Environmental Quality Commission

REGULAR MEETING AGENDA

Date: 1/25/2017
Time: 6:30 p.m.
City Hall/Administration Building
701 Laurel St., Menlo Park, CA 94025

A. Call To Order

B. Roll Call – Bedwell, DeCardy, Dickerson, Vice Chair London, Marshall, Chair Martin, Smolke

C. Public Comment

Under "Public Comment," the public may address the Commission on any subject not listed on the agenda. Each speaker may address the Commission once under Public Comment for a limit of three minutes. Please clearly state your name and address or political jurisdiction in which you live. The Commission cannot act on items not listed on the agenda and, therefore, the Commission cannot respond to non-agenda issues brought up under Public Comment other than to provide general information.

D. Regular Business

D1. Announcement on Sustainability Division management transition to Clay Curtin – 10 min

D2. Make a determination on an appeal for one coast Redwood tree at 318 Pope Street (Attachment) – 1hr (allocation: City Arborist 10 min, Appellant 10 min, Public Comment 10 min, EQC discussion and vote 30 min)

D3. Informational presentation on PG&E proposal to remove trees for gas line safety – 30 min – Bill Chiang, PG&E Public Affairs Representative

D4. Discuss and approve moving the Environmental Quality Commission meeting date to the third Wednesday of every month – 5 min

D5. Approve November 30, 2016 Environmental Quality Commission meeting minutes (Attachment) – 2 mins

E. Reports and Announcements

E1. Informational update on proposed scope of work for the Jack Lyle Park restroom project (Attachment) – 10 min

E2. Informational update on commissioner attendance report and City Clerk updates to commission policy (Attachment) – 10 min

E3. Staff update on RFP for Heritage Tree Ordinance Update project, California Public Utilities Commission energy data ruling, Bedwell Bayfront Park Master Plan and Zoning – 10 min – Heather Abrams and Vanessa Marcadejas

E4. Update on commissioner volunteer work – 10 min

E5. Future agenda items – 5 mins

F. Adjournment

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At every Regular Meeting of the Commission, in addition to the Public Comment period where the public shall have the right to address the Commission on any matters of public interest not listed on the agenda, members of the public have the right to directly address the Commission on any item listed on the agenda at a time designated by the Chair, either before or during the Commission's consideration of the item.

At every Special Meeting of the Commission, members of the public have the right to directly address the Commission on any item listed on the agenda at a time designated by the Chair, either before or during consideration of the item.

Any writing that is distributed to a majority of the Commission by any person in connection with an agenda item is a public record (subject to any exemption under the Public Records Act) and is available for inspection at the City Clerk's Office, 701 Laurel St., Menlo Park, CA 94025 during regular business hours.

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CITY OF MENLO PARK

STAFF REPORT

Environmental Quality Commission
Meeting Date: **1/25/2017**
Staff Report Number: **17-002-EQC**

Regular Business: **Issue: Determination on appeal of staff's denial of one Heritage Tree removal permit at 318 Pope St.**

Recommendation

Staff recommends the Environmental Quality Commission (EQC) deny the appeal and uphold staff's decision to deny the Heritage Tree removal permit application at 318 Pope St.

Policy Issues

The proposed action is consistent with City policies.

Background

Section 13.24.010 of Menlo Park's Heritage Tree Ordinance (Municipal Code), Intent and purpose states**,** "This chapter is adopted because the city has been forested by stands of oak, bay and other trees, the preservation of which is necessary for the health and welfare of the citizens of this city in order to preserve the scenic beauty and historical value of trees, prevent erosion of topsoil and sedimentation in waterways, protect against flood hazards and landslides, counteract the pollutants in the air, maintain the climatic balance and decrease wind velocities. It is the intent of this chapter to establish regulations of the removal of Heritage Trees within the city in order to preserve as many trees as possible consistent with the propose of this chapter and the reasonable economic enjoyment of private property.**"**

In July of 2015 a Use permit for the demolition of the existing structure and construction of a new two story home at 318 Pope was approved by the City Planning Department. The arborist report submitted with the permit application was completed by Ray Morneau on May 14, 2015 (Attachment A) and identified the subject coast redwood (*Sequoia sempervirens*, Attachment B) Heritage Tree as being in "Fair" overall condition with a "High" aptitude for preservation. No application for a permit to remove the redwood was submitted at that time. The Use permit expired in July 2016 with the project incomplete.

On September 6, 2016, the current property owner, Scott Cole, submitted a Heritage Tree removal permit application to remove the subject coast redwood Heritage Tree located on the same property. The permit application was submitted with a completed arborist form (prepared by Project Arborist, Kielty Arborist Services LLC on August 31, 2016) and site plans for proposed development for a 2 story home (Attachment C), which is currently under review by the City Planning Department. The following reasons were stated for removal request:

- Poor form
- High Risk

The City Arborist reviewed the application and conducted Level 2, Basic Assessments on September 20, 2016 to evaluate the tree condition and complete a tree risk assessment. On September 22, the City Arborist denied the permit application (Attachment D) based on the following conditions:

- Tree is healthy with a moderate risk rating.
- Routine tree maintenance and monitoring is a reasonable and feasible alternative to removal.
- Above mitigation would reduce residual risk rating from moderate to low.

On October 6, 2016 the property owner submitted an appeal for the denial of the Heritage Tree removal permit (Attachment E).

On October 20, 2016 the property owner submitted a Use permit application to the City Planning Department including an arborist report, which had been prepared on June 3, 2016. The arborist report recommends removal of the subject redwood and specifies tree protection measures as well as makes recommendations to mitigate potential risk if the tree is retained (Attachment F). On November 14, 2016 Deanne Ecklund, City contract inspecting arborist, conducted an on-site inspection of subject tree and reviewed development plans. Deanne specified to the City Arborist and Planning Department staff that the subject redwood was, “not a high risk” and recommended approval of the tree protection measures specified by the Project Arborist for the redwood if the tree is to be retained.

On November 22, 2016 the property owners submitted a subsequent appeal letter and arborist report to the EQC (Attachment G and H).

Analysis

Section 13.24.040, of Heritage Tree ordinance requires staff and the EQC to consider the following eight factors when determining whether there is good cause for permitting removal of a heritage tree

(1) The condition of the tree or trees with respect to disease, danger of falling, proximity to existing or proposed structures and interference with utility services;

(2) The necessity to remove the tree or trees in order to construct proposed improvements to the property;

(3) The topography of the land and the effect of the removal of the tree on erosion, soil retention and diversion or increased flow of surface waters;

(4) The long-term value of the species under consideration, particularly lifespan and growth rate;

(5) The ecological value of the tree or group of trees, such as food, nesting, habitat, protection and shade for wildlife or other plant species;

(6) The number, size, species, age distribution and location of existing trees in the area and the effect the removal would have upon shade, privacy impact and scenic beauty;

(7) The number of trees the particular parcel can adequately support according to good arboricultural practices;

(8) The availability of reasonable and feasible alternatives that would allow for the preservation of the tree(s).

Staff’s denial of the removal permit was based on the following Heritage Tree Ordinance conditions:

(1) The condition of the tree or trees with respect to disease, danger of falling, proximity to existing or proposed structures and interference with utility services;

(4) The long-term value of the species under consideration, particularly lifespan and growth rate;

(8) The availability of reasonable and feasible alternatives that would allow for the preservation of the tree(s).

With respect to criteria one and four, the following criteria were assessed related to disease, danger of falling, proximity to existing or proposed structures, and long term value of the species.

Site Factors

- The subject tree is located at the south east corner of the residential home at 318 Pope St. with a relatively level grade.
- The tree root collar is pronounced and abutting a property line wood fence to the southeast and causing minor displacement.
- There is a one story residential home (at subject address), which is approximately three and half feet to the north east of tree as well as a one story neighboring home (at 310 Pope St.) approximately fifteen feet the southeast on the tree.
- There are gravel and paver walkways to the north east and south east of the tree with minor uplifting from surfacing roots.
- There was no visible evidence of damage to adjacent structures at time of inspection. No evidence documenting structural property damage was submitted by applicant.
- There was no visible evidence of site changes that had recently occurred at the time of inspection.
- The prevailing wind is from the northwest.

Tree Health and Species Profile

- The redwood is healthy with an estimated ninety eight percent of the foliage in the canopy being healthy and normal at the time of inspection.
- Tree vigor (growth rate) is normal for the age and species at the time of inspection. Redwoods are typically one of the fastest growing trees in cultivation.
- There were not any visible signs or symptoms of pest infestation, decay or disease infection at time of inspection. Redwood is known to be largely pest, disease, and decay resistant.
- The estimated age of the tree is approximately seventy to eighty years old based on the age of the homes located on the property and within the surrounding neighborhood which was developed in the 1940's. Coast redwoods commonly grow over one hundred and fifty years old in cultivation with several individual trees known to still be growing after two thousand years.
- According to the University of California Tree Failure Report program database a low percentage (2%) of all of the roughly six thousand failure records submitted are for *Sequoia sempervirens.* (CTFRP)
- It is the opinion of the author that while bark inclusions can be indicative of a structural defect in some trees, trunk failure associated with bark inclusions in coast redwoods is not a common occurrence.

Tree Defects and Conditions Affecting the Likelihood of Failure

- There are three main trunks, or co-dominate stems, which are roughly the same size (approximately thirty inches in diameter) with three narrow unions at approximately twelve feet above the existing grade. All of the main unions have evidence of included bark, which is a term used to describe a pattern of development where bark becomes embedded at the point of a narrow attachment of two or more stems. Included bark typically does not have the same amount of holding tissue as a union

with a wider angle of attachment and is therefore considered to be a type of structural defect. (Harris, 1999).

- Moderate response growth that has developed in the form of a blunted rib running longitudinal from the main union on the west side of the trunk to the root collar. The rib is approximately eight feet in length, ten inches wide, and three to five inches in thickness. There are also small sized (approximately six inches in diameter) burls growing in the main union on the south side of the trunk. Response growth is new wood that is produced by trees in the outermost cells to compensate for increased loads. The presence of a rib typically indicates internal cracking. Ribs with a pointed or sharp edge are often associated with more active cracks close to the surface. Cracks that have fully closed and are deeper below the surface display a more blunted edge on a rib. (Dunster, 2013).
- All three of co-dominate main stems have a corrected leans. Corrected leans or sweeps develop over time as the primary growth is redirected upward toward light (through phototropism) and are typically considered to have a likelihood of failure that is improbable to possible under normal conditions. (Dunster, 2013)
- Cabling has been installed between the co-dominate main stems at a height of approximately thirty feet above the main unions, which is not consistent with industry standards. The recommended height for the installation of cable anchors is, “two-thirds the distance from the union to the ends of the branches”. (Smiley, Lilly, 2013)
- There was no evidence of previous limb failure at time of inspection. Pruning history appeared to be limited to minor raising the canopy and cleaning of dead interior limbs.
- There was no evidence of any significant change in the tree or site conditions since the Morneau arborist report identified the redwood as being in fair condition with a high suitability for retention in May of 2015.

Load Factors

- The height of the coast redwood is approximately one hundred and ten feet with a crown spread of approximately forty five feet making the crown size large relative to adjacent trees.
- The co-dominate main stems are approximately thirty inches in diameter at point of attachment.
- Existing adjacent structures located to the north and north east trees provide partial protected from wind exposure.
- Seasonal rains are common in the area from October to April with an average annual rainfall of sixteen inches. (NOAA)
- Several severe storm events with heavy rainfall and wind loading have occurred since the initial permit application was submitted identifying the likelihood of failure as, “hazardous”.
- The overall crown of the tree is relatively symmetrical with a live crown ratio (LCR) estimated to be approximately ninety five percent. LCR is the ratio of the total length of the living foliage and limbs in the crown to total tree height. A higher LCR is believed to dampen the force of wind as the lateral branches and foliage intercept and dissipate the wind force throughout a larger area of the crown and thereby reduce loading on trunk, main lateral limbs, and there unions.
- Typically a LCR of less than one third is considered to have an increased likelihood of failure.

Likelihood of Failure

- The likelihood of failure is the potential for a tree or limb to fail within a time frame based on the species, defect, anticipated loads and response growth is. The time frame specified for this report is one year. The ISA risk categorization system rates likelihood of failure as improbable, possible, probable, or imminent. The Likelihood of failure of the co-dominate main stems with bark inclusion, response wood and corrected lean was determined to be **possible**. Possible is defined as a failure could occur, but is unlikely during normal weather conditions within a given time frame. (Dunster, 2013). Given the extent of response wood, its location in proximity to the defect and its shape, and

the species failure profile, there is no indication that failure is actively occurring or will take place within the specified time frame.

Target Assessment

- Targets are people and property that have the potential to be impacted in the event of tree or limb failure within the target zone. The target zone in this case is a one hundred and ten foot radius area around the tree, which equal to the tree height. The targets identified to have the potential to have greater than minor damage occur if one or more of the co-dominate main stems were to fail include the following:
    - Residential home at subject address
    - Occupants inside of residential home
    - Neighboring home at 310 Pope St.
    - Occupants inside neighboring home
    - Out building at subject address
    - Occupants of outbuilding at subject address
    - Occupants of yard at subject address and neighboring address

Occupancy Rates

- The duration of time that a target is located within a target zone is the occupancy rate. Rates are classified by the ISA as constant, frequent, occasional, or rare. The occupancy rates and descriptions for specified targets are the following:
    - Residential and neighboring home and out building: **Constant** -target present at all times day and night.
    - Occupants inside residential and neighboring home: **Frequent** -target present for most of the day.
    - Occupants of outbuilding and yards: **Occasional** - target is present infrequently or irregularly

Target Protection, Size of Defect Part, and Distance of Fall

- The size of the tree part at the point of target impact, the distance of fall and any target protections are considered when determining the consequences of failure (see below). Target protection is anything that would protect the target from impact. For instance, pliable live lateral limbs and foliage provide some protection to a target as they dampen the force of impact from a falling tree trunk. The following target protections were identified to exist for each specified target:
    - Neighboring home - live lateral limbs and foliage.
    - Occupants inside residential home, neighboring home and out building – structure.
    - Outbuilding - live lateral limbs and foliage.

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- The size of the defective part was considered as it effects the force of impact. The location of the size of part is evaluated where the likely impact would occur, which is not necessarily where the location of the defect part is in all cases. The following are the estimated sizes of tree parts for each specified target:
    - Main co-dominate leader over residential home and occupants – approximately thirty inches in diameter.
    - Main co-dominate over neighboring home and occupants – approximately twenty five inches in diameter.
    - Main co-dominate over out building, occupants of outbuilding and yards – approximately twenty inches in diameter.

- A falling tree or part will increase in speed and force of impact as it falls. The shorter the distance of fall, the lesser the force of impact. “If the distance from a tree trunk to a well-built, multi-story house

is short, a tree that falls may simply lean against the house, causing minor damage." (Dunster, 2013). The following are the estimated distance of fall for each tree part to specified target:

- Main co-dominate over residential home and occupants – approximately eight to ten feet
- Main co-dominate over neighboring home and occupants – approximately fifteen feet
- Main co-dominate over out-building, outbuilding occupants – approximately twenty to forty feet.

Likelihood of Failure and Impact

- Considering both the likelihood of failure and the likelihood of impact, which is effected by the location of the target, direction of fall, target protections (see above), and the occupancy rate. ISA categorizes likelihood of failure and impact as Unlikely, Somewhat likely, Likely, Very Likely. The following matrix is used to consider these factors and determine likelihood of failure and impact. (Dunster, 2013).

Likelihood of Failure	Likelihood of Impacting Target			
	Very low	**Low**	**Medium**	**High**
Imminent	Unlikely	Somewhat likely	Likely	Very likely
Probable	Unlikely	Unlikely	Somewhat likely	Likely
Possible	Unlikely	Unlikely	Unlikely	Somewhat likely
Improbable	Unlikely	Unlikely	Unlikely	Unlikely

- The following likelihood of impact for each specified target were determined using the matrix above:
  - Main co-dominate over residential, neighboring homes and occupants - Somewhat likely
  - Main co-dominate over out building, outbuilding occupants, and occupants of yard - Unlikely

Consequences of Failure

- The consequences of failure are ranked by the ISA as Negligible, Minor, Significant, Severe. They are defined as follows:
  - Negligible - consequences that involve low-value property damage or disruption that can be replaced or repaired; they do not involve personal injury.
  - Minor - consequences that involve low to moderate property damage, small disruptions to traffic, or a communication utility or a very minor injury.
  - Significant - consequences are that involve property damage of moderate to high value, considerable disruption, or personal injury.
  - Severe – consequences are those that could involve serious personal injury or death, damage to high value property, or disruption of important activities. (Dunster, 2013).

- Using these descriptions, the following are the consequences of failure and description for each of the specified targets are estimated taking into account target protections, part size and distance of fall:
  - Residential home at subject address - Significant
  - Occupants inside of residential home - Significant
  - Neighboring home at 310 Pope St. - Significant
  - Occupants inside neighboring home - Significant
  - Out building at subject address - Significant
  - Occupants of outbuilding at subject address - Significant
  - Occupants of backyard at subject address - Severe
  - Occupants of backyard at neighboring address - Severe

Risk Rating

- The risk rating is the combination of the likelihood of the tree or part falling and impacting a target and the severity of the consequences. Using the matrix below the following Risk Ratings were estimated for all parts and target was found to be Moderate. (Dunster, 2013).

Likelihood of Failure & Impact	Consequences of Failure			
	Negligible	Minor	Significant	Severe
Very likely	Low	Moderate	High	Extreme
Likely	Low	Moderate	High	High
Somewhat likely	Low	Low	Moderate	Moderate
Unlikely	Low	Low	Low	Low

Overall Risk Rating

- The overall risk rating is taken from the highest risk rating of any tree part and target. In this case, the overall risk rating for the subject tree is Moderate.

With respect to criteria eight, reasonable and feasible alternatives were considered:

Mitigation Measures

- The prudent implementation of the tree maintenance recommendations specified in June 3, 2016 Project Arborist report can effectively be used to mitigate the level of risk from moderate to a low residual risk.
- In addition, the author recommends monitoring the position of the co-dominate leaders, condition of the tree and cabling systems on an annual basis at a minimum.

Recommendations

Staff recommends the Environmental Quality Commission (EQC) deny the appeal and uphold staff's decision to deny the Heritage Tree removal permit application based on these findings.

Impact on City Resources

There are no additional City resources required for this item.

Environmental Review

An Environmental Review is not required for this item.

Public Notice

Public Notification was achieved by posting the agenda, with the agenda items being listed, at least 72 hours prior to the meeting.

Attachments

A. Morneau Arborist Report 5/15
B. Heritage Tree Image
C. Heritage Tree Permit Application
D. Heritage Tree Permit Denial Letter
E. Applicants Letter of Appeal
F. Kielty Arborist Report 6/16
G. Planning Department Application Confirmation Notice
H. Appellant Letter to EQC
I. Literature Cited

Report prepared by:
Christian Bonner, City Arborist

Report Reviewed by:
Vanessa Marcadejas, Senior Sustainability Specialist

ATTACHMENT A

PNW-ISA Certified Tree Risk Assessor #1188
ISA Certified Arborist #WE 0132A
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Ray Morneau
• ARBORIST •

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Certified Arborist's
Pre-Construction Tree Inventory
&
Tree Protection Plan

RECEIVED
JUN 18 2015
CITY OF MENLO PARK
BUILDING

May 14, 2015

Prepared for:
Hilary & Timothy Gudgel
835 Boyce Avenue
Palo Alto, CA 94301

Site:
Residential Redevelopment
318 Pope Street
Menlo Park, CA 94025

Prepared by:
Ray Morneau
ISA Certified Arborist #WE-0132A
PNWISA Certified Tree Risk Assessor #1188

Contents

1.0 Assignment & Introduction

Development Stage	
X	Pre-construction: design phase.
	City Required Inspection/Report
	Demo / Rough Grading / Trenching
	Streets/Utility/Drainage
	Building Construction
	Fine Grading / Landscaping
	Follow-up

Hilary and Tim Gudgel have retained me to provide the City-required Arborist Report for his project at 318 Pope Street in Menlo Park.

Drawings provided for my reference include a topo, Sheet A-102, "Site Plan - Proposed", and Sheet A-103, "Site Coverage Diagram".

To the extent that the requested information has been developed, this report follows the Community Development Department 3-page handout "Documents Associated with a Complete Plan Submittal" at: http://www.menlopark.org/DocumentCenter/Home/View/76, "Documents Associated with a Complete Plan Submittal" and http://www.menlopark.org/DocumentCenter/Home/View/90, "Tree Protection Specifications". I can be retained to provide follow up memo reports as more project details are developed and can be reviewed.

I have also reviewed the City comment letter dated April 16, 2015.

2.0 Discussion with leading summary

2.1 Summary

Seventeen (17) trees are associated with this property, either as on-site trees or municipal street trees. There are none just off-site as (nearly) overhanging neighbors' trees. The proposed site plan (Sheet A-102) shows the reconfiguration of the house in somewhat the same footprint as the old residence, but giving the three heritage trees along the south fenceline more undisturbed space. Driveway access is per the existing alley, which also minimizes disruption. And, new landscaping is being added which will improve aesthetics and will include at least three new jacaranda trees.

Of the 17 trees, 6 are "Heritage" of which five have a high likelihood of remaining decades beyond the close of this project (#1, #2, #3, #4, and #5). Loquat (#9, back by the garage) is belaboring under extreme pressure from the fireblight bacteria, *Erwinia amylovora*, and will not likely survive more than a couple of years before it looks like a failure. Summary charts below:

Tree Frequency Charts

Overall Tree Frequency Chart (17)

	Protected = 6					Not Protected
	Heritage-size = 6			Non-Heritage-size = 0		
	Street	Neighbor	On-property	Street	Neighbor	----
Total	2	0	4	0	0	11
Keep	2	0	4	0	0	3
Remove	0	0	0	0	0	8

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Overall Condition Chart

Percentage Range	Text Description	Quantity
0%	DEAD	0
1% to 25%	Very Poor	0
26% to 49%	Poor	5
50 % to 70%	Fair	7
71% to 90%	Good	5
91% to 100%	Excellent	0
		17

Sorted Alphabetically by Botanical Name

Maple, Japanese	2	*Acer palmatum*
Dracena	1	*Cordyline australis*
Cypress, Italian	1	*Cupressus sempervirens*
Tree Fern, Australian	1	*Dicksonia antarctica*
Loquat	1	*Eriobotrya japonica*
Palm, Can. Isl. Date	2	*Phoenix canariensis*
Victorian Box	1	*Pittosporum undulatum*
Oak, Coast Live	2	*Quercus agrifolia*
Redwood, Coast	1	*Sequioa sempervirens*
Palm, Queen	4	*Syagrus romanzoffiana*
Palm, Mexican Fan	1	*Washingtonia robusta*
	17	

Sorted by Frequency on Botanical Name

Palm, Queen	4	*Syagrus romanzoffiana*
Maple, Japanese	2	*Acer palmatum*
Palm, Can. Isl. Date	2	*Phoenix canariensis*
Oak, Coast Live	2	*Quercus agrifolia*
Dracena	1	*Cordyline australis*
Cypress, Italian	1	*Cupressus sempervirens*
Tree Fern, Australian	1	*Dicksonia antarctica*
Loquat	1	*Eriobotrya japonica*
Victorian Box	1	*Pittosporum undulatum*
Redwood, Coast	1	*Sequioa sempervirens*
Palm, Mexican Fan	1	*Washingtonia robusta*
	17	

Sorted Alphabetically by Common Name

Cypress, Italian	1	*Cupressus sempervirens*
Dracena	1	*Cordyline australis*
Loquat	1	*Eriobotrya japonica*
Maple, Japanese	2	*Acer palmatum*
Oak, Coast Live	2	*Quercus agrifolia*
Palm, Can. Isl. Date	2	*Phoenix canariensis*
Palm, Mexican Fan	1	*Washingtonia robusta*
Palm, Queen	4	*Syagrus romanzoffiana*
Redwood, Coast	1	*Sequioa sempervirens*
Tree Fern, Australian	1	*Dicksonia antarctica*
Victorian Box	1	*Pittosporum undulatum*
	17	

Sorted by Frequency on Common. Name

Palm, Queen	4	*Syagrus romanzoffiana*
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Loquat	1	*Eriobotrya japonica*
Palm, Mexican Fan	1	*Washingtonia robusta*
Redwood, Coast	1	*Sequioa sempervirens*
Tree Fern, Australian	1	*Dicksonia antarctica*
Victorian Box	1	*Pittosporum undulatum*
	17	

Tree Disposition / Inventory Summary

T #	Name, Common	Trunk Diam.	Overall Condition	Aptitude	Heritage Tree?	Keep? or Remove?	Summary Comments (PT = Protected Tree)
1	Palm, Can. Isl. D.	30.8"	77% Good	High	ST	Keep	In 9-foot wide planter strip; ~45-feet CBT (clear brown trunk).
2	Palm, Can. Isl. D.	33.0"	77% Good	High	ST	Keep	In 9-foot wide planter strip; ~45-feet CBT (clear brown trunk).
3	Oak, Coast Live	34.0"	80% Good	High	HT	Keep	2-feet from front fence, 9-feet to house. Very little deadwood.
4	Oak, Coast Live	22.6"	69% Fair	High	HT	Keep	6-inches to side fence, 18-feet to house. Very lop-sided.
5	Redwood Coast	94.4"	65% Fair	High	HT	Keep	Prominent root flare; 4-feet to house; co-dominance at 12'.
6	*Tree Fern, Austr.*	5.7"	80% Good	Mod.	No	Keep	Under #5 redwood, 4-feet to its root flare.
7	Maple, Japanese	4.2"	42% Poor	Low	No	**Rem.**	Crowded, lop-sided, misshapen under #5 redwood.
8	*Victorian Box*	multi	49% Poor	High	No	Keep	Twelve stems along side fence as a hedge/screening.
9	Loquat	19.6"	42% Poor	Very Low	HT	Keep	Crowdedby fence, garage. Co-dominance. Fireblight disease.
10	*Palm, Mex. Fan*	6.2"	65% Fair	Low	No	Keep	At front corner of existing garage; 3-feet CBT.
11	Cypress, Italian	4.7"	65% Fair	Mod.	No	**Rem.**	Typical Italian Cypress; 1-foot to side fence; 6-feet to garage.
12	Maple, Japanese	8.2"	47% Poor	Low	No	**Rem.**	Four stems with weak attachments. One dead;.
13	Palm, Queen	7.8"	72% Good	High	No	**Rem.**	Existing front fence at ~2-feet; 7-feet CBT.
14	Palm, Queen	10.6"	49% Poor	Low	No	**Rem.**	Existing front fence at ~2-feet; 5-feet CBT.
15	Dracena	4.0"	63% Fair	Low	No	**Rem.**	Existing front fence at ~7-feet; spindly/stunted.
16	Palm, Queen	9.4"	60% Fair	Low	No	**Rem.**	Existing front fence at ~2-feet; 6-feet CBT.
17	Olive, Common	multi	57% Fair	Low	No	**Rem.**	4", 4", 3", 2" stems at ground; fence at ~4'; 7' to house, thin.

2.2 Discussion

The current house will be replaced with a new home in approximately the same footprint. This residential site has 17 trees associated with it.

Six measure up to be "Heritage Trees" (greater than 15-inch diameter for non-oaks and greater than 10-inch diameters for oak trees) of which two (2) are street trees in front. All six will remain, preserved through the construction project. All this analysis is charted in the above tables.

Great effort is being made in the planning stage to work to preserve the palm street trees, the two oaks, and the redwood. Three of the eleven non-heritage-size trees will be kept in place and the new landscaping will include planting at least three new jacarandas. While the loquat tree (#9) can remain, it will be an exceptional challenge to preserve due to the already present disease, decline, deadwood, and structural defects.

All in all, this is a well thought-out strategy, design, and arrangement poised for success with the implementation of the tree preservation plan. This report follows typical tree protection measures commonly used in the City of Menlo Park.

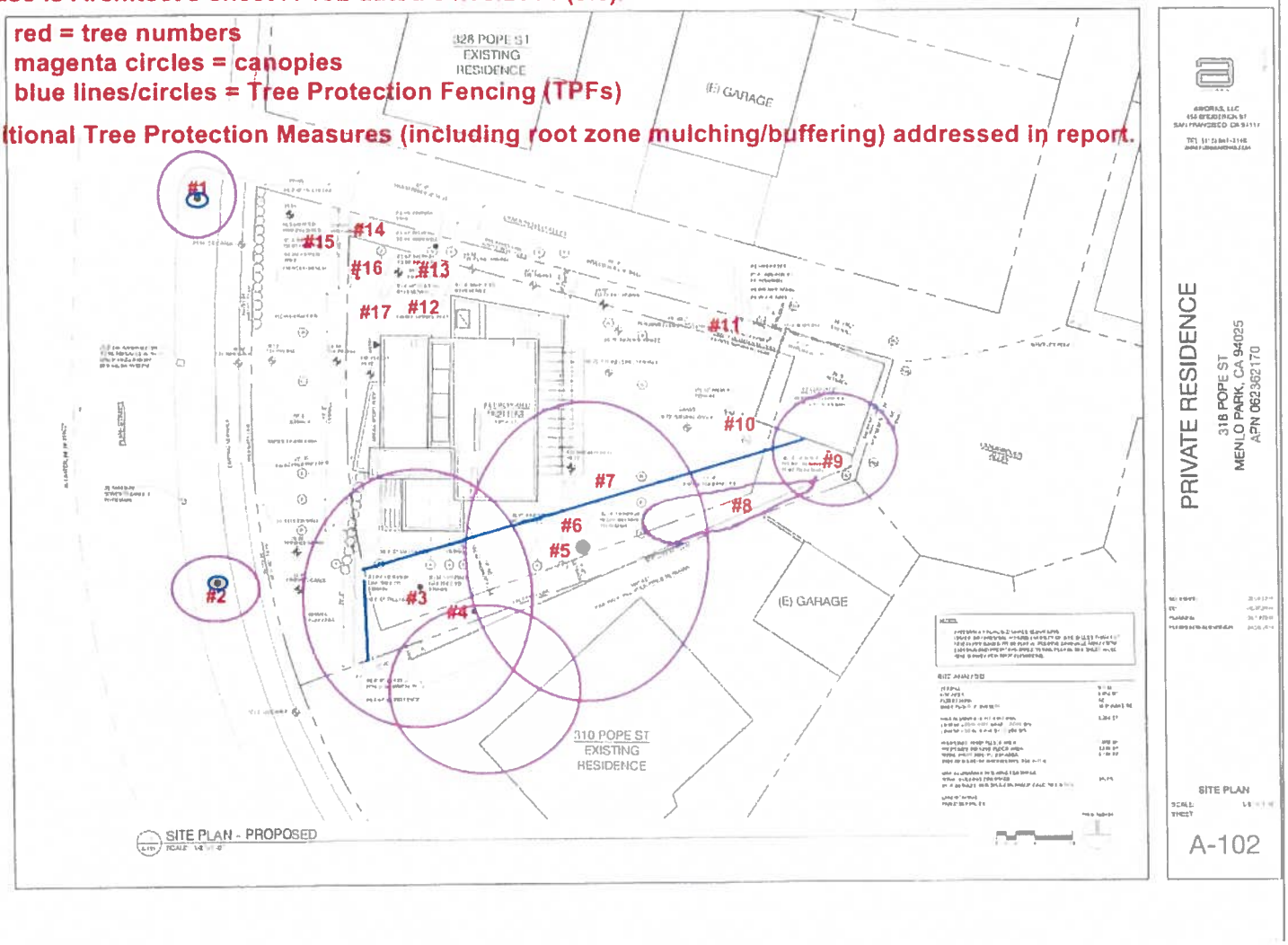
3.0 Site Plan, Tree Data, & Data Legend

3.1 Plan, with tree numbers added

Ray Morneau, Arborist, added Tree Numbers, TPFs, and Canopies for HTs to remain for May 2015 report.
Base is Architect's sheet A-102 dated 04.06.2014 (sic).

red = tree numbers
magenta circles = canopies
blue lines/circles = Tree Protection Fencing (TPFs)

Additional Tree Protection Measures (including root zone mulching/buffering) addressed in report.



3.2 Tree Data (following two pages)

3.3 Data Legend (then following two pages)

F5

Tree #	Common Name (*Botanical Name*)	dbh (Diametrer at Breast Height)	Crown Radius	Height	Crown Class	% Vigor	% Structure	% Overall	Age / Longevity	Aptitude	Removal	Additional Comments	Protected: ≥15", or ≥10"; ST; O/H
1	Palm, Canary Island Date *(Phoenix canariensis)*	30.8"	30'	65'	Dom.	75%	90%	77% Good	Mature	High	Keep	In 9-foot wide planter strip between curb and sidewalk; 6-feet to alley. Pruned recently to remove dead fronds. ~45-feet CBT (clear brown trunk).	ST
2	Palm, Canary Island Date *(Phoenix canariensis)*	33.0"	30'	65'	Dom.	75%	90%	77% Good	Mature	High	Keep	In 9-foot wide planter strip between curb and sidewalk; 6-feet to alley. Pruned recently to remove dead fronds. ~45-feet CBT.	ST
3	Oak, Coast Live *(Quercus agrifolia)*	34.0"	30'	60'	Dom.	70%	90%	80% Good	Mature	High	Keep	Root flare at 2-feet from existing front wood fence, 9-feet to exisitng house wall. Very little deadwood accumulated, as if recently pruned for crown cleaning, but foliage tips hang very near roof.	HT
4	Oak, Coast Live *(Quercus agrifolia)*	22.6"	30'	35'	Dom.	70%	68%	69% Fair	Mature	High	Keep	Root flare at 6-inches from existing side wood fence, 18-feet to exisitng house wall. Very little deadwood accumulated; foliage tips touch neighbor's roof. Entire canopy grows to south as an understory beneath #3 and #5	HT
5	Redwood Coastal (Sequoia sempervirens)	94.4"	35'	99'	Dom.	65%	65%	65% Fair	Mature	High	Keep	Very prominent root flare at side fence with bottom board cut out to accommodate tree; 4-feet to existing house wall. Three co-dominant trunks at 12-feet.	HT
6	*Tree Fern, Australian (Dicksonia antarctica)*	5.7"	3'	3'	Supp	80%	80%	80% Good	Semi-mature	Mod.	Keep	Under #5 redwood, 4-feet to its root flare. Another smaller (3-inch) tree fern growing 1-foot away.	No
7	Maple, Japanese (Acer palmatum)	4.2" @ 1'	6'	14'	Supp	30%	55%	42% Poor	Semi-mature	Low	**Rem.**	Crowded, lop-sided, misshapen under #5 redwood.	No
8	*Victorian Box (Pittosporum undulatum)*	see comm.	6	18'	Co-dom.	60%	40%	49% Poor	Mature	High	Keep	Twelve low-branching stems (3- to 6-inch diameters near ground level) along existing side wood fence as a hedge providing a screening effect.	No
9	Loquat *(Eriobotrya japonica)*	19.6" @ 1'	18'	27'	Dom.	45%	40%	42% Poor	Over-mature	Very Low	Keep	Crowded in to corner of existing side wood fence and existing garage. Co-dominant trunks with embedded crotch from ground level (defective, weak attachment). Thinning foliage crown with extensive dieback-decline with fireblight bacteria.	No
10	*Palm, Mexican Fan (Washingtonia robusta)*	6.2" @ 3'	4'	6'	Dom.	60%	70%	65% Fair	Semi-mature	Low	Keep	At front corner of existing garage; 3-feet CBT.	No
11	Cypress, Italian *(Cupressus sempervirens)*	4.7" @ 6"	1'	20'	Dom.	55%	70%	65% Fair	Semi-mature	Mod.	**Rem.**	Typical young Italian Cypress; 1-foot to exising side wood fence; 6-feet to existing garage.	No

Tree #	Common Name (*Botanical Name*)	dbh (Diametrer at Breast Height)	Crown Radius	Height	Crown Class	% Vigor	% Structure	% Overall	Age / Longevity	Aptitude	Removal	Additional Comments	Protected: ≥15", or ≥10"; ST; O/H
12	Maple, Japanese (Acer palmatum)	8.2" @ 6"	7'	18'	Dom.	60%	35%	47% Poor	Mature	Low	**Rem.**	Four stems from ground level with embedded bark (weak) attachments. Verticillium wilt appears to have kill the smallest (3-inch) one; 4-feet to house, 6-feet to gate.	No
13	Palm, Queen *(Syagrus romanzoffiana)*	7.8"	5'	15'	Dom.	66%	80%	72% Good	Semi-mature	High	**Rem.**	Existing front fence at ~2-feet; 7-feet CBT.	No
14	Palm, Queen *(Syagrus romanzoffiana)*	10.6"	5'	16'	Dom.	55%	45%	49% Poor	Semi-mature	Low	**Rem.**	Existing front fence at ~2-feet; 5-feet CBT.	No
15	Dracena *(Cordyline australis)*	4.0"	2'	16'	Dom.	66%	60%	63% Fair	Semi-mature	Low	**Rem.**	Existing front fence at ~7-feet; spindly/stunted.	No
16	Palm, Queen *(Syagrus romanzoffiana)*	9.4"	4'	14'	Dom.	60%	60%	60% Fair	Semi-mature	Low	**Rem.**	Existing front fence at ~2-feet; 6-feet CBT.	No
17	Olive, Common *(Olea europa)*	see comm	10'	16'	Dom.	55%	60%	57% Fair	Semi-mature	Low	**Rem.**	Muli-stemmed from ground level (4", 4", 3", 2"). Existing front fence at ~4-feet; 7-feet to corner of house. Misshapen, thin foliage crown.	No

3.3 Data Legend (then following two pages)

Legend: Ray Morneau, Arborist - Tree Inventory Headers

Observations were made and data gathered during my on-site inspection (May 13, 2015). Further conclusions and protection measures were refined from office research, seminar information, and past experience based on those observations and data.

Unless otherwise defined as a limited inventory, all site trees larger than a minimum diameter (usually ≥4-inch) were numbered and inspected.

The gathered data was entered into a Microsoft® Excel database. The data is encapsulated into the accompanying "Tree Inventory Data" section. The categories are typically self-descriptive with only the following notes.

Tree Number:	I sequentially assigned tree numbers from 1 to 17. A 1-inch-diameter aluminum tag is nailed to each tree at about eye level. I add a prefix "15" to identify each as linked with this inventory, thus differentiating it from any other numbering system.
Names:	We employ the initial common names from McMinn, if listed, otherwise from Sunset. Scientific/botanical names are included to minimize confusion. As applicable, we used McMinn's key and/or Sunset's descriptions.
DBH: Diameter at Breast Height:	This measurement is the trunk diameter measured at the standard height defined by the jurisdiction in which the tree trunk grows. The industry standard is 54 inches above ground level, taken with a standard surveyor's diameter tape, recorded in inches. For multi-trunked trees, measurements were taken below the lowest branch swelling and/or individual stems at 54 inches, or an average, depending on which height measurement is deemed to produce the best representative figure.
Crown Radius:	The averaged radii's measurement is shown in feet.
Ht (Height):	Estimated distance foliage crown extends above grade, recorded in feet.
Crown Class:	This helps visualize and assess tree form in the event stand might be altered. Both aesthetics and stability can be changed when adjacent trees are pruned or removed. Classifications: Dominant: tree canopy standing alone or over companions. Co-dominant: tree canopy blends with, but is crowded by, companions. Intermediate: crowded canopy receiving some light from above but little, if any, from sides. Suppressed: tree's foliage below surrounding trees' or existing site features.

% Vigor:	Rating for tree's growth and vitality as a blend of elements like leaf or bud size and color, twig growth (elongation), accumulation of deadwood, cavities, woundwood development, trunk expansion (growth "cracks"), etc.
% Structure:	Structure rating for tree's architecture as a composite of factors like branch attachment, lean and balance, effects of prior breakage, crossing-tangled-twisted limbs, codominant trunks and/or branches, decay and cavities, anchorage (roots), etc.
% Overall Condition:	Percentage rating assessing the tree's overall vigor, recent growth, insects/diseases, and structural defects. Relative text rating included in the same cell as: Excellent, Good, Fair, Poor, Very Poor. This corresponds to the "Condition Percentage" factor in tree valuations per the Council of Tree and Landscape Appraisers (CTLA) system used by the International Society of Arboriculture. (CTLA, 1992. It combines foliage, branches, limbs, trunk, and root ratings into a composite condition score. This rating is used in the calculation of these trees' appraised value sometimes required by the City of Menlo Park.
Apptitude or Suitability for Preservation:	Considers tree's condition (vigor and structure), longevity/age, adaptability, and aesthetics. This rating takes into account any announced intentions of changes in area/lot use. Degrees: High, Moderate, Low, Very Low. High: Tree in great condition and any existing defects or stresses are minor or can be easily mitigated. Moderate: Notable vigor and/or stability problems but which can be moderated with treatment &/or increased tree protection zone. Low: Significant problems, including shorter life expectancy. Difficult to retain but potential with much larger tree protection zone. Very Low: Substantial existing problems, defects, stresses. Unlikely to survive impact of any project.
Comment:	Notes; most obvious defects, insects, diseases or unique characteristics.
Protected ≥15", or ≥10"; ST; O/H	Notation of tree's status as a "Protected Tree" per the Menlo Park Municipal Code, Chapter 13.24. "Heritage Trees": California native oak species 10-inch diameter or greater ("**≥10**"") and any other tree 15-inch diameter or greater ("**≥15**""). Additional types of protected trees would be "Street Trees" ("**ST**"), as they are regulated by the City, and nearby trees on adjacent properties which may become overhanging this project (**O/H**).

4.0 Tree Preservation & Analysis

Specific to Heritage Palm, Oak, Redwood, & Loquat Trees .... #1, #2, #3, #4, #5, and #9:

Besides the more broadbrush Tree Preservation Measures (TPMs) below, which are applicable, this section draws a focused analysis for the six major heritage trees impacted by this project.

Arborist's Comment: This has many earmarks of a good project, through no fault of mine yet at this point. Perhaps that is due to the architect's experience ... or maybe even early good information from a prior arborist. Anyway, this design appears to inherently preserve existing large-scale trees by not crowding trees' above and below ground spaces! Even utility lines and meters (like water, sewer, electric, gas) are situated outside of trees' root zones! Thank you!!

4.1 Canary Island Date Palm #1 (30.9-inch trunk diameter): The most notable impacts could be the driveway/alley configuration, or maybe a decision to re-pour the sidewalk slab. Since these palms are often moved with very small root balls, we can expect that this palm would easily withstand any impact necessary for this project. However, keep the Project Arborist informed of any changes not shown on plans he has seen.

- Tree Protection Fencing for this specimen can be a trunk wrap, as already described in The City of Menlo Park "Tree Protection Specifications", paragraph 4. (http://www.menlopark.org/DocumentCenter/Home/View/90)
- Maintain supplemental root zone buffer (wood chips?) outside of tree protection fence to foliage branch dripline in order to minimize root zone compaction. Type or material of buffer may depend on whether the existing turf remains in place.
- The likelihood of encountering significant roots during driveway grading or sidewalk base prep is low [see section 5.4, below].

4.2 Canary Island Date Palm #2 (33.0-inch trunk diameter): The most notable impacts could be installing a gravel play area, replacing the existing lawn on which this palm has probably been relying for some of its water. Also, there could maybe be a decision to re-pour the sidewalk slab. Other notes per Section 4.1, above.

4.3 Coast Live Oak #3 (34.0-inch trunk diameter): The most notable impacts may be the removal of the existing house foundation, which can be accomplished without significant root zone disruption by working from the house side of the area and the equipment operator carefully lifting the concrete up and out.

The new foundation can be also be carefully excavated with minimal root zone disruption. And, of course, overhead cautions may be required to avoid breakage in the foliage crown.

- Tree Protection Fencing for this specimen can be a linear chain link on driven posts, as already described in The City of Menlo Park "Tree Protection Specifications", paragraph 4. (http://www.menlopark.org/DocumentCenter/Home/View/90)

  The TPF location is also shown on the Sheet A-102 on page 5 of this report. The concept of fencing individual trees can be discussed, but in my opinion this situation readily calls for fencing all four trees along the south side within a separate and continuous run of fencing, since much of the root zones all run together anyway.
- Maintain supplemental root zone buffer (wood chips?) inside and outside of tree protection fence to foliage branch dripline in order to minimize root zone compaction.
- The likelihood of encountering significant roots during foundation excavation is low [see section 5.4, below].
- The tree care contractor will need to prune with reduction thinning and cuts for clearance/raising to accommodate the new house, which I presume will be two-story. This will not remove more than approximately 5% of the foliage canopy.
- The landscape plan is probably still being developed. Plan to take into account the California Oak Foundation guidelines, including no installing plants with high water demands within 10-feet of a mature (oak) tree's trunk. The plan must, of course, be reviewed by the City Arborist and Project Arborist. Alternatively, collaboration could be good.

4.4 Coast Live Oak #4 (22.6-inch trunk diameter): The impacts and associated guidelines will be as for Section 4.3, above – though modified due to being even further from the house.

4.5 Coastal Redwood #5 (94.4-inch trunk diameter): This mature fair condition redwood tree may be the most significantly impacted by this project – yet it is not as close to the work as found on some other construction sites.

Again, the most notable impact, similar to oak #3 above, may be removal of existing and digging a new foundation. There is a high likelihood that hand excavation of the foundation will be necessary, else the impact and guidelines discussion above carries over to this redwood.

4.6 Loquat #9 (19.6-inch trunk diameter): There appear to be no changes in the vicinity. So, the most notable impacts would be if plans change. Meanwhile, the above guidelines for other trees similarly situated would apply.

Due to the substantial problems by which Loquat #9 is already plagued, the owners and/or contractor should not be penalized. After all, it is already in "Poor" condition and fireblight can be a fatal stress.

5.0 Tree Preservation Guidelines: Pre-Construction Maintenance notes

5.1 Identify a TPZ (Tree Protection Zone) for each tree to remain after the project closes. A TPZ is defined by the jurisdiction in which the project is located to provide above-ground- and root-zone-protection for trees. In the absence of a specific local definition, the TPZ shall be a circle with a radius of 10-feet for every 1-foot of trunk diameter.

Within the TPZ shall be identified a CRZ (Critical Root Zone) – a no man's land within which no activity may occur without Project Arborist or City Arborist monitoring and/or sign-off. Unless otherwise specified, the CRZ shall be the larger of 3-foot-radius-circle or a circle with a radius of 1.5-feet for every 1-foot of trunk diameter.

5.2 Supplemental watering should be provided for trees to remain. A rule of thumb for construction site stressed trees is 10-20 gallons per trunk diameter inch per month, particularly critical during hot weather. This is modified by the Project Arborist on site with root zone inspections and monitoring as water demands will obviously be lower during cool, damp weather. Inspection should find soil between 3" and 18" below grade moist enough for roots to thrive.

5.3 No pruning is absolutely needed at this time, though pruning to reduce foliage branch endweights could make for better-structured trees (in some cases). Crown raising may be required over the house. Nevertheless, deadwood removal and endweight reduction is commonly performed to improve existing site trees. And, usually project trees benefit from "Crown Cleaning" for deadwood removal and "Crown Thinning" to lighten branch endweights) at sometime before the close of the project. Then the owner has a benchmark against which to compare future status of the trees. All work must conform to published ANSI A-300 Standards

5.4 Approaching project commencement, when the foundations, driveways, and other hardscape features (including trenches) have been staked/located, then some pruning may likely be needed. Raising/clearance can be minimized for space to work. Root pruning along the lines within 15-feet on either side of mature trees' trunks can sever roots cleanly, reducing shock to these trees' systems.

Root pruning prior to excavating for driveways, foundations, and other hardscape must be done to avoid excessive root damage (rips, tears, shatter, breakage). This is commonly performed with a trencher until 1-inch diameter roots are encountered, at which time the crew continues with exposing larger roots for hand pruning with a sharp saw (hand saw, Sawz-All®, or equivalent). This can be done by careful hand-digging or air/hydraulic excavation to avoid damaging tree roots.

5.5 All project tree work performed before, during, or after construction is to be done by WCISA Certified Tree Workers under the supervision of an ISA Certified Arborist (or equivalents, if they possess sufficient skill for approval by Project Arborist). This includes all pruning, removals (including stump removals) within driplines of trees to be preserved, root pruning, and repair or remedial measures.

6.0 Tree Preservation Guidelines: Tree Protection Measures

6.1 Fencing and other root zone protection is usually specified as a drip-line installation of 6-foot high chain link fence on galvanized drive posts, plus root zone wood chip mulch. However, due to the inevitable myriad project variables, alternatives are frequently allowed – but require careful strategies arranged with and signed off by the Project Arborist or City Arborist.

For this project, when/where that intrusion is allowed, it is best to position the tree protection fencing as near the line of the hardscape as possible, leaving just enough room to work – buffering the remaining root zone with alternative protection.

Must be in place before demolition or any other project site work.

Though generally expected to extend to the dripline, here the TPF can be installed as close to that as possible.

One 24- to 36-inch opening or gate should be left for inspection access to each area.

Fence material is to be 6-foot-high chain link fence supported by 8-foot long, 2-inch diameter galvanized fence posts driven 2-feet into the soil.

Where no plant material root zone buffer is growing (e.g. ivy), a wood chip mulch is to be spread evenly to a 4-inch depth from the dripline to 6-inches from the base of the trunk. Taper to existing ground level at the base of the trunk with a slope of about 2:1.

Additional root zone areas requiring protection can be buffered as Project Arborist requires, e.g., if project scope changes. Commonly acceptable buffer materials often include wood chips, crushed rock, plywood, steel trench plates, and/or a combination of such materials. Consult Project Arborist for depth specifications (which vary depending on use of area and/or specific traffic).

Root zone areas to be protected may be modified by the Municipal Arborist or Project Arborist as plans develop.

6.2 Prohibited Acts & Admonishments/Requirements

6.2.1 No parking or vehicle traffic over any root zones, unless using buffers approved by Project Arborist.

6.2.2 Monitor root zone moisture and maintain as per above.

6.2.3 Have a certified arborist repair any damage promptly.

6.2.4 No pouring or storage of fuel, oil, chemicals, or hazardous materials under these foliage canopies.

6.2.5 No grade changes (cuts, fills, etc.) under these foliage crowns without prior Project Arborist approval. For instance, hand excavation and thinner base prep may be required in some root zone areas.

6.2.6 Any additional pruning required must be performed under arborist supervision – including root pruning – clean, smooth cuts with no breaking, scraping, shattering, or tearing of wood tissue and/or bark.

6.2.7 No storage of construction materials under any foliage canopy without prior Project Arborist approval.

6.2.8 No trenching within the critical root zone area. Consult Project Arborist before any trenching or root cutting beneath any tree's foliage canopy. It is best to route all trenching out from under trees' driplines. Often trenches in root zones must be hand excavated to leave roots intact.

6.2.9 No clean out of trucks, tools, or other equipment over the critical root zone. Keep this debris outside of any existing or future root zone.

6.2.10 No attachment of signs or other construction apparatus to these trees.

6.3 Construction-time Maintenance

6.3.1 Monitor root zone moisture and maintain as per above (§4.1).

6.3.2 Maintain/repair tree protection fences and/or root zone mulch/buffer material.

6.3.3 Have a certified arborist promptly repair any damage to trees.

6.3.4 Develop the plan for follow-up care so, as the project closes, the care of the trees can be handed over for continuing management by the owner and/or landscape contractor.

6.4 Post-Construction Follow-Up

6.4.1 Monitor root zone moisture, especially during/following drought//dry seasons. [A dry season is any time more than 60 days elapse since significant rainfall (2-inches or less).]

6.4.2 Observe, monitor the trees' status quo and make sound arboricultural decisions based on the on-going results.

6.4.3 Perform a walk-around the rainy storm season (~October-November) and again after (~May-June) looking for flags calling out for attention, including breakage/hangers, overly dense growth, presence of insects/disease/"mushrooms", or other damage. Investigate and/or schedule treatment options as needed.

6.4.4 Check the root zone mulch to maintain at a 2- to 4-inch depth, not against the trunk. "Fluff" to break up clumps and/or replenish as needed to maintain.

7.0 Certification

I certify that all the statements of fact in this report are true, complete, and correct to the best of my knowledge, ability, and belief, and are made in good faith.

Respectfully submitted,

Raymond J. Morneau

Raymond J. Morneau
ISA Certified Arborist #WE-0132A
PNW-ISA Certified Tree Risk Assessor #1188

ATTACHMENT B

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ATTACHMENT C

Heritage Tree Removal Permit Application

RECEIVED
SEP 06 2016
CITY OF MENLO PARK
BUILDING

This application must be submitted with the Arborist Form

Submit application forms to 701 Laurel Street, Menlo Park, CA 94025

Application No. HTR2016-00207

Purpose of application: Removal ☒ Pruning of more than 25% ☐

Permit Fee: $135.00 (each tree, up to 3 trees); $90 each additional tree (separate forms required for each tree)

PLEASE PRINT CLEARLY

Site Address: 316 Pope Street, Menlo Park CA 94025

Name of Applicant: Scott Cole Phone: 650 814 6307 FAX:

Mailing Address: 835 Lytton Ave. Palo Alto CA 94301 Email: scottcole@sbcglobal.net

I (we) hereby agree to hold the City harmless from all costs and expenses, including attorney's fees, incurred by the City, including but not limited to, all cost in the City's defense of its actions in any proceeding brought in any State or Federal Court challenging the City's actions with respect to the proposed tree removal.

Signature of property owner authorizing access and inspection of tree in his/her absence:

Date: 9/6/2016

PAID
SEP 06 2016

Type of Tree: redwood Location on property: right side

Reasons for Request:

Form of tree is poor, leading to high risk for splitting and falling on and damaging the house or the neighbor's house.

IF TREE IS DAMAGING STRUCTURE PLEASE ATTACH PHOTOS DEMONSTRATING DAMAGE.

Are you considering any construction on your property in the next 12 months? Yes ☐ No ☐
If yes, please submit additional information describing what type of construction is planned and a site plan.

- Tree may not be removed (or pruned over 25%) unless and until the applicant has received final permission from the City as indicated below.
- The signed permit approval form must be on site and available for inspection while the tree work is being performed.
- A suitable replacement tree, 15 gallon size or larger with a mature height of 30 feet or more, is to be installed in the time frame indicated below.

PLEASE DO NOT WRITE BELOW THIS LINE

PERMIT APPROVED ☐ PERMIT DENIED ☒

TIMING OF REMOVAL

☐ Upon receipt of this approved permit
☐ After applying for a Building Permit for associated construction

TIMING OF REPLANTING

☐ Within 30 days of Heritage Tree removal
☐ Prior to final building inspection of associated construction

Staff Signature: Date: 9/22/16

Print name and title: CITY ARBORIST

Arborist Form

Please complete one form for each tree. Mark each tree with colored ribbon or tape prior to our inspection.

Site Address: 318 Pope

ARBORIST INFORMATION:

Name of Certified Arborist: Kevin Kielty

ISA or ASCA number: WE#0476 Menlo Park Business License number: _____

Company: Kielty Arborist Services

Address: P.O. Box 6187 San Mateo, CA 94403

Phone: (650) 515-9783 FAX: _____ Email: kkarbor0476@yahoo.com

TREE INFORMATION:

Date of Inspection: 5/17/16, 8/3/16

Common Name: Redwood Botanical Name: Sequoia Sempervirens

Location of Tree: Side of home, South side of Property Height of Tree: 120'

Diameter of tree at 54 inches above natural grade: 95.7

Circumference of tree at 54 inches above natural grade _____

Condition of Tree:

Fair vigor, poor form, codominant at 15', 3.5' away from home, cables installed, included bark, heavy leaders in opposite directions, hazardous, leader closest to neighbors home has significant lean.

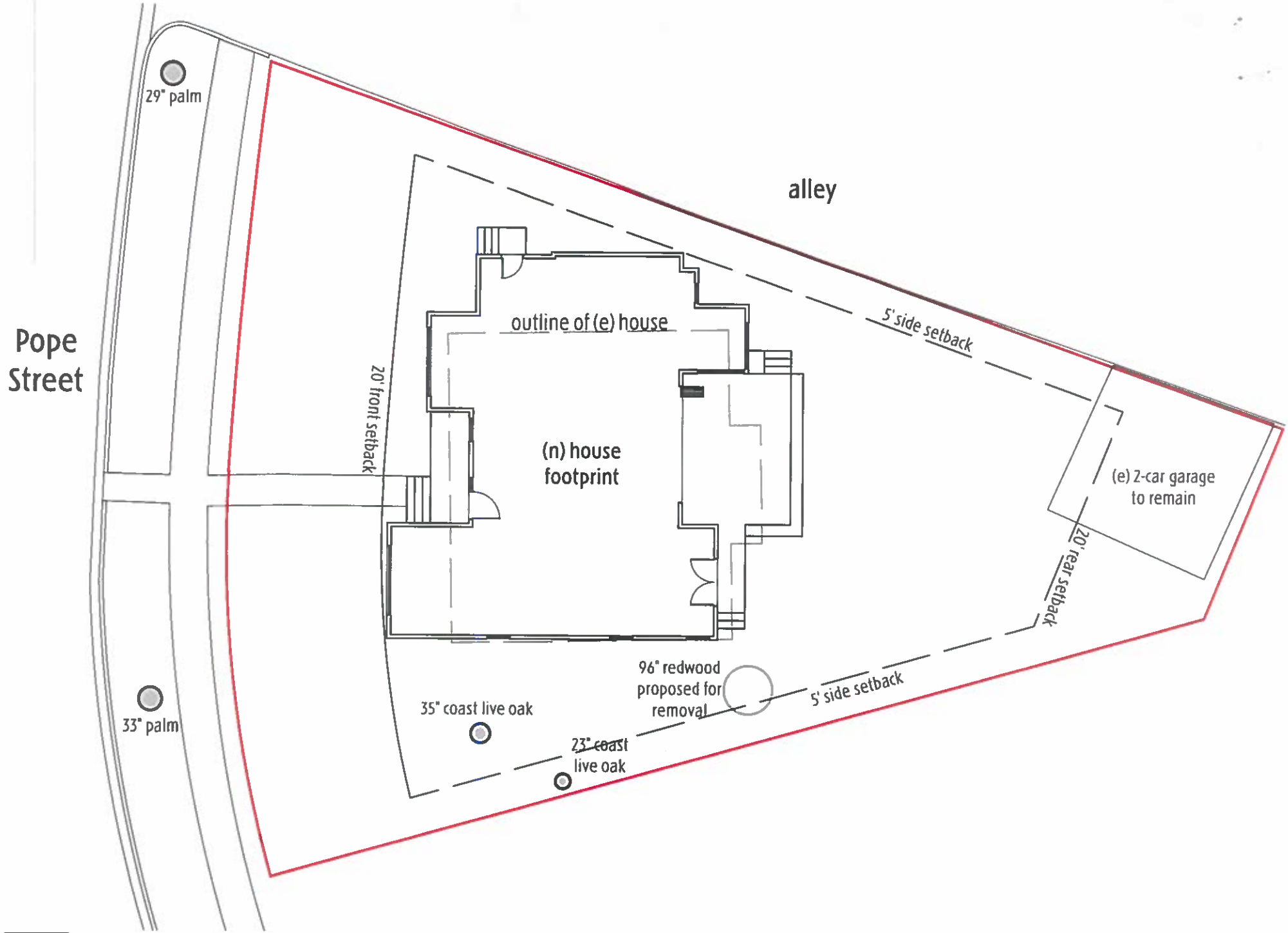
If recommending removal or pruning, please list all reasons:

Hazardous tree

Suggested Replacement Tree:

Coast live oak, cork oak, Blue oak, deodar cedar, Brisbane box, zelkova, Ginkgo, Canary island pine

Signature of Arborist: Kevin Kielty **Date:** 8/3/16



318 Pope Street - potential site plan

scale: 1/16" = 1'-0"

Kielty Arborist Services LLC

Certified Arborist WE#0476A
P.O. Box 6187
San Mateo, CA 94403
650-515-9783

August 31, 2016

Isabelle Cole
1525 Webster Street
Palo Alto CA 94301

Site:318 Pope, Menlo Park

Dear Ms. Cole,

As requested on Tuesday, May 17, 2016, and again on Wednesday August 3, 2016 I visited the above site to inspect and comment on a large redwood tree proposed for removal. The large redwood tree has some form flaws that give the tree a high risk of failure. The owner would like to remove and replace the tree per the city of Menlo Park's replacement tree requirements.

Showing tree in question from the street

Method:

All inspections were made from the ground; the tree was not climbed for this inspection. The tree in question was located to me by the home owner. The tree was then measured for diameter at 54 inches above ground level (DBH or diameter at breast height). The tree was given a condition rating for form and vitality. The tree's condition rating is based on 50 percent vitality and 50 percent form, using the following scale.

1	-	29	Very Poor
30	-	49	Poor
50	-	69	Fair
70	-	89	Good
90	-	100	Excellent

The height of the tree was measured using a Nikon Forestry 550 Hypsometer. The spread was paced off. Comments and recommendations for future maintenance are provided.

Survey:

Tree#	Species	DBH	CON	HT/SP	Comments
1	Redwood *(Sequoia sempervirens)*	95.7	45	120/45	Fair vigor, poor form, codominant at 15 feet, 3.5 feet from corner of existing home, cables installed, included bark on all sides of crotch, bulging can be seen in included bark area, leaders heavy in opposite directions, hazardous, leader closest to neighbors home has a significant lean.

Showing poor union with included bark

Summary:

The large redwood tree has a diameter of 95.7 inches. The tree has fair vigor, and poor form. The tree is located on the south side of the property near the property line. The tree is only 3.5 feet away from the existing home. This tree is a codominant tree consisting of 3 separate leaders starting at a height of 15 feet. These 3 leaders all have poor unions. In particular the union formation on the west side of the tree has a large seam that runs down to the base of the tree, and a bulging area can be seen below the poor formed union. These bulging areas often indicate included bark. Included bark forms in the junctions of codominant stems where there is a narrow angle union, meaning the junction looks like a "V" rather than a "U." As the tree grows the narrow union will essentially fill with bark and create a growing area of structural weakness in the tree. Even in young trees, when you notice a very narrow angle (creating a "V" at the junction of branches) it is likely that stress put on the either of the codominant stems can cause splitting, or even cause the stem to break off at the junction. As the 3 leaders grow they have the potential to push against each other often until the point of failure. In the poor union I observed

a good amount of callus tissue indicating that the tree is under a considerable amount of stress that may have caused the union to slightly split open. Also each leader is heavy to the direction away from the trunks and creates more stress to the poor formed union area. In the past a cable has been installed in the trees canopy in order to offer extra support to the poor union. This indicates past mitigations in place to reduce the risk of failure. The installed cables are not strong enough to hold such a large amount of weight and would likely snap if the tree were to fail. The leader of most concern leans slightly towards the neighbors property on the south side of the tree.

Showing close up of union with callus tissue

A basic tree risk assessment was performed on this tree. The leader to the south has a high risk even after possible mitigations were explored. The target of impact for this leader would be the neighbors home. Consequences of failure would be severe. The remaining leaders had a moderate risk level. Because of the large seam in combination with included bark on the leader to the south, its risk rating did not change from high, even after mitigations were explored. The high risk rating for the leader to the south is unacceptable by the owners standards and is the reason this tree is being recommended for removal. Removing this tree will alleviate all risk associated with this tree. The owners have plans to replant per Menlo Park replacement tree procedures.

The information included in this report is believed to be true and based on sound arboricultural principles and practices

Sincerely,

Kevin R. Kielty
Certified Arborist WE#0476A

David P. Beckham
Certified Arborist WE#10724A
Tree Risk Assessment Qualification

CITY OF MENLO PARK

Sept 22, 2016

Scott Cole,
835 Lytton Ave
Palo Alto, CA 94301

Subject: Application to remove one (1) coast redwood Heritage Tree at 318 Cotton St.

Dear Scott Cole,

This letter is to inform you that the City has received and reviewed the application for the removal of one (1) coast redwood Heritage Tree at 318 Pope St. The application for removal has been denied. The subject tree is healthy and in good condition. Concerns regarding potential risk can be addressed with routine tree maintenance in accordance with the International Society of Arboriculture, Best Management Practices and the City of Menlo Park, Heritage Tree Ordinance.

You, or any member of the public, may appeal this decision to the Environmental Quality Commission by submitting a request in writing, within 15 days of the date of this letter. A fee of $200 per tree shall be due at the time of appeal. For further information regarding the City's action on this Heritage Tree removal request or the appeal process, please feel free to contact the Environmental Programs Specialist, Vanessa Marcadejas at (650) 330-6768.

Sincerely,

Christian Bonner
City Arborist
Public Works Department

Cc: Vanessa Marcadejas, Environmental Programs Specialist

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ATTACHMENT E

RECEIVED

OCT 07 2016

City Clerk's Office
City of Menlo Park

October 6, 2016

Isabelle and Scott Cole
835 Lytton Avenue
Palo Alto, CA 94301

Re: Appeal for Heritage Tree Removal at 318 Pope Street

Dear City of Menlo Park,

We want to appeal your denial of removal of the redwood tree at 318 Pope Street. We are enclosing the $200 fee for this appeal. Please let us know the next steps in this process.

Sincerely,

Isabelle and Scott Cole

Please Contact me through e-mail:

isabellecole@sbcglobal.net

CITY OF MENLO PARK/FINANCE DEP
650-330-6704

119708 4:11 PM 10/07/16

EMP: RACHEL

---

702 HERITAGE TREE REVIEW
1 @ 200.00 200.00
APPEAL
318 POPE ST
PAID BY L SCOTT COLE
ISABELLE A COLE

SUB-TOTAL : $200.00
SALES TAX : .00

TOTAL > $200.00

PAY TYPE : CHECK
6475
RECEIVED : 200.00
CHANGE : .00

701 LAUREL STREET
MENLO PARK, CA. 94025
THANK YOU FOR YOUR BUSINESS

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Kielty Arborist Services LLC

Certified Arborist WE#0476A
P.O. Box 6187
San Mateo, CA 94403
650-515-9783

RECEIVED
OCT 20 2016
CITY OF MENLO PARK
BUILDING

June 3, 2016

Isabelle Cole
1525 Webster Street
Palo Alto CA 94301

Site:318 Pope, Menlo Park

Dear Ms. Cole,

As requested on Tuesday, May 17, 2016, I visited the above site to inspect and comment on the trees. A new home is planned for this site and your concerns as to the future health and safety of the trees has prompted this visit

Method:
The significant trees on this site were located on a map provided by you. Each tree was given an identification number. This number was inscribed on a metal foil tag and nailed to the trees at eye level. The trees were then measured for diameter at 54 inches above ground level (DBH or diameter at breast height). A condition rating of 1 – 100 was assigned to each tree representing form and vitality using the following scale:

1	-	29	Very Poor
30	-	49	Poor
50	-	69	Fair
70	-	89	Good
90	-	100	Excellent

The height of each tree was estimated and the spread was paced off. Lastly, a comments section is provided.

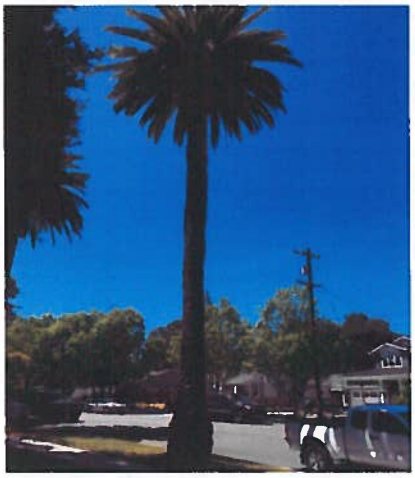
Survey:

Tree#	Species	DBH	CON	HT/SP	Comments
1P	Canary island palm *(Phoenix canariensis)*	33.1	80	65/20	Good vigor, good form, street tree, in planting pit, well maintained.
2P	Canary island palm *(Phoenix canariensis)*	28.9	80	65/20	Good vigor, good form, street tree, in planting pit, well maintained.
3P	Coast live oak *(Quercus agrifolia)*	34.9	70	65/40	Good vigor, fair form, 9 feet from the corner of existing home, suppressed by large redwood, heavy to south west, good crotches throughout tree, hangs over home.
4P	Coast live oak *(Quercus agrifolia)*	23.5	45	30/45	Fair vigor, poor form, heavily suppressed by surrounding trees, heavy lateral limbs, no room for vertical growth.
5P	Redwood *(Sequoia sempervirens)*	95.7	45	120/45	Fair vigor, poor form, multi leader at 15 feet, 3.5 feet from corner of existing home, cables installed, included bark on all sides of crotch, bulging can be seen in included bark area, leaders heavy in opposite directions, hazardous, leader closest to neighbors home has a significant lean and needs to be heavily trimmed if retained.
6	Pittosporum hedge *(Pittosporum eugenioides)*	4.0	60	20/10	Good vigor, fair form, good screen, 40 foot long hedge consisting of trees under 4 inches in diameter.
7P	Loquat *(Eriobotrya japonica)*	19.3	30	25/20	Poor vigor, poor form, in decline, codominant at 1 foot with a poor crotch formation.
8	Fan palm *(Washingtonia robusta)*	12.3	80	8/8	Good vigor, good form, easily moved.
9	Italian cypress *(Cupressus sempervirens)*	5.0	80	30/5	Good vigor, good form, easily moved.
10	Japanese maple *(Acer palmatum)*	10.4	45	20/10	Fair vigor, poor form, multi leader at base, dieback in canopy.
11	Queen palm *(Syagrus romanzoffiana)*	8.4	50	15/8	Good vigor, good form, easily moved.

Survey:

Tree#	Species	DBH	CON	HT/SP	Comments
12	Queen palm *(Syagrus romanzoffiana)*	9.6	10	15/8	Poor vigor, poor form, decay at base, failed tree.
13	Queen palm *(Syagrus romanzoffiana)*	10.3	50	15/8	Good vigor, good form, easily moved.
14	Olive *(Olea europaea)*	9.6	50	15/10	Good vigor, poor form, multi leader at base, staked for support.
15	Cabbage palm *(Cordyline australis)*	4.0	50	15/10	Good vigor, good form, easily moved.

******Indicates neighbors trees*
P-*Indicates protected tree*



Summary:
The trees on site are a mix of imported and native trees. The majority of the trees are in fair condition with a few poor trees. Trees #1 and #2 are both Canary island palm trees located in a sidewalk planting strip. They have been well maintained and will need to be protected as they are city managed street trees. Tree protection fencing shall totally enclose the planting strip so that compaction does not occur to the soil near these trees. No impacts are expected.

Showing palm tree #1

Coast live oak tree #3 is a protected tree in the city of Menlo Park. This tree is 9 feet from the corner of the existing home. The tree is suppressed by the large redwood tree #5 and as a result is heavy away from tree #5 to the south west. Some of this trees canopy is over the existing home. A new 2 story home is being designed in the same general location as the existing home but moved slightly farther away from the trees on this side of the property. Some minor trimming may be needed to facilitate the construction of a second story. Any trimming to be done shall be done by a licensed tree care provider and stay underneath 25% of the trees total foliage to be removed. This trimming will benefit the trees health and form as the tree is heavy in the direction of the home and trimming is recommended regardless of the proposed construction. Tree protection fencing for this tree is to be placed as close to the existing foundation of the home as possible and to a distance of 10X the trees diameter where possible. All tree protection measures must be in place before the start of any proposed work, including demolition.

Coast live oak tree #4 is in poor condition as the tree is heavily suppressed by surrounding trees. This tree has no room to grown in vertical height and as a result has developed large lateral leaders. If retained this tree will need maintenance pruning every 3 years in order to lighten heavy end weight of the trees leaders, and to keep the leaders at a manageable size through reduction cuts. This tree is a protected tree and will need a permit if wanted to be removed.

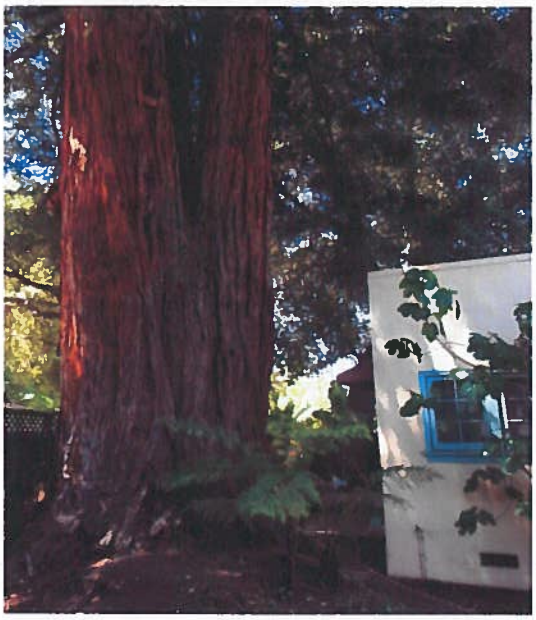
Showing poor crotch formation with included bark.

Mature redwood #5 has poor form and is the reason for its poor condition rating. This tree has a large trunk with a diameter of 95.7. The tree is codominant with 3 leaders starting at 15 feet. These 3 leaders all share apical dominance and have created poor crotches with included bark at 15 feet. Included bark forms in the junctions of codominant stems where there is a narrow angle union, meaning the junction looks like a "V" rather than a "U." As the tree grows the narrow union will essentially fill with bark and create a growing area of structural weakness in the tree. Even in young trees, when you notice a very narrow angle (creating a "V" at the junction of branches) it is likely that stress put on the either of the codominant stems can cause splitting, or even cause the stem to break off at the junction. As the 3 leaders grow they have the potential to push against each other often until the point of failure. Bulging is visible in these areas of included bark and often indicate a structural weakness. Also each leader is heavy to the direction away from the trunks and creates more stress to the poor crotch area at 15 feet. Because of this trees poor growth form and the trees target at a failure being the home or neighbors home, I am recommending this tree to be removed as it is a hazard to the property. The owner of the property would like to save the tree. Recommended mitigation measures are as followed:

Mitigations for redwood tree #5:

- Install cables in upper 2/3 of canopy in order to offer extra support. Cables have been installed in the past at the wrong height.
- During the dry season irrigate the tree with soaker hoses, especially during construction.
- Have a licensed tree care provider selectively prune branches to lighten the load on each leader, while still allowing for an aesthetically pleasing tree. Pruning shall not exceed 25% of the total foliage, following ANSI standards and Palo Alto standards. The leader that is heavy towards the neighbors home should be heavily pruned as this leader already has a lean.
- Continue to monitor the crotches and overall health of the tree.
- It is advised that a certified arborist inspect the tree every 2 years, or if any noticeable cracking, or bulging near the base of the tree is seen, that a certified arborist be called out right away.

Even with these mitigation measures in place this tree would still pose as a liability if a leader failure were to occur and is the reason removal is recommended.



Showing proximity to home

The existing home near redwood tree #5 is only 3.5 feet away from this tree. If this tree is to be retained, during demolition of the existing home the tree protection fencing must be placed as close to the existing home as possible. The whole south side of the home where trees #3-5 are located should be fenced off. All heavy equipment must work away from these trees in order to not compact the soil around these trees. Tree protection fencing for redwood #5, past the foundation area, should be extend as far out as possible. The proposed home will be set slightly farther back from this large tree. The existing foundation near this home likely acted as a root barrier. When designing the new foundation near this tree a pier and grade beam should be used with the least amount of excavation depth as possible for the grade beam, in order to bridge over what large roots may exist in these areas. After demolition has taken place, a trench must be dug by hand in combination with an air spade in the area of the proposed foundation in order to explore potential impacts to the tree and to strategically place piers in order to miss areas of heavy rooting.

Loquat tree #7 is of protected size in the city of Menlo Park. This tree is in obvious decline as more than 50% of its foliage is dead. Also this tree has a poor crotch formation at its base and is recommended for removal as no mitigation measures would improve the health of this tree.
The remaining trees on the property are not of protected size in the city of Menlo Park. If they are to be retained they should be protected in the same manner as the protected trees on site. The following tree protection plan will help to insure that the trees will survive the construction.

Tree Protection Plan:

Tree Protection Zones

Tree protection zones should be installed and maintained throughout the entire length of the project. Fencing for tree protection zones should be 6' tall, metal chain link material supported by metal 2" diameter poles, pounded into the ground to a depth of no less than 2'. The location for the protective fencing should be as close to the dripline of desired trees as possible, still allowing room for construction to safely continue. No equipment or materials shall be stored or cleaned inside the protection zones. Areas outside protection zones, but still beneath the tree's driplines, where foot traffic is expected to be heavy, should be mulched with 4-6" of chipper chips. The spreading of chips will help to reduce compaction and improve soil structure.

Root Cutting and Grading

Any roots to be cut shall be monitored and documented. Large roots (over 2" diameter) or large masses of roots to be cut must be inspected by the site arborist. The site arborist, at this time, may recommend irrigation or fertilization of the root zone. All roots needing to be cut should be cut clean with a saw or lopper. Roots to be left exposed for a period of time should be covered with layers of burlap and kept moist. The over dig for the foundation should be reduced as much as possible when roots are encountered.

Trenching and Excavation

Trenching for irrigation, drainage, electrical or any other reason shall be done by hand when inside the dripline of a protected tree. Hand digging and the careful placement of pipes below or besides protected roots will significantly reduce root loss, thus reducing trauma to the tree. All trenches shall be backfilled with native materials and compacted to near its original level, as soon as possible. Trenches to be left open for a period of time, will require the covering of all exposed roots with burlap and be kept moist. The trenches will also need to be covered with plywood to help protect the exposed roots.

Irrigation

Normal irrigation shall be maintained on this site at all times. The imported trees will require normal irrigation. This includes large redwood #5. On a construction site, I recommend irrigation during winter months, 1 time per month. Seasonal rainfall may reduce the need for additional irrigation. During the warm season, April – November, my recommendation is to use heavy irrigation, 2 times per month. This type of irrigation should be started prior to any excavation. The irrigation will improve the vigor and water content of the trees. The on-site arborist may make adjustments to the irrigation recommendations as needed. The foliage of the

trees may need cleaning if dust levels are extreme. Removing dust from the foliage will help to reduce mite and insect infestation.

Demolition
All tree protection must be in place prior to the start of demolition. Demolition equipment must enter the project from the existing driveway. If vehicles are to stray off the drive the area within the dripline of a protected tree must be covered with 6 inches of chips and steel plates or 11/4 inch plywood.

The information included in this report is believed to be true and based on sound arboricultural principles and practices.

Sincerely,

Kevin R. Kielty
Certified Arborist WE#0476A

David P. Beckham
Certified Arborist WE#10724A

Kielty Arborist Services

P.O. Box 6187
San Mateo, CA 94403
650-515-9783

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 the risk of living near trees. Clients may choose to accept or disregard the recommendations of the arborist, or seek additional advice.

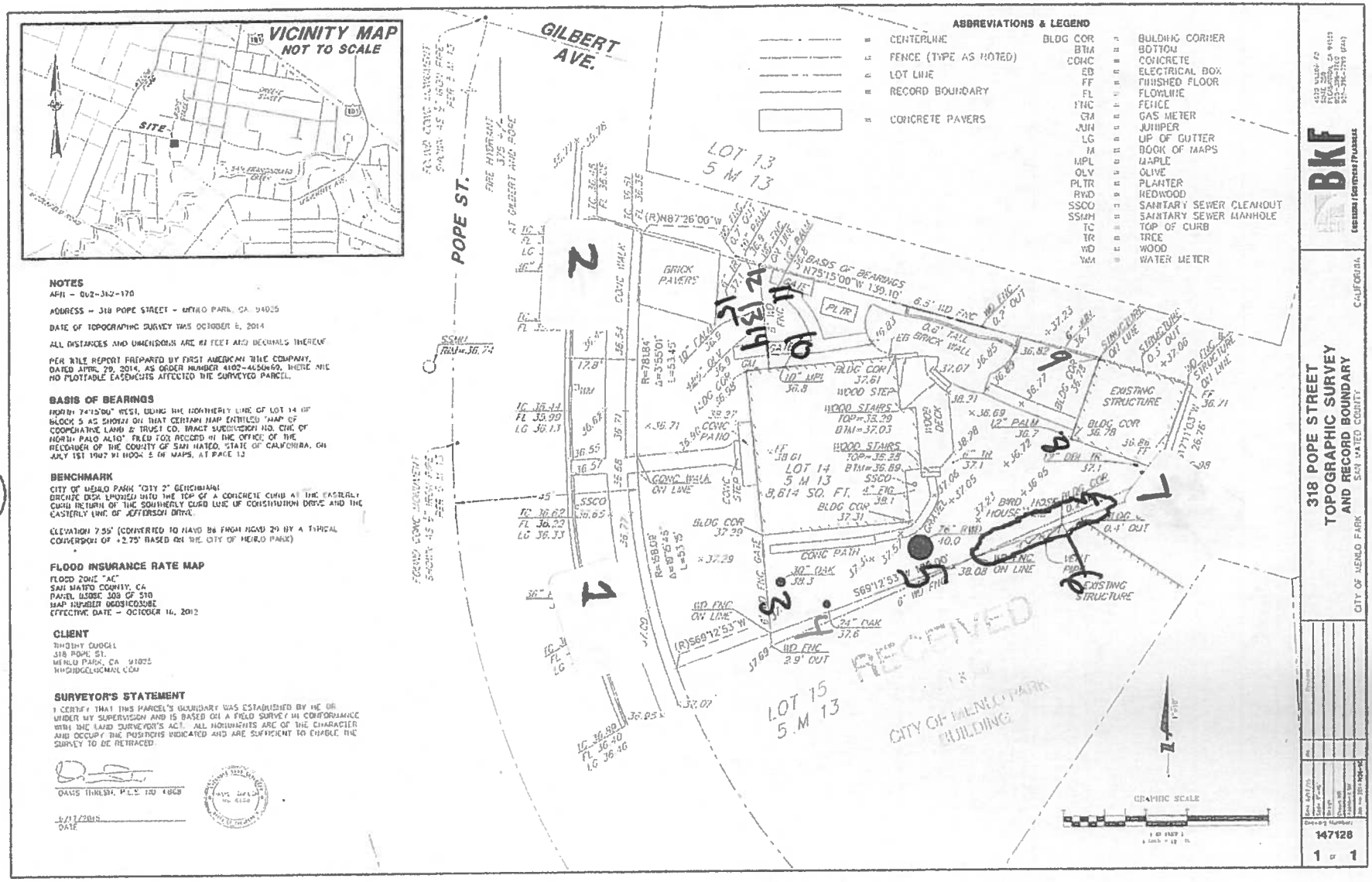
Arborists cannot detect every condition that could possibly lead to the structural failure of a tree. Trees are living organisms that fail in ways we do not fully understand. Conditions are often hidden within trees and below ground. Arborists cannot guarantee that a tree will be healthy or safe under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

Treatment, pruning, and removal of trees may involve considerations beyond the scope of the arborist's services such as property boundaries, property ownership, site lines, disputes between neighbors, landlord-tenant matters, etc. Arborists cannot take such issues into account unless complete and accurate information is given to the arborist. The person hiring the arborist accepts full responsibility for authorizing the recommended treatment or remedial measures.

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

Arborist: _____
Kevin R. Kielty

Date: June 3, 2016



NOTES

APN – 062-342-170

ADDRESS – 318 POPE STREET – MENLO PARK, CA 94025

DATE OF TOPOGRAPHIC SURVEY WAS OCTOBER 6, 2014

ALL DISTANCES AND DIMENSIONS ARE IN FEET AND DECIMALS THEREOF

PER TITLE REPORT PREPARED BY FIRST AMERICAN TITLE COMPANY, DATED APRIL 29, 2014, AS ORDER NUMBER 4102-4456460, THERE ARE NO PLOTTABLE EASEMENTS AFFECTED THE SURVEYED PARCEL.

BASIS OF BEARINGS

NORTH 74°15'00" WEST, BEING THE NORTHERLY LINE OF LOT 14 OF BLOCK 5 AS SHOWN ON THAT CERTAIN MAP ENTITLED "MAP OF COOPERATIVE LAND & TRUST CO. TRACT SUBDIVISION NO. ONE OF NORTH PALO ALTO" FILED FOR RECORD IN THE OFFICE OF THE RECORDER OF THE COUNTY OF SAN MATEO, STATE OF CALIFORNIA, ON JULY 1ST 1907 IN BOOK 5 OF MAPS, AT PAGE 13

BENCHMARK

CITY OF MENLO PARK "CITY 2" GEODETIC

BRONZE DISK LIMITED INTO THE TOP OF A CONCRETE CURB AT THE EASTERLY CURB RETURN OF THE SOUTHERLY CURB LINE OF CONSTITUTION DRIVE AND THE EASTERLY LINE OF JEFFERSON DRIVE

ELEVATION 7.55' (CONVERTED TO NAVD 88 FROM NGVD 29 BY A TYPICAL CONVERSION OF +2.75' BASED ON THE CITY OF MENLO PARK)

FLOOD INSURANCE RATE MAP

FLOOD ZONE "AE"
SAN MATEO COUNTY, CA
PANEL NUMBER 309 OF 510
MAP NUMBER 06081C0309E
EFFECTIVE DATE – OCTOBER 16, 2012

CLIENT

TIMOTHY DUGGAL
318 POPE ST.
MENLO PARK, CA 94025
TIMDUGGAL@GMAIL.COM

SURVEYOR'S STATEMENT

I CERTIFY THAT THIS PARCEL'S BOUNDARY WAS ESTABLISHED BY ME OR UNDER MY SUPERVISION AND IS BASED ON A FIELD SURVEY IN CONFORMANCE WITH THE LAND SURVEYOR'S ACT. ALL MONUMENTS ARE OF THE CHARACTER AND OCCUPY THE POSITIONS INDICATED AND ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED.

DAVID THRESH, P.L.S. NO. 6868

6/17/2015
DATE

BKF

318 POPE STREET
TOPOGRAPHIC SURVEY AND RECORD BOUNDARY

SAN MATEO COUNTY CALIFORNIA

CITY OF MENLO PARK

Drawing Number: 147128

1 of 1

(2-0)

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November 22, 2016

City of Menlo Park
Environmental Quality Commission

Dear Members of the Environmental Quality Commission,

We, the owners of the property located at 318 Pope, hereby appeal the decision of City Arborist Christian Bonner rejecting the removal of a redwood tree on our property.

Our plan is to tear down the existing home on the site and build a new home. When we first bought the property, it was our intention to keep the heritage redwood. We appreciate its history and beauty, and didn't think it would be necessary to take down the tree in order to build our home.

However, when we had a respected local arborist, Kevin Kielty, complete the required arborist report, we were somewhat shocked at his evaluation of the risk this tree poses. He does deem the tree to be healthy (as does Christian Bonner), but he says the form of the tree is poor, specifically due to the three codominant leaders, which cause the tree to be structurally unstable.

We requested a second opinion, and the second arborist, Michael Young, confirmed Kevin Kielty's opinion and went even further, saying "…this tree has a serious structural flaw that could cause it to split in three different directions. When failure occurs the tree will cause enormous structural damage and loss of life is highly likely."

We are nature lovers, backpackers, and avid gardeners, and we do not take lightly the request to remove any tree from any property. But while we understand the inherent sadness in taking down such an imposing specimen, this tree poses a safety risk to us (when we are living in our new home) and to our neighbors, and is a significant liability for us as owners of the property. We hope you agree, and look forward to the speedy approval of this appeal. If we can provide any additional information, please do not hesitate to contact us.

Sincerely,

Isabelle and Scott Cole

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urbantreemanagement inc.

11/2/16

Isabelle Cole
318 Pope Street
Menlo Park, CA 94025

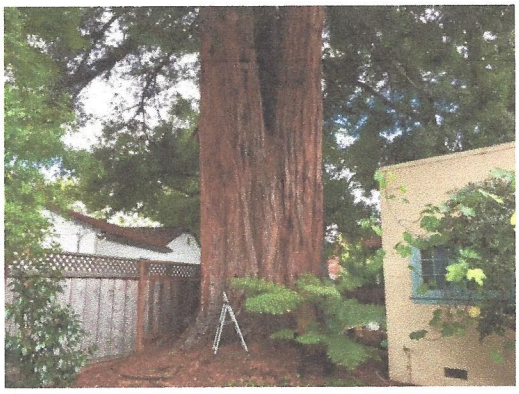
Re: **Redwood Removal Request**

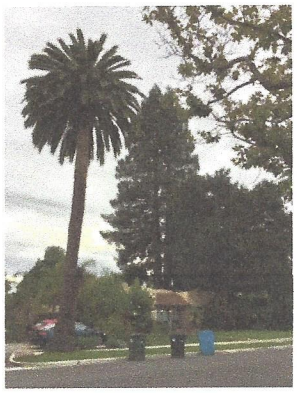
To Whom It May Concern:

Assignment

It was my assignment to inspect the large Redwood (*Sequoia sempervirens*) in the back yard and offer my professional assessment of the structural stability of this tree.

Summary

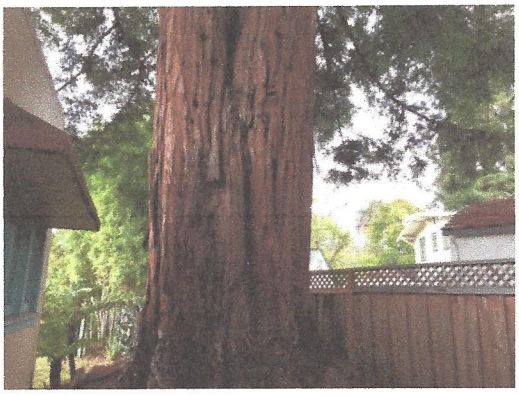




This Redwood (see images to right) is enormous. Quite simply this is a very large peg in a very small hole. All of that would be a non-issue except this tree has a serious structural flaw that could cause it to split in three different directions. When failure occurs the tree will cause enormous structural damages and loss of life is highly likely. The likelihood of tree failure in this instance is high. Rather than living with this enormous threat I recommend removing this tree ASAP.

Discussion

The Redwood was rated based upon the following table. As an example, a tree may be rated "good" under the Health column for excellent/vigorous appearance and growth, while the same tree may be rated "fair/poor" in the Structure column if structural mitigation is needed.

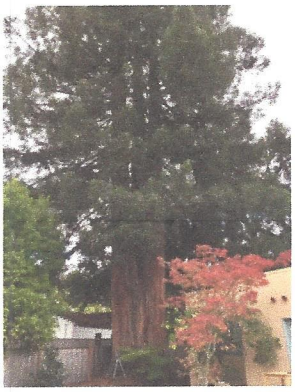


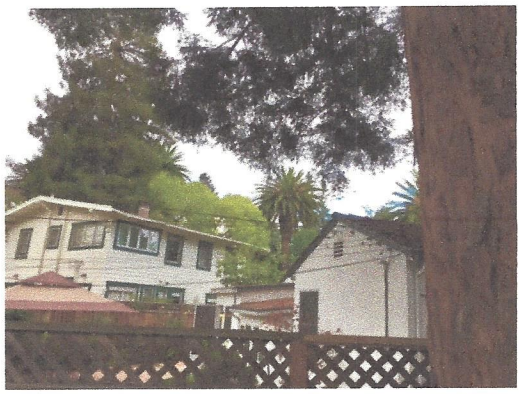
t650+321+0202 | f408+399+8063 | po box 971 los gatos ca 95031 | urbantreemanagement.com
contractors license # 755989 | certified arborist WC ISA # 623 | certified tree risk assessor #1399

Rating	Health	Structure
Good	excellent/vigorous	flawless
Fair/good	healthy	very stable
Fair	fair	routine maintenance needed such as pruning or end weight reduction as tree grows, minor structural corrections needed
Fair/poor	declining	significant structural weakness(es), mitigation needed, mitigation may or may not preserve the tree
Poor	dead or near dead	hazard

This Redwood has a trunk diameter (DBH) of 95.7". It stands approximately 120' tall and 45' wide. This tree is in Good Health but the Structure is Fair/Poor – Poor due to the three codominant limbs that make up the tree's main structure.

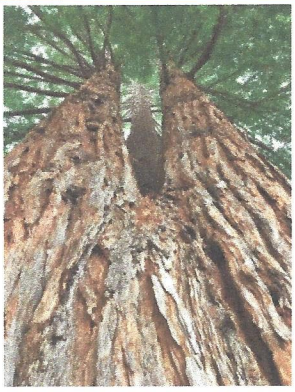
The tree is located 3.5' from the right rear corner of the home at 318 Pope, and right along the right side fence line (see images to right).

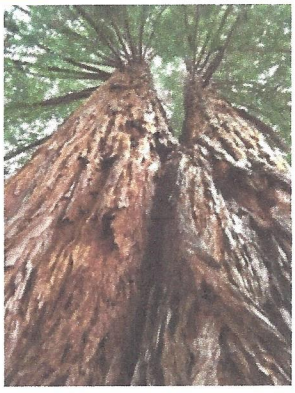




The main problem with this tree is the three main codominant leaders starting 15' above grade (see images to lower right). Codominant leaders, especially when they have included bark, are prone to splitting apart because they are not attached where they appear to be growing together (http://www.umass.edu/urbantree/factsheets/35codominantstems_rev1.html).

This tree has three main co-dominant leaders with included bark and the three leaders are not well attached to each other. In fact, each year the three main stems of this tree grow apart more and more. The union between these tree main stems is weak and highly prone to splitting apart. This is a well-known fact among trained Arborists. There is no disputing it. This isn't a matter of IF this tree will fail; it's a matter of WHEN.





The level of risk presented by this tree falling apart is extremely high. The combination of the height of this tree, the weight of the wood and the proximity of this house and the neighbors within striking distance – there are *at least* two – mandates that the risk be mitigated.

Mitigating the risk of a tree this large can only be done by removing the risk factor (ie. whole tree removal). If the tree were smaller a series of cables could be used to try to cable the three leaders together, in an attempt to have them not split apart in a high wind event. This tree currently has cables, but it is my opinion that they are non-functional. While there are Industry Best Practices for cabling trees – this tree is too large to be able to say that proper cabling would truly mitigate the risk of a large limb failure. Trees have not been engineered and the mitigation would not be engineered, thus the reliability of the cables would be a "best guess" at best. Due to the size of this tree and the threat of loss of life; a best guess is not acceptable.

The only acceptable mitigation for the risk represented by this tree is to remove the risk: tree removal.

While removing a tree of this size is always an unfortunate loss to the community and our environment, loss of life is unacceptable. The codominant leaders should have never been allowed to form on this tree, but that mistake was made many years ago and now we are faced with devising a resolution. The resolution, in this case, is to remove the Redwood tree.

Please contact me directly should you have any further questions.

Respectfully,

Michael P. Young

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Literature Cited

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Harris, R.W. (1999). *Arboriculture: Integrated Management of Landscape Trees Shrubs and Vines* (3rd ed.). Prentice Hall.

Precipitation Summary. (National Oceanic and Atmospheric Administration (NOAA)). Retrieved October 2016, from http://www.cnrfc.noaa.gov/rainfall_data.php

Smiley, T.E. & S.L. (2013). *Best Management Practices: Tree Support Systems Cabling Bracing, Guying, and Propping*. (3rd ed.). International Society of Arboriculture.

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SPECIAL MEETING MINUTES - DRAFT

Date: **11/30/2016**
Time: **6:30 p.m.**
Administration Building
700 Alma St., Menlo Park, CA 94025

A. Chair Martin called the meeting to order at 6:35 p.m.

B. **Roll Call**

Present: Bedwell, DeCardy, Vice Chair London, Marshall, Chair Martin, Smolke
Absent: Dickerson
Staff: Sustainability Manager Heather Abrams, Senior Sustainability Specialist Vanessa Marcadejas

C. **Public Comment**

There was no public comment

Commissioner Smolke recuses herself from the meeting for item D1 at 6:37 p.m.

D. **Regular Business**

D1. Make a determination on an appeal for one incense Cedar tree at 262 Yale Road (Attachment) – 1hr (time allocation: Appellant 10 min, City Arborist 10 min, Public Comment 10 min, EQC discussion and vote 30 min)

City Arborist, Christian Bonner, provided the Commission with a brief overview of his evaluation of the heritage tree and his reasoning for denying the removal permit.

Appellant, Phillip Kamangar, provided the Commission with his reasons for requesting the tree removal. He reports that the tree is causing structural damage to his and his neighbor's home.

Public Comment

- Mark Reinhold, neighbor to 262 Yale, stated that he opposes the removal of the heritage tree and urges the EQC to deny the appeal. He recommended that it would be helpful for a structural engineer to assess whether the property damage is cause by the tree.
- Sally Cole, resident, stated that she opposes the removal of the heritage tree and supports the EQC in their efforts in reviewing tree removal requests.
- Horace Nash, resident, stated that he opposes the removal of the heritage tree. He also provided the commission with information from a Kent State tree study regarding the risks associated with tree failure.
- Besty Nash, stated that she opposes the removal of the heritage tree and is concerned about

Menlo Park's tree canopy in the future.

ACTION: Motion and second (DeCardy/Bedwell) to deny the appeal based on the Heritage Tree criteria as stated in the arborist report, passes (5-0-2) (Yayes: Bedwell, DeCardy, London, Marshall, Martin; Absent/Abstain: Dickerson, Smolke)

D2. Annual Arborist Report/Urban Forest Update – Christian Bonner – 40 min

City Arborist, Christian Bonner, provided a presentation to the Commission (Presentation attachment)

Public Comment

- Aruni Nanayakkara suggested that it would be helpful to see a trend line graph for privately owned trees.
- Horace Nash stated that it would be helpful to move the signature area to the top of the Tree Removal Permit application to assist in better compliance.

ACTION: No formal action was taken on this item.

D3. Discussion of draft Request for Proposals (RFP) for consultant to assist with Heritage Tree Ordinance (HTO) update (Attachment) – Vanessa Marcadejas - 30 min

Senior Sustainability Specialist, Vanessa Marcadejas provided a presentation to the Commission.

Public Comment

- Catherine Martineau, Executive Director of Canopy, stated that she is excited that Menlo Park and the EQC are moving forward with an update to the Heritage Tree Ordinance. She is currently assisting San Mateo County and Palo Alto with updates to their tree ordinances.

ACTION: No formal action was taken on this item.

D4. Discuss and approve cancellation of December EQC meeting

ACTION: Motion and second (London/Martin) to approve the cancellation of the December EQC meeting passes (6-0-1) (Yayes: Bedwell, DeCardy, London, Martin, Marshall, Smolke; Absent/Abstain: Dickerson)

D5. Approve September 28, 2016 Environmental Quality Commission meeting minutes (Attachment) – *2* mins

ACTION: Motion and second (Martin/London) to approve the September 28, 2016 EQC minutes passes (4-0-3) (Yayes: Bedwell, London, Marshall, Martin; Absent/Abstain: DeCardy, Dickerson, Smolke)

E. Reports and Announcements

E1. Informational update on General Plan and Draft Zoning Regulations discussed at Planning Commission meetings on October 19th and October 24th and City Council Meetings on November 9th, November 15th and November 29th – Vice Chair London – 10 min

Vice Chair London provides an update to the Commission (Janelle London Update documents attachment)

E2. Informational update on Zero Waste Community Workshops – Heather Abrams – 2 min

Sustainability Manager, Heather Abrams provided an update to the Commission.

E3. Informational update on California Public Utility Commission privacy ruling on PG&E energy data – Heather Abrams – 2 min

Sustainability Manager, Heather Abrams provided an update to the CPUC's ruling 14-05-016 "Decision Adopting Rules to Provide Access to Energy Usage and Usage-Related Data While Protecting Privacy of Personal Data", which makes GHG emission data previously counted in the community's GHG inventory unavailable for measurement against the City's GHG target.

E4. Future agenda items – 5 mins

- Discuss moving of EQC meeting day
- Heritage Tree Appeal
- CPUC/GHG target measurement update
- Final update on Zoning
- Bedwell Bayfront Park Project
- Volunteer updates on EQC

Commissioner DeCardy leaves the meeting at 10:07 p.m.

F. Adjournment

Chair Martin adjourned the meeting at 10:39 p.m.

Meeting minutes prepared by Vanessa Marcadejas, Senior Sustainability Specialist

STAFF REPORT

Environmental Quality Commission
Meeting Date: **1/25/2017**
Staff Report Number: **17-001-EQC**

Informational Item: **Update on the status and design guidelines for the Jack Lyle Park Restroom project**

Recommendation

This is an informational item and does not require City Council action

Policy Issues

The City Council previously approved a project to construct a restroom at Jack Lyle Park as part of the FY 2015-16 Capital Improvement Program (CIP) and authorized additional funding for the project in FY 2016-17.

Background

On November 10, 2015 a public meeting was held on potential locations and restroom designs, including a pre-fabricated structure. Attendees from the public provided feedback and voiced their support for a pre-fabricated structure adjacent to the Rosener House.

Subsequent to that meeting the City met with Rosener House officials and board members from the Peninsula Volunteers. They were receptive to the project and approved the restroom location adjacent to the Rosener House.

A preliminary design for the restroom has been developed by the City's consultants (SSA Landscape Architects) and was presented at a community workshop at the Rosener House on December 15, 2016. Overall the feedback received from the community review of the design was positive. The location next to the Rosener House, as well as matching the architectural style of the Rosener House to make the restroom "blend-in" was preferred. Designing the facility for two, family-style restrooms also received positive feedback.

Analysis

In order to further develop the design parameters, staff reviewed the Planning and Building code requirements as well as opportunities to incorporate sustainable design concepts. Since the park is zoned PF (Public Facility) and all uses for government purposes by the City are considered permitted uses, the project does not require any further review regarding land use. The only development standard is a maximum floor area ratio of 30%, which the park is substantially below.

The Planning Division also stated that the restroom does not require architectural control approval. Section 16.68.020 of the Municipal Code discusses architectural control approval and when it is required. The section explicitly exempts accessory buildings. The question is whether restrooms are defined as accessory buildings. In the most recent case involving the restroom at Kelly Park, Planning defined the restroom as an accessory building. To be consistent with the last determination and because Planning believes they are accessory to the park use, their determination is that the restrooms do not need architectural control.

Although this is a pre-manufactured building the Building Division will review the design for conformance with the latest building and seismic codes. Given the proposed size of the building of approximately 180 square feet, CalGreen building requirements do not apply.

Although not specifically required, green building design standards will be considered on this project. There are sustainable components inherent in the design, including recycled materials (doors, block walls, roof); low energy fixtures (LED lights, metered water closets / faucets). The building also uses sustainable materials that are mostly local, with minimized carbon footprints. Since this is a pre-fabricated building, it should have a smaller carbon footprint than a site-built structure because of the nature of mass-production.

Although this is a new building many of the opportunities for sustainable design are negated by the location of the building adjacent to the existing Rosener House. Designing the roofline to allow in winter sun, and block out summer sun is not really an option because of the building orientation. Incorporating solar panels would also require the re-orientation of the building. Sky lights could be added but they do not necessarily offset energy costs when using LED light fixtures. On-site waste-water treatment is not an option given the small size of the building. The idea of allowing natural light in to warm the floor, etc. is a great concept, but typically achieved using a lot of glass, which is not an option when privacy, venting, and maintenance are primary goals of a restroom.

Impact on City Resources

The Jack Lyle Park Restroom project budget is $350,000. Sources of funds include Rec-in-Lieu Fees and from the annual transfer of General Fund dollars.

Environmental Review

The project is categorically exempt under Class 3 (Section 15303, “New Construction or Conversion of Small Structures”) of the current California Environmental Quality Act (CEQA) Guidelines.

Public Notice

Public Notification was achieved by posting the agenda, with the agenda items being listed, at least 72 hours prior to the meeting.

Attachments

A. Site Plan
B. Artist Rendering of Proposed Restroom

Report prepared by:
Michael Zimmermann, Senior Civil Engineer

Reviewed by:
Justin Murphy, Public Works Director

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JACK LYLE PARK RESTROOM – Site Plan

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ATTACHMENT B

JACK LYLE PARK RESTROOM / PHOTO-SIMULATION

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MEMORANDUM

Date: 1/2/2017
To: Commission staff liaisons
From: Pamela Aguilar, City Clerk
Re: 2016 commissions attendance report and proposed update to commission attendance policy

Dear Commission Liaisons,

Every year in January, the City Clerk's office prepares an attendance report for each commission reflecting data from the previous calendar year and presents the report to the City Council for its review.

Attached is the 2016 commission attendance report that will be presented to the City Council at its meeting on January 24. Please share with your respective commissions during your January commission meetings.

In addition, our office will request that the City Council approve an update to the commission policy adding a requirement that when any absence by a commissioner that occurs after the posting of the agenda which results in a lack of quorum, and therefore cancellation of the meeting, be recorded on the commission attendance report. Currently in this situation, only a cancelled meeting is reported. A red-line version of the policy with the proposed update is also included for your reference.

Thank you for your assistance with this item.

City of Menlo Park

City Council Policy

Department	Page 1 of 1	Effective Date
City Council		January 1, 1991
Subject	**Approved by** Resolution 2801 - 05/27/1985 Revised Resolution 4242 - 12/04/1990	**Procedure #** CC-91-0001
Board and Commission Attendance Policy		

PURPOSE:

This policy is adopted in order to encourage attendance at Board and Commission scheduled meetings and to replace members who are unable to attend on a consistent basis.

BACKGROUND:

A policy of attendance at Board and Commission scheduled meetings has not been uniform throughout the City. Many commissions have their own policies which they implement on an informal basis. Some commission scheduled meetings have been cancelled due to the lack of a quorum, a number of Commissions have members who miss a majority of their scheduled meetings and the issue of attendance at scheduled meetings is of concern. Some Commission chairpersons have previously expressed a need for an attendance policy which would be consistent for all boards and commissions and which would dictate the removal of a board or Commission member who has missed a certain number of scheduled meetings in the calendar year.

There are, often times, excellent reasons why a Board or Commission member might not be able to attend a scheduled meeting: illness, business or home commitments. The policy should be flexible enough so that a reasonable number of absences are allowed. Extensive absences on the part of a Board or Commission member do restrict the ability of a Board or Commission to complete its work and an attendance policy is meant to discourage such behavior.

POLICY:

1) A compilation of attendance will be submitted to the Council annually in January listing absences for all Board and Commission members.

2) Absences, which result in attendance at less than two-thirds of Board and Commission scheduled meetings for any reason during the calendar year, will be reported to the City Council and may result in replacement of the Board or Commission member by the Council.

3) Any Board or Commission member who feels that unique circumstances have led to numerous absences, can appeal directly to the City Council for a waiver of this policy or a leave of absence.

4) When an absence by a commissioner occurs after the posting of the agenda, which results in a lack of a quorum and therefore cancellation of the commission meeting, the attendance of the commission for the noticed meeting will be recorded on the commission attendance report.

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2016 COMMISSION ATTENDANCE REPORT

ENVIRON. QUALITY												
Meets monthly	**January**	**February**	**March**	**April**	**May**	**June**	**July**	**August**	**September**	**October**	**November**	**December**
Name	**1/27/2016**	**2/24/2016**	**3/24/2016**	**4/27/2016**	**5/25/2016**	**6/22/2016**		**8/31/2016**	**9/28/2016**			
Andrew Barnes	N/A	N/A	N/A	N/A	N/A	N/A	Canceled for summer break	N/A	N/A	Canceled due to lack of quorum	N/A	Canceled for winter break
Allan Bedwell	Present	Present	ABSENT	ABSENT	ABSENT	ABSENT		ABSENT	Present		Present	
Chris DeCardy	ABSENT	Present	Present	Present	Present	Present		Present	ABSENT		Present	
Joyce Dickerson	N/A	N/A	N/A	N/A	N/A	ABSENT		Present	Present		ABSENT	
Kristin Kuntz-Duriseti	Present	ABSENT	ABSENT	Present	N/A	N/A		N/A	N/A		N/A	
Janelle London	N/A	N/A	N/A	N/A	Present	Present		Present	Present		Present	
Scott Marshall	Present	Present	Present	Present	Present	Present		Present	Present		Present	
Deborah Martin	Present	Present	Present	Present	Present	Present		ABSENT	Present		Present	
Mitchel Slomiak	Present	Present	Present	Present	N/A	N/A		N/A	N/A		N/A	
Christina Smolke	ABSENT	Present	Present	Present	Present	Present		Present	ABSENT		Present	

last updated 8/2016

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