Runoff is medium and erosion hazard is low.
- 7) Vegetation: The vegetation is of the transitional Coast live oak forest type. It is a mixture of some Coast live oak and Valley oak, overstory trees with an understory comprised of Bigleaf maple (*Acer macrophyllum*), Coyote bush (*Baccharis pilularis*), Poison oak (*Toxicodendron diversilobum*), and French broom (*Genista monspessulana*).
- 8) Forest Condition and Health: The forest's condition and health are evaluated with the use of the residual trees and those of the surrounding oak forest as a stand. The overall condition of the forest is healthy and vigorous with the majority of the trees in fair to good condition with some small amount of dieback observed.

BACKGROUND/PROJECT DESCRIPTION

In November 2021, I (Justin Ono, Ono Consulting) was contacted by Ms. Kimberly Ventre who requested a visit to her property in the Santa Lucia Preserve. A previous report was drafted for a design prepared for Mr. David Howerton in September 2020. This previous design was in roughly the same building envelope but had a different driveway configuration. The visit focused on an assessment of trees within the buildable homesite area adjacent to a proposed building site, and incorporation of the information gained during the design phase of Mr. Howerton's project. Ms. Ventre requested the findings from the review and assessment of trees occupying the buildable area at 2 Arrowmaker Trace be prepared and documented in a report that would work in conjunction with other conditions for approval of the preliminary design review process.

In April 2022 the driveway was realigned to facilitate tree preservation and a new civil drawing was designed to minimize grading to reduce the number of trees required to be removed. The plans were studied, and the report updated to reflect the new driveway designs. Previously, a site visit was taken to the property on September February 28, 2022, where trees were assessed for health and condition at that time. The assessment focused on the preliminary location for development 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 viewshed, and general aesthetic quality of the area while complying with county codes. A study of the individual trees was made around the proposed development. The trees were located, tagged, measured, inspected, and recorded. The trees' critical root zones (CRZ) were evaluated using the trees' crown spreads as predictions as to where the tree's critical root system would be. 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 on the short- and long-term health of the tree. All meetings and field reviews 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 buildable area of the site is forested mainly with oak trees (Coast live oak, and Valley oak species).
- 11 trees would be proposed for removal with the current design.
 - One (1) Valley oak in the 10-23-inch diameter class.
 - One (1) Valley oak in the 24-35-inch diameter class.
 - five (5) Coast live oaks in the 12-23-inch diameter class.
 - Three (3) Coast live oaks in the 24-35-inch diameter class.
 - One (1) 60-inch Coast live oak tree in very poor condition that has had two large codominant stems fail and has a large amount of decay in its trunk.
- 36 Coast live oak trees will possibly be impacted by grading for the proposed development or will need branches pruned for emergency vehicle clearance.
 - 18 Coast live oak trees in the 10-23-inch diameter class.
 - 16 Coast live oak trees in the 24-36-inch diameter class.
 - Two (2) Valley oak trees in the 10-23-inch diameter class.

- One (1) large Coast live oak tree (#128, 26-inches in diameter) is adjacent to the proposed driveway grading and care will be needed when excavating around its root zone.
- Two large Coast live oak trees (#77 a 36-inch diameter and #78 a 40-inch diameter) are adjacent to the proposed home and will need care will be needed when excavating around their root zones.
- Most of the trees are moderate to large-sized (15-30-inches) and are in fair to good health.
- Tree spacing is approximately 10-20 feet on center with an estimated tree population of 220-250 trees on site.

PROJECT ASSESSMENT/CONCLUSION

Due to the high number of total trees on this site and surrounding sites coupled with the relatively low number of protected trees in the home and driveway areas, proposed development should minimally impact the landscape. Tree removal and pruning will be necessary; however, the high number of trees on this parcel and relatively good vigor of the trees on-site 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 a decline in the long term as well.

RECOMMENDATIONS

Pre-Construction Meeting

It is recommended that a project arborist/forester be retained and before the start of construction a meeting and training session shall be conducted to communicate and instruct personnel about tree removal, retention, and protection. The pre-construction meeting will include instruction on required tree protection and exclusionary fencing installed before grading, excavation, and construction procedures. Meeting attendees should include all involved parties such as site clearance personnel, construction managers, heavy equipment operators, and tree service operators. A certified professional such as a Monterey County qualified forester or County qualified arborist will conduct training. A list of pre-construction attendees and the materials discussed may be maintained to be provided to the county. Meeting attendees must agree to abide by tree protection and instructions as indicated during the meeting and agree to ensure tree protection will remain in place during the entire construction period.

Tree Removal

There are 11 trees to be removed with the design. The tree removal contractor shall verify the absence of active animal or bird nesting sites before any tree removal. If any active animal or bird nesting sites are found before tree removal, work shall be stopped until a qualified biologist is consulted for further recommendations.

Tree Planting

Trees will need to be replaced following a landscape plan prepared by a qualified landscape architect or designer. The Santa Lucia Preserve Guidelines require mitigation of tree removal at a ratio of 3:1 for all trees over 6 inches in diameter, measured 24 inches above natural grade, and 5:1 for all Landmark Trees (24 inches in diameter or greater as measured 24 inches above natural grade). There are six (6) trees in the 6-23" diameter class and five (5) trees in the Landmark class that need to be mitigated. Replanting should be consistent with the Santa Lucia Preserve Design Guidelines and Fuel Management Standards.

Best Management Practices

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. Fill placed within the dripline may encourage the development of oak root fungus (*Armillaria mellea*). As necessary, trees shall be protected by fencing or other materials to delineate protection zones.
- B) Pruning shall be conducted so as not to unnecessarily injure the tree. General principles 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 from February through May.
- E) Oak material greater than 3 inches in diameter remaining on-site for 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

Before 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 set out to tree drip lines and through the wrapping of trunks with protective materials. No stripping of topsoil or grubbing of understory shall occur in tree preservation zones.
- Fenced areas and 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 course of action.
- Fencing shall consist of chain link, hay bales, or plastic mesh reinforced with dimensional lumber. Again, fencing shall be set to the tree dripline unless previously approved by a qualified professional.
- 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 should be placed to the farthest extent possible from the base of the tree to protect the area within the tree drip line (no closer than 10-12 feet away from the base of a tree or 5 times (5X's) the trunk diameter, whichever is furthest).
- 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 shall be monitored by a qualified arborist or forester to ensure against drilling or cutting into or through major roots. Again, no stripping of topsoil or grubbing of understory shall occur in tree preservation zones.
- The project architect and/or qualified arborist shall 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 2-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, 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 effects, such as hand digging, bridging or tunneling under roots, etc...

Tree Pruning

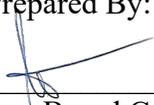
It is to be understood that the pruning of retained trees is be expected for this site. Pruning shall conform to the following standards:

- Clear the crown of diseased, crossing, weak, and dead wood to a minimum size of 1-1/2 inch in diameter;
- Remove stubs, cutting outside the wound wood tissue that has formed around the branch;
- Interior branches shall not be stripped out.
- Reduce end weight on heavy, horizontal branches by selectively removing small-diameter branches, no greater than 3 inches, near the ends of the scaffolds. In some cases, larger diameters may be removed depending on the situation (where critical for safety).
- Pruning cuts larger than 4 inches in diameter, except for deadwood, shall be avoided, unless deemed crucial for safety (broken, cracked, crossing, rubbing, etc.).
- Pruning cuts that expose heartwood shall be avoided whenever possible.
- Pruning shall not be performed during periods of flight of adult boring insects because fresh wounds attract pests (generally spring). Pruning shall be performed only when the danger of infestation has passed.
- All pruning shall be performed by a qualified arborist or under supervision of an ISA Certified Arborist or Tree Worker. Arborists are required to have a State of California Contractors License for Tree Service (C-61/D49) and provide proof of workers compensation and general liability insurance.
- All pruning shall be in accordance with the Tree Pruning Guidelines (International Society of Arboriculture) and/or the ANSI A300 Pruning Standard (American National Standard for Tree Care Operations) and adhere to the most recent edition of ANSI Z133.1.
- No more than 20 percent of live foliage shall be removed within the trees.

- Brush shall be chipped, and chips shall be spread underneath trees within the tree protection zone to a maximum depth of 6 inches, leaving the trunk clear of mulch.

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.

Report Prepared By:



Justin Ono, Board Certified Master Arborist #9388B
ASCA Registered Consulting Arborist #744

March 2, 2022
Date

Recommendations Agreed to by landowner:

Landowner

Date

Forest Management Plan approved by:

Director of Planning

Date

Tree Chart

Lot 39 Santa Lucia Preserve

Tree #	Species	DBH	Health	Structure	Remove	Impacted	Height	CRZ	Crown	Comments
34	Coast live oak	48	Good	Good			65	30	60	
35	Valley Oak	10	Fair	Poor			35	20	20	Lean
36	Coast live oak	26	Fair	Good			55	15	30	
37	Coast live oak	28	Fair	Good			55	15	30	
38	Coast live oak	32	Fair	Good			65	20	40	
39	Coast live oak	16	Fair	Good	x		35	15	25	In proposed building envelope
40	Coast live oak	30	Fair	Poor	x		55	25	50	In proposed building envelope
41	Coast live oak	15	Fair	Good	x		45	15	30	In proposed building envelope
42	Valley Oak	26	Fair	Fair	x		40	15	35	In proposed building envelope
43	Coast live oak	15	Fair	Good			45	10	20	
44	Coast live oak	15	Fair	Good			45	10	20	
45	Coast live oak	15	Fair	Good	x		45	12	30	Grading
46	Coast live oak	30	Fair	Good			55	15	35	
47	Coast live oak	30	Fair	Good			55	15	35	
48	Coast live oak	30	Fair	Poor			45	15	30	Unbalanced crown
49	Coast live oak	24	Fair	Poor			45	15	30	Unbalanced crown
50	Coast live oak	24	Fair	Good			45	10	20	
51	Coast live oak	30	Fair	Good			45	18	35	
52	Coast live oak	24	Fair	Fair	x		45	20	40	In proposed landscape area
53	Coast live oak	26	Fair	Fair	x		45	30	60	In proposed landscape area, broken branches
54	Coast live oak	12	Fair	Fair			40	6	10	
55	Coast live oak	30	Fair	Fair			40	10	20	
56	Coast live oak	30	Fair	Fair			40	15	30	
57	Coast live oak	30	Fair	Fair		x	40	15	30	
58	Coast live oak	20	Fair	Fair		x	40	10	20	
59	Coast live oak	20	Fair	Fair			40	8	15	
60	Coast live oak	15	Fair	Fair			40	10	20	
61	Coast live oak	20	Fair	Fair	x		40	12	25	Grading for proposed ADU
62	Coast live oak	24	Fair	Poor			40	20	50	
63	Coast live oak	22	Fair	Poor			50	15	30	Excessive lean
64	Coast live oak	18	Fair	Poor			55	10	15	Excessive lean
65	Coast live oak	60	Poor	Poor	x		55	25	20	In proposed ADU envelope, Broken stems, decay
66	Coast live oak	15	Fair	Poor		x	45	20	20	Lean, small dieback, suppressed
67	Coast live oak	15	Fair	Fair		x	45	15	30	lean, overtopping #66
68	Coast live oak	28	Fair	Fair		x	50	20	40	Lean

Lot 39 Santa Lucia Preserve

Tree #	Species	DBH	Health	Structure	Remove	Impacted	Height	CRZ	Crown	Comments
69	Coast live oak	10	Fair	Fair		x	35	6	10	Lean
70	Coast live oak	24	Fair	Fair			40	15	30	Lean
71	Coast live oak	12,12	Fair	Poor			35	15	35	Codominant stems, lean, one stem poor
72	Coast live oak	20	Fair	Fair			45	20	20	Lean
73	Coast live oak	20	Fair	Fair		x	40	20	40	
74	Coast live oak	18	Fair	Fair		x	40	10	20	Large deadwood
75	Coast live oak	18	Poor	Fair		x	35	10	20	Large deadwood, thinning crown
76	Coast live oak	18	Fair	Fair			45	20	30	Lean
77	Coast live oak	36	Fair	Fair			45	20	45	Dieback in upper crown
78	Coast live oak	40	Fair	Fair			50	20	50	Crown dieback
79	Coast live oak	26	Fair	Fair		x	50	15	30	Adjacent driveway turnaround
80	Coast live oak	15	Fair	Fair		x	35	12	25	Adjacent driveway turnaround
81	Coast live oak	15	Fair	Fair		x	35	12	25	
82	Coast live oak	18	Fair	Fair			50	8	20	Lean
83	Coast live oak	24	Fair	Fair			45	10	20	
84	Valley Oak	10	Fair	Fair			40	8	15	Adjacent driveway turnaround
85	Coast live oak	18,18	Fair	Fair		x	40	20	45	Dead branches
86	Coast live oak	6	Fair	Fair			15	8	15	Lean
87	Coast live oak	30	Fair	Fair		x	40	20	45	Adjacent driveway turnaround
88	Coast live oak	24	Fair	Fair			50	20	45	
89	Madrone	20,20,24	Fair	Fair			60	30	50	
90	Coast live oak	24	Fair	Fair		x	45	20	40	Adjacent Driveway
91	Coast live oak	12	Fair	Fair		x	35	15	30	Adjacent Driveway, Significant lean
92	Coast live oak	36	Fair	Fair			55	20	45	
93	Coast live oak	10	Fair	Fair			40	10	20	Lean
94	Coast live oak	12	Fair	Fair			40	8	15	Dead branch
95	Coast live oak	12	Fair	Fair			50	10	20	
96	Coast live oak	10	Fair	Fair			35	8	15	
97	Coast live oak	10,15	Fair	Fair			45	20	45	
98	Valley Oak	10	Poor	Poor	x		20	5	5	dead branch, dead top
99	Coast live oak	24	Fair	Fair		x	40	10	25	Adjacent Driveway
100	Coast live oak	24	Fair	Poor		x	40	20	40	Adjacent driveway, included bark
101	Coast live oak	17	Fair	Fair			50	10	20	
102	Coast live oak	12	Fair	Fair			45	10	15	Fungus
103	Coast live oak	12	Fair	Fair	x		45	8	15	In driveway

Lot 39 Santa Lucia Preserve

Tree #	Species	DBH	Health	Structure	Remove	Impacted	Height	CRZ	Crown	Comments
104	Coast live oak	12	Fair	Fair			45	8	15	Lean
105	Coast live oak	24	Fair	Fair			55	15	30	Lean
106	Coast live oak	24	Fair	Fair			60	20	40	growing into Tree #118, dead branch
107	Coast live oak	26	Fair	Poor		x	50	20	35	Adjacent driveway, included bark
108	Coast live oak	12	Fair	Fair		x	45	8	15	Adjacent driveway
109	Coast live oak	12	Fair	Fair		x	45	8	15	Adjacent driveway
110	Coast live oak	10	Fair	Fair		x	40	8	15	Adjacent driveway
111	Coast live oak	18	Fair	Fair		x	50	10	25	Adjacent driveway
112	Coast live oak	15	Fair	Fair			45	20	20	Lean
113	Coast live oak	15	Dead	Poor			35	10	25	Dead, broken branch
114	Coast live oak	12	Fair	Fair			45	10	25	Lean
115	Coast live oak	24	Fair	Good			60	20	45	
116	Coast live oak	24	Fair	Fair			50	10	25	Lean
117	Coast live oak	21	Fair	Fair			45	15	30	
118	Coast live oak	16	Fair	Fair			40	10	20	growing into Tree #112
119	Valley Oak	12	Fair	Fair			40	10	15	
120	Coast live oak	18	Fair	Fair			50	15	30	Lean, broken branch
121	Coast live oak	30	Fair	Fair			40	20	40	
122	Coast live oak	36	Fair	Fair			50	20	40	
123	Coast live oak	24	Fair	Poor			35	10	15	Lean, broken top
124	Coast live oak	15	Fair	Poor			25	10	20	
125	Coast live oak	30	Fair	Poor			35	20	30	Lean
126	Coast live oak	32	Fair	Good			55	20	40	
127	Coast live oak	28	Fair	Fair			65	20	50	
128	Coast live oak	26	Fair	Fair		x	60	20	40	Adjacent driveway
129	Coast live oak	16	Fair	Fair			45	20	20	
130	Coast live oak	24	Fair	Fair			40	15	30	Lean
131	Coast live oak	18	Fair	Fair			45	10	20	Lean
132	Coast live oak	24	Fair	Fair		x	55	15	30	Adjacent driveway, dead branch
133	Coast live oak	12	Fair	Fair			40	10	20	Dead branch
135	Coast live oak	16	Fair	Fair		x	40	20	20	Lean
138	Valley Oak	18	Fair	Good		x	45	10	20	Adjacent driveway
139	Coast live oak	18	Fair	Good			45	10	20	
140	Madrone	12	Fair	Good			45	10	20	
141	Coast live oak	18	Fair	Fair			35	10	20	

Lot 39 Santa Lucia Preserve

Tree #	Species	DBH	Health	Structure	Remove	Impacted	Height	CRZ	Crown	Comments
142	Coast live oak	16	Fair	Fair			55	10	25	
143	Coast live oak	28	Fair	Fair			75	20	40	
144	Coast live oak	24	Fair	Fair		x	50	20	45	Pruning for driveway clearance
145	Coast live oak	18	Fair	Poor		x	55	15	25	Adjacent driveway, dead leader, reiterated top
145.1	Coast live oak	28	Fair	Fair			65	20	45	
145.2	Coast live oak	36	Fair	Fair			55	20	45	
146	Coast live oak	26	Fair	Poor		x	45	10	25	Suppressed, decay
146.1	Coast live oak	10	Fair	Fair			50	8	12	
146.2	Coast live oak	10	Fair	Fair			30	8	12	
147	Coast live oak	11	Fair	Fair			25	10	10	Lean
148	Coast live oak	36	Fair	Fair			65	30	60	
149	Coast live oak	18	Fair	Poor			55	15	15	Broken Branches, reiterated top
150	Coast live oak	26	Fair	Fair		x	55	15	20	Lean, adjacent driveway
151	Coast live oak	24	Fair	Fair		x	50	15	35	Adjacent driveway, tree 108 growing into crown
152	Coast live oak	10	Fair	Fair			45	8	15	Suppressed
153	Valley Oak	12	Fair	Fair		x	55	15	20	
154	Coast live oak	18,24	Fair	Fair			45	15	35	
155	Coast live oak	26	Fair	Fair		x	60	20	40	Lean into driveway, pruning
156	Coast live oak	36	Fair	Fair		x	55	20	45	Broken branches
157	Coast live oak	30	Fair	Fair			60	25	50	
158	Coast live oak	24	Fair	Fair			50	15	35	

PHOTOGRAPHS



Location of the proposed house



View downhill of the proposed driveway



View uphill through the proposed driveway



View of the upper driveway approach



Location of the proposed driveway turnaround



View to the west of the building envelope

TREE PROTECTION NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSURING THAT ALL TREES AND PLANTING DESIGNATED TO REMAIN OR PRESERVE IN PLACE SHALL RECEIVE ALL REASONABLE PROTECTION, CARE AND MAINTENANCE REQUIRED FOR THEIR SURVIVAL DURING AND AFTER CONSTRUCTION.
2. THE CONTRACTOR SHALL PROTECT THE ROOT AREAS OF TREES TO REMAIN/PRESERVE IN PLACE WITHIN A MINIMUM 10' RADIUS OF TRUNK OR AS DIRECTED BY LANDSCAPE ARCHITECT STOCKPILING OF MATERIALS, VEHICLE PARKING AND TRAFFIC, DUMPING OF REFUSE AND CONTINUOUS RUNNING OR PONDING OF WATER.
3. IF TREE PROTECTION FENCING IS DISTURBED DURING WORK WITHIN THE ROOT ZONE, THE CONTRACTOR SHALL REPLACE THE FENCING IMMEDIATELY FOLLOWING COMPLETION OF THE WORK.
4. WHERE IT IS NECESSARY TO TRENCH, EXCAVATE OR GRADE WITHIN THE DRIP LINES AND ROOT ZONES OF EXISTING TREES, THE CONTRACTOR SHALL USE ALL POSSIBLE CARE TO AVOID INJURY TO TRESS AND TREE ROOTS. EXCAVATION IN THESE AREAS SHALL BE DONE BY HAND. WHERE TWO (2) INCH AND LARGER ROOTS OCCUR AT EXISTING OAKS, NOTIFY THE LANDSCAPE

ARCHITECT FOR FURTHER INSTRUCTIONS. ROOTS SHALL BE CUT AT THE TIME OF THE EARTHWORK WITH CLEAN VERTICAL CUT. CLOSE ALL TRENCHED WITHIN THE ROOT ZONE WITHIN 24 HOURS. WHERE THIS IS NOT POSSIBLE, ANY ROOTS EXPOSED FOR MORE THAN 24 HOURS SHALL BE COVERED WITH BURLAP AND KEPT MOIST ON THE SIDE OF THE TRENCH ADJACENT TO THE TREE.

5. WHERE EVER POSSIBLE, AND IN KEEPING WITH SAFETY REQUIREMENTS AND CODES, COMBINE ALL UTILITIES, LIGHTING AND IRRIGATION IN COMMON TRENCHES.

TREE REMOVAL IDENTIFICATION SCHEDULE

SYMBOL	DESCRIPTION
39	Coast Live Oak / <i>Quercus agrifolia</i>
40	Coast Live Oak / <i>Quercus agrifolia</i>
41	Coast Live Oak / <i>Quercus agrifolia</i>
42	Valley Oak / <i>Quercus lobata</i>
45	Coast Live Oak / <i>Quercus agrifolia</i>
52	Coast Live Oak / <i>Quercus agrifolia</i>
53	Coast Live Oak / <i>Quercus agrifolia</i>
61	Coast Live Oak / <i>Quercus agrifolia</i>
65	Coast Live Oak / <i>Quercus agrifolia</i>
98	Valley Oak / <i>Quercus lobata</i>
103	Coast Live Oak / <i>Quercus agrifolia</i>

- NOTES:**
1. Total number of trees to be removed: 11
 For more information on assessment methods, protection requirements, preservation, and recommendations please refer to the Arborist Report.

TREES WITHIN DRIVEWAY ZONE

SYMBOL	DESCRIPTION
66	Coast Live Oak / <i>Quercus agrifolia</i>
67	Coast Live Oak / <i>Quercus agrifolia</i>
68	Coast Live Oak / <i>Quercus agrifolia</i>
69	Coast Live Oak / <i>Quercus agrifolia</i>
70	Coast Live Oak / <i>Quercus agrifolia</i>
71	Coast Live Oak / <i>Quercus agrifolia</i>
72	Coast Live Oak / <i>Quercus agrifolia</i>
73	Coast Live Oak / <i>Quercus agrifolia</i>
74	Coast Live Oak / <i>Quercus agrifolia</i>
75	Coast Live Oak / <i>Quercus agrifolia</i>
76	Coast Live Oak / <i>Quercus agrifolia</i>
79	Coast Live Oak / <i>Quercus agrifolia</i>
80	Coast Live Oak / <i>Quercus agrifolia</i>
81	Coast Live Oak / <i>Quercus agrifolia</i>
82	Coast Live Oak / <i>Quercus agrifolia</i>
83	Coast Live Oak / <i>Quercus agrifolia</i>
84	Valley Oak / <i>Quercus lobata</i>
85	Coast Live Oak / <i>Quercus agrifolia</i>
86	Coast Live Oak / <i>Quercus agrifolia</i>
87	Coast Live Oak / <i>Quercus agrifolia</i>
88	Coast Live Oak / <i>Quercus agrifolia</i>
89	Madrone / <i>Arbutus menziesii</i>
90	Coast Live Oak / <i>Quercus agrifolia</i>
91	Coast Live Oak / <i>Quercus agrifolia</i>
92	Coast Live Oak / <i>Quercus agrifolia</i>
93	Coast Live Oak / <i>Quercus agrifolia</i>
99	Coast Live Oak / <i>Quercus agrifolia</i>
100	Coast Live Oak / <i>Quercus agrifolia</i>
107	Coast Live Oak / <i>Quercus agrifolia</i>
108	Coast Live Oak / <i>Quercus agrifolia</i>
109	Coast Live Oak / <i>Quercus agrifolia</i>
110	Coast Live Oak / <i>Quercus agrifolia</i>
127	Coast Live Oak / <i>Quercus agrifolia</i>
128	Coast Live Oak / <i>Quercus agrifolia</i>
131	Coast Live Oak / <i>Quercus agrifolia</i>
132	Coast Live Oak / <i>Quercus agrifolia</i>
133	Coast Live Oak / <i>Quercus agrifolia</i>
135	Coast Live Oak / <i>Quercus agrifolia</i>
138	Valley Oak / <i>Quercus lobata</i>
139	Coast Live Oak / <i>Quercus agrifolia</i>
141	Coast Live Oak / <i>Quercus agrifolia</i>
145	Coast Live Oak / <i>Quercus agrifolia</i>
150	Coast Live Oak / <i>Quercus agrifolia</i>
151	Coast Live Oak / <i>Quercus agrifolia</i>

- NOTE:**
1. SEE ARBORIST REPORT FOR PRUNING AND MAINTENANCE RECOMMENDATIONS FOR TREES TO REMAIN IN DRIVEWAY ZONE.

TREE PROTECTION LEGEND

SYMBOL	DESCRIPTION
●	(E) TREES TO BE PROTECTED IN PLACE, SEE TREE PROTECTION NOTES
⊗	(E) TREES TO BE REMOVED
○	TREE PROTECTION ZONE
---	PROPERTY BOUNDARY
---	HOMELAND BOUNDARY
---	PROPOSED SITE FOOTPRINT
---	PROPOSED ROAD
---	DRIVEWAY ZONE (15' OFFSET FROM PROPOSED ROAD)

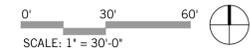
TREE TOTALS IN DRIVEWAY ZONE

●	Total Tagged Trees to Remain in Driveway Zone: 44
○	Total Untagged Trees to Remain in Driveway Zone: 4

PROPOSED ACCESS ROAD TO (E) WELL SITE
 PROPOSED WATERLINE ACCESS EASEMENT

PROPOSED BLDG.
 PROPOSED BLDG.
 PROPOSED BLDG.
 PROPOSED ROAD
 DRIVEWAY ZONE: TREES ASSESSED WITHIN A 15' OFFSET FROM PROPOSED ROAD

EXISTING ROAD



CURVEBALL
 2 ARROWMAKER TRACE
 CARMEL, CA 93923

PROJECT: 2021-10	DATE: 06/24/22
DRAWN: SJ	CHECKED: AL
REVISIONS:	
DATE: 06/24/22	ISSUED FOR: PLANNING SUBMISSION

SHEET TITLE:
 TREE PROTECTION & REMOVAL PLAN

SHEET:
L1.00