File: 10693-18GA-18DR

Design Review and Grading Abatement for a new retaining wall.

Summary: Design Review and Grading Abatement for a new retaining wall exceeding five (5) vertical feet that extends more than 80 horizontal feet. Proposed grading is 250 cubic yards (c.y.) of cut and 250 cubic yards (c.y.) of fill.

Owner: Mirjana Vajdic
Applicant: Mirjana Vajdic
Lot Size: 1.3 acres
APN: 510-30-040
Supervisorial District: 1

Gen. Plan Designation: Hillsides
Zoning: HS-d1
Address: 16330 Matilija Drive, Los Gatos
Present Land Use: Residential
Approved Building Site: Yes

RECOMMENDED ACTIONS
A. Accept a Categorical Exemption, under Section 15304 (Class 4 – grading) and Section 15303 (Class 3 – retaining wall) of the CEQA Guidelines, Attachment A.

B. Grant Design Review and Grading Abatement, subject to conditions outlined in Attachment B.

ATTACHMENTS INCLUDED
Attachment A – Proposed CEQA Determination
Attachment B – Proposed Conditions of Approval
Attachment C – Location & Vicinity Map
Attachment D – Proposed Plans
PROJECT DESCRIPTION

The proposed project includes construction of a future retaining wall ranging from a minimum of 2.7 feet in height to a maximum of 8.7 feet in height. The retaining wall is proposed to be 123 feet in length, extending from the northwest corner of the property to the southwest portion of the lot. The Design Review approval for the retaining wall is associated with a grading violation for unpermitted cut and fill to widen an existing driveway, and to allow the owner access around the property to connect two driveways into one circular driveway. As such, the applicant is also requesting approval of a Grading Abatement application to abate the existing grading violation. There are three (3) oak trees and two (2) California Bay Laurel proposed for protection, and one (1) unidentified tree, 15 inches in diameter, proposed for removal.

The lot is a 1.3 gross-acre parcel at the southwest corner of Matilija Drive and Los Sereños Robles of Los Gatos, in the unincorporated area of Santa Clara County.

Setting/Location Information

The subject property is in the southwestern portion of the unincorporated area of Santa Clara County, approximately 2,000 feet west from the City of Monte Sereno. The neighborhood character consists of new estate homes ranging from approximately 6,000 to 10,000 square feet in size. The property is located 0.3 miles south from Hwy. 9 and more than 1.5 miles west from Hwy. 17. The property is connected to a sewer system and water service is provided by San Jose Water Company.

The site is not located within the Santa Clara Valley Habitat Plan Area and, therefore, is not a covered project. Based on County GIS data, the property consists of coast Live Oak Forest and Woodland. Based on County GIS data, the slope of the area of grading ranges from approximately 5% to 10%.

REASONS FOR RECOMMENDATIONS

A. Environmental Review and Determination (CEQA)

The proposed project qualifies for a Categorical Exemption via Section 15303(e) for a retaining wall and 15304 (a) for grading on a slope less than 10%.

B. Project/Proposal

1. General Plan: Hillsides

2. Zoning Standards. Per Zoning Ordinance Section 4.20.020(B)(2), retaining walls are exempt from accessory structure development standards. As such, the project is only for Design Review of a retaining wall exceeding five (5) vertical feet that extends more than 80 horizontal feet in the HS-d1(Hillsides with Design Review) combined zoning district and a Grading Abatement to abate a grading violation (County Code Div. 12, Chapter III, Article 5).
C. **Design Review Findings:**

Per Section §5.50.040 of the County Zoning Ordinance, all Design Review applications are subject to the stated scope of review. The overall purpose of design review is to encourage quality design and mitigate potential adverse visual impacts of development. In the following discussion, the scope of review findings is listed in **bold**, and an explanation of how the project meets the required standard is in plain text below.

1. **Mitigation of any adverse visual impacts from proposed structures, grading, vegetation removal and landscaping:**

   The proposed retaining wall is designed to soften the appearance of the wall as seen from the street by incorporating varied wall heights that measure from a minimum of 2.7 feet to a maximum of 8.7 feet in height. The wall is located along the side of the driveway whereby portions of the wall are visible from the street right-of-way, beyond the front of the existing garage. The materials proposed on the wall include natural stone facades, with an LRV value less than 45 to soften and blend the retaining with the existing natural topography.

   The retaining wall includes grading that follows the existing contours of the site of 250 c.y. of cut and 250 c.y. of fill.

   As part of the mitigation to alleviate potential visual impacts, the applicant has proposed landscaping in front of and behind the wall, for portions that are visible from the street. The Landscape Plan includes at least eight (8) Bougainvillea plants along the base of the retaining wall, with at a minimum of eight (8) Star Jasmine planted at the top of the retaining wall to cascade over the walls in order to further soften the wall’s aesthetics and blend it with the natural topography. A condition of approval requiring said landscaping to be maintained in a thriving and healthy manner has been included.

   As conditioned, the proposed retaining wall will not create any significant adverse visual impacts due to the quality of the overall design and limited visibility from the valley floor or street right-of-way.

2. **Compatibility with the natural environment:**

   The proposed retaining wall is located on the most suitable area of the property in order to minimize grading and unnecessary tree removal. In addition, the proposed retaining wall is proposed to stabilize the existing grade and hillside, and landscaping will blend the retaining wall with the natural environment. Any other location would require significantly more grading, create scaring on the hillside and additional tree removals. Thus, the proposed retaining wall is designed to be compatible with the natural environment.
3. **Conformance with the “Design Review Guidelines,” adopted by the Board of Supervisors;**

The proposed retaining wall conforms to the Design Review Guidelines as the siting of the retaining wall utilizes the existing flat area and is designed to follow the natural contours in the surrounding area to minimize excessive grading. As most of the neighboring parcels are estate homes nearby with significant setbacks to the front, side, and rear, and the development area is surrounded by dense trees to the west; impacts on privacy and view of neighboring properties is minimal. The most visible area of the retaining wall is to the front of the property facing Matilija Drive where the wall has been significantly reduced to less than 5 feet in height, with planters to mitigate the height and blend the wall with the natural surroundings. The retaining wall materials are to have a Light Reflectivity Value less than or equal to 45.

4. **Compatibility with the neighborhood and adjacent development;**

The proposed retaining wall is keeping with the character of the surrounding neighborhood by blending the design with the existing natural surroundings. The proposed size of the wall, with maximum height of 8.7 ft tall and 123 feet in length, is necessary to stabilize the grading between the existing property and the neighboring hillside located on the adjacent property. The project will not be obtrusive, as it is designed to mitigate any visual impacts by incorporating varied heights of the wall and providing planters along the base and top portions of the wall, so landscape screening can be included to blend the retaining wall with the existing natural landscaping. The architectural design is composed of natural stones with an LRV of 45 or less.

5. **Compliance with applicable zoning district regulations; and**

Residential uses, including retaining walls, are allowed uses in HS hillsides zoning district, and the project complies with the HS zoning regulations. The proposed retaining wall is a component of the residential use of the property. Per Zoning Ordinance Section 4.20.020(B)(2), retaining walls are exempt from accessory structure zoning development standards. The proposed design of the retaining wall is in keeping with the –d1 design standards by incorporating planters along the base and top of wall to mitigate any visual impacts, and exterior colors are conditioned to be less than 45 in LRV.

6. **Conformance with the general plan, any applicable specific plan, other applicable guidelines.**

The proposed retaining wall is in a suitable portion of the site where the slope is modest to minimize grading and disturbance to the site. The size of the proposed retaining wall is necessary to stabilize the grading between the existing property and the neighboring hillside located on the adjacent property. The landscaping and exterior color and materials will be conditioned to have an LRV of 45 or less to
ensure compatibility with the surrounding environment. The proposed development substantially conforms with the Santa Clara County General Plan and Hillside Grading Guidelines, as the proposed retaining wall is used to protect the adjacent hillside, provide access for the property owner, and preserve the natural environment and topography (R-GD-25).

D. **Grading Approval Findings:**

Pursuant to Section C12-433, all Grading Approvals are subject to specific findings. In the following discussion, the scope of review findings is listed in **bold**, and an explanation of how the project meets the required standard is in plain text below:

1. **The amount, design, location, and the nature of any proposed grading is necessary to establish or maintain a use presently permitted by law on the property.**

   The project includes 250 c.y. of cut and 250 c.y. of fill to accommodate the proposed retaining wall, which is necessary to stabilize the existing grading and prevent unnecessary grading in the HS zoning district. The amount, design, location and the nature of proposed grading is necessary and appropriate to establish the circular driveway of the existing residence for the single-family residential use, which is a permissible use in the HS zoning district.

2. **The grading will not endanger public and/or private property, endanger public health and safety, will not result in excessive deposition of debris or soil sediments on any public right-of-way, or impair any spring or existing watercourse.**

   All proposed grading will be located on-site and will be engineered to ensure that the construction of the wall does not endanger public and/or private property, and will maintain the public health and safety of nearby residences and property. No excessive grading will be conducted. No unnecessary cuts or fills will occur. Standard conditions of approval and requirements of final grading plans will ensure that grading around retaining wall will not result in slope instability or erosion.

3. **Grading will minimize impacts to the natural landscape, scenic, biological and aquatic resources, and minimize erosion impacts.**

   The proposed grading has been designed to follow contours of the natural topography to the maximum extent possible with the retaining wall sited within the area that is needed to stabilize the existing grading. The majority of the proposed grading is for the establishment of the retaining wall along the driveway and side of the existing residence. The grading will not impose any impacts to biological, aquatic resources, or cultural resources. The Arborist Report prepared by Kurt Fouts, I.S.A. Certified Arborist, dated June 27, 2018, identifies three (3) oak trees and two (2) California Bay Laurel for protection within the area of the proposed
retaining wall to prevent any impacts to existing trees. Although the arborist report identifies one (1) unidentified tree, 15 inches in diameter, proposed for removal due to poor health, tree replacement for the tree is a condition of approval.

4. **For grading associated with a new building or development site, the subject site shall be one that minimizes grading in comparison with other available development sites, taking into consideration other development constraints and regulations applicable to the project.**

The existing property is developed with a single-family residence. The majority of the proposed grading is related to the new retaining wall that is needed to stabilize the slope adjacent to the existing residence, garage and driveway. The grading for the retaining wall is designed to follow the natural contours to the maximum extent possible. No on-site alternative location would minimize grading amounts, and the proposed wall has been designed to support the adjacent slope. Overall, the grading is designed minimally to establish the retaining wall.

5. **Grading and associated improvements will conform with the natural terrain and existing topography of the site as much as possible, and should not create a significant visual scar.**

The proposed grading is designed to conform with natural terrain and existing topography and will not create any significant visual scar. Any other location would require significantly more grading and create scarring on the hillside. Furthermore, the applicant has provided landscape screening to avoid visual impacts of the wall as seen from the street or neighboring properties.

6. **Grading conforms with any applicable general plan or specific plan policies; and**

The proposed grading is in conformance with specific findings and policies identified in the County General Plan. The establishment of a retaining wall is designed to stabilize the slope between the existing residence and neighboring property. The wall is designed to reduce visual impacts by blending the wall with the existing natural environment in keeping with General Plan policies R-GD 25.

7. **Grading substantially conforms with the adopted "Guidelines for Grading and Hillside Development" and other applicable guidelines adopted by the County.**

The proposed retaining wall will be located along the side of the existing residence, where an existing, unprotected slope can be found. The wall is designed to match the existing terrain, utilizes materials to help blend the wall into the natural terrain, and provides landscaping to screen the wall. The grading is not excessive and the
establishment of retaining wall will create any significant visual scar or impact to the environment.

BACKGROUND

On April 28, 2018, the applicant submitted an application for a Grading Abatement to resolve unpermitted grading associated with expansion of the existing driveway and construction of a new retaining wall to stabilize the grading between the existing property and the neighboring property. The application was deemed incomplete for processing, pending the submittal an application for Design Review. On July 20, 2018, the applicant submitted an application for Design Review, which was combined with the Grading Abatement application and deemed incomplete for processing. After meeting with Staff to discuss design and visual mitigations for the retaining wall, the applicant submitted a revised design of the proposed retaining wall on October 1, 2018. The full application was deemed complete on October 30, 2018. A public notice was mailed to all property owners within a 300-foot radius on November 21, 2018 and was also published in the Post Records on November 21, 2018.

STAFF REPORT REVIEW

Prepared by: Lara Tran, Associate Planner
Reviewed by: Leza Mikhail, Zoning Administrator
Notice of Exemption from CEQA

To: County Clerk-Recorder
   County of Santa Clara

Office of Planning & Research
   P.O. Box 3044, Room 222
   Sacramento, CA 95812-3044

Project Title
   Residence: 16330 Matilija Drive, Los Gatos

File Number (if applicable)
   10693-18GA-18DR

Project Location
   16330 Matilija Drive, southwest corner of Matilija Drive and Los Sereños Robles of Los Gatos in the unincorporated area of Santa Clara County. Zoning HS-d1

Public Agency Approving Project
   County of Santa
   Lara Tran, Associate Planner

Project Description (including purpose and beneficiaries of project)
   DESIGN REVIEW of a retaining wall exceeding five (5) vertical feet that extends more than 80 horizontal feet associated with a GRADING ABATEMENT. Proposed grading is 250 cubic yards (c.y.) of cut and 250 cubic yards (c.y.) of fill. There are three (3) oak trees and two (2) California Bay Laurel proposed for protection, and one (1) unidentified tree, 15 inches in diameter, proposed for removal.

Exempt Status check one/indicate type of State CEQA Guidelines section number:
   ☑ Categorical Exemption [CEQA Guidelines 15301-15333];
   ☐ Statutory Exemption [CEQA Guidelines 15260-15285];
   ☐ Declared Emergency [15269(a)];
   ☐ Emergency Project [15269(b)(c)];
   ☐ General Rule [CEQA Guidelines 15061(b)(3)];

Reasons the project is exempt:
   The proposed project qualifies for a Categorical Exemption, Section 15304 (Class 4) and Section 15303 (Class 3 – retaining wall). The proposed work is not grading on land with a slope of more than 10%, nor is proposed retaining wall located in any waterways, wetland, or scenic area. The project consists of filing of earth into previously excavated land with material compatible with the natural features of the site.

County Contact Person
   Lara Tran
   Title
   Associate Planner
   Telephone Number
   (408) 299-5759

Date: 11/28/18

Signature:

Name/Title: Lara Tran/ Associate Planner

Approved by:

File 10693-18GA-18DR
16330 Matilija Drive
Zoning Administration Meeting
December 7, 2018 Item # 3
ATTACHMENT B

Preliminary Conditions of Approval

10693-18GA-18DR

DESIGN REVIEW and GRADING ABATEMENT CONDITIONS OF APPROVAL

Owner/Applicant: Mirjana Vajdic
File Number: 10693-18GA-18DR
Location: 16330 Matijila Drive, Los Gatos (APN: 510-30-040)
Project Description: Design Review and Grading Abatement for a new retaining wall exceeding five (5) vertical feet that extends more than 80 horizontal feet. Proposed grading is 250 cubic yards (c.y.) of cut and 250 cubic yards (c.y.) of fill.

If you have any question regarding the following preliminary conditions of approval, call the person whose name is listed below as the contact for that agency. S/he represents a specialty and can provide details about the conditions of approval.

<table>
<thead>
<tr>
<th>Agency</th>
<th>Name</th>
<th>Phone</th>
<th>E-mail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning</td>
<td>Lara Tran</td>
<td>(408) 299-5759</td>
<td><a href="mailto:lara.tran@pln.sccgov.org">lara.tran@pln.sccgov.org</a></td>
</tr>
<tr>
<td>Land Development Engineering</td>
<td>Ed Duazo</td>
<td>(408) 299-5733</td>
<td><a href="mailto:chris.freitas@pln.sccgov.org">chris.freitas@pln.sccgov.org</a></td>
</tr>
<tr>
<td>Geology</td>
<td>Jim Baker</td>
<td>(408) 299-5774</td>
<td><a href="mailto:jim.baker@pln.sccgov.org">jim.baker@pln.sccgov.org</a></td>
</tr>
<tr>
<td>Building Inspection</td>
<td></td>
<td>(408) 299-5700</td>
<td></td>
</tr>
</tbody>
</table>

STANDARD CONDITIONS OF APPROVAL

Building Inspection
1. For detailed information about the requirements for a Building Permit, obtain a Building Permit Application Instruction handout from the Building Inspection Office or visit the website at www.sccbuilding.org.

Planning
2. Construction of the new retaining wall shall take place in accordance with the approved civil plans prepared by Kenneth Douglas Wilson (Licensed Land Surveyor) and Jason T. Barnum, P.E., submitted on October 1, 2018, and these conditions of approval. Any changes to the proposed project may result in additional environmental review, pursuant to the California Environmental Quality Act, or additional Planning review and a public
3. Grading Abatement approval includes a maximum of 250 cubic yards of cut and 250 cubic yards of fill (500 yards combined) and the construction of the retaining wall. Grading plans submitted for Grading Permit shall be in substantial conformance with the approved Civil Plans submitted on October 1, 2018.

4. The exterior color surfaces of the retaining wall shall be of muted colors with a light reflectivity value (LRV) of 45 or lower.

**Protection of Existing Trees**

5. All tree protection measures shall be adhered to as stipulated in the arborist report (Attachment D) dated June 27, 2018, under “Tree Protection Zone & Critical Root Zone” and “Tree Protection Procedures” by Kurt Foust, Arborist Consultant, I.S.A. Certified Arborist, including:

   a. The project arborist shall meet with the General Contractor prior to any tree removal, demolition, or construction activities to discuss a construction management plan and designate the location of any material storage, wash out, office modules, portable sanitation, and areas of vehicle.

   b. Heavy equipment access and egress shall be clearly posted on site throughout the duration of the development project.

   c. The contractor shall immediately notify the project arborist if roots are damaged, exposed, or trunk or branches are wounded.

   d. All tree removals shall be performed by hand using light equipment without any damage to remaining trees. All stumps shall be removed by hand or using hand operated stump grinding machinery when within the Root Intrusion Zone (RIZ) of remaining trees and to a depth of no less than twelve (12) inches.

   e. Following fencing installation, the project arborist shall inspect and confirm that the tree protected fencing has been installed adequately and provide a written report (with photographs) to the project planner with the County of Santa Clara.

   f. The Arborist shall monitor construction activity to ensure that the tree protection measures are implemented and submit a Construction Observation Letter to the Planning Office for approval, prior to final inspection, summarizing the results of the monitoring activity and resulting health of trees designated for preservation onsite.

   g. All tree protection measures as recommended by a certified Arborist shall be shown on the final grading/ construction or landscape plans and adhered to during construction, including protection for three (3) Oak tree canopies (identified as T1, T2, and T3 in the arborist report) and the two (2) California Bay Laurel
(identified as T4 and T5). Any disturbance to the canopies and/or decline in health of protected trees shall require notification to the project Arborist and County Planning Office.

Tree Removal/Replacement

6. Final grading construction plans shall clearly identify the size and species of all trees proposed for removal, consistent with the arborist report and “Tree Assessment Chart” submitted by Kurt Foust, Arborist Consultant, I.S.A. Certified Arborist, on June 27, 2018. For each tree designated for removal, replacement shall occur at the replacement ratios stated below:

   a. **Tree Removal:** Project proposes the removal of one (1) unidentified tree 15-inches in diameter. “Tree Assessment Chart” within the arborist report submitted by Kurt Foust, Arborist Consultant, I.S.A. Certified Arborist, on June 27, 2018 identified the tree as T6.

   b. **Tree Replacement:** As specified by the Santa Clara County Guidelines for Tree Protection and Preservation for Land Use Applications, the removal requires the replacement of [2] 24” box of oak trees or [3] 15-gallon of oak trees.

   **Note:** Tree replacement can be dependent on amount of room available on a parcel in which trees can be planted. On properties where there is limited room to plant replacement trees, fewer replacement trees may be authorized per County of Santa Clara Guidelines for Tree Protection and Preservation. An (I.S.A.) certified arborist shall provide written justification if there are fewer tree replacements on the property.

   c. All proposed landscape plant materials shall be drought-tolerant and/or native species and will match existing vegetation.

   d. All trees to remain shall be protected with five-foot chainlink fencing on steel posts driven into the ground to the extent possible at the dripline of the trees.

   e. Arrangement of trees and other plant materials shall provide for defensible space for fire protection around proposed buildings.

Tree Fencing

7. Fenced enclosures for trees to be protected shall be erected at the dripline of trees or as established by the Arborist to establish the Tree Protective Zone (TPZ) in which no soil disturbance is allowed, and activities are restricted.

8. All trees to be preserved shall be protected with minimum 5-foot high fences. Fences are to be mounted on 2-inch diameter galvanized iron posts, driven into the ground to a depth of at least 2 feet, at no more than 10-foot spacing (See detail, available at [www.sccplanning.org](http://www.sccplanning.org)). This detail shall appear on grading and building permit plans.
9. In areas where soil properties are less than conducive to hearty vegetation growth, soil augmentation shall be required, particularly in those areas surrounding tree installation pits. The extent of soil augmentation shall be based on the anticipated drip line at maturity, with a depth adequate to promote root development for structural stability and vigor.

10. All proposed trees on the property are subject (without time limitation) to the provisions of Division C16: Tree Preservation and Removal, of the County Ordinance Code and the conditions of approval for the project.

Land Development Engineering

11. Property owner is responsible for the adequacy of any drainage facilities and for the continued maintenance thereof in a manner that will preclude any hazard to life, health or damage to adjoining property.

CONDITIONS OF APPROVAL TO BE COMPLETED PRIOR TO BUILDING AND/OR GRADING PERMIT ISSUANCE

Planning

12. Prior to issuance of any permits, the applicant shall pay all reasonable costs associated with the work by the Department of Planning and Development.

13. Prior to issuance of a grading and/or building permit a final landscape plan for the retaining wall shall be submitted and approved by the Planning Office. The landscaping plan shall include at least eight (8) planters of Bougainvillea along the base of the retaining wall with at a minimum of eight (8) Star Jasmine planters located at the top of the retaining wall.

14. The final landscaping plan shall also include location for all trees replacement of [2] 24” box of oak trees or [3] 15-gallon of oak trees. If the owner/applicant is requesting for less trees replacement, an (ISA) certified arborist shall provide written justification. Additionally, the landscape plans shall include tree protections measures as identified in Condition Nos. 5-10.

15. Pursuant to §5.20.125, record a Notice of Permit and Conditions with the County Office of Clerk-Recorder, to ensure that successor property owners are made aware that certain conditions of approval shall have enduring obligation. Evidence of such recordation shall be provided prior to building permit issuance.

Geology

16. Prior to building permit issuance, submit a geo-technical engineers’ Plan Review Letter that confirms the plans conform with the intent of the recommendations presented in AST’s “Soil and Foundation Investigation Report” dated January 8, 2018.
Prior to start of any construction activities, obtain a Grading Permit from Land Development Engineering (LDE) and a Building Permit (retaining wall) from the Building Inspection Office (BIO).

Prior to LDE clearance of the building permit, issuance of the grading permit is required (building and grading permits can be applied concurrently). The process for obtaining a Grading Permit, Building Permit, and the forms that are required can be found at the following web pages:

https://www.sccgov.org/sites/dpd/Iwantto/Permits/Pages/GP.aspx
https://www.sccgov.org/sites/dpd/Iwantto/Permits/Pages/BP.aspx

Contact LDE at (408) 299-5734 for more information and timelines.

Grading plans shall include an Erosion and Sediment Control Plan that outlines seasonally appropriate erosion and sediment controls during the construction period. Include the County’s Standard Best Management Practice Plan Sheets BMP-1 and BMP-2 with the Plan Set.

Final grading plans shall include a single sheet which contains the County standard notes and certificates as shown on County Standard Cover Sheet. Plans shall be neatly and accurately drawn, at an appropriate scale that will enable ready identification and recognition of submitted information.

Improvement Plans

Final improvement plans shall be prepared by a licensed civil engineer for review and approval by LDE and the scope of work shall be in substantial conformance with the conditionally approved preliminary plans on file with the Planning Office. Include plan, profile, typical sections, contour grading for all street, road, driveway, structures and other improvements as appropriate for construction. The final design shall be in conformance with all currently adopted standards and ordinances. The following standards are available on-line:


Survey monuments shall be shown on the improvement plan to provide sufficient information to locate the proposed improvements and the property lines. Existing monuments must be exposed, verified and noted on the grading plans. Where existing monuments are below grade, they shall be field verified by the surveyor and the grade shall be restored and a temporary stake shall be placed identifying the location of the found monument. If existing survey monuments are not found, temporary staking delineating the property line may be placed prior to construction and new monuments shall be set prior to final acceptance of the improvements. The permanent survey
monuments shall be set pursuant to the State Land Surveyor’s Act. The Land Surveyor / Engineer in charge of the boundary survey shall file appropriate records pursuant to Business and Professions Code Section 8762 or 8771 of the Land Surveyors Act with the County Surveyor.

23. Improvement plans shall show all applicable easements affecting the parcel(s) with benefactors and recording information.

Soils and Geology
24. Submit one copy of the geotechnical report for the project, prepared by a registered civil engineer, as required by the Santa Clara County Ordinance Code, to Land Development Engineering.

25. Submit a plan review letter by the Project Geotechnical Engineer certifying that the geotechnical issues identified in the above geotechnical report been mitigated on the improvement plan. This letter shall be submitted to and reviewed by Land Development Engineering.

Agreements
26. Enter into a land development improvement agreement with the County. Submit an Engineer’s Estimate of Probable Construction Cost prepared by a registered civil engineer with the all stages of work clearly identified for all improvements and grading as proposed in this application. Post financial assurances based upon the estimate, sign the development agreement and pay necessary inspection and plan check fees, and provide County with a Certificate of Worker's Compensation Insurance. (C12-206).

CONDITIONS OF APPROVAL TO BE COMPLETED PRIOR TO OCCUPANCY OR ONE YEAR FROM THE DATE OF THE LAND DEVELOPMENT AGREEMENT, WHICHERVER COMES FIRST.

Planning
27. Prior to final inspection, contact Lara Tran, at least one (1) week in advance to schedule a site visit to verify the approved exterior colors have been installed as approved and landscaping (including tree preservation and replacement) have been installed and maintained.

Geology
28. Prior to final inspection, submit a Construction Observation Letter detailing that the construction of the retaining wall is consistent with the recommendation outlined in the Soils and Foundation Report dated January 8, 2018.

Land Development Engineering
29. Existing and set permanent survey monuments shall be verified by inspectors prior to final acceptance of the improvements by the County. Any permanent survey monuments damaged or missing shall be reset by a licensed land surveyor or registered
civil engineer authorized to practice land surveying and they shall file appropriate records pursuant to Business and Professions Code Section 8762 or 8771 of the Land Surveyors Act with the County Surveyor.

30. Construct all the improvements. Construction staking is required and shall be the responsibility of the developer.
ARBOРИST REPORT-
Tree Resource Analysis, Construction Impact Assessment &
Tree Protection Plan for:

Proposed site improvements at:
16330 Matilija Drive, Los Gatos
(APN: 510-30-040)
June 27, 2018

Prepared for:

Mr. Jack Eitzen
P.O. Box 998
Saratoga, CA, 95071

826 Monterey Avenue
Capitola, CA 95010
831-359-3607
kurtflouts1@outlook.com

ISA Certified Arborist  WE0681A
# Table of Contents

**SUMMARY** ................................................................................................................................ 1  
Background .................................................................................................................................... 1  
Assignment ..................................................................................................................................... 1  
Limits of the Assignment .............................................................................................................. 2  
Purpose and use of the report ........................................................................................................ 2  
Resources ....................................................................................................................................... 2  

**OBSERVATIONS** ...................................................................................................................... 3  

**DISCUSSION** ............................................................................................................................. 4  
Species List .................................................................................................................................... 4  
Condition Rating ........................................................................................................................... 4  
Suitability for Preservation ............................................................................................................. 5  
Impact Level ................................................................................................................................... 5  
Tree Evaluation and Recording Methods ...................................................................................... 5  
Tree Protection Zone & Critical Root Zone .................................................................................... 6  
Oak Woodland Impacts .................................................................................................................. 7  
Subject Tree Construction Impacts .............................................................................................. 8  
Tree Protection Procedures ........................................................................................................... 8  
Replacement Trees ....................................................................................................................... 8  

**CONCLUSION** ............................................................................................................................ 9  

**RECOMMENDATIONS** ............................................................................................................... 10
Attachments: Appendix A -F

Appendix A – Tree Assessment Chart

Appendix B – Criteria for Tree Assessment Chart

Appendix C - Tree Protection Plan Sheet

Appendix D – Subject Tree Images

Appendix E - Tree Protection Guidelines & Restrictions

- Protecting Trees During Construction
- Project Arborist Duties & Inspection Schedule
- Tree Protection Fencing
- Tree Protection Signs
- Monitoring
- Root Pruning
- Tree Work Standards & Qualifications
- Letter from County of Santa Clara Department of Planning and Development dated 5/26/18
- Aerial Image of Property Boundaries & Oak Woodland Extents
- Santa Clara County – Guidelines for Tree Protection and Preservation for Land Use Applications
- Santa Clara County Planning Office – Guide to Evaluating Oak Woodland Impacts

Appendix F- Assumptions & Limiting Conditions
SUMMARY

- Site improvements adjacent to a single-family home are proposed at 16330 Matilija Drive, Los Gatos.
- A new retaining wall on the eastern edge of the property is proposed.
- Excavation for the wall occurred in November of 2018.
- The excavation impacted three young “protected” trees on the property.
- Two maturing “protected” on the adjacent property were also impacted.
- The three young “protected” trees are in fair to good condition have suffered significant construction impacts and should be monitored for a specified time period to determine if their condition worsens and replacement is required.
- The two maturing trees on the adjacent property have received minor to moderate construction impacts and their future health should not change due to the previous excavation.
- There will be no impact to the adjacent Oak Woodland Habitat Area, as the limits of the project area, are not within the Oak Woodland Habitat Area.
- Any anticipated coast live oak tree losses would be limited to one tree and therefore not have a significant impact on the total oak canopy cover.

Background

Plans have been submitted to the County of Santa Clara Planning Department, for construction of a retaining wall at 16330 Matilija Drive, Los Gatos. Excavation for the wall has been completed.

Mr. Jack Eitzen has requested my services, to assess the condition of six “protected” trees, and one “not-protected” tree within the project site and the construction impacts that may have affected them. Further, to provide a report with my findings and recommendations to meet County of Santa Clara planning requirements.

Assignment

Provide an arborists report that includes an assessment of the trees within the project area. The assessment is to include the species, size (trunk diameter, height and canopy spread), condition (health and structure), and suitability for preservation ratings.

To complete this assignment, the following services were performed:
- **Tree Resource Evaluation**: Inventory, evaluate and assign suitability for preservation ratings for subject trees.
- **Plan Review**: Reviewed provided plans including: Wall Location Plan, Sheet C1.0, By Jason Barnum, Dated March 2018.
- **Construction Impact Assessment**: Combine tree resource data with observed construction impacts, to provide recommendations for removal or retention of trees.
- **Tree Protection Specifications**: Provide tree protection specifications to help ensure the long-term health of the subject trees.
- **Mapping**: Tree canopies were plotted onto, Wall Location Plan, Sheet C1.0, By Jason Barnum, Dated March 2018, to create a Tree Protection Plan sheet.

**Limits of the Assignment**
The information contained in this report covers only those items that were examined and reflects the condition of those items at the time of inspection on June 19, 2018. The inspection is limited to visual examination of accessible items without climbing, dissection, excavation, probing, or coring. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the trees in questions may not arise in the future.

**Purpose and use of the report**
The report is intended to identify all the trees within the plan area that could be affected by a project. The report is to be used by the developer, their agents, and the County of Santa Clara as a reference for existing tree conditions and to help satisfy the County of Santa Clara planning requirements.

**Resources**
All information within this report is based on site plans as of the date of this report. Resources are as follows:

- Wall Location Plan, Sheet C1.0, By Jason Barnum, Dated March 2018.
- Site Visit, Tree Inventory & Condition Evaluation at, 16330 Matilija Drive, 6/19/2018.
- Santa Clara County Planning Office Guide to Evaluating Oak Woodlands Impacts & Santa Clara County Guidelines for Tree Protection and Preservation for Land Use Applications
OBSERVATIONS

There are five “protected”, trees that were impacted by the previous excavation for the new retaining wall. All are California native species. Three are Coast Live Oaks (Quercus agrifolia). Two of these are maturing trees, and one is a young oak. The two remaining “protected” trees are California Bay Laurel (Umbellularia californica). One tree of protected size was dead before excavation for the wall occurred and the species could not be identified. One tree impacted by the excavation is not “protected”, a young Toyon (Heteromeles arbutifolia).
DISCUSSION

The tree inventory consists of seven trees comprised of three species. The three Coast Live Oaks, two California Bay Laurel and one dead tree (unidentified), are classified as “protected” trees and are of a species and size protected by the County of Santa Clara. The toyon tree is not “protected”.

Species List

TOTAL SUBJECT TREES: 7 Trees

Protected: 6
3 Coast Live Oak (Quercus agrifolia)
2 California Bay Laurel (Umbellularia californica)
1 Unidentified (dead)

Not Protected: 1
1 Toyon (Heteromeles arbutifolia)

Condition Rating

A tree’s condition is determined by assessing both the health and structure, then combining the two factors to reach a condition rating. Tree condition is rated as poor, fair or good. The quantity of trees assigned for each category (good, fair or poor), is indicated below:

Tree Condition Rating
- Good - 2
- Fair - 3
- Poor - 2
Suitability for Preservation

A tree's suitability for preservation is determined based on its health, structure, age, species characteristics and longevity using a scale of good, fair or poor. The quantity of trees assigned to each category (good, fair or poor), is listed below.

Suitability Rating

- Good - 2
- Fair - 3
- Poor - 2

Impact Level

Impact level rates the degree a tree may be impacted by construction activity and is primarily determined by how close the construction procedures occur to the tree. Construction impacts are rated as low, moderate, high. The quantity of trees assigned for each category (low, moderate, high), is indicated below:

- Low - 1
- Moderate - 1
- High - 4

Tree Evaluation and Recording Methods

Site evaluations were made on 5/18/2018. The inventory included all trees on the property, and four trees on an adjacent property, with a dripline overhanging the project limits. The health and structural condition of each tree was assessed and recorded. Based on the trees health and structural condition, each tree's suitability for preservation was rated and recorded.

The recorded data is included in the Tree Assessment Chart, Appendix A, of this report. Tree numbers were plotted on the attached Tree Protection Plan sheets. To correlate the data in the Tree Assessment Chart to the tree's location on the site, refer to the Tree Protection Plan sheet - Appendix C.
Tree Protection Zone

The tree protection zone (TPZ), is a defined area within which certain activities are prohibited or restricted to minimize potential injury to designated trees during construction.

The size of the optimal TPZ can be determined by a formula based on: 1) trunk diameter 2) species tolerance to construction impacts, and 3) tree age (Matheny, N. and Clark, J 1998). In some instances, tree drip line is used as the TPZ. Development constraints can also influence the final size of the tree protection zone.

Fencing is installed to delineate the (TPZ), and to protect tree roots, trunk, and scaffold branches from construction equipment. The fenced protection area may be smaller than the optimal or designated TPZ area in some circumstances. Tree protection may also involve the arming of the tree trunk and/or scaffold limbs with barriers to prevent mechanical damage from construction equipment. See Tree Protection Guidelines & Restrictions – Appendix E.

Once the TPZ is delineated and fenced (prior to any site work, equipment and materials move in), construction activities are only to be permitted within the TPZ if allowed for and specified by the project arborist.

Where tree protection fencing cannot be used, or as an additional protection from heavy equipment, tree wrap may be used. Wooden slats at least one inch thick are to be bound securely, edge to edge, around the trunk. A single layer or more of orange plastic construction fencing is to be wrapped and secured around the outside of the wooden slats. Major scaffold limbs may require protection as determined by the City arborist or Project arborist. Straw wattle may also be used as a trunk wrap and secured with orange plastic fencing.

Data has been entered in the Tree Assessment Chart – Appendix A, which indicates the optimal Tree Protection Zone for each tree.

Additional general tree protection guidelines are included in Tree Protection Guidelines & Restrictions – Appendix E.

Critical Root Zone

Critical Root Zone (CRZ) is the area of soil around the trunk of a tree where roots are located that provide critical stability, uptake of water and nutrients required for a tree's survival. The CRZ is the minimum distance from the trunk that trenching that requires root cutting should occur and can be calculated as three to the five times the trunk Diameter at Breast Height (DBH). For example, if a tree is one foot in trunk diameter than the CRZ is three to five feet from the trunk location. We will often average this as four times the trunk diameter or 1ft. DBH = 4ft. CRZ (Smiley, E.T., Fraedrich, B. and Hendrickson, N. 2007).
Oak Woodland Impacts

An analysis has been made determine whether the proposed project may result in a conversion of oak woodlands that will have a significant effect on the environment. Any oak tree (native tree species in the genus Quercus) that is 5 inches or more in diameter at 4 feet above final grade is regulated and subject to evaluation in the determination of impacts.

A land development project is considered to have a significant direct impact on oak woodland if the project will result in \textbf{1/2 acre or more} decrease in native oak canopy within an oak woodland on the project site.

The proposed project is within the property boundaries of 16330 Matilija Drive, Los Gatos. The property is 1.29 acres in size, with approximately 2/3 or .86 of an acre canopy cover comprised of oak woodland. The project limits were identified as being located \textbf{adjacent} (see attached letter from County of Santa Clara Department of Planning and Development, page 3, dated 5/26/18 & aerial image of property boundaries), to an Oak Woodland. Based on the provided \textbf{Wall Location Plan} dated March 2018, I have determined, the limits of the project will not encroach into the Oak woodland Habitat area.

Further, I have determined that only one coast live oak has received significant construction impacts and may require removal in the future. If this tree is removed, the total acreage canopy cover impacts from oak trees removed is less than .05 of an acre.

The primary construction impacts to existing trees within the project area is due to excavation for the retaining wall and the corresponding root loss of adjacent trees. The excavation work was undertaken in November of 2017. No “protected” trees were removed because of the work. However, the impacts to one coast live oak and two California bay laurels is rated high, with significant encroachment into the critical root zone of each of these trees. It is very likely that a significant percentage of roots, (including anchoring roots), were lost for each of these trees. Further, due the height and branching structure of tree T3 coast live oak, the stability of this tree in wind events is suspect. However, since there is not a permanent target should the tree fail, removal of the tree is not recommended at this time. Both species, the coast live oak and the California bay laurel, are rated \textbf{moderate} (scale of good, moderate, or poor), for their construction tolerance (Matheny, N. and Clark, J 1998, \textit{Trees & Development – A Technical Guide to Preservation of Trees During Land Development}).

The current condition of these three trees ranges from good to fair. If the condition if any of these trees declines within the next two years and becomes poor, the tree should be replaced with new trees at a ratio and species as required according to County of Santa Clara specification.
Construction Phases Affecting Subject Trees

Construction phases that will impact trees on this project include:

1. Excavation for retaining wall, (work completed). Root zone impacts.
2. Installation of piers. Trunk & canopy impacts.

Impacts to Subject Trees

1. Completed excavation for retaining wall impacted trees, T1 – T7
2. Installation of piers could potentially impact trees T3 & T4.

Tree Protection Procedures and Recommended Sequence

1. INSTALL TREE TRUNK PROTECTION
   - Wrap trees #T3 & T4 (see trunk wrapping detail, Tree Protection Plan, Sheet T1), prior to any new construction.

Replacement Trees

If protected trees are removed, the County of Santa Clara Tree Preservation Guidelines recommend the following guidelines for replacement trees:

- Replacement trees should be native and like for like.
- Oak trees lost shall be replaced with oak trees.
- For the removal of one small tree (5-18 inches):
  - (3) 15-gallon trees, or (2) 24-inch box trees should be planted.
- The trees should be planted in appropriate locations that will not conflict with the existing home or overhead high voltage utility wires.
- No tree removal shall be permitted until such grading or building permit has been issued by the County as indicated on approved plans.
CONCLUSION

- Site improvements adjacent to a single-family home are proposed at 16330 Matilija Drive, Los Gatos.
- A new retaining wall on the eastern edge of the property is proposed.
- Excavation for the wall occurred in November of 2018.
- The excavation impacted three young “protected” trees on the property. Including one coast live oak and two California bay laurels.
- Two maturing “protected” coast live oak trees on the adjacent property were also impacted.
- The two young “protected” California bay laurel trees are in good condition have suffered significant construction impacts and should be monitored for two years, by an experience tree professional, to determine if their condition worsens and replacement is required.
- One young “protected” coast live oak is in fair condition has suffered significant construction impacts and should be monitored for two years, by an experienced tree professional, to determine if their condition worsens and replacement is required.
- The two maturing coast live oak trees on the adjacent property have received minor to moderate construction impacts and their future health should not change due to the previous excavation.
- Two trees T3 Coast live oak & T4 California bay laurel could be impacted by the equipment used to drill the pier holes, by the installation of the pier forming material or by the concrete installation into the pier forms. For these reasons the trees should receive tree trunk protection wrap as indicated on the Tree Protection Plan sheet prior to any construction activities.
- There will be no impact to the adjacent Oak Woodland Habitat Area as the limits of the project area, are not within the Oak Woodland Habitat Area.
- Any anticipated coast live oak tree losses would be limited to one tree and will not have a significant impact on the total oak canopy cover.
- If trees T3, T4 or T5 decline to a poor condition within the next two years removal is recommended, a permit will be required and, replacement trees will be required.
RECOMMENDATIONS

1. Obtain all necessary permits prior to removing or significantly altering any trees on site.

2. Wrap trunks of trees T3 & T4 as specified on Tree Protection Plan, Sheet T-1.

3. Monitor at six-month intervals, the condition of trees that were highly impacted by the excavation for the retaining wall. Evaluation should be made by a certified arborist or other tree professional.

4. If the condition of any of the trees becomes poor within the two-year period, obtain a tree removal permit, remove failing trees and replant like for like natives at the recommended replanting size and ratio.

Respectfully submitted,

Kurt Fouts
ISA Certified Arborist  WE0681A
### Tree Assessment Chart - Appendix A

#### 16330 Matilija Drive, Los Gatos

**Suitability for Preservation Ratings:**

- **Good:** Trees in good health and structural condition with potential for longevity on the site
- **Fair:** Trees in fair health and/or with structural defects that may be reduced with treatment procedures
- **Poor:** Trees in poor health and/or with poor structure that cannot be effectively abated with treatment

**Retention or Removal Code:**

- **RT:** Retain Tree
- **RI:** Remove Due to Construction Impacts
- **I.M.:** Impacts Can Be Mitigated With Pre-Construction Treatments
- **R.C.:** Remove Due to Condition

---

<table>
<thead>
<tr>
<th>Tree #</th>
<th>Species</th>
<th>Trunk Diameter @ 54 inches a.g.</th>
<th>Protected Tree</th>
<th>Crown Height &amp; Spread</th>
<th>Health Rating</th>
<th>Structural Rating</th>
<th>Suitability for Preservation (Based Upon Condition)</th>
<th>Tree Protection Zone (in feet)</th>
<th>Construction Impacts (Rating &amp; Description)</th>
<th>Retention or Removal Code</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1</td>
<td>coast live oak (<em>Quercus agrifolia</em>)</td>
<td>16” (estimated)</td>
<td>Yes</td>
<td>45’X38’</td>
<td>Good</td>
<td>Fair</td>
<td>Fair</td>
<td>12’</td>
<td>Low (Root loss, excavation)</td>
<td>RT</td>
<td>On adjacent property. Soil cut for retaining wall was 11’ from trunk.</td>
</tr>
<tr>
<td>T2</td>
<td>coast live oak</td>
<td>13”</td>
<td>Yes</td>
<td>40’X25’</td>
<td>Good</td>
<td>Fair</td>
<td>Fair</td>
<td>10’</td>
<td>Moderate (Root loss, excavation)</td>
<td>RT</td>
<td>On adjacent property. Soil cut for retaining wall was 11’ from trunk. Significant lean to North west. Soil cut for retaining wall was 8’ from trunk.</td>
</tr>
</tbody>
</table>
## Tree Assessment Chart - Appendix A

<table>
<thead>
<tr>
<th>Tree #</th>
<th>Species</th>
<th>Trunk Diameter @ 48 inches a.g.</th>
<th>Protected Tree</th>
<th>Crown Height &amp; Spread</th>
<th>Health Rating</th>
<th>Structural Rating</th>
<th>Suitability for Preservation (Based Upon Condition)</th>
<th>Tree Protection Zone (in feet)</th>
<th>Construction Impacts (Rating &amp; Description)</th>
<th>Retention or Removal Code</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>T3</td>
<td>coast live oak (Quercus agrifolia)</td>
<td>9&quot;</td>
<td>Yes</td>
<td>32'X15'</td>
<td>Fair</td>
<td>Fair</td>
<td>Fair</td>
<td>7'</td>
<td>High (root loss, compaction)</td>
<td>RT</td>
<td>Small twig dieback over 25% of canopy. Unbalanced canopy with weight bias to north east. Soil cut for retaining wall was &lt; 1’ from trunk.</td>
</tr>
<tr>
<td>T4</td>
<td>California bay laurel (Umbellularia californica)</td>
<td>8&quot;</td>
<td>Yes</td>
<td>32'X15'</td>
<td>Good</td>
<td>Fair</td>
<td>Good</td>
<td>7'</td>
<td>High (Root loss, excavation)</td>
<td>RT</td>
<td>Unbalanced canopy with weight bias to North. Soil cut for retaining wall was &lt; 1' from trunk.</td>
</tr>
<tr>
<td>T5</td>
<td>California bay laurel (Umbellularia californica)</td>
<td>8&quot;,6&quot;,5&quot;</td>
<td>Yes</td>
<td>20'X20'</td>
<td>Good</td>
<td>Fair</td>
<td>Good</td>
<td>10'</td>
<td>High (root loss, compaction)</td>
<td>RT</td>
<td>Unbalanced canopy with weight bias to North. Soil cut for retaining wall was &lt; 2' from trunk.</td>
</tr>
<tr>
<td>T6</td>
<td>unidentified</td>
<td>15&quot;</td>
<td>Yes</td>
<td>10'X15'</td>
<td>Poor</td>
<td>Poor</td>
<td>Poor</td>
<td>N/A</td>
<td>N/A</td>
<td>RC</td>
<td>Tree was dead prior to beginning of project. Bark splitting on trunk indicating tree has been dead for &gt; one year.</td>
</tr>
<tr>
<td>T7</td>
<td>toyon (Heteromeles arbutifolia)</td>
<td>4&quot;</td>
<td>No</td>
<td>8'X6'</td>
<td>Poor</td>
<td>Fair</td>
<td>Poor</td>
<td>7'</td>
<td>High (root loss, compaction)</td>
<td>RC</td>
<td>Soil cut for retaining wall was &lt; 2’ from trunk.</td>
</tr>
</tbody>
</table>

---

16330 Matilija Drive, Los Gatos

Tree Assessment Chart - Appendix A

---

Kurt Fouts
Arborist Consultant

826 Monterey Avenue
Capitola, CA 95010
831-359-3607
scharborgounds@yahoo.com

Page 2 of 2 6/27/2018
APPENDIX B – CRITERIA FOR TREE ASSESSMENT CHART

Following is an explanation of the data used in the tree evaluations. The data is incorporated in the Tree Assessment Chart, Appendix A.

**Trunk Diameter and Number of Trunks:**

Trunk diameter as measured at 4.5 feet above grade. The number of trunks refers to a single or multiple trunked tree. Multiple trunks are measured at 4.5 feet above grade.

**Health Ratings:**

- **Good:** A healthy, vigorous tree, reasonably free of signs and symptoms of disease
- **Fair:** Moderate vigor, moderate twig and small branch dieback, crown may be thinning and leaf color may be poor
- **Poor:** Tree in severe decline, dieback of scaffold branches and/or trunk, most of foliage from epicormics

**Structure Ratings:**

- **Good:** No significant structural defects. Growth habit and form typical of the species
- **Fair:** Moderate structural defects that might be mitigated with regular care
- **Poor:** Extensive structural defects that cannot be abated.

**Suitability for Preservation Ratings:**

**Rating factors:**

- **Tree Health:** Healthy vigorous trees are more tolerant of construction impacts such as root loss, grading and soil compaction, then are less vigorous specimens.

- **Structural integrity:** Preserved trees should be structurally sound and absent of defects or have defects that can be effectively reduced, especially near structures or high use areas.

- **Tree Age:** Over mature trees have a reduced ability to tolerate construction impacts, generate new tissue and adjust to an altered environment. Young to maturing specimens are better able to respond to change.
Species response: There is a wide variation in the tolerance of individual tree species to construction impacts.

Rating Scale:

*Good:* Trees in good health and structural condition with potential for longevity on the site

*Fair:* Trees in fair health and/or with structural defects that may be reduced with treatment procedures.

*Poor:* Trees in poor health and/or with poor structure that cannot be effectively abated with treatment. Trees can be expected to decline or fail regardless of construction impacts or management. The species or individual may possess characteristics that are incompatible or undesirable in landscape settings or unsuited for the intended use of the site.

Construction Impacts:

Rating Scale:

*High:* Development elements proposed that are located within the Tree Protection Zone that would severely impact the health and/or stability of the tree. The tree impacts cannot be mitigated without design changes. The tree may be located within the building footprint.

*Moderate:* Development elements proposed that are located within the Tree Protection Zone that will impact the health and/or stability of the tree and can be mitigated with tree protection treatments.

*Low:* Development elements proposed that are located within or near the Tree Protection Zone that will have a minor impact on the health of the tree and can be mitigated with tree protection treatments.

*None:* Development elements will have no impact on the health and stability of the Tree.

Tree Protection Zone (TPZ):

Defined area within which certain activities are prohibited or restricted to prevent or minimize potential injury to designated trees, particularly during construction or development.
For additional information refer to arborist report dated June 27, 2018

Drawn by K.F. 6/27/2018
Base Map provided by: Jason Barnum, Civil Engineer

T1 - coast live oak
16" DBH

T2 - coast live oak
13" DBH

T3 - coast live oak
9" DBH

T4 - California bay laurel
8" DBH

T5 - California bay laurel
8", 6", 5" DBH

T6 - unidentified species
15" DBH

T7 - toyon
DBH

Tree Protection Plan - Sheet T-1

Legend

Tree Location & Number
Tree Protection Fencing
Tree Canopy Extents
Hand Trenching & Root Pruning
Remove Tree

Tree Protection Specification - Trunk/Scaffold Wrap

Where the City Arborist or Project Arborist has determined that tree protection fencing will not suffice for the safety of each tree, Tree Wrap may be used as an alternative form of tree protection. Wooden stake(s) at least one inch thick are to be inserted around, edge to edge, around the trunk. A single layer or two pieces of coroplast or equivalent material should be wrapped around each wooden stake; stapled scaffold order may require protection as determined by the City Arborist or Project Arborist. Where possible, they may also be used as a walk way for inspection. A single layer or two pieces of orange plastic construction fencing is to be wrapped and secured around the other stake.

For additional information refer to arborist report dated June 27, 2018

Drawn by K.F. 6/27/2018
Base Map provided by: Jason Barnum, Civil Engineer

T1 - coast live oak
16" DBH

T2 - coast live oak
13" DBH

T3 - coast live oak
9" DBH

T4 - California bay laurel
8" DBH

T5 - California bay laurel
8", 6", 5" DBH

T6 - unidentified species
15" DBH

T7 - toyon
DBH

Tree Protection Plan - Sheet T-1

Legend

Tree Location & Number
Tree Protection Fencing
Tree Canopy Extents
Hand Trenching & Root Pruning
Remove Tree

Tree Protection Specification - Trunk/Scaffold Wrap

Where the City Arborist or Project Arborist has determined that tree protection fencing will not suffice for the safety of each tree, Tree Wrap may be used as an alternative form of tree protection. Wooden stake(s) at least one inch thick are to be inserted around, edge to edge, around the trunk. A single layer or two pieces of coroplast or equivalent material should be wrapped around each wooden stake; stapled scaffold order may require protection as determined by the City Arborist or Project Arborist. Where possible, they may also be used as a walk way for inspection. A single layer or two pieces of orange plastic construction fencing is to be wrapped and secured around the other stake.

For additional information refer to arborist report dated June 27, 2018

Drawn by K.F. 6/27/2018
Base Map provided by: Jason Barnum, Civil Engineer

T1 - coast live oak
16" DBH

T2 - coast live oak
13" DBH

T3 - coast live oak
9" DBH

T4 - California bay laurel
8" DBH

T5 - California bay laurel
8", 6", 5" DBH

T6 - unidentified species
15" DBH

T7 - toyon
DBH

Tree Protection Plan - Sheet T-1

Legend

Tree Location & Number
Tree Protection Fencing
Tree Canopy Extents
Hand Trenching & Root Pruning
Remove Tree

Tree Protection Specification - Trunk/Scaffold Wrap

Where the City Arborist or Project Arborist has determined that tree protection fencing will not suffice for the safety of each tree, Tree Wrap may be used as an alternative form of tree protection. Wooden stake(s) at least one inch thick are to be inserted around, edge to edge, around the trunk. A single layer or two pieces of coroplast or equivalent material should be wrapped around each wooden stake; stapled scaffold order may require protection as determined by the City Arborist or Project Arborist. Where possible, they may also be used as a walk way for inspection. A single layer or two pieces of orange plastic construction fencing is to be wrapped and secured around the other stake.

For additional information refer to arborist report dated June 27, 2018

Drawn by K.F. 6/27/2018
Base Map provided by: Jason Barnum, Civil Engineer

T1 - coast live oak
16" DBH

T2 - coast live oak
13" DBH

T3 - coast live oak
9" DBH

T4 - California bay laurel
8" DBH

T5 - California bay laurel
8", 6", 5" DBH

T6 - unidentified species
15" DBH

T7 - toyon
DBH

Tree Protection Plan - Sheet T-1

Legend

Tree Location & Number
Tree Protection Fencing
Tree Canopy Extents
Hand Trenching & Root Pruning
Remove Tree

Tree Protection Specification - Trunk/Scaffold Wrap

Where the City Arborist or Project Arborist has determined that tree protection fencing will not suffice for the safety of each tree, Tree Wrap may be used as an alternative form of tree protection. Wooden stake(s) at least one inch thick are to be inserted around, edge to edge, around the trunk. A single layer or two pieces of coroplast or equivalent material should be wrapped around each wooden stake; stapled scaffold order may require protection as determined by the City Arborist or Project Arborist. Where possible, they may also be used as a walk way for inspection. A single layer or two pieces of orange plastic construction fencing is to be wrapped and secured around the other stake.

For additional information refer to arborist report dated June 27, 2018

Drawn by K.F. 6/27/2018
Base Map provided by: Jason Barnum, Civil Engineer

T1 - coast live oak
16" DBH

T2 - coast live oak
13" DBH

T3 - coast live oak
9" DBH

T4 - California bay laurel
8" DBH

T5 - California bay laurel
8", 6", 5" DBH

T6 - unidentified species
15" DBH

T7 - toyon
DBH

Tree Protection Plan - Sheet T-1

Legend

Tree Location & Number
Tree Protection Fencing
Tree Canopy Extents
Hand Trenching & Root Pruning
Remove Tree

Tree Protection Specification - Trunk/Scaffold Wrap

Where the City Arborist or Project Arborist has determined that tree protection fencing will not suffice for the safety of each tree, Tree Wrap may be used as an alternative form of tree protection. Wooden stake(s) at least one inch thick are to be inserted around, edge to edge, around the trunk. A single layer or two pieces of coroplast or equivalent material should be wrapped around each wooden stake; stapled scaffold order may require protection as determined by the City Arborist or Project Arborist. Where possible, they may also be used as a walk way for inspection. A single layer or two pieces of orange plastic construction fencing is to be wrapped and secured around the other stake.

For additional information refer to arborist report dated June 27, 2018

Drawn by K.F. 6/27/2018
Base Map provided by: Jason Barnum, Civil Engineer

T1 - coast live oak
16" DBH

T2 - coast live oak
13" DBH

T3 - coast live oak
9" DBH

T4 - California bay laurel
8" DBH

T5 - California bay laurel
8", 6", 5" DBH

T6 - unidentified species
15" DBH

T7 - toyon
DBH

Tree Protection Plan - Sheet T-1

Legend

Tree Location & Number
Tree Protection Fencing
Tree Canopy Extents
Hand Trenching & Root Pruning
Remove Tree

Tree Protection Specification - Trunk/Scaffold Wrap

Where the City Arborist or Project Arborist has determined that tree protection fencing will not suffice for the safety of each tree, Tree Wrap may be used as an alternative form of tree protection. Wooden stake(s) at least one inch thick are to be inserted around, edge to edge, around the trunk. A single layer or two pieces of coroplast or equivalent material should be wrapped around each wooden stake; stapled scaffold order may require protection as determined by the City Arborist or Project Arborist. Where possible, they may also be used as a walk way for inspection. A single layer or two pieces of orange plastic construction fencing is to be wrapped and secured around the other stake.

For additional information refer to arborist report dated June 27, 2018

Drawn by K.F. 6/27/2018
Base Map provided by: Jason Barnum, Civil Engineer

T1 - coast live oak
16" DBH

T2 - coast live oak
13" DBH

T3 - coast live oak
9" DBH

T4 - California bay laurel
8" DBH

T5 - California bay laurel
8", 6", 5" DBH

T6 - unidentified species
15" DBH

T7 - toyon
DBH

Tree Protection Plan - Sheet T-1

Legend

Tree Location & Number
Tree Protection Fencing
Tree Canopy Extents
Hand Trenching & Root Pruning
Remove Tree

Tree Protection Specification - Trunk/Scaffold Wrap

Where the City Arborist or Project Arborist has determined that tree protection fencing will not suffice for the safety of each tree, Tree Wrap may be used as an alternative form of tree protection. Wooden stake(s) at least one inch thick are to be inserted around, edge to edge, around the trunk. A single layer or two pieces of coroplast or equivalent material should be wrapped around each wooden stake; stapled scaffold order may require protection as determined by the City Arborist or Project Arborist. Where possible, they may also be used as a walk way for inspection. A single layer or two pieces of orange plastic construction fencing is to be wrapped and secured around the other stake.

For additional information refer to arborist report dated June 27, 2018

Drawn by K.F. 6/27/2018
Base Map provided by: Jason Barnum, Civil Engineer

T1 - coast live oak
16" DBH

T2 - coast live oak
13" DBH

T3 - coast live oak
9" DBH

T4 - California bay laurel
8" DBH

T5 - California bay laurel
8", 6", 5" DBH

T6 - unidentified species
15" DBH

T7 - toyon
DBH

Tree Protection Plan - Sheet T-1

Legend

Tree Location & Number
Tree Protection Fencing
Tree Canopy Extents
Hand Trenching & Root Pruning
Remove Tree

Tree Protection Specification - Trunk/Scaffold Wrap

Where the City Arborist or Project Arborist has determined that tree protection fencing will not suffice for the safety of each tree, Tree Wrap may be used as an alternative form of tree protection. Wooden stake(s) at least one inch thick are to be inserted around, edge to edge, around the trunk. A single layer or two pieces of coroplast or equivalent material should be wrapped around each wooden stake; stapled scaffold order may require protection as determined by the City Arborist or Project Arborist. Where possible, they may also be used as a walk way for inspection. A single layer or two pieces of orange plastic construction fencing is to be wrapped and secured around the other stake.
Image #2 – Trees T1, T2, T3 coast live oaks & T4 California bay laurel (circled in background).
Image #3 – Tree T5 California bay laurel & T6 unidentified (dead tree)
Appendix E - TREE PROTECTION GUIDELINES AND RESTRICTIONS

Protecting Trees During Construction:

1) Before the start of site work, equipment or materials move in, clearing, excavation, construction, or other work on the site, every tree to be retained shall be securely fenced-off as delineated in approved plans. Such fences shall remain continuously in place for the duration of the work undertaken in connection with the development.

2) If the proposed development, including any site work, will encroach upon the tree protection zone, special measures shall be utilized, as approved by the project arborist, to allow the roots to obtain necessary oxygen, water, and nutrients.

3) Underground trenching shall avoid the major support and absorbing tree roots of protected trees. If avoidance is impractical, hand excavation undertaken under the supervision of the project arborist may be required. Trenches shall be consolidated to service as many units as possible. Boring/tunneling under roots should be considered as an alternative to trenching.

4) Concrete or asphalt paving shall not be placed over the root zones of protected trees, unless otherwise permitted by the project arborist.

5) Artificial irrigation shall not occur within the root zone of native oaks, unless deemed appropriate on a temporary basis by the project arborist to improve tree vigor or mitigate root loss.

6) Compaction of the soil within the tree protection zone shall be avoided.

7) Any excavation, cutting, or filling of the existing ground surface within the tree protection zone shall be minimized and subject to such conditions as the project arborist may impose. Retaining walls shall likewise be designed, sited, and constructed to minimize their impact on protected trees.

8) Burning or use of equipment with an open flame near or within the tree protection zone shall be avoided. All brush, earth, and other debris shall be removed in a manner that prevents injury to the tree.

9) Oil, gas, chemicals, paints, cement, stucco or other substances that may be harmful to trees shall not be stored or dumped within the tree protection zone of any protected tree, or at any other location on the site from which such substances might enter the tree protection zone of a protected tree.

10) Construction materials shall not be stored within the tree protection zone of a protected tree.
Project Arborist Duties and Inspection Schedule:

The project arborist is the person(s) responsible for carrying out technical tree inspections, assessment of tree health, structure and risk, arborist report preparation, consultation with designers and municipal planners, specifying tree protection measures, monitoring, progress reports and final inspection.

A qualified project arborist (or firm) should be designated and assigned to facilitate and insure tree preservation practices. He/she/they should perform the following inspections:

Inspection of site: Prior to equipment and materials move in, site work, demolition, landscape construction and tree removal: The project arborist will meet with the general contractor, architect/engineer, and owner or their representative to review tree preservation measures, designate tree removals, delineate the location of tree protection fencing, specify equipment access routes and materials storage areas, review the existing condition of trees and provide any necessary recommendations.

Inspection of site: During excavation or any activities that could affect trees: Inspect site during any activity within the Tree Protection Zones of preserved trees and any recommendations implemented. Assess any changes in the health of trees since last inspection.

Final Inspection of Site: Inspection of site following completion of construction. Inspect for tree health and make any necessary recommendations.

Kurt Fouts shall be the Project Arborist for this project. All scheduled inspections shall include a brief Tree Monitoring report, documenting activities and provided to the City Arborist.

Tree Protection Fencing

Tree Protection fencing shall be installed prior to the arrival of construction equipment or materials. Fence shall be comprised of six-foot chain link fence mounted on eight-foot tall, 1 and 7/8-inch diameter galvanized posts, driven 24 inches into the ground and spaced on a minimum of 10-foot centers. Once established, the fence must remain undisturbed and be maintained throughout the construction process until final inspection.

A final inspection by the City Arborist at the end of the project will be required prior to removing any tree protection fencing.

Tree Protection Signs

All sections of fencing should be clearly marked with signs stating that all areas within the fencing are Tree Protection Zones and that disturbance is prohibited.
Monitoring

Any trenching, construction or demolition that is expected to damage or encounter tree roots should be monitored by the project arborist or a qualified ISA Certified Arborist and should be documented.

The site should be evaluated by the project arborist or a qualified ISA Certified Arborist after construction is complete, and any necessary remedial work that needs to be performed should be noted.

Root Pruning

Root pruning shall be supervised by the project arborist. When roots over two inches in diameter are encountered they should be pruned by hand with loppers, handsaw, reciprocating saw, or chain saw rather than left crushed or torn. Roots should be cut beyond sinker roots or outside root branch junctions and be supervised by the project arborist. When completed, exposed roots should be kept moist with burlap or backfilled within one hour.

Tree Work Standards and Qualifications

All tree work, removal, pruning, planting, shall be performed using industry standards of workmanship as established in the Best Management Practices of the International Society of Arboriculture (ISA) and the American National Standards Institute series, Safety Requirements in Arboriculture Operations ANSI Z133-2017,

Contractor licensing and insurance coverage shall be verified.

During tree removal and clearance, sections of the Tree Protection Fencing may need to be temporarily dismantled to complete removal and pruning specifications. After each section is completed, the fencing is to be re-installed.

Trees to be removed shall be cut into smaller manageable pieces consistent with safe arboricultural practices, and carefully removed so as not to damage any surrounding trees or structures. The trees shall be cut down as close to grade as possible. Tree removal is to be performed by a qualified contractor with valid City Business/ State Licenses and General Liability and Workman’s Compensation insurance.
Development Site Tree Health Care Measures

RECOMMENDED TO PROVIDE OPTIMUM GROWING CONDITIONS, PHYSIOLOGICAL INVIGORATION AND STAMINA, FOR PROTECTION AND RECOVERY FROM CONSTRUCTION IMPACT.

Establish and maintain TPZ fencing, trunk and scaffold limb barriers for protection from mechanical damage, and other tree protection requirements as specified in the arborist report.

Project arborist to specify site-specific soil surface coverings (wood chip mulch or other) for prevention of soil compaction and loss of root aeration capacity.

Soil, water and drainage management is to follow the ISA BMP for "Managing Trees During Construction" and the ANSI Standard A300(Part 2)-2011 Soil Management (a. Modification, b. 'Fertilization, c. Drainage.)

Fertilizer / soil amendment product(s) amounts and method of application to be specified by certified arborist.
ASSUMPTIONS AND LIMITING CONDITIONS

1. Any legal description provided by the appraiser/consultant is assumed to be correct. No responsibility is assumed for matters legal in character nor is any opinion rendered as the quality of any title.

2. The appraiser/consultant can neither guarantee nor be responsible for accuracy of information provided by others.

3. The appraiser/consultant shall not be required to give testimony or to attend court by reason of this appraisal unless subsequent written arrangements are made, including payment of an additional fee for services.

4. Loss or removal of any part of this report invalidates the entire appraisal/evaluation.

5. Possession of this report or a copy thereof does not imply right of publication or use for any purpose by any other than the person(s) to whom it is addressed without written consent of this appraiser/consultant.

6. This report and the values expressed herein represent the opinion of the appraiser/consultant, and the appraiser/consultant’s fee is in no way contingent upon the reporting of a specified value nor upon any finding to be reported.

7. Sketches. Diagrams. Graphs. Photos. Etc., in this report, being intended as visual aids, are not necessarily to scale and should not be construed as engineering reports or surveys.

8. This report has been made in conformity with acceptable appraisal/evaluation/diagnostic reporting techniques and procedures, as recommended by the International Society of Arboriculture.

9. When applying any pesticide, fungicide, or herbicide, always follow label instructions.

10. No tree described in this report was climbed, unless otherwise stated. We cannot take responsibility for any defects which could only have been discovered by climbing. A full root collar inspection, consisting of excavating around the tree to uncover the root collar and major buttress roots, was not performed, unless otherwise stated. We cannot take responsibility for any root defects which could only have been discovered by such an inspection.

CONSULTING ARBORIST DISCLOSURE STATEMENT

Arborists are tree specialists who use their education, knowledge, training, and experience to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce risk of living near trees. Clients may choose to accept or disregard the recommendations of the arborist, or to seek additional advice.

Arborists cannot detect every condition that could possibly lead to the structural failure of a tree. Trees are living organisms that fail in ways we do not fully understand. Conditions are often hidden within trees and below ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period of time. Likewise, remedial treatments, like medicine, cannot be guaranteed.

Trees can be managed, but they cannot be controlled. To live near trees is to accept some degree of risk. The only way to eliminate all risk associated with trees is to eliminate all trees.

Kurt Fouts
Arborist Consultant
826 Monterey Avenue
Capitola, CA 95010
831-359-3607
kurtfouts1@outlook.com