Tree Inventory, Assessment, and Protection

56 Central Avenue
Los Gatos, CA 95032

Prepared for:

Town of Los Gatos

October 11, 2018

Prepared By:

Richard Gessner
ASCA - Registered Consulting Arborist ® #496
ISA - Board Certified Master Arborist® WE-4341B
ISA - Tree Risk Assessor Qualified
CA Qualified Applicators License QL 104230

Monarch Consulting Arborists LLC
P.O. Box 1010
Felton, CA 95018
831. 331. 8982

EXHIBIT 9

Table of Contents

Summary

The inventory contains 20 trees comprised of 8 different species. The plans indicate the existing structures will be demolished and removed and a new residence is to be built. Four trees are in good condition and four poor while the remaining twelve are all in fair shape. Many of the trees (coast live oaks (*Quercus agrifolia*) or blue oaks (*Quercus douglasii*)) are growing on the property boundary or adjacent site (517, 518, 519, 528, 529, 533, 534) and their suitability for conservation is not a factor. Ten trees are expected to be highly impacted and removed, seven moderate to highly influenced depending on construction and actual proximity to the improvements, while four should not be affected. Tree protection for this project would consist of a modified Type I scheme because most originating on the site will be removed. The only trees to remain are around the perimeter or originating on other parcels. A total of 20 trees were appraised for a rounded depreciated value of $87,210.00 using the Trunk Formula Method.

Introduction

Background

The Town of Los Gatos asked me to assess the site, trees, and proposed footprint plan, and to provide a report with my findings and recommendations to help satisfy planning requirements.

Assignment

- Provide an arborist's report including an assessment of the trees within the project area and on the adjacent sites. The assessment is to include the species, size (trunk diameter), condition (health and structure), and suitability for preservation ratings. Affix aluminum number tags on the trees for reference on site and on plans.
- Provide tree protection specifications, guidelines, and impact ratings for trees that may be affected by the project.
- Provide appraised values.

Limits of the assignment

- The information in this report is limited to the condition of the trees during my inspection on September 20, 2018. No tree risk assessments were performed.
- Tree heights and canopy diameters are estimates.
- The plans reviewed for this assignment were as follows (Table 1).

Table 1: Plans Reviewed Checklist

Plan	Date	Sheet	Reviewed	Source	Notes
Existing Site Topographic Map or A.L.T.A with tree locations			No		
Proposed Site Plan	8/30/18	A1.1	Yes	Hometec Architecture	
Demolition Plan			No		
Construction Staging			No		
Grading and Drainage	August 2018	C1	Yes	Westfall Engineers	
Utility Plan and Hook-up locations			No		
Exterior Elevations	8/30/18	A-5, A-6, A-7	No	Hometec Architecture	
Landscape Plan					
Irrigation Plan			No		
T-1 Tree Protection Plan			No		

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 Town of Los Gatos and the property owners as a reference for existing tree conditions to help satisfy planning requirements.

Observations

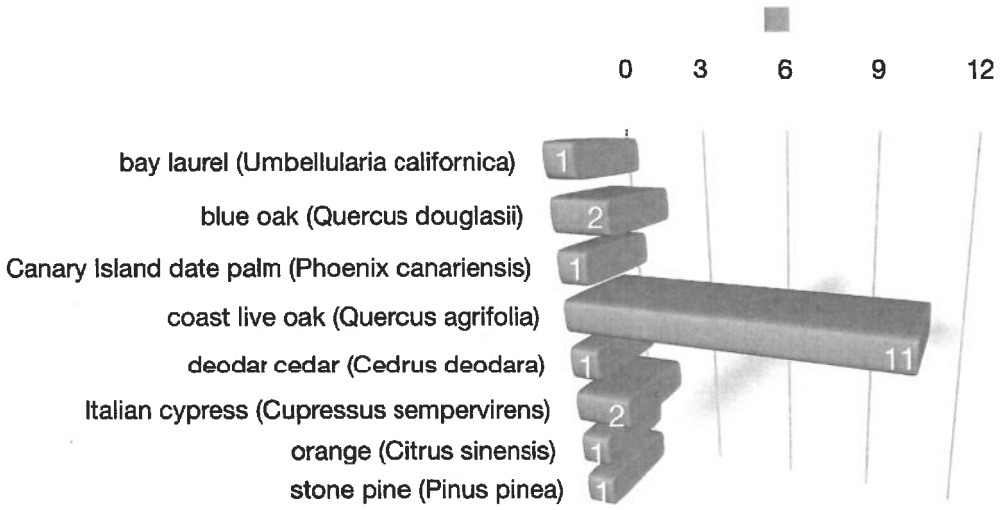
Tree Inventory

The inventory consists of trees protected by the Town of Los Gatos located on site and those in close proximity on neighboring properties. Sec. 29.10.0960. - Scope of protected trees. All trees which have a four-inch or greater diameter (twelve and one half-inch circumference) of any trunk, when removal relates to any review for which zoning approval or subdivision approval is required. (Appendix A and B). Los Gatos Town Ordinance 29.10.0970 Exceptions (1) states the following: "A fruit or nut tree that is less than eighteen (18) inches in diameter (fifty-seven-inch circumference).

The inventory contains 20 trees comprised of 8 different species. Four oaks (Quercus spp.) (520, 526, 527, and 528) are considered Large Protected[1], fourteen are Protected[2] and one is Exempt[3].

The chart below list the species and their relative quantities (Chart 1).

Chart 1: Species Distribution



[1] Large protected tree means any oak (*Quercus spp.*), California buckeye (*Aesculus californica*), or Pacific madrone (*Arbutus menziesii*) which has a 24-inch or greater diameter (75-inch circumference); or any other species of tree with a 48-inch or greater diameter (150-inch circumference).

[2] Protected tree means a tree regulated by the Town of Los Gatos as set forth in Section. 29.10.0960, Scope of protected trees.

[3] A fruit or nut tree that is less than eighteen (18) inches in diameter (fifty-seven-inch circumference).

Plans and Tree Conflicts

The plans indicate the existing structures will be demolished and removed and a new residence is to be built.

Coast live oaks 517, 518, 519, 533, 534 are not located on the plans and are growing along the property boundary adjacent to the existing cottage (Appendix A). Trees 517, 518, 519 are at the driveway entrance while 533 and 534 are next to the structure growing along the northeast boundary. It is likely these trees originate on the adjacent site along with blue oak 528 and coast live oak 529.

Several trees are indicated to be removed including date palm 521, deodar cedar 524, coast live oaks 525 and 526, and blue oak 527. All these trees are within the footprint of the proposed structures. Stone pine 523 is listed to remain on the site plan but removed on the civil drawings, it will be highly impacted by grading and any destruction to the soil environment or roots behind the lean will compromise the tree.

Palm tree 521 currently has nesting owls (*Strix sp.*)[4] in a cavity under the lowest fronds.

Analysis

Tree appraisal was performed according to the Council of Tree & Landscape Appraisers *Guide for Plant Appraisal 9th Edition, 2000* (CLTA) along with Western Chapter International Society of Arboriculture *Species Classification and Group Assignment, 2004*. The trees were appraised using the "Cost Approach" and more specifically the "Trunk Formula Method" (Appendix B).

"Trunk Formula Method" is calculated as follows: Basic Tree Cost = (Appraised tree trunk increase X Unit tree cost + Installed tree cost) Appraised Value = (Basic tree cost X Species % X Condition % X Location %).

A total of 20 trees were appraised for a rounded depreciated value of $87,210.00 using the Trunk Formula Method (Appendix B2).

Appraisal worksheets are available upon request.

[4] Protected under State law (See Fish and Game Code, Sections 3503, 3503.5, 3505 and 3513, and California Code of Regulation, Title 14, Sections 251.1, 652 and 783-786.6).
The Migratory Bird Treaty Act of 1918 (MBTA), codified at 16 U.S.C. §§ 703–712 . The Migratory Bird Treaty Act of 1918 prohibits the removal of all listed species or their parts (feathers, eggs, nests, etc.) from such property.

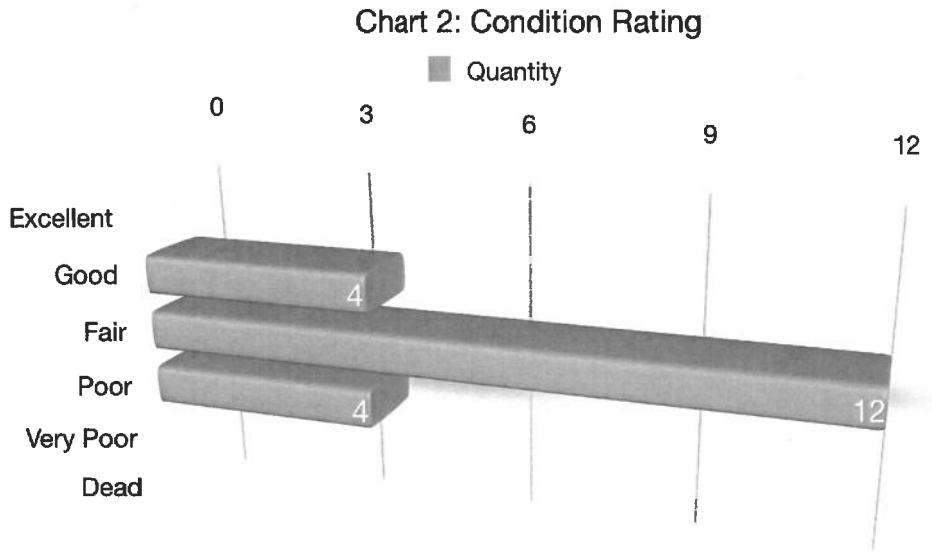
Discussion

Condition Rating

A tree's condition is a determination of its overall health, structure, and form. The assessment considered both the health and structure for a combined condition rating.

- 100% - Exceptional = Good health and structure with significant size, location or quality.
- 61-80% - Good = Normal vigor, well-developed structure, function and aesthetics not compromised with good longevity for the site.
- 41-60 % - Fair = Reduced vigor, damage, dieback, or pest problems, at least one significant structural problem or multiple moderate defects requiring treatment. Major asymmetry or deviation from the species normal habit, function and aesthetics compromised.
- 21-40% - Poor = Unhealthy and declining appearance with poor vigor, abnormal foliar color, size or density with potential irreversible decline. One serious structural defect or multiple significant defects that cannot be corrected and failure may occur at any time. Significant asymmetry and compromised aesthetics and intended use.
- 6-20% - Very Poor = Poor vigor and dying with little foliage in irreversible decline. Severe defects with the likelihood of failure being probable or imminent. Aesthetically poor with little or no function in the landscape.
- 0-5% - Dead/Unstable = Dead or imminently ready to fail.

Four trees are in good condition and four poor while the remaining twelve are all in fair shape (Chart 2). The table on pages 6 indicates the individual tree assessment.



The table below lists the trees and the condition assessment for each (Table 2).

Table 2: Condition Assessment

Tree Species	#	Trunk Diameter (in.)	Vigor	Structure	Form	Condition
Italian cypress (*Cupressus sempervirens*)	515	8	Good	Good	Good	Good
Italian cypress (*Cupressus sempervirens*)	516	12	Good	Good	Good	Good
coast live oak (*Quercus agrifolia*)	517	11	Good	Poor	Poor	Poor
coast live oak (*Quercus agrifolia*)	518	9	Good	Poor	Poor	Poor
coast live oak (*Quercus agrifolia*)	519	12	Good	Good	Fair	Fair
coast live oak (*Quercus agrifolia*)	520	28	Good	Good	Good	Good
Canary Island date palm (*Phoenix canariensis*)	521	24	Good	Good	Good	Good
orange (*Citrus sinensis*)	522	4	Poor	Poor	Poor	Poor
stone pine (*Pinus pinea*)	523	34	Good	Poor	Poor	Poor
deodar cedar (*Cedrus deodara*)	524	27	Fair	Fair	Good	Fair
coast live oak (*Quercus agrifolia*)	525	22	Good	Good	Good	Fair
coast live oak (*Quercus agrifolia*)	526	27	Good	Poor	Good	Fair
blue oak (*Quercus douglasii*)	527	24	Good	Fair	Good	Fair
blue oak (*Quercus douglasii*)	528	28	Good	Good	Good	Fair
coast live oak (*Quercus agrifolia*)	529	16	Good	Fair	Fair	Fair
coast live oak (*Quercus agrifolia*)	530	5	Fair	Fair	Fair	Fair
coast live oak (*Quercus agrifolia*)	531	15	Good	Good	Fair	Fair
bay laurel (*Umbellularia californica*)	532	4	Good	Fair	Good	Fair
coast live oak (*Quercus agrifolia*)	533	13	Good	Fair	Fair	Fair
coast live oak (*Quercus agrifolia*)	534	13	Good	Good	Fair	Fair

Suitability for Conservation

A tree's suitability for conservation is determined based on its health, structure, age, species and disturbance tolerances, proximity to cutting and filling, proximity to construction or demolition, and potential longevity using a scale of good, fair, or poor (Fite, K, and Smiley, E. T., 2016). Trees with good suitability have good vigor, structural stability, and potential longevity after construction.

- Good = Trees with good health, structural stability and longevity.
- Fair = Trees with fair health and/or structural defects that may be mitigated through treatment. These trees require more intense management and monitoring, and may have shorter life spans than those in the good category.
- Poor = Trees in poor health with significant structural defects that cannot be mitigated and will continue to decline regardless of treatment. The species or individual may possess characteristics that are incompatible or undesirable in landscape settings or unsuited for the intended use of the site.

Many of the trees (coast live oaks or blue oaks) are growing on the property boundary or adjacent site (517, 518, 519, 528, 529, 533, 534) so their suitability for conservation is not a factor because they must be retained regardless unless otherwise shown to be within the property boundary. For the site itself the deodar cedar, date palm, and stone pine are poorly suited for retention while all the a oaks have fair suitability. Date palm 521 is not well suited for retention from an urban forestry standpoint but the tree contained nesting owls at the time of the inspection. The small trees less than five inches in diameter were not assessed for suitability and could be easily replaced. On the property ten trees have fair suitability and four poor with the remaining originate on adjacent parcels.

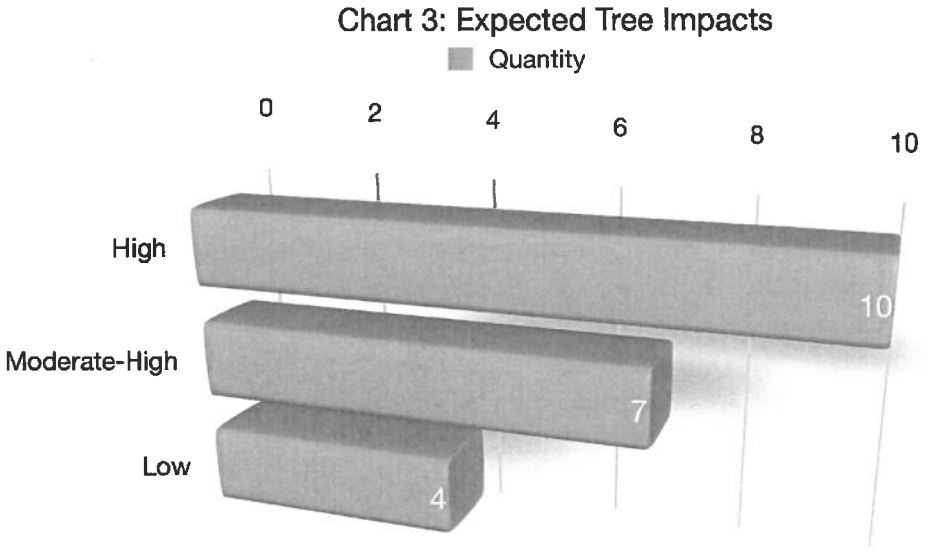
Impact Level

Impact level defines how a tree may be affected by construction activity and proximity to the tree, and is described as low, moderate, or high. The following scale defines the impact rating:

- Low = The construction activity will have little influence on the tree.
- Moderate = The construction may cause future health or structural problems, and steps must be taken to protect the tree to reduce future problems.
- High = Tree structure and health will be compromised and removal is recommended, or other actions must be taken for the tree to remain. The tree is located in the building envelope.

Trees highly impacted include date palm 521, stone pine 523, deodar cedar 524, coast live oaks 525 and 526, and blue oak 527. Some smaller trees like coast live oak 530 and bay laurel 532 will likely need to be removed as well. There are several oaks along the northeast boundary including 517, 518, 519 at the driveway entrance and 533 and 534 near existing structure all growing along the adjacent property driveway. These trees could be moderate to highly impacted depending on the construction proximity and nearby grading. However there are already structures (driveway and building) within the same footprint as the proposed improvements which will limit impacts to some extent.

Ten trees are expected to be highly impacted and removed, seven moderate to highly influenced depending on construction and actual proximity to the improvements, while four should not be affected (Chart 3).



Tree Protection

There are three different tree protection schemes which are called Type I, Type II and Type III trunk protection only (Figures 1, 2, and 3). Tree protection focuses on protecting trees from damage to the roots, trunk, or scaffold branches from heavy equipment (Appendix D). The tree protection zone (TPZ) is the defined area in which certain activities are prohibited to minimize potential injury to the tree. The TPZ can be determined by a formula based on species tolerance, tree age, and diameter at breast height (DBH) (Matheny, N. and Clark, J. 1998) or as the drip line in some instances. Preventing mechanical damage to the main stems from equipment or hand tools can be accomplished by wrapping the main stem with straw wattle (Figure 3). The wattle will create a porous barrier around the trunk and prevent damage to the bark and vascular tissues underneath. This mechanical barrier will be required for all trees within the project area.

Tree protection for this project would consist of a modified Type I scheme because most originating on the site will be removed. The only trees to remain are around the perimeter or originating on other parcels.

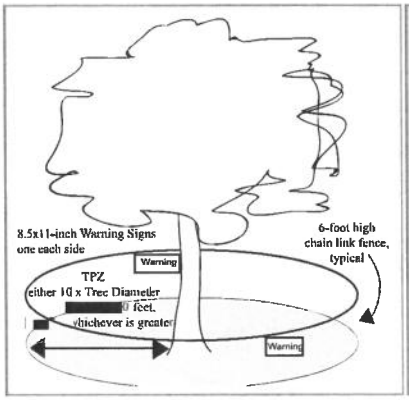


Figure 1: Type I Tree protection with fence placed at a radius of ten times the trunk diameter. Image City of Palo Alto 2006.

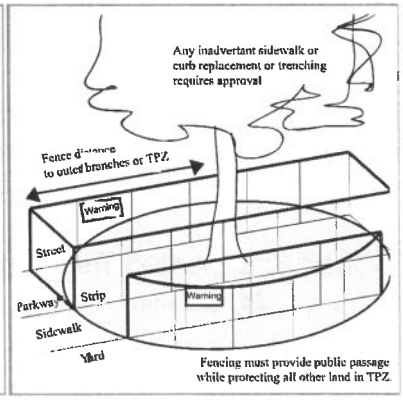


Figure 2: Type II Tree protection with fence placed along the sidewalk and curb to enclose the tree. Image City of Palo Alto 2006.

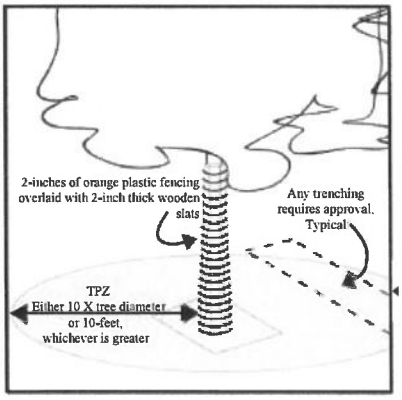


Figure 3: Type III Tree protection with trunk protected by a barrier to prevent mechanical damage. Image City of Palo Alto 2006.

Conclusion

The inventory contains 20 trees comprised of 8 different species. Four oaks are considered Large Protected, fourteen are Protected and one is Exempt. The plans indicate the existing structures will be demolished and removed and a new residence is to be built. Four trees are in good condition and four poor while the remaining twelve are all in fair shape. Many of the trees (coast live oaks or blue oaks) are growing on the property boundary or adjacent site (517, 518, 519, 528, 529, 533, 534) so their suitability for conservation is not a factor because they must be retained regardless unless otherwise shown to be within the property boundary. For the site itself the deodar cedar, date palm, and stone pine are poorly suited for retention (although the date palm contains nesting owls) while all the a oaks have fair suitability. Ten trees are expected to be highly impacted and removed, seven moderate to highly influenced depending on construction and actual proximity to the improvements, while four should not be affected. Tree protection for this project would consist of a modified Type I scheme because most originating on the site will be removed. The only trees to remain are around the perimeter or originate on other parcels. A total of 20 trees were appraised for a rounded depreciated value of $87,210.00 using the Trunk Formula Method.

Recommendations

Pre-construction and Planning Phase

1. Place tree numbers and tree protection fence locations and guidelines on the plans including the grading, drainage, and utility plans. Create a separate plan sheet that includes all protection measures labeled "T-1 Tree Protection Plan."

2. Locate and include trees 517, 518, 519, 533, 534 missing from the plans growing along the northeast boundary.

3. Contact a wildlife biologist to inspect the date palm and verify any protection required as per the Migratory Bird Treaty Act and State Regulations regarding birds of prey.

4. All tree maintenance and care shall be performed by a qualified arborist with a C-61/D-49 California Contractors License. Tree maintenance and care shall be specified in writing according to American National Standard for Tree Care Operations: *Tree, Shrub and Other Woody Plant Management: Standard Practices* parts 1 through 10 and adhere to ANSI Z133.1 safety standards and local regulations. All maintenance is to be performed according to ISA Best Management Practices.

5. Refer to Appendix D for general tree protection guidelines including recommendations for arborist assistance while working under trees, trenching, or excavation within a trees drip line or designated TPZ/CRZ.

6. Provide a copy of this report to all contractors and project managers, including the architect, civil engineer, and landscape designer or architect. It is the responsibility of the owner to ensure all parties are familiar with this document.

7. Arrange a pre-construction meeting with the project arborist or landscape architect to verify tree protection is in place, with the correct materials, and at the proper distances.

8. Arrange for the project arborist to monitor and document initial grading activity and no grading is to occur within any tree protection zone including utility hook-ups.

Construction and Post-Construction Phase

1. Monitor the health and structure of all trees for any changes in condition.

2. Perform any other mitigation measures to help ensure long term survival.

Bibliography

American National Standard for Tree Care Operations: Tree, Shrub and Other Woody Plant Management : Standard Practices (Management of Trees and Shrubs During Site Planning, Site Development, and Construction)(Part 5). Londonderry, NH: Secretariat, Tree Care Industry Association, 2012. Print.

Costello, Laurence Raleigh, Bruce W. Hagen, and Katherine S. Jones. *Oaks in the urban landscape: selection, care, and preservation.* Oakland, CA: University of California, Agriculture and Natural Resources, 2011. Print.

Fite, Kelby, and Edgar Thomas. Smiley. *Managing trees during construction*, second edition. Champaign, IL: International Society of Arboriculture, 2016.

ISA. *Guide For Plant Appraisal 9th Edition.* Savoy, IL: International Society of Arboriculture, 2000. Print.

ISA. *Guide For Plant Appraisal 10th Edition.* Savoy, IL: International Society of Arboriculture, 2018. Print.

ISA. Species Classification and Group Assignment, 2004 Western Chapter Regional Supplement. Western Chapter ISA

Matheny, Nelda P., Clark, James R. Trees and development: A technical guide to preservation of trees during land development. Bedminster, PA: International Society of Arboriculture1998.

Smiley, E, Matheny, N, Lilly, S, ISA. *Best Management Practices: Tree Risk Assessment:* International Society of Arboriculture, 2017. Print

Glossary of Terms

Basic Tree Cost: The cost of replacement for a perfect specimen of a particular species and cross sectional area prior to location and condition depreciation.

Cost Approach: An indication of value by adding the land value to the depreciated value of improvements.

Defect: An imperfection, weakness, or lack of something necessary. In trees defects are injuries, growth patterns, decay, or other conditions that reduce the tree's structural strength.

Diameter at breast height (DBH): Measures at 1.4 meters (4.5 feet) above ground in the United States, Australia (arboriculture), New Zealand, and when using the Guide for Plant Appraisal, 9th edition; at 1.3 meters (4.3 feet) above ground in Australia (forestry), Canada, the European Union, and in UK forestry; and at 1.5 meters (5 feet) above ground in UK arboriculture.

Drip Line: Imaginary line defined by the branch spread or a single plant or group of plants. The outer extent of the tree crown.

Mechanical damage: Physical damage caused by outside forces such as cutting, chopping or any mechanized device that may strike the tree trunk, roots or branches.

Scaffold branches: Permanent or structural branches that for the scaffold architecture or structure of a tree.

Straw wattle: also known as straw worms, bio-logs, straw noodles, or straw tubes are man made cylinders of compressed, weed free straw (wheat or rice), 8 to 12 inches in diameter and 20 to 25 feet long. They are encased in jute, nylon, or other photo degradable materials, and have an average weight of 35 pounds.

Topping: Inappropriate pruning technique to reduce tree size. Cutting back a tree to a predetermined crown limit, often at internodes.

Tree Protection Zone (TPZ): Defined area within which certain activities are prohibited or restricted to prevent or minimize potential injury to designated trees, especially during construction or development.

Tree Risk Assessment: Process of evaluating what unexpected things could happen, how likely it is, and what the likely outcomes are. In tree management, the systematic process to determine the level of risk posed by a tree, tree part, or group of trees.

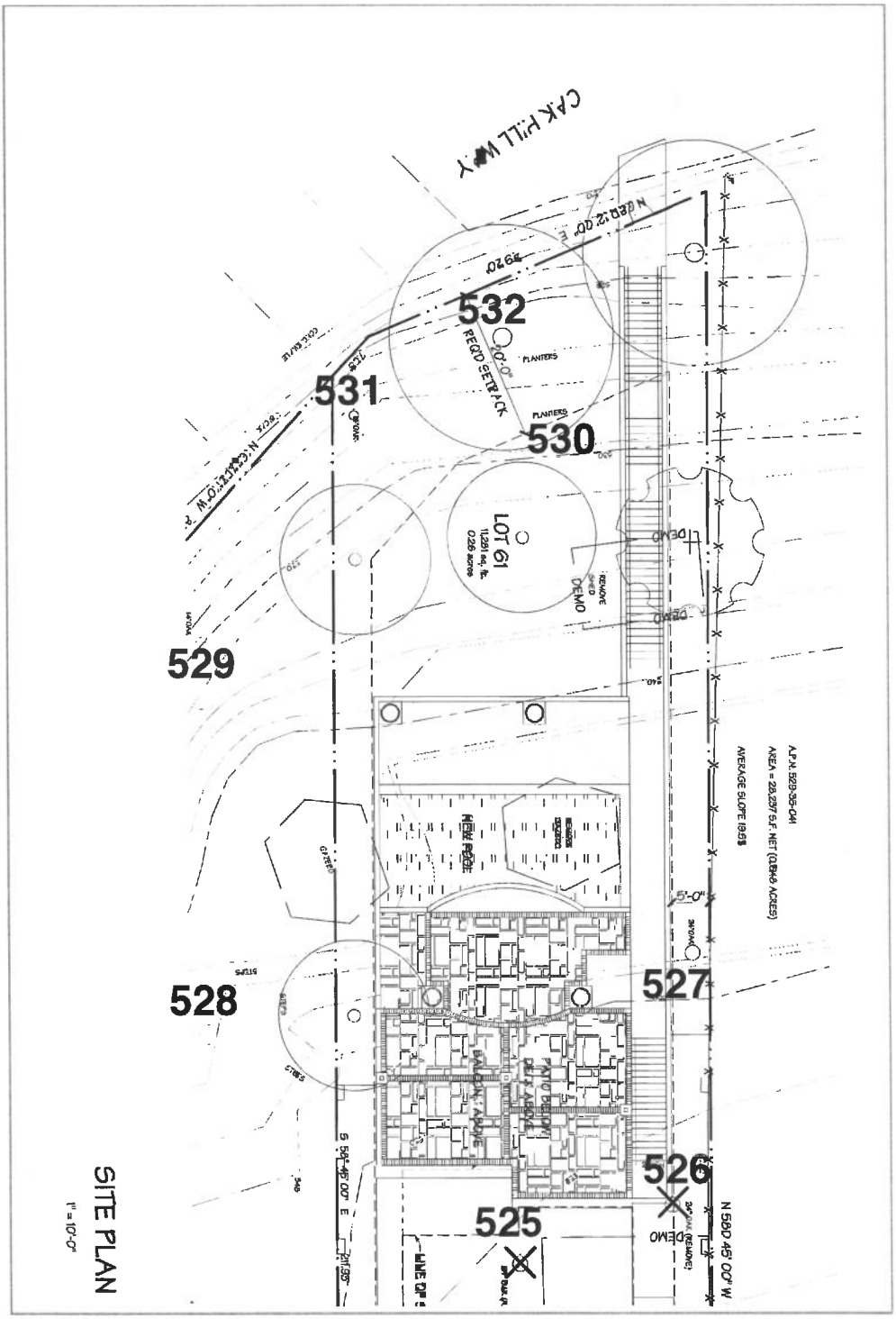
Trunk: Stem of a tree.

Trunk Formula Method: Method to appraise the monetary value of trees considered too large to be replaced with nursery or field grown stock. Based on developing a representative unit cost for replacement with the same or comparable species of the same size and in the same place, subject to depreciation for various factors. Contrast with replacement cost method.

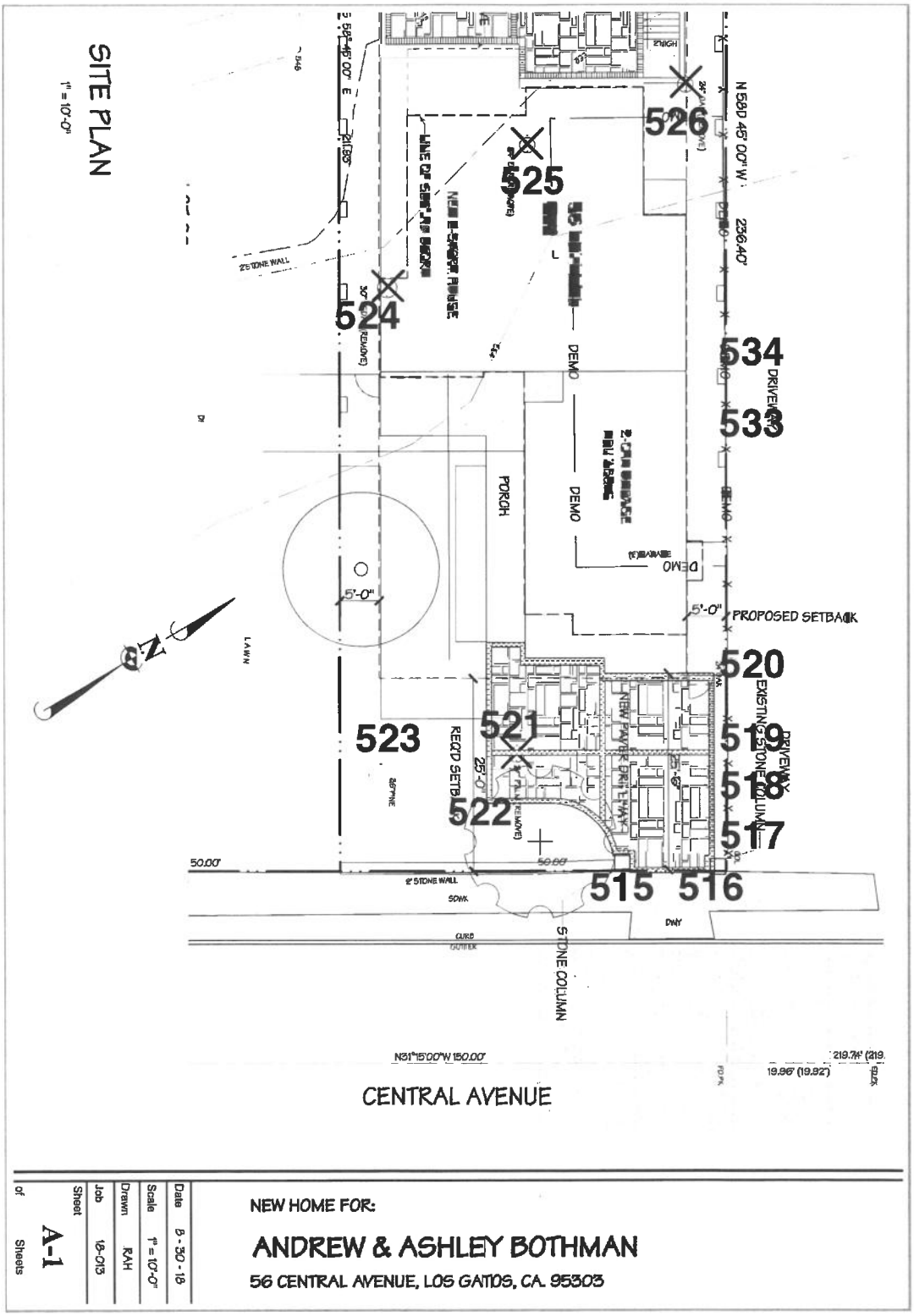
Volunteer: A tree, not planted by human hands, that begins to grow on residential or commercial property. Unlike trees that are brought in and installed on property, volunteer trees usually spring up on their own from seeds placed onto the ground by natural causes or accidental transport by people. Normally, volunteer trees are considered weeds and removed, but many desirable and attractive specimens have gone on to become permanent residents on many public and private grounds.

Appendix A: Tree Inventory Map and Site Plan

A1: West Portion



East Portion



Appendix B: Tree Inventory and Assessment Tables

B1: Inventory and Assessment

Table 3: Inventory and Assessment

Tree Species	I.D. #	Trunk Diameter (in.)	~ Height (ft.)	~ Canopy Diameter (ft.)	Condition	Suitability	Impact	Status
Italian cypress (*Cupressus sempervirens*)	515	8	35	4	Good	Fair	Low	Protected
Italian cypress (*Cupressus sempervirens*)	516	12	35	4	Good	Fair	Low	Protected
coast live oak (*Quercus agrifolia*)	517	11	25	25	Poor	Fair	Moderate -High	Protected
coast live oak (*Quercus agrifolia*)	518	9	25	25	Poor	Fair	Moderate -High	Protected
coast live oak (*Quercus agrifolia*)	519	12	25	25	Fair	Fair	Moderate -High	Protected
coast live oak (*Quercus agrifolia*)	520	28	45	38	Good	Fair	Moderate -High	Large Protected
Canary Island date palm (*Phoenix canariensis*)	521	24	40	20	Good	Poor	High	Protected
orange (*Citrus sinensis*)	522	4	6	6	Poor	Poor	High	Exempt
stone pine (*Pinus pinea*)	523	34	55	50	Poor	Poor	High	Protected
deodar cedar (*Cedrus deodara*)	524	27	55	45	Fair	Poor	High	Protected
coast live oak (*Quercus agrifolia*)	525	22	45	40	Fair	Fair	High	Protected

Tree Species	I.D. #	Trunk Diameter (in.)	~ Height (ft.)	~ Canopy Diameter (ft.)	Condition	Suitability	Impact	Status
coast live oak (*Quercus agrifolia*)	526	27	45	40	Fair	Fair	High	Large Protected
blue oak (*Quercus douglasii*)	527	24	45	40	Fair	Fair	High	Large Protected
blue oak (*Quercus douglasii*)	528	28	55	50	Fair	Fair	Low	Large Protected
coast live oak (*Quercus agrifolia*)	529	16	30	30	Fair	Fair	Low	Protected
coast live oak (*Quercus agrifolia*)	530	5	15	10	Fair	Fair	High	Protected
coast live oak (*Quercus agrifolia*)	531	15	30	30	Fair	Fair	Moderate -High	Protected
bay laurel (*Umbellularia californica*)	532	4	20	10	Fair	Fair	High	Protected
coast live oak (*Quercus agrifolia*)	533	13	35	30	Fair	Fair	Moderate -High	Protected
coast live oak (*Quercus agrifolia*)	534	13	35	30	Fair	Fair	Moderate -High	Protected

B2: Appraisal Summary

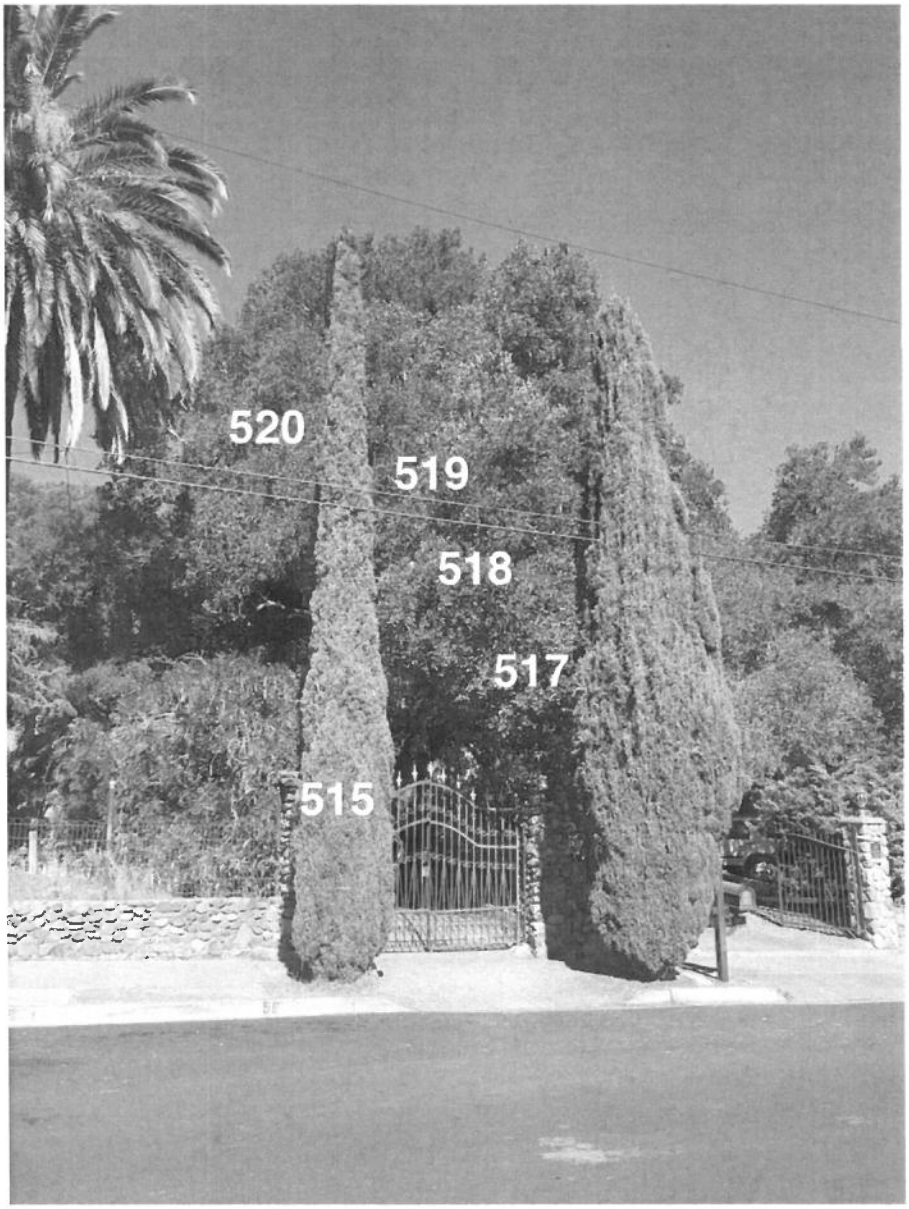
Table 4: Appraisal Summary

Tree Species	I.D. #	Trunk Diameter (in.)	Species Rating	Condition	Location	Rounded Value
Italian cypress (*Cupressus sempervirens*)	515	8	50.00%	75.0%	63.33%	$620.00
Italian cypress (*Cupressus sempervirens*)	516	12	50.00%	75.0%	63.33%	$1,300.00
coast live oak (*Quercus agrifolia*)	517	11	90.00%	25.0%	63.33%	$660.00
coast live oak (*Quercus agrifolia*)	518	9	90.00%	25.0%	63.33%	$460.00
coast live oak (*Quercus agrifolia*)	519	12	90.00%	50.0%	63.33%	$1,560.00
coast live oak (*Quercus agrifolia*)	520	28	90.00%	75.0%	63.33%	$12,100.00
Canary Island date palm (*Phoenix canariensis*)	521	24	90.00%	75.0%	63.33%	$15,100.00
orange (*Citrus sinensis*)	522	4	70.00%	25.0%	63.33%	$150.00
stone pine (*Pinus pinea*)	523	34	70.00%	25.0%	63.33%	$3,600.00
deodar cedar (*Cedrus deodara*)	524	27	70.00%	50.0%	63.33%	$5,800.00
coast live oak (*Quercus agrifolia*)	525	22	90.00%	50.0%	63.33%	$5,000.00
coast live oak (*Quercus agrifolia*)	526	27	90.00%	50.0%	63.33%	$7,500.00
blue oak (*Quercus douglasii*)	527	24	90.00%	50.0%	63.33%	$10,000.00
blue oak (*Quercus douglasii*)	528	28	90.00%	50.0%	63.33%	$13,600.00
coast live oak (*Quercus agrifolia*)	529	16	90.00%	50.0%	63.33%	$2,700.00
coast live oak (*Quercus agrifolia*)	530	5	90.00%	50.0%	63.33%	$540.00
coast live oak (*Quercus agrifolia*)	531	15	90.00%	50.0%	63.33%	$2,390.00
bay laurel (*Umbellularia californica*)	532	4	70.00%	50.0%	63.33%	$490.00

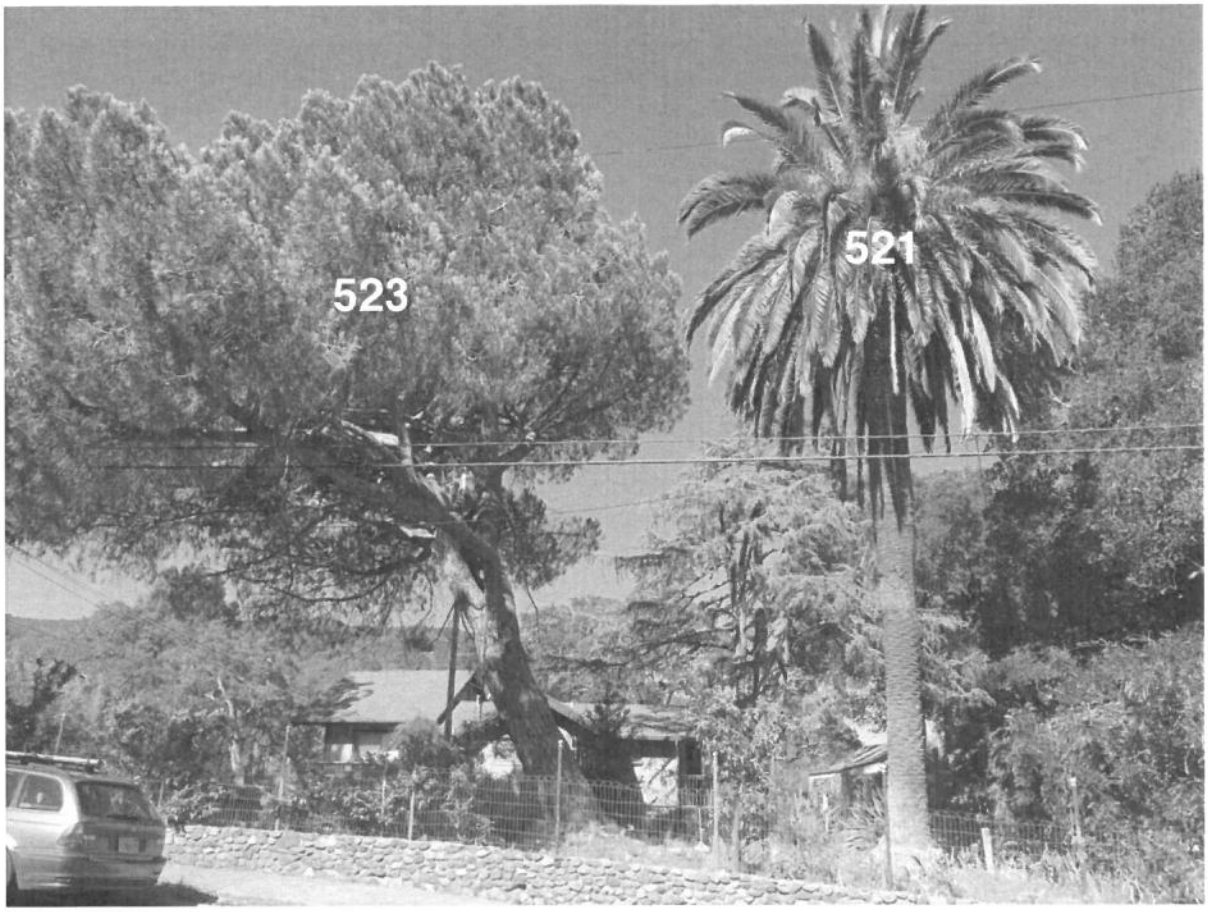
Tree Species	I.D. #	Trunk Diameter (in.)	Species Rating	Condition	Location	Rounded Value
coast live oak (*Quercus agrifolia*)	533	13	90.00%	50.0%	63.33%	$1,820.00
coast live oak (*Quercus agrifolia*)	534	13	90.00%	50.0%	63.33%	$1,820.00

Appendix C: Photographs

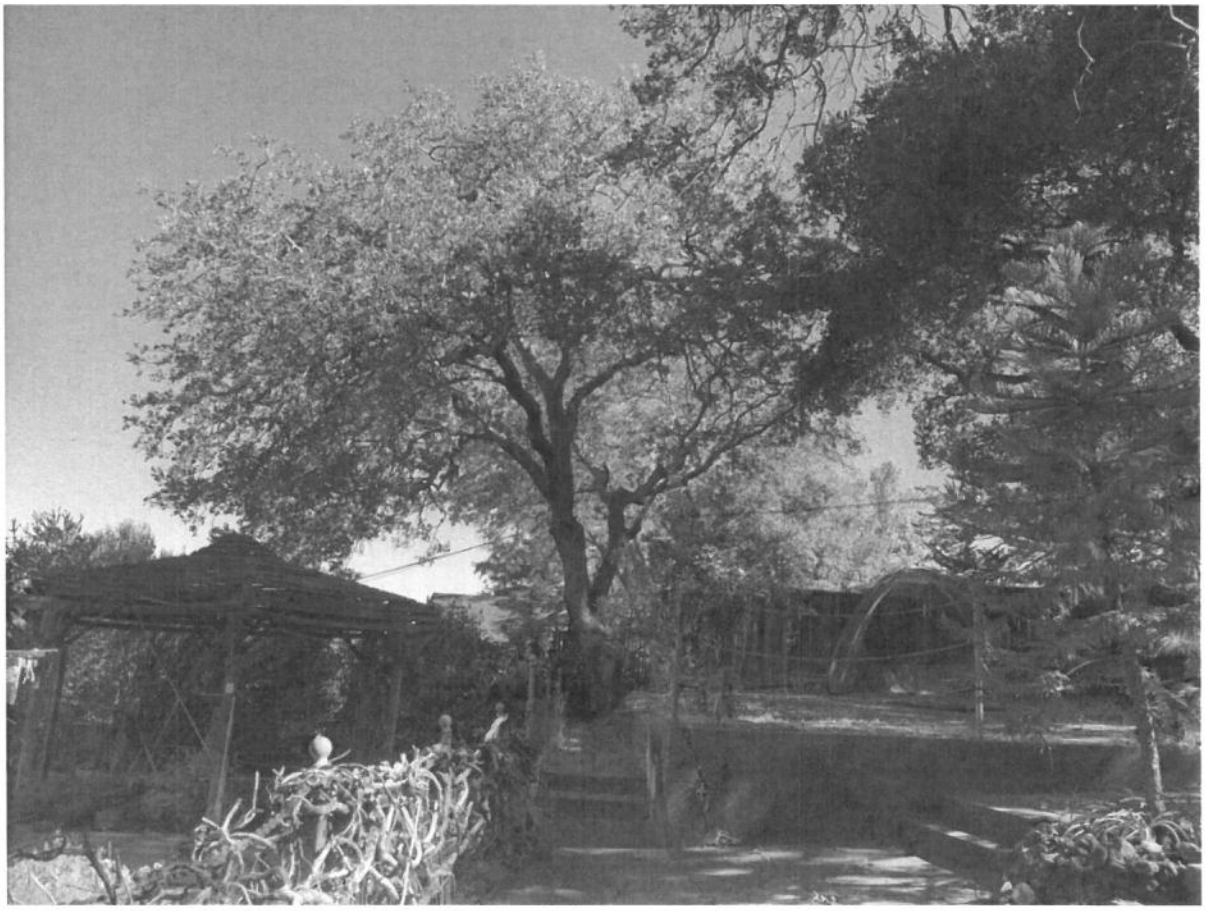
C1: Cypress 515 and 516, Oaks 517 through 520



C2: Palm 521 and stone pine 523

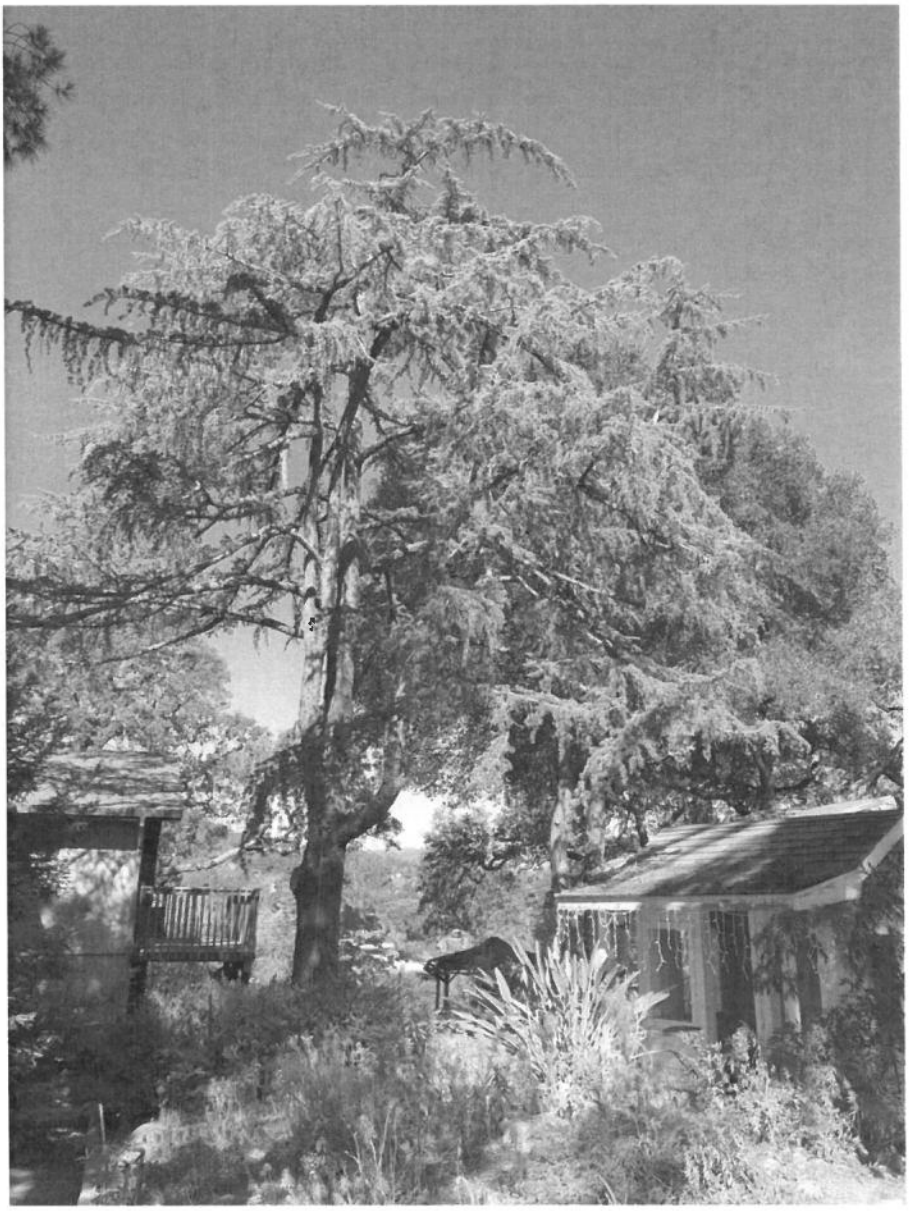


C3: Blue oak 527



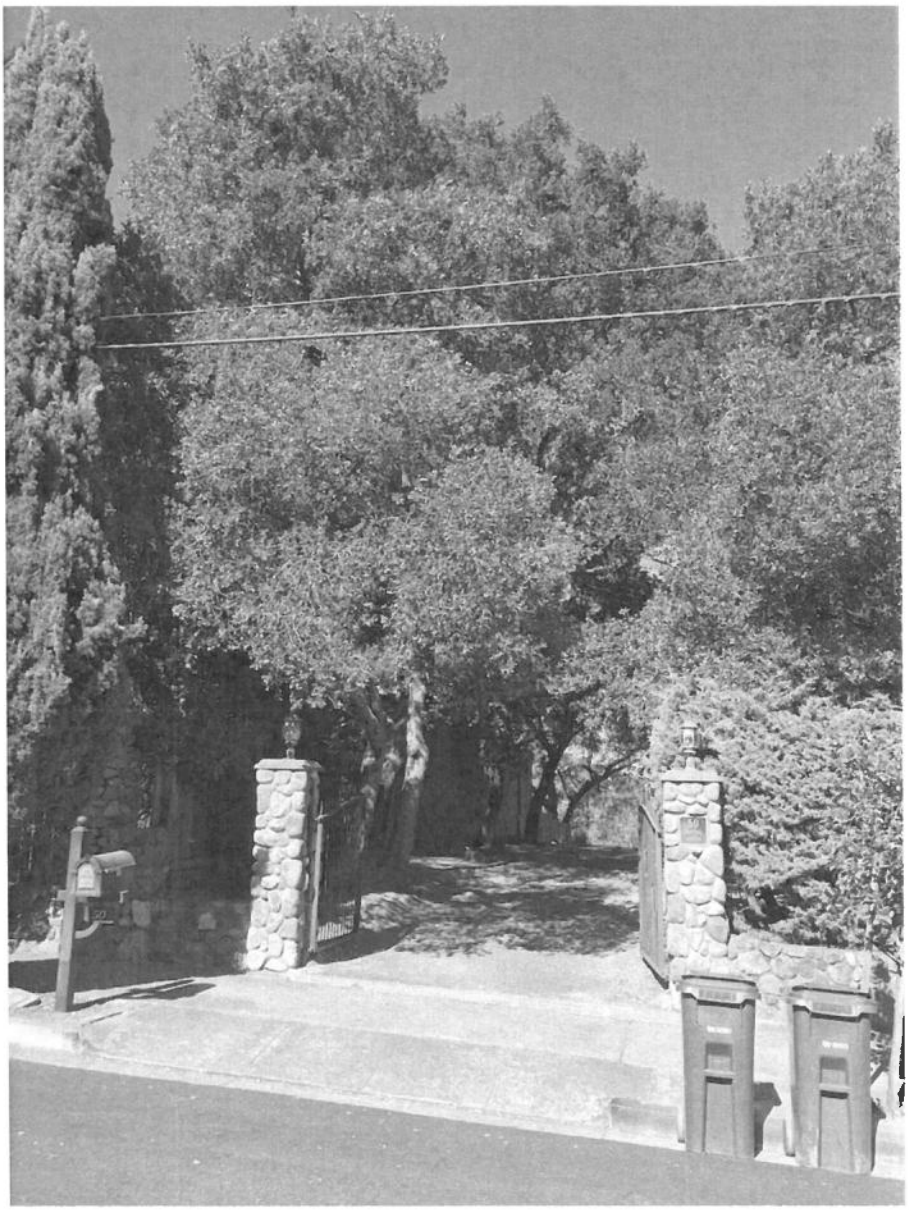
C4: Coast live oaks 525 and 526

C5: Deodar cedar 524



C6: Coast live oak 531

C7: Oaks 517 through 520 and 532 and 533 along northeast boundary



Appendix D: Tree Protection Guidelines

Section 29.10.1005. - Protection of Trees During Construction

Tree Protection Zones and Fence Specifications

1. **Size and materials:** Six (6) foot high chain link fencing, mounted on two-inch diameter galvanized iron posts, shall be driven into the ground to a depth of at least two (2) feet at no more than ten-foot spacing. For paving area that will not be demolished and when stipulated in a tree preservation plan, posts may be supported by a concrete base.
2. **Area type to be fenced:** Type I: Enclosure with chain link fencing of either the entire dripline area or at the tree protection zone (TPZ), when specified by a certified or consulting arborist. Type II: Enclosure for street trees located in a planter strip: chain link fence around the entire planter strip to the outer branches. Type III: Protection for a tree located in a small planter cutout only (such as downtown): orange plastic fencing shall be wrapped around the trunk from the ground to the first branch with two-inch wooden boards bound securely on the outside. Caution shall be used to avoid damaging any bark or branches.
3. **Duration of Type I, II, III fencing:** Fencing shall be erected before demolition, grading or construction permits are issued and remain in place until the work is completed. Contractor shall first obtain the approval of the project arborist on record prior to removing a tree protection fence.
4. **Warning Sign:** Each tree fence shall have prominently displayed an eight and one-half-inch by eleven-inch sign stating: "Warning—Tree Protection Zone—This fence shall not be removed and is subject to penalty according to Town Code 29.10.1025." Text on the signs should be in both English and Spanish (Appendix E).

All persons, shall comply with the following precautions

1. Prior to the commencement of construction, install the fence at the dripline, or tree protection zone (TPZ) when specified in an approved arborist report, around any tree and/or vegetation to be retained which could be affected by the construction and prohibit any storage of construction materials or other materials, equipment cleaning, or parking of vehicles within the TPZ. The dripline shall not be altered in any way so as to increase the encroachment of the construction.
2. Prohibit all construction activities within the TPZ, including but not limited to: excavation, grading, drainage and leveling within the dripline of the tree unless approved by the Director.
3. Prohibit disposal or depositing of oil, gasoline, chemicals or other harmful materials within the dripline of or in drainage channels, swales or areas that may lead to the dripline of a protected tree.
4. Prohibit the attachment of wires, signs or ropes to any protected tree.
5. Design utility services and irrigation lines to be located outside of the dripline when feasible.

6. Retain the services of a certified or consulting arborist who shall serve as the project arborist for periodic monitoring of the project site and the health of those trees to be preserved. The project arborist shall be present whenever activities occur which may pose a potential threat to the health of the trees to be preserved and shall document all site visits.
7. The Director and project arborist shall be notified of any damage that occurs to a protected tree during construction so that proper treatment may be administered.

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

Roots greater than two inches in diameter shall not be cut. When roots over two inches in diameter are encountered and are authorized to be cut or removed, 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.

Boring or Tunneling

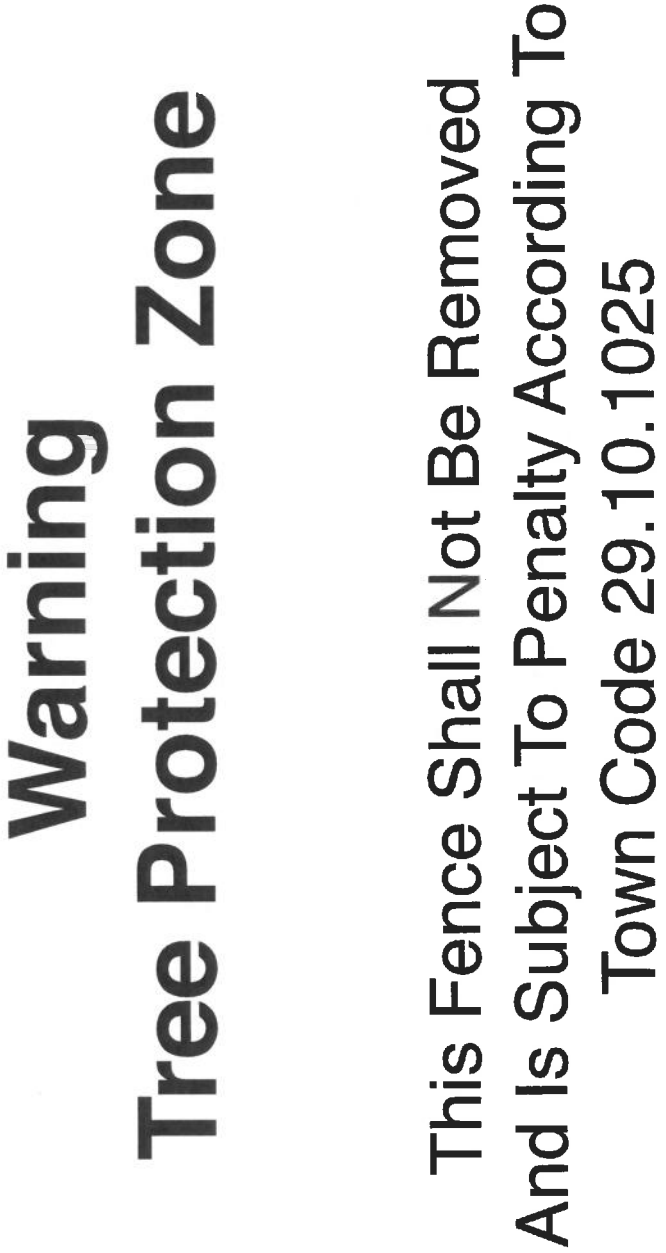
Boring machines should be set up outside the drip line or established Tree Protection Zone. Boring may also be performed by digging a trench on both sides of the tree until roots one inch in diameter are encountered and then hand dug or excavated with an Air Spade® or similar air or water excavation tool. Bore holes should be adjacent to the trunk and never go directly under the main stem to avoid oblique (heart) roots. Bore holes should be a minimum of three feet deep.

Tree Pruning and Removal Operations

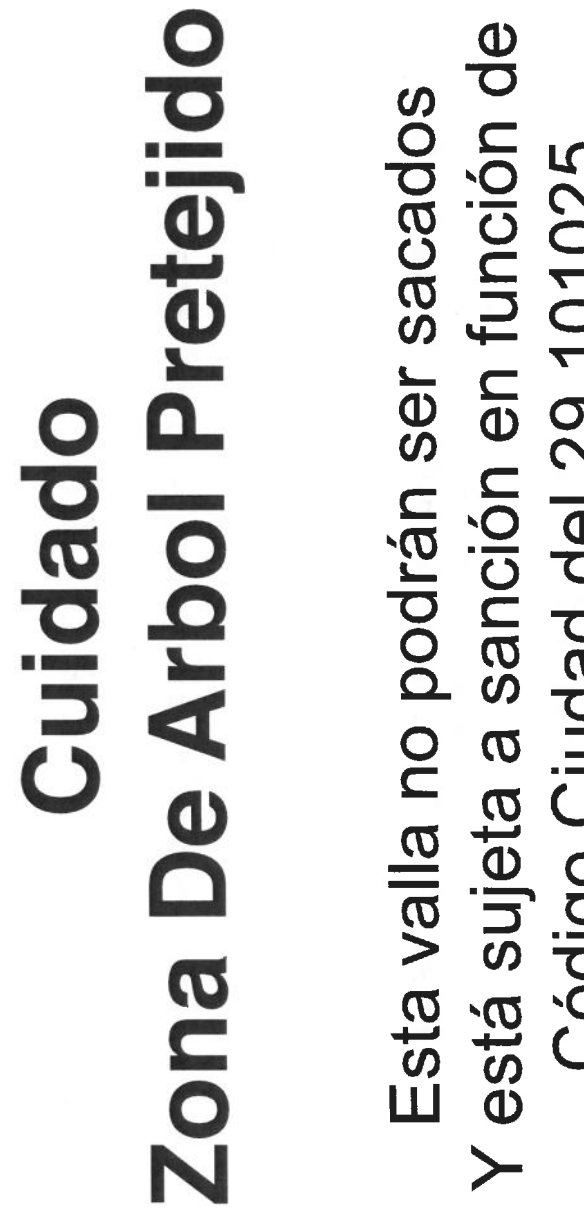
All tree pruning or removals should be performed by a qualified arborist with a C-61/D-49 California Contractors License. Treatment, including pruning, shall be specified in writing according to the most recent ANSI A-300A Standards and Limitations and performed according to ISA Best Management Practices while adhering to ANSI Z133.1 safety standards. Trees that need to be removed or pruned should be identified in the pre-construction walk through.

Appendix E: Tree Protection Signs

E1: English



E2: Spanish


Cuidado
Zona De Arbol Pretejido
Esta valla no podrán ser sacados
Y está sujeta a sanción en función de
Código Ciudad del 29.101025

Qualifications, Assumptions, and Limiting Conditions

Any legal description provided to the consultant is assumed to be correct. Any titles or ownership of properties are assumed to be good and marketable. All property is appraised or evaluated as though free and clear, under responsible ownership and competent management.

All property is presumed to be in conformance with applicable codes, ordinances, statutes, or other regulations.

Care has been taken to obtain information from reliable sources. However, the consultant cannot be responsible for the accuracy of information provided by others.

The consultant shall not be required to give testimony or attend meetings, hearings, conferences, mediations, arbitration, or trials by reason of this report unless subsequent contractual arrangements are made, including payment of an additional fee for such services.

This report and any appraisal value expressed herein represent the opinion of the consultant, and the consultant's fee is not contingent upon the reporting of a specified appraisal value, a stipulated result, or the occurrence of a subsequent event.

Sketches, drawings, and photographs in this report are intended for use as visual aids, are not necessarily to scale, and should not be construed as engineering or architectural reports or surveys. The reproduction of information generated by architects, engineers, or other consultants on any sketches, drawings, or photographs is only for coordination and ease of reference. Inclusion of said information with any drawings or other documents does not constitute a representation as to the sufficiency or accuracy of said information.

Unless otherwise expressed: a) this report covers only examined items and their condition at the time of inspection; and b) the inspection is limited to visual examination of accessible items without dissection, excavation, probing, or coring. There is no warranty or guarantee, expressed or implied, that structural problems or deficiencies of plants or property may not arise in the future.

Certification of Performance

I Richard Gessner, Certify:

That I have personally inspected the tree(s) and/or the property referred to in this report, and have stated my findings accurately. The extent of the evaluation and/or appraisal is stated in the attached report and Terms of Assignment;

That I have no current or prospective interest in the vegetation or the property that is the subject of this report, and I 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, nor upon the results of the assessment, the attainment of stipulated results, or the occurrence of any other subsequent events;

I further certify that I am a Registered Consulting Arborist® with the American Society of Consulting Arborists, and that I acknowledge, accept and adhere to the ASCA Standards of Professional Practice. I am an International Society of Arboriculture Board Certified Master Arborist®. I have been involved with the practice of Arboriculture and the care and study of trees since 1998.

Richard J. Gessner

ASCA Registered Consulting Arborist® #496
ISA Board Certified Master Arborist® WE-4341B
ISA Tree Risk Assessor Qualified
CA Qualified Applicators License QL 104230

Copyright