



Kosmowski Residence Arborist Report | 2020

Prepared for:

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Summary

Eron Kosmowski is planning the improvement with additions of a residential property, at 15 Poplar Drive, in Kentfield CA. Currently the project area consists of a single family home with trees in the back and front yards. Trees were assessed on July 30, 2020. The assessment included all trees with Protected or Heritage status potentially impacted by the proposed remodeling project.

Twenty-one (21) trees representing three species were evaluated (Tree Species Table). For all species combined, most trees were in fair condition, with the remainder roughly divided between good and poor, and one tree dead.

On residential sites, the County of Marin protects native trees with trunk diameters of 6"—10" and greater depending on species (Municipal Code Chapter 22.27 Native Tree Protection and Preservation). Based on this definition, there were 20 *Protected Trees*.

Based on my evaluation of the development plans and understanding of the property owner's intentions:

- Seven trees are recommended for removal
- Nine trees can be preserved with negligible to minor impacts
- Five trees may potentially be preserved depending on the amount of roots encountered during excavation.

The need to excavate within the recommended tree protection zones will determine the impacts to the tree. Minimizing excavation or moving construction farther from the five trees with greatest potential impact, will help preserve these trees.

A tree protection zone shall be established for trees being preserved within range of impact of the project grading footprint.

Impacts to trees being preserved can be further minimized by following the Tree Preservation Guidelines found in this report.

Background and Overview

15 Poplar Drive is a single family home located in Kentfield, CA. In July 2020, Eron Kosmowski requested that Bartlett Tree Experts conduct a site inspection and inventory of trees with Protected or Heritage status near a proposed remodeling project and describe our observations, findings, and recommendations for those trees potentially impacted by the proposed improvement project. Western Division Inventory and Consulting Arborist visited the property on July 30, 2020 to inspect the site and inventory subject trees for the purpose of writing this report.

This report provides the following information:

1. Assessment of the health and structural condition of the trees within the proposed project area based on a visual inspection from the ground.
2. Evaluation of the impacts to trees based on development plans.
3. Guidelines for tree preservation during the design, construction and maintenance phases of development.

Purpose

The intended purpose of this report is to provide information on the condition of Protected or Heritage Trees near the area of disturbance, their suitability for preservation, and to offer recommendations regarding the protection of those trees retained during the proposed construction activity. This report is intended to be used by Eron Kosmowski as part of the proposed development application to the County of Marin, CA.

Limits of the Assignment

The conclusions and recommendations within this report were based on one site visit with visual assessments from the ground. Assessments were made of the designated trees on July 30, 2020. The site plans provided to BTE were drawings showing the layout of the existing lot, with structures and proposed improvements in relation to the surrounding land and trees. The location of the trees were obtained from site plans provided by l'oro designs, San Francisco, CA

This tree inventory was not a tree risk assessment. As such, no trees were assessed for risk in accordance with industry standards, nor are there any tree risk ratings or risk mitigation recommendations provided within this preservation plan.

There is no guarantee for the preservation of the trees contained in this report. However, the preservation plan is made with the best interest intended for the trees being preserved.

Tree Assessment Methods

Trees were assessed on July 30, 2020. The assessment included only trees with Protected or Heritage status as designated by the County of Marin, located close enough to the proposed area of disturbance to effect impact. One additional non-protected tree was included as it was located entirely within the canopy dripline of an adjacent Heritage Tree. All trees assessed were located on the property. The assessment procedure consisted of the following steps:

1. Identifying the tree as to species;
2. Tagging each tree with an identifying number and recording its location on a map;
3. Measuring the trunk diameter at a point 54" above grade;
4. Evaluating the health and structural condition based on a visual inspection from the ground:

Good A healthy tree that may have a slight decline in vigor, small amount of twig dieback, minor structural defects that could be corrected.

Fair Tree with moderate vigor, moderate twig and small branch dieback, thinning of crown, poor leaf color, moderate structural defects that might be mitigated with regular care.

Poor Tree in decline, epicormic growth, extensive dieback of medium to large branches, significant structural defects that cannot be abated.

5. Rating the suitability for preservation as "high", "moderate" or "low". Suitability for preservation considers the health, age and structural condition of the tree, and its potential to remain an asset to the site for years to come.

High Trees with good health and structural stability that have the potential for longevity at the site.

Moderate Trees with somewhat declining health and/or structural defects that can be abated with treatment. The tree will require more intense management and monitoring, and may have shorter life span than those in 'high' category.

Low Tree in poor health or with significant structural defects that cannot be mitigated. Tree is expected to continue to decline, regardless of treatment. The species or individual may have characteristics that are undesirable for landscapes and generally are unsuited for use areas.

Description of Trees

Twenty-one (21) trees representing three species were evaluated (Table 1). For all species combined, 14 trees were in good (24%) to fair (43%) condition with six trees in poor condition (29%), and one dead tree. Descriptions of each tree are found in the **Tree Assessment**, and approximate locations are plotted on the **Assessment Site Plan** (see Appendix).

TREE SPECIES IDENTIFIED

Genus	Species	Common Name	Condition				Total
			Dead	Poor	Fair	Good	
<i>Quercus</i>	<i>agrifolia</i>	Oak-Coast Live	1	3	6	4	14
<i>Quercus</i>	<i>kelloggii</i>	Oak-California Black	-	1	-	1	2
<i>Umbellularia</i>	<i>californica</i>	Bay-California	-	2	3	-	5
Total			1	6	9	5	21



Photo 1: Coast live oak #17 had included bark and a stem cavity.

Fourteen (14) coast live oaks (67% of trees assessed) comprised the majority of trees on site. One tree was dead (#13), while three were in poor condition (#16, 17 & 18). Six of the 14 were in fair condition (#1, 5, 6, 10, 14, 21), and four were good condition (#2, 4, 7 & 8). They ranged in age from semi mature (13" trunk diameter) to mature (24" trunk diameter). There were examples of good form and structure within the group (#1, 4, 8), and most exhibited moderate vigor. There were defects of note among the coast live oaks such as the stem cavity and included bark of tree #17 (photo 1), as well as pest and disease occurrence, such as the borer infestation of tree #18 (photo 2).

The trees included in this assessment were typical of properties located on the eastern slopes of Mt. Tamalpais. The site was primarily populated with native oak species and bay laurel, as well as intentional plantings of ornamental tree species such as pin oak, sweet bay, and Japanese maple.

Fourteen (14) coast live oaks (67% of trees assessed) comprised the majority of trees on site. One tree was dead (#13), while three were in poor condition (#16, 17 & 18). Six of the 14 were in fair condition (#1, 5, 6, 10, 14, 21), and four were good condition (#2, 4, 7 & 8). They ranged in age from semi mature (13" trunk diameter) to mature (24" trunk diameter). There were examples of good form and structure within the group (#1, 4, 8), and most exhibited moderate vigor. There were defects of note among the coast live oaks such as the stem cavity and included bark of tree #17 (photo 1), as well as pest and disease occurrence, such as the borer infestation of tree #18 (photo 2).



Photo 2: Coast live oak #18 had roughened bark from borer activity.

Two California black oaks (trees #15 and 19) measuring 14”/9” and 10”, respectively comprised 10% of trees assessed. Tree #15 was in good condition, form, and structure, while tree #19 was in poor condition with significant structural defects and disease presence in the form of canopy dieback, stem crack and stem canker (Photos 3 & 4, below).



Photos 3 & 4: California black oak #19 live oak had an included stem crack (left), and stem canker (right).

Five California bay trees (24% of trees assessed) were inventoried. Three of the bay laurels were in poor condition (#9 & 20); while the other three were in fair condition (#3, 11, & 12).

County of Marin Tree Regulation

On residential sites, the County of Marin Municipal Code Chapter 22.27 (Native Tree Protection and Preservation) designates native oak trees with trunk diameters of 6 inches or greater, and California bays with a combined trunk diameter of 10 inches or greater as Protected Trees (12 of 21 trees assessed). Native oaks and bays with trunk diameters greater than 18 inches and 30 inches respectively are designated as Heritage Trees (eight trees of 21 trees assessed). Those trees determined to be in poor condition by the Project Arborist qualify for exemption from tree removal permit requirements, regardless of protected status (22.62.040). Seven of 21 trees assessed qualify for exemption from removal permit requirements.

Suitability for Preservation

Before evaluating the impacts that will occur during development, it is important to consider the quality of the tree resource itself and the potential for individual trees to function well over an extended length of time. Trees that are preserved on development sites must be carefully selected to make sure that they may survive development impacts, adapt to a new environment, and perform well in the landscape.

Our goal is to identify trees that have the potential for long-term health, structural stability, and longevity. For trees growing in open fields, away from areas where people and property are present, structural defects and/or poor health presents a low risk of damage or injury if they fail. However, we must be concerned about safety in use areas. Therefore, where development encroaches into existing plantings, we must consider their structural stability as well as their potential to grow and thrive in a new environment. Where development will not occur, the normal life cycles of decline, structural failure and death should be allowed to continue.

Evaluation of suitability for preservation considers several factors:

- **Tree health**
Healthy, vigorous trees are better able to tolerate impacts such as root injury, demolition of existing structures, changes in soil grade and moisture, and soil compaction than are non-vigorous trees. For example, coast live oak #17 was in poor health. It would not tolerate construction impacts as well as a healthier coast live oak.
- **Structural integrity**
Trees with significant amounts of wood decay and other structural defects that cannot be corrected are likely to fail. Such trees should not be preserved in areas where damage to people or property is likely. For example, California black oak #5 had a significant stem crack. This structural defect has compromised the stability of the tree and structural integrity will continue to decline as decay becomes established at the site of injury.
- **Species response**
There is a wide variation in the response of individual species to construction impacts and changes in the environment. For instance, coast live oaks are more tolerant of root pruning than California bays.
- **Tree age and longevity**
Old trees, while having significant emotional and aesthetic appeal, have limited physiological capacity to adjust to an altered environment. Young trees are better able to generate new tissue and respond to change.

- **Species invasiveness**

Species that spread across a site and displace desired vegetation are not always appropriate for retention. This is particularly true when indigenous species are displaced. The CA Invasive Plant Inventory Database <http://www.cal-ipc.org/plants/inventory/> lists species identified as being invasive. No trees inventoried for this report are considered to be invasive.

Each tree was rated for suitability for preservation based upon its age, health, structural condition and ability to safely coexist within a development environment (see **Tree Assessment Table** in the Appendix, and **Tree Species Table** on page four). We consider trees with high suitability for preservation to be the best candidates for preservation. We do not recommend retention of trees with low suitability for preservation in areas where people or property will be present. Retention of trees with moderate suitability for preservation depends upon the intensity of proposed site changes.

Tree suitability for preservation

High These are trees with good health and structural stability that have the potential for longevity at the site. Six (6) trees had high suitability for preservation.

Moderate Trees in this category have fair health and/or structural defects that may be abated with treatment. These trees require more intense management and monitoring, and may have shorter life-spans than those in the “high” category. Eight (8) trees had moderate suitability for preservation.

Low Trees in this category are in poor health or have significant defects in structure that cannot be abated with treatment. These trees can be expected to decline regardless of management. The species or individual tree may possess either characteristics that are undesirable in landscape settings or be unsuited for use areas. Seven (7) trees had low suitability for preservation.

Evaluation of Impacts and Recommendations

To assess impacts to trees, I reviewed the “Site Plan Existing, A1.0”, “Site Plan Proposed, A1.1” and “Landscape Plan A1.03” created by l’oro designs dated 07/22/20. The plans include an addition to the existing structure and new landscaped areas. Surveyed trunk locations were plotted on the plans, and decisions regarding identified trees that would likely be removed and preserved were based on those locations.

Construction plans entail a partial re-development of the existing site. Disposition of individual trees is listed in Appendix III-Tree Disposition. Based on my evaluation of the plans:

- 7 trees will be removed
- 10 trees can be preserved
- 4 trees may potentially be preserved

Of the seven trees to be removed, trees #16 and 17 will be removed to complete construction, both trees were in poor condition. I recommend removing five additional trees because they are in poor condition.

The 10 trees listed as preserve should have no or minor impacts from construction. To protect these trees from construction impacts, I recommend following the Tree Preservation Guidelines.

The four trees that may potentially be preserved depending on the amount of roots encountered during excavation. Trees #3-5 appear to have excavation within 10 feet of the trunk to install pervious and non-pervious walkway and patio surfaces. The potential root loss associated with excavation, grading, and compaction may have a significant impact on these trees. Tree #14 is presently located near an existing driveway; the need to excavate and replace the driveway will determine the impacts to the tree. Minimizing excavation or moving construction farther from the trees, will help preserve these trees.

Coast live oak #5 is listed as Potentially Preserve. This tree was in fair condition, because of a suspected *Phytophthora ramorum* canker. If tree #5 has Sudden Oak Death, it would be ill equipped to manage additional stressors (Photo 3). Root loss through excavation, grade changes, or compaction may compromise the health of this and other trees inventoried with potentially preserve disposition status (Trees #3 and 4). Coast live oak #5 also exhibits moderate canopy dieback; soil and plant health care measures should be taken post project to mitigate impacts of construction activity if the tree is to be preserved.



Photo 3: Coast live oak #5 with suspected *Phytophthora ramorum* trunk canker.

Tree Preservation Guidelines

The goal of tree preservation is not merely tree survival during development but maintenance of tree health and beauty for many years. Trees retained on sites that are either subject to extensive injury during construction or are inadequately maintained become a liability rather than an asset. The response of individual trees will depend on the amount of excavation and grading, the care with which demolition is undertaken, and the construction methods. Coordinating any construction activity inside the **TREE PROTECTION ZONE** can minimize these impacts.

The following recommendations will help reduce impacts to trees from development and maintain and improve their health and vitality through the clearing, grading and construction phases.

Tree Protection Zone

1. **A TREE PROTECTION ZONE** shall be identified for trees to be preserved near the project grading footprint. The **TREE PROTECTION ZONE** shall be the area indicated in the *Tree Disposition Table*.
2. Fence all trees to be retained to completely enclose the **TREE PROTECTION ZONE** prior to demolition, grubbing or grading. Fences shall be 6 ft. chain link with posts sunk into the ground or equivalent as approved by the County of Marin.
3. Fences must be installed prior to beginning demolition and must remain until construction is complete.
4. No grading, excavation, construction or storage or dumping of materials shall occur within the **TREE PROTECTION ZONE**.
5. No underground services including utilities, sub-drains, water or sewer shall be placed in the **TREE PROTECTION ZONE**.

Design recommendations

1. Any changes to the plans affecting the trees should be reviewed by the Project Arborist with regard to tree impacts. These include, but are not limited to, site plans, improvement plans, utility and drainage plans, grading plans, landscape and irrigation plans, and demolition plans.
2. Plan for tree preservation by designing adequate space around trees to be preserved. This is the **TREE PROTECTION ZONE**: No grading, excavation, construction or storage of materials should occur within that zone. Route underground services including utilities, sub-drains, water or sewer around the **TREE PROTECTION ZONE**.
3. **Tree Preservation Guidelines** prepared by the Project Arborist, which include specifications for tree protection during demolition and construction, should be included on all plans.
4. Any herbicides placed under paving materials must be safe for use around trees and labeled for that use.

5. As trees withdraw water from the soil, expansive soils may shrink within the root area. Therefore, foundations, footings and pavements on expansive soils near trees should be designed to withstand differential displacement.

Pre-demolition and pre-construction treatments and recommendations

1. The demolition and construction superintendents shall meet with the Project Arborist before beginning work to review all work procedures, access routes, storage areas, and tree protection measures.
2. Fence all trees indicated to completely enclose the Tree Protection Zone prior to demolition, grubbing or grading. Fences shall be 6 ft. chain link. Fences are to remain until all grading and construction is completed.
3. Fences are to remain until all grading and construction is completed. Where demolition must occur close to trees, such as removing curb and pavement, install trunk protection devices such as winding silt sock wattling around trunks or stacking hay bales around tree trunks.
4. Structures and underground features to be removed within the **TREE PROTECTION ZONE** shall use equipment that will minimize damage to trees above and below ground, and operate from outside the **TREE PROTECTION ZONE**. Tie back branches and wrap trunks with protective materials to protect from injury as directed by the Project Arborist. The Project Arborist shall be on-site during all operations within the **TREE PROTECTION ZONE** to monitor demolition activity.
5. All tree work shall comply with the Migratory Bird Treaty Act as well as California Fish and Wildlife code 3503-3513 to not disturb nesting birds. To the extent feasible tree pruning and removal should be scheduled outside of the breeding season. Breeding bird surveys should be conducted prior to tree work. Qualified biologists should be involved in establishing work buffers for active nests.

Recommendations for tree protection during construction

1. Any approved grading, construction, demolition or other work within the **TREE PROTECTION ZONE** should be monitored by the Project Arborist.
2. All contractors shall conduct operations in a manner that will prevent damage to protected trees.
3. Tree protection devices are to remain until all site work has been completed within the work area. Fences or other protection devices may not be relocated or removed without permission of the Project Arborist.



Photo 4: Trunk protection devices (straw wattling) used to protect trees within established TPZs.

4. Construction trailers, traffic and storage areas must remain outside **TREE PROTECTION ZONE** at all times.
5. Any root pruning required for construction purposes shall receive the prior approval of and be supervised by the Project Arborist. Roots should be cut with a saw to provide a flat and smooth cut. Removal of roots larger than 2" in diameter should be avoided.
6. If roots 2" and greater in diameter are encountered during site work and must be cut to complete the construction, the Project Arborist must be consulted to evaluate effects on the health and stability of the tree and recommend treatment.
7. Prior to grading or trenching, trees may require root pruning outside the **TREE PROTECTION ZONE**. Any root pruning required for construction purposes shall receive the prior approval of, and be supervised by, the Project Arborist.
8. Spoil from trench, footing, utility or other excavation shall not be placed within the **TREE PROTECTION ZONE**, neither temporarily nor permanently.
9. All grading within the dripline of trees shall be done using the smallest equipment possible. The equipment shall operate perpendicular to the tree and operate from outside the **TREE PROTECTION ZONE**. Any modifications must be approved and monitored by the Project Arborist.
10. If injury should occur to any tree during construction, it should be evaluated as soon as possible by the Project Arborist so that appropriate treatments can be applied.
11. No excess soil, chemicals, debris, equipment or other materials shall be dumped or stored within the **TREE PROTECTION ZONE**.



Example of Tree Protection Fence Signage

Maintenance of impacted trees

Our procedures included assessing trees for observable defects in structure. This is not to say that trees without significant defects will not fail. Failure of apparently defect-free trees does occur, especially during storm events. Wind forces, for example, can exceed the strength of defect-free wood causing branches and trunks to break. Wind forces coupled with rain can saturate soils, reducing their ability to hold roots, and blow over defect-free trees. Although we cannot predict all failures, identifying those trees with observable defects is a critical component of enhancing public safety.

Furthermore, trees change over time. Our inspections represent the condition of the tree at the time of inspection. As trees age, the likelihood of failure of branches or entire trees increases. Annual tree inspections are recommended to identify changes to tree health and structure. In addition, trees should be inspected after storms of unusual severity to evaluate damage and structural changes. Initiating these inspections is the responsibility of the client and/or tree owner.

Preserved trees will experience a physical environment different from that pre-development. As a result, tree health and structural stability should be monitored. Occasional pruning, fertilization, mulch, pest management, replanting and irrigation may be required. In addition, provisions for monitoring both tree health and structural stability following construction must be made a priority.

Replacement Requirements

In accordance with 22.26.040 of the Marin County Development Code.:

- Replacement of trees at a ratio of two new, appropriately sized and installed trees for each tree designated to be removed, and for which a tree removal permit is required, unless a higher or lower replacement ration is determined to be appropriate.

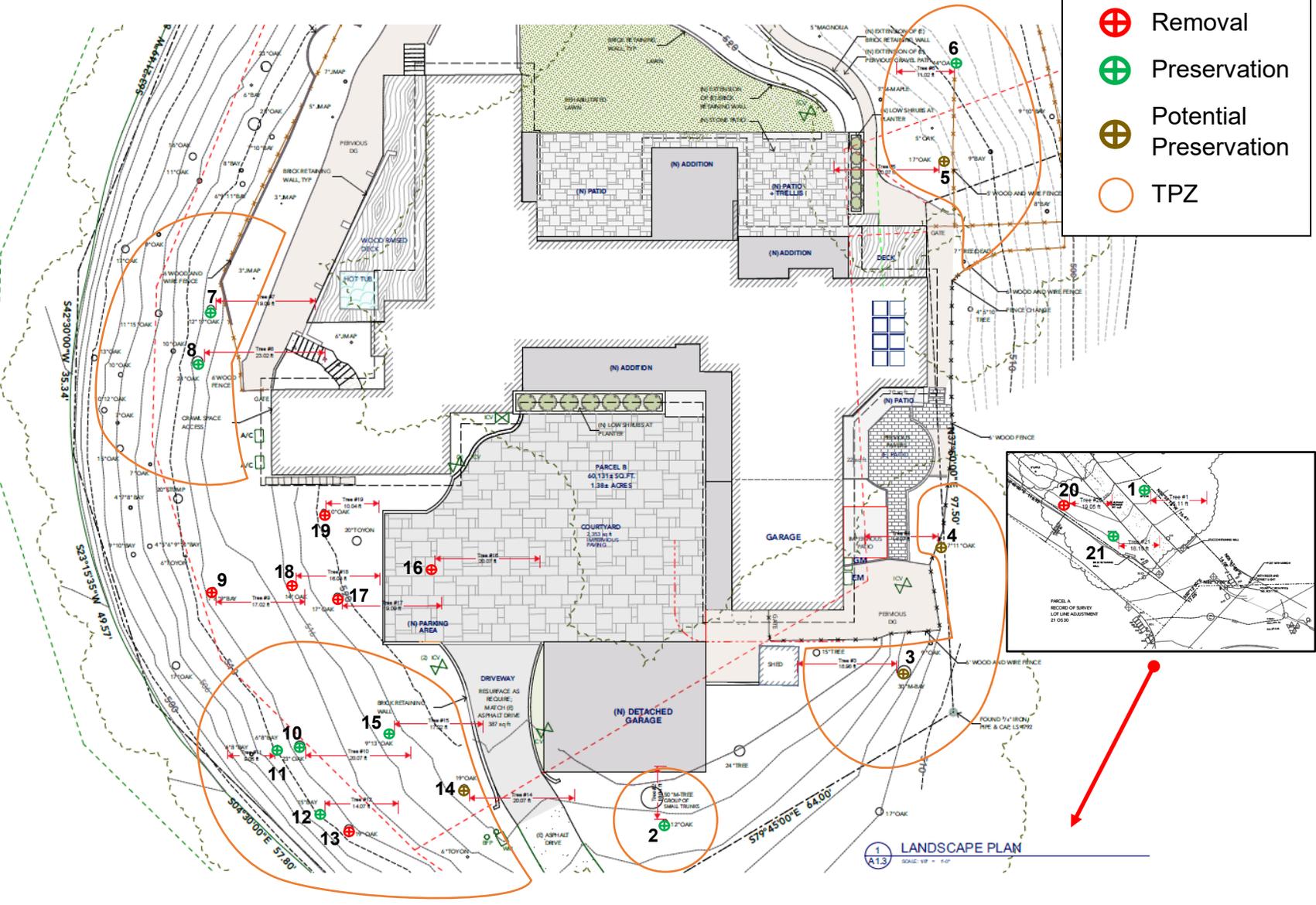
In the event that tree planting on the site is not feasible or appropriate, the County may require in lieu of planting on the specific property, the payment of money in the amount of \$500.00 per replacement tree to be deposited into the Tree Preservation Fund managed by the Marin County Parks and Open Space Department for planting, maintenance, and management of trees and other vegetation.

While all trees are Protected or Heritage, all seven trees planned for removal are in poor condition and do not require a permit. No replace trees should be required for this project.

Appendix I – Assessment Site Plan

Recommended for:

- ⊕ Removal
- ⊕ Preservation
- ⊕ Potential Preservation
- TPZ



Appendix II – Tree Assessment

Tree ID	Species	DBH (in.)	Protected Status	Condition	Suitability for Preservation	Comments
1	Oak-Coast Live (<i>Quercus agrifolia</i>)	26	Heritage	Fair	Moderate	Good form and structure; cavity, root collar; moderate vigor.
2	Oak-Coast Live (<i>Quercus agrifolia</i>)	13	Protected	Good	High	Good form and structure; moderate+ vigor.
3	Bay-California (<i>Umbellularia California</i>)	7,7,7,6,6 5,4,4,4	Protected	Fair	Moderate	Multiple stems; moderate vigor.
4	Oak-Coast Live (<i>Quercus agrifolia</i>)	12, 9	Protected	Good	High	Good form and structure; moderate+ vigor.
5	Oak-Coast Live (<i>Quercus agrifolia</i>)	19	Heritage	Fair	Moderate	Phytophthora suspected; moderate dieback.
6	Oak-Coast Live (<i>Quercus agrifolia</i>)	13	Protected	Fair	Moderate	Phytophthora suspected; moderate vigor.
7	Oak-Coast Live (<i>Quercus agrifolia</i>)	17, 12	Heritage	Good	High	Buried root collar; moderate+ vigor.
8	Oak-Coast Live (<i>Quercus agrifolia</i>)	24	Heritage	Good	High	Good form and structure; moderate+ vigor.
9	Bay-California (<i>Umbellularia California</i>)	8, 7, 7	Protected	Poor	Low	Cavity, stem; cavity, root collar; low vigor.
10	Oak-Coast Live (<i>Quercus agrifolia</i>)	22	Heritage	Fair	High	Cavity stem; moderate+ vigor.
11	Bay-California (<i>Umbellularia California</i>)	7, 5	No	Fair	Moderate	Moderate vigor.
12	Bay-California (<i>Umbellularia California</i>)	12	Protected	Fair	Moderate	Lean; moderate vigor.
13	Oak-Coast Live (<i>Quercus agrifolia</i>)	17	Protected	Dead	Low	Tree is dead, and potentially unstable.
14	Oak-Coast Live (<i>Quercus agrifolia</i>)	19	Heritage	Remove	Moderate	Buried root collar; moderate dieback.

Tree ID	Species	DBH (in.)	Protected Status	Condition	Suitability for Preservation	Comments
15	Oak-California Black (<i>Quercus kelloggii</i>)	14, 9	Protected	Good	High	Good form and structure; buried root collar.
16	Oak-Coast Live (<i>Quercus agrifolia</i>)	21	Heritage	Poor	Low	Missing portion of canopy; cavity, stem.
17	Oak-Coast Live (<i>Quercus agrifolia</i>)	17	Protected	Poor	Low	Cavity, stem; decay root collar; unbalanced crown.
18	Oak-Coast Live (<i>Quercus agrifolia</i>)	14	Protected	Poor	Low	Lean; cavity, stem; moderate dieback; borers.
19	Oak-Coast Live (<i>Quercus agrifolia</i>)	10	Protected	Poor	Low	Crack, stem; canker, stem; unbalanced crown; dead portion of canopy.
20	Bay-California (<i>Umbellularia California</i>)	15	Protected	Poor	Low	Cavity, root collar; low vigor.
21	Oak-Coast Live (<i>Quercus agrifolia</i>)	20	Heritage	Fair	Moderate	Cavity root collar; cavity, branch, moderate+ vigor.

Appendix III – Tree Disposition

Tree ID	Species	DBH (in.)	Protected	Disposition	TPZ (ft.) Radius	Comments
1	Oak-Coast Live (<i>Quercus agrifolia</i>)	26	Yes	Preserve	25	No construction planned within dripline.
2	Oak-Coast Live (<i>Quercus agrifolia</i>)	13	Yes	Preserve	10	9 feet from garage as planned.
3	Bay-California (<i>Umbellularia California</i>)	7,7,7,6,6 5,4,4,4	Yes	Potentially Preserve	19	6 feet from installation of pervious DG walkway.
4	Oak-Coast Live (<i>Quercus agrifolia</i>)	12, 9	Yes	Potentially Preserve	14	4 feet from pervious hardscape.
5	Oak-Coast Live (<i>Quercus agrifolia</i>)	19	Yes	Potentially Preserve	20	8 feet from installation of pervious DG walkway.
6	Oak-Coast Live (<i>Quercus agrifolia</i>)	13	Yes	Preserve	11	No construction planned within dripline.
7	Oak-Coast Live (<i>Quercus agrifolia</i>)	17, 12	Yes	Preserve	19	8 feet from installation of pervious DG walkway.
8	Oak-Coast Live (<i>Quercus agrifolia</i>)	24	Yes	Preserve	23	7 feet from installation of pervious DG walkway.
9	Bay-California (<i>Umbellularia California</i>)	8, 7, 7	*No	Remove	—	Poor condition
10	Oak-Coast Live (<i>Quercus agrifolia</i>)	22	Yes	Preserve	20	10 feet from installation of courtyard.
11	Bay-California (<i>Umbellularia California</i>)	7, 5	Yes	Preserve	9	No construction planned within dripline.
12	Bay-California (<i>Umbellularia California</i>)	12	Yes	Potentially Preserve	14	No construction planned within dripline.
13	Oak-Coast Live (<i>Quercus agrifolia</i>)	17	*No	Remove	—	Dead
14	Oak-Coast Live (<i>Quercus agrifolia</i>)	19	Yes	Potentially Preserve	20	5 feet from existing driveway that may require excavation.

Tree ID	Species	DBH (in.)	Protected	Disposition	TPZ (ft.) Radius	Comments
15	Oak-California Black (<i>Quercus kelloggii</i>)	14, 9	Yes	Preserve	17	15 feet from driveway
16	Oak-Coast Live (<i>Quercus agrifolia</i>)	21	*No	Remove	—	Within grading footprint.
17	Oak-Coast Live (<i>Quercus agrifolia</i>)	17	*No	Remove	—	8 feet from installation of courtyard
18	Oak-Coast Live (<i>Quercus agrifolia</i>)	14	*No	Remove	—	18 feet from courtyard, Poor condition
19	Oak-Coast Live (<i>Quercus agrifolia</i>)	10	*No	Remove	—	10 feet from courtyard, Poor condition
20	Bay-California (<i>Umbellularia California</i>)	15	*No	Remove	—	Poor condition
21	Oak-Coast Live (<i>Quercus agrifolia</i>)	20	Yes	Preserve	18	No construction within dripline

Appendix III - Assumptions and Limiting Conditions

Any legal description provided to the consultant is assumed to be correct. Any titles and ownership to any property are assumed to be good and marketable. No responsibility is assumed for matters legal in character. Any and all property is evaluated as though free and clear, under responsible ownership and competent management.

Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible; however, the consultant can neither guarantee nor be responsible for the accuracy of information provided by others.

The consultant shall not be required to give testimony or attend court by reason of this report unless subsequent contractual arrangements are made, including payment of an additional fee for such services as described in the fee schedule and contract of engagement.

Loss or alteration of any part of this report invalidates the entire report.

Possession of this report or a copy thereof does not imply right of publication or use for any purpose by any other than the persons to whom it is addressed, without the prior expressed written or verbal consent of the consultant.

This report, or any copy thereof, shall not be conveyed, in whole or in part, by anyone, including the client, to the public via any media type or outlet, without the prior expressed consent of the consultant specifically as to value conclusions, identity of the consultant, or any reference to any professional society or institute or to any initialed designation conferred upon the consultant as stated in his qualification.

This report and values expressed herein represent the opinion of the consultant, and the consultant's fee is in no way contingent upon the reporting of a specified value, a stipulated result, the occurrence of a subsequent event, nor upon any finding to be reported.

Illustrations, diagrams, graphs, and photographs in this report, being intended as visual aids, are not necessarily to scale and should not be construed as engineering or architectural reports or surveys.

Information contained in this report covers only those items that were examined and reflects the condition of those items at the time of inspection. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the plans or property in question may not arise in the future.

Appendix IV - Certificate of Performance

I, Lee Nachtrieb, certify:

- That I have personally inspected the tree(s) and/or property referred to in this report, and have stated my findings accurately. The extent of the evaluation is stated in the attached report;
- That I have no current or prospective interest in the vegetation or the property that is the subject of this report and have no personal interest or bias with respect to the parties involved;
- That the analysis, opinions, and conclusions stated herein are my own;
- That my analysis, opinions, and conclusions were developed and this report has been prepared according to commonly accepted arboricultural practices;
- That no one provided significant professional assistance to the consultant, except as indicated within the report;
- That my compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client or any other party.

I am an International Society of Arboriculture Certified Arborist with a Tree Risk Assessment Qualification, and have been involved in the practice of arboriculture and the study of trees for over 35 years.

Signed: Lee Nachtrieb

Date: 8/7/2020