



# **ARBORIST REPORT**

**HYATT HOUSE HOTEL  
AT VALLCO PARK**  
WOLFE ROAD & INTERSTATE 280  
CUPERTINO, CALIFORNIA  
(APN 316-20-092)

**Submitted to:**

Community Development Department  
City of Cupertino  
10300 Torre Avenue  
Cupertino, CA 95014

**Prepared by:**

David L. Babby  
*Registered Consulting Arborist® #399*  
*Board-Certified Master Arborist® #WE-4001B*

---

July 24, 2014

## TABLE OF CONTENTS

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
1.0	INTRODUCTION .....	1
2.0	TREE COUNT AND COMPOSITION .....	2
3.0	SUITABILITY FOR TREE PRESERVATION .....	3
4.0	REVIEW OF POTENTIAL IMPACTS .....	5
4.1	Proposed Removals .....	5
4.2	Potential Significant Impacts .....	6
5.0	GUIDELINES FOR TREE REPLACEMENTS .....	8
6.0	GENERAL PROTECTION MEASURES .....	11
6.1	Design Guidelines .....	11
6.2	Before Demolition, Grading and Construction .....	13
6.3	During Demolition, Grading and Construction .....	14
7.0	ASSUMPTIONS AND LIMITING CONDITIONS .....	16

## EXHIBITS

<u>EXHIBIT</u>	<u>TITLE</u>
A	TREE INVENTORY TABLE (20 sheets)
B	SITE MAP (one sheet)
C	PHOTOGRAPHS (11 sheets)

## 1.0 INTRODUCTION

The City of Cupertino Community Development Department has retained me to prepare this *Arborist Report* in connection with the proposed application to construct a five-story, 148-room hotel named **Hyatt House Hotel at Vallco Park**; the property is a triangular-shaped lot, bordered by Interstate 280 to the north, N. Wolfe Road to the west, and Perimeter Road to the south (APN 316-20-092), and currently serves as an overflow parking lot for Vallco Mall.

Specific tasks assigned to perform are as follows:

- Visit the site on May 12 and 15, 2014 to identify 150 trees having trunks with diameters of four inches and greater (measured 54 inches above grade).
- Determine each tree's trunk diameter at 54 inches above grade or where appropriate to obtain the best representation of trunk size. Diameters are rounded to the nearest inch, and trees listed with more than one diameter are formed by multiple trunks.
- Ascertain each tree's health and structural integrity, and assign an overall condition rating (e.g. good, fair, poor or dead).
- Determine each tree's suitability for preservation (e.g. high, moderate or low).
- Obtain photographs; see Exhibit C.
- Identify which trees have trunks situated within the public right-of-way.
- Assign tree numbers in a sequential pattern, and those locations can and numbers can be viewed on Sheet A-0.2 presented in Exhibit B (copy of the *Demolition/Tree Removal Plan*, dated 7/15/14).
- Affix metal tags with engraved, corresponding numbers to each accessible trunk or major limb (the tags are round aluminum).
- Review the plan set dated 7/15/14 to identify potential tree disposition and impacts.
- Provide tree replacement guidelines.
- Develop general protection measures to help avoid or mitigate impacts to trees planned for retention.
- Prepare a written report that presents the aforementioned information, and submit via email as a PDF document.

## 2.0 TREE COUNT AND COMPOSITION

**One-hundred fifty (150) trees** of eight various species were inventoried for this report. They are sequentially numbered as **1 thru 150**, and the table below, and continued on the following two pages, identifies their common names, assigned numbers, counts and overall percentages.

NAME	TREE NUMBER(S)	COUNT	% OF TOTAL
coast live oak	91, 92, 145, 146	4	3%
coast redwood	1, 2, 4, 5-89, 93-95, 97-102, 107	98	65%
cork oak	90, 143, 144	3	2%
evergreen pear	109, 110, 136-139	6	4%
honey locust	103, 131-133, 142, 147-150	9	6%
Monterey pine	129, 130, 134, 135, 140, 141	6	4%
pin oak	127, 128	2	1%
Shamel ash	3, 96, 104-106, 108, 111-126	22	15%
<b>Total</b>		<b>150</b>	<b>100%</b>

As illustrated above, the site is populated predominantly by **coast redwoods**, which form a highly dense and established screen along the north (Hwy 280) and west (N. Wolfe Road) boundaries. The redwoods exhibit symptoms of significant or severe stress from not receiving sufficient water over the years, and the vast majority appear in poor health. Of these, many are beyond recovery, and others might improve if an assertive watering program is immediately implemented. Absent of supplemental water, continued decline for many years later can be expected, and those otherwise intended for retention and protection may ultimately require removal.

Specific information regarding each tree is presented within the table in **Exhibit A**. The trees' locations and corresponding numbers can be viewed on the site map in **Exhibit B**, and photographs are presented in **Exhibit C**.

One tree, #96, is a within the public right-of-way along N. Wolfe Road and defined as a **street tree**.

Sheet A-0.2 identifies two 'trees #102.' The one immediately north of #101 is the correct one, and the other near #107 and 108 is small evergreen pear with a trunk diameter less than three inches; see the map in Exhibit B for further clarification.

Four coast live oaks are defined as "specimen trees" pursuant to Appendix B of Ordinance No. 07-2003; they include **#91, 92, 145 and 146**.

### 3.0 SUITABILITY FOR TREE PRESERVATION

Each tree has been assigned either a "high," "moderate" or "low" suitability for preservation rating as a means to cumulatively measure and consider their existing health, structural integrity, anticipated life span, available growing space, location, size and species. A description of these ratings are presented below; note that the "high" category comprises **nine** (or 6%), the "moderate" category **58** (or 39%), and the "low" category **83** (or 55%) of the total inventoried trees.

**High:** Applies to **trees #14, 20, 29, 32, 33, 44, 89, 95 and 97**.

These trees offer a good potential for contributing long-term to the site; appear reasonably healthy with stable structures; have no apparent, significant health issues or structural defects; and require regular care to maintain their longevity and vigor.

**Moderate:** Applies to **trees #3, 5, 8, 10, 15, 16, 21-28, 30, 31, 35, 36, 39, 41, 42, 45-52, 54, 55, 57-59, 61, 63-65, 75, 82, 87, 91-93, 98-102, 107, 118, 119, 124, 125, 131, 132, 139 and 143.**

These trees contribute to the site but at levels less than those assigned a high suitability; have health and/or structural issues that can potentially be reasonably addressed and property mitigated; and frequent care is typically required for their remaining lifespan. A good number of redwoods within this rating serve as established screening elements between Interstate 280 and N. Wolfe Road; they are assigned moderate suitability solely for this reason, as well as the potential of health recovery, including numerous that have been "topped" and/or suppressed growth due to adjacent, more established trees (they would otherwise be assigned a low suitability for their poor health condition).

**Low:** Applies to **trees #1, 2, 4, 6, 7, 9, 11-13, 17-19, 27, 34, 37, 38, 40, 43, 53, 56, 60, 62, 66-74, 76-81, 83-86, 88, 90, 94, 96, 103-106, 108-117, 120-123, 126-130, 133-138, 140-142 and 144-150.**

These trees are either dead, nearly dead, severely declined, highly suppressed in terms of canopy and trunk development, and/or have such serious structural defects that they are expected to worsen regardless of tree care measures employed (i.e. beyond recovery). None appear suitable for retention.

Of **low suitability trees**, the following four should be **immediately removed: #94, 123, 126 and 145.** **Trees #94, 123 and 126** are dead. **Tree #145** has a massive split where four leaders originate, and is at severe risk of breaking at any time (presents an immediate, hazardous risk to persons and vehicles below).

## 4.0 REVIEW OF POTENTIAL IMPACTS

### 4.1 Proposed Removals

The following **114 trees** are identified for removal to accommodate the proposed project design and/or low suitability for preservation: **#1, 2, 4, 6, 7, 9, 11-13, 17-19, 27, 34, 37, 38, 40, 43, 53 and 56-150.**

The above list considers the following:

- All redwood trees along the western boundary for construction of the proposed path (the vast majority are in poor condition).
- All trees at the southwest section of the site to accommodate the proposed path, driveway, and grading.
- All trees within the existing parking lot to allow building construction.
- All trees within the planter strip along Perimeter Road for site improvements.
- Select redwoods along the north boundary due to being in poor condition.
- Trees at the northwest corner of the property for the bioretention planter.

Of the 114 trees, three are assigned a high suitability, 27 a moderate suitability, and 84 a low suitability; none are suitable for relocation. The high suitability trees include #89, 95 and 97, all sizeable coast redwoods with trunk diameters of 30, 22 and 24 inches, respectively, but appear in only fair health condition; their removal appears necessitated by the proposed path, driveway, and associated grading at the southwest corner of the site.

Sheet **A-0.2** provides information regarding the proposed tree disposition. Several observations and recommendations for updating that plan are as follows:

- The elevations shown for trees differs from those provided on the civil drawings. As such, the plan needs to be **substituted** with the Sandis topo for a base map, assuming the Sandis topo reflects the correct elevation and site information.
- **Trees #57, 58 and 59** need to reflect **removal** due to being within the proposed bioretention planter and immediately adjacent to the storm drain.
- Omit the additional **#102** discussed in Section 2.0 of this report (page 3).

## 4.2 Potential Significant Impacts

Of the **36** trees planned for **retention**, implementation of the proposed design would subject a number to a high or severe level of impacts. Discussion and recommendations for design modification to achieve adequate protection are provided in this section.

Redwood trees **#14, 15, 16, 20 and 21** will sustain potentially severe root loss during excavation for the new section of parking lot at the northeast section of the property. To achieve protection, the **section of existing planter** within at least **12 feet from their trunks** should remain intact and be regarded as their **Tree Protection Zone ("TPZ"** hereinafter).

The proposed **relocation** of the **cellular equipment enclosure** will result in excavation within a significant section of tree #10's root zone, and the process may expose root damage or loss to #14-16, 20 and 21. I recommend a plan for relocating this feature is provided to best assess impacts.

For trees retained along the northern border, excavation for the proposed **storm drain and inlets** would expose the redwood to the potential loss and/or damage to large roots within the parking lot. To reduce the risk of damage or impacts, I recommend the main line is established at least **ten feet** from the trunks. The inlets can be placed at the edge of proposed lot, however, must be strategically located away from retained trees (i.e. in voids containing trees that are either small or proposed for removal), and the lines connecting the inlets to the storm in a radial direction to tree trunks. A possible alternative is for the line to be directionally-bored by 36 inches or more below grade, and the access pits established beyond the canopy of a retained tree.

The proposed **nine light poles** along the north boundary show footings within the existing planter and immediately adjacent to the following 12 trees: **#16, 21, 26, 30, 31, 35, 36, 41, 44, 45, 49 and 54**. To avoid potentially significant impacts, I recommend the light poles are situated or designed so that no drilling or excavation is needed within the planter (a

possible alternative is to place them within the finger islands). The electrical layout should also be configured as described above for the storm drains.

Another potential impact for trees along the north boundary involves the footing design and installation method of the **proposed wall/curb**. It is critical that the future curb and gutter do not require lateral excavation into the existing planter (i.e. any soil and roots behind existing back of curb), including for overexcavation to construct, form and pour the wall/curb, footing and gutter. Additionally, the wall/curb and gutter should not require **excavation** into **existing base** material, or have the flexibility for as-built changes, should roots of two inches and greater in diameter be encountered. Additionally, **existing base material** should be **utilized** for the new lot where roots of this size become encountered.

The **electrical layout** for lighting or purposes becomes a critical component to avoid trenching within protection zones, and subsequently, can result in severe root loss. To avoid this from occurring, I recommend the layout is established, reviewed and approved prior to building permit issuance, and the routes established beyond tree protection zones.

The **path** proposed along the **north side** of the northern shared fence line appears to present no significant impacts to adjacent redwoods, provided excavation is not needed for its construction (i.e. a no-dig design, including for base materials, forms and edging), and direct compaction of existing soil grade can be avoided grade. A material that may achieve these specifications is Tensar® Biaxial **Geogrid** ([www.tensarcorp.com](http://www.tensarcorp.com)).

Note that for any trees redwoods being considered for retention, it is critical to begin immediately supplying them with **supplemental water**. Their current, overall poor and dying condition can be attributed to an absence of water.

## 5.0 GUIDELINES FOR TREE REPLACEMENTS

Applying Section 14.18.185, Table A, of the City Code, one of the following options would be applied for mitigating removal of the 114 trees:

- Installing **187 trees** of 24-inch box size.
- Installing **109 trees** of 24-inch box size plus **39** of 36-inch box size.
- Installing **109 trees** of 24-inch box size, and for the **additional 78 trees** of 24-inch box size, any **combination** of one 36-inch box for every two 24-inch boxes.

Based on the table presented on L-3, a total of **95 trees** of 24-inch box size are proposed for installation, a difference of 92 trees of 24-inch box trees to meet Code Section 14.18.185 for mitigation replacements.

My review of the landscape plans reveals several opportunities to **enhance replacement mitigation**, namely the following:

- As many trees as necessary along the front of the building could be upsized to 36-inch boxes.
- Trees could be installed within the bioretention planter, such as Marina madrone, Fernleaf Fullmoon maple, or Elegant Brisbane box.
- Trees could be installed within the barren area at the southwest corner of the property.
- Once Sheet L-3 is coordinated with all removals shown on A-0.2, such as along the north property edge, additional space and opportunity will be created for installing new trees.

Regarding the **species** proposed for replacements, I recommend the following:

- For the London planes, substituting 'Bloodgood' with the 'Columbia.'
- Substituting Shamel ash with one of the following: Shumard red oak or Autumn purple white ash. The Shumard is preferred, but due to the multi-leader, competing structure, it is important to select ones with a dominant central leader.
- Consider additional species, such as mentioned for the bioretention planter, and possibly a valley oak or cork oak in a larger planter area.

Regarding redwoods to be installed along the **west boundary**, the existing coast redwoods are roughly spaced, on average, nine to ten feet apart. I suggest **12 feet** between each tree would provide appropriate spacing for this site.

For redwoods to be installed along the **north boundary**, there are some instances where redwoods are proposed for removal due to being under highly suppressed and crowded-growing conditions, and installing a new redwood would be futile due to inadequate space, sunlight, and the established dominance of adjacent redwoods with broad canopies. There are other instances where trees are proposed for removal due to being in poor condition, but there appears sufficient sunlight and spacing for new redwoods, if not one to each removed tree, then one between where two are removed. Suggestions and considerations for the locations and amounts of replacements are as follows:

- The area occupied by #9, 27, 34, 40, 43 and 56 should not be replaced.
- Replacements for #1, 2, 4, 11, 12, 13, 53 and 60-63 should be installed within the same trunk areas as of the removed trees.
- One tree is suggested between #17 and 18, and another between #37 and 38.
- The spacing distance between new and existing would vary along the north boundary to accommodate the above recommendations and consider existing conditions, such as the dominance of existing redwoods crowding out available planting space and sunlight.
- For new redwoods installed, I do not anticipate those planted in close proximity of established ones will sustain sufficient growing space and sunlight to reach a similar height. Those setback some from established ones do present a reasonably good opportunity though, and estimate that under favorable growing conditions, 15 to 20 years may allow them to reach a similar height.

Based on the amount of new trees to be installed, they should be **selected and tagged at the nursery** by an ISA (International Society of Arboriculture) certified arborist and/or the landscape architect prior to being shipped to the site. They should have relatively symmetrical structures mostly free of obvious defects, wounds and girdling roots.

Additionally, the arborist and/or landscape architect should be retained to examine and root prune, as needed, once the boxes are removed and before being installed.

All new trees should be **installed**, including necessary irrigation, by an experienced state-licensed **landscape contractor** or a **professional tree service company**, and performed to professional industry standards. Only if necessary to stand upright, they should be double-staked (no cross-brace) with rubber tree ties or equivalent, and the support stakes cut below the first main lateral branch. Percolation tests should also be performed for each planting pit to ensure drainage is achieved.

All **irrigation** should be supplied through valves and automatic timers separate from that of shrubs, plants and groundcover, and supplied by two bubblers placed and staked on the surface of the root ball (versus against the trunk or in a sleeve) at around the one-half or three-quarters of the distance between the trunk and rootball edges. Additionally, an eight-inch tall circular berm formed by soil should be formed around the perimeter of the rootball (for water from the bubblers to flood). A two- to three-inch layer of wood-chip mulch should be spread on top and 12 inches beyond the root ball (but not piled against the trunks).

## 6.0 GENERAL PROTECTION MEASURES

Recommendations presented within this section serve as general design guidelines to help mitigate or avoid impacts to trees being retained. They are subject to revision upon reviewing the updated project design, and I should be consulted in the event any cannot be feasibly implemented. Please note that all referenced **distances from trunks** are intended to be from the closest edge (face of) of their outermost perimeter at soil grade.

### 6.1 Design Guidelines

1. All **recommendations** presented in **Section 4.0** of this report should be considered part of this section.
2. A **TPZ** is where all trenching, soil scraping, compaction, grading (cut and fill), removal of underground utilities and vaults, finish-grading, overexcavation, subexcavation, swales, bioswales, storm drains, equipment cleaning, stockpiling and dumping of materials, and equipment/vehicle operation shall be avoided. For general design purposes, the minimum **TPZs** of select trees that may potentially be retained are provided in **Section 4.0** of this report. For all other inventoried trees not mentioned in Section 4.0 but being retained, I recommend their TPZs are up to 12 inches from proposed improvements, and beneath their entire canopies in all other directions. Where an impact encroaches slightly within a setback, it can be reviewed on a case-by-case basis to determine appropriate mitigation measures.
3. The **tree numbers** of all retained trees should be added to the civil and landscape plans to allow for efficient design review for both the City and contractors.
4. **Sheet C-3.0** should show the **limits of grading**.
5. All **existing, unused lines, pipes and manholes** within a TPZ should be **abandoned** and cut off at existing soil grade (rather than being dug up and causing subsequent root damage); this provision should be specified on A-0.2.

6. **Overexcavation** for constructing any curb, gutter, walk, foundation etc. within a TPZ should be reduced to the maximum extent possible, such as six inches.
7. **Shoring** should be specified for the north side of the proposed underground garage.
8. The permanent and temporary **drainage design**, including downspouts, should not require water being discharged within TPZs. Also, any **swales** needed for drainage within a TPZ should require no more than a three-inch soil cut and fill, and roots two inches and greater in diameter retained and not damaged.
9. **Any underground utilities and services** (e.g. electrical) should be routed **beyond TPZs**. Where this is not feasible, the section of line(s) within the TPZ should be directionally-bored by at least four feet below existing grade, or installed by other means (e.g. pipe-bursting) to avoid an open trench. The ground above any tunnel must remain undisturbed, and access pits and any above-ground infrastructure (e.g. splice boxes, meters and vaults) established beyond all TPZs.
10. The future **staging area** and **route(s) of access** should be shown on the final site plan and avoided on unpaved areas beneath or near canopies. Where not feasible, I should be consulted to review the location and proximity to particular trees, and strive to identify a temporary root zone buffer that could potentially minimize soil compaction within a TPZ, and in turn, lessen impacts to a tree's vigor and longevity.
11. To restrict spoils and runoff from traveling into root zones, the future **erosion control design** should establish any silt fence and/or straw rolls away from a tree's trunk (not against it), and as close to the canopy edge as possible. Additionally, where within a TPZ, the material should require none or a maximum vertical soil cut of two inches for its embedment.
12. The **landscape design** should conform to the following additional guidelines:
  - a. **Large growing trees**, such as those that can exceed the height of retained trees, should be installed beyond TPZs, and at least 10 to 15 feet from a future foundation, wall and hardscape.

- b. **Plant material** installed beneath canopies of oaks must be drought-tolerant, limited in amount, and planted at least five or more feet from their trunks. Plant material installed beneath the canopies of all other trees should be at least 36 inches from their trunks.
- c. **Irrigation and lighting features** (e.g. main line, lateral lines, valve boxes, wiring and controllers) should be established so that no trenching occurs within a TPZ. In the event this is not feasible, they may require being installed in a radial direction to a tree's trunk, and terminate a specific distance from a trunk (versus crossing past it).
- d. **Ground cover** beneath canopies should be comprised of a three- to four-inch layer of coarse wood chips or other high-quality mulch (gorilla hair, bark or rock, stone, gravel, black plastic or other synthetic ground cover should be avoided). Mulch should not be placed against the trees' trunks.
- e. **Tilling, ripping and compaction** within TPZs should be avoided.
- f. Bender board or other **edging material** proposed beneath the canopies should be established on top of existing soil grade (such as by using vertical stakes).
- g. Providing **ongoing supplemental water** during the dry months of the year following the project would benefit the longevity of redwoods and, possibly applied through bubblers strategically located throughout the root zones. Additional discussion can be provided upon request.
- h. Ensure **no recycled water** is supplied to the redwoods.

## 6.2 Before Demolition, Grading and Construction

- 13. A **site meeting** with the general contractor and me ("**project arborist**" hereinafter) should be conducted several weeks prior to work commencing for the purpose of reviewing **tree fencing locations** and other **measures** presented in this report. **Additional site visits** include reviewing root pruning and tree impacts during construction, and providing a final assessment of project impacts (for scheduling purposes, I request a minimum five business-day notice for these subsequent visits).
- 14. **Tree protective fencing** is needed prior to any grading, trenching or excavation for the purpose of restricting access into and enclosing the **entire TPZs**. Its location can be identified during the initial site meeting, and should remain intact and be

maintained throughout construction. One approach is to utilize five-foot tall chain link panels mounted on steel posts or concrete blocks, and the panels firmly established to avoid easily being shifted or opened. Another includes mounting five-to six-foot tall chain link on two-inch diameter steel posts that are driven into the ground 24 inches deep.

15. The **limits of sidewalk, streetscape and grading** should be **staked** prior to any digging occurring.

16. **Wood chips** may need to be spread on exposed ground beneath the canopies of select trees. They should be **coarse** (e.g. ¼- to ¾-inch in size), and spread to a four- to five-inch layer beyond improvements, not piled against a trunk, and remain throughout construction.

### **6.3 During Demolition, Grading and Construction**

17. **Great care** must be taken during demolition of all existing features, to including the existing structures, curbs, gutter, etc. to avoid excavating into the ground and disturbing roots.

18. Any approved **digging or trenching** within a **TPZ** should be **manually performed** without heavy equipment or tractors, including small ones, operating within a TPZ.

19. Any **roots encountered** during the process with diameters **less than two inches** in diameter can be cleanly severed at a 90-degree angle to the direction of root growth. In doing so, sharp cutting tools (e.g. loppers or handsaw) shall be used, and the cut should occur against the tree side of the trench. Roots considered for removal with diameters of **two inches and greater** must first be reviewed by the project arborist.

20. **Spoils** created during digging must not be piled or spread within a TPZ. If necessary, they can be temporarily piled on plywood or a tarp.

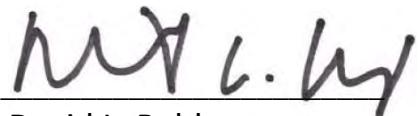
21. **Tree trunks** shall not be used as winch supports for moving or lifting heavy loads.

22. **Supplemental water** is essential to promote, and in many instances improve, the vigor and longevity of trees being retained, as well as help offset impacts. The methodology, amount and frequency can be discussed prior to construction.
23. The **disposal** of harmful products (such as cement, paint, chemicals, oil and gasoline) is prohibited beneath canopies or anywhere on site that allows drainage beneath or near TPZs. **Herbicides** should not be used with a TPZ; where used on site, they should be labeled for safe use near trees.
24. Any **tree pruning** should be performed by a California state-licensed tree service company (D-49 classification) that has an ISA certified arborist in a supervisory role, carries General Liability and Worker's Compensation insurance, and abides by in accordance with ANSI A300-2001 (Pruning) and ANSI Z133.1-2006 (Safety Operations) standards.

## 7.0 ASSUMPTIONS AND LIMITING CONDITIONS

- All information presented herein reflects my observations and measurements obtained from the project site on May 12 and 15, 2014.
- My observations were performed visually without probing, coring, dissecting or excavating. I cannot, in any way, assume responsibility for any defects that could only have been discovered by performing the mentioned services in the specific area(s) where a defect was located.
- The assignment pertains solely to trees listed in Exhibit A. I hold no opinion towards other trees on or surrounding the project area.
- I cannot provide a guarantee or warranty, expressed or implied, that deficiencies or problems of any trees or property in question may not arise in the future.
- No assurance can be offered that if all my recommendations and precautionary measures (verbal or in writing) are accepted and followed, that the desired results may be achieved.
- I cannot guarantee or be responsible for the accuracy of information provided by others.
- I assume no responsibility for the means and methods used by any person or company implementing the recommendations provided in this report.
- The information provided herein represents my opinion. Accordingly, my fee is in no way contingent upon the reporting of a specified finding, conclusion or value.
- The numbers shown on the site map in Exhibit B are intended to only roughly approximate a tree's location and should not be considered as surveyed trunk locations.
- This report is proprietary to me and may not be copied or reproduced in whole or part without prior written consent. It has been prepared for the sole and exclusive use of the parties to whom submitted for the purpose of contracting services provided by David L. Babby.
- If any part of this report or copy thereof be lost or altered, the entire evaluation shall be invalid.

Prepared By:



David L. Babby

Registered Consulting Arborist® #399

Board-Certified Master Arborist® #WE-4001B

Date: July 24, 2014



**EXHIBIT A:**

**TREE INVENTORY TABLE**

(20 sheets)



## TREE INVENTORY TABLE

TREE/ TAG NO.	TREE NAME	SIZE Trunk Diameter (in.)	CONDITION			Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
			Health Condition (100% = Best, 0% = Worst)	Structural Integrity (100% = Best, 0% = Worst)	Overall Condition (Good/Fair/Poor/Dead)		
1	coast redwood <i>(Sequoia sempervirens)</i>	13	30%	50%	Poor	Low	X
Comments: Near bottom of hill. Dead branches. Water may improve health.							
2	coast redwood <i>(Sequoia sempervirens)</i>	17	30%	40%	Poor	Low	X
Comments: Topped, a condition that adversely impacts long-term structural integrity. At bottom of hill.							
3	Shamel ash <i>(Fraxinus uhdei)</i>	27	60%	40%	Fair	Moderate	
Comments: Multiple leader structure. Lower trunk is covered by ivy. At top of hill.							
4	coast redwood <i>(Sequoia sempervirens)</i>	20	30%	40%	Poor	Low	X
Comments: Near top of hill. Topped. Very stressed canopy and recovery is highly questionable.							
5	coast redwood <i>(Sequoia sempervirens)</i>	16	40%	50%	Poor	Moderate	
Comments: Roots have contributed to large mounds in adjacent asphalt lot. Trunk has outgrown small planter. Adjacent curb is cracked.							
6	coast redwood <i>(Sequoia sempervirens)</i>	20	20%	30%	Poor	Low	X
Comments: Nearly dead and beyond recovery.							
7	coast redwood <i>(Sequoia sempervirens)</i>	23	20%	30%	Poor	Low	X
Comments: Nearly dead and beyond recovery. Adjacent curb is raised, and roots have formed mounds in parking lot.							
8	coast redwood <i>(Sequoia sempervirens)</i>	20	50%	40%	Poor	Moderate	
Comments: Topped. Sparse canopy, and improvement only possible with regular watering.							



## TREE INVENTORY TABLE

TREE/ TAG NO.	TREE NAME	SIZE Trunk Diameter (in.)	CONDITION			Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
			Health Condition (100% = Best, 0% = Worst)	Structural Integrity (100% = Best, 0% = Worst)	Overall Condition (Good/Fair/Poor/Dead)		
9	coast redwood <i>(Sequoia sempervirens)</i>	14	30%	60%	Poor	Low	X
Comments: Declining canopy with highly questionable recovery.							
10	coast redwood <i>(Sequoia sempervirens)</i>	25	40%	70%	Poor	Moderate	
Comments: Topped and very sparse canopy. Recovery possible, but only with regular watering.							
11	coast redwood <i>(Sequoia sempervirens)</i>	22	30%	40%	Poor	Low	X
Comments: Adjacent to tall sign. Topped. Very sparse canopy with highly questionable recovery.							
12	coast redwood <i>(Sequoia sempervirens)</i>	19	30%	40%	Poor	Low	X
Comments: Adjacent to tall sign. Topped. Very sparse canopy with highly questionable recovery.							
13	coast redwood <i>(Sequoia sempervirens)</i>	21	30%	50%	Poor	Low	X
Comments: Lower trunk sweeps (i.e. curves) then grows vertical. Very sparse canopy with highly questionable recovery.							
14	coast redwood <i>(Sequoia sempervirens)</i>	24	80%	70%	Good	High	
Comments: Relatively healthy tree with good structure.							
15	coast redwood <i>(Sequoia sempervirens)</i>	24	40%	40%	Poor	Moderate	
Comments: Topped. A large buttress roots grows around an existing beam. Declining health, and recovery may be possible with regular watering.							
16	coast redwood <i>(Sequoia sempervirens)</i>	24	40%	40%	Poor	Moderate	
Comments: Topped. Declining health, and recovery may be possible with regular watering.							



## TREE INVENTORY TABLE

TREE/ TAG NO.	TREE NAME	SIZE Trunk Diameter (in.)	CONDITION			Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
			Health Condition (100% = Best, 0% = Worst)	Structural Integrity (100% = Best, 0% = Worst)	Overall Condition (Good/Fair/Poor/Dead)		
17	coast redwood <i>(Sequoia sempervirens)</i>	13	40%	40%	Poor	Low	X
Comments: Suppressed and crowded-growing conditions.							
18	coast redwood <i>(Sequoia sempervirens)</i>	8	40%	30%	Poor	Low	X
Comments: Suppressed growth adjacent to #19.							
19	coast redwood <i>(Sequoia sempervirens)</i>	13	40%	40%	Poor	Low	X
Comments: Suppressed growth adjacent to #18.							
20	coast redwood <i>(Sequoia sempervirens)</i>	28	70%	80%	Good	High	
Comments: Relatively healthy tree with a stable structure.							
21	coast redwood <i>(Sequoia sempervirens)</i>	21	60%	60%	Fair	Moderate	
Comments: Nearly the entire trunk sweeps (i.e. grows with curves).							
22	coast redwood <i>(Sequoia sempervirens)</i>	25	70%	50%	Fair	Moderate	
Comments: Relatively healthy tree with decent structure.							
23	coast redwood <i>(Sequoia sempervirens)</i>	15	80%	40%	Fair	Moderate	
Comments: Crowded-growing conditions. Appears healthy.							
24	coast redwood <i>(Sequoia sempervirens)</i>	23	40%	70%	Poor	Moderate	
Comments: Declined canopy, and recovery only possible through regular watering.							



## TREE INVENTORY TABLE

TREE/ TAG NO.	TREE NAME	SIZE Trunk Diameter (in.)	CONDITION			Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
			Health Condition (100% = Best, 0% = Worst)	Structural Integrity (100% = Best, 0% = Worst)	Overall Condition (Good/Fair/Poor/Dead)		
25	coast redwood <i>(Sequoia sempervirens)</i>	22	40%	70%	Poor	Moderate	
Comments: Declined canopy, and recovery only possible through regular watering.							
26	coast redwood <i>(Sequoia sempervirens)</i>	32	40%	70%	Poor	Moderate	
Comments: Declined canopy - needs regular water for recovery. Excessive branch weight.							
27	coast redwood <i>(Sequoia sempervirens)</i>	14	40%	50%	Poor	Moderate	X
Comments: Crowded-growing conditions adjacent to #26. Declined canopy - needs water for recovery.							
28	coast redwood <i>(Sequoia sempervirens)</i>	20	50%	50%	Fair	Moderate	
Comments: Crowded-growing conditions adjacent to #29. Needs regular water for health improvement.							
29	coast redwood <i>(Sequoia sempervirens)</i>	24	60%	80%	Fair	High	
Comments: Fairly healthy tree with a stable structure.							
30	coast redwood <i>(Sequoia sempervirens)</i>	20	50%	50%	Fair	Moderate	
Comments: Needs regular watering for health improvement.							
31	coast redwood <i>(Sequoia sempervirens)</i>	20	40%	70%	Fair	Moderate	
Comments: Declined canopy - needs regular watering for health improvement.							
32	coast redwood <i>(Sequoia sempervirens)</i>	18	60%	70%	Fair	High	
Comments: Fairly healthy tree with a stable structure.							



## TREE INVENTORY TABLE

TREE/ TAG NO.	TREE NAME	SIZE Trunk Diameter (in.)	CONDITION			Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
			Health Condition (100% = Best, 0% = Worst)	Structural Integrity (100% = Best, 0% = Worst)	Overall Condition (Good/Fair/Poor/Dead)		
33	coast redwood <i>(Sequoia sempervirens)</i>	24	80%	70%	Good	High	
Comments: Relatively healthy tree with a stable structure.							
34	coast redwood <i>(Sequoia sempervirens)</i>	16	50%	40%	Poor	Low	X
Comments: Suppressed, crowded-growing conditions.							
35	coast redwood <i>(Sequoia sempervirens)</i>	17	50%	50%	Fair	Moderate	
Comments: Crowded-growing conditions. Regular watering is needed to improve health.							
36	coast redwood <i>(Sequoia sempervirens)</i>	32	50%	70%	Fair	Moderate	
Comments: Sparse canopy. Excessive branch weight. Regular watering is needed to improve health.							
37	coast redwood <i>(Sequoia sempervirens)</i>	13	50%	40%	Poor	Low	X
Comments: Suppressed, crowded-growing conditions.							
38	coast redwood <i>(Sequoia sempervirens)</i>	12	60%	30%	Poor	Low	X
Comments: Suppressed, crowded-growing conditions.							
39	coast redwood <i>(Sequoia sempervirens)</i>	22	50%	30%	Poor	Moderate	
Comments: Topped. Excessive branch weight needs addressing through pruning. Regular watering needed to improve health.							
40	coast redwood <i>(Sequoia sempervirens)</i>	12	50%	40%	Poor	Low	X
Comments: Topped. Crowded-growing conditions between adjacent, dominant trees.							



## TREE INVENTORY TABLE

TREE/ TAG NO.	TREE NAME	SIZE Trunk Diameter (in.)	CONDITION			Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
			Health Condition (100% = Best, 0% = Worst)	Structural Integrity (100% = Best, 0% = Worst)	Overall Condition (Good/Fair/Poor/Dead)		
41	coast redwood <i>(Sequoia sempervirens)</i>	32	60%	30%	Poor	Moderate	
	Comments: Topped. Regular watering needs for improving health.						
42	coast redwood <i>(Sequoia sempervirens)</i>	24	40%	70%	Fair	Moderate	
	Comments: Declined canopy - needs regular watering for health improvement.						
43	coast redwood <i>(Sequoia sempervirens)</i>	10	50%	30%	Poor	Low	X
	Comments: Suppressed, crowded-growing conditions.						
44	coast redwood <i>(Sequoia sempervirens)</i>	26	60%	80%	Fair	High	
	Comments: Relatively healthy tree with a stable structure.						
45	coast redwood <i>(Sequoia sempervirens)</i>	22	50%	50%	Fair	Moderate	
	Comments: Crowded-growing conditions has resulted in a narrow canopy.						
46	coast redwood <i>(Sequoia sempervirens)</i>	24	70%	40%	Fair	Moderate	
	Comments: Topped.						
47	coast redwood <i>(Sequoia sempervirens)</i>	24	40%	50%	Poor	Moderate	
	Comments:						
48	coast redwood <i>(Sequoia sempervirens)</i>	26	60%	50%	Fair	Moderate	
	Comments:						



## TREE INVENTORY TABLE

TREE/ TAG NO.	TREE NAME	SIZE Trunk Diameter (in.)	CONDITION			Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
			Health Condition (100% = Best, 0% = Worst)	Structural Integrity (100% = Best, 0% = Worst)	Overall Condition (Good/Fair/Poor/Dead)		
49	coast redwood <i>(Sequoia sempervirens)</i>	32	60%	40%	Fair	Moderate	
	Comments: Topped.						
50	coast redwood <i>(Sequoia sempervirens)</i>	20	50%	60%	Fair	Moderate	
	Comments: Needs regular watering for health improvement.						
51	coast redwood <i>(Sequoia sempervirens)</i>	20	40%	40%	Poor	Moderate	
	Comments: Declined health and poor structure.						
52	coast redwood <i>(Sequoia sempervirens)</i>	24	40%	50%	Poor	Moderate	
	Comments: Declined health - needs regular watering for health improvement. Has a crook about midway up trunk.						
53	coast redwood <i>(Sequoia sempervirens)</i>	20	30%	60%	Poor	Low	X
	Comments: Very sparse canopy with a highly questionable recovery.						
54	coast redwood <i>(Sequoia sempervirens)</i>	26	40%	50%	Poor	Moderate	
	Comments: Trunk bifurcates into codominant leaders about midway up trunk. Needs regular water if health improvement is expected.						
55	coast redwood <i>(Sequoia sempervirens)</i>	24	50%	60%	Fair	Moderate	
	Comments: Top curves. Regular watering is needed to improve health.						



## TREE INVENTORY TABLE

TREE/ TAG NO.	TREE NAME	SIZE Trunk Diameter (in.)	CONDITION			Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
			Health Condition (100% = Best, 0% = Worst)	Structural Integrity (100% = Best, 0% = Worst)	Overall Condition (Good/Fair/Poor/Dead)		
56	coast redwood <i>(Sequoia sempervirens)</i>	15	50%	40%	Poor	Low	X
Comments: Suppressed, crowded-growing conditions.							
57	coast redwood <i>(Sequoia sempervirens)</i>	23	60%	70%	Fair	Moderate	X
Comments:							
58	coast redwood <i>(Sequoia sempervirens)</i>	30	60%	50%	Fair	Moderate	X
Comments: Crowded-growing conditions. Excessive branch weight.							
59	coast redwood <i>(Sequoia sempervirens)</i>	22	50%	60%	Fair	Moderate	X
Comments: Regular watering is needed to improve health.							
60	coast redwood <i>(Sequoia sempervirens)</i>	18	30%	60%	Poor	Low	X
Comments: Very sparse canopy, and recovery is highly questionable.							
61	coast redwood <i>(Sequoia sempervirens)</i>	30	60%	40%	Fair	Moderate	X
Comments: Topped. Needs regular watering for health improvement.							
62	coast redwood <i>(Sequoia sempervirens)</i>	12	40%	40%	Poor	Low	X
Comments: Crowded-growing conditions contributes to poor trunk development.							
63	coast redwood <i>(Sequoia sempervirens)</i>	22	60%	40%	Fair	Moderate	X
Comments: Needs regular watering for health improvement.							



## TREE INVENTORY TABLE

TREE/ TAG NO.	TREE NAME	SIZE Trunk Diameter (in.)	CONDITION			Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
			Health Condition (100% = Best, 0% = Worst)	Structural Integrity (100% = Best, 0% = Worst)	Overall Condition (Good/Fair/Poor/Dead)		
64	coast redwood <i>(Sequoia sempervirens)</i>	14	50%	50%	Fair	Moderate	X
Comments: Topped. Crowded-growing conditions. Regular watering is needed for health improvement.							
65	coast redwood <i>(Sequoia sempervirens)</i>	30	40%	60%	Fair	Moderate	X
Comments: Codominant tops. Declined canopy - needs regular watering for improvement.							
66	coast redwood <i>(Sequoia sempervirens)</i>	24	20%	40%	Poor	Low	X
Comments: Extremely poor health and beyond recovery.							
67	coast redwood <i>(Sequoia sempervirens)</i>	8	40%	20%	Poor	Low	X
Comments: Declined and highly suppressed canopy.							
68	coast redwood <i>(Sequoia sempervirens)</i>	26	20%	50%	Poor	Low	X
Comments: Extremely poor health and beyond recovery.							
69	coast redwood <i>(Sequoia sempervirens)</i>	10	30%	40%	Poor	Low	X
Comments: Suppressed, crowded-growing conditions. Very sparse canopy.							
70	coast redwood <i>(Sequoia sempervirens)</i>	13	30%	50%	Poor	Low	X
Comments: Very sparse canopy. Recovery highly questionable.							
71	coast redwood <i>(Sequoia sempervirens)</i>	18	30%	40%	Poor	Low	X
Comments: Crowded-growing conditions. Very sparse canopy and recovery is highly questionable.							



## TREE INVENTORY TABLE

TREE/ TAG NO.	TREE NAME	SIZE Trunk Diameter (in.)	CONDITION			Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
			Health Condition (100% = Best, 0% = Worst)	Structural Integrity (100% = Best, 0% = Worst)	Overall Condition (Good/Fair/Poor/Dead)		
72	coast redwood <i>(Sequoia sempervirens)</i>	26	30%	50%	Poor	Low	X
Comments: Topped. Very sparse canopy and recovery is highly questionable.							
73	coast redwood <i>(Sequoia sempervirens)</i>	26	30%	50%	Poor	Low	X
Comments: Very sparse canopy and recovery highly questionable.							
74	coast redwood <i>(Sequoia sempervirens)</i>	10	20%	30%	Poor	Low	X
Comments: Has a dead top. Crowded-growing conditions. Extremely sparse and beyond recovery.							
75	coast redwood <i>(Sequoia sempervirens)</i>	36	40%	80%	Fair	Moderate	X
Comments: Adjacent curb is buckled and raised. Declined canopy - needs regular watering if to recover.							
76	coast redwood <i>(Sequoia sempervirens)</i>	13	30%	40%	Poor	Low	X
Comments: Suppressed growth and a very sparse canopy. Recovery high questionable.							
77	coast redwood <i>(Sequoia sempervirens)</i>	24	30%	60%	Poor	Low	X
Comments: Very sparse canopy and recovery highly questionable.							
78	coast redwood <i>(Sequoia sempervirens)</i>	22	20%	40%	Poor	Low	X
Comments: Extremely sparse canopy and beyond recovery.							
79	coast redwood <i>(Sequoia sempervirens)</i>	12	20%	40%	Poor	Low	X
Comments: Extremely sparse canopy and beyond recovery. Crooked top. Crowded-growing conditions.							



## TREE INVENTORY TABLE

TREE/ TAG NO.	TREE NAME	SIZE Trunk Diameter (in.)	CONDITION			Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
			Health Condition (100% = Best, 0% = Worst)	Structural Integrity (100% = Best, 0% = Worst)	Overall Condition (Good/Fair/Poor/Dead)		
80	coast redwood <i>(Sequoia sempervirens)</i>	24	20%	50%	Poor	Low	X
Comments: Extremely sparse canopy and beyond recovery.							
81	coast redwood <i>(Sequoia sempervirens)</i>	4	30%	50%	Poor	Low	X
Comments: Crowded-growing conditions. Very sparse canopy and recovery highly questionable.							
82	coast redwood <i>(Sequoia sempervirens)</i>	12	40%	70%	Fair	Moderate	X
Comments: Declined canopy and requires regular watering if recovery is expected.							
83	coast redwood <i>(Sequoia sempervirens)</i>	30	30%	40%	Poor	Low	X
Comments: Very sparse canopy and recovery is highly questionable. Topped.							
84	coast redwood <i>(Sequoia sempervirens)</i>	22	30%	50%	Poor	Low	X
Comments: Very sparse canopy and recovery is highly questionable.							
85	coast redwood <i>(Sequoia sempervirens)</i>	17	30%	60%	Poor	Low	X
Comments: Adjacent curb is buckled. Very sparse canopy and recovery is highly questionable.							
86	coast redwood <i>(Sequoia sempervirens)</i>	26	30%	60%	Poor	Low	X
Comments: Adjacent curb is buckled. Very sparse canopy and recovery is highly questionable.							
87	coast redwood <i>(Sequoia sempervirens)</i>	20	50%	60%	Fair	Moderate	X
Comments: Trunk curves. Regular watering is needed if improvement to health is expected.							



## TREE INVENTORY TABLE

TREE/ TAG NO.	TREE NAME	SIZE Trunk Diameter (in.)	CONDITION			Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
			Health Condition (100% = Best, 0% = Worst)	Structural Integrity (100% = Best, 0% = Worst)	Overall Condition (Good/Fair/Poor/Dead)		
88	coast redwood <i>(Sequoia sempervirens)</i>	14	40%	40%	Poor	Low	X
Comments: Crowded-growing conditions.							
89	coast redwood <i>(Sequoia sempervirens)</i>	30	60%	70%	Fair	High	X
Comments: Needs regular watering to improve health.							
90	cork oak <i>(Quercus suber)</i>	13	30%	30%	Poor	Low	X
Comments: Structure formed by three codominant leaders. Canopy is one-sided and extremely sparse. Recovery is unlikely.							
91	coast live oak <i>(Quercus agrifolia)</i>	15	80%	40%	Fair	Moderate	X
Comments: Asymmetrical, nearly one-sided canopy (making poor structural form). Reasonably healthy.							
92	coast live oak <i>(Quercus agrifolia)</i>	14	90%	40%	Fair	Moderate	X
Comments: Formed by codominant leaders at 10' high. Asymmetrical, one-sided canopy. Encroaches on large light pole. Lower trunk has a large wound. Healthy canopy.							
93	coast redwood <i>(Sequoia sempervirens)</i>	11	40%	40%	Poor	Moderate	X
Comments: Suppressed growth due to crowded-growing conditions.							
94	coast redwood <i>(Sequoia sempervirens)</i>	13	0%	0%	Dead	Low	X
Comments: Tree is dead and should be <b>removed immediately</b> .							
95	coast redwood <i>(Sequoia sempervirens)</i>	22	50%	80%	Fair	High	X
Comments: Needs water if expected to improve in health.							



## TREE INVENTORY TABLE

TREE/ TAG NO.	TREE NAME	SIZE Trunk Diameter (in.)	CONDITION			Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
			Health Condition (100% = Best, 0% = Worst)	Structural Integrity (100% = Best, 0% = Worst)	Overall Condition (Good/Fair/Poor/Dead)		
96	Shamel ash ( <i>Fraxinus uhdei</i> )	24	50%	30%	Poor	Low	X
Comments: Weak structure. On road side of fence, near sidewalk. Street tree.							
97	coast redwood ( <i>Sequoia sempervirens</i> )	24	50%	70%	Fair	High	X
Comments: Needs regular watering to improve health.							
98	coast redwood ( <i>Sequoia sempervirens</i> )	11	60%	60%	Fair	Moderate	X
Comments: Crowded-growing conditions. Needs regular watering to improve health.							
99	coast redwood ( <i>Sequoia sempervirens</i> )	8	60%	50%	Fair	Moderate	X
Comments: Crowded-growing conditions. Needs regular watering to improve health.							
100	coast redwood ( <i>Sequoia sempervirens</i> )	21	40%	70%	Fair	Moderate	X
Comments: Sparse canopy - needs water if expected to improve in health.							
101	coast redwood ( <i>Sequoia sempervirens</i> )	14	50%	80%	Fair	Moderate	X
Comments: Needs water if expected to improve in health.							
102	coast redwood ( <i>Sequoia sempervirens</i> )	20	40%	70%	Fair	Moderate	X
Comments: Sparse canopy - needs water if expected to improve in health.							
103	honey locust ( <i>Gleditsia triacanthos</i> )	13	30%	40%	Poor	Low	X
Comments: Structure comprised of codominant leaders.							



## TREE INVENTORY TABLE

TREE/ TAG NO.	TREE NAME	SIZE Trunk Diameter (in.)	CONDITION			Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
			Health Condition (100% = Best, 0% = Worst)	Structural Integrity (100% = Best, 0% = Worst)	Overall Condition (Good/Fair/Poor/Dead)		
104	Shamel ash ( <i>Fraxinus uhdei</i> )	17	30%	50%	Poor	Low	X
Comments: Extremely sparse canopy and buried root collar. Recovery unlikely.							
105	Shamel ash ( <i>Fraxinus uhdei</i> )	11	60%	40%	Fair	Low	X
Comments: Poor form.							
106	Shamel ash ( <i>Fraxinus uhdei</i> )	13	40%	40%	Poor	Low	X
Comments: Has substantial deadwood in lower canopy.							
107	coast redwood ( <i>Sequoia sempervirens</i> )	22	40%	70%	Fair	Moderate	X
Comments: Sparse canopy - needs water if expected to improve in health.							
108	Shamel ash ( <i>Fraxinus uhdei</i> )	23	40%	40%	Poor	Low	X
Comments: Has a large girdling root. Canopy is sparse and formed by multiple leaders.							
109	evergreen pear ( <i>Pyrus kawakamii</i> )	9	40%	50%	Poor	Low	X
Comments:							
110	evergreen pear ( <i>Pyrus kawakamii</i> )	8	70%	40%	Fair	Low	X
Comments: Large limbs cut from lower trunk. Poor structure.							
111	Shamel ash ( <i>Fraxinus uhdei</i> )	18	40%	50%	Poor	Low	X
Comments: Formed by multiple leaders at 12 feet high. Has a large girdling root.							



## TREE INVENTORY TABLE

TREE/ TAG NO.	TREE NAME	SIZE Trunk Diameter (in.)	CONDITION			Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
			Health Condition (100% = Best, 0% = Worst)	Structural Integrity (100% = Best, 0% = Worst)	Overall Condition (Good/Fair/Poor/Dead)		
112	Shamel ash ( <i>Fraxinus uhdei</i> )	19	40%	50%	Poor	Low	X
Comments: Codominants originate at eight feet high.							
113	Shamel ash ( <i>Fraxinus uhdei</i> )	10	40%	30%	Poor	Low	X
Comments: Very weak structure. Large limb previously cut. Canopy is highly asymmetrical and has poor form.							
114	Shamel ash ( <i>Fraxinus uhdei</i> )	14	50%	30%	Poor	Low	X
Comments: Severely pruned in past.							
115	Shamel ash ( <i>Fraxinus uhdei</i> )	6	30%	30%	Poor	Low	X
Comments: Suppressed and very sparse canopy. Extensive deadwood. Buried root collar.							
116	Shamel ash ( <i>Fraxinus uhdei</i> )	13	30%	40%	Poor	Low	X
Comments: Very sparse canopy.							
117	Shamel ash ( <i>Fraxinus uhdei</i> )	5	20%	20%	Poor	Low	X
Comments: Mostly dead and well-beyond recovery.							
118	Shamel ash ( <i>Fraxinus uhdei</i> )	11	50%	50%	Fair	Moderate	X
Comments: Declined canopy.							
119	Shamel ash ( <i>Fraxinus uhdei</i> )	10	40%	60%	Fair	Moderate	X
Comments: Declined canopy.							



## TREE INVENTORY TABLE

TREE/ TAG NO.	TREE NAME	SIZE	CONDITION			Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
		Trunk Diameter (in.)	Health Condition (100% = Best, 0% = Worst)	Structural Integrity (100% = Best, 0% = Worst)	Overall Condition (Good/Fair/Poor/Dead)		
120	Shamel ash ( <i>Fraxinus uhdei</i> )	8	40%	40%	Poor	Low	X
Comments: Declined canopy and poor form.							
121	Shamel ash ( <i>Fraxinus uhdei</i> )	7	50%	40%	Poor	Low	X
Comments: Declined canopy and poor form.							
122	Shamel ash ( <i>Fraxinus uhdei</i> )	13	20%	40%	Poor	Low	X
Comments: Extensive dieback and well-beyond recovery.							
123	Shamel ash ( <i>Fraxinus uhdei</i> )	9	0%	0%	Dead	Low	X
Comments: Tree is dead and should be <b>immediately removed</b> .							
124	Shamel ash ( <i>Fraxinus uhdei</i> )	19	80%	60%	Good	Moderate	X
Comments: Curb along downhill side is raised, and roots have formed mounds in adjacent asphalt walk.							
125	Shamel ash ( <i>Fraxinus uhdei</i> )	16	50%	60%	Fair	Moderate	X
Comments: Curb downhill is broken. Declined canopy.							
126	Shamel ash ( <i>Fraxinus uhdei</i> )	7	0%	0%	Dead	Low	X
Comments: Tree is dead and should be <b>immediately removed</b> .							
127	pin oak ( <i>Quercus palustris</i> )	10	50%	40%	Poor	Low	X
Comments: Has a large wound along major limb, as well as a small girdling root. Canopy is sparse and broad.							



## TREE INVENTORY TABLE

TREE/ TAG NO.	TREE NAME	SIZE Trunk Diameter (in.)	CONDITION			Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
			Health Condition (100% = Best, 0% = Worst)	Structural Integrity (100% = Best, 0% = Worst)	Overall Condition (Good/Fair/Poor/Dead)		
128	pin oak <i>(Quercus palustris)</i>	11	40%	20%	Poor	Low	X
Comments: Large deadwood and very sparse canopy. Form is very poor. There is a large decaying wound along most of trunk, as well as extensive decay at trunk's base.							
129	Monterey pine <i>(Pinus radiata)</i>	15	40%	50%	Poor	Low	X
Comments: Has red turpentine beetle. Trunk has outgrown planter, and the adjacent curb has buckled at multiple locations. Formed by codominant tops. Sparse canopy and beyond recovery.							
130	Monterey pine <i>(Pinus radiata)</i>	32	50%	20%	Poor	Low	X
Comments: Base of trunk is above adjacent lot. Trunk has outgrown planter. Excessive limb weight. Structure is formed by five leaders that form weak attachments. Adjacent curb has buckled along both sides of planter.							
131	honey locust <i>(Gleditsia triacanthos)</i>	10	50%	50%	Fair	Moderate	X
Comments: Declined canopy and formed by codominant tops.							
132	honey locust <i>(Gleditsia triacanthos)</i>	7	50%	50%	Fair	Moderate	X
Comments: Has a small wound along trunk. Canopy is asymmetrical.							
133	honey locust <i>(Gleditsia triacanthos)</i>	8	50%	40%	Poor	Low	X
Comments: Crowded-growing conditions has formed an asymmetrical, one-sided canopy.							
134	Monterey pine <i>(Pinus radiata)</i>	20	30%	50%	Poor	Low	X
Comments: Has girdling roots. Trunk is outgrowing planter, and roots adjacent curb is raised. Canopy is very sparse and beyond recovery.							



## TREE INVENTORY TABLE

TREE/ TAG NO.	TREE NAME	SIZE Trunk Diameter (in.)	CONDITION			Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
			Health Condition (100% = Best, 0% = Worst)	Structural Integrity (100% = Best, 0% = Worst)	Overall Condition (Good/Fair/Poor/Dead)		
135	Monterey pine ( <i>Pinus radiata</i> )	23	50%	50%	Fair	Low	X
Comments: Declined canopy, and recovery highly unlikely for this species. Trunk is outgrowing planter, and adjacent curb is damaged.							
136	evergreen pear ( <i>Pyrus kawakamii</i> )	11	40%	40%	Poor	Low	X
Comments: Multiple leaders and has been excessively pruned in past.							
137	evergreen pear ( <i>Pyrus kawakamii</i> )	8	50%	40%	Poor	Low	X
Comments: Excessively pruned in past. Canopy is asymmetrical due to crowded-growing conditions, and there may be a girdling root.							
138	evergreen pear ( <i>Pyrus kawakamii</i> )	12	50%	40%	Poor	Low	X
Comments: Has been excessively pruned. Canopy has a low-growing form.							
139	evergreen pear ( <i>Pyrus kawakamii</i> )	7	60%	40%	Fair	Moderate	X
Comments: Has a wound along trunk's base.							
140	Monterey pine ( <i>Pinus radiata</i> )	16	40%	50%	Poor	Low	X
Comments: Adjacent curb is damaged. Declined canopy and beyond recovery.							
141	Monterey pine ( <i>Pinus radiata</i> )	19	50%	30%	Poor	Low	X
Comments: Declined canopy and recovery is highly unlikely for this species. Adjacent curb is damaged. Infested by red turpentine beetle.							



## TREE INVENTORY TABLE

TREE/ TAG NO.	TREE NAME	SIZE Trunk Diameter (in.)	CONDITION			Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
			Health Condition (100% = Best, 0% = Worst)	Structural Integrity (100% = Best, 0% = Worst)	Overall Condition (Good/Fair/Poor/Dead)		
142	honey locust <i>(Gleditsia triacanthos)</i>	9	30%	50%	Poor	Low	X
Comments: Canopy is very sparse.							
143	cork oak <i>(Quercus suber)</i>	20	70%	40%	Fair	Moderate	X
Comments: Structure consists of multiple leaders that form a broad canopy. Poor structure.							
144	cork oak <i>(Quercus suber)</i>	5	40%	40%	Poor	Low	X
Comments: Sparse canopy. Multi-leader structure.							
145	coast live oak <i>(Quercus agrifolia)</i>	20	30%	20%	Poor	Low	X
Comments: Has a very broad and extremely sparse canopy that is beyond recovery. Has excessive limb weight and a substantial level of deadwood. Should be <b>removed immediately</b> due to a large crack where four main leaders originate, and above that contains weak attachments. Tree is at severe risk of breaking.							
146	coast live oak <i>(Quercus agrifolia)</i>	17	40%	30%	Poor	Low	X
Comments: Sparse canopy with excessive limb weight. Poor structure.							
147	honey locust <i>(Gleditsia triacanthos)</i>	10	30%	40%	Poor	Low	X
Comments: Roots have formed mounds in lot and raised adjacent curb. Very sparse canopy.							
148	honey locust <i>(Gleditsia triacanthos)</i>	8	40%	50%	Poor	Low	X
Comments: Adjacent curb has been damaged. Sparse canopy.							



## TREE INVENTORY TABLE

TREE/ TAG NO.	TREE NAME	SIZE		CONDITION			Suitability for Preservation (High/Moderate/Low)	Proposed for Removal
		Trunk Diameter (in.)		Health Condition (100% = Best, 0% = Worst)	Structural Integrity (100% = Best, 0% = Worst)	Overall Condition (Good/Fair/Poor/Dead)		
149	honey locust <i>(Gleditsia triacanthos)</i>	9	40%	40%	Poor	Low	X	
Comments: Adjacent curb has been damaged. Sparse canopy and poor structure.								
150	honey locust <i>(Gleditsia triacanthos)</i>	9	50%	60%	Fair	Low	X	
Comments: Decline, as with adjacent locusts, can be expected.								

**EXHIBIT B:**

**SITE MAP**

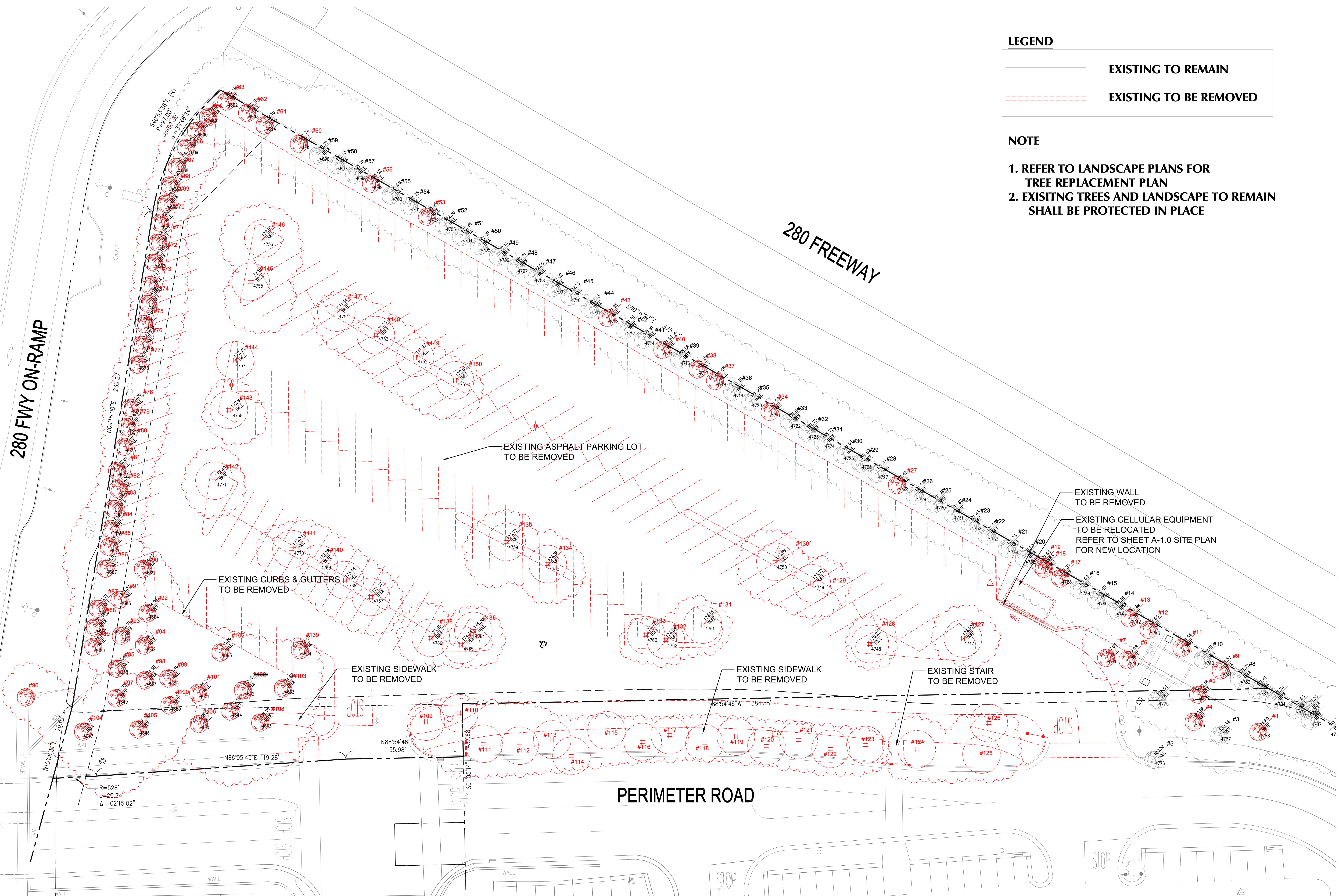
(one sheet)

**LEGEND**

	EXISTING TO REMAIN
	EXISTING TO BE REMOVED

**NOTE**

1. REFER TO LANDSCAPE PLANS FOR TREE REPLACEMENT PLAN
2. EXISITNG TREES AND LANDSCAPE TO REMAIN SHALL BE PROTECTED IN PLACE

**280 FWY ON-RAMP****280 FREEWAY****HYATT HOUSE HOTEL AT VALLCO PARK**HYATT  
house™WOLFE ROAD & INTERSTATE 280  
CUPERTINO, CALIFORNIA**DEMOLITION / TREE REMOVAL PLAN**

SCALE: 1/16"-1'-0"

0 16' 32' 64'

DATE: 7/15/2014  
JOB NO.: 1345P

## **EXHIBIT C:**

### **PHOTOGRAPHS**

(11 sheets)

#### **Photo Index**

**Page C-1:** Trees #1 thru 9

**Page C-7:** Trees #111 thru 122

**Page C-2:** Trees #10 thru 20

**Page C-8:** Trees #123 thru 130

**Page C-3:** Trees #20 thru 42

**Page C-9:** Trees #131-138, 140, 141

**Page C-4:** Trees #43 thru 83

**Page C-10:** Trees #142 thru 146

**Page C-5:** Trees #84 thru 102

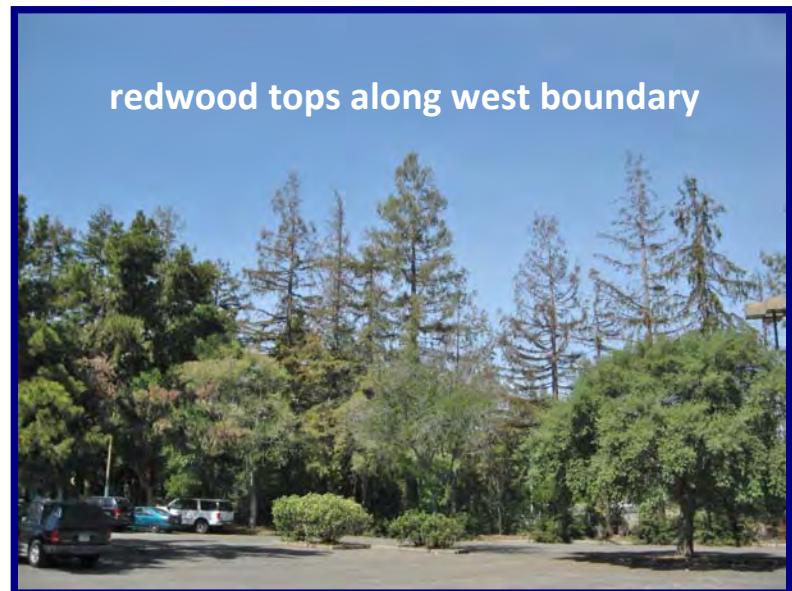
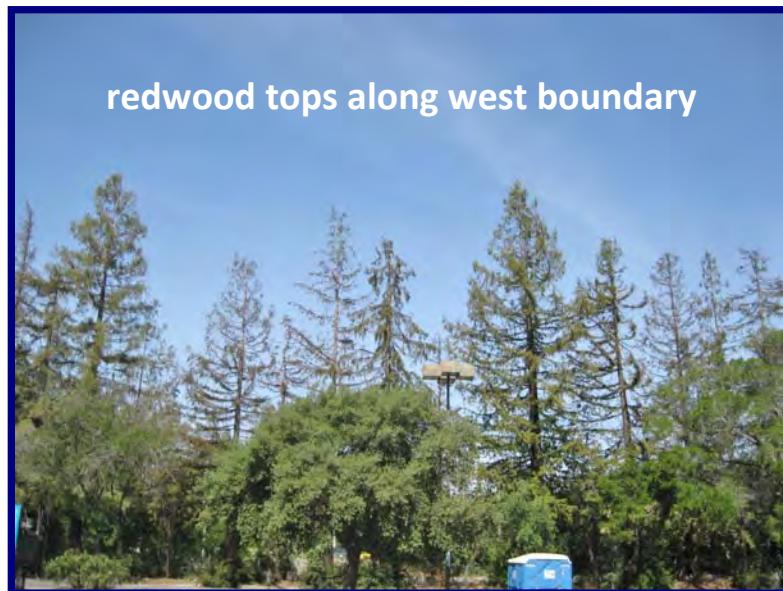
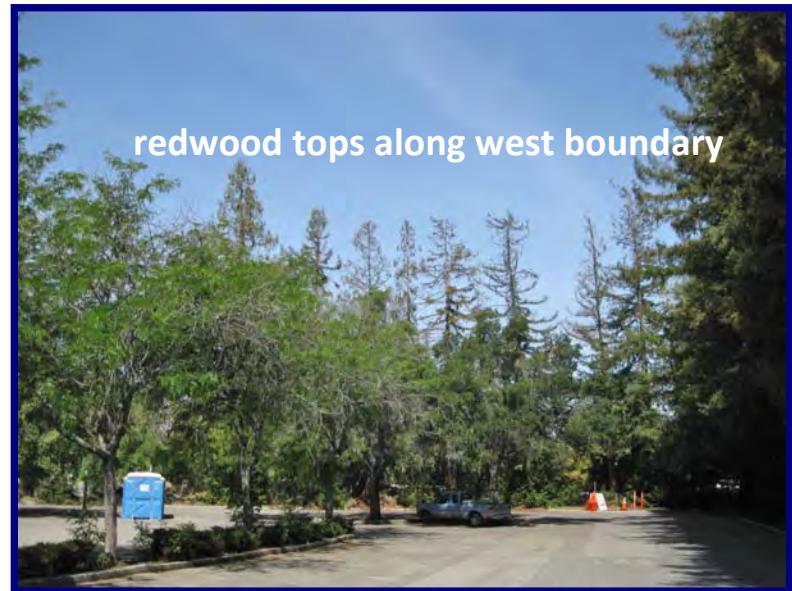
**Page C-11:** Trees #147 thru 150

**Page C-6:** Trees #103-110, 139











redwood tops along east boundary



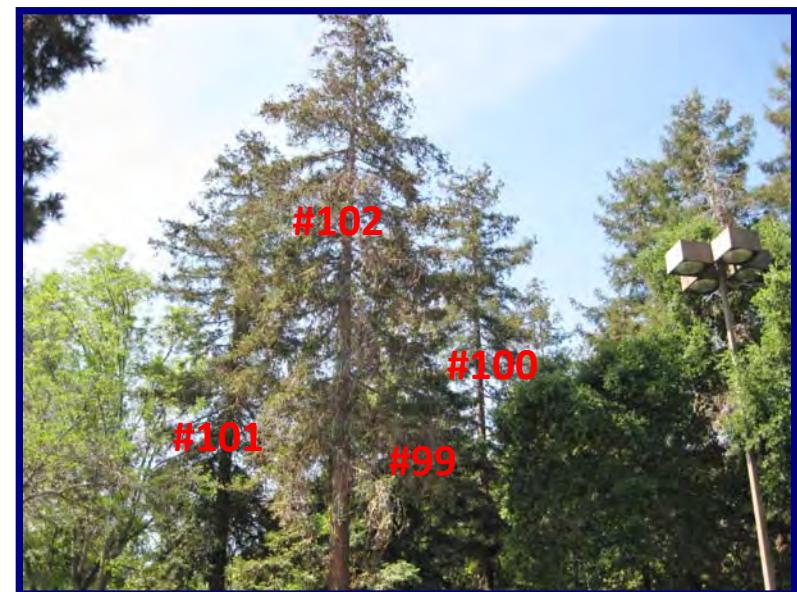
#96



#96



#98 - - - - - #90



#102

#100

#101

#99

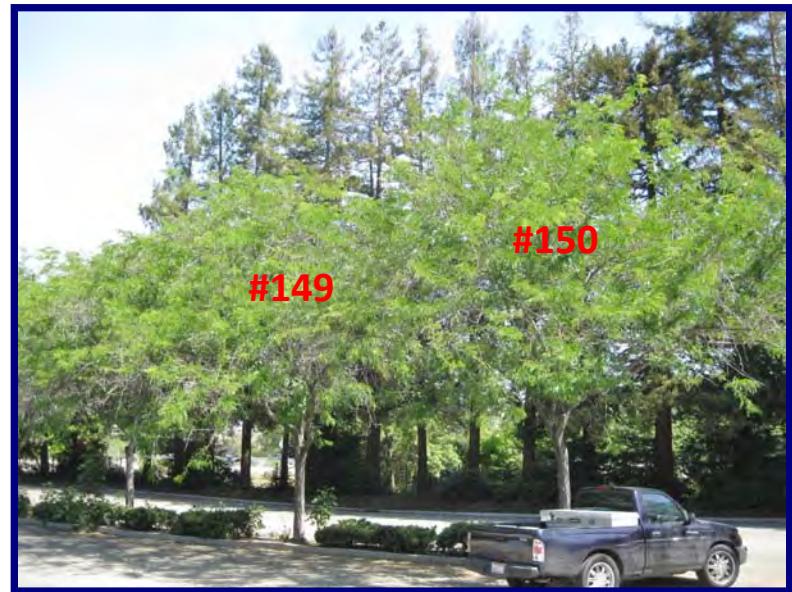














**Michael L. Bench**  
Consulting Arborist  
(831) 594-5151

7327 Langley Canyon Road  
Prunedale, California 93907

**A Peer Review of the Arborist Report  
The Hills at Vallco Project  
N. Wolfe Road and Stevens Creek Boulevard  
Cupertino, California**

**Assignment**

I was asked by Mr. Geoff Bradley, ACIP, Principal/President of M-Group and Assistant to the Planning Department, City of Cupertino, to conduct a Peer Review of the Arborist Report for The Hills at Vallco Project, Cupertino, California.

The Arborist Report was prepared by Mr. Walter Levison, ISA Certified Arborist and ASCA Registered Consulting Arborist. Mr. Levison states that he reviewed the exiting at this site in the Spring and Fall, 2015. Mr. Levison's Report is dated 10-5-15, Revised 10-30-15.

**Observations**

I inspected the trees at the site on November 16, 17, 2015.

I have worked with Mr. Levison on a few projects in previous years. I know Mr. Levison to be a well qualified arborist, competent, and thorough. At the initiation of this review, I had no reason to expect that Mr. Levison's work concerning this project was anything less than competent and thorough. For this reason, I did not look at each tree individually, and I did not take the time to review each tree with the detail prepared in Levison's report. I looked at groups of trees primarily, except when an individual tree would catch my eye. In those cases, I inspected those trees more closely.

This does not suggest that I agree with Mr. Levison concerning each tree. I found many trees, in which I would rate their overall condition (health/structural integrity) slightly lower than Levison.

Some trees have declined since Levison's report, despite the fact that the last revision was 10-30-15. For example, Levison reported the coast redwood (*Sequoia sempervirens*) Trees # 332, 333, 335, 501, 51, and 52 poor. These trees are now dead.

The Hills at Vallco  
N. Wolfe Road  
Cupertino, California

I observed the following trees to be dead, but it is possible that I may have overlooked 2-3. The current dead trees are: 17, 51, 52, 112, 113, 182, 203, 204, 209, 213, 218, 328, 332, 333, 335, 358, 479, 499, 500, 501, 502, 612, 659, 699, 700, 704, 709, 716, 718, 719, 812, 814, 815, 821, 827, and 1100. The majority of these are Coast Redwood (*Sequoia sempervirens*), which should not be surprising. Although *Sequoia sempervirens* is the State Tree, it is a very high water consumer. Most landscapes have cut back on water usage. Some have turned off landscape irrigation. Thirsty trees, for example, *Sequoia sempervirens* have declined or died in large numbers all over northern California. This is expected to continue.

On this property, the single and double row of *Sequoia sempervirens* adjacent to the West side property boundary are declining rapidly. I expect many more of these to be dead within a year.

Most of the *Sequoia sempervirens* specimens near the buildings still have a fairly dense canopies, but a close inspection suggests that these are all severely drought stressed. I expect many of these to decline sharply in the months ahead.

Another fairly high water consuming species, which was used extensively at this property, is Shamel Ash (*Fraxinus uhdei*). The majority of the street trees (Trees # 8-50) along Stevens Creek Boulevard and along N. Wolfe Road (Trees # 52-285 and Trees # 475-428) are Shamel Ash.. It appears that the irrigation has been maintained (perhaps with minor reduction), because the majority of these trees are still in Fair to Good health.

However, it must be stated that the majority of these mature Shamel Ash are reaching the end of their useful life. By this, they have grown to the point of using up most, if not all, of their limited soil growing space. Once the roots stop growing, because they have nowhere else to grow, the trees will start to decline. This is a slow process, but I expect virtually all of the Shamel ash street trees to decline and die intermittently within a few years ( 10-20 years estimated). Bear in mind, the Shamel ash species is well known for causing damage to sidewalks and infrastructure, especially as they mature.

The overwhelming majority of the trees in the interior of the site (parking areas primarily) and the trees on the West and East boundaries are in decline and are in fair to poor condition. This is in great part due to the reduction in irrigation, which is predicted to continue. Experts are saying that California demand has exceeded supply and this circumstance is not expected to change any time soon.

The Hills at Vallco  
N. Wolfe Road  
Cupertino, California

In my opinion, this is an opportunity to strategically and methodically remove the “thirsty trees” a few at a time, and to replace them with low or very low water consuming replacement trees and shrubs. Should this strategy be adopted for replacement, unfortunately it would not be workable to remove “thirsty” trees intermittently in a group of “thirsty” trees and to replant low water replacements. This would create an incompatible planting. If you irrigate sufficiently to maintain the “thirsty” trees in those areas, the low water consuming replacements would die from excess water. If you were to suddenly change the irrigation to meet the needs of the low water consuming trees, the “thirsty” trees would die. I would recommend that a new planting strategy of low water consuming plants must be done by water zones. All of the trees and plants within those zones must have similar needs. In places where this has been done successfully, it is usually done on the basis of a 5 or 10 year plan, or longer.

Levison “recommends avoiding any transplants of existing trees at the Vallco site” (P.24). I agree with this assessment. For example, the Holly oak (*Quercus ilex*) is in excellent condition. It is one that could be considered for transplant, except for the fact that specimens of the *Quercus ilex* species in recent years sometimes contract a disease, which is a mystery and is unidentified by plant pathologists. Experts do not know what the disease is and do not know what causes it. In my opinion, this makes a Holly oak, even in excellent condition, a questionable candidate.

The plan proposes to remove and replace 115 trees. In light of my previous comments, I think this number will be exceeded, not because of the proposed re-development, but because of the fact that this property, like so many other properties, were planted at time when it appeared that the supply of water would be plentiful. I suggest one of two strategies to arrive at a more realistic number.

1. Use the Tree List provided by Levison. All, if not most of those trees, which Levison has identified as having a health condition of 25% or less, I suspect will not survive the construction period.
2. Strategically remove and replace trees essentially all of the “thirsty” specimens with low water consuming specimens in planned areas that would coincide with the redevelopment plan and schedule.

Respectfully submitted,

Michael L. Bench, Consulting Arborist  
International Society of Arboriculture Certification # WE 1897A  
American Society of Consulting Arborists Member



**Walter Levison**  
CONSULTING ARBORIST

ASCA Registered Consulting Arborist #401

ISA Qualified Tree Risk Assessor



ISA Certified Arborist #WC-3172

Assessment of 895 Trees  
at  
The Hills at Vallco Project  
North Wolfe Road  
Cupertino, California

Prepared for:  
Vallco Property Owner LLC  
c/o Mr. Reed Moulds  
Sand Hill Property Co.  
2882 Sand Hill Road, Suite 241  
Menlo Park, CA 94025

Site Visits:

Walter Levison (WLCA)

Spring & Fall, 2015

Report:

Walter Levison

10/5/2015, Revised 10/30/2015



## Table of Contents

<b>1.0 Summary</b>	<b>3</b>
<b>2.0 Assignment &amp; Background</b>	<b>8</b>
<b>3.0 Observations &amp; Discussion</b>	<b>9</b>
<b>3.1 Predominant Tree Species at Vallco</b>	<b>9</b>
<b>3.2 Tree Condition Study</b>	<b>10</b>
<b>3.3 Drought Effects on Vallco Trees</b>	<b>11</b>
<b>3.4 Soil Moisture Deficit / Moisture Requirements</b>	<b>11</b>
<b>3.5 Ion Content in Recycled Water / Standards</b>	<b>13</b>
<b>3.6 Effects of Proposed New Utilities Plan on Woody Roots</b>	<b>16</b>
<b>4.0 Risk of Failure / Tree Risk Assessment Qualified (TRAQ)</b>	<b>18</b>
<b>5.0 Landscape &amp; Irrigation Pipe Installation Concerns</b>	<b>21</b>
<b>6.0 Tree Transplant Options</b>	<b>24</b>
<b>7.0 Consultant's Qualifications</b>	<b>25</b>
<b>8.0 Assumptions and Limiting Conditions</b>	<b>26</b>
<b>9.0 Certification</b>	<b>27</b>
<b>10.0 Tree Maintenance Vendors and Tree Sources</b>	<b>28</b>
<b>11.0 Digital Images Archived 9/25/2015 (WLCA)</b>	<b>29</b>
<b>12.0 Tree Maintenance Recommendations / Phase</b>	<b>38</b>
<b>13.0 Tree Protection Recommendations / Phase</b>	<b>40</b>
<b>14.0 Attached, Tree Data Charts Updated (WLCA)</b>	<b>48</b>
<b>15.0 Attached, Tree Location Map (2015, Olin Studio)</b>	<b>48</b>
<b>16.0 Attached, U.S. Forest Service Fact Sheet – Coast Redwood</b>	
	<b>48</b>



## 1.0 Summary

The following matrix summarizes existing conditions at the site, and includes detailed information on tree disposition related to the current proposed development entitled The Hills at Vallco. The information was too complex to be presented in standard bulleted format:

Line Number	Description	Details	Species	Condition Ratings	Municipal Protection Status?	Total Count
1	Total trees at site	875 trees plus 20 median trees along N. Wolfe	Various	Ranging from "dead" to "good"	None, except for six (6) trees as noted below on line 2.	895
2	Protected trees on site (City of Cupertino ordinance)	#260, 261, 262, 414, 415, 416	California sycamores	Fair to Good (see Excel tree data charts for more details)	Yes	6
3	Transplants initially proposed by team (WLCA suggests considering retaining the trees in-situ, or removing the trees.)	2 protected trees in medians (sycamores #260 and #416)	California sycamore (protected specimens)	Good and Fair respectively	Yes	2
4	Removals proposed by team  (Tag numbers noted in the updated WLCA Excel tree data charts attached to this report)	Direct conflicts with proposed demolition and new construction	Aleppo pine ( <i>Pinus halepensis</i> )  Canary Island pine ( <i>Pinus canariana</i> )  carrotwood or carob ( <i>Cupaniopsis</i> or <i>Ceratonia</i> )  coast redwood ( <i>Sequoia sempervirens</i> )  dollar gum ( <i>Eucalyptus polyanthemos</i> )	1  1  4  77  3	(Various condition ratings)	No  361



Line Number	Description	Details	Species		Condition Ratings	Municipal Protection Status?	Total Count
			evergreen pear ( <i>Pyrus kawakamii</i> )	15			
			fern pine ( <i>Podocarpus gracilior</i> )	15			
			<i>Ficus</i> species	7			
			flowering cherry cultivar ( <i>Prunus serrulata</i> Cult.)	1			
			flowering pear cultivar ( <i>Pyrus calleryana</i> Cult.)	8			
			giant sequoia ( <i>Metasequoia glyptostroboides</i> )	1			
			holly oak ( <i>Quercus ilex</i> )	3			
			Italian stone pine ( <i>Pinus pinea</i> )	18			
			Monterey pine ( <i>Pinus radiata</i> )	10			
			oak species ( <i>Quercus</i> sp.)	2			
			pine species ( <i>Pinus</i> sp.)	1			
			red oak ( <i>Quercus rubra</i> )	1			
			shamel ash ( <i>Fraxinus uhdei</i> )	163			
			southern magnolia ( <i>Magnolia grandiflora</i> )	17			
			species not identified (out of leaf, etc.)	4			
			strawberry tree ( <i>Arbutus</i> Cult.)	2			
			tulip tree ( <i>Liriodendron tulipifera</i> )	7			



**Walter Levison**  
CONSULTING ARBORIST



ASCA Registered Consulting Arborist #401

ISA Qualified Tree Risk Assessor

ISA Certified Arborist #WC-3172

Line Number	Description	Details	Species	Condition Ratings	Municipal Protection Status?	Total Count
5	Removals proposed by WLCA due to very poor overall condition ratings (in addition to those noted in line 4 above)	-----	(Tag Numbers) #51, 227, 281, 434, 435, 438, 185, 495, 496, 497, 521, 522, 523, 536, 555, 564, 567, 592, 597, 598, 603, 604, 605, 606, 607, 610, 628, 629, 631, 634, 635, 636, 637, 639, 646, 653, 654, 659, 660, 670, 671, 675, 677, 683, 684, 685, 689, 691, 699, 700, 702, 704, 705, 706, 707, 709, 711, 714, 716, 717, 718, 719, 720, 721, 722, 724, 726, 728, 731, 732, 735, 736, 758, 763, 764, 768, 810, 812, 813, 814, 815, 821, 827, 834, 836, 843, 853, 873, 1119		No	89
6	West perimeter road trees in vicinity of trenching.  Various tag numbers (#571 to #871, etc.)  Tree disposition: Unknown until building set of plans is available for review.	Proposed utility trenching per street plan sheet P-0506  Expect potential negative impacts to trees if utilities not installed using pit to pit directional bore technology	Coast redwoods, shamel ash, etc.	Various	No	300+



Line Number	Description	Details	Species	Condition Ratings	Municipal Protection Status?	Total Count
7	East side of east perimeter road. Various tag numbers (#518 to #570, etc.) Tree disposition: Unknown until building set of plans is available for review.	Proposed utility trenching per street plan sheet P-0506 Expect potential negative impacts to trees if utilities not installed using pit to pit directional bore technology	Shamel ash, Chinese elm, etc.	Various	No	50+
8	Potential root loss to trees along east side of alternate lot west. Various tag numbers (#953 to #1,049, etc.)	Proposed utility trenching per street plan sheet P-0506 Proposed new water line route (if the utility is not installed using pit to pit directional bore technology)	Coast redwood	Various	No	100+



Line Number	Description	Details	Species	Condition Ratings	Municipal Protection Status?	Total Count
9	Potential root loss to trees along N. Wolfe Rd.  Tree tags #1106, 1107, 1108	Proposed utility trenching per street plan sheet P-0506  Proposed new storm drain line trench along N. Wolfe Rd. (if the utility is not installed using pit to pit directional bore technology)	Southern magnolia	"Fair"	No	3
10	Potential root loss to trees along east side of N. Wolfe Rd.  Tree tag numbers #430, 431, 432, 433, 434 435, 437, 438, 439	Proposed utility trenching per street plan sheet P-0506  Proposed communication line trench running north-south between freeway 280 and Block 12 development (if the utility is not installed using pit to pit directional bore technology)	Giant sequoia, coast redwood, shamel ash  (Note that author WLCA suggests considering some trees in this grouping for removal, such as #434, 435, and 438, per line 5 of this matrix).	Ranges from 'very poor' to 'good'.	No	9



Line Number	Description	Details	Species	Condition Ratings	Municipal Protection Status?	Total Count
11	Conceptual Landscape plan and Irrigation plan impacts to existing trees (as applicable)	Only limited impact assessment was performed by WLCA, due to the conceptual nature of the current designs shown on proposed plan sheets available as of the date of writing.	WLCA reviewed tree species proposed for use by the landscape architect Olin Studio, and offered alternatives to some species or cultivars deemed inappropriate. WLCA also offered limited analysis of potential landscape and irrigation trenching impacts to existing trees. See section 5.0 of this report below.			

## 2.0 Assignment & Background

Walter Levison, Consulting Arborist (WLCA) was initially retained by Vallco Property Owner LLC (VPO) to tag and assess 895 trees throughout the existing site that extends from perimeter road west to perimeter road east, and from freeway 280 to Stevens Creek Boulevard, Cupertino, California, including median trees along North Wolfe adjacent to the Vallco site. The east boundary of the survey area was a property owned by Apple Inc. The west boundary of the survey area was a developed single family residential area. Tags in this area are tagged #1 through #875 (round-shaped tags), with median trees tagged as #1,106 through #1,125 (racetrack-shaped tags) along N. Wolfe Road.

WLCA's initial work product consisted of an Excel tree data set in PDF format, along with digitally marked up tree location maps, delivered to VPO in spring, 2015. The initial proposed development set of plans for The Hills at Vallco had not yet been developed at that time, and was not available for review.

A secondary tree study was also completed by WLCA, which involved tagging, assessing, and locating on a topo sheet all trees located north of the Vallco site in a triangular lot known as 'alternate lot west', situated between the northwest corner of the Vallco shopping center property and freeway 280. Trees in this area were tagged as trees #876 through #1,105, with round-shaped tags to #1,000, and racetrack-shaped tags for trees numbering greater than 1,000. N. Wolfe Road median trees #1,106 through #1,125 were added at this time, using the racetrack-shaped tags as noted above.

WLCA was later retained in September 2015 to prepare a formal written arborist report that was to include the following items:

- a) Review the DropBox set of proposed plan sheets as available in September 2015. If possible, note conflicts where initial proposed utilities and construction may impact trees being retained, and discuss adjustments to the plans as applicable.



- b) Update the existing Excel tree data spreadsheet to note an "X" in removal column indicating tree to be removed.
- c) Discussion of trees to be retained and trees to be removed, including species overviews, condition ratings, etc.
- d) Note trees protected per Cupertino City Tree Ordinance being retained and removed.
- e) Note trees suggested by WLCA to be removed due to very poor condition.
- f) Note possible adjustments to the scope of construction to optimize tree survival and/or preserve important trees on the site as applicable (see also item 'a' above).
- g) Note irrigation and soil moisture deficit concerns and options.
- h) Note tree part failure risk concerns.
- i) Archive digital images of some important or otherwise noteworthy tree specimens and include those images in the report.
- j) Attach the updated Excel tree data charts and a master tree location basemap to the report.
- k) Prepare recommendations for transplanting on-site for significant sized trees that are expected to be removed as a result of site plan work, with new install locations to be noted by Consultant on the proposed site plan drawings. Specifications for holding trees in boxes, etc. (i.e. "box holding" recommendations for irrigation, maintenance, etc.).
- l) Recommendations for tree protection and maintenance based on arboriculture BMPs, with phased protection and maintenance conforming to the current proposed demolition and construction phases 1, 2, and 3.

All of the above items are included in this written report. Most of the information has been presented in matrix form, for ease of reference. The updated WLCA tree data sheets (Excel format) are attached to this report. Olin Studio's single PDF landscape plan sheet P0601 "existing tree conditions", based off WLCA's original Spring 2015 rough-plot tree location maps, is attached to this report for reference of existing tree locations.

### 3.0 Observations & Discussion

Existing trees at the Vallco site (not including alternate lot west):

#### 3.1 Predominant Tree Species at Vallco

Tree Species	Number of individuals	Percent of total tree population of 895
Shamel ash ( <i>Fraxinus uhdei</i> )	399	45%
Coast redwood ( <i>Sequoia sempervirens</i> )	319	36%
Pine species (mainly <i>Pinus radiata</i> and <i>Pinus pinea</i> )	65 (approx.)	7%

As seen above, the tree population percentages of coast redwood and shamel ash along the Vallco property perimeter are far too high for a stable urban forest situation. In an ideal world, we would stratify the population out using a large number of tree genera and species to guard against pest and disease outbreaks (and abiotic issues such as drought conditions) that could potentially wipe out a large percentage of the tree population.



The existing monoculture type planting was from an earlier era when the Vallco site was originally built out and planted using mainly coast redwood and shamel ash. These trees are very heavy water users, and have been suffering for years during the continuing California drought conditions with subnormal rainfall. Supplemental very heavy irrigation on a regular basis throughout the year is crucial to keeping coast redwood and shamel ash alive and vigorous. However, the ash and redwood specimens at Vallco have not been receiving this level of irrigation, and are spiraling into decline and in many cases death.

At this time, the property owner is not proposing any significant alterations to the perimeter tree populations on Vallco property, and the screening benefit of the perimeter trees will remain as long as individual trees are alive and thriving. Note also that many of these trees are not actually on Vallco property and are within a public utility right of way (personal communication, Vallco property owner 10/23/2015).

### 3.2 Tree Condition Study

Overall Tree Condition Ratings for Two Main Species in Population  
(Not including alternative lot west)

Tree Species	Number of individuals	Dead	Very Poor	Poor	Fair	Good	Excellent
Coast redwood	319	15	52	74	110	66	2
Percent of redwood population	(100%)	5%	16%	<b>23%</b>	<b>34%</b>	21%	<1%
Tree Species	Number of individuals	Dead	Very Poor	Poor	Fair	Good	Excellent
Shamel ash	399	2	65	161	156	15	0
Percent of Shamel ash population	(100%)	<1%	16%	<b>40%</b>	<b>39%</b>	4%	0%

Interestingly, the above study shows somewhat of a bell curve form, where most of the tree individuals rated out with overall condition ratings in the middle portion of the rating range (range is from dead (0%) to excellent (90% to 100%). If droughty conditions continue in California with subnormal natural rainfall this winter, many of these trees could continue spiraling into decline and end up with all ratings in the dead, very poor, and poor portion of the rating range, unless very heavy irrigation were to be commenced at this time and continued regularly through the entire winter.



### 3.3 Drought Effects on Vallco Trees

Given the current low soil moisture conditions that have been present in the San Francisco Bay Area for multiple years now, and continued subnormal natural rainfall conditions, the moisture available to the coast redwood and shamel ash tree root zones at Vallco is very minimal. This has resulted in chronic loss of live twig density and live foliar density in the trees, which is expressed visually as desiccated, dead patches of canopy seen in the trees, especially in the outermost, uppermost sections of the tree canopies of individual specimens along the east and west sides of the west perimeter road (see images below in this report).

It is not clear whether tree vigor (new live twig and foliar growth) will be or can be boosted through either very heavy, sustained supplemental irrigation of the trees' root zones, or through natural rainfall finally occurring after the (existing) prolonged period of subnormal soil moisture. Generally, trees that decline to an overall condition rating of poor (i.e. less than 50%) will not increase in vigor until very heavy irrigation is applied over an extended period of 6, 12, or even 18 months<sup>1</sup> to the trees' entire root zone areas. Even after this type of serious irrigation regime commences and is continued for the extended period, the trees may still not respond favorably, and will continue to decline.

High quality irrigation water with low ionic content needs to be available for supplemental irrigation of coast redwoods. See section 3.5 below for more information.

### 3.4 Soil Moisture Deficit / Moisture Requirements

#### Shamel Ash and Coast Redwood Moisture Requirements

In order to keep coast redwood and shamel ash specimens from declining in live twig density, live twig extension, and live foliar density over time, a very heavy irrigation regime will need to be set in place as an over-grade no-dig type system placed over the ground throughout the open soil root zones of individual trees and groupings of these trees being retained at Vallco.

Although the actual volume of supplemental water to be applied per week per coast redwood specimen varies with soil conditions, weather, solar exposure, and other issues, the following is a set of rough guidelines for water application based on the author's experience. Note that use of a heavy mulch of coarse chipper truck type wood chips lain over the



<sup>1</sup> Levison, Walter. Professional consulting experience with irrigation of coast redwoods on construction sites on South Bay and Peninsula, Bay Area locations, between 1999 and 2015.



ground surface in a 4 to 6 inch thick layer can significantly reduce evaporation, and thereby help reduce supplemental irrigation needs:

Supplemental Irrigation	Per Week	Per Month, Year-Round (See "Winter Tier")	
1. Tier 1 "Optimal" for an individual coast redwood	Suggest 1x/week irrigation event	20 gallons per each 1 inch of trunk diameter	Based on the Barrie D. Coate and Associates published standard
2. Tier 2 Moderate level (OK for trees with grafted root systems, etc.)	Suggest 1x/week irrigation event	10 gallons per each 1 inch of trunk diameter	
3. Tier 3 During water use restriction periods	Suggest 1x/week irrigation event	5 gallons per each 1 inch of trunk diameter	
4. Tier 4 During Winter Storms (regular heavy rain events)		Temporary shutoff of irrigation system OK between December and March, depending on intensity of and frequency of rain events.	
5. Optional: Fog, Spray, or Mist Systems	(3x to 7x/week)		

WLCA generally recommends that irrigation events occur once weekly (1x/week) throughout the entire "open soil sections of the root zones" of the trees, which may be as large as 25 feet radius or more in some cases. The trees' root zone areas need to be allowed to "dry down" as water percolates through the uppermost few feet of the soil profile, and is then used by the trees (transpired) or evaporates into the atmosphere (evaporation from open soil). As noted above in this section, use of mulch is beneficial if a layer 4 inches thick can be placed over the open soil root zone areas of the trees, between approximately 1 foot out and 25 feet out from the trunks of the trees.

**Optionally, we could install some type of fogging system to augment moisture uptake by the trees by adding fog water to some lower canopy or mid canopy locations. Redwoods in their natural range along the Northern California coast and Oregon coast forests derive a significant**



percentage of their water moisture through direct acquisition of fog water through their needles<sup>2</sup>. Thus, use of a fogging system could potentially be of great benefit to the trees, if such a system could be affixed to locations near canopies at varying elevations above grade. Above are images of aerial sprinkler or aerial misting systems that were in actual use on local peninsula Bay Area project redwood specimens (images courtesy of Ray Morneau, Consulting Arborist). The images shown in this report section show materials used to build a

misting system, with the system activated and running in the last of the three images. These systems would require a substantial initial investment in piping, mistheads, and labor to install, but have been beneficial in terms of increasing tree survival during hot or windy periods, according to other arborists and nurserymen I spoke with in 2015.

### 3.5 Ion Content in Recycled Water / Standards

Many municipalities such as San Jose and Palo Alto are using recycled water as a regular component of their City parks irrigation regime. However, this does come with known drawbacks. Coast redwoods are known to be sensitive to ion concentrations in soil water per the text referenced below<sup>3</sup>. The text notes that coast redwood has low tolerance of boron ion in recycled water. Ion sensitivity of coast redwood as related to other ions such as



<sup>2</sup> Burgess SSO, Dawson TE (2004). *The Contribution of Fog to the Water Relations of Sequoia sempervirens (D. Don): Foliar Uptake and Prevention of Dehydration*. Plant Cell Environ. 27:1023-1034.

<sup>3</sup> Costello, Perry, Matheny, Henry, and Geisel (2003). *Abiotic Disorders of Landscape Plants: A Diagnostic Guide*. UC ANR Publication 3420. ANR Communications Services. Oakland, California.



sodium, chloride, or ammonium was not specifically noted in the text. However, per the author's conversations with numerous city arborists and consulting arborists in the Bay Area, coast redwood appears to have low tolerance of specific ionic content in water in addition to boron ion.

The following table derived from information in the below-referenced text provides some guidelines for total ion content of various ions in recycled water at levels that could be deemed "safe" for trees with low tolerance (high ion sensitivity), although this is only a guideline, and was published more than 10 years ago:

Irrigation Water Ion	Type of Measurement	Content Range Considered "Safe"	Unsafe for Tree Species with Low Tolerance to Stated Ions
TDS Total Dissolved Solids	Mg/l	<450	450 to 2,000
Salinity	Mmhos/cm	<0.7	0.7 to 3.0
Boron	Mg/l	<0.5	0.5 to 1.0
Chloride (surface bubbler irrigation)	Mg/l	<140	140 to 300
Chloride (sprinkler irrigation)	Mg/l	<100	>100
Sodium (surface bubbler irrigation)	SAR	<3	3 to 9
Sodium (sprinkler irrigation)	Mg/l	<70	>70

Salinity tolerance of various tree species proposed in the Hills project tree palette by OLIN is noted in the reference shown in this report as citation #3. WLCA is in communication with OLIN staff to discuss salinity tolerance issues.

## EXISTING REDWOODS

The new project does not proposed to use recycled water for irrigation of the existing redwoods being retained as perimeter screening (personal communication 10/23/2015, Mr. Steve Lynch, Sand Hill Property Co.). Therefore, the ionic content of irrigation water appears (at the time of writing) to be an issue with new proposed tree plantings only.



## USE OF RECYCLED WATER BLEND AND FLUSHING SEQUENCES

To reduce ion content in irrigation water to acceptable levels per the above matrix guidelines, recycled water with high ion content can be blended with standard municipal drinking water prior to running it through irrigation systems for surface application to trees. Per the Vallco property owner, this blending will be performed seasonally during non water-restriction periods in order to comply with local regulations regarding potable water use for landscapes during drought periods.

Another “trick” that can be performed to reduce ionic content remaining in the root zones of trees is to use recycled water for a number of irrigation cycles (e.g. 4 to 9 cycles), then “flush” the root zones by using a 5<sup>th</sup> or 10<sup>th</sup> irrigation cycle of 100% municipal drinking water (anecdotal reference). This would require that a very detailed record of irrigation be maintained by a groundsperson on site, to record exactly when recycled water and drinking water was applied to very specific landscape zones. Both recycled water and drinking water would need to be available side by side as irrigation system inputs with manual levers that would be operated by the groundsperson.

## OAK TREES BEING INSTALLED

Per discussions with Apple Inc.’s arborist Mr. Dave Muffly who is an expert in oak tree selection and cultivation, oak species being installed at The Hills should be provided with municipal drinking water as the irrigation water source, without any blending with recycled water. This is recommended to avoid potential problems with ion sensitivity by the oaks. Mr. Muffly notes that the Apple Campus 2 project will not use recycled water for irrigation of the oaks (AC2 campus is also within the jurisdiction of City of Cupertino, and has recycled water piping that will be used for irrigation of non-oak landscape zones).

As regards The Hills roof planting area where many oak species will be installed at Vallco, we may need to develop a special dual piping system which will allow for recycled water and standard drinking water sources to be piped up separately. This would allow the two water sources to be applied in an alternating manner and/or blended in a tank prior to being applied to sensitive species such as the oaks and fruit bearing orchard trees, to reduce the overall ionic content being applied to the landscape over time.

## WEEPING WILLOW AND FREMONT COTTONWOOD AT ROOF DRAINAGE SWALES

The Abiotic Disorders text (citation #3) noted above in this report contains a list of various tree species along with referenced scientific studies during which salinity and boron tolerance was determined for certain species. Per this list, Fremont cottonwood, proposed to be installed at The Hills in swales where runoff collection will occur, exhibit “moderate” to “high” tolerance of salinity (i.e. ionic concentrations) in recycled water, which would suggest that they can tolerate soil moisture derived from runoff water that may contain higher than normal ionic concentration. Weeping willow, also proposed by the project team for inclusion in drainage runoff swales at our site, also appears to exhibit “moderate” to “high” tolerance of ionic concentration in irrigation water, which also suggests tolerance to runoff water as the main source of their root zone soil moisture. Even so, WLCA suggests considering removal of these two species from the proposed plant palette list, given that they require heavy irrigation year round to maintain vigor.



## RECYCLED WATER EFFECTS ON FRUIT-BEARING ORCHARD TREES

Per the text referenced in citation #3 in this report, fruit-bearing tree species proposed by the team for the rooftop orchard which will be for human consumption are noted in the text as exhibiting "low" relative tolerance to ionic content in recycled water used for irrigation. Given that fruit bearing orchard trees generally require heavy irrigation, this is of concern if recycled water is going to be used on the Hills greenroof where the orchard areas will be located. As noted above in this section of the report, blending recycled water with municipal drinking water can bring down ionic concentration to levels below the safe thresholds noted above in the matrix. Flushing the tree root zones by use of 100% drinking water on a periodic basis may also be a viable method of reducing ionic concentration buildup in the root zones of the trees, such as the example WLCA noted of 4 to 9 irrigation cycles using recycled water, followed by a 5<sup>th</sup> or a 10<sup>th</sup> irrigation cycle using 100% municipal drinking water (anecdotal reference).

Per the author's recent conversation with a Northern California soil scientist who specializes in orchard soils, the inability for fruit trees such as cherry, apricot and apple to tolerate ion content in recycled water used for irrigation appears to be verified. Blending and/or other dilution is warranted.

Again, use of a dual piping system to bring up both standard drinking water and recycled water sources to the greenroof may be able to solve the problem of ionic content in recycled water being applied to the orchard areas, as it will allow us to blend the two sources of water and/or apply them to the landscape in an alternating manner to flush salts through the soil.

WLCA suspects that over time, municipal recycled water may become of increasingly higher quality in terms of ionic content being reduced to below the low-tolerance sensitivity threshold of 0.7 Mmhos/cm salinity. Refer to the ionic content table on page 14 above for more information.

## 3.6 Effects of Proposed New Utilities Plan on Woody Roots

The negative effect of proposed new utility trenching per project sheet P-0506 on existing trees to be retained could be significant to severe, depending on the actual final sprayed routes of these utility trenches. The current plan sheet shows utilities as conceptual routing only, and it is therefore difficult to determine actual impacts to specific trees. However, WLCA did note various groupings of trees and expected (potential) impacts to those trees from utility trenching, in the summary matrix section 1.0 lines #6 through #10 above in this report.

Typical woody lateral root growth extends from trees at least 3X to 5X the canopy dripline radius per previously published arboriculture science texts. This growth is generally present between grade elevation (i.e. soil surface) and down to approximately 24 inches below grade in our western Bay Area urban clay-based soils, though in some cases, older redwoods and oaks can achieve large diameter woody root growth at depths as far as 50 to 60 inches below grade<sup>4</sup>

For tree stability maintenance, it is acceptable to sever roots at locations within 25 to 30 feet of large diameter coast redwoods and shamel ash. However, utility trenching within 25 feet of those trees may cause severe negative impacts to the trees' health and structural condition, resulting in premature decline and/or death. In those cases where utilities need to be routed within 25 feet of large trees being retained, WLCA suggests using pit to pit directional bore technology whereby conduit is pushed and pulled **below** the root systems of trees being retained, thereby allowing for

<sup>4</sup> Levison, Walter. Professional experience on Bay Area construction sites from 1999 to 2015.



**Walter Levison**  
CONSULTING ARBORIST

ASCA Registered Consulting Arborist #401

ISA Qualified Tree Risk Assessor



ISA Certified Arborist #WC-3172

almost complete root preservation when done correctly. See image of pit to pit directional bore in action below on one of my projects in the Bay Area. In this particular case, the bore started above ground, and ended at a pit. Typical method would be to start and end at a small dug pit.





## 4.0 Risk of Failure / Tree Risk Assessment Qualified (TRAQ)

Prior to the newer International Society of Arboriculture (ISA) TRAQ system (tree risk assessment qualified) coming into place as the new international standard for tree part and whole tree failure risk assessment, arborist consultants referred to an older numeric system of 12 points which consisted of:

- Failure potential of identified part (1 to 4 points)
- Size of part (1 to 4 points)
- Target rating (1 to 4 points)

The final numeric "hazard rating" derived from this system ranged from 3 to 12 points<sup>5</sup>.

The newer system is based on alpha-type ratings, and requires the tree risk assessor to attend a rigorous training class sponsored by the ISA, after which the assessor takes a final exam.

Assessors that pass the final exam are then given the title "tree risk assessment qualified", after which time they are allowed to use the published system and its components<sup>6</sup> and prepare information on tree risk in written reports. Qualified tree risk assessors must retake the qualification course and exam every few years to renew status as tree risk assessment qualified.

The basic TRAQ process has been amalgamated into a matrix below (next page) for readers of this report.

Note that TRAQ risk ratings are derived after consideration of various different failure modes (e.g. branch, scaffold limb, mainstem, whole tree) and different targets such as vehicles, pedestrians, bicyclists, residential structures, commercial buildings, etc. Target frequency and duration at a specific target zone, such as cars and pedestrians stopped at a traffic light, are considered when determining target "occupancy", in order to determine risk of tree part failure and impact of that tree or tree part onto that specific target at that moment when the target is occupying the target zone radius.

<sup>5</sup> Matheny, Nelda and Clark, James. 1994. *Evaluation of Hazard Trees in Urban Areas*. 2<sup>nd</sup> edition. International Society of Arboriculture, Urbana, Illinois.

<sup>6</sup> Duster, Julian et. al. 2013. *Tree Risk Assessment Manual*. International Society of Arboriculture, Champaign, Illinois.



## TRAQ Protocol Amalgamation

Likelihood of Failure	Likelihood of Impacting Target				
	Very Low	Low	Medium	High	
<i>Imminent</i>	Unlikely	Somewhat Likely	Likely	Very Likely	
<i>Probable</i>	Unlikely	Unlikely	Somewhat Likely	Likely	
<i>Possible</i>	Unlikely	Unlikely	Unlikely	Somewhat Likely	
<i>Improbable</i>	Unlikely	Unlikely	Unlikely	Unlikely	
<b>Improbable:</b>	The tree or branch is not likely to fail during normal weather conditions and may not fail in many severe weather conditions.				
<b>Possible:</b>	Failure could occur, but it is unlikely during normal weather conditions.				
<b>Probable:</b>	Failure may be expected during normal weather conditions.				
<b>Imminent:</b>	Failure has started or is most likely to occur in the near future, even if there is no significant wind or increased load.				
<b>Very Low:</b>	Remote chance that failure will impact target. Rarely used site fully exposed; occasionally used site partially protected. Rarely used trail or trailhead in a rural area, or an occasionally used area that has some protection due to other trees between the failure and the target.				
<b>Low:</b>	Not likely that failure will impact target. Occasionally used area fully exposed; frequently used area partially exposed; constant target well protected. EX: a little-used service road next to the tree, or a frequently used street with a street tree between the assessed tree and the street.				
<b>Medium:</b>	Even odds that failure will impact target. Frequently used area fully exposed on one side of tree; constantly occupied area partially protected. EX: suburban street next to street tree, or a house partially protected by an intermediate tree.				
<b>High:</b>	Likely that the failure will contact the target. A fixed target is fully exposed. EX: near a high-use road or walkway with an adjacent street tree.				
Likelihood of Failure and Impact	Consequences				
	Negligible	Minor	Significant	Severe	
<i>Very Likely</i>	Low	Moderate	High	Extreme	
<i>Likely</i>	Low	Low	Moderate	High	
<i>Somewhat Likely</i>	Low	Low	Low	Moderate	
<i>Unlikely</i>	Low	Low	Low	Low	
<b>Negligible:</b>	low value damage or disruption, no personal injury.				
<b>Minor:</b>	low to moderate damage, small disruptions to traffic or communication lines, or very minor personal injury.				
<b>Significant:</b>	moderate to high value damage, considerable disruption, or personal injury.				
<b>Severe:</b>	high value damage, major disruption, severe personal injury or death.				



Approximately 360 trees at the Vallco site are proposed to be removed from the interior sections of the existing property, and approximately 90 additional trees are proposed by WLCA to be removed due to very poor overall condition or structural and/or health issues that are unmitigable, for a total of approximately 450 potential removals. This leaves a total of approximately 450 trees to remain on site, mainly coast redwoods and shamel ash, along the perimeters of the site that are vulnerable to proposed construction damages in terms of both subgrade impacts to roots from trenching, soil compaction, etc. and above-grade physical impacts to the trunk tissues and canopy live wood and foliage.

Use of WLCA and/or other arborists as monitors will help minimize risk of tree damages that could increase risk of whole tree and tree part failure and impact to targets.

Designing around trees to avoid deep excavation, trenching, grading, construction, and other work within 20 horizontal feet of trunk edges can go a long way toward reducing impacts to the trees being retained, and reducing risk of tree failure and impact to targets.

Given the existing issue of soil moisture deficit (i.e. "drought stress") and lack of adequate irrigation to boost soil moisture within the root zones of trees being retained, WLCA expects that many of the trees to remain may actual become moderate risk or high risk specimens over time due to their premature decline in terms of loss of live twig density. As an example of our current risk exposure and future risk of tree failure and impact to targets as related to irrigation, WLCA offers the following sample risk assessment of a typical coast redwood along the west perimeter road:

#### SAMPLE RISK ASSESSMENT FOR A TYPICAL VALLCO COAST REDWOOD TO REMAIN

Typical coast redwood specimen / Mode of Failure	Location	Condition (Average existing)	Likelihood of failure	Likelihood of impacting target pedestrians and cars	Likelihood of failure and impact	Consequences	Risk of Failure and Impact (Existing)
#772 to #871 Failure Mode: <b>Branch</b>	West side of west perimeter road	Fair	Possible	High	Somewhat Likely	Significant	Low
Typical coast redwood specimen / Mode of Failure	Location	Condition (Future estimated)	Likelihood of failure (Future est.)	Likelihood of impacting target pedestrians and cars	Likelihood of failure and impact	Consequences	Risk of Failure and Impact (Future est.)
#772 to #871 Failure Mode: <b>Whole Tree</b>	West side of west perimeter road	<b>Very Poor</b> <i>(if trees not heavily irrigated year round)</i>	Probable	High	Likely	Severe	High



## EXISTING "ELEVATED RISK" TYPE TREES

Although outside of the initial scope of WLCA's tree assessment assignment, it is noteworthy that some existing trees exhibiting significant lean off from vertical, girdling roots, and/or woody buttress roots severed one or more side of the root plate during landscape irrigation pipe trenching and/or sidewalk replacement could be categorized as "elevated risk" type trees that currently rate out as moderate or high risk of failure and impact to target. These include trees such as, but not limited to:

**Trees #434, 435, 438, 726, 1109, 1110, 1111, 1112, and 1115.**

Many of these elevated-risk type trees are included in the group of trees suggested to be removed per WLCA in summary matrix 1.0 line 5, or are to be removed outright due to site plan conflicts. However, N. Wolfe Road median shamel ash specimen **#1115**, for example, is proposed to remain per the current proposed site plan tree disposition sheet.

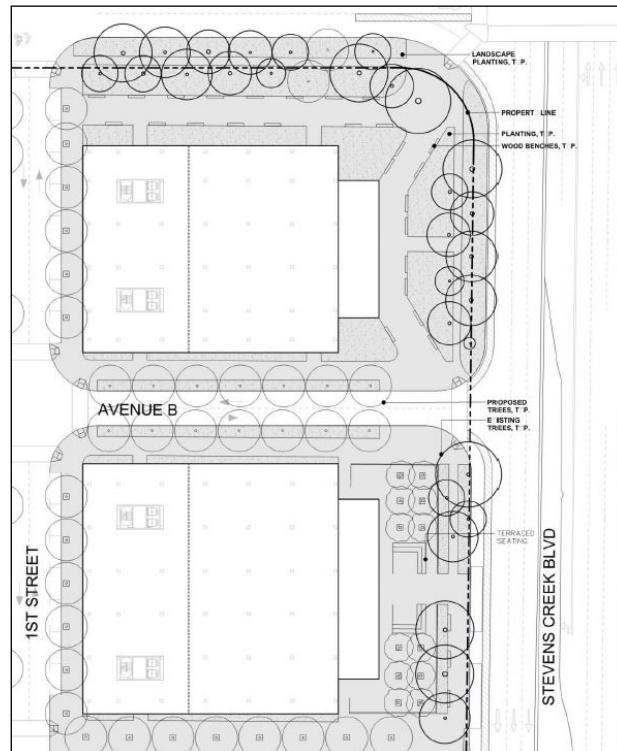
There may be many additional trees that become "elevated risk" specimens due to root loss, root damage, and continued soil moisture deficit, during the actual construction of phases 1, 2, and 3 at The Hills at Valco project over time. Use of heavy irrigation at the site starting now (Fall 2015) may be very beneficial in the long run in terms of reducing dieback and lengthening expected useful lifespan of the trees by providing good soil moisture to trees being retained.

## 5.0 Landscape & Irrigation Pipe Installation Concerns

### Demolition of Existing Planters / Concerns:

Demolition of existing curbs, planting areas, asphalt parking stall surface materials, etc. to make way for new landscaping may cause significant or severe damage to the below ground portions of trees being retained such as shamel ash at the southwest end of the site along the south boundary of the existing SEARS parking lot. The image capture at right shows a portion of project team sheet P-0609 main entry area landscaping proposed for this southwest corner area of The Hills project:

Some of the trees such as those circles drawn along the hard black line property boundary that rings the site are shamel ash specimens being retained, while other trees drawn on this sheet by the landscape architect are proposed new "in-fill" trees to augment existing screening.





WLCA's main concern in areas such as this involves demolition crew activities during removal of surface hardscape and deep curbs, which may be comingled with existing woody tree root systems. When pulling out the curbs and hardscape piece by piece, these roots may become tangled with the machinery bucket teeth and be pulled, ripped, or otherwise destroyed or damaged in the process. Therefore, an arborist monitor is suggested during demolition of any material within approximately 20 feet of a tree to be retained. As noted above in this report, we know that woody tree roots can extend laterally as far as 3x to 5x the canopy dripline distance from the trunk edge, which means that a 20 foot radius canopy tree may theoretically have roots extending as far as 60 to 100 feet radius out from trunk, even under asphalt, if there are no physical impediments to growth extension such as deep curbs or deep foundation footings.

### Irrigation Pipe Trenching / Concerns:

New irrigation pipe trenching will need to be performed in a manner that allows for maximum lateral woody root retention when within 20 horizontal feet of trees being retained such as those shown in the image above near Stevens Creek Blvd. Toward this end, we will need to modify the standard (typ.) municipal code 18 inch depth of cover spec detail used in most jurisdictions for schedule 40 PVC piping, and instead use one of the following options:

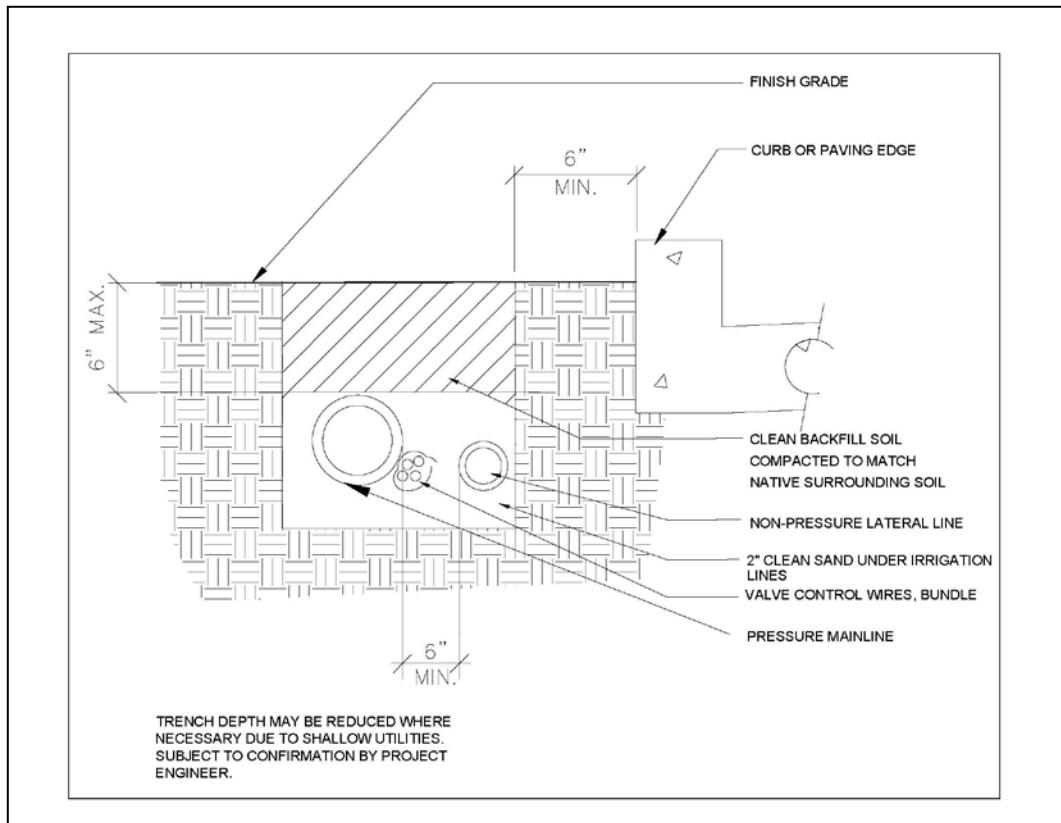
- a. Option 1: "No Dig". This irrigation type uses flexible  $\frac{1}{2}$ " diameter tubing that starts at a PVC riser at 20 feet or farther from a tree trunk of a tree being retained, and proceeds to snake over the ground to locations within 20 feet of a trunk of an existing tree where irrigation is needed. Bubblers are either affixed to the tubing itself, or to offshoot  $\frac{1}{4}$ " diameter tubing with bubblers. There is also emitter line that is available in  $\frac{1}{2}$ " diameter, with built in bubblers, though these tend to clog easily.

The no-dig option is optimal in terms of protecting lateral tree roots extending out from existing trees. However, vandalism is always a problem. The tubing can be buried slightly by covering it with a 4 inch thick layer of wood chip mulch to avoid some vandalism, but further measures may need to be taken to keep the tubing flush with the soil surface, such as pinning down the tubing with professional grade steel landscape U-pins, etc. See image at right.





- b. Option 2: "Six Inch Cover" Rule: Use a modified specification such as a setup where a maximum of six (6) inches of soil cover is specified as the maximum allowable vertical space between top of newly installed PVC irrigation pipe and original soil grade elevations, within 20 feet of a tree trunk. At right is a sample specification side cut detail showing this setup that was used for a recent project where new landscaping was to be installed within 20 feet of valuable cedar specimens being retained in Palo Alto, California. See sample spec image below (copyright Sandis Civil).





## 6.0 Tree Transplant Options

Transplanting, depending on whether a tree is immediately moved and installed at another location, or is boxed up and held above ground with temporary irrigation for a number of months or years prior to permanent reinstallation at the transplant site, can cost on the order of \$5,000 to \$20,000 per tree for larger trees (e.g. a 15 inch diameter coast live oak, for example). Thus, the costs of transplant are generally infeasible in terms of the cost of transplant versus appraised dollar value of the tree.

Typically, smaller diameter trees such as those 10 inches trunk diameter or less, in good overall condition (i.e. 70% overall condition rating or better), with upright, symmetrical branch and limb architecture are the best candidates for transplant.

Larger diameter trees, older trees, trees in poor or fair condition, and specimens with asymmetrical root systems, sloping root systems on a non-level slope, and those which exhibit asymmetrical above-ground branch architecture, are for the most part not good transplant candidates.

Trees currently proposed by the project team for transplant include two (2) protected-size California sycamore specimens protected by City tree ordinance:

1. **Sycamore #260.** This tree is in good overall condition, but is of relatively large diameter at over 15 inches diameter. The tree is an older specimen, and exhibits lean to the northeast as well as a canopy lopsided to the northeast.

The asymmetrical nature of the tree's above-ground architecture, plus the fact that the root system could be limited or asymmetrical in the median planting area that it currently resides in, are negative factors when considering the tree for transplant. I suggest attempting to work around the tree, and retaining it during construction, rather than attempting to transplant this specimen. See the images section below in this report which shows the severe westward lean of the canopy.

2. **Sycamore #416.** This tree is in fair overall condition (50% out of 100% possible points), which is the lowest possible "fair" rating just 1 point above the threshold for "poor" (49%).

The tree exhibits a lopsided canopy that extends eastward, and also exhibits a severe girdling root issue that downgraded the structural value of the tree to a 30%. This girdling root issue caused the overall condition rating to be bumped down to a 50%.

Trees with lopsided canopies, and limited or otherwise asymmetrical root systems such as this tree with its girdling root problem, are poor candidates for transplant, especially since the overall condition rating is only 50%. Again, I suggest trying to retain the tree and work around it during construction. See the images section below which shows the tree's eastward lopsided canopy.

In summary, WLCA recommends avoiding any transplants of existing trees at the Vallco site. If trees #260 and #416 are required to be removed due to issues related to conflicts with proposed new construction, then remove the trees, or redesign the project to work around the trees. Note that many trees currently proposed to be retained may need to be removed due to root loss and root damage that could occur during construction activities, especially during utility installations if those pipes and conduits are not installed using pit to pit bore technology to avoid trenching.



**Walter Levison**  
CONSULTING ARBORIST

ASCA Registered Consulting Arborist #401

ISA Qualified Tree Risk Assessor



ISA Certified Arborist #WC-3172

## 7.0 Consultant's Qualifications

- ISA Tree Risk Assessment Qualified
- ASCA Registered Consulting Arborist #401
- Millbrae Community Preservation Commission (Tree Board)  
2001-2006
- ASCA Arboriculture Consulting Academy graduate, class of 2000
- ISA Certified Arborist #WC-3172
- B.A. Environmental Studies/Soil and Water Resources  
UC Santa Cruz, Santa Cruz, California 1990
- Peace Corps Soil and Water Conservation Extension Agent  
Chiangmai Province, Thailand 1991-1993
- Associate Consulting Arborist  
Barrie D. Coate and Associates  
4/99-8/99
- Contract City Arborist, City of Belmont Planning and Community Development Department  
5/99-present
- Continued education through attendance of arboriculture lectures and forums sponsored by The American Society of Consulting Arborists, The International Society of Arboriculture (Western Chapter), and various governmental and non-governmental entities.

(My full curriculum vitae is available upon request)



## 8.0 Assumptions and Limiting Conditions

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

It is assumed that any property is not in violation of any applicable codes, ordinance, statutes, or other government regulations.

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

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

Unless required by law otherwise, the possession of this report or a copy thereof does not imply right of publication or use for any other purpose by any other than the person to whom it is addressed, without the prior expressed written or verbal consent of the consultant/appraiser.

Unless required by law otherwise, neither all nor any part of the contents of this report, nor copy thereof, shall be conveyed by anyone, including the client, to the public through advertising, public relations, news, sales, or other media, without the prior expressed conclusions, identity of the consultant/appraiser, or any reference to any professional society or institute or to any initiated designation conferred upon the consultant/appraiser as stated in his qualifications.

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

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

Unless expressed otherwise:

- a. information contained in this report covers only those items that were examined and reflects the conditions of those items at the time of inspection; and
- b. the inspection is limited to visual examination of accessible items without dissection, excavation, probing, or coring. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the plants or property in question may not arise in the future.

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

### *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 to seek additional advice.

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



**Walter Levison**  
CONSULTING ARBORIST

ASCA Registered Consulting Arborist #401

ISA Qualified Tree Risk Assessor



ISA Certified Arborist #WC-3172

take such considerations into account unless complete and accurate information is disclosed to the arborist. An arborist should then be expected to reasonably rely upon the completeness and accuracy of the information provided.

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

## 9.0 Certification

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

Signature of Consultant



## 10.0 Tree Maintenance Vendors and Tree Sources

Service	Company	What they offer	Contact
Transplanting	Tree Movers Inc.	Large specimen trees, transplant services.	650-968-6117
	Valley Crest Tree Co. tree moving division	Large specimen trees, transplant services.	818-223-8500
Pruning	Advanced Tree Care	Pruning, root crown excavation, fertilization, tree installation, support systems for high risk trees, SOD phosphate sprays.	650-839-9539
	Maguire Tree Care	Pruning performed directly by an ISA Certified Arborist	650-245-2620
	Trees 360	Pruning performed directly by an ISA Certified Arborist (upon request).	408-866-1010
	Commercial Tree Care	Pruning of very high quality if request ISA Certified Arborist Joe Nama to directly monitor pruning work.	408-985-TREE
	The Shady Tree Co.	High quality pruning.	650-326-0406 <a href="http://www.theshadystreecompany.com">www.theshadystreecompany.com</a>
Special Tree Sources	Specialty Oaks Lower Lake, CA	California native oak species	<a href="http://www.specialtyoaks.com">www.specialtyoaks.com</a>
	Oracle Oak Nursery	Various oaks and hybrid elms. Only local purveyor of hard to find Italian oak ( <i>Q. fainetto</i> 'Forest Green'). Can also order <i>Quercus fainetto</i> directly from the grower in Oregon which is JF Schmidt.	<a href="http://www.oracleoaknursery.com">www.oracleoaknursery.com</a>
	Sweet Lane Wholesale Nursery Santa Rosa, CA	Can import rare oaks such as the fantastic 'Forest Green' Hungarian oak, from Oregon growers.  Also may be able to request the excellent Cathedral live oak ( <i>Quercus virginiana</i> 'Cathedral')	<a href="http://www.sweetlanenursery.com">www.sweetlanenursery.com</a>
	J.F. Schmidt & Son Co. Oregon	Is the actual grower of the 'Forest Green' Hungarian oak ( <i>Quercus fainetto</i> 'Forest Green'). Order direct from them and have trees shipped into California from their grow site in Oregon	<a href="http://www.jfschmidt.com/introduction/forestgreen/index.html">http://www.jfschmidt.com/introduction/forestgreen/index.html</a> (503) 663-4128
	L.E. Cooke Nursery	Current local source of the rare 'Roberts' sycamore: a cultivar of deciduous California sycamore that is reported to be resistant to both powdery mildew and sycamore anthracnose, while exhibiting fast upright growth appropriate for urban landscape conditions.	<a href="http://www.lecooke.com/cms/contact-le-cooke.html">http://www.lecooke.com/cms/contact-le-cooke.html</a> Visalia, CA (800) 845-5193



**Walter Levison**  
CONSULTING ARBORIST

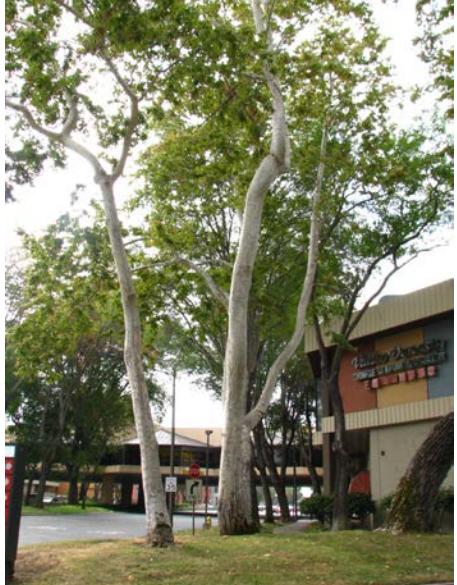
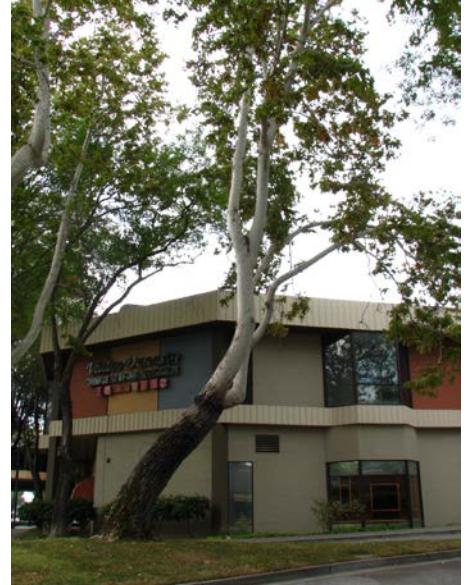
ASCA Registered Consulting Arborist #401

ISA Qualified Tree Risk Assessor



ISA Certified Arborist #WC-3172

## 11.0 Digital Images Archived 9/25/2015 (WLCA)

Tree #	Image	Tree #	Image
285 to 289 to be removed, looking northeast		277 to 284 to be retained, looking north	
261 and 262 to be retained, looking south		Sycamore 260 initially proposed by team to be transplanted. WLCA suggests removal of tree, or redesign the plan to work around it.	



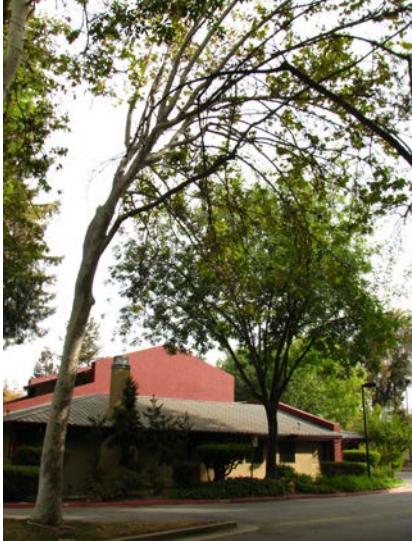
**Walter Levison**  
CONSULTING ARBORIST

ASCA Registered Consulting Arborist #401

ISA Qualified Tree Risk Assessor



ISA Certified Arborist #WC-3172

Tree #	Image	Tree #	Image
414 and 415 to be retained		416 initially proposed by the project team to be transplanted (WLCA suggests removal, or redesign the project to work around it)	
426 to 444 along west side of Alexander's Steakhouse  Some of these trees are to remain, and others are suggested by WLCA to be removed due to safety (risk) concerns		Close-up of the roots severed along the west side of tree 438, (suggested by WLCA to be removed), during sidewalk replacement.	



Tree #	Image	Tree #	Image
Sidewalk heave (vertical displacement) along the east side of tree 431 to be retained. Infrastructure such as this with roots likely travelling under the hardscape should be left in-situ instead of being removed (if possible), since severe root loss could occur if the walk were rebuilt. Use diamond grinding to level.		Redwoods 423, 424, 425 to be removed at the steakhouse parking lot.	
Italian stone pines in JC Penny parking lot, looking south.		Example of redwoods and ash specimens 332, 333, and 335 in very poor condition due to soil moisture deficit, at the JC Penny parking lot.	



**Walter Levison**  
CONSULTING ARBORIST

ASCA Registered Consulting Arborist #401

ISA Qualified Tree Risk Assessor



ISA Certified Arborist #WC-3172

Tree #	Image	Tree #	Image
Trees 338 to 358 to be removed along the east side of the JC Penny parking lot.		Chinese elms and other trees being retained 521 to 541, looking south along the Apple Inc. property.	
Redwoods 500, 501, and 502 are dead in the southeast corner of the JC Penny parking lot area. These trees are planned to be removed.		In contrast to dead redwoods 500, 501, and 502 shown in the image at left, redwoods 505 and 510 at right are in decent condition just 30 or 40 feet west. The trees are to be removed.	
Shamel ash and redwoods 396 to 404 to be removed at the west side of JC Penny parking lot		Shamel ash 452 to 457 to be removed from the east side of N. Wolfe Rd.	



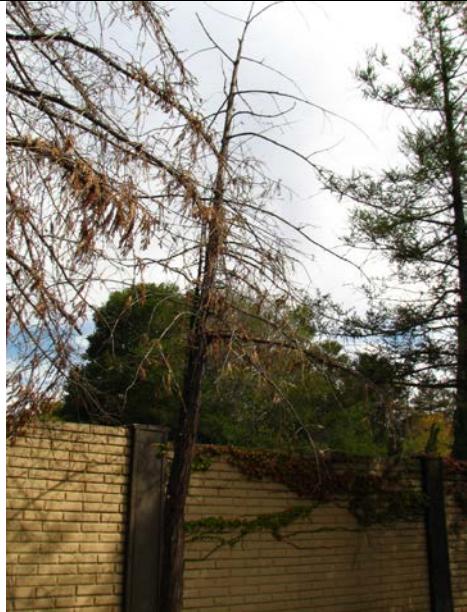
**Walter Levison**  
CONSULTING ARBORIST

ASCA Registered Consulting Arborist #401

ISA Qualified Tree Risk Assessor



ISA Certified Arborist #WC-3172

Tree #	Image	Tree #	Image
Close-up of tree 267 to be removed, which exhibits a severe girdling root issue due to planting strip width which severely restricted normal lateral root extension from the trunk		Grove of redwoods 204 to 218 to be removed just west of Dynasty Restaurant.	
Looking south down west perimeter road, at rows starting with tree 240 on left (row to be removed), and 703 at right (row to be retained)		Redwood specimens along the west side of west perimeter road are suffering severely from soil moisture deficit, and are generally declining or dying	



Tree #	Image	Tree #	Image
Monterey pine 726 rates out with a probable risk of failure due to lean, girdling roots, etc. This tree is in WLCA's suggested removal list.		Looking south along west perimeter road, again with trees on left to be removed (tree 165 southward), and trees on right to be retained (tree 771 southward)	
The dense screen along the west side of west perimeter road as shown here near tree 771 is in danger of dying due to soil moisture deficit. Replacement of these high water use trees with drought tolerant evergreen species is a viable option.			<p>Looking south along west perimeter road.</p> <p>The trees at right are trees 752 southward, and 852 southward, and are currently proposed to be retained.</p> <p>Trees along the left side (east side) of west perimeter road are to be removed.</p>



Tree #	Image	Tree #	Image
<p>Shamel ash trees 8 and 9 to be retained at the southwest corner of the Valco site.</p> <p>Note curb and asphalt displacement from root growth. If this hardscape is removed and replaced, severe root loss and root damage may result, ending in further tree decline or death.</p>			
<p>Shamel ash 23 to 36 to be retained, looking southeast.</p>		<p>Shamel ash 42 to 50 to be retained along south border.</p> <p>Looking southeast.</p>	



Tree #	Image	Tree #	Image
Monterey pine 51 at southeast corner of the Vallco site. This tree is dead, and needs to be removed at this time as a high risk of failure and impact to targets.		Looking north at shamel ash 55, 57, 59, 61, 63, 65 to be retained.	
Southern magnolias 1106, 1107, 1108 proposed by the project team to be retained, are in decline due to severe soil moisture deficit, and may need to be removed.		Looking north at shamel ash 102, 103, 104, and 105 to be retained. Note canopy dieback in the form of live twig density decline.	



**Walter Levison**  
CONSULTING ARBORIST

ASCA Registered Consulting Arborist #401

ISA Qualified Tree Risk Assessor



ISA Certified Arborist #WC-3172

Tree #	Image	Tree #	Image
Looking northeast at shamel ash 459 to 475 to be retained along the east side of N. Wolfe Rd.		Long-lived, drought tolerant oak species like these two existing holly oaks 97 and 98 to be removed at Vallco are the types of trees we should be installing on the proposed Hills at Vallco project.	



## 12.0 Tree Maintenance Recommendations / Phase

The following matrix shows all tree maintenance recommendations by WLCA for those trees located south of the alternate lot west area. Note:

- Trees being removed as shown on the proposed tree disposition plan sheet P-0602 are not included in this list.
- Trees recommended to be removed by WLCA due to very poor condition, extreme lean, etc. are not included in this list (see list of eighty nine (89) WLCA-recommended removals in section 1.0 matrix, line 5, above in this report).

Line Number	Maintenance Action Suggested	Tree Tag Number	Phase
1	Branch endweight reduction pruning on lengthy sections of canopy	#8, 9, 104, 414, 442	Prior to phase 1 demolition.
2	Arborist cable and/or bracing installation per ANSI A300 support system standards	#443	Prior to phase 1 demolition.
3	Verify spring 2016 leafout of tree. If no leafout occurs, then remove tree as "dead"	#17, 518, 554	May, 2016.
4	Arborist monitor tree for stability and for declines in vigor (recent pre-project trenching or other work in 2015 resulted in root damage to many of these trees, the impacts of which may be significant or severe)	#225, 226, 228, 282, 283, 285, 454, 459, 460, 463, 465, 468, 469, 473, 475, 695, 737, 744, 865, 1115, 1122, 1123, 1124, 1125.	2x/year.
5	Remove one of two existing codominant mainstems at the fork, by an ISA Certified Arborist, per ANSI A300 pruning standards.	#246	Prior to phase 1 demolition.



**Walter Levison**  
CONSULTING ARBORIST



ASCA Registered Consulting Arborist #401

ISA Qualified Tree Risk Assessor

ISA Certified Arborist #WC-3172

Line Number	Maintenance Action Suggested	Tree Tag Number	Phase
6	<p>Commence heavy weekly irrigation over root zone, and continue through winter. Rate of approx. 25 to 100 gallons per tree per week, year-round.</p> <p>Consider use of aerial based sprinkler systems and/or aerial based misting systems to be installed in redwood specimens.</p>	(All trees to remain)	As soon as possible, continuing 1x/week minimum, year-round.
7	Add 4 inch layer of chipper truck type wood chips over soil to reduce irrigation water evaporation. Pull mulch out at least 6 to 12 inches away from trunk edges to avoid moisture retention at root crown.	(All trees to remain)	Prior to start heavy periodic irrigation.
8	Remove electrical utility company guy wire and strapping that is surrounding the trunk.	#669	Call utility representatives to schedule this for prior to start of phase 1 demolition.



## 13.0 Tree Protection Recommendations / Phase

Phase:	Acronym:
Phase 1 Demolition	1D
Phase 1 Construction	1C
Phase 2 Demolition	2D
Phase 2 Construction	2C
Phase 3 Demolition	3D
Phase 3 Construction	3C

Line Number	Protection Action	Sample Image	Tree Tag Number	Phase
1	<p>ROOT PROTECTION FENCE –</p> <p>5-foot high chain link, hung on 7-foot long 2-inch diameter iron tube posts driven 24-inches into the ground, max. 6 feet spacing on-center.</p>		<p>219, 220, 221, 239, 240, 241, (245 through 251), 277, 278, (280 through 292), (571 through 703), (1114 through 1125).</p> <p>(Not including individual trees in this group that are to be removed per author recommendation in report section 1.0 line 5).</p>	1D, 1C
2	<p>TRUNK BUFFER –</p> <p>20 wraps of orange plastic with wood boards overlaid and duct taped in place around the wood</p>		<p>260, 261, 262, plus all trees at the outermost portions of the tree root zone protection fence sections that face construction work.</p>	1D, 1C



Line Number	Protection Action	Sample Image	Tree Tag Number	Phase
3	WOOD CHIP MULCH –  4 inch thick layer of chipper truck type wood chips (not bark chips). Place over entire open soil root zone areas, and pull 6 to 12 inches away from tree trunk edges.		Where possible, all trees to remain	1D, 1C
4	IRRIGATION TEMPORARY  Heavy 1x/week  25 to 100 gallons per tree, per week, minimum, year-round		Where possible, all trees to remain	1D, 1C
5	ROOT PRUNING  Back-dig around exposed roots, and prune at right angle to root growth direction, removing all broken, shattered, or otherwise damaged sections of roots		Where applicable during excavation, trenching, grading, etc.	1D, 1C
6	HARDSCAPE REMAIN  Allow existing hardscape areas to remain, where possible, to avoid root loss and root damage. Arborist monitoring required during demolition within 20 feet of trunk.		219, 220, 221, 239, 240, 241, (245 through 251), (260?), 261, 262, 277, 278, (280 through 292)	1D, 1C



**Walter Levison**  
CONSULTING ARBORIST



ASCA Registered Consulting Arborist #401

ISA Qualified Tree Risk Assessor

ISA Certified Arborist #WC-3172

Line Number	Protection Action	Sample Image	Tree Tag Number	Phase
7	PIT TO PIT DIRECTIONAL BORE for all trenching, including utilities, drain pipes, downspout drain lines, etc., for all trenches within 20 feet of trunks of trees being retained.		Various, along west perimeter road and N. Wolfe Rd.	1D, 1C
8	IRRIGATION PERMANENT Use no-dig over grade tubing, or max. of "6 inch cover within 20 feet of trees" as blurb-specified on all plans.		All areas	1D, 1C



Line Number	Protection Action	Sample Image	Tree Tag Number	Phase
9	<b>ROOT PROTECTION FENCE –</b>  5-foot high chain link, hung on 7-foot long 2-inch diameter iron tube posts driven 24-inches into the ground, max. 6 feet spacing on-center.		(7 through 36), (42 through 65), (69 through 88), (746 through 754), (840 through 871), 317, 318, 319, 426, 427, 430, 431, 432, 433, 435, 435, 437, 438, 439, 442, 443, 444 (518 through 546), (550 through 570).  <i>(Not including individual trees in this group that are to be removed per author recommendation in section 1.0 line 5).</i>	2D, 2C
10	<b>TRUNK BUFFER –</b>  20 wraps of orange plastic with wood boards overlaid and duct taped in place around the wood		317, 318, 319, 426, 427, 430, 431, 432, 433, 435, 435, 437, 438, 439, 442, 443, 444, 451, 452, 454, 414, 415, (416?), 740, 741, 742, 743, 744, 745, 1106, 1107, 1108, plus all trees at the outermost portions of the tree root zone protection fence sections that face construction work),	2D, 2C



Line Number	Protection Action	Sample Image	Tree Tag Number	Phase
11	WOOD CHIP MULCH –  4 inch thick layer of chipper truck type wood chips (not bark chips). Place over entire open soil root zone areas, and pull 6 to 12 inches away from tree trunk edges.		Where possible, all trees to remain	2D, 2C
12	IRRIGATION TEMPORARY  Heavy 1x/week  25 to 100 gallons per tree per week minimum, year-round		Where possible, all trees to remain	2D, 2C
13	ROOT PRUNING  Back-dig around exposed roots, and prune at right angle to root growth direction, removing all broken, shattered, or otherwise damaged sections of roots		Where applicable during excavation, trenching, grading, etc.	2D, 2C



Line Number	Protection Action	Sample Image	Tree Tag Number	Phase
14	HARDSCAPE REMAIN  Allow existing hardscape areas to remain where possible, to avoid root loss and root damage. Arborist monitoring required during demolition within 20 feet of trunk.		8, 9, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 33, 35, 43, 45, 47, 49, 52, 54, 56, 58, 60, 62, 64, 69, 70, 71, 73, 75, 77, 79, 81, 83, 85, 87, 88, 317, 318, 319, 426, 427, 430, 431, 432, 433, 435, 435, 437, 438, 439, 442, 443, 444, 451, 452, 454, 414, 415, (416?), (740 through 745)	2D, 2C
15	PIT TO PIT DIRECTIONAL BORE for all trenching, including utilities, drain pipes, downspout drain lines, etc., for all trenches within 20 feet of trunks of trees being retained.		Various, along N. Wolfe Rd., east perimeter road, north perimeter road, and west perimeter road.	2D, 2C
16	IRRIGATION PERMANENT  Use no-dig over grade tubing, or max. of "6 inch cover within 20 feet of trees" as blurb-specified on all plans.		All areas	2D, 2C



Line Number	Protection Action	Sample Image	Tree Tag Number	Phase
17	<b>ROOT PROTECTION FENCE –</b>  5-foot high chain link, hung on 7-foot long 2-inch diameter iron tube posts driven 24-inches into the ground, max. 6 feet spacing on-center.		102, 102, 104, 105, (459 through 475), 671, 672, 673, (704 through 839)  <i>(Not including individual trees in this group that are to be removed per author recommendation in report section 1.0 line 5).</i>	3D, 3C
18	<b>TRUNK BUFFER –</b>  20 wraps of orange plastic with wood boards overlaid and duct taped in place around the wood		102, 102, 104, 105, (459 through 475), plus all trees at the outermost portions of the tree root zone protection fence sections that face construction work)	3D, 3C
19	<b>WOOD CHIP MULCH –</b>  4 inch thick layer of chipper truck type wood chips (not bark chips). Place over entire open soil root zone areas, and pull 6 to 12 inches away from tree trunk edges.		Where possible, all trees to remain	3D, 3C



Line Number	Protection Action	Sample Image	Tree Tag Number	Phase
20	IRRIGATION TEMPORARY  Heavy 1x/week  25 to 100 gallons per tree per week minimum, year-round		Where possible, all trees to remain	3D, 3C
21	ROOT PRUNING  Back-dig around exposed roots, and prune at right angle to root growth direction, removing all broken, shattered, or otherwise damaged sections of roots		Where applicable during excavation, trenching, grading, etc.	3D, 3C
22	HARDSCAPE REMAIN  Allow existing hardscape areas to remain where possible, to avoid root loss and root damage. Arborist monitoring required during demolition within 20 feet of trunk.		102, 102, 104, 105, (459 through 475)	3D, 3C
23	PIT TO PIT DIRECTIONAL BORE for all trenching, including utilities, drain pipes, downspout drain lines, etc., for all trenches within 20 feet of trunks of trees being retained.		Various, along N. Wolfe Rd., and west perimeter road.	3D, 3C



**Walter Levison**  
CONSULTING ARBORIST



ASCA Registered Consulting Arborist #401

ISA Qualified Tree Risk Assessor

ISA Certified Arborist #WC-3172

Line Number	Protection Action	Sample Image	Tree Tag Number	Phase
24	IRRIGATION PERMANENT Use no-dig over grade tubing, or max. of "6 inch cover within 20 feet of trees" as blurb-specified on all plans.		All areas.	3D, 3C

## 14.0 Attached, Tree Data Charts Updated (WLCA)

## 15.0 Attached, Tree Location Map (2015, Olin Studio)

## 16.0 Attached, U.S. Forest Service Fact Sheet – Coast Redwood

Tree #/g#	To be Removed Per Current Status	Author Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (Inches @ 54° A.G. (+2.54*4.5))	Reported Trunk Diameter (inches) & Condition (e.g. Crotch Rot, Decay, etc.)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Tree Density (Very Low, Low, Mod, High, Ex.)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Out Evidences (Note/Elevation)	Topped or Severely Pruned on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note/Elevation)	Codominant Measurements with Dominant Main Trunk(s) (Note/Height)	Root Extension Restricted in Past	Soil Moisture Deficit (% at height Stress*)	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
1	X			13.0					13.0			Shamel ash	<i>Fraxinus uhdei</i>	30/18	20/30	25% very poor	poor											
2	X			10.9					10.9			Shamel ash	<i>Fraxinus uhdei</i>	25/20	50/35	40% poor	moderate			7								
3	X			13.9					13.9			Shamel ash	<i>Fraxinus uhdei</i>	30/25	60/45	50% fair	moderate											
4	X			16.6					16.6			Shamel ash	<i>Fraxinus uhdei</i>	35/30	55/60	57% fair	moderate											
5	X			22.0					22.0			Shamel ash	<i>Fraxinus uhdei</i>	45/45	75/60	66% fair	good			12								
6	X			13.3					13.3			Shamel ash	<i>Fraxinus uhdei</i>	35/15	50/35	43% poor	moderate											
7				27.6					27.6			Monterey pine	<i>Pinus radiata</i>	55/30	65/65	65% fair	moderate											
8				19.9					19.9			Shamel ash	<i>Fraxinus uhdei</i>	55/30	70/60	64% fair	moderate	W									Needs endweight reduction pruning	
9				26.2					26.2			Shamel ash	<i>Fraxinus uhdei</i>	55/40	60/50	55% fair	poor to mod					GR					Needs endweight reduction pruning	
10				27.0					27.0			Shamel ash	<i>Fraxinus uhdei</i>	55/30	60/50	55% fair	poor to mod	N										
11				28.8					28.8			Shamel ash	<i>Fraxinus uhdei</i>	55/30	60/60	60% fair	moderate	S				GR						
12				20.2					20.2			Shamel ash	<i>Fraxinus uhdei</i>	55/25	55/50	53% fair	poor to mod	E										
13				22.2					22.2			Shamel ash	<i>Fraxinus uhdei</i>	55/25	60/50	55% fair	poor to mod	S										
14				24.7					24.7			Shamel ash	<i>Fraxinus uhdei</i>	60/28	60/60	60% fair	moderate	N										

Tree Tag #	To be Removed Per Current Steward Author Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54° A.G. (+2.54*#*4.5)	Reported Tree Trunk Diameters at 54° Angle at Ground Level of Current Tree Core (10.0 single stem, 20+ multi, various specified species, and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating Range (0=100% health)	Overall Condition Rating (0=100%)	Live Wt. Density (Very Low, Low, Med, High, Very High)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Out Edition (Note Elevation)	Topping or Severe Pruning on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sapwood Decay (Note Elevation)	Coprafruit Measurements and/or Internal Health (Note Height)	Root Extension Restricted in Painter	Soil Volume Deficit ("Soil Depth Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
15			24.6					24.6			Shamel ash	<i>Fraxinus uhdei</i>	60/30	60/45	55% fair	moderate	N										
16			20.6					20.6			Shamel ash	<i>Fraxinus uhdei</i>	55/30	55/55	55% fair	moderate	N										
17			17.7					17.7			Shamel ash	<i>Fraxinus uhdei</i>	45/25	0/0	0% dead (not verified)		S									Verify tree condition once spring leafout is complete in April/May.	
18			31.6					31.6			Shamel ash	<i>Fraxinus uhdei</i>	60/30	65/48	59% fair	moderate	N				GR	10 to 12					
19			18.2					18.2			Shamel ash	<i>Fraxinus uhdei</i>	45/25	60/50	55% fair	moderate	S										
20			21.5					21.5			Shamel ash	<i>Fraxinus uhdei</i>	50/35	55/55	55% fair	poor to mod											
21			17.0					17.0			Shamel ash	<i>Fraxinus uhdei</i>	35/20	50/60	55% fair	moderate	S				GR						
22			32.3					32.3			Shamel ash	<i>Fraxinus uhdei</i>	55/50	75/65	70% good	good	NE										
23			24.5					24.5			Shamel ash	<i>Fraxinus uhdei</i>	55/30	65/40	50% fair	moderate	S	30		GR							
24			29.7					29.7			Shamel ash	<i>Fraxinus uhdei</i>	55/40	65/50	60% fair	moderate	N			GR							
25			20.7					20.7			Shamel ash	<i>Fraxinus uhdei</i>	50/30	55/45	50% fair	moderate	SE	30		serious GR							
26			20.2					20.2			Shamel ash	<i>Fraxinus uhdei</i>	35/35	50/50	50% fair	moderate	N			GR							
27			25.8					25.8			Shamel ash	<i>Fraxinus uhdei</i>	55/35	65/50	57% fair	moderate	S										
28			36.9					36.9			Shamel ash	<i>Fraxinus uhdei</i>	60/40	75/45	60% fair	good	N			GR							

Tree ID #	To be Removed Per Current Status	Author Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (Inches @ 54° A.G. (1.254*4.5))	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Wt. Density (Very Low, Low, Med, High, Ex-High)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Splitout Evidence (Note Elevation)	Burred Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note Elevation)	Colonization Measurements (Note Height)	Root Extension Restricted in Painter	Soil Moisture Deficit (% at Night Stress*)	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)		
29				32.3					32.3		Shamel ash	<i>Fraxinus uhdei</i>	60/35	70/50	60% fair	good	S											
30				29.5					29.5		Shamel ash	<i>Fraxinus uhdei</i>	50/40	60/55	59% fair	good	NE											
31				6.3					6.3		Shamel ash	<i>Fraxinus uhdei</i>	18/10	40/30	35% poor	moderate	S									Stunted		
32				17.9					17.9		Shamel ash	<i>Fraxinus uhdei</i>	55/35	60/40	50% fair	moderate	N											
33				26.0					26.0		Shamel ash	<i>Fraxinus uhdei</i>	55/35	60/50	57% fair	moderate									Diameter estimated.			
34				24.0					24.0		Shamel ash	<i>Fraxinus uhdei</i>	50/25	50/40	45% poor	?	S									Tree out of leaf. Condition estimated.		
35				23.3					23.3		Shamel ash	<i>Fraxinus uhdei</i>	55/25	60/55	57% fair	moderate	N											
36				26.6					26.6		Shamel ash	<i>Fraxinus uhdei</i>	55/45	65/60	63% fair	moderate												
37				32.9					32.9		Shamel ash	<i>Fraxinus uhdei</i>	60/35	70/60	65% fair	good	N											
38				18.2					18.2		Shamel ash	<i>Fraxinus uhdei</i>	50/25	65/50	58% fair	moderate	S											
39				23.0					23.0		Shamel ash	<i>Fraxinus uhdei</i>	55/40	65/50	57% fair	good	N									Diameter estimated.		
40				28.2					28.2		Shamel ash	<i>Fraxinus uhdei</i>	55/45	60/45	52% fair	moderate	S		25		GR							
41				18.3					18.3		Shamel ash	<i>Fraxinus uhdei</i>	50/20	60/50	55% fair	moderate	NE											
42				6.5					6.5		Shamel ash	<i>Fraxinus uhdei</i>	20/8	30/25	28% very poor	poor	S	S										

Tree ID #	To be Removed Per Current Stewardship Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Author Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter (inches @ 54° A.G. (+2.5% +4.5))	Reported Tree Trunk Diameter (inches @ 54° A.G. (+2.5% +4.5))	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Wt. Density (Very Low, Low, Med, High, Ex-High)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Dent Evidence (Note Elevation)	Topping or Severe Pruning on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note Elevation)	Codominant Measurements with Dominant (Note Height) (Note Height)	Root Extension Restricted in Painter	Soil Moisture Deficit (% at height Stress*)	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)	
43				24.0					24.0			Shamel ash	<i>Fraxinus uhdei</i>	55/30	65/60	63% fair	good	N				GR				Diameter estimated.			
44				30.7					30.7			Shamel ash	<i>Fraxinus uhdei</i>	50/35	65/45	55% fair	good	S				GR							
45				18.0					18.0			Shamel ash	<i>Fraxinus uhdei</i>	50/20	50/50	50% fair	poor to mod	N											
46				30.5					30.5			Shamel ash	<i>Fraxinus uhdei</i>	55/35	65/45	55% fair	good	S				GR		7 to 9					
47				26.0					26.0			Shamel ash	<i>Fraxinus uhdei</i>	55/30	70/60	67% fair	good	N								Diameter estimated.			
48				31.6					31.6			Shamel ash	<i>Fraxinus uhdei</i>	55/30	60/55	57% fair	mod to good	S				GR							
49				24.5					24.5			Shamel ash	<i>Fraxinus uhdei</i>	55/25	55/55	55% fair	moderate	N											
50				39.5					39.5			Shamel ash	<i>Fraxinus uhdei</i>	55/40	55/55	55% fair	moderate	E				serious GR							
51	X			45.7					45.7			Monterey pine	<i>Pinus radiata</i>	55/45	25/25	25% very poor	poor									Bark beetle issues			
52				25.9					25.9			Monterey pine	<i>Pinus radiata</i>	55/30	40/40	40% poor	poor												
53				16.9					16.9			Shamel ash	<i>Fraxinus uhdei</i>	45/25	65/60	63% fair	good	E	E										
54				31.6					31.6			Shamel ash	<i>Fraxinus uhdei</i>	55/40	60/50	55% fair	moderate	W				GR							
55				21.8					21.8			Shamel ash	<i>Fraxinus uhdei</i>	50/25	65/60	60% fair	good												
56				18.3					18.3			Shamel ash	<i>Fraxinus uhdei</i>	50/20	55/55	55% fair	moderate	W											

Tree Tag #	To be Removed Per Current Stewardship Recommendations Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter (Inches @ 54" A.G. (1.254" x 4.5))	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Wt. Density (Very Low, Low, Med, High, Ex-High)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Dust Evidence (Note Elevation)	Topping or Severe Pruning on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note Elevation)	Cordon Measurements (Note Height, Width, and/or new bark thickness) (Note Height)	Root Extension Restricted in Painter	Soil Moisture Deficit ("2" x height Stress %")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
57			19.5					19.5		Shamel ash	<i>Fraxinus uhdei</i>	55/30	65/60	63% fair	good	E										
58			26.4					26.4		Shamel ash	<i>Fraxinus uhdei</i>	55/30	60/55	58% fair	moderate	W										
59			33.8					33.8		Shamel ash	<i>Fraxinus uhdei</i>	55/30	60/50	55% fair	good	E										
60			24.9					24.9		Shamel ash	<i>Fraxinus uhdei</i>	45/35	65/55	60% fair	good	W										
61			24.4					24.4		Shamel ash	<i>Fraxinus uhdei</i>	55/35	60/60	60% fair	moderate	E										
62			27.9					27.9		Shamel ash	<i>Fraxinus uhdei</i>	55/25	50/50	50% fair	poor to mod	W										
63			31.5					31.5		Shamel ash	<i>Fraxinus uhdei</i>	55/40	70/65	68% fair	good											
64			20.8					20.8		Shamel ash	<i>Fraxinus uhdei</i>	40/25	50/50	50% fair	poor to mod	W										
65			20.7					20.7		Shamel ash	<i>Fraxinus uhdei</i>	50/25	65/53	55% fair	good	E				GR						
66	X		37.8					37.8		Shamel ash	<i>Fraxinus uhdei</i>	60/25	70/63	68% fair	good	W										
67	X		18.3					18.3		Shamel ash	<i>Fraxinus uhdei</i>	55/25	65/65	65% fair	moderate	W										
68	X		41.0					41.0		Shamel ash	<i>Fraxinus uhdei</i>	55/50	60/55	58% fair	mod to good	NW					possible bark inclusion issues					
69			19.4					19.4		holly oak	<i>Quercus ilex</i>	45/20	60/60	60% fair	moderate	W										
70			13.2					13.2		holly oak	<i>Quercus ilex</i>	25/20	60/60	60% fair	moderate	W										

Tree ID#	To be Removed Per Current Status	Author Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (inches @ 54" A.G. (1.254" x 4.5))	Height and Canopy Spread	Common Name	Scientific Name (Genus, species)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Wt. Diversity (Very Poor, Poor, Mod., Good, Ex.)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Dust Evidence (Note Elevation)	Topping or Severe Pruning on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note Elevation)	Colonization Measurements (Note Height, Width, Depth, Number, Location(s) (Note Height))	Root Extension Restricted in Painter	Soil Moisture Deficit (% at Night Stress*)	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
71				40.8					40.8		60/45	Shamel ash	<i>Fraxinus uhdei</i>	65/55	60% fair	good											
72				24.3					24.3		55/25	Shamel ash	<i>Fraxinus uhdei</i>	55/50	50% fair	moderate	E										
73				26.2					26.2		55/35	Shamel ash	<i>Fraxinus uhdei</i>	50/50	50% fair	poor	W										
74				28.0					28.0		55/30	Shamel ash	<i>Fraxinus uhdei</i>	60/60	60% fair	moderate	E										
75				21.4					21.4		40/25	Shamel ash	<i>Fraxinus uhdei</i>	50/50	50% fair	moderate	W										
76				20.2					20.2		50/18	Shamel ash	<i>Fraxinus uhdei</i>	40/50	47% poor	poor to mod	E										
77				15.8					15.8		45/15	Shamel ash	<i>Fraxinus uhdei</i>	40/30	35% poor	poor	W										
78				17.0					17.0		55/35	Shamel ash	<i>Fraxinus uhdei</i>	65/40	50% fair	moderate											
79				21.2					21.2		55/25	Shamel ash	<i>Fraxinus uhdei</i>	55/55	55% fair	poor to mod	W										
80				28.2					28.2		55/35	Shamel ash	<i>Fraxinus uhdei</i>	60/50	55% fair	moderate	E										
81				24.7					24.7		55/35	Shamel ash	<i>Fraxinus uhdei</i>	55/50	53% fair	moderate	W										
82				19.0					19.0		55/20	Shamel ash	<i>Fraxinus uhdei</i>	45/50	49% poor	poor to mod	E										
83				17.8					17.8		55/30	Shamel ash	<i>Fraxinus uhdei</i>	60/55	57% fair	moderate	W										
84				21.2					21.2		35/30	Shamel ash	<i>Fraxinus uhdei</i>	55/55	55% fair	moderate	E										

Tree ID #	To be Removed Per Current Status	Author Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (inches @ 54° A.G. (1.254x4.5))	Reported Trunk Diameter (inches @ 54° A.G. (1.254x4.5))	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Tree Density (Very Low, Low, Mod, High, Ex.)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Dust Evidence (Note Elevation)	Topped or Severely Pruned on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note Elevation)	Codominant Measurements (Note Height, Width, and/or crown radius, Inclination(s) (Note Height))	Root Extension Restricted in Past	Soil Moisture Deficit (% at height Stress*)	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)	
85				20.3					20.3			Shamel ash	<i>Fraxinus uhdei</i>	55/30	65/60	65% fair	moderate to good												
86				23.2					23.2			Shamel ash	<i>Fraxinus uhdei</i>	55/35	65/50	55% fair	good												
87				22.8					22.8			Shamel ash	<i>Fraxinus uhdei</i>	55/35	65/55	60% fair	mod to good	NW											
88				5.9	5.0	4.9			15.8			Monterey pine	<i>Pinus radiata</i>	9/11	65/65	65% fair	moderate										ID of species not verified		
89	X			23.5					23.5			Canary Island pine	<i>Pinus canariensis</i>	45/18	80/75	78% good	good												
90	X			16.0					16.0			Monterey pine	<i>Pinus radiata</i>	18/25	30/30	30% poor	moderate										ID of species not verified. Tree appears to be infected by pine pitch canker fungus.		
91	X			20.4					20.4			Monterey pine	<i>Pinus radiata</i>	25/25	40/40	40% poor	poor to mod		W									Tree has bark beetle issues and/or pine pitch canker infection.	
92	X	X		15.5					15.5			carrotwood, or carob tree	<i>Cupaniopsis anacardoides</i> , or <i>Ceratonia siliqua</i>	20/15	25/10	15% very poor	poor to mod		W										
93	X			11.6					11.6			carrotwood, or carob tree	<i>Cupaniopsis anacardoides</i> , or <i>Ceratonia siliqua</i>	20/15	50/30	45% poor	moderate												
94	X			13.0					13.0			carrotwood, or carob tree	<i>Cupaniopsis anacardoides</i> , or <i>Ceratonia siliqua</i>	20/20	45/35	40% poor	poor to mod												
95	X			6.0	6.0	6.0	6.0	6.0	5.0	35.0		carrotwood, or carob tree	<i>Cupaniopsis anacardoides</i> , or <i>Ceratonia siliqua</i>	20/20	65/10	30% poor	good											Failing at bark inclusion at 1 foot above grade.	
96	X			34.0					34.0			Shamel ash	<i>Fraxinus uhdei</i>	40/25	65/55	57% fair	good											X	
97	X			15.3					15.3			holly oak	<i>Quercus ilex</i>	20/25	75/75	75% good	good												
98	X			14.0					14.0			holly oak	<i>Quercus ilex</i>	25/25	75/75	75% good	good												

Tree ID#	To be Removed Per Current Status	Author Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (inches @ 54° A.G. (1.254x4+4.5))	Reported Tree Trunk Diameter at Crotch (inches) (10.0 = single stem, 20+ = multi, various specified number = non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Wt. Density (Very Low, Low, Mod., High, Ex.)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Dust Evidence (Note Elevation)	Topping or Severe Pruning on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note Elevation)	Cadmium Measurements (Note Elevation, Mass, Inches Long) (Note Height)	Root Extension Restricted in Painter	Soil Moisture Deficit (% at height Stress*)	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)		
99	X			11.6					11.6			holly oak	<i>Quercus ilex</i>	22/20	70/70	70% good	moderate		SE	13										
100	X			12.3					12.3			Monterey pine	<i>Pinus radiata</i>	18/15	50/50	50% fair	moderate											ID of species not verified.		
101	X			16.0					16.0			Monterey pine	<i>Pinus radiata</i>	28/20	50/50	50% fair	moderate													
102				25.9					25.9			Shamel ash	<i>Fraxinus uhdei</i>	50/35	50/35	40% poor	moderate				X									
103				24.7					24.7			Shamel ash	<i>Fraxinus uhdei</i>	55/35	50/40	45% poor	moderate	E			X									
104				16.5					16.5			Shamel ash	<i>Fraxinus uhdei</i>	55/30	55/50	50% fair	moderate	E	E		X							Needs endweight reduction pruning		
105				16.0					16.0			Shamel ash	<i>Fraxinus uhdei</i>	45/25	45/45	45% poor	moderate	E			X									
106	X			21.7					21.7			Shamel ash	<i>Fraxinus uhdei</i>	50/35	60/50	55% fair	good				X									
107	X			19.4					19.4			Shamel ash	<i>Fraxinus uhdei</i>	50/25	60/45	55% fair	moderate	S			X									
108	X			15.9					15.9			Shamel ash	<i>Fraxinus uhdei</i>	35/30	55/55	55% fair	poor to mod													
109	X			14.4					14.4			Shamel ash	<i>Fraxinus uhdei</i>	35/25	40/40	40% poor	poor to mod	N												
110	X			18.9					18.9			Shamel ash	<i>Fraxinus uhdei</i>	45/30	40/30	35% poor	poor											11		
111	X	X		29.7					29.7			Monterey pine	<i>Pinus radiata</i>	45/35	60/55	57% fair	moderate												Measured at 2 feet.	
112	X	X		19.1					19.1			Monterey pine	<i>Pinus radiata</i>	25/18	0/0	0% Dead														

Tree ID #	To be Removed Per Current Steward Author Recommendations Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54° A.G. (+2/-4/+4)	Reported Tree Type or Common Name (10.0+ single stem, 20+ multi, various specified species, or non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating Range (0-100% each)	Overall Condition Rating (0-100%)	Live Tree Density Very Poor, Poor, Mod, Good, Very Good	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Drop Evidence (Note Elevation)	Topping or Severe Pruning on Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Sap Decay (Note Elevation)	Cadmium Measurements with Soil Sample Mass and Depth (Note Height)	Root Extension Restricted in Past	Soil Nutrient Deficit ("Soil Tight Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
113	X	X	28.0	15.0					43.0		Monterey pine	<i>Pinus radiata</i>	30/20	25/25	25% very poor	poor	W									Bark beetle issues and/or pine pitch canker fungus.	
114	X		41.0						41.0		Monterey pine	<i>Pinus radiata</i>	35/35	55/45	50% fair	moderate	S									Measured at 2 feet.	
115	X		19.8						19.8		Shamel ash	<i>Fraxinus uhdei</i>	50/30	50/40	43% poor	poor to mod	E										
116	X		12.7						12.7		Shamel ash	<i>Fraxinus uhdei</i>	35/25	45/50	47% poor	poor to mod											
117	X		14.4						14.4		Shamel ash	<i>Fraxinus uhdei</i>	35/25	40/45	45% poor	poor to mod											
118	X		7.9						7.9		Shamel ash	<i>Fraxinus uhdei</i>	25/15	30/30	30% poor	poor											
119	X		10.3						10.3		Shamel ash	<i>Fraxinus uhdei</i>	25/20	45/50	48% poor	poor to mod	E										
120	X		11.4						11.4		Shamel ash	<i>Fraxinus uhdei</i>	25/20	40/30	37% poor	poor to mod	E										
121	X		10.9						10.9		Shamel ash	<i>Fraxinus uhdei</i>	30/20	60/50	57% fair	mod to good	E										
122	X		8.3						8.3		Shamel ash	<i>Fraxinus uhdei</i>	25/15	40/30	30% poor	poor		E			GR						
123	X		30.1						30.1		coast redwood	<i>Sequoia sempervirens</i>	60/25	30/30	30% poor	poor								X	X		
124	X		22.9						22.9		Shamel ash	<i>Fraxinus uhdei</i>	55/40	60/50	55% fair (? Tree is leafless)						GR					Tree condition needs to be verified after spring leafout.	
125	X		24.9						24.9		Shamel ash	<i>Fraxinus uhdei</i>	60/30	40/40	40% poor	poor					GR			X			
126	X		12.0						12.0		Shamel ash	<i>Fraxinus uhdei</i>	50/20	30/30	30% poor	poor	E							X			

Tree ID#	To be Removed Per Current Status	Author Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter (Inches @ 54" A.G. (7.25" + 4.5))	Height and Canopy Spread (ft.)	Scientific Name (Genus, species)	Common Name	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Tree Density (Very Low, Low, Med, High, Ex.)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Out Evidence (Note Elevation)	Topping or Severe Pruning on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note Elevation)	Culprits (Moles, Gophers, Squirrels, Raccoons, Skunks, Insects (Note Height))	Root Extension Restricted in Painter	Soil Moisture Deficit (% at Night Stress?)	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
127	X			25.1					25.1																		
128	X			19.4					19.4																		
129	X			4.0					4.0																	Located at P1 parking level.	
130	X			4.0					4.0																	Located at P1 parking level.	
131	X			4.2					4.2																	Located at P1 parking level.	
132	X			4.4					4.4																	Located at P1 parking level.	
133	X			4.3					4.3																	Located at P1 parking level.	
134	X			4.0					4.0																	Located at P1 parking level.	
135	X			4.8					4.8																	Located at P1 parking level.	
136	X			4.7					4.7																	Located at P1 parking level.	
137	X			4.6					4.6																	Located at P1 parking level.	
138	X			7.8	4.9				12.7				Ficus species	Ficus sp.	20/12	70/50	55% fair	moderate									Located at P1 parking level.
139	X			6.8	4.1				10.9				Ficus species	Ficus sp.	20/12	70/50	55% fair	moderate									Located at P1 parking level.
140	X			6.8					6.8				Ficus species	Ficus sp.	20/12	70/50	55% fair	moderate									Located at P1 parking level.

Tree ID#	To be Removed Per Current Status	Author Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (Inches @ 54° A.G. (1/2pi * D^2 * 4/3))	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Wt. Density (Very Low, Low, Med, High, Ex-High)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Out Evidence (Note Elevation)	Topped or Severely Pruned on Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Sap Decay (Note Elevation)	Culprits (Moles, Gophers, Rats, Squirrels, etc.) (Note Height)	Root Extension Restricted in Past	Soil Moisture Deficit (% at Night Stress*)	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)			
141	X			5.9	3.7					9.6	Ficus species	<i>Ficus</i> sp.	20/12	70/50	55% fair	moderate											Located at P1 parking level.			
142	X			5.0	4.3					9.3	Ficus species	<i>Ficus</i> sp.	20/12	70/50	55% fair	moderate												Located at P1 parking level.		
143	X			5.0	4.1					9.1	Ficus species	<i>Ficus</i> sp.	20/12	70/50	55% fair	moderate												Located at P1 parking level.		
144	X			5.0	4.6	4.4				14.0	Ficus species	<i>Ficus</i> sp.	20/12	70/50	55% fair	moderate													Located at P1 parking level.	
145	X			24.7						24.7	Monterey pine	<i>Pinus radiata</i>	35/25	60/60	60% fair	moderate														
146	X			8.1						8.1	evergreen pear	<i>Pyrus kawakamii</i>	20/15	60/50	57% fair	moderate														
147	X			7.2						7.2	evergreen pear	<i>Pyrus kawakamii</i>	15/12	40/40	40% poor	poor	W													
148	X			42.2						42.2	coast redwood	<i>Sequoia sempervirens</i>	60/25	80/80	80% good	good														
149	X			28.0						28.0	coast redwood	<i>Sequoia sempervirens</i>	55/15	35/45	40% poor	poor														
150	X			4.0	3.1					7.1	flowering cherry cultivar	<i>Prunus serrulata</i> Cult.	12/8	30/30	30% poor	? Out of leaf						BRC						Needs root crown excavation. Condition not verified (tree out of leaf during survey).		
151	X			27.7						27.7	coast redwood	<i>Sequoia sempervirens</i>	60/20	80/60	60% fair	good														
152	X			31.2						31.2	coast redwood	<i>Sequoia sempervirens</i>	55/15	60/60	60% fair	moderate														
153	X			29.5						29.5	coast redwood	<i>Sequoia sempervirens</i>	55/15	60/60	60% fair	moderate														
154	X			18.0						18.0	coast redwood	<i>Sequoia sempervirens</i>	50/15	70/70	70% good	moderate														

Tree ID #	To be Removed Per Current Status	Author Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (Inches @ 54" A.G. (1.25" = 1")	Reported Trunk Diameter (inches) & Condition (e.g. Canker, Decay, etc.)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Wt. Diversity (Very Low, Low, Med, Good, Ex+)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Dust Evidence (Note Elevation)	Topped or Severely Pruned on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note Elevation)	Culprits (Moles, Gophers, Squirrels, Rats, Insects, Birds, etc.) (Note Height)	Root Extension Restricted in Past	Soil Moisture Deficit ("2" = High Stress*)	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)	
155	X			20.0					20.0		Reported Trunk Diameter 27.4" (single stem, 20" multi, various specified condition notes, non-native species)	coast redwood	<i>Sequoia sempervirens</i>	50/15	70/70	70% good	moderate												
156	X			27.4					27.4			coast redwood	<i>Sequoia sempervirens</i>	60/18	75/75	75% good	good												
157	X			29.0					29.0			coast redwood	<i>Sequoia sempervirens</i>	60/18	70/70	70% good	moderate												
158	X			27.2					27.2			coast redwood	<i>Sequoia sempervirens</i>	60/15	50/40	40% poor	poor											X	Root system severed during ADA ramp installation.
159	X			34.9					34.9			coast redwood	<i>Sequoia sempervirens</i>	70/25	60/40	48% poor	poor to mod											X	Root system severed during ADA ramp installation.
160	X			16.2					16.2			fern pine	<i>Podocarpus gracilior</i>	55/12	70/20	35% poor	moderate			X				3					
161	X			14.6					14.6			fern pine	<i>Podocarpus gracilior</i>	50/8	40/20	27% very poor	poor			X				17					
162	X			11.1					11.1			tree species out of leaf	Genus species	45/16	50/25	32% poor	poor	S	S						At various elevations				
163	X			21.5					21.5			Shamel ash	<i>Fraxinus uhdei</i>	45/30	30/30	30% poor	poor	E							9	X			
164	X			18.8					18.8			Shamel ash	<i>Fraxinus uhdei</i>	50/30	35/35	35% poor	poor								X				
165	X			21.4					21.4			Shamel ash	<i>Fraxinus uhdei</i>	50/30	30/30	30% poor	poor							6	X				
166	X	X		16.9					16.9			Shamel ash	<i>Fraxinus uhdei</i>	35/25	25/25	25% very poor								X					
167	X			21.6					21.6			Shamel ash	<i>Fraxinus uhdei</i>	40/25	30/30	30% poor	poor				GR			X					
168	X			12.1					12.1			Shamel ash	<i>Fraxinus uhdei</i>	35/20	50/40	45% poor	poor to mod				GR			X					

Tree ID #	To be Removed Per Current Steward Author Recommendations Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54° A.G. (+2.54*4.5)	Reported Total Tree Diameter at Curbstone Circumference (10.0' single stem, 20" multi, various specified diameters for non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating Range (0=100% health)	Overall Condition Rating (0=100%)	Live Wt. Density Very Low, Low, Mod., High, Very High	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned on Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Sap Decay (Note Elevation)	Codominant Measurements with Dominant Width, Inclination(s) (Note Height)	Root Extension Restricted in Past	Soil Moisture Deficit ("Soil Tight Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
169	X	X	20.1					20.1			Shamel ash	<i>Fraxinus uhdei</i>	40/25	25/25	25% very poor	very poor					severe GR			X			
170	X		25.9					25.9			Shamel ash	<i>Fraxinus uhdei</i>	55/30	55/40	45% poor	poor											
171	X		40.2					40.2			coast redwood	<i>Sequoia sempervirens</i>	60/25	80/80	80% good	moderate											
172	X		21.2					21.2			Shamel ash	<i>Fraxinus uhdei</i>	45/30	55/45	45% poor	poor							8				
173	X		27.2					27.2			coast redwood	<i>Sequoia sempervirens</i>	65/18	45/45	45% poor	poor								X			
174	X		29.5					29.5			Shamel ash	<i>Fraxinus uhdei</i>	55/40	30/30	30% poor	poor					0 to 7			X			
175	X		26.5					26.5			Shamel ash	<i>Fraxinus uhdei</i>	55/40	50/60	55% fair	moderate								X			
176	X	X	22.5					22.5			Shamel ash	<i>Fraxinus uhdei</i>	55/40	25/30	27% very poor	very poor								X			
177	X		37.5					37.5			coast redwood	<i>Sequoia sempervirens</i>	65/25	55/60	58% fair	poor to mod								X	X		
178	X		5.7	3.8				9.5			strawberry tree	<i>Arbutus unedo</i>	15/15	70/50	60% fair	moderate	W	W		X							
179	X		8.1					8.1			strawberry tree	<i>Arbutus unedo</i>	20/12	80/60	70% good	good	W	W									
180	X	X	21.2					21.2			Shamel ash	<i>Fraxinus uhdei</i>	55/25	15/15	15% very poor	very poor						11	X				
181	X	X	11.6					11.6			coast redwood	<i>Sequoia sempervirens</i>	55/6	10/10	10% very poor	very poor							X	X			
182	X	X	21.2					21.2			coast redwood	<i>Sequoia sempervirens</i>	65/12	5/5	5% very poor	very poor							X				

Tree Tag #	To be Removed Per Current Steward Author Recommendations Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54° A.G. (+2.5% +4.5%)	Reported Tree Trunk Diameters at 54° Angle (A.G.) of Current Steward (10.0 single stem, 20" multi, various species and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating Range (0-100% each)	Overall Condition Rating (0-100%)	Live Wt. Diversity Very Poor, Poor, Mod., Good, Excellent	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Duct Evidence (Note Elevation)	Topped or Severely Pruned on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note Elevation)	Cable/Wire Maintenance and/or Removal Instructions (Note Height)	Root Extension Restricted in Painter	Soil Moisture Deficit ("soil tight stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
183	X	X							13.8		Shamel ash	<i>Fraxinus uhdei</i>	45/16	20/20	20% very poor	very poor											
184	X	X			11.9				11.9		Shamel ash	<i>Fraxinus uhdei</i>	45/12	5/5	5% very poor	very poor											
185		X			13.3				13.3		Shamel ash	<i>Fraxinus uhdei</i>	50/18	20/20	20% very poor	very poor											
186	X	X			9.7				9.7		Shamel ash	<i>Fraxinus uhdei</i>	30/12	8/8	8% very poor	very poor											
187	X				34.7				34.7		coast redwood	<i>Sequoia sempervirens</i>	55/25	60/60	60% fair	moderate										X	
188	X	X			12.2				12.2		dollar gum seedling	<i>Eucalyptus polyanthemos</i> (seedling)	50/20	20/20	20% very poor	very poor	N	N								X	
189	X				18.1				18.1		coast redwood	<i>Sequoia sempervirens</i>	60/20	40/40	40% poor	poor										X	
190	X				26.9				26.9		coast redwood	<i>Sequoia sempervirens</i>	70/25	40/40	40% poor	poor										X	
191	X				17.5				17.5		dollar gum seedling	<i>Eucalyptus polyanthemos</i> (seedling)	60/35	60/50	58% fair	moderate	S										
192	X	X			22.3				22.3		coast redwood	<i>Sequoia sempervirens</i>	70/12	10/10	10% very poor	very poor											
193	X				21.0				21.0		coast redwood	<i>Sequoia sempervirens</i>	70/16	50/50	50% fair	moderate											
194	X				20.4				20.4		dollar gum seedling	<i>Eucalyptus polyanthemos</i> (seedling)	60/20	40/40	40% poor	poor									X X		
195	X				27.6				27.6		coast redwood	<i>Sequoia sempervirens</i>	70/20	30/30	30% poor	poor									X X		
196	X				19.5				19.5		coast redwood	<i>Sequoia sempervirens</i>	55/20	55/55	55% fair	moderate									X X		

Tree ID#	To be Removed Per Current Stewardship Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Author Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (inches @ 54" A.G. (1.25m height))	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Tree Density (Very Low, Low, Med, High, Ex.)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Out Elevation (Note Elevation)	Topped or Severely Pruned on Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Sap Decay (Note Elevation)	Cable/Maintain Mainstem with Other Mainstem(s) (Note Height)	Root Extension Restricted in Past	Soil Moisture Deficit (% at Night Stress*)	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
197	X			30.1					30.1		coast redwood	<i>Sequoia sempervirens</i>	75/25	70/70	70% good	moderate											
198	X			5.0					5.0		evergreen pear	<i>Pyrus kawakamii</i>	15/12	40/40	40% poor	poor											Stunted.
199	X			6.0					6.0		evergreen pear	<i>Pyrus kawakamii</i>	20/13	40/40	40% poor	poor											Infected with bacterial fireblight.
200	X	X		10.1							evergreen pear	<i>Pyrus kawakamii</i>	22/20	30/20	25% very poor	moderate											Infected with bacterial fireblight.
201	X			16.5					16.5		evergreen pear	<i>Pyrus kawakamii</i>	30/30	45/55	50% fair	moderate	N	E									Infected with bacterial fireblight.
202	X			6.0					6.0		evergreen pear	<i>Pyrus kawakamii</i>	15/12	50/40	45% poor	poor	N										
203	X	X		18.6					18.6	(ID not verified - tree out of leaf during survey)	tulip tree	<i>Liriodendron tulipifera</i>	60/20	0/0	0% dead												High risk of failure. Dead tree.
204	X	X		11.2					11.2	(ID not verified - tree out of leaf during survey)	tulip tree	<i>Liriodendron tulipifera</i>	45/15	? Tree out of leaf. May be dead.	?			E									High risk of failure. Tree may be dead (verify after spring leafout).
205	X			36.0					36.0		coast redwood	<i>Sequoia sempervirens</i>	80/30	75/75	75% good	good											Possible steep hillside stability issues.
206	X			24.1					24.1		coast redwood	<i>Sequoia sempervirens</i>	75/20	75/65	70% good	good											Possible steep hillside stability issues.
207	X			29.9					29.9		coast redwood	<i>Sequoia sempervirens</i>	80/25	75/40	50% fair	good											Possible steep hillside stability issues. Needs arborist cabling between mainstems, or remove one of two mainstems, if retain tree.
208	X			32.2					32.2		coast redwood	<i>Sequoia sempervirens</i>	80/25	75/40	50% fair	good											Possible steep hillside stability issues. Needs arborist cabling between mainstems, or remove one of two mainstems, if retain tree.
209	X	X		22.4					22.4	(ID not verified - tree out of leaf during survey)	tulip tree	<i>Liriodendron tulipifera</i>	75/20	0/0	0% dead											High risk of failure. Dead tree.	
210	X			49.0					49.0		coast redwood	<i>Sequoia sempervirens</i>	85/25	75/60	65% fair	moderate											Possible stability issue on the hill. Roots may have been severed.

Tree ID#	To be Removed Per Current Stewardship Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Author Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (Inches @ 54° A.G. (1/2pi * d^2 / 4 * g))	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Tree Density (Very Low, Low, Med, High, Ex.)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Dust Evidences (Note/Elevation)	Topping or Severe Pruning on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note/Elevation)	Cedarian Mortars (Note/Elevation), White Mortars (Note/Elevation), Red Mortars (Note/Elevation)	Root Extension Restricted in Past	Soil Moisture Deficit (% at height Stress*)	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
211	X			14.9					14.9		coast redwood	<i>Sequoia sempervirens</i>	50/15	65/65	65% fair	moderate											
212	X			22.0					22.0		coast redwood	<i>Sequoia sempervirens</i>	65/15	75/75	75% good	moderate											
213	X	X		16.0					16.0		tulip tree (ID not verified - tree out of leaf during survey)	<i>Liriodendron tulipifera</i>	35/30	0/0	0% dead (Confirm in spring)		W										Tree appears dead, but may simply be above ground dormant.
214	X			31.3					31.3		coast redwood	<i>Sequoia sempervirens</i>	75/25	75/65	70% good	moderate											
215	X			20.3					20.3		fern pine	<i>Podocarpus gracilior</i>	50/20	80/60	70% good	good	W										
216	X			15.4					15.4		fern pine	<i>Podocarpus gracilior</i>	50/20	75/65	70% good	good	W										
217	X			13.6					13.6		fern pine	<i>Podocarpus gracilior</i>	50/20	75/65	70% good	good	W										
218	X	X		17.4					17.4		tulip tree (ID not verified - tree out of leaf during survey)	<i>Liriodendron tulipifera</i>	55/20	0/0	0% dead? (Verify once tree has leafed out in spring)		W										Verify condition once tree has leafed out (or not) in spring.
219				20.8					20.8		Shamel ash	<i>Fraxinus uhdei</i>	50/25	40/50	43% poor	poor to mod	W										
220				28.8					28.8		Shamel ash	<i>Fraxinus uhdei</i>	55/35	60/55	59% fair	moderate											
221				19.3					19.3		Shamel ash	<i>Fraxinus uhdei</i>	50/25	50/50	50% fair	moderate											
222	X			19.5					19.5		Shamel ash	<i>Fraxinus uhdei</i>	55/35	60/55	58% fair	moderate	E										
223	X			30.4					30.4		Shamel ash	<i>Fraxinus uhdei</i>	55/40	70/45	55% fair	good	E	E			GR		12	X			
224	X			18.4					18.4		Shamel ash	<i>Fraxinus uhdei</i>	50/15	40/50	40% poor	poor to mod	W										

Tree ID#	To be Removed Per Current Stewardship Recommendations Due to Very Poor Health or Elevated Risk of Failure	Author Recommendations	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (inches @ 54" A.G. (1.25m height))	Reported Trunk Diameter (inches @ 54" A.G. (1.25m height))	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Tree Density (Very Poor, Poor, Mod, Good, Very Good)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Dust Evidence (Note Elevation)	Topping or Severe Pruning on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Stem Decay (Note Elevation)	Colonization Measurements (Note Height, Width, Depth, Number of Colonies, Inclusion(s)) (Note Height)	Root Extension Restricted in Past	Soil Moisture Deficit (% at height Stress*)	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)	
225				25.4					25.4			Shamel ash	<i>Fraxinus uhdei</i>	55/35	50/40	48% poor	moderate	E				0 to 1					Roots severed on west side.		
226				15.5					15.5			Shamel ash	<i>Fraxinus uhdei</i>	45/25	50/30	37% poor	moderate	E	E			0 to 5	14				Roots severed on west side.		
227	X			18.5					18.5			Shamel ash	<i>Fraxinus uhdei</i>	45/25	30/20	25% very poor	poor	E									Roots severed on west side.		
228				11.5					11.5			Shamel ash	<i>Fraxinus uhdei</i>	30/25	40/30	35% poor	moderate	E									Roots severed on west side.		
229	X			9.6					9.6			coast redwood	<i>Sequoia sempervirens</i>	25/12	90/90	90% excellent	good												
230	X			8.9					8.9			coast redwood	<i>Sequoia sempervirens</i>	30/14	90/90	90% excellent	good												
231	X			14.4					14.4			Shamel ash	<i>Fraxinus uhdei</i>	45/20	35/45	39% poor	poor												
232	X			19.3					19.3			Shamel ash	<i>Fraxinus uhdei</i>	55/30	40/45	42% poor	poor to mod	E											
233	X			19.6					19.6			Shamel ash	<i>Fraxinus uhdei</i>	55/30	50/40	47% poor	moderate	E				0 to 1							
234	X			15.1					15.1			Shamel ash	<i>Fraxinus uhdei</i>	50/25	35/35	35% poor	poor	E											
235	X			17.8					17.8			Shamel ash	<i>Fraxinus uhdei</i>	55/25	55/40	50% fair	moderate												
236	X			17.4					17.4			Shamel ash	<i>Fraxinus uhdei</i>	55/25	55/55	55% fair	moderate												
237	X			6.5					6.5			Shamel ash	<i>Fraxinus uhdei</i>	30/15	75/65	70% good	mod to good												
238	X			9.2					9.2			Shamel ash	<i>Fraxinus uhdei</i>	35/18	75/60	72% good	mod to good												

Tree ID#	To be Removed Per Current Stewardship Recommendations Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (Inches @ 54" A.G. (1.25m))	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Wt. Diversity (Very Poor, Poor, Adequate, Good, Excellent)	Lopsided Canopy (Direction Notes)	Trunk Lean (Direction Notes)	Historical Stem Split/Dust Evidence (Note Elevation)	Topping or Severe Pruning on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note Elevation)	Codominant Mainstems with One or More Weak Indication(s) (Note Height)	Root Extension Restricted in Painter	Soil Moisture Deficit (% at height Stress*)	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
239			6.8					6.8		Shamel ash	<i>Fraxinus uhdei</i>	30/18	70/45	54% fair	mod to good											
240			8.1					8.1		Shamel ash	<i>Fraxinus uhdei</i>	30/18	70/60	70% good	mod to good											
241			6.4					6.4		coast redwood	<i>Sequoia sempervirens</i>	30/10	85/85	85% good	good											
242	X		5.4					5.4		coast redwood	<i>Sequoia sempervirens</i>	30/10	85/85	85% good	good											
243	X		5.7					5.7		coast redwood	<i>Sequoia sempervirens</i>	30/10	85/85	85% good	good											
244	X		4.6					4.6		coast redwood	<i>Sequoia sempervirens</i>	25/10	75/75	75% good	good											
245			6.7					6.7		flowering pear (out of leaf)	<i>Pyrus calleryana</i> Cult.	30/14	85/65	75% good	good	N										
246			5.8					5.8		flowering pear (out of leaf)	<i>Pyrus calleryana</i> Cult.	25/13	85/60	68% fair	good							see notes		Two codominant mainstems. Remove one of two.		
247			4.9					4.9		flowering pear (out of leaf)	<i>Pyrus calleryana</i> Cult.	24/10	85/50	55% fair	moderate	N										Root crown anomaly.
248			7.8					7.8		flowering pear (out of leaf)	<i>Pyrus calleryana</i> Cult.	30/18	85/55	62% fair	good	N						Various elevations				
249			6.5					6.5		flowering pear (out of leaf)	<i>Pyrus calleryana</i> Cult.	30/12	85/65	75% good	good	N										
250			6.3					6.3		flowering pear (out of leaf)	<i>Pyrus calleryana</i> Cult.	30/12	85/55	60% fair	good	N						12				
251			6.1					6.1		flowering pear (out of leaf)	<i>Pyrus calleryana</i> Cult.	20/10	85/60	68% fair	good											
252	X		3.6					3.6		flowering pear (out of leaf)	<i>Pyrus calleryana</i> Cult.	18/8	85/75	80% good	good											

Tree ID #	To be Removed Per Current Status	Author Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (Inches @ 54" A.G. (+24" +48")	Reported Trunk Diameter (inches @ 54" A.G. (+24" +48"))	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0-100% each)	Overall Condition Rating (0-100%)	Live Wt. Density (Very Low, Low, Med, Good, Very High)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Out Evidences (Note Elevation)	Topped or Severely Pruned on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note Elevation)	Culprits (Moles, Gophers, Rats, Squirrels, etc.) (Note Height)	Root Extension Restricted in Past	Soil Moisture Deficit (% at height Stress*)	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
253	X			7.3					7.3			flowering pear (out of leaf)	<i>Pyrus calleryana</i> Cult.	30/15	85/65	73% good	good											
254	X			7.5					7.5			flowering pear (out of leaf)	<i>Pyrus calleryana</i> Cult.	30/18	85/55	63% fair	good											
255	X			9.0					9.0			flowering pear (out of leaf)	<i>Pyrus calleryana</i> Cult.	30/20	85/45	55% fair	good											
256	X			7.5					7.5			flowering pear (out of leaf)	<i>Pyrus calleryana</i> Cult.	30/15	85/50	58% fair	good											
257	X			7.4					7.4			flowering pear (out of leaf)	<i>Pyrus calleryana</i> Cult.	30/15	85/55	65% fair	good											
258	X			6.7					6.7			flowering pear (out of leaf)	<i>Pyrus calleryana</i> Cult.	30/15	85/60	67% fair	good			X	X							
259	X			4.9					4.9			flowering pear (out of leaf)	<i>Pyrus calleryana</i> Cult.	25/12	85/65	69% fair	good			X								
260		X	35.9					35.9	X	California sycamore	<i>Platanus racemosa</i>	65/45	65/50	60% fair	moderate	W	W											
261			22.8	21.9				44.7	X	California sycamore	<i>Platanus racemosa</i>	65/45	75/45	57% fair	moderate		N & S			GR	See notes at right	At zero ft.			Bark sloughing at root crown, possibly due to irrigation water spray.			
262			15.4					15.4	X	California sycamore	<i>Platanus racemosa</i>	45/30	70/70	70% good	moderate	NE	NE					1 ft.						
263	X		13.5					13.5		Shamel ash	<i>Fraxinus uhdei</i>	35/15	50/45	47% poor	moderate	S	S				GR							
264	X		14.9					14.9		Shamel ash	<i>Fraxinus uhdei</i>	55/20	55/55	55% fair	poor to mod	S	S											
265	X		19.0					19.0		Shamel ash	<i>Fraxinus uhdei</i>	50/20	55/40	45% poor	moderate					GR		25						
266	X		20.8					20.8		Shamel ash	<i>Fraxinus uhdei</i>	55/30	50/30	35% poor	poor to mod				X							Roots have been severed.		

Tree Tag #	To be Removed Per Current Stewardship Recommendations Due to Very Poor Health or Elevated Risk of Failure	Author Recommendations	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter (Inches @ 54" A.G. (+2.5% +4.5%))	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Tree Density (Very Low, Low, Med, High, Ex.)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Splitout Evidence (Note Elevation)	Topping or Severe Pruning on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sapling Decay (Note Elevation)	Culprits (Mastodons, Elephants, etc. Note when known), with Date of Last Infestation(s) (Note Height)	Root Extension Restricted in Past	Soil Moisture Deficit (% at Night Stress*)	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
267	X			23.7					23.7		Shamel ash	<i>Fraxinus uhdei</i>	50/35	65/30	30% poor	good	SW	SW			GR				X	Roots have been severed.	
268	X			26.5					26.5		Shamel ash	<i>Fraxinus uhdei</i>	55/25	75/55	65% fair	good	S										
269	X			27.1					27.1		Shamel ash	<i>Fraxinus uhdei</i>	55/25	75/45	55% fair	good					serious GR		25	X			
270	X			28.7					28.7		Shamel ash	<i>Fraxinus uhdei</i>	60/35	75/55	63% fair	good							10			Rod system asymmetrical	
271	X			35.2					35.2		coast redwood	<i>Sequoia sempervirens</i>	60/20	70/70	70% good	moderate									X		
272	X			19.3					19.3		coast redwood	<i>Sequoia sempervirens</i>	70/12	68/70	69% fair	moderate									X		
273	X			23.3					23.3		coast redwood	<i>Sequoia sempervirens</i>	60/12	70/70	70% good	moderate									X		
274	X			23.9					23.9		coast redwood	<i>Sequoia sempervirens</i>	60/12	70/70	70% good	moderate									X		
275	X			17.0					17.0		Shamel ash	<i>Fraxinus uhdei</i>	55/16	65/65	65% fair	moderate									X		
276	X			15.4					15.4		Shamel ash	<i>Fraxinus uhdei</i>	50/12	40/30	34% poor	poor	E								X		
277				19.3					19.3		Shamel ash	<i>Fraxinus uhdei</i>	50/25	50/40	40% poor	moderate	E	E			serious GR			X			
278				21.0					21.0		Shamel ash	<i>Fraxinus uhdei</i>	60/25	60/50	55% fair	moderate	W	W			GR						
279	X			26.7					26.7		coast redwood	<i>Sequoia sempervirens</i>	50/20	80/80	80% good	good											
280				16.4					16.4		Shamel ash	<i>Fraxinus uhdei</i>	40/20	30/45	37% poor	poor					serious GR			X			

Tree ID#	To be Removed Per Current Status Author Recommendations Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter Inches @ 54" A.G. (+2.54*Age)	Reported Tree Type or Common Name (10.0+ single stem, 20+ multi, various specified common names, non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating Range (0=100% health)	Overall Condition Rating (0=100%)	Live Wt. Density Very Low, Low, Med, High, Very Hg	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Drop Evidence (Note Elevation)	Topping or Severe Pruning on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note Elevation)	Culprits Identified as Cause of Health Issues (Note Height)	Root Extension Restricted in Past	Soil Moisture Deficit ("20+ eight Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)	
281	X		21.2					21.2			Shamel ash	<i>Fraxinus uhdei</i>	50/35	30/20	20% very poor	very poor			6		GR			X		Roots severed.		
282			15.0					15.0			Shamel ash	<i>Fraxinus uhdei</i>	35/18	30/30	30% poor	poor	E									Roots severed.		
283			18.1					18.1			Shamel ash	<i>Fraxinus uhdei</i>	50/20	40/30	35% poor	poor to mod		E				GR			X		Roots severed.	
284			14.4					14.4			Shamel ash	<i>Fraxinus uhdei</i>	40/25	40/40	40% poor	poor						GR			X			
285			18.4					18.4			Shamel ash	<i>Fraxinus uhdei</i>	50/25	50/40	44% poor	poor to mod	E	E				GR			X		Roots severed.	
286			17.0					17.0			Shamel ash	<i>Fraxinus uhdei</i>	40/45	60/60	60% fair	moderate	N											
287			24.3					24.3			coast redwood	<i>Sequoia sempervirens</i>	60/15	70/70	70% good	moderate										X		
288			15.7					15.7			coast redwood	<i>Sequoia sempervirens</i>	60/15	70/70	70% good	moderate									X			
289			26.9					26.9			coast redwood	<i>Sequoia sempervirens</i>	60/15	50/65	63% fair	moderate									X	Apical meristem showing physical symptoms of soil moisture deficit.		
290			14.8					14.8			Shamel ash	<i>Fraxinus uhdei</i>	40/20	45/35	40% poor	poor to mod	W					serious GR			X			
291			24.2					24.2			Shamel ash	<i>Fraxinus uhdei</i>	50/40	55/45	48% poor	moderate	W					serious GR	6					
292			16.3					16.3			coast redwood	<i>Sequoia sempervirens</i>	35/10	70/70	70% good	moderate												
293	X		11.0					11.0			giant sequoia	<i>Metasequoia glyptostroboides</i>	20/10	30/30	30% poor	poor	W	W								Has a <i>Botryosphaeria</i> infection.		
294	X		18.7					18.7			fem pine	<i>Podocarpus gracilior</i>	30/18	50/40	45% poor	moderate	W						5	X				

Tree ID #	To be Removed Per Current Steward Author Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54° A.G. (+2.54x4.5)	Reported Tree Type or Common Name (10.0+ single stem, 20+ multi, various specified species, 100+ non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Tree Density Very Poor, Poor, Mod., Good, Very Good, Ex+	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Drop Evidence (Note Elevation)	Topped or Severely Pruned on Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Sap Decay (Note Elevation)	Cadmium Measurements in Soil (ppm) and Water Infiltration (mm/Hr) (Note Height)	Root Extension Restricted in Painter	Soil Moisture Deficit ("Soil Tight Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
295	X		8.6					8.6			southern magnolia	<i>Magnolia grandiflora</i>	18/15	25/25	25% very poor	very poor											
296	X		17.3					17.3			Shamel ash	<i>Fraxinus uhdei</i>	30/15	35/35	35% poor	poor	W	W									
297	X	X	12.1					12.1			Shamel ash	<i>Fraxinus uhdei</i>	25/15	35/20	20% very poor	poor											
298	X	X	18.8					18.8			coast redwood	<i>Sequoia sempervirens</i>	60/12	15/15	15% very poor	very poor											
299	X		16.0					16.0			Shamel ash	<i>Fraxinus uhdei</i>	45/15	30/45	40% poor	poor	E										
300	X	X	23.3					23.3			coast redwood	<i>Sequoia sempervirens</i>	60/15	20/20	20% very poor	very poor										X	
301	X	X	15.2					15.2			Shamel ash	<i>Fraxinus uhdei</i>	25/18	20/15	19% very poor	very poor										X	
302	X		26.9	15.0				41.9			coast redwood	<i>Sequoia sempervirens</i>	70/25	60/60	60% fair	moderate										X	
303	X		17.2					17.2			Shamel ash	<i>Fraxinus uhdei</i>	35/25	55/60	55% fair	moderate	NW										
304	X	X	19.0					19.0			coast redwood	<i>Sequoia sempervirens</i>	45/10	5/5	5% very poor	very poor										X	
305	X	X	20.1					20.1			Shamel ash	<i>Fraxinus uhdei</i>	20/15	10/10	10% very poor					X		6					
306	X		17.5					17.5			Shamel ash	<i>Fraxinus uhdei</i>	45/25	50/40	40% poor	poor to mod	W								8		
307	X	X	17.7					17.7			Shamel ash	<i>Fraxinus uhdei</i>	40/20	30/25	29% very poor	poor				X		0 to 6					
308	X		21.1					21.1			coast redwood	<i>Sequoia sempervirens</i>	50/15	75/75	75% good	good											

Tree ID #	To be Removed Per Current Stewardship Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Author Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (Inches @ 54° A.G. (1.2544 * 4.5))	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Tree Density (Very Low, Low, Med, Good, Very High)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Out Elevation (Note Elevation)	Topping or Severe Pruning on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note Elevation)	Codominant Measurements with Dominant Width (Inches) (Note Height)	Root Extension Restricted in Painter	Soil Moisture Deficit (% at Night Stress*)	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
309 X				16.2					16.2		coast redwood	<i>Sequoia sempervirens</i>	50/15	75/70	73% good	good											
310 X				20.6					20.6		Shamel ash	<i>Fraxinus uhdei</i>	50/35	50/50	50% fair	moderate	W										
311 X				27.0					27.0		Shamel ash	<i>Fraxinus uhdei</i>	55/45	65/55	60% fair	good	W										
312 X				16.1					16.1		Shamel ash	<i>Fraxinus uhdei</i>	35/20	50/25	32% poor	moderate	W					GR	at root crown due to sprinkler irrigation most likely				
313 X				20.9					20.9		Shamel ash	<i>Fraxinus uhdei</i>	45/35	50/35	45% poor	poor	W					GR		X			
314 X				30.6					30.6		Shamel ash	<i>Fraxinus uhdei</i>	55/45	70/40	50% fair	Good			X				6				Root system on steep slope
315 X				21.8					21.8		coast redwood	<i>Sequoia sempervirens</i>	60/12	55/60	57% fair	moderate	E										X
316 X				18.5					18.5		Shamel ash	<i>Fraxinus uhdei</i>	55/20	50/45	48% poor	moderate	N										Root system on steep slope
317				10.2					10.2		Shamel ash	<i>Fraxinus uhdei</i>	45/12	40/40	40% poor	poor											
318				9.9					9.9		Shamel ash	<i>Fraxinus uhdei</i>	50/12	45/45	45% poor	poor											
319				18.6					18.6		Shamel ash	<i>Fraxinus uhdei</i>	50/30	50/50	50% fair	moderate	N										
320 X				13.3					13.3		Shamel ash	<i>Fraxinus uhdei</i>	35/12	50/40	45% poor	moderate							7				
321 X				16.2					16.2		Shamel ash	<i>Fraxinus uhdei</i>	50/20	55/60	56% fair	mod to good								X			
322 X				11.9					11.9		Shamel ash	<i>Fraxinus uhdei</i>	45/15	40/40	40% poor	poor								X			

Tree ID#	To be Removed Per Current Steward Author Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54° A.G. (+2.54*inches)	Reported Tree Diameter at 4.5' above ground level of Current Canopy (10.0" single stem, 20" multi, various specified canopy heights for non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating Range (0=100% health)	Overall Condition Rating (0=100%)	Live Wt. Density (Very Low, Low, Med, High, Very Hg)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Duct Evidence (Note Elevation)	Topping or Severe Pruning on Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Sap Decay (Note Elevation)	Cadmium Measurements in soil (ppm) and/or soil solution (ppm) (Indication(s) (Note Height)	Root Extension Restricted in Painter	Soil Nutrient Deficit ("Soil Tight Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
323	X		9.4					9.4			Shamel ash	<i>Fraxinus uhdei</i>	45/12	30/30	30% poor	poor											
324	X		12.8					12.8			Shamel ash	<i>Fraxinus uhdei</i>	40/12	30/40	35% poor	poor											
325	X	X	7.4					7.4			Shamel ash	<i>Fraxinus uhdei</i>	28/12	20/20	20% very poor	very poor											
326	X		13.0					13.0			Shamel ash	<i>Fraxinus uhdei</i>	45/20	45/55	48% poor	poor											
327	X		11.9					11.9			Shamel ash	<i>Fraxinus uhdei</i>	45/12	30/30	30% poor	poor	E			GR					X		
328	X	X	5.7					5.7			southern magnolia	<i>Magnolia grandiflora</i>	12/6	0/0	0% dead											X	
329	X		14.2					14.2			Shamel ash	<i>Fraxinus uhdei</i>	45/20	35/40	38% poor	poor		S								X	
330	X		15.7					15.7			Shamel ash	<i>Fraxinus uhdei</i>	40/20	30/40	35% poor	poor		S								X	
331	X		10.1					10.1			Shamel ash	<i>Fraxinus uhdei</i>	30/20	40/35	37% poor	poor	S	S								X	
332	X	X	18.9					18.9			coast redwood	<i>Sequoia sempervirens</i>	55/12	5/5	5% very poor	very poor										X	
333	X	X	18.4					18.4			coast redwood	<i>Sequoia sempervirens</i>	55/8	5/5	5% very poor	very poor										X	
334	X		18.5					18.5			Shamel ash	<i>Fraxinus uhdei</i>	45/25	45/55	50% fair	moderate										X	
335	X	X	16.0					16.0			coast redwood	<i>Sequoia sempervirens</i>	50/12	5/5	5% very poor	very poor										X	
336	X	X	9.6					9.6			Shamel ash	<i>Fraxinus uhdei</i>	25/10	10/10	10% very poor	moderate				mainstem					X		

Tree ID#	To be Removed Per Current Status	Author Recommendations Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (inches) @ 54" A.G. (1.254*4.8)	Reported Tree Trunk Diameter at 54" A.G. (10.0" single stem, 20" multi, various specified diameter measurements for non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0-100% each)	Overall Condition Rating (0-100%)	Live Wt. Density (Very Low, Low, Med, High, Ex-High)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Out Evidences (Note Elevation)	Topped or Severely Pruned on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note Elevation)	Cold-Season Mortality (Note Elevation, Mortality Indication(s), Note Height)	Root Extension Restricted in Past	Soil Moisture Deficit ("20" height Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
337	X	X		8.8					8.8			Shamel ash	<i>Fraxinus uhdei</i>	25/7	5/5	5% very poor	very poor					mainstem			X			
338	X			8.7					8.7			Shamel ash	<i>Fraxinus uhdei</i>	30/8	30/10	15% very poor	poor					mainstem			X			
339	X			12.8					12.8			Shamel ash	<i>Fraxinus uhdei</i>	40/20	40/40	40% poor	poor	W				mainstem			X			
340	X			14.3					14.3			Shamel ash	<i>Fraxinus uhdei</i>	50/20	35/40	38% poor	poor					mainstem			X			
341	X	X		10.9					10.9			Shamel ash	<i>Fraxinus uhdei</i>	35/8	10/10	10% very poor	very poor					mainstem			X			
342	X	X		12.0					12.0			Shamel ash	<i>Fraxinus uhdei</i>	45/18	10/10	10% very poor	very poor					mainstem			X			
343	X			13.7					13.7			Shamel ash	<i>Fraxinus uhdei</i>	45/18	35/35	35% poor	poor					mainstem			X	Verify condition once tree leafs out in spring.		
344	X	X		7.3					7.3			Shamel ash	<i>Fraxinus uhdei</i>	20/12	20/20	20% very poor	very poor					mainstem			X			
345	X			14.4					14.4			Shamel ash	<i>Fraxinus uhdei</i>	50/20	40/30	35% poor	poor					8			X			
346	X	X		10.7					10.7			Shamel ash	<i>Fraxinus uhdei</i>	25/12	10/10	10% very poor	very poor	E							X			
347	X	X		11.3					11.3			Shamel ash	<i>Fraxinus uhdei</i>	25/12	25/10	17% very poor	poor								X			
348	X	X		12.9					12.9			Shamel ash	<i>Fraxinus uhdei</i>	45/18	25/20	20% very poor	very poor								X			
349	X	X		12.2					12.2			Shamel ash	<i>Fraxinus uhdei</i>	30/20	25/25	25% very poor	very poor								X			
350	X	X		14.2					14.2			Shamel ash	<i>Fraxinus uhdei</i>	50/15	20/20	20% very poor	very poor								X			

Tree ID #	To be Removed Per Current Status	Author Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (Inches @ 14' A.G. (1.2m height))	Reported Tree Type (e.g. Crape Myrtle, Cornelian Cherry, etc.)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Wt. Density (Very Low, Low, Med, High, Ex-High)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Dust Erosion (Note/Elevation)	Toppling or Severe Pruning on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note/Elevation)	Colonization Measurements (Note/Elevation, Max, Min, Avg, Range, Standard Deviation(s), Note/Highest)	Root Extension Restricted in Painter	Soil Moisture Deficit (% at height Stress*)	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
351	X			14.6					14.6			Shamel ash	<i>Fraxinus uhdei</i>	30/20	40/25	28% very poor	poor to mod											
352	X			11.7					11.7			Shamel ash	<i>Fraxinus uhdei</i>	25/20	10/10	10% very poor	very poor	W	W									
353	X			17.7					17.7			Shamel ash	<i>Fraxinus uhdei</i>	40/25	35/35	35% poor	poor	E										
354	X			13.4					13.4			Shamel ash	<i>Fraxinus uhdei</i>	35/20	45/35	40% poor	poor											
355	X			12.5					12.5			Shamel ash	<i>Fraxinus uhdei</i>	35/15	20/15	18% very poor	very poor											X
356	X			18.0					18.0			Shamel ash	<i>Fraxinus uhdei</i>	45/30	20/10	15% very poor	very poor	W	S									X
357	X			20.8					20.8			Shamel ash	<i>Fraxinus uhdei</i>	45/45	40/50	46% poor	M											X
358	X			10.9					10.9			Shamel ash	<i>Fraxinus uhdei</i>	35/15	0/0	0% dead	E	E										X
359	X			18.3					18.3			Pine species (not verified)	<i>Pinus</i> sp.	30/20	80/55	65% fair	good	N					0 to 1 foot			X		
360	X			24.4					24.4			Italian stone pine	<i>Pinus pinea</i>	30/35	90/60	77% good	excellent											
361	X			26.6					26.6			Italian stone pine	<i>Pinus pinea</i>	30/30	60/60	60% fair	moderate									X	X	Measured at 2 feet.
362	X			28.6					28.6			Italian stone pine	<i>Pinus pinea</i>	25/35	70/70	70% good	good									X		Measured at 2 feet.
363	X			7.2					7.2			red oak	<i>Quercus rubra</i> (not verified)	20/15	80/50	60% fair	good											Tree out of leaf. Needs training pruning.
364	X			5.5					5.5			oak species	<i>Quercus</i> sp.	12/8	60/40	40% poor	moderate						X			5		Tree out of leaf. Needs training pruning.

Tree ID#	To be Removed Per Current Stewardship Recommendations Due to Very Poor Health or Elevated Risk of Failure	Author Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (inches @ 54° A.G. (1.254x4+5))	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=10% health)	Overall Condition Rating (0=10%)	Live Wt. Diversity (Very Low, Low, Med, High, Ex.)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Dust/Evidence (Note Elevation)	Topping or Severe Pruning on Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Sap Decay (Note Elevation)	Codominant Mainstems with Subordinate Whorls (Note Height)	Root Extension Restricted in Past	Sap Molecule Deficit ("Tight Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
365	X			7.3					7.3		southern magnolia	<i>Magnolia grandiflora</i>	18/13	40/40	40% poor	poor to mod											
366	X			17.0					17.0		Italian stone pine	<i>Pinus pinea</i>	18/25	80/50	60% fair	good	N										Measured at 3.5 feet
367	X			24.3					24.3		Italian stone pine	<i>Pinus pinea</i>	25/30	80/35	45% poor	good	N										
368	X			20.2					20.2		Italian stone pine	<i>Pinus pinea</i>	25/30	80/35	45% poor	good	N					GR	7	X			Measured at 3.5 feet.
369	X			23.8					23.8		Italian stone pine	<i>Pinus pinea</i>	25/30	50/50	50% fair	poor to mod											Measured at 2.0 feet.
370	X			5.7					5.7		tree species out of leaf	(Genus, species)	25/15	75/55	65% fair	moderate											Verify species in spring after full leafout.
371	X			26.3					26.3		Aleppo pine	<i>Pinus halepensis</i>	30/35	80/60	70% good	good											Codominant mainstems at 5 feet.
372	X			21.6	18.7				40.3		Italian stone pine	<i>Pinus pinea</i>	30/35	80/70	75% good	good	N										
373	X	X		7.4					7.4		southern magnolia	<i>Magnolia grandiflora</i>	20/15	25/25	25% very poor	very poor											
374	X	X		7.2					7.2		tulip tree	<i>Liriodendron tulipifera</i>	12/8	20/10	15% very poor	very poor	N				X			X	X		
375	X	X		5.6					5.6		tulip tree	<i>Liriodendron tulipifera</i>	12/8	20/10	15% very poor	very poor					X			X	X		
376	X	X		5.6					5.6		southern magnolia	<i>Magnolia grandiflora</i>	13/10	25/25	25% very poor	very poor											
377	X			7.6					7.6		southern magnolia	<i>Magnolia grandiflora</i>	19/12	35/35	35% poor	poor											
378	X	X		7.0					7.0		southern magnolia	<i>Magnolia grandiflora</i>	20/14	20/20	20% very poor	very poor											

Tree ID #	To be Removed Per Current Stewardship Recommendations Removal Due to Very Poor Condition or Elevated Risk of Failure	Author Recommendations Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter (Inches) @ 54° A.G. (+2.54 +4.5)	Reported Total Tree Diameter at Curbstone Circumference (10.0' single stem, 20" multi, various specified diameter at non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0-100% each)	Overall Condition Rating (0-100%)	Live Wt. Density (Very Low, Low, Med, High, Ex-High)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Dust Evidence (Note Elevation)	Toppling or Severe Pruning on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note Elevation)	Codominant Measurements with Non-codominant Branch(es) (Note Height)	Root Extension Restricted in Painter	Soil Moisture Deficit ("20% weight Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
379	X	X		6.5					6.5			southern magnolia	<i>Magnolia grandiflora</i>	14/12	25/25	25% very poor	very poor									X		
380	X	X		7.4					7.4			southern magnolia	<i>Magnolia grandiflora</i>	20/10	20/20	20% very poor	very poor	W								X		
381	X			23.0	14.7				37.7			Italian stone pine	<i>Pinus pinea</i>	25/30	75/55	64% fair	moderate											
382	X			20.8					20.8			Italian stone pine	<i>Pinus pinea</i>	25/25	70/60	65% fair	moderate					GR			X			
383	X			19.5					19.5			Italian stone pine	<i>Pinus pinea</i>	25/30	80/65	74% good	good	E				GR			X			
384	X			22.0					22.0			Italian stone pine	<i>Pinus pinea</i>	25/30	70/60	65% fair	moderate	S	S						X		Measured at 2.0 feet.	
385	X			33.2					33.2			Italian stone pine	<i>Pinus pinea</i>	25/35	60/30	38% poor	moderate	S							3	X		
386	X	X		4.5					4.5			southern magnolia	<i>Magnolia grandiflora</i>	13/8	15/15	15% very poor	very poor								1	X	X	
387	X	X		7.8					7.8			southern magnolia	<i>Magnolia grandiflora</i>	18/18	20/20	20% very poor	very poor								X			
388	X	X		7.5					7.5			southern magnolia	<i>Magnolia grandiflora</i>	18/15	20/20	20% very poor	very poor								X			
389	X			31.9	22.3				54.2			Italian stone pine	<i>Pinus pinea</i>	30/45	50/40	47% poor	moderate								2	X		
390	X			13.2	13.0				26.2			Italian stone pine	<i>Pinus pinea</i>	25/15	80/30	45% poor	good	N	N						3	X		
391	X			12.4	12.0				24.4			Italian stone pine	<i>Pinus pinea</i>	25/30	80/60	67% fair	good	E	E						3	X		
392	X			14.6					14.6			Italian stone pine	<i>Pinus pinea</i>	25/18	80/65	69% fair	good	E							X			

Tree ID #	To be Removed Per Current Status	Author Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (Inches @ 54" A.G. (1.254" x 4.5))	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Tree Density (Very Low, Low, Med, High, Ex-High)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Dust Evidence (Note Elevation)	Topped or Severely Pruned on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note Elevation)	Culprits (Mammals, Birds, Insects, Weather, Inclusions) (Note Height)	Root Extension Restricted in Past	Soil Moisture Deficit (% at Night Stress?)	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
393 X				14.3					14.3		Italian stone pine	<i>Pinus pinea</i>	20/20	70/70	70% good	good		E				X					
394 X				10.3					10.3		tree species out of leaf	(Genus, species)	35/20	80/65	75% good	good											
395 X				9.8					9.8		tree species out of leaf	(Genus, species)	35/20	80/65	75% good	good		W									
396 X				18.1					18.1		coast redwood	<i>Sequoia sempervirens</i>	65/12	70/70	70% good	moderate											Sleep slope
397 X				20.5					20.5		coast redwood	<i>Sequoia sempervirens</i>	65/12	75/75	75% good	moderate											Sleep slope
398 X				13.4					13.4		Shamel ash	<i>Fraxinus uhdei</i>	40/25	80/70	74% good	good											Sleep slope
399 X				11.3					11.3		Shamel ash	<i>Fraxinus uhdei</i>	35/15	30/30	30% poor	poor											Sleep slope
400 X				21.3					21.3		Shamel ash	<i>Fraxinus uhdei</i>	40/25	60/50	55% fair	moderate							6				Sleep slope
401 X				20.2					20.2		Shamel ash	<i>Fraxinus uhdei</i>	45/20	50/35	40% poor	moderate	W						8	10			On steep slope.
402 X				18.4					18.4		Shamel ash	<i>Fraxinus uhdei</i>	45/25	60/45	55% fair	good							6				On steep slope.
403 X				15.0					15.0		Shamel ash	<i>Fraxinus uhdei</i>	40/18	40/40	40% poor	poor	W						6	8			On steep slope.
404 X				25.7					25.7		Shamel ash	<i>Fraxinus uhdei</i>	55/35	40/40	40% poor	poor	SW						various elevations				On steep slope.
405 X				29.5					29.5		Shamel ash	<i>Fraxinus uhdei</i>	65/35	40/35	40% poor	poor	S	S					7				On steep slope.
406 X				17.4					17.4		coast redwood	<i>Sequoia sempervirens</i>	50/8	70/70	70% good	moderate											On steep slope.

Tree ID #	To be Removed Per Current Status	Author Recommendations Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (Inches @ 54" A.G. (+24" +4.5))	Reported Tree Trunk Diameter at Curbstone (Curb 10.0, single stem, 20" multi, various specified diameter, 100% non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0-100%, each)	Overall Condition Rating (0-100%)	Live Wt. Density (Very Low, Low, Med, High, Ex-High)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Dust Evidence (Note Elevation)	Topping or Severe Pruning on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note Elevation)	Cold Climate Measurements with Average Max, Min, Range (Note Height)	Root Extension Restricted in Painter	Soil Moisture Deficit ("2" or "High Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
407	X	X		4.1					4.1			southern magnolia	<i>Magnolia grandiflora</i>	15'1	5/5	5% very poor	very poor						0 to 10					
408	X	X		5.9	3.8				9.7			southern magnolia	<i>Magnolia grandiflora</i>	18'6	10/10	10% very poor	very poor											
409	X			18.3					18.3			coast redwood	<i>Sequoia sempervirens</i>	55/15	65/65	65% fair	moderate											
410	X			20.7					20.7			coast redwood	<i>Sequoia sempervirens</i>	55/13	65/65	65% fair	moderate											
411	X			22.4					22.4			coast redwood	<i>Sequoia sempervirens</i>	55/13	60/60	60% fair	poor to mod											
412	X			32.4					32.4			Shamel ash	<i>Fraxinus uhdei</i>	65/35	65/55	65% fair	good	S										
413	X			15.6					15.6			Shamel ash	<i>Fraxinus uhdei</i>	60/18	50/40	45% poor	poor to mod	N										
414				22.5					22.5	X	California sycamore	<i>Platanus racemosa</i>	55/30	50/45	50% fair	moderate	W	W			GR			Will need endweight reduction pruning at west side of canopy.				
415				18.3					18.3	X	California sycamore	<i>Platanus racemosa</i>	60/30	50/50	50% fair	moderate	N				GR							
416		X	17.8						17.8	X	California sycamore	<i>Platanus racemosa</i>	50/20	50/50	50% fair	moderate	E				GR							
417	X		19.2						19.2			Shamel ash	<i>Fraxinus uhdei</i>	30/25	75/55	70% good	good											
418	X		11.5						11.5			Shamel ash	<i>Fraxinus uhdei</i>	30/15	45/40	40% poor	moderate					GR						
419	X		17.3						17.3			Shamel ash	<i>Fraxinus uhdei</i>	35/40	60/50	55% fair	moderate	W				GR						
420	X		11.1						11.1			Shamel ash	<i>Fraxinus uhdei</i>	35/25	75/70	70% good	good	W										

Tree ID #	To be Removed Per Current Stewardship Recommendations Due to Very Poor Health or Elevated Risk of Failure	Author Recommendations	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (Inches @ 54° A.G. (1.254 x D <sup>4/3</sup> )	Reported Tree Diameter at Breast Height (DBH) (10.0" single stem, 20" multi, various species, non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0-100% each)	Overall Condition Rating (0-100%)	Live Wt. Density (Very Low, Low, Med, High, Ex.)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Dust Evidence (Note Elevation)	Topping or Severe Pruning on Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Sap Decay (Note Elevation)	Codominant Mainstems with Side Forks, Twists, Inclusions (Note Height)	Root Extension Restricted in Painter	Soil Moisture Deficit (% at Night Stress*)	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
421	X			13.7					13.7			Shamel ash	<i>Fraxinus uhdei</i>	35/25	50/50	50% fair	poor to mod											
422	X			14.3					14.3			Shamel ash	<i>Fraxinus uhdei</i>	30/30	75/45	60% fair	good											
423	X			29.1					29.1			coast redwood	<i>Sequoia sempervirens</i>	70/20	70/70	70% good	moderate											
424	X			33.6					33.6			coast redwood	<i>Sequoia sempervirens</i>	70/18	60/60	60% fair	moderate											
425	X			24.9					24.9			coast redwood	<i>Sequoia sempervirens</i>	65/15	70/70	70% good	moderate											
426				27.8					27.8			coast redwood	<i>Sequoia sempervirens</i>	55/20	75/68	70% good	moderate											
427				17.3					17.3			Shamel ash	<i>Fraxinus uhdei</i>	60/20	40/40	40% poor	poor	E										X
428	X			29.0					29.0			Shamel ash	<i>Fraxinus uhdei</i>	60/35	50/50	50% fair	poor to mod	W										
429	X			22.0					22.0			Shamel ash	<i>Fraxinus uhdei</i>	55/35	70/55	65% fair	good											Codominant mainstems fork at 13 feet.
430				27.4					27.4			giant sequoia	<i>Metasequoia glyptostroboides</i>	75/15	65/45	55% fair	poor to mod											Tree was limbed up.
431				27.9					27.9			Shamel ash	<i>Fraxinus uhdei</i>	65/45	45/30	40% poor	poor to mod	W	E									9
432				24.0					24.0			Shamel ash	<i>Fraxinus uhdei</i>	55/35	50/60	55% fair	poor to mod	W										
433				16.9					16.9			Shamel ash	<i>Fraxinus uhdei</i>	60/25	75/60	63% fair	good	E	E									
434	?			29.3					29.3			giant sequoia	<i>Metasequoia glyptostroboides</i>	75/12	35/20	25% very poor	poor	E				X						Roots were severed during installation of ADA walkway.

Tree ID#	To be Removed Per Current Specification	Author Recommendations Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter (Inches @ 54° A.G. (+2.5% +4.5))	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Wt. Density (Very Low, Low, Med., High, Ex.)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Dust Evidence (Note Elevation)	Topping or Severe Pruning on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sum Decay (Note Elevation)	Cable Installation Measurements (Note Height, Span, Weight, Inclination(s) (Note Height))	Root Extension Restricted in Painter	Soil Moisture Deficit (% at height Stress*)	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)	
435	?			31.1					31.1		Shamel ash	<i>Fraxinus uhdei</i>	65/45	40/20	25% very poor	poor	W				GR			3		Roots severed during sidewalk replacement		
436	X			23.0	12.0				35.0		coast redwood	<i>Sequoia sempervirens</i>	65/18	75/60	65% fair	good											Diameters estimated.	
437				27.7					27.7		Shamel ash	<i>Fraxinus uhdei</i>	60/30	30/30	30% poor	poor	W											
438	?			23.5					23.5		Shamel ash	<i>Fraxinus uhdei</i>	65/18	60/30	37% poor	moderate	E										Roots severed during sidewalk replacement	
439				27.0					27.0		coast redwood	<i>Sequoia sempervirens</i>	75/16	70/70	70% good	good				X							Crown raising pruning was performed to limb up this tree.	
440	X			18.7					18.7		Shamel ash	<i>Fraxinus uhdei</i>	60/30	35/35	35% poor	very poor	W	W									Condition estimated prior to spring leafout.	
441	X			21.2					21.2		Shamel ash	<i>Fraxinus uhdei</i>	60/45	50/50	50% fair	moderate											Roots severed during sidewalk replacement	
442				31.2					31.2		Shamel ash	<i>Fraxinus uhdei</i>	60/45	60/45	53% fair	moderate	W	S									Roots severed during sidewalk replacement . Will need endweight reduction pruning.	
443				41.0					41.0		coast redwood	<i>Sequoia sempervirens</i>	70/20	75/60	68% fair	good											Cable installation recommended.	
444				21.5					21.5		Shamel ash	<i>Fraxinus uhdei</i>	55/30	70/50	60% fair	moderate	W											
445	X			15.4					15.4		Shamel ash	<i>Fraxinus uhdei</i>	60/18	50/50	50% fair	moderate	N			X								
446	X			21.1					21.1		coast redwood	<i>Sequoia sempervirens</i>	70/15	75/75	75% good	good												
447	X			17.5					17.5		Shamel ash	<i>Fraxinus uhdei</i>	60/20	55/50	52% fair	poor to mod	N											
448	X			15.7					15.7		coast redwood	<i>Sequoia sempervirens</i>	70/10	60/60	60% fair	moderate	E										Tree was limbed up.	

Tree ID #	To be Removed Per Current Stewardship Recommendations Due to Very Poor Health or Elevated Risk of Failure	Author Recommendations	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (Inches @ 14° A.G. (+2.54*4.5))	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Tree Density (Very Poor, Poor, Mod, Good, Very Good)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Dust Evidences (Note Elevation)	Topping or Severe Pruning on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note Elevation)	Cedarian Mortars with or without Bark, Inclusions (Note Height)	Root Extension Restricted in Painter	Soil Moisture Deficit (% at height Stress*)	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)		
449	X			16.5					16.5		coast redwood	<i>Sequoia sempervirens</i>	70/10	60/60	60% fair	moderate	E										Tree was limbed up.		
450	X			15.5					15.5		coast redwood	<i>Sequoia sempervirens</i>	70/10	60/50	55% fair	moderate	E										Tree was limbed up.		
451				19.6					19.6		Shamel ash	<i>Fraxinus uhdei</i>	50/25	70/55	60% fair	good	W												
452				21.5					21.5		Shamel ash	<i>Fraxinus uhdei</i>	55/30	50/35	40% poor	poor to mod	W										0 to 2		
453	X	X		15.0					15.0		Shamel ash	<i>Fraxinus uhdei</i>	50/10	10/10	10% very poor	very poor													
454				29.4					29.4		Shamel ash	<i>Fraxinus uhdei</i>	65/35	50/40	47% poor	poor to mod											12	Roots damaged.	
455	X			17.7					17.7		Shamel ash	<i>Fraxinus uhdei</i>	45/18	30/35	33% poor	poor	E											Roots damaged.	
456	X			22.3					22.3		Shamel ash	<i>Fraxinus uhdei</i>	60/20	40/35	37% poor	poor	W	W									15		
457	X			28.5					28.5		Shamel ash	<i>Fraxinus uhdei</i>	65/35	50/60	55% fair	moderate	W												
458	X			25.1					25.1		Shamel ash	<i>Fraxinus uhdei</i>	60/35	30/40	35% poor	poor to mod												Bark stuffing off. Phloem/bark disorder.	
459				31.9					31.9		Shamel ash	<i>Fraxinus uhdei</i>	75/45	60/60	60% fair	moderate												Roots damaged.	
460				31.8					31.8		Shamel ash	<i>Fraxinus uhdei</i>	65/45	60/55	59% fair	moderate												Roots damaged.	
461				25.5					25.5		Shamel ash	<i>Fraxinus uhdei</i>	55/40	50/50	50% fair	poor to mod											15		
462				15.3					15.3		Shamel ash	<i>Fraxinus uhdei</i>	40/15	50/40	45% poor	moderate												8	

Tree ID#	To be Removed Per Current Status	Author Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (Inches @ 54" A.G. (1.254" x 4.5)	Reported Tree Trunk Diameter at 54" above Ground (inches) (10.0+ single stem, 20" multi, various specified diameter for non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Wt. Density (Very Low, Low, Med, High, Ex-High)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Out Evidences (Note/Elevation)	Topping or Severe Pruning on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note/Elevation)	Codominant Measurements with Dominant Width (Inches) (Note Height)	Root Extension Restricted in Painter	Soil Moisture Deficit (% at height Stress*)	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)		
463				21.0					21.0			Shamel ash	<i>Fraxinus uhdei</i>	55/45	75/60	70% good	good	W				0 to 5					Roots damaged.			
464				34.1					34.1			Shamel ash	<i>Fraxinus uhdei</i>	55/30	65/45	48% poor	moderate	E												
465				22.8					22.8			Shamel ash	<i>Fraxinus uhdei</i>	60/30	55/45	50% fair	moderate	W										Roots damaged.		
466				29.3					29.3			Shamel ash	<i>Fraxinus uhdei</i>	65/30	60/45	50% fair	mod to good	E												
467				25.6					25.6			Shamel ash	<i>Fraxinus uhdei</i>	65/45	50/30	37% poor	moderate						GR	3 to 10						
468				24.6					24.6			Shamel ash	<i>Fraxinus uhdei</i>	55/30	40/40	40% poor	poor												Roots damaged.	
469				25.2					25.2			Shamel ash	<i>Fraxinus uhdei</i>	50/30	40/30	38% poor	poor	W	S				GR	12					Roots damaged.	
470				27.7					27.7			Shamel ash	<i>Fraxinus uhdei</i>	60/35	45/35	40% poor	poor													
471				14.9					14.9			Shamel ash	<i>Fraxinus uhdei</i>	40/15	45/45	45% poor	poor	W	W											
472				16.4					16.4			Shamel ash	<i>Fraxinus uhdei</i>	50/20	45/45	45% poor	poor	E												
473				31.5					31.5			Shamel ash	<i>Fraxinus uhdei</i>	60/45	75/65	68% fair	good							9 and 10 (not verified)					Roots damaged	
474				25.3					25.3			Shamel ash	<i>Fraxinus uhdei</i>	60/30	75/60	65% fair	good	E					GR							
475				28.7					28.7			Shamel ash	<i>Fraxinus uhdei</i>	60/45	70/65	68% fair	moderate												Roots damaged.	
476	X			15.2					15.2			Shamel ash	<i>Fraxinus uhdei</i>	30/25	35/40	38% poor	poor to mod	E												

Tree ID #	To be Removed Per Current Status	Author Recommendations Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (inches @ 54" A.G. (1.254" x 4.5))	Height and Canopy Spread (ft.)	Scientific Name (Genus, species)	Common Name	Health & Structural Rating (0-100% each)	Overall Condition Rating (0-100%)	Live Tree Density (Very Low, Low, Med, High, Ex-High)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Dust Evidences (Note Elevation)	Topped or Severely Pruned on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note Elevation)	Codominant Measurements (Note Height, Width, and/or crown radius, inclinations) (Note Height)	Root Extension Restricted in Past	Soil Moisture Deficit (% at Night Stress*)	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
477	X	X		13.9					13.9			Shamel ash	<i>Fraxinus uhdei</i>	35/20	20/20	20% very poor	very poor										
478	X			16.9					16.9			coast redwood	<i>Sequoia sempervirens</i>	40/15	50/50	50% fair	poor										
479	X	X		22.1					22.1			coast redwood	<i>Sequoia sempervirens</i>	50/20	0/0	0% dead											
480	X			13.1					13.1			Shamel ash	<i>Fraxinus uhdei</i>	30/18	45/45	45% poor	poor	SE									
481	X			20.0					20.0			Shamel ash	<i>Fraxinus uhdei</i>	35/25	45/45	45% poor	poor	W									
482	X			9.8					9.8			Shamel ash	<i>Fraxinus uhdei</i>	30/10	30/20	25% very poor	poor	W									
483	X			12.7					12.7			Shamel ash	<i>Fraxinus uhdei</i>	30/16	50/40	50% fair	moderate	N				GR					
484	X			15.9					15.9			Shamel ash	<i>Fraxinus uhdei</i>	30/18	60/50	55% fair	moderate										
485	X			13.7					13.7			Shamel ash	<i>Fraxinus uhdei</i>	30/20	55/55	55% fair	moderate	E									
486	X			22.3					22.3			coast redwood	<i>Sequoia sempervirens</i>	50/18	70/70	70% good	moderate										
487	X			21.9					21.9			coast redwood	<i>Sequoia sempervirens</i>	50/18	70/70	70% good	moderate										
488	X			12.4					12.4			Shamel ash	<i>Fraxinus uhdei</i>	30/16	50/35	40% poor	moderate	N				0 to 3					
489	X			8.9					8.9			Shamel ash	<i>Fraxinus uhdei</i>	30/20	55/35	45% poor	moderate										
490	X			14.3					14.3			Shamel ash	<i>Fraxinus uhdei</i>	35/35	55/45	47% poor	poor to mod	W	W								

Tree ID #	To be Removed Per Current Status	Author Recommendations Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (Inches @ 54° A.G. (1.2544 * 4.5))	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Tree Density (Very Low, Low, Med, High, Ex.)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Dust Evidence (Note/Elevation)	Toppling or Severe Pruning on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note/Elevation)	Codominant Measurements with Dominant Width (Inches) (Note Height)	Root Extension Restricted in Painter	Soil Moisture Deficit (% at Night Stress*)	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
491	X	X		9.3					9.3		Shamel ash	<i>Fraxinus uhdei</i>	20/12	40/20	27% very poor	poor	E										
492	X			9.1					9.1		Shamel ash	<i>Fraxinus uhdei</i>	25/18	50/35	40% poor	poor to mod		W	W								
493	X			12.4					12.4		Shamel ash	<i>Fraxinus uhdei</i>	30/18	45/30	35% poor	poor to mod		W	W								
494	X			13.8					13.8		Shamel ash	<i>Fraxinus uhdei</i>	30/30	40/40	40% poor	poor											
495	X			13.0					13.0		Shamel ash	<i>Fraxinus uhdei</i>	30/16	26/20	22% very poor	poor		W	W				0 to 8				
496	X			7.9					7.9		Shamel ash	<i>Fraxinus uhdei</i>	25/12	30/20	25% very poor	poor	E										
497	X			10.2					10.2		Shamel ash	<i>Fraxinus uhdei</i>	30/20	25/30	29% very poor	poor		W	W								
498	X			11.8					11.8		evergreen pear	<i>Pyrus kawakamii</i>	20/20	50/40	44% poor	poor	N		5								Fireblight infection.
499	X	X		4.0					4.0		evergreen pear	<i>Pyrus kawakamii</i>	9/6	0/0	0% dead												
500	X	X		21.4					21.4		coast redwood	<i>Sequoia sempervirens</i>	55/15	0/0	0% dead												
501	X	X		19.0					19.0		coast redwood	<i>Sequoia sempervirens</i>	55/15	15/15	15% very poor	very poor									X	Slope slope.	
502	X	X		24.4					24.4		coast redwood	<i>Sequoia sempervirens</i>	55/12	0/0	0% dead										X		
503	X			6.7					6.7		evergreen pear	<i>Pyrus kawakamii</i>	13/14	40/40	40% poor	poor	S								5		
504	X			9.9	9.0				18.9		oak species	<i>Quercus sp.</i>	35/30	80/50	60% fair	good	S				GR					Steep slope	

Tree ID #	To be Removed Per Current Status	Author Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (inches @ 54" A.G. (1.254" x 4.5))	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Wt. Density (Very Low, Low, Med, High, Ex-High)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Out Elevation (Note Elevation)	Topped or Severely Pruned on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note Elevation)	Culprits (Mastodons, Elephants, etc. with date removed, Mass, Inclusion(s), Note Height)	Root Extension Restricted in Past	Soil Moisture Deficit ("To begin Stress?")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)		
505	X			32.3					32.3		coast redwood	<i>Sequoia sempervirens</i>	50/35	70/70	70% good	moderate									X	Steep slope			
506	X			10.0					10.0		evergreen pear	<i>Pyrus kawakamii</i>	25/15	40/40	40% poor	poor	E	E									Fireblight infection.		
507	X	X		7.6					7.6		evergreen pear	<i>Pyrus kawakamii</i>	18/15	20/20	20% very poor	very poor	N	N			X						Fireblight infection.		
508	X			10.9					10.9		evergreen pear	<i>Pyrus kawakamii</i>	25/25	40/30	35% poor	poor	N	N			X						Fireblight infection.		
509	X	X		7.2	6.9	5.5			19.6		southern magnolia	<i>Magnolia grandiflora</i>	25/15	15/15	15% very poor	very poor	N									X			
510	X			28.0					28.0		coast redwood	<i>Sequoia sempervirens</i>	60/25	80/80	80% good	good										X			
511	X			14.4					14.4		evergreen pear	<i>Pyrus kawakamii</i>	20/25	40/50	44% poor	poor					X						Roots damaged on grade. Fireblight infection.		
512	X			6.0					6.0		southern magnolia	<i>Magnolia grandiflora</i>	15/8	50/30	37% poor	moderate					X						X		
513				5.6					5.6		southern magnolia	<i>Magnolia grandiflora</i>	18/10	40/40	40% poor	poor	E									X			
514				4.4					4.4		southern magnolia	<i>Magnolia grandiflora</i>	18/6	40/40	40% poor	poor	E								X				
515				10.5					10.5		evergreen pear	<i>Pyrus kawakamii</i>	25/20	30/30	30% poor	poor	E	E			X						Fireblight infection.		
516	X			10.6					10.6		evergreen pear	<i>Pyrus kawakamii</i>	25/20	30/40	35% poor	poor	E	E			X						Fireblight infection.		
517	X			6.5					6.5		southern magnolia	<i>Pyrus kawakamii</i>	13/7	40/30	30% poor	poor to mod	E					4 to 7							
518				23.2					23.2		Shamel ash	<i>Fraxinus uhdei</i>	50/30	55/60	55% fair	poor to mod	W	W									Out of leaf. Overall condition verify in spring after leafout.		

Tree ID#	To be Removed Per Current Steward Author Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter Inches @ 54" A.G. (+2.5% +4.5%)	Reported Tree Type and Condition Category of Current Stewardship (10.0 = single stem, 20+ multi, various species and/or non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating Range (0-100% each)	Overall Condition Rating (0-100%)	Live Tree Density (Very Low, Low, Med, High, Very High)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Out Edition (Note Elevation)	Topped or Severely Pruned on Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Sap Decay (Note Elevation)	Cadmium Measurements in Soil (ppm) and Water Infiltration (mm/Hr) (Note Height)	Root Extension Restricted in Painter	Soil Nutrient Deficit ("Soil Depth Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
519			18.5					18.5			Monterey pine	<i>Pinus radiata</i>	55/18	60/50	55% fair	poor to mod		E			X						
520			4.0					4.0			Chinese elm	<i>Ulmus parvifolia</i>	15/12	75/45	57% fair	moderate	N	N									
521	X		20.2					20.2			Shamel ash	<i>Fraxinus uhdei</i>	55/18	30/25	28% very poor	poor	W										
522	X		14.3					14.3			Shamel ash	<i>Fraxinus uhdei</i>	35/18	10/10	10% very poor	very poor	W						5				
523	X		14.0					14.0			Monterey pine	<i>Pinus radiata</i>	40/12	25/25	25% very poor	poor	S	S									
524			10.6					10.6			Chinese elm	<i>Ulmus parvifolia</i>	40/30	75/75	75% good	good	E				X						
525			17.6					17.6			Shamel ash	<i>Fraxinus uhdei</i>	40/25	35/35	35% poor	poor	W	W									
526			6.7					6.7			Chinese elm	<i>Ulmus parvifolia</i>	18/12	65/50	55% fair	moderate	E				X						
527			8.2					8.2			Shamel ash	<i>Fraxinus uhdei</i>	20/15	70/40	55% fair	good	S	S									
528			11.1					11.1			Chinese elm	<i>Ulmus parvifolia</i>	25/35	70/60	68% fair	moderate					X						
529			12.7					12.7			Shamel ash	<i>Fraxinus uhdei</i>	30/20	45/45	45% poor	poor to mod	W	W									
530			10.4					10.4			Chinese elm	<i>Ulmus parvifolia</i>	30/30	75/65	73% good	moderate	S				X						
531			9.2					9.2			Shamel ash	<i>Fraxinus uhdei</i>	30/18	50/40	45% poor	W	S										
532			12.3					12.3			Chinese elm	<i>Ulmus parvifolia</i>	50/40	65/70	70% good	moderate	SE				X						

Tree ID#	To be Removed Per Current Steward Author Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter Inches @ 54" A.G. (+2.5% +4.5%)	Reported Tree Trunk Diameter at 54" A.G. (inches) (10.0 = single stem, 20+ multi, various species and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating Range (0=100% health)	Overall Condition Rating (0=100%)	Live Tree Density (Very Low, Low, Med, High, Very High, Ex.)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Drop Evidence (Note Elevation)	Topped or Severely Pruned on Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Sap Decay (Note Elevation)	Culprits/Masturbators with Description (Note Height)	Root Extension Restricted in Past	Soil Moisture Deficit ("20+ eight Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
533			13.2					13.2			Shamel ash	<i>Fraxinus uhdei</i>	30/30	60/60	60% fair	moderate											
534			10.2					10.2			Chinese elm	<i>Ulmus parvifolia</i>	40/20	70/60	70% good	good	E			X							
535			20.6					20.6			Shamel ash	<i>Fraxinus uhdei</i>	35/35	60/50	55% fair	good											
536	X		12.1					12.1			Shamel ash	<i>Fraxinus uhdei</i>	30/20	20/20	20% very poor	very poor											
537			13.1					13.1			Chinese elm	<i>Ulmus parvifolia</i>	35/35	60/55	60% fair	moderate	E			X							
538			19.9					19.9			Shamel ash	<i>Fraxinus uhdei</i>	35/35	50/45	50% fair	poor to mod											
539			12.7					12.7			Chinese elm	<i>Ulmus parvifolia</i>	25/30	75/65	70% good	good	E	E		X							
540			21.9					21.9			Shamel ash	<i>Fraxinus uhdei</i>	45/45	65/55	60% fair	moderate					GR						
541			12.5					12.5			Chinese elm	<i>Ulmus parvifolia</i>	30/30	60/50	55% fair	moderate				X							
542			13.7					13.7			Shamel ash	<i>Fraxinus uhdei</i>	35/25	50/50	50% fair	moderate	W	W									
543			15.2					15.2			Shamel ash	<i>Fraxinus uhdei</i>	40/25	55/30	34% poor	moderate	S				GR	5					
544			14.1					14.1			Chinese elm	<i>Ulmus parvifolia</i>	40/35	70/60	67% fair	moderate	E	E		X							
545			17.4					17.4			Shamel ash	<i>Fraxinus uhdei</i>	40/30	75/55	64% fair	good	W								Tight forks at 8 feet.		
546			11.2					11.2			Chinese elm	<i>Ulmus parvifolia</i>	30/35	70/60	66% fair	moderate	E	E		X							

Tree ID #	To be Removed Per Current Stewardship Recommendations Due to Very Poor Condition or Elevated Risk of Failure	Author Recommendations Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (inches @ 54° A.G. (1.254+4.5))	Height and Canopy Diameter (feet)	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Tree Density (Very Low, Low, Med, High, Ex-High)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Out Evidences (Note Elevation)	Toppling or Severe Pruning on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note Elevation)	Cedarian Mortars (Note Mortar, when known, with Indication(s) Note Height)	Root Extension Restricted in Painter	Soil Moisture Deficit (% at height Stress*)	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
547	X	X		12.5					12.5																		
548	X			16.0	13.0				29.0			Monterey pine	<i>Pinus radiata</i>	55/35	50/35	38% poor	poor to mod	E									Diameters of mainstems estimated.
549	X			16.3					16.3			Shamel ash	<i>Fraxinus uhdei</i>	45/30	65/55	61% fair	moderate	W	W								
550				17.5					17.5			Shamel ash	<i>Fraxinus uhdei</i>	50/30	75/65	70% good	good	W									
551				23.0					23.0			Monterey pine	<i>Pinus radiata</i>	50/35	40/40	40% poor	poor	E	E								Diameter estimated
552				11.2					11.2			Chinese elm	<i>Ulmus parvifolia</i>	25/25	60/60	60% fair	moderate	N	N		X						
553				14.2					14.2			Shamel ash	<i>Fraxinus uhdei</i>	30/20	75/65	70% good	good	W	W								
554				4.0					4.0			elm species	<i>Ulmus sp.</i>	20/10	75/75	75% good	good										Tree out of leaf. ID not verified at time of writing.
555	X		9.8						9.8			Shamel ash	<i>Fraxinus uhdei</i>	20/15	10/10	10% very poor	very poor						0 to 10				
556			16.8						16.8			Shamel ash	<i>Fraxinus uhdei</i>	30/30	55/60	59% fair	moderate						0 to 1				Vehicle impact scar.
557			12.9						12.9			Shamel ash	<i>Fraxinus uhdei</i>	50/25	35/35	35% poor	poor	W	W								
558			13.8						13.8			Chinese elm	<i>Ulmus parvifolia</i>	35/35	75/70	73% good	good	N	N		X						
559			15.9						15.9			Shamel ash	<i>Fraxinus uhdei</i>	50/25	55/50	54% fair	poor to mod	W									
560			11.5						11.5			Chinese elm	<i>Ulmus parvifolia</i>	30/30	65/70	68% fair	moderate	E			X						

Tree Tag #	To be Removed Per Current Stewardship Recommendations Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (Inches @ 54" A.G. (1.25m + 4.5))	Reported Total Height & Canopy Spread of Current Canopy Cover (10.0' single stem, 20' multi, various specified heights for non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Wt. Density (Very Low, Low, Med, High, Ex.)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Dieback Evidence (Note Elevation)	Topping or Severe Pruning on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note Elevation)	Codominant Measurements with Dominant Stem (Inches/long) (Note Height)	Root Extension Restricted in Painter	Soil Moisture Deficit (% at height Stress*)	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
561			13.7					13.7			Chinese elm	<i>Ulmus parvifolia</i>	30/30	70/50	60% fair	good	N			X							
562			13.8					13.8			Shamel ash	<i>Fraxinus uhdei</i>	30/30	40/35	38% poor	poor	N										
563			23.6					23.6			Monterey pine	<i>Pinus radiata</i>	35/30	30/30	30% poor	poor	N										Bark beetle frass noted at root crown.
564	X		14.8					14.8			Shamel ash	<i>Fraxinus uhdei</i>	35/25	25/20	23% very poor	very poor	W	W									
565			19.0					19.0			Monterey pine	<i>Pinus radiata</i>	35/25	45/45	45% poor	poor to mod											
566			17.5					17.5			Shamel ash	<i>Fraxinus uhdei</i>	45/35	40/40	40% poor	moderate	W	W									
567	X		16.2					16.2			Shamel ash	<i>Fraxinus uhdei</i>	30/15	25/25	25% very poor	very poor											
568			18.0					18.0			Shamel ash	<i>Fraxinus uhdei</i>	45/35	75/65	70% good	good	W										
569			13.5					13.5			Shamel ash	<i>Fraxinus uhdei</i>	30/25	70/65	68% fair	good	W										
570			12.7					12.7			Shamel ash	<i>Fraxinus uhdei</i>	18/10	50/30	40% poor	moderate	W	W		X							
571			22.7					22.7			coast redwood	<i>Sequoia sempervirens</i>	55/20	60/60	60% fair	moderate										X	
572			31.6					31.6			coast redwood	<i>Sequoia sempervirens</i>	55/20	60/45	55% fair	moderate									25	X	
573			16.5					16.5			coast redwood	<i>Sequoia sempervirens</i>	50/15	60/50	53% fair	moderate									X		
574			25.6					25.6			coast redwood	<i>Sequoia sempervirens</i>	55/15	60/60	60% fair	moderate									X		

Tree Tag #	To be Removed Per Current Stewardship Recommendations Due to Very Poor Health or Elevated Risk of Failure	Author Recommendations	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (inches @ 54° A.G. (1.254 x 4.5))	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Wt. Density (Very Low, Low, Med., High, Ex.)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Splitout Evidence (Note Elevation)	Topping or Severe Pruning on Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Sap Decay (Note Elevation)	Cedarian Mortars (Note Mortar Type, Color, Size, Location(s), Note Height)	Root Extension Restricted in Painter	Soil Moisture Deficit ("20% height Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
575				12.0					12.0		coast redwood	<i>Sequoia sempervirens</i>	35/10	60/40	47% poor	moderate									x		
576				32.1	13.4	12.2			57.7		coast redwood	<i>Sequoia sempervirens</i>	55/25	70/70	70% good	poor									x		
577				27.6					27.6		coast redwood	<i>Sequoia sempervirens</i>	50/15	40/30	35% poor	poor									x		
578				17.1					17.1		coast redwood	<i>Sequoia sempervirens</i>	50/12	60/60	60% fair	moderate									x		
579				17.7					17.7		coast redwood	<i>Sequoia sempervirens</i>	50/12	65/65	65% fair	moderate									x		
580				31.5	9.0				40.5		coast redwood	<i>Sequoia sempervirens</i>	60/20	75/75	75% good	moderate									x		
581				21.5	10.5				32.0		coast redwood	<i>Sequoia sempervirens</i>	60/15	60/60	60% fair	moderate									x		
582				31.7					31.7		coast redwood	<i>Sequoia sempervirens</i>	70/25	80/80	80% good	good									x		
583				8.3					8.3		coast redwood	<i>Sequoia sempervirens</i>	35/6	20/20	20% very poor	very poor									x	Difficult to assess visually.	
584				26.9					26.9		coast redwood	<i>Sequoia sempervirens</i>	70/20	65/65	65% fair	moderate									x		
585				15.9	7.3				23.2		coast redwood	<i>Sequoia sempervirens</i>	50/15	65/65	65% fair	moderate									x		
586				25.3					25.3		coast redwood	<i>Sequoia sempervirens</i>	50/13	65/65	65% fair	moderate									x		
587				19.9					19.9		coast redwood	<i>Sequoia sempervirens</i>	50/14	65/65	65% fair	moderate									x		
588				21.0					21.0		coast redwood	<i>Sequoia sempervirens</i>	50/12	60/60	60% fair	moderate									x		

Tree ID#	To be Removed Per Current Specification	Author Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter (Inches @ 54° A.G. (1.254 x D + 4.5)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Tree Density (Very Low, Low, Mod, High, etc.)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Splitout Evidence (Note Elevation)	Topping or Severe Pruning on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note Elevation)	Cordon Measurements (Note Height, width, and/or elevation, inches/feet)	Root Extension Restricted in Painter	Soil Moisture Deficit (% at height Stress*)	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
589				23.3					23.3		coast redwood	<i>Sequoia sempervirens</i>	60/12	65/65	65% fair	moderate									X		
590				25.5	5.0				30.5		coast redwood	<i>Sequoia sempervirens</i>	60/10	30/40	35% poor	poor									X		
591				21.2					21.2		coast redwood	<i>Sequoia sempervirens</i>	55/10	50/40	45% poor	poor									X		
592	X			25.0					25.0		coast redwood	<i>Sequoia sempervirens</i>	60/8	25/35	28% very poor	very poor									X		
593				14.4					14.4		coast redwood	<i>Sequoia sempervirens</i>	40/10	30/30	30% poor	poor to mod	S					0 to 5			X		
594				18.1					18.1		coast redwood	<i>Sequoia sempervirens</i>	50/13	65/55	50% fair	moderate									X		
595				19.2					19.2		coast redwood	<i>Sequoia sempervirens</i>	25/15	40/25	30% poor	moderate	25 (apical meristem)								X		
596				12.8					12.8		coast redwood	<i>Sequoia sempervirens</i>	55/8	50/40	45% poor	poor to mod	S								X		
597	X			12.7	8.3				21.0		coast redwood	<i>Sequoia sempervirens</i>	35/10	0/0	0% dead	dead							1		X		
598	X			19.5					19.5		coast redwood	<i>Sequoia sempervirens</i>	50/6	30/10	20% very poor	very poor									X	Shear crack through the mainstem longitudinally.	
599				27.0					27.0		coast redwood	<i>Sequoia sempervirens</i>	75/25	65/65	65% fair	moderate									X		
600				18.8					18.8		coast redwood	<i>Sequoia sempervirens</i>	65/8	50/40	45% poor	poor	W								X	Canker developing on trunk at 5 feet elevation.	
601				25.5					25.5		coast redwood	<i>Sequoia sempervirens</i>	70/14	40/40	40% poor	poor									X		
602				13.7	7.7				21.4		coast redwood	<i>Sequoia sempervirens</i>	40/9	40/30	35% poor						BRC			X			

Tree ID #	To be Removed Per Current Stewardship Recommendations Due to Very Poor Condition or Elevated Risk of Failure	Author Recommendations	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter (inches) @ 54° A.G. (+2.54 +4.5)	Reported Trunk Diameter (inches) @ 54° A.G. (+2.54 +4.5)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0-100% each)	Overall Condition Rating (0-100%)	Live Tree Density (Very Low, Low, Mod, High, Ex-High)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Out Evidences (Note Elevation)	Toppling or Severe Pruning on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note Elevation)	Codominant Mainstem Forks or Major Branches with Significant Inclusion(s) (Note Height)	Root Extension Restricted in Painter	Soil Moisture Deficit ("Soil Tight Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
603	X			17.3					17.3			coast redwood	<i>Sequoia sempervirens</i>	50/15	25/25	25% very poor	very poor		W								X	
604	X			16.7					16.7			coast redwood	<i>Sequoia sempervirens</i>	50/12	25/25	25% very poor	very poor											
605	X			6.6					6.6			coast redwood	<i>Sequoia sempervirens</i>	35/7	25/25	25% very poor	very poor											
606	X			26.4					26.4			coast redwood	<i>Sequoia sempervirens</i>	60/18	20/30	25% very poor	poor										X	Codominant mainstem fork at 20 feet.
607	X			15.4					15.4			coast redwood	<i>Sequoia sempervirens</i>	55/10	15/20	17% very poor	very poor										X	
608				22.4					22.4			coast redwood	<i>Sequoia sempervirens</i>	60/14	30/30	30% poor	poor	W									X	
609				27.1					27.1			coast redwood	<i>Sequoia sempervirens</i>	70/18	35/35	35% poor	poor										X	
610	X			13.0					13.0			coast redwood	<i>Sequoia sempervirens</i>	30/8	40/20	28% very poor	poor to mod										X	
611				39.4					39.4			coast redwood	<i>Sequoia sempervirens</i>	75/15	70/70	70% good	good										X	Cankers on trunk at 6 feet.
612				8.0					8.0			coast redwood	<i>Sequoia sempervirens</i>	25/4	0/0	0% dead	dead										X	
613				26.5					26.5			coast redwood	<i>Sequoia sempervirens</i>	75/18	75/75	75% good	good										X	
614				32.3					32.3			coast redwood	<i>Sequoia sempervirens</i>	65/15	70/70	70% good	mod to good										X	
615				15.4					15.4			coast redwood	<i>Sequoia sempervirens</i>	50/10	50/50	50% fair	poor										X	
616				24.4					24.4			coast redwood	<i>Sequoia sempervirens</i>	65/11	55/50	53% fair	mod										X	

Tree Tag #	To be Removed Per Current Stewardship Recommendations Due to Very Poor Health or Elevated Risk of Failure	Author Recommendations	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (inches @ 54" A.G. (1.25m x 4.5))	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Wt. Density (Very Low, Low, Med, High, Ex.)	Lopsided Canopy (Direction Notes)	Trunk Lean (Direction Notes)	Historical Stem Splitout Evidence (Note Elevation)	Topping or Severe Pruning on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note Elevation)	Cedarian Mortars (Note Mortar Type, Color, Size, Location(s), Note Height)	Root Extension Restricted in Painter	Soil Moisture Deficit ("20% height Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
617				10.1					10.1		coast redwood	<i>Sequoia sempervirens</i>	25/9	65/45	55% fair	mod									x		
618				28.7					28.7		coast redwood	<i>Sequoia sempervirens</i>	70/18	55/60	55% fair	poor to mod									x		
619				12.5					12.5		coast redwood	<i>Sequoia sempervirens</i>	45/10	50/40	50% fair	moderate									x		
620				15.3					15.3		coast redwood	<i>Sequoia sempervirens</i>	35/10	50/40	50% fair	moderate									x		
621				12.6					12.6		coast redwood	<i>Sequoia sempervirens</i>	45/11	60/50	55% fair	moderate									x		
622				23.4					23.4		coast redwood	<i>Sequoia sempervirens</i>	75/15	50/50	50% fair	poor									x		
623				25.1					25.1		coast redwood	<i>Sequoia sempervirens</i>	75/15	50/50	50% fair	poor									x		
624				15.9					15.9		coast redwood	<i>Sequoia sempervirens</i>	70/12	50/40	49% poor	poor									x		
625				19.7	6.4				26.1		coast redwood	<i>Sequoia sempervirens</i>	65/10	50/50	50% fair	poor									x		
626				19.6					19.6		coast redwood	<i>Sequoia sempervirens</i>	60/10	60/50	55% fair	poor to mod									x		
627				22.9					22.9		coast redwood	<i>Sequoia sempervirens</i>	75/12	60/50	53% fair	poor									x		
628	x			14.1					14.1		coast redwood	<i>Sequoia sempervirens</i>	45/8	20/30	25% very poor	very poor									x		
629	x			11.9					11.9		coast redwood	<i>Sequoia sempervirens</i>	45/7	10/10	10% very poor	very poor									x		
630				12.0					12.0		coast redwood	<i>Sequoia sempervirens</i>	35/10	35/35	35% poor	poor									x		

Tree Tag #	To be Removed Per Current Stewardship Recommendations Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter (Inches @ 54° A.G. (1.254x4.45))	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Wt. Density (Very Low, Low, Med, High, Ex.)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Splitout Evidence (Note Elevation)	Topping or Severe Pruning on Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Sap Decay (Note Elevation)	Colonization Measurements (Note Elevation, Main, Sub, Minor, Other, Inclusion(s) (Note Height))	Root Extension Restricted in Painter	Soil Moisture Deficit ("Soil Tight Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
631	X		16.2					16.2		coast redwood	<i>Sequoia sempervirens</i>	45/15	20/20	20% very poor	very poor											
632			15.5					15.5		coast redwood	<i>Sequoia sempervirens</i>	50/18	40/30	35% poor	poor to mod											
633			9.3					9.3		coast redwood	<i>Sequoia sempervirens</i>	40/10	35/35	35% poor	poor											
634	X		11.5					11.5		coast redwood	<i>Sequoia sempervirens</i>	50/12	20/20	20% very poor	very poor											
635	X		18.4					18.4		coast redwood	<i>Sequoia sempervirens</i>	50/12	10/10	10% very poor	very poor											
636	X		20.9					20.9		coast redwood	<i>Sequoia sempervirens</i>	70/18	25/25	25% very poor	very poor											
637	X		13.8					13.8		coast redwood	<i>Sequoia sempervirens</i>	50/15	25/25	25% very poor	very poor											One of two mainstems was removed at grade.
638			27.9					27.9		coast redwood	<i>Sequoia sempervirens</i>	80/25	75/75	75% good	mod to good											
639	X		10.8					10.8		coast redwood	<i>Sequoia sempervirens</i>	35/8	25/25	25% very poor	very poor											Difficult to assess visually.
640			21.1					21.1		coast redwood	<i>Sequoia sempervirens</i>	70/12	40/40	40% poor	poor	W										
641			19.6					19.6		coast redwood	<i>Sequoia sempervirens</i>	60/12	65/55	60% fair	moderate		N									
642			30.3					30.3		coast redwood	<i>Sequoia sempervirens</i>	75/20	50/50	50% fair	moderate											
643			24.3					24.3		coast redwood	<i>Sequoia sempervirens</i>	70/18	60/55	50% fair	moderate											
644			11.1					11.1		coast redwood	<i>Sequoia sempervirens</i>	55/12	50/50	50% fair	poor											

Tree ID #	To be Removed Per Current Stewardship Recommendations Due to Very Poor Health or Elevated Risk of Failure	Author Recommendations	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (inches @ 54° A.G. (+2.54*4.5))	Reported Tree Trunk Diameter (inches @ 54° A.G. (+2.54*4.5))	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Wt. Density (Very Low, Low, Mod., High, Ex.)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Dust Evidence (Note Elevation)	Toppling or Severe Pruning on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note Elevation)	Cadmium Measurements (Note Elevation, Mass, Inclusion(s), Note Height)	Root Extension Restricted in Past	Soil Nutrient Deficit ("Soil Tight Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
645				22.8					22.8			coast redwood	<i>Sequoia sempervirens</i>	70/12	40/35	39% poor	poor									X		
646	X			14.8	7.5				22.3			coast redwood	<i>Sequoia sempervirens</i>	50/10	45/20	27% very poor	poor	W								X	S-trunk form at certain heights.	
647				31.5					31.5			coast redwood	<i>Sequoia sempervirens</i>	75/25	80/80	80% good	good									X		
648				4.9					4.9			coast redwood	<i>Sequoia sempervirens</i>	25/5	30/30	30% poor	poor	S								X		
649				25.7					25.7			coast redwood	<i>Sequoia sempervirens</i>	65/12	50/50	50% fair	moderate									X		
650				22.4					22.4			coast redwood	<i>Sequoia sempervirens</i>	65/16	50/50	50% fair	moderate									X		
651				29.6					29.6			coast redwood	<i>Sequoia sempervirens</i>	70/20	60/40	55% fair	moderate									X		
652				15.9					15.9			coast redwood	<i>Sequoia sempervirens</i>	65/16	40/40	40% poor	poor									X		
653	X			16.0					16.0			coast redwood	<i>Sequoia sempervirens</i>	60/10	20/20	20% very poor	very poor									X		
654	X			20.5					20.5			coast redwood	<i>Sequoia sempervirens</i>	55/6	30/15	20% very poor	very poor									X		
655				25.0	10.0				35.0			coast redwood	<i>Sequoia sempervirens</i>	70/15	50/50	50% fair	poor to mod								3	X		
656				27.3					27.3			coast redwood	<i>Sequoia sempervirens</i>	75/15	60/40	50% fair	poor to mod								6	X		
657				19.8					19.8			coast redwood	<i>Sequoia sempervirens</i>	70/15	45/45	45% poor	poor	W								X		
658				30.8					30.8			coast redwood	<i>Sequoia sempervirens</i>	70/18	30/35	30% poor	poor								4 to 8	X		

Tree ID#	To be Removed Per Current Stewardship Recommendations Removal Due to Very Poor Condition or Elevated Risk of Failure	Author Recommendations Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (Inches @ 54" A.G. (1.2m))	Height and Canopy Spread	Scientific Name (Genus, species)	Common Name	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Tree Density (Very Poor, Poor, Mod, Good, Very Good)	Lopsided Canopy (Direction Notes)	Trunk Lean (Direction Notes)	Historical Stem Split/Dust Evidence (Note Elevation)	Topping or Severe Pruning on Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Sap Decay (Note Elevation)	Cedarian Mortars (Note Elevation, Mortar Color, Mortar Indication(s) (Note Height))	Root Extension Restricted in Painter	Soil Moisture Deficit ("To Right Street")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)		
659	X			10.0					10.0				coast redwood	Sequoia sempervirens	35/4	0/0	0% dead	dead											
660	X			23.0					23.0				coast redwood	Sequoia sempervirens	70/15	30/20	25% very poor	very poor										S-trunk form between 60 and 65 feet elevation.	
661				12.4					12.4				coast redwood	Sequoia sempervirens	30/8	50/30	35% poor	moderate											
662				17.7					17.7				coast redwood	Sequoia sempervirens	50/15	60/45	50% fair	moderate											
663				11.2					11.2				coast redwood	Sequoia sempervirens	50/10	55/50	50% fair	poor to mod										X	
664				11.0					11.0				coast redwood	Sequoia sempervirens	50/10	50/50	50% fair	poor										X	
665				20.4					20.4				coast redwood	Sequoia sempervirens	65/18	60/55	58% fair	moderate										X	
666				20.9					20.9				coast redwood	Sequoia sempervirens	70/25	40/50	45% poor	poor										X	
667				16.7					16.7				coast redwood	Sequoia sempervirens	65/18	40/50	45% poor	poor										X	
668				9.1					9.1				coast redwood	Sequoia sempervirens	40/7	30/35	35% poor	poor										X	
669				9.9					9.9				coast redwood	Sequoia sempervirens	40/7	30/30	30% poor	poor										X	This tree has a PG&E guy strap around its trunk which may eventually girdle the stem, possibly causing loss of stability within the stem cross section.
670	X			10.7					10.7				coast redwood	Sequoia sempervirens	40/6	20/20	20% very poor	very poor										X	
671	X			7.1					7.1				coast redwood	Sequoia sempervirens	30/6	25/25	25% very poor	very poor										X	
672				14.9					14.9				coast redwood	Sequoia sempervirens	50/12	40/40	40% poor	poor										X	

Tree ID #	To be Removed Per Current Steward Author Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (+2.54*Age)	Reported Tree Trunk Diameters at 54" A.G. (inches) Circumference Circles (10.0, single stem, 20" multi, various species and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating Range (0=100% health)	Overall Condition Rating (0=100%)	Live Wt. Density Very Low, Low, Med, High, Very Hg (Note Elev.)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Drop Evidence (Note Elevation)	Topped or Severely Pruned on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note Elevation)	Culprits (Masturbators and/or Root Rot Infectors) (Note Height)	Root Extension Restricted in Painter	Soil Nutrient Deficit ("Soil Tight Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
673			22.2					22.2			Shamel ash	<i>Fraxinus uhdei</i>	50/25	30/35	33% poor	poor											
674			24.2					24.2			Shamel ash	<i>Fraxinus uhdei</i>	55/25	35/40	36% poor	poor											
675	X		15.0					15.0			Shamel ash	<i>Fraxinus uhdei</i>	50/15	20/30	25% very poor	very poor											
676			16.6					16.6			Shamel ash	<i>Fraxinus uhdei</i>	65/18	30/30	30% poor	very poor											
677	X		17.6					17.6			Shamel ash	<i>Fraxinus uhdei</i>	65/18	10/10	10% very poor	very poor											
678			13.4					13.4			Shamel ash	<i>Fraxinus uhdei</i>	60/18	45/45	45% poor	poor to mod	E										
679			12.7					12.7			Shamel ash	<i>Fraxinus uhdei</i>	50/14	40/30	35% poor	poor	E					6					
680			15.6					15.6			Shamel ash	<i>Fraxinus uhdei</i>	60/25	50/35	40% poor	poor to mod	E										
681			17.3					17.3			Shamel ash	<i>Fraxinus uhdei</i>	65/25	45/45	45% poor	moderate	E										
682			14.2					14.2			Shamel ash	<i>Fraxinus uhdei</i>	50/25	45/30	35% poor	poor to mod	E					9					
683	X		18.7					18.7			Shamel ash	<i>Fraxinus uhdei</i>	65/30	25/10	15% very poor	very poor	E	E				5 to 6				Possible destabilized root plate. High risk tree. Remove.	
684	X		12.2					12.2			Shamel ash	<i>Fraxinus uhdei</i>	50/20	15/15	15% very poor	very poor											
685	X		10.5					10.5			Shamel ash	<i>Fraxinus uhdei</i>	45/20	15/15	15% very poor	very poor	E	E									
686			4.0					4.0			coast redwood	<i>Sequoia sempervirens</i>	15/6	50/50	50% fair	moderate											

Tree ID #	To be Removed Per Current Stewardship Recommendations Due to Very Poor Health or Elevated Risk of Failure	Author Recommendations	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter (inches) @ 54° A.G. (+2.54 +4.5)	Reported Trunk Diameter (inches) @ 54° A.G. (+2.54 +4.5)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Wt. Density (Very Low, Low, Med., High, Very Hg.)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Ductus Evidence (Note Elevation)	Toppling or Severe Pruning on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note Elevation)	Root Extension Restricted in Painter	Soil Moisture Deficit ("Soil Tight Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
687				11.4					11.4			Shamel ash	<i>Fraxinus uhdei</i>	45/25	40/35	37% poor	poor to mod	E	E					X			
688				4.5					4.5			coast redwood	<i>Sequoia sempervirens</i>	20/8	70/70	70% good	moderate							X			
689	X			15.9					15.9			Shamel ash	<i>Fraxinus uhdei</i>	65/20	10/10	10% very poor	very poor	E	E					X			
690				4.9					4.9			coast redwood	<i>Sequoia sempervirens</i>	18/6	70/70	70% good	moderate							X			
691	X			10.8					10.8			Shamel ash	<i>Fraxinus uhdei</i>	35/25	15/15	15% very poor	very poor	E			X			X			
692				22.5					22.5			Shamel ash	<i>Fraxinus uhdei</i>	75/35	65/50	55% fair	mod to good	E	E					X			
693				28.0					28.0			Shamel ash	<i>Fraxinus uhdei</i>	70/40	65/50	55% fair	mod to good	E	E					9	X		
694				21.3					21.3			Shamel ash	<i>Fraxinus uhdei</i>	70/35	40/40	40% poor	poor							18	X		
695				28.3					28.3			Shamel ash	<i>Fraxinus uhdei</i>	70/35	60/50	55% fair	moderate	E	E					X	Roots severed with decay, on west side of root system.		
696				23.9					23.9			Shamel ash	<i>Fraxinus uhdei</i>	75/30	50/50	50% fair	poor to mod	E						X			
697				25.3					25.3			Shamel ash	<i>Fraxinus uhdei</i>	75/30	45/35	43% poor	poor to mod	E				GR	11	X			
698				8.2					8.2			coast redwood	<i>Sequoia sempervirens</i>	28/10	55/60	55% fair	poor to mod							X			
699	X			8.4					8.4			coast redwood	<i>Sequoia sempervirens</i>	28/10	0/0	0% dead	dead							X			
700	X			7.5					7.5			coast redwood	<i>Sequoia sempervirens</i>	28/10	0/0	0% dead	dead							X			

Tree Tag #	To be Removed Per Current Stewardship Recommendations Removal Due to Very Poor Condition or Elevated Risk of Failure	Author Recommendations Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (inches) @ 54" A.G. (+2.54*Age)	Reported Tree Trunk Diameter at 54" A.G. (inches) or Current Tree Diameter (10.0 = single stem, 20+ = multi, various specified numbers = non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Wt. Density (Very Low, Low, Med, High, Very Hgt)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Out Evidences (Note Elevation)	Topped or Severely Pruned on Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Sap Decay (Note Elevation)	Cadaverine Measurements (Note Height, Width, Depth, and/or Elevation(s)) (Note Height)	Root Extension Restricted in Past	Soil Nutrient Deficit ("Soil Tight Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
701				8.2					8.2			coast redwood	<i>Sequoia sempervirens</i>	25/7	40/40	40% poor	poor											
702	X			8.1					8.1			coast redwood	<i>Sequoia sempervirens</i>	25/7	10/10	10% very poor	very poor											
703				20.3					20.3			coast redwood	<i>Sequoia sempervirens</i>	40/20	40/40	40% poor	poor to mod											
704	X			11.3					11.3			coast redwood	<i>Sequoia sempervirens</i>	30/8	0/0	0% dead	dead											
705	X			10.3					10.3			coast redwood	<i>Sequoia sempervirens</i>	30/4	5/5	5% very poor	very poor											X
706	X			11.0					11.0			coast redwood	<i>Sequoia sempervirens</i>	30/8	10/10	10% very poor	very poor										X	
707	X			5.8					5.8			coast redwood	<i>Sequoia sempervirens</i>	25/6	10/10	10% very poor	very poor										X	
708				11.5					11.5			coast redwood	<i>Sequoia sempervirens</i>	30/8	40/40	40% poor	poor										X	
709	X			4.2					4.2			coast redwood	<i>Sequoia sempervirens</i>	20/4	0/0	0% dead	dead											X
710				12.3					12.3			coast redwood	<i>Sequoia sempervirens</i>	35/8	40/40	40% poor												X
711	X			11.3					11.3			coast redwood	<i>Sequoia sempervirens</i>	40/4	10/10	10% very poor	very poor										X	
712				8.4					8.4			coast redwood	<i>Sequoia sempervirens</i>	30/8	30/30	30% poor	poor										X	
713				11.4					11.4			coast redwood	<i>Sequoia sempervirens</i>	35/6	40/40	40% poor	poor										X	
714	X			7.3					7.3			coast redwood	<i>Sequoia sempervirens</i>	30/6	15/15	15% very poor	very poor										X	

Tree ID #	To be Removed Per Current Status	Author Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (inches) @ 54° A.G. (+2.5% +4.5%)	Reported Total Tree Diameter at Crotch (inches) (e.g. 10.0 = single stem; 20" multi, various species; 30" = non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0-100%, each)	Overall Condition Rating (0-100%)	Live Wt. Density (Very Low, Low, Med, High, Ex-High)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Out Evidences (Note/Elevation)	Toppling or Severe Pruning on Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Sap Decay (Note/Elevation)	Culprits/Maintenance Issues (Note/Elevation, with date/time, Month, Year, Description(s)) (Note/Helping)	Root Extension Restricted in Painter	Soil Moisture Deficit ("Soil Tight Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
715				19.5					19.5			coast redwood	<i>Sequoia sempervirens</i>	50/15	45/45	45% poor	poor									X		
716	X		4.3						4.3			coast redwood	<i>Sequoia sempervirens</i>	17/5	0/0	0% dead	dead											
717	X		10.1						10.1			coast redwood	<i>Sequoia sempervirens</i>	30/7	20/20	20% very poor	very poor											
718	X		7.0						7.0			coast redwood	<i>Sequoia sempervirens</i>	20/4	0/0	0% dead	dead										X	
719	X		11.4						11.4			coast redwood	<i>Sequoia sempervirens</i>	40/15	0/0	0% dead	dead										X	
720	X		9.1						9.1			coast redwood	<i>Sequoia sempervirens</i>	50/7	0/0	0% dead	dead										X	
721	X		15.3						15.3			coast redwood	<i>Sequoia sempervirens</i>	50/12	10/10	10% very poor	very poor										X	
722	X		11.5						11.5			coast redwood	<i>Sequoia sempervirens</i>	50/10	20/20	20% very poor	very poor										X	
723			21.0						21.0			Monterey pine	<i>Pinus radiata</i>	55/20	50/40	48% poor	moderate	E	E								X	
724	X		13.9						13.9			coast redwood	<i>Sequoia sempervirens</i>	50/9	15/15	15% very poor	very poor										X	
725			22.0						22.0			Monterey pine	<i>Pinus radiata</i>	55/25	35/40	38% poor	poor										X	
726	X		20.9						20.9			Monterey pine	<i>Pinus radiata</i>	50/25	30/25	28% very poor	very poor	SE	SE								X	
727			13.5						13.5			coast redwood	<i>Sequoia sempervirens</i>	50/12	40/25	30% poor	poor										X	
728	X		12.8						12.8			coast redwood	<i>Sequoia sempervirens</i>	45/10	10/15	13% very poor	very poor	E									X	

Tree ID#	To be Removed Per Current Stewardship Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Author Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (inches @ 54" A.G. (1.2m))	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0-100% each)	Overall Condition Rating (0-100%)	Live Wt. Density (Very Low, Low, Med, High, Ex-High)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Splitout Evidence (Note Elevation)	Topping or Severe Pruning on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note Elevation)	Cordon Measurements (Note Height, Width, Inclination(s), Note Height)	Root Extension Restricted in Past	Sap Molecule Deficit ("Sap Weight Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
729				9.0					9.0		coast redwood	<i>Sequoia sempervirens</i>	40/5	60/30	45% poor	moderate									X		
730				14.0					14.0		coast redwood	<i>Sequoia sempervirens</i>	50/9	50/50	50% fair	moderate									X	Difficult to assess visually.	
731	X			14.7					14.7		Shamel ash	<i>Fraxinus uhdei</i>	55/25	25/25	25% very poor	very poor	E	E							X		
732	X			24.3					24.3		Shamel ash	<i>Fraxinus uhdei</i>	55/25	25/25	25% very poor	very poor	E				GR		7	X			
733				19.2					19.2		Shamel ash	<i>Fraxinus uhdei</i>	55/30	40/35	38% poor	poor	E					1 foot (car impact)			X		
734				17.1					17.1		Shamel ash	<i>Fraxinus uhdei</i>	45/30	35/35	35% poor	poor									X	Circling roots. Roots damaged on grade.	
735	X			17.5					17.5		Shamel ash	<i>Fraxinus uhdei</i>	55/25	20/20	20% very poor	very poor	E					1 foot (car impact)			X		
736	X			19.1					19.1		Shamel ash	<i>Fraxinus uhdei</i>	45/35	25/25	25% very poor	very poor						Various elevations.			X		
737				20.7					20.7		Shamel ash	<i>Fraxinus uhdei</i>	55/30	30/40	35% poor	poor	E							20	X	Roots severed and damaged on grade.	
738				21.7					21.7		Shamel ash	<i>Fraxinus uhdei</i>	50/30	40/40	40% poor	poor	S				GR				X		
739				23.7					23.7		Shamel ash	<i>Fraxinus uhdei</i>	65/30	25/25	25% very poor	very poor	E								X		
740				26.0					26.0		Shamel ash	<i>Fraxinus uhdei</i>	45/35	65/50	56% fair	good				X	GR			X	X		
741				24.5					24.5		Shamel ash	<i>Fraxinus uhdei</i>	50/30	40/40	40% poor	poor				X				X	X		
742				27.2					27.2		Shamel ash	<i>Fraxinus uhdei</i>	50/30	50/40	48% poor	moderate						Various elevations	X	X			

Tree ID#	To be Removed Per Current Stewardship Recommendations Due to Very Poor Health or Elevated Risk of Failure	Author Recommendations	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter (inches @ 54° A.G. (1.254 x D <sup>4/3</sup> )	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Wt. Density (Very Low, Low, Med., High, Ex.)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Dust Evidence (Note Elevation)	Topping or Severe Pruning on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note Elevation)	Cordon Measurements (Note Height, Width, Inclination(s)) (Note Height)	Root Extension Restricted in Past	Soil Moisture Deficit ("To Right Side")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
743				30.1					30.1		Shamel ash	<i>Fraxinus uhdei</i>	50/40	60/45	50% fair	moderate				X			X				
744				25.2					25.2		Shamel ash	<i>Fraxinus uhdei</i>	55/30	50/40	45% poor	moderate							X			Roots pruned near mainstem.	
745				14.2					14.2		Shamel ash	<i>Fraxinus uhdei</i>	30/20	35/30	35% poor	poor				X			X				
746				24.1					24.1		Shamel ash	<i>Fraxinus uhdei</i>	50/25	60/50	55% fair	moderate	E			X							
747				18.6					18.6		Shamel ash	<i>Fraxinus uhdei</i>	60/25	60/30	38% poor	moderate	E				GR		various elevations	X			
748				21.7					21.7		Shamel ash	<i>Fraxinus uhdei</i>	55/30	50/45	49% poor	moderate	E								X		
749				16.0					16.0		Shamel ash	<i>Fraxinus uhdei</i>	50/20	30/30	30% poor	poor	E			X					X		
750				17.3					17.3		Shamel ash	<i>Fraxinus uhdei</i>	50/25	40/40	40% poor	poor	E								X		
751				15.8					15.8		Shamel ash	<i>Fraxinus uhdei</i>	55/25	25/25	25% very poor	poor	E	E							X	Circling roots.	
752				18.5					18.5		Shamel ash	<i>Fraxinus uhdei</i>	55/30	55/45	50% fair	moderate	E	E				8			X		
753				19.8					19.8		Shamel ash	<i>Fraxinus uhdei</i>	50/30	50/45	49% poor	poor	E	E							X		
754				21.8					21.8		Shamel ash	<i>Fraxinus uhdei</i>	65/25	55/40	45% poor	moderate	E	E		X	GR				X		
755				20.1					20.1		Shamel ash	<i>Fraxinus uhdei</i>	55/25	60/50	55% fair	moderate	E								X		
756				18.1					18.1		Shamel ash	<i>Fraxinus uhdei</i>	60/30	50/45	49% poor	poor to mod	E	E			GR	6		X			

Tree ID#	To be Removed Per Current Status	Author Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (Inches @ 54° A.G. (1.254x4.8))	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0-100% each)	Overall Condition Rating (0-100%)	Live Wt. Density (Very Low, Low, Med, High, Ex-High)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Out Evidence (Note/Elevation)	Topping or Severe Pruning on Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Sap Decay (Note/Elevation)	Root Extension Restricted in Painter	Soil Nutrient Deficit ("Soil Tight Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
757				16.8					16.8		Shamel ash	<i>Fraxinus uhdei</i>	60/25	40/40	40% poor	poor								X		
758	X			19.3					19.3		Shamel ash	<i>Fraxinus uhdei</i>	55/30	25/25	25% very poor	very poor	E	E						X		
759				18.2					18.2		Shamel ash	<i>Fraxinus uhdei</i>	60/30	35/35	35% poor	poor	E	E						X		
760				20.8					20.8		Shamel ash	<i>Fraxinus uhdei</i>	60/35	40/30	35% poor	poor	E	E						X		
761				15.4					15.4		Shamel ash	<i>Fraxinus uhdei</i>	50/30	60/35	40% poor	moderate	E	E					8	X		
762				17.1					17.1		Shamel ash	<i>Fraxinus uhdei</i>	50/35	35/35	35% poor					GR				X		
763	X			23.5					23.5		Shamel ash	<i>Fraxinus uhdei</i>	65/35	15/15	15% very poor	very poor	E						9	X		
764	X			13.6					13.6		Shamel ash	<i>Fraxinus uhdei</i>	50/20	10/10	10% very poor	very poor	E							X		
765				16.0					16.0		Shamel ash	<i>Fraxinus uhdei</i>	50/25	30/30	30% poor	poor	E	E						X		
766				18.5					18.5		Shamel ash	<i>Fraxinus uhdei</i>	50/30	40/40	40% poor	poor	E	E			GR			X		
767				18.8					18.8		Shamel ash	<i>Fraxinus uhdei</i>	60/30	35/45	40% poor	poor	E	E						X		
768	X			14.5					14.5		Shamel ash	<i>Fraxinus uhdei</i>	55/30	20/20	20% very poor	very poor	E	E						X	Roots damaged on grade.	
769				23.8					23.8		Shamel ash	<i>Fraxinus uhdei</i>	65/35	55/35	40% poor	moderate	E	E			serious girdling root		15	X		
770				16.3					16.3		Shamel ash	<i>Fraxinus uhdei</i>	55/25	30/30	30% poor	poor	E						10	X		

Tree ID #	To be Removed Per Current Stewardship Recommendations Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (inches @ 54° A.G. (1/2pi * d^2 * 4/3))	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Tree Density (Very Low, Low, Med, High, Ex.)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Out Evidences (Note/Elevation)	Toppling or Severe Pruning on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note/Elevation)	Codominant Measurements (Note/Elevation, Max, Min, Diam, Height, Inclination(s)) (Note/Height)	Root Extension Restricted in Painter	Soil Moisture Deficit ("Soil Tight Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
771			16.1					16.1		Shamel ash	<i>Fraxinus uhdei</i>	55/30	60/45	55% fair	moderate	E								X		
772			33.6					33.6		coast redwood	<i>Sequoia sempervirens</i>	75/20	70/70	70% good	moderate									X		
773			16.4					16.4		coast redwood	<i>Sequoia sempervirens</i>	60/13	60/60	60% fair	moderate									X		
774			18.5					18.5		coast redwood	<i>Sequoia sempervirens</i>	60/15	75/60	67% fair	moderate									X		
775			10.7					10.7		coast redwood	<i>Sequoia sempervirens</i>	30/6	60/50	55% fair	moderate									X		
776			34.2					34.2		coast redwood	<i>Sequoia sempervirens</i>	75/25	70/70	70% good	moderate									X		
777			7.8					7.8		coast redwood	<i>Sequoia sempervirens</i>	25/6	55/35	40% poor	moderate	W	W							X		
778			28.8					28.8		coast redwood	<i>Sequoia sempervirens</i>	75/25	70/70	70% good	moderate									X		
779			16.8					16.8		coast redwood	<i>Sequoia sempervirens</i>	50/13	65/55	60% fair	moderate									X		
780			7.0					7.0		coast redwood	<i>Sequoia sempervirens</i>	35/6	55/35	45% poor	moderate									X		
781			21.6					21.6		coast redwood	<i>Sequoia sempervirens</i>	65/15	60/40	47% poor	moderate							15		X		
782			32.1					32.1		coast redwood	<i>Sequoia sempervirens</i>	35/20	70/70	70% good	moderate									X		
783			26.0					26.0		coast redwood	<i>Sequoia sempervirens</i>	85/20	70/70	70% good	moderate									X		
784			16.1					16.1		coast redwood	<i>Sequoia sempervirens</i>	75/15	70/65	70% good	moderate									X		

Tree ID #	To be Removed Per Current Steward Author Recommendations Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54° A.G. (+2.54*inches)	Reported Tree Trunk Diameters at 54° Angle (A.G.) from Previous Survey (10.0, single stem, 20" multi, various specified species, and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating Range (0=100% health)	Overall Condition Rating (0=100%)	Live Tree Density (Very Low, Low, Med, High, Very High, Ex.)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Splitout Evidence (Note Elevation)	Topping or Severe Pruning on Past Survey	Buried Root Crown (BRC) or Girdling Roots (GR)	Sap Decay (Note Elevation)	Culprits Identified as Cause of Health Issues (Note Height)	Root Extension Restricted in Past	Soil Moisture Deficit ("20% depth Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
785			21.9					21.9			coast redwood	<i>Sequoia sempervirens</i>	75/15	70/70	70% good	moderate									X		
786			13.0					13.0			coast redwood	<i>Sequoia sempervirens</i>	50/8	50/35	40% poor	poor	W								X		
787			17.8					17.8			coast redwood	<i>Sequoia sempervirens</i>	65/10	60/35	40% poor	poor	W								X		
788			20.1					20.1			coast redwood	<i>Sequoia sempervirens</i>	90/15	60/60	60% fair	poor to mod									X		
789			23.4					23.4			coast redwood	<i>Sequoia sempervirens</i>	80/15	75/70	73% good	moderate	E								X		
790			19.5					19.5			coast redwood	<i>Sequoia sempervirens</i>	80/18	75/75	75% good	moderate									X		
791			17.1	15.1				32.2			coast redwood	<i>Sequoia sempervirens</i>	70/20	70/60	65% fair								2		X		
792			28.2					28.2			coast redwood	<i>Sequoia sempervirens</i>	90/20	70/70	70% good	moderate									X		
793			21.9					21.9			coast redwood	<i>Sequoia sempervirens</i>	70/15	65/60	62% fair	moderate									X		
794			22.0					22.0			coast redwood	<i>Sequoia sempervirens</i>	50/15	60/40	47% poor	moderate					0 to 2			X	Apical stem splitout		
795			24.0					24.0			coast redwood	<i>Sequoia sempervirens</i>	85/20	70/70	70% good	moderate									X		
796			45.5					45.5			coast redwood	<i>Sequoia sempervirens</i>	90/30	75/75	75% good	good									X		
797			14.8					14.8			coast redwood	<i>Sequoia sempervirens</i>	50/8	50/40	47% poor	moderate									X	Supressed in shade	
798			12.6					12.6			coast redwood	<i>Sequoia sempervirens</i>	60/12	60/40	48% poor	poor	E					20		X			

Tree ID #	To be Removed Per Current Stewardship Recommendations Due to Very Poor Health or Elevated Risk of Failure	Author Recommendations	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter (inches @ 54° A.G. (1.254 x D <sup>4/3</sup> )	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Tree Density (Very Low, Low, Mod, High, Ex.)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Dust Evidence (Note Elevation)	Topping or Severe Pruning on Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Sap Decay (Note Elevation)	Cedarian Mortars (Note Mortar Type, Color, Location(s), Note Height)	Root Extension Restricted in Painter	Soil Moisture Deficit ("To Right Street")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
799				22.6					22.6		coast redwood	<i>Sequoia sempervirens</i>	80/13	70/70	70% good	moderate									X		
800				21.8					21.8		coast redwood	<i>Sequoia sempervirens</i>	65/13	65/65	65% fair	moderate									X		
801				17.3					17.3		coast redwood	<i>Sequoia sempervirens</i>	55/9	50/50	50% fair	poor	W	W							X		
802				32.5					32.5		coast redwood	<i>Sequoia sempervirens</i>	90/25	50/50	50% fair	poor									X	Difficult to assess visually.	
803				15.0					15.0		coast redwood	<i>Sequoia sempervirens</i>	60/9	30/30	30% poor	poor									X		
804				32.4					32.4		coast redwood	<i>Sequoia sempervirens</i>	90/18	60/60	60% fair	poor to mod									X		
805				13.0					13.0		coast redwood	<i>Sequoia sempervirens</i>	50/5	40/40	40% poor	poor									X	S-trunk form	
806				16.8					16.8		coast redwood	<i>Sequoia sempervirens</i>	50/10	60/55	55% fair	moderate									X		
807				12.1					12.1		coast redwood	<i>Sequoia sempervirens</i>	60/12	50/55	53% fair	poor to mod									X		
808				24.5					24.5		coast redwood	<i>Sequoia sempervirens</i>	90/20	40/30	33% poor	poor								55	X		
809				11.0					11.0		coast redwood	<i>Sequoia sempervirens</i>	55/15	60/50	55% fair	poor to mod									X		
810	X			15.0					15.0		coast redwood	<i>Sequoia sempervirens</i>	75/8	10/10	10% very poor	very poor									X		
811				5.6					5.6		coast redwood	<i>Sequoia sempervirens</i>	30/6	40/30	35% poor	poor									X		
812	X			23.2					23.2		coast redwood	<i>Sequoia sempervirens</i>	80/20	0/0	0% dead	dead									X	S - trunk form.	

Tree Tag #	To be Removed Per Current Status Author Recommends Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (Inches @ 54" A.G. (1.25" = 1" + 4.5))	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Tree Density (Very Poor, Poor, Mod., Good, Excellent)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Dust Evidence (Note Elevation)	Topping or Severe Pruning on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note Elevation)	Culprits (Moles, Gophers, Skunks, Raccoons, Birds, Insects, etc.) (Note Height)	Root Extension Restricted in Painter	Soil Moisture Deficit ("To Right Street")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)	
813	X		13.3					13.3		coast redwood	<i>Sequoia sempervirens</i>	70/16	10/10	10% very poor	very poor									X			
814	X		24.4					24.4		coast redwood	<i>Sequoia sempervirens</i>	85/20	0/0	0% dead	dead												
815	X		9.0					9.0		coast redwood	<i>Sequoia sempervirens</i>	40/5	0/0	0% dead	dead												
816			16.5					16.5		coast redwood	<i>Sequoia sempervirens</i>	80/12	50/50	50% fair	poor										X		
817			11.9					11.9		coast redwood	<i>Sequoia sempervirens</i>	35/6	50/40	43% poor	poor										X		
818			25.4					25.4		coast redwood	<i>Sequoia sempervirens</i>	80/18	60/60	60% fair	moderate										X		
819			12.4					12.4		coast redwood	<i>Sequoia sempervirens</i>	55/13	50/40	45% poor	poor									X			
820			26.3					26.3		coast redwood	<i>Sequoia sempervirens</i>	90/25	55/60	58% fair	poor to mod									X			
821	X		4.6					4.6		coast redwood	<i>Sequoia sempervirens</i>	30/3	0/0	0% dead	dead									X			
822			23.4					23.4		coast redwood	<i>Sequoia sempervirens</i>	90/20	50/50	50% fair	poor								18	X			
823			17.9					17.9		coast redwood	<i>Sequoia sempervirens</i>	100/15	50/35	40% poor	poor								70	X			
824			29.3					29.3		coast redwood	<i>Sequoia sempervirens</i>	100/20	40/40	40% poor	poor to mod								25	X			
825			7.8					7.8		coast redwood	<i>Sequoia sempervirens</i>	30/8	40/20	29% very poor	poor									X			
826			11.1					11.1		coast redwood	<i>Sequoia sempervirens</i>	35/12	60/50	50% fair	poor to mod	E								X	Bow form trunk.		

Tree ID #	To be Removed Per Current Stewardship Recommendations Due to Very Poor Condition or Elevated Risk of Failure	Author Recommendations Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter (Inches @ 54" A.G. (1.2m))	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Wt. Density (Very Low, Low, Med, High, Ex.)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Splitout Evidence (Note Elevation)	Topping or Severe Pruning on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note Elevation)	Culprits (Mammals, Birds, Insects, etc. with Specific Name and Location(s) (Note Height))	Root Extension Restricted in Painter	Soil Moisture Deficit ("To Right Street")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
827	X			10.7					10.7		coast redwood	<i>Sequoia sempervirens</i>	35/10	0/0	0% dead	dead									X	Bow form trunk.	
828				11.7					11.7		coast redwood	<i>Sequoia sempervirens</i>	50/8	30/30	30% poor	poor											
829				27.2					27.2		coast redwood	<i>Sequoia sempervirens</i>	95/25	70/70	70% good	moderate											
830				15.2					15.2		coast redwood	<i>Sequoia sempervirens</i>	40/16	45/30	37% poor	poor to mod								20	X		
831				11.0					11.0		coast redwood	<i>Sequoia sempervirens</i>	40/8	30/40	37% poor	poor	SW								X		
832				13.0					13.0		coast redwood	<i>Sequoia sempervirens</i>	45/11	60/55	59% fair	moderate									X		
833				26.6					26.6		coast redwood	<i>Sequoia sempervirens</i>	70/30	70/65	69% fair	moderate								30	X		
834	X			5.8					5.8		coast redwood	<i>Sequoia sempervirens</i>	30/5	20/20	20% very poor	very poor	SE								X		
835				15.8	11.0				26.8		coast redwood	<i>Sequoia sempervirens</i>	85/18	60/50	55% fair	poor to mod								2	X		
836	X			9.8					9.8		coast redwood	<i>Sequoia sempervirens</i>	30/12	25/25	25% very poor	very poor	S								X		
837				15.2					15.2		coast redwood	<i>Sequoia sempervirens</i>	45/10	50/40	45% poor	poor to mod	W	NW							X		
838				23.9					23.9		coast redwood	<i>Sequoia sempervirens</i>	85/20	45/45	45% poor	poor									X		
839				26.1					26.1		coast redwood	<i>Sequoia sempervirens</i>	90/25	60/60	60% fair	moderate								X			
840				10.8	9.0				19.8		coast redwood	<i>Sequoia sempervirens</i>	60/8	35/35	35% poor	poor								20	X		

Tree ID #	To be Removed Per Current Steward Author Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter Inches @ 54° A.G. (+2.5% +4.5%)	Reported Tree Trunk Diameters at 54° Angle (A.G.) of Current Steward (10.0, single stem, 20" multi, various species and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating Range (0-100%, each)	Overall Condition Rating (0-100%)	Live Tree Density (Very Low, Low, Mod, High, Very High)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Drop Evidence (Note Elevation)	Topping or Severe Pruning on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sapling Decay (Note Elevation)	Cadmium Measurements in Soil (ppm) and Water Infiltration (mm/Hr)	Root Extension Restricted in Painter	Soil Nutrient Deficit ("Soil Tight Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
841			21.2					21.2			coast redwood	<i>Sequoia sempervirens</i>	80/13	60/50	53% fair	poor to mod								X			
842			27.2	8.5				35.7			coast redwood	<i>Sequoia sempervirens</i>	90/15	70/70	70% good	moderate								X			
843	X	X	10.8					10.8			coast redwood	<i>Sequoia sempervirens</i>	55/4	10/10	10% very poor	very poor								X			
844			16.4					16.4			coast redwood	<i>Sequoia sempervirens</i>	80/20	60/40	50% fair	poor to mod								X			
845			28.2					28.2			coast redwood	<i>Sequoia sempervirens</i>	90/25	70/70	70% good	moderate								X			
846			14.7					14.7			coast redwood	<i>Sequoia sempervirens</i>	45/6	50/45	48% poor	poor to mod								X			
847			11.5	9.5				21.0			coast redwood	<i>Sequoia sempervirens</i>	45/10	50/50	50% fair	poor to mod								X			
848			23.9					23.9			coast redwood	<i>Sequoia sempervirens</i>	90/20	50/50	50% fair	poor to mod								X			
849			20.5					20.5			coast redwood	<i>Sequoia sempervirens</i>	80/18	60/50	55% fair	poor to mod								X			
850			18.3					18.3			coast redwood	<i>Sequoia sempervirens</i>	80/15	55/50	54% fair	poor to mod	E							X			
851			24.5					24.5			coast redwood	<i>Sequoia sempervirens</i>	95/25	65/50	60% fair	moderate								X	Sweep form trunk.		
852			12.5	6.9				19.4			coast redwood	<i>Sequoia sempervirens</i>	55/18	60/50	50% fair	poor to mod							1	X			
853	X		11.8	7.8				19.6			coast redwood	<i>Sequoia sempervirens</i>	35/18	15/15	15% very poor	very poor							2	X			
854			18.5					18.5			coast redwood	<i>Sequoia sempervirens</i>	70/18	40/35	38% poor	poor							30	X			

Tree ID#	To be Removed Per Current Stewardship Recommendations Due to Very Poor Health or Elevated Risk of Failure	Author Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (inches) @ 54° A.G. (+2.5% +4.5%)	Reported Total Tree Diameter at Crotch (inches) (e.g. 10.0 = single stem, 20" multi, various specified diameter at various species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Tree Density (Very Low, Low, Mod, High, Ex.)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Dust Evidence (Note Elevation)	Toppling or Severe Pruning on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note Elevation)	Culprits (Mastodons, Elephants, etc. or other animals, Insects (e.g. Termites)) (Note Height)	Root Extension Restricted in Painter	Soil Moisture Deficit ("Too tight Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
855				15.1					15.1			coast redwood	<i>Sequoia sempervirens</i>	70/18	55/50	53% fair	poor to mod									X		
856				10.1					10.1			coast redwood	<i>Sequoia sempervirens</i>	45/9	40/35	40% poor	poor									X		
857				21.1					21.1			coast redwood	<i>Sequoia sempervirens</i>	85/25	55/50	50% fair	poor to mod									X		
858				19.5					19.5			coast redwood	<i>Sequoia sempervirens</i>	85/20	60/50	55% fair	moderate									X		
859				9.8					9.8			coast redwood	<i>Sequoia sempervirens</i>	50/10	40/35	38% poor	poor									X	Supressed in shade	
860				22.2					22.2			coast redwood	<i>Sequoia sempervirens</i>	85/20	60/60	60% fair	moderate									X		
861				25.0					25.0			coast redwood	<i>Sequoia sempervirens</i>	90/30	60/60	60% fair	moderate									X		
862				20.6					20.6			coast redwood	<i>Sequoia sempervirens</i>	80/25	60/60	60% fair	moderate									X		
863				31.5					31.5			coast redwood	<i>Sequoia sempervirens</i>	90/20	75/75	75% good	good									X		
864				23.8					23.8			coast redwood	<i>Sequoia sempervirens</i>	95/15	70/65	68% fair	moderate									X		
865				24.0					24.0			coast redwood	<i>Sequoia sempervirens</i>	90/15	60/40	47% poor	moderate	W								X	S-trunk form. Abnormal trunk cross section that is cankered.	
866				31.0	13.3				44.3			coast redwood	<i>Sequoia sempervirens</i>	95/28	60/50	55% fair	moderate	W								3	X	
867				6.5					6.5			coast redwood	<i>Sequoia sempervirens</i>	30/6	65/45	55% fair	moderate									X	Supressed in shade	
868				16.3					16.3			coast redwood	<i>Sequoia sempervirens</i>	50/18	70/70	70% good	moderate									X		

Tree Tag #	To be Removed Per Current Stewardship Recommendations Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (Inches @ 54° A.G. (+2.54*inches))	Reported Trunk Diameter (inches) & Description of Condition (e.g. 10.0" single stem, 20" multi, various species, non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Tree Density (Very Low, Low, Mod., High, Ex.)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Out Evidences (Note Elevation)	Topping or Severe Pruning on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note Elevation)	Coparental Measurements (Note Height, Width, Depth, Elevation, Inclination(s) (Note Height))	Root Extension Restricted in Past	Soil Moisture Deficit ("Soil Tight Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
869			16.0					16.0			coast redwood	<i>Sequoia sempervirens</i>	75/15	70/60	68% fair	moderate									X		
870			27.6					27.6			coast redwood	<i>Sequoia sempervirens</i>	85/20	75/75	75% good	good									X		
871			25.8					25.8			coast redwood	<i>Sequoia sempervirens</i>	95/25	75/75	75% good	good									X		
872			23.7	15.6				39.3			coast redwood	<i>Sequoia sempervirens</i>	50/20	65/55	60% fair	moderate	E							2			
873	X		13.9					13.9			coast redwood	<i>Sequoia sempervirens</i>	65/12	25/25	25% very poor	poor											
874			10.5					10.5			coast redwood	<i>Sequoia sempervirens</i>	30/9	35/30	30% poor	poor											
875			14.1					14.1			coast redwood	<i>Sequoia sempervirens</i>	45/10	40/40	40% poor	poor											
876	Alt. Lot "West" ( <b>START OF ALTERNATE LOT WEST SURVEY</b> )		31.0					31.0			coast redwood	<i>Sequoia sempervirens</i>	75/18	70/70	70% good	moderate											
877	Alt. Lot "West"		23.7					23.7			coast redwood	<i>Sequoia sempervirens</i>	65/18	65/60	63% fair	poor to mod									X		
878	Alt. Lot "West"		19.2					19.2			coast redwood	<i>Sequoia sempervirens</i>	75/15	65/60	63% fair	poor to mod									X		
879	Alt. Lot "West"		22.8					22.8			coast redwood	<i>Sequoia sempervirens</i>	75/18	65/65	65% fair	moderate									X		
880	Alt. Lot "West"		20.5					20.5			coast redwood	<i>Sequoia sempervirens</i>	75/18	65/65	60% fair	moderate									X		
881	Alt. Lot "West"		20.8	11.9				32.7			coast redwood	<i>Sequoia sempervirens</i>	75/18	60/50	58% fair	moderate								3	X		
882	Alt. Lot "West"		33.3					33.3			coast redwood	<i>Sequoia sempervirens</i>	65/20	60/60	60% fair	moderate									X		

Tree Tag #	To be Removed Per Current Stewardship Recommendations Due to Very Poor Health or Elevated Risk of Failure	Author Recommendations	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (inches @ 54° A.G. (1.254x4.5))	DBH (inches) & Description of Current Trunk Condition (10.0+ single stem, 20+ multi, various species, non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0-100%, each)	Overall Condition Rating (0-100%)	Live Tree Density (Very Low, Low, Med, High, Ex.)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Dust Evidence (Note Elevation)	Toppling or Severe Pruning on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note Elevation)	Cedarian Mortars (Note Elevation, Mortar Type, Color, Indication(s), Note Height)	Root Extension Restricted in Painter	Soil Nutrient Deficit ("Soil Depth Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)		
883 Alt. Lot "West"				11.4					11.4		Impacted by T-5000, 100% dead, 10.0+ single stem, 20+ multi, various species, non-native species	coast redwood	<i>Sequoia sempervirens</i>	30/8	30/35	33% poor	poor									X				
884 Alt. Lot "West"				31.5					31.5			coast redwood	<i>Sequoia sempervirens</i>	90/18	60/60	60% fair	poor to mod	W									X			
885 Alt. Lot "West"				32.1					32.1			coast redwood	<i>Sequoia sempervirens</i>	95/25	75/75	75% good	moderate										X			
886 Alt. Lot "West"				9.8					9.8			coast redwood	<i>Sequoia sempervirens</i>	45/6	30/30	30% poor	poor										X			
887 Alt. Lot "West"				25.5					25.5			coast redwood	<i>Sequoia sempervirens</i>	75/18	65/65	65% fair	poor to mod										X			
888 Alt. Lot "West"				29.0					29.0			coast redwood	<i>Sequoia sempervirens</i>	85/25	60/55	59% fair	poor to mod										X			
889 Alt. Lot "West"	?			15.3					15.3			coast redwood	<i>Sequoia sempervirens</i>	45/9	25/25	25% very poor	poor										X			
890 Alt. Lot "West"	X			16.9					16.9			coast redwood	<i>Sequoia sempervirens</i>	50/12	0/0	0% dead											X			
891 Alt. Lot "West"	X			29.5					29.5			coast redwood	<i>Sequoia sempervirens</i>	65/25	0/0	0% dead											X			
892 Alt. Lot "West"	X			8.6					8.6			coast redwood	<i>Sequoia sempervirens</i>	30/8	0/0	0% dead											X			
893 Alt. Lot "West"				26.4					26.4			coast redwood	<i>Sequoia sempervirens</i>	75/20	70/70	70% good	moderate										X			
894 Alt. Lot "West"				18.3					18.3			coast redwood	<i>Sequoia sempervirens</i>	65/12	40/30	35% poor	moderate										X	Borers/aphids fungal infection noted as canker progression along trunk. Monitor progression over time.		
895 Alt. Lot "West"				29.4					29.4			Italian stone pine	<i>Pinus pinea</i>	45/30	85/75	79% good	good	E	E											
896 Alt. Lot "West"				26.2					26.2			Italian stone pine	<i>Pinus pinea</i>	45/25	80/30	50% fair	good	E	E								18			

Tree Tag #	To be Removed Per Current Stewardship Recommendations Due to Very Poor Health or Elevated Risk of Failure	Author Recommendations	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (Inches @ 54° A.G. (1.254x4+4.5))	DBH (inches) per City of Cupertino Code (10.0 = single stem, 20+ = multi, various specified numbers for non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Tree Density (Very Low, Low, Med, High, Ex.)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Splitout Evidence (Note Elevation)	Topping or Severe Pruning on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note Elevation)	Culprits (Mastodons, Beavers, etc., with date removed, Year, Location(s), Note Height)	Root Extension Restricted in Past	Soil Moisture Deficit ("Too tight Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
897 Alt. Lot "West"				9.6					9.6			coast redwood	<i>Sequoia sempervirens</i>	25/12	65/60	64% fair	moderate									X		
898 Alt. Lot "West"				17.8					17.8			coast redwood	<i>Sequoia sempervirens</i>	45/15	60/60	60% fair	poor to mod									X		
899 Alt. Lot "West"				11.4					11.4			coast redwood	<i>Sequoia sempervirens</i>	45/15	60/40	50% fair	moderate									X	Sweep-form trunk.	
900 Alt. Lot "West"				19.7					19.7			coast redwood	<i>Sequoia sempervirens</i>	60/16	35/35	35% poor	poor									X		
901 Alt. Lot "West"				4.1					4.1			coast redwood	<i>Sequoia sempervirens</i>	30/6	35/35	35% poor	moderate									X		
902 Alt. Lot "West"				9.5					9.5			coast redwood	<i>Sequoia sempervirens</i>	35/12	65/45	50% fair	moderate									X	Mainstem splitout.	
903 Alt. Lot "West"				14.7					14.7			coast redwood	<i>Sequoia sempervirens</i>	45/15	65/65	65% fair	moderate									X		
904 Alt. Lot "West"				12.9					12.9			coast redwood	<i>Sequoia sempervirens</i>	65/15	70/70	70% good	moderate									X		
905 Alt. Lot "West"				14.7					14.7			coast redwood	<i>Sequoia sempervirens</i>	55/20	65/70	68% fair	moderate									X		
906 Alt. Lot "West"				19.3					19.3			coast redwood	<i>Sequoia sempervirens</i>	70/20	70/70	70% good	moderate									X		
907 Alt. Lot "West"				16.0					16.0			coast redwood	<i>Sequoia sempervirens</i>	60/12	60/45	50% fair	poor	E								X		
908 Alt. Lot "West"				6.4					6.4			coast redwood	<i>Sequoia sempervirens</i>	25/10	70/40	50% fair	moderate	E								X		
909 Alt. Lot "West"				27.0					27.0			coast redwood	<i>Sequoia sempervirens</i>	75/20	50/50	50% fair	poor									X		
910 Alt. Lot "West"				22.9					22.9			coast redwood	<i>Sequoia sempervirens</i>	75/18	65/65	65% fair	poor to mod									X		

Tree Tag #	To be Removed Per Current Stewardship Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Author Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (inches @ 54° A.G. (1/2pi * d^2 / 4))	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Tree Density (Very Low, Low, Med, High, Ex+)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Splitout Evidence (Note Elevation)	Topping or Severe Pruning on Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Sap Decay (Note Elevation)	Cedarian Mortars (Note Mortar Type, Color, Location(s), Height)	Root Extension Restricted in Painter	Soil Moisture Deficit ("20% height Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)	
911 Alt. Lot "West"				20.4					20.4		coast redwood	<i>Sequoia sempervirens</i>	75/20	70/70	70% good	moderate									X			
912 Alt. Lot "West"				25.5					25.5		coast redwood	<i>Sequoia sempervirens</i>	75/18	60/50	55% fair	poor to mod									X	S-form trunk.		
913 Alt. Lot "West"				20.2					20.2		coast redwood	<i>Sequoia sempervirens</i>	71/18	70/70	70% good	moderate									X			
914 Alt. Lot "West"				23.5					23.5		coast redwood	<i>Sequoia sempervirens</i>	70/18	50/60	54% fair	poor									X			
915 Alt. Lot "West"				14.8					14.8		coast redwood	<i>Sequoia sempervirens</i>	75/16	55/55	55% fair	poor									X			
916 Alt. Lot "West"				16.2	10.0				26.2		coast redwood	<i>Sequoia sempervirens</i>	55/16	75/70	70% good	moderate									X			
917 Alt. Lot "West"				14.5					14.5		coast redwood	<i>Sequoia sempervirens</i>	45/10	40/40	40% poor	poor									X			
918 Alt. Lot "West"				28.9					28.9		coast redwood	<i>Sequoia sempervirens</i>	80/15	40/40	40% poor	poor									X			
919 Alt. Lot "West"	X			17.2					17.2		coast redwood	<i>Sequoia sempervirens</i>	50/4	0/0	0% dead										X			
920 Alt. Lot "West"				24.4					24.4		coast redwood	<i>Sequoia sempervirens</i>	80/12	70/70	70% good	moderate	N								X			
921 Alt. Lot "West"				21.5					21.5		Italian stone pine	<i>Pinus pinea</i>	45/20	85/45	55% fair	good	E	E										
922 Alt. Lot "West"				17.8					17.8		Italian stone pine	<i>Pinus pinea</i>	45/18	70/35	40% poor	good	E	E										
923 Alt. Lot "West"	X			12.2	9.1				21.3		coast redwood	<i>Sequoia sempervirens</i>	50/4	0/0	0% dead									X				
924 Alt. Lot "West"				12.1					12.1		coast redwood	<i>Sequoia sempervirens</i>	70/10	60/50	55% fair	moderate	N								X			

Tree Tag #	To be Removed Per Current Stewardship Recommendations Due to Very Poor Health or Elevated Risk of Failure	Author Recommendations	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter (Inches @ 54° A.G. (1/2pi * D * 4/3))	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Tree Density (Very Low, Low, Med, High, Ex.)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Splitout Evidence (Note Elevation)	Topping or Severe Pruning on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note Elevation)	Culprits (Mastodons, Elephants, etc. known to have removed trees in the area, with their names and dates)	Root Extension Restricted in Past	Soil Moisture Deficit ("To what Stress?")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
925 Alt. Lot "West"				20.8					20.8		coast redwood	<i>Sequoia sempervirens</i>	65/14	65/65	65% fair	moderate											
926 Alt. Lot "West"				7.5					7.5		coast redwood	<i>Sequoia sempervirens</i>	35/6	60/40	50% fair	moderate	S										
927 Alt. Lot "West"				11.2					11.2		coast redwood	<i>Sequoia sempervirens</i>	45/8	50/40	47% poor	poor to mod	S										
928 Alt. Lot "West"				18.7					18.7		coast redwood	<i>Sequoia sempervirens</i>	60/10	70/65	68% fair	moderate	S										
929 Alt. Lot "West"				25.4					25.4		coast redwood	<i>Sequoia sempervirens</i>	75/20	70/70	70% good	moderate	E										X
930 Alt. Lot "West"				19.9					19.9		coast redwood	<i>Sequoia sempervirens</i>	75/18	70/70	70% good	moderate	E										X
931 Alt. Lot "West"				15.2					15.2		coast redwood	<i>Sequoia sempervirens</i>	65/18	60/60	60% fair	poor to mod	E										X
932 Alt. Lot "West"	X			14.2					14.2		coast redwood	<i>Sequoia sempervirens</i>	55/8	5/5	5% very poor	very poor											X
933 Alt. Lot "West"	X			8.5					8.5		coast redwood	<i>Sequoia sempervirens</i>	30/5	0/0	0% dead												X
934 Alt. Lot "West"				23.5					23.5		Monterey pine	<i>Pinus radiata</i>	55/25	60/45	50% fair	moderate	SW	SW									X
935 Alt. Lot "West"	X			13.2					13.2		coast redwood	<i>Sequoia sempervirens</i>	45/7	5/5	5% very poor	very poor	E										X
936 Alt. Lot "West"				29.2					29.2		coast redwood	<i>Sequoia sempervirens</i>	70/20	70/70	70% good	moderate											X
937 Alt. Lot "West"	X			6.0					6.0		coast redwood	<i>Sequoia sempervirens</i>	30/5	0/0	0% dead												X
938 Alt. Lot "West"	X			15.3					15.3		coast redwood	<i>Sequoia sempervirens</i>	60/10	20/20	20% very poor	very poor											X

Tree Tag #	To be Removed Per Current Stewardship Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Author Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (Inches @ 54° A.G. (1/2pi * D^2 * 4/3))	Reported Trunk Diameter (Inches @ 54° A.G. (1/2pi * D^2 * 4/3))	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Wt. Density (Very Low, Low, Med, Good, Very High)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Splitout Evidence (Note Elevation)	Toppling or Severe Pruning on Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Sap Decay (Note Elevation)	Culprits (Masturbators who have removed bark, Insects (e.g. borers), Pathogens (e.g. Hail))	Root Extension Restricted in Painter	Soil Nutrient Deficit ("Soil tight Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
939 Alt. Lot "West"				4.3					4.3			Shamel ash	<i>Fraxinus uhdei</i>	25/9	85/85	85% good	good											
940 Alt. Lot "West"				20.1					20.1			coast redwood	<i>Sequoia sempervirens</i>	65/12	40/50	45% poor	poor											
941 Alt. Lot "West"				20.0					20.0			coast redwood	<i>Sequoia sempervirens</i>	75/15	70/70	70% good	moderate											
942 Alt. Lot "West"	X			5.0					5.0			coast redwood	<i>Sequoia sempervirens</i>	65/13	0/0	0% dead												
943 Alt. Lot "West"				22.6					22.6			coast redwood	<i>Sequoia sempervirens</i>	65/15	60/50	55% fair	poor to mod											X
944 Alt. Lot "West"				17.1					17.1			coast redwood	<i>Sequoia sempervirens</i>	60/13	70/70	70% good	moderate											X
945 Alt. Lot "West"				19.4					19.4			coast redwood	<i>Sequoia sempervirens</i>	65/15	70/65	68% fair	moderate											X
946 Alt. Lot "West"				17.0					17.0			coast redwood	<i>Sequoia sempervirens</i>	65/12	30/30	30% poor	poor											X
947 Alt. Lot "West"				7.8					7.8			coast redwood	<i>Sequoia sempervirens</i>	30/5	30/30	30% poor	poor											X
948 Alt. Lot "West"				23.0					23.0			Monterey pine	<i>Pinus radiata</i>	15/2	0/0	0% dead (STUMP)												X
949 Alt. Lot "West"	X			12.2					12.2			coast redwood	<i>Sequoia sempervirens</i>	50/5	0/0	0% dead												X
950 Alt. Lot "West"				16.6					16.6			coast redwood	<i>Sequoia sempervirens</i>	60/18	75/75	75% good	moderate											X
951 Alt. Lot "West"				24.5					24.5			Italian stone pine	<i>Pinus pinea</i>	15/2	0/0	0% dead											X	
952 Alt. Lot "West"				19.5					19.5			Italian stone pine	<i>Pinus pinea</i>	30/20	60/30	40% poor	good	E	E								Severe lean.	

Tree Tag #	To be Removed Per Current Stewardship Recommendations Due to Very Poor Health or Elevated Risk of Failure	Author Recommendations	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (Inches @ 54" A.G. (1" = 2.54" x 4.5))	Reported Trunk Diameter (inches @ 54" A.G. (1" = 2.54" x 4.5))	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Tree Density (Very Low, Low, Med, High, Ex.)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Out Evidences (Note/Elevation)	Toppling or Severe Pruning on Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Sap Decay (Note/Elevation)	Coparental Measurements (Note/Elevation, Max, Min, Average, Range, Inclusion(s), Note/Helping)	Root Extension Restricted in Painter	Soil Moisture Deficit ("2" = eight Stress*)	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)			
953 Alt. Lot "West"				22.7					22.7			coast redwood	<i>Sequoia sempervirens</i>	50/15	50/45	47% poor	poor to mod														
954 Alt. Lot "West"	X			8.7					8.7			coast redwood	<i>Sequoia sempervirens</i>	25/5	5/5	5% very poor	very poor														
955 Alt. Lot "West"	?			17.7					17.7			coast redwood	<i>Sequoia sempervirens</i>	40/18	25/25	25% very poor	very poor														
956 Alt. Lot "West"				25.9					25.9			coast redwood	<i>Sequoia sempervirens</i>	65/20	50/50	50% fair	poor to mod														
957 Alt. Lot "West"				14.0	13.8				27.8			coast redwood	<i>Sequoia sempervirens</i>	55/13	30/30	30% poor	poor							2		X					
958 Alt. Lot "West"	?			6.4					6.4			coast redwood	<i>Sequoia sempervirens</i>	40/4	5/5	5% very poor	very poor										X				
959 Alt. Lot "West"				21.4					21.4			coast redwood	<i>Sequoia sempervirens</i>	65/18	45/45	45% poor	poor											X			
960 Alt. Lot "West"				5.5					5.5			Shamel ash	<i>Fraxinus uhdei</i>	25/10	85/60	65% fair	good	S	S									X			
961 Alt. Lot "West"				21.5					21.5			coast redwood	<i>Sequoia sempervirens</i>	60/18	30/30	30% poor												X			
962 Alt. Lot "West"				14.3					14.3			coast redwood	<i>Sequoia sempervirens</i>	35/14	30/30	30% poor												X			
963 Alt. Lot "West"				4.0					4.0			California pepper tree	<i>Schinus molle</i>	17/7	75/75	75% good	good														
964 Alt. Lot "West"	X			17.9					17.9			coast redwood	<i>Sequoia sempervirens</i>	40/6	0/0	0% dead												X			
965 Alt. Lot "West"				16.5					16.5			coast redwood	<i>Sequoia sempervirens</i>	55/15	30/30	30% poor												X			
966 Alt. Lot "West"	?			18.8					18.8			coast redwood	<i>Sequoia sempervirens</i>	50/5	25/25	25% very poor	poor										X				

Tree Tag #	To be Removed Per Current Stewardship Recommendations Due to Very Poor Health or Elevated Risk of Failure	Author Recommendations	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (inches @ 54° A.G. (1/2pi * d^2 / 4))	Reported Total Tree Diameter at Crotch (inches) (e.g. 10.0 = single stem, 20" multi-stemmed tree, 10" non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Wt. Density (Very Low, Low, Mod., High, Ex.)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Out Evidences (Note/Elevation)	Toppling or Severe Pruning on Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Sap Decay (Note/Elevation)	Root Extension Restricted in Past	Soil Nutrient Deficit ("Soil tight Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
967	Alt. Lot "West"			6.8	3.7				10.5			Shamel ash	<i>Fraxinus uhdei</i>	35/14	85/70	75% good	good							X			
968	Alt. Lot "West"	?		15.1					15.1			coast redwood	<i>Sequoia sempervirens</i>	35/4	0/0	0% dead											
969	Alt. Lot "West"			5.6					5.6			Shamel ash	<i>Fraxinus uhdei</i>	35/12	75/75	75% good	good										
970	Alt. Lot "West"	?		9.2					9.2			coast redwood	<i>Sequoia sempervirens</i>	40/8	5/5	5% very poor	very poor										
971	Alt. Lot "West"	?		7.7					7.7			coast redwood	<i>Sequoia sempervirens</i>	55/18	20/20	20% very poor	very poor										
972	Alt. Lot "West"			22.2					22.2			coast redwood	<i>Sequoia sempervirens</i>	65/20	65/65	65% fair	moderate										
973	Alt. Lot "West"			18.5					18.5			coast redwood	<i>Sequoia sempervirens</i>	65/20	40/40	40% poor	poor										
974	Alt. Lot "West"			19.4					19.4			coast redwood	<i>Sequoia sempervirens</i>	65/20	75/75	75% good	moderate										
975	Alt. Lot "West"			23.2					23.2			coast redwood	<i>Sequoia sempervirens</i>	65/16	65/65	65% fair	moderate	N									
976	Alt. Lot "West"			10.6					10.6			coast redwood	<i>Sequoia sempervirens</i>	55/12	70/65	68% fair	moderate										
977	Alt. Lot "West"			10.3					10.3			coast redwood	<i>Sequoia sempervirens</i>	55/12	65/65	66% fair	moderate										
978	Alt. Lot "West"			28.6					28.6			coast redwood	<i>Sequoia sempervirens</i>	70/15	70/70	70% good	moderate										
979	Alt. Lot "West"			23.8					23.8			coast redwood	<i>Sequoia sempervirens</i>	80/18	60/60	60% fair	poor to mod										
980	Alt. Lot "West"			20.5					20.5			coast redwood	<i>Sequoia sempervirens</i>	70/18	60/60	60% fair	poor to mod										

Tree Tag #	To be Removed Per Current Stewardship Recommendations Due to Very Poor Health or Elevated Risk of Failure	Author Recommendations	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (Inches @ 54° A.G. (+2.54*4.5))	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Wt. Diversity (Very Poor, Poor, Mod., Good, Excl.)	Lopsided Canopy (Direction Notes)	Trunk Lean (Direction Notes)	Historical Stem Split/Dust Evidence (Note Elevation)	Topped or Severely Pruned on Past	Buried Root Crown (BRC) or Galling Roots (GR)	Sap Decay (Note Elevation)	Culprits (Mastodons, Elephants, etc. Note when known), Bark Infection(s) (Note Height)	Root Extension Restricted in Past	Soil Moisture Deficit ("To depth Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
981 Alt. Lot "West"				20.9					20.9		coast redwood	<i>Sequoia sempervirens</i>	80/18	75/75	75% good	moderate											
982 Alt. Lot "West"				20.0					20.0		coast redwood	<i>Sequoia sempervirens</i>	70/15	45/40	43% poor	poor											
983 Alt. Lot "West"				16.2					16.2		coast redwood	<i>Sequoia sempervirens</i>	80/15	60/60	60% fair	poor to mod											
984 Alt. Lot "West"				23.0					23.0		coast redwood	<i>Sequoia sempervirens</i>	70/18	65/65	65% fair	moderate	NW								X	Sweep-form trunk.	
985 Alt. Lot "West"				28.8					28.8		coast redwood	<i>Sequoia sempervirens</i>	70/18	45/45	45% poor	poor									X		
986 Alt. Lot "West"				22.0	16.7				38.7		coast redwood	<i>Sequoia sempervirens</i>	70/18	45/45	45% poor	poor									X		
987 Alt. Lot "West"				19.2					19.2		coast redwood	<i>Sequoia sempervirens</i>	55/12	60/50	55% fair	poor to mod									X		
988 Alt. Lot "West"				26.7					26.7		coast redwood	<i>Sequoia sempervirens</i>	70/15	45/45	45% poor	poor									X		
989 Alt. Lot "West"				10.2					10.2		coast redwood	<i>Sequoia sempervirens</i>	35/12	60/50	55% fair	moderate									X		
990 Alt. Lot "West"				27.3					27.3		coast redwood	<i>Sequoia sempervirens</i>	80/16	60/60	60% fair	poor to mod									X		
991 Alt. Lot "West"				25.0					25.0		coast redwood	<i>Sequoia sempervirens</i>	80/17	45/45	45% poor	poor									X		
992 Alt. Lot "West"				29.5					29.5		coast redwood	<i>Sequoia sempervirens</i>	80/18	45/50	48% poor	poor to mod									X		
993 Alt. Lot "West"				20.7					20.7		coast redwood	<i>Sequoia sempervirens</i>	75/12	30/30	30% poor	poor									X		
994 Alt. Lot "West"				33.3					33.3		coast redwood	<i>Sequoia sempervirens</i>	60/18	45/55	50% fair	poor to mod									X		

Tree Tag #	To be Removed Per Current Stewardship Recommendations Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter (Inches) @ 54" A.G. (+2.5% +4.5%)	Reported Tree Trunk Diameter at 54" A.G. (inches) Note: If multiple trunks, enter the largest trunk diameter (10.0, single stem, 20" multi, various specified diameter for non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0-100%, each)	Overall Condition Rating (0-100%)	Live Tree Density (Very Poor, Poor, Mod, Good, Excellent)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Dust Evidence (Note Elevation)	Toppling or Severe Pruning on Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Sapwood Decay (Note Elevation)	Cold-weather Protection Measures (Note: Windbreak, Insulation, Heating)	Root Extension Restricted in Painter	Soil Moisture Deficit ("Too tight Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
995 Alt. Lot "West"			16.1						16.1		coast redwood	<i>Sequoia sempervirens</i>	60/12	35/35	35% poor	poor									X	S-trunk form.	
996 Alt. Lot "West"			16.8						16.8		coast redwood	<i>Sequoia sempervirens</i>	65/16	55/55	55% fair	poor to mod									X		
997 Alt. Lot "West"			17.9						17.9		coast redwood	<i>Sequoia sempervirens</i>	65/14	60/60	60% fair	moderate									X		
998 Alt. Lot "West"			21.1						21.1		coast redwood	<i>Sequoia sempervirens</i>	65/15	65/65	65% fair	moderate									X	S-trunk form.	
999 Alt. Lot "West"			23.3						23.3		coast redwood	<i>Sequoia sempervirens</i>	65/18	60/60	60% fair	poor to mod									X		
1000 Alt. Lot "West"			12.0						12.0		coast redwood	<i>Sequoia sempervirens</i>	60/16	65/65	65% fair	moderate									X		
1001 Alt. Lot "West"			12.7						12.7		coast redwood	<i>Sequoia sempervirens</i>	50/13	55/50	54% fair	poor to mod									X		
1002 Alt. Lot "West"			16.8						16.8		coast redwood	<i>Sequoia sempervirens</i>	60/15	45/50	48% poor	poor									X		
1003 Alt. Lot "West"			12.4	12.0	11.5				35.9		coast redwood	<i>Sequoia sempervirens</i>	65/15	65/60	65% fair	moderate									X		
1004 Alt. Lot "West"			20.7						20.7		coast redwood	<i>Sequoia sempervirens</i>	70/16	40/40	40% poor	poor								15	X		
1005 Alt. Lot "West"			13.0						13.0		coast redwood	<i>Sequoia sempervirens</i>	35/14	50/45	48% poor	moderate									X		
1006 Alt. Lot "West"			26.7						26.7		coast redwood	<i>Sequoia sempervirens</i>	75/18	30/30	30% poor	poor									X		
1007 Alt. Lot "West"			16.8						16.8		coast redwood	<i>Sequoia sempervirens</i>	65/18	30/30	30% poor	poor									X		
1008 Alt. Lot "West"			18.9						18.9		coast redwood	<i>Sequoia sempervirens</i>	70/18	60/60	60% fair	poor to mod									X		
1009 Alt. Lot "West"	?		16.6						16.6		coast redwood	<i>Sequoia sempervirens</i>	55/18	10/10	10% very poor	very poor									X	Apical meristem is gone.	
1010 Alt. Lot "West"	?		17.7						17.7		coast redwood	<i>Sequoia sempervirens</i>	65/15	15/15	15% very poor	very poor									X		

Tree ID #	To be Removed Per Current Specification	Author Recommends Removal Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (inches) @ 54° A.G. (+2.5% +4.5%)	Reported Total Tree Diameter of Current Canopy Circumference (10.0' single stem, 20' multi, various specified canopy diameter for non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating Range (0-100% each)	Overall Condition Rating (0-100%)	Live Wt. Density (Very Low, Low, Med, High, Ex-High)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Drop Evidence (Note Elevation)	Topped or Severely Pruned on Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Sap Decay (Note Elevation)	Culprits (Masturbators and/or Root Rot, Insects (Note Height))	Root Extension Restricted in Past	Soil Moisture Deficit ("To a height of 6")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
1011	All. Lot "West"	?		13.8					13.8			coast redwood	<i>Sequoia sempervirens</i>	65/15	25/25	25% very poor	very poor								X	Chain around trunk is girdling the tree, and must be removed ASAP in order to avoid the tree being structurally compromised.		
1012	All. Lot "West"			21.7					21.7			coast redwood	<i>Sequoia sempervirens</i>	70/18	60/60	60% fair	poor to mod											
1013	All. Lot "West"			26.4					28.4			coast redwood	<i>Sequoia sempervirens</i>	75/18	30/30	30% poor	poor											
1014	All. Lot "West"	?		15.1					15.1			coast redwood	<i>Sequoia sempervirens</i>	70/13	20/20	20% very poor	very poor									X		
1015	All. Lot "West"	?		18.4					18.4			coast redwood	<i>Sequoia sempervirens</i>	65/14	25/25	25% very poor	very poor									X		
1016	All. Lot "West"			16.6					16.6			coast redwood	<i>Sequoia sempervirens</i>	70/16	40/35	38% poor	poor									X	Apical meristem deflected off from vertical.	
1017	All. Lot "West"	?		13.1					13.1			coast redwood	<i>Sequoia sempervirens</i>	55/13	30/20	25% very poor	very poor									X		
1018	All. Lot "West"			16.9					16.9			coast redwood	<i>Sequoia sempervirens</i>	55/16	30/20	25% very poor	poor									X		
1019	All. Lot "West"			26.5					26.5			coast redwood	<i>Sequoia sempervirens</i>	75/18	65/75	70% good	moderate									X		
1020	All. Lot "West"	?		6.8					6.8			coast redwood	<i>Sequoia sempervirens</i>	20/4	30/20	25% very poor	poor									X		
1021	All. Lot "West"			9.7					9.7			coast redwood	<i>Sequoia sempervirens</i>	35/12	75/55	65% fair	moderate									X		
1022	All. Lot "West"			21.0					21.0			coast redwood	<i>Sequoia sempervirens</i>	55/13	35/40	38% poor	poor									X		
1023	All. Lot "West"			24.9					24.9			coast redwood	<i>Sequoia sempervirens</i>	75/20	55/65	60% fair	poor to mod									X		
1024	All. Lot "West"			17.7					17.7			coast redwood	<i>Sequoia sempervirens</i>	60/14	60/65	65% fair	moderate									X		
1025	All. Lot "West"			8.8					8.8			coast redwood	<i>Sequoia sempervirens</i>	35/10	60/45	53% fair	moderate									X		
1026	All. Lot "West"			16.5					16.5			coast redwood	<i>Sequoia sempervirens</i>	40/10	60/60	60% fair	moderate									X		
1027	All. Lot "West"			20.6					20.6			coast redwood	<i>Sequoia sempervirens</i>	65/14	70/70	70% good	moderate									X		

Tree ID #	To be Removed Per Current Stewardship	Author Recommendations Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (inches) @ 54° A.G. (+2.5% +4.5%)	Reported Total Tree Diameter of Current Stewardship (10.0' single stem, 20' multi, various specified species, or non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0-100% each)	Overall Condition Rating (0-100%)	Live Tree Density (Very Low, Low, Mod, High, Ex.)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Out Edition (Note/Elevation)	Topped or Severely Pruned on Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Sap Decay (Note/Elevation)	Culprits (Mastodons, Beavers, etc., or other Inhabitant(s) (Note/Habitat))	Root Extension Restricted in Past	Soil Moisture Deficit ("Soil Tight Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)	
1028 Alt. Lot "West"				18.8					18.8			coast redwood	<i>Sequoia sempervirens</i>	60/14	55/45	50% fair	poor to mod												
1029 Alt. Lot "West"	?			18.4					18.4			coast redwood	<i>Sequoia sempervirens</i>	60/10	20/20	20% very poor	very poor												
1030 Alt. Lot "West"	?			17.5					17.5			coast redwood	<i>Sequoia sempervirens</i>	65/10	5/5	5% very poor	very poor												
1031 Alt. Lot "West"	?			21.0					21.0			coast redwood	<i>Sequoia sempervirens</i>	65/10	5/5	5% very poor	very poor												
1032 Alt. Lot "West"				23.7					23.7			coast redwood	<i>Sequoia sempervirens</i>	70/18	55/40	47% poor	poor to mod							40		X			
1033 Alt. Lot "West"				18.5					18.5			coast redwood	<i>Sequoia sempervirens</i>	55/13	65/65	65% fair	moderate										X		
1034 Alt. Lot "West"				24.8					24.8			coast redwood	<i>Sequoia sempervirens</i>	70/15	70/70	70% good	moderate										X		
1035 Alt. Lot "West"				17.0					17.0			coast redwood	<i>Sequoia sempervirens</i>	75/14	70/35	50% fair	moderate							9		X			
1036 Alt. Lot "West"				30.4					30.4			coast redwood	<i>Sequoia sempervirens</i>	85/25	75/75	75% good	good										X		
1037 Alt. Lot "West"				23.3					23.3			coast redwood	<i>Sequoia sempervirens</i>	80/15	70/60	60% fair	moderate										X		
1038 Alt. Lot "West"				22.0					22.0			coast redwood	<i>Sequoia sempervirens</i>	70/15	60/50	55% fair	poor to mod									X		Apical stem missing (blown out).	
1039 Alt. Lot "West"				25.9					25.9			coast redwood	<i>Sequoia sempervirens</i>	90/20	70/70	70% good	moderate										X		
1040 Alt. Lot "West"				45.4					45.4			coast redwood	<i>Sequoia sempervirens</i>	80/20	70/67	70% good	moderate	S									X		
1041 Alt. Lot "West"				29.1					29.1			coast redwood	<i>Sequoia sempervirens</i>	80/15	70/70	70% good	moderate										X		
1042 Alt. Lot "West"				17.5					17.5			coast redwood	<i>Sequoia sempervirens</i>	80/10	70/60	65% fair	moderate										X		
1043 Alt. Lot "West"				36.5					36.5			coast redwood	<i>Sequoia sempervirens</i>	85/18	75/70	73% good	good										X		
1044 Alt. Lot "West"	?			11.5					11.5			coast redwood	<i>Sequoia sempervirens</i>	60/7	20/20	20% very poor	very poor										X		

Tree Tag #	To be Removed Per Current Stewardship Recommendation Due to Very Poor Health or Elevated Risk of Failure	Author Recommendations	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter (inches) @ 14' A.G. (1.25" = 1" + 4.5)	Reported Total Height & Diameter of Current Canopy (e.g. 10.0' single stem, 20" multi, various species, etc.)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating (0=100% health)	Overall Condition Rating (0=100%)	Live Tree Density (Very Low, Low, Mod, High, Ex-High)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Out Evidence (Note Elevation)	Topped or Severely Pruned on Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Sap Decay (Note Elevation)	Culprits (Mammals, Birds, Insects, Weather, Inclusions) (Note Height)	Root Extension Restricted in Past	Soil Moisture Deficit ("2" = eight feet =?)	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)		
1045	Alt. Lot "West"			33.7					33.7			coast redwood	<i>Sequoia sempervirens</i>	90/13	70/60	63% fair	moderate	E									X			
1046	Alt. Lot "West"			27.8					27.8			coast redwood	<i>Sequoia sempervirens</i>	90/12	65/50	57% fair	moderate	E												
1047	Alt. Lot "West"			21.0					21.0			coast redwood	<i>Sequoia sempervirens</i>	80/12	70/60	68% fair	moderate	E												
1048	Alt. Lot "West"			17.2					17.2			coast redwood	<i>Sequoia sempervirens</i>	60/12	70/60	67% fair	moderate	E												
1049	Alt. Lot "West"			43.9					43.9			coast redwood	<i>Sequoia sempervirens</i>	90/18	70/70	70% good	good	E												
1050	Alt. Lot "West"			26.8					26.8			coast redwood	<i>Sequoia sempervirens</i>	80/12	70/60	68% fair	good	W												
1051	Alt. Lot "West"			27.4					27.4			coast redwood	<i>Sequoia sempervirens</i>	90/12	70/60	70% good	good	W												
1052	Alt. Lot "West"			23.6					23.6			coast redwood	<i>Sequoia sempervirens</i>	80/12	70/60	64% fair	good	W												
1053	Alt. Lot "West"			23.2					23.2			coast redwood	<i>Sequoia sempervirens</i>	80/12	70/50	64% fair	good	S											X	Located on steep slope. Possible stability issues?
1054	Alt. Lot "West"			24.6					24.6			coast redwood	<i>Sequoia sempervirens</i>	80/10	70/50	65% fair	good	S											X	Located on steep slope. Possible stability issues?
1055	Alt. Lot "West"			27.8					27.8			coast redwood	<i>Sequoia sempervirens</i>	80/13	70/50	67% fair	good	S											X	Located on steep slope. Possible stability issues?
1056	Alt. Lot "West"			25.9					25.9			coast redwood	<i>Sequoia sempervirens</i>	80/12	55/60	57% fair	poor to mod												X	
1057	Alt. Lot "West"			27.0					27.0			coast redwood	<i>Sequoia sempervirens</i>	75/15	70/70	70% good	good												X	
1058	Alt. Lot "West"			28.7					28.7			coast redwood	<i>Sequoia sempervirens</i>	75/18	70/70	70% good	good												X	S-trunk at 4-feet elevation.
1059	Alt. Lot "West"		X	29.3	22.0				51.3			coast redwood	<i>Sequoia sempervirens</i>	80/18	70/60	68% fair	moderate to good											2	X	
1060	Alt. Lot "West"	X		7.6					7.6			white alder	<i>Ailanthus altissima</i>	18/7	30/10	20% very poor	poor				X	lower trunk						X		
1061	Alt. Lot "West"			19.6					19.6			coast redwood	<i>Sequoia sempervirens</i>	80/12	70/55	63% fair	good	W										X	S-trunk form between zero and 15 feet.	

Tree Tag #	To be Removed Per Current Stewardship Recommendation Due to Very Poor Health or Elevated Risk of Failure	Author Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (inches) @ 54° A.G. (1.254 x D <sup>4/3</sup> )	Reported Total Tree Diameter at Crotch (inches) (Crown to Crotch = 10.0, single stem, 20" multi, various specified crown height and non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating Range (0-100% each)	Overall Condition Rating (0-100%)	Live Tree Density (Very Low, Low, Med, High, Ex-High)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Dust Evidence (Note Elevation)	Topped or Severely Pruned on Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Sap Decay (Note Elevation)	Culprits (Insects, Fungi, etc.) and/or Management Techniques (Note Height)	Root Extension Restricted in Past	Soil Nutrient Deficit ("Soil Nutrient Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
1062	Alt. Lot "West"			9.9					9.9			coast redwood	<i>Sequoia sempervirens</i>	45/9	70/65	70% good	good	S								X		
1063	Alt. Lot "West"			19.4					19.4			coast redwood	<i>Sequoia sempervirens</i>	60/12	70/65	68% fair	moderate to good									X		
1064	Alt. Lot "West"			12.2					12.2			Shamel ash	<i>Fraxinus uhdei</i>	35/30	50/50	50% fair	poor to mod	W								X		
1065	Alt. Lot "West"			12.0					12.0			Shamel ash	<i>Fraxinus uhdei</i>	35/25	80/60	67% fair	good	SW	SW							X		
1066	Alt. Lot "West"			32.2					32.2			Italian stone pine	<i>Pinus pinea</i>	30/40	75/45	58% fair	good	S						4		Requires endweight reduction pruning. Note trunk measured at narrow point below standard height.		
1067	Alt. Lot "West"			25.7					25.7			Italian stone pine	<i>Pinus pinea</i>	25/35	65/40	52% fair	moderate	S	S						6		Requires endweight reduction pruning. Note trunk measured at narrow point below standard height.	
1068	Alt. Lot "West"			24.6					24.6			Italian stone pine	<i>Pinus pinea</i>	30/35	75/60	66% fair	good			12							Requires endweight reduction pruning. Note trunk measured at narrow point below standard height.	
1069	Alt. Lot "West"			24.2					24.2			Italian stone pine	<i>Pinus pinea</i>	30/35	75/60	68% fair	good	N		18							Requires endweight reduction pruning. Note trunk measured at narrow point below standard height.	
1070	Alt. Lot "West"	X		15.4					15.4			Monterey pine	<i>Pinus radiata</i>	20/20	30/20	25% very poor	poor	S						1		X		
1071	Alt. Lot "West"			9.0					9.0			honey locust	<i>Gleditsia triacanthos</i>	25/18	35/40	37% poor	poor									X		
1072	Alt. Lot "West"			8.3					8.3			honey locust	<i>Gleditsia triacanthos</i>	25/15	40/25	33% poor	poor	W								X		
1073	Alt. Lot "West"			8.9					8.9			honey locust	<i>Gleditsia triacanthos</i>	25/20	40/40	40% poor	poor									X		
1074	Alt. Lot "West"			8.2					8.2			honey locust	<i>Gleditsia triacanthos</i>	25/20	40/40	40% poor	poor									X		
1075	Alt. Lot "West"	X		7.6					7.6			evergreen pear	<i>Pyrus kawakamii</i>	16/13	25/25	25% very poor	very poor	W								X	Fireblight infection	
1076	Alt. Lot "West"	X		8.8					8.8			evergreen pear	<i>Pyrus kawakamii</i>	20/20	25/25	25% very poor	very poor	S								X	Fireblight infection	
1077	Alt. Lot "West"			12.9					12.9			evergreen pear	<i>Pyrus kawakamii</i>	30/30	30/40	35% poor	moderate									X	Fireblight infection	
1078	Alt. Lot "West"			9.2					9.2			honey locust	<i>Gleditsia triacanthos</i>	22/25	65/60	63% fair	moderate									X		

Tree ID #	To be Removed Per Current Steward	Author Recommendations Removal Due to Very Poor Health or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in)	Trunk 2 (in)	Trunk 3 (in)	Trunk 4 (in)	Trunk 5 (in)	Trunk 6 (in)	Adjusted Trunk Diameter (inches) @ 14' A.G. (+2.5% +4.5%)	Reported Trunk Diameter (inches) @ 14' A.G. (10.0 - single stem; 20" multi, various specified diameter at non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating Range (0-100% each)	Overall Condition Rating (0-100%)	Live Tree Density (Very Low, Low, Med, High, Ex-High)	Lopsided Canopy (Direction Notes)	Trunk Lean (Direction Notes)	Historical Stem Split/Out Evidences (Note Elevation)	Topped or Severely Pruned on Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Sapwood Decay (Note Elevation)	Culprits (Masturbators, Voles, Squirrels, Raccoons, Skunks, Insects (e.g. Borers)) (Note Height)	Root Extension Restricted in Past	Soil Nutrient Deficit ("Soil Tight Stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)	
1079	Alt. Lot "West"			6.7					6.7			honey locust	<i>Gleditsia triacanthos</i>	18/15	65/55	60% fair	moderate												
1080	Alt. Lot "West"			8.5					8.5			honey locust	<i>Gleditsia triacanthos</i>	25/20	65/60	63% fair	moderate												
1081	Alt. Lot "West"			19.8					19.8			Italian stone pine	<i>Pinus pinea</i>	30/40	80/70	75% good	good	E									Will need endweight reduction pruning if retained.		
1082	Alt. Lot "West"			32.8					32.8			Italian stone pine	<i>Pinus pinea</i>	35/30	80/60	67% fair	good	S									Will need endweight reduction pruning if retained. Note: measured at 2 feet elevation.		
1083	Alt. Lot "West"			22.1					22.1			Italian stone pine	<i>Pinus pinea</i>	30/30	80/65	69% fair	good	N	N								Will need endweight reduction pruning if retained.		
1084	Alt. Lot "West"			23.9					23.9			Italian stone pine	<i>Pinus pinea</i>	25/25	75/45	55% fair	good	S									Note: measured at 3 feet elevation.		
1085	Alt. Lot "West"			18.4					18.4			Italian stone pine	<i>Pinus pinea</i>	28/30	80/50	65% fair	good	S									Note: measured at 3 feet elevation.		
1086	Alt. Lot "West"			17.6					17.6			Italian stone pine	<i>Pinus pinea</i>	30/25	80/65	75% good	good										S-trunk form.		
1087	Alt. Lot "West"			4.4					4.4			(dead standing tree)	(dead standing tree)	13/4	0/0	0% dead											X		
1088	Alt. Lot "West"			7.0	7.0	6.5			20.5			coast redwood	<i>Sequoia sempervirens</i>	25/10	80/80	80% good	good										X		
1089	Alt. Lot "West"			7.5					7.5			coast redwood	<i>Sequoia sempervirens</i>	25/10	80/80	80% good	good										X		
1090	Alt. Lot "West"			4.5					4.5			coast redwood	<i>Sequoia sempervirens</i>	18/8	80/80	80% good	good										X		
1091	Alt. Lot "West"			12.5					12.5			coast redwood	<i>Sequoia sempervirens</i>	30/10	70/70	70% good	good										X		
1092	Alt. Lot "West"			4.7	4.1				8.8			coast redwood	<i>Sequoia sempervirens</i>	20/13	80/80	80% good	good										X		
1093	Alt. Lot "West"			5.7	5.3				11.0			coast redwood	<i>Sequoia sempervirens</i>	25/12	80/80	80% good	good										X		
1094	Alt. Lot "West"			13.4					13.4			coast redwood	<i>Sequoia sempervirens</i>	30/11	70/60	66% fair	moderate									X			
1095	Alt. Lot "West"	X		42.0					42.0			Italian stone pine	<i>Pinus pinea</i>	25/30	80/0	20% very poor	good									Trunk diameter estimated. Tree has failed structurally, and is lying on the ground.			

Tree ID #	To be Removed Per Current Specification	Author Recommendations Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter (inches) @ 54° A.G. (+2.5% +4.5%)	Reported Total Tree Diameter of Current Site Condition (10.0' single stem, 20' multi, various specified species, or 1 non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating Range (0-100% each)	Overall Condition Rating (0-100%)	Live Tree Density (Very Low, Low, Med, High, Very High, Ex-High)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Splitout Evidence (Note Elevation)	Topped or Severely Pruned on Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Sapwood Decay (Note Elevation)	Culprits (Roots with Adverse Influence(s) (Note Height))	Root Extension Restricted in Past	Soil Volume Deficit ("20% height stress")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)		
1096	Alt. Lot "West"			31.8					31.8			Italian stone pine	<i>Pinus pinea</i>	25/25	80/55	64% fair	good	N	N							X	Trunk measured at 2 feet elevation.			
1097	Alt. Lot "West"	X		13.2					13.2			tulip tree	<i>Liriodendron tulipifera</i>	30/12	25/25	25% very poor	very poor													
1098	Alt. Lot "West"	?		12.6					12.6			tulip tree	<i>Liriodendron tulipifera</i>	25/10	40/30	30% poor	poor													
1099	Alt. Lot "West"			27.9					27.9			Italian stone pine	<i>Pinus pinea</i>	35/45	85/55	70% good	good	SW	SW	20									Needs endweight reduction pruning.	
1100	Alt. Lot "West"			28.0					28.0			Italian stone pine	<i>Pinus pinea</i>	20/35	0/0	0% dead													Trunk diameter estimated. Tree has failed structurally, and is lying on the ground as dead wood.	
1101	Alt. Lot "West"	?		18.9					18.9			Italian stone pine	<i>Pinus pinea</i>	40/30	80/50	50% fair	good	NW	NW										Note: many trees appear to be leaning in larger-diameter planter areas, due to their root development having been severely restricted in terms of lateral extension. The root plates of many of these trees appear to be tilted, which causes them to lean in one direction, resulting from the lack of open soil planting area width, which has now resulted in the root plates remaining very limited in lateral extension. As the roots continue to extend with heavy endweight, those load forces act on the small diameter root plates, which then causes the trees' root plates to rotate and push up out of the ground.	
1102	Alt. Lot "West"	?		38.3					38.3			Italian stone pine	<i>Pinus pinea</i>	40/28	80/47	50% fair	good	SW	SW										Same as 'notes' for tree #1101. Trunk diameter measured at 1 foot elevation.	
1103	Alt. Lot "West"	X		24.7					24.7			Italian stone pine	<i>Pinus pinea</i>	30/25	80/0	10% very poor	good	S	S										Same as 'notes' for tree #1101. Trunk diameter measured at 2 feet elevation.	
1104	Alt. Lot "West"	X		28.0					28.0			Italian stone pine	<i>Pinus pinea</i>	20/20	0/0	0% dead													Same as 'notes' for tree #1101. Trunk diameter measured at 2 feet elevation.	
1105	Alt. Lot "West"			5.0	4.5				9.5			river red gum	<i>Eucalyptus camaldulensis</i>	30/10	90/45	60% fair	good							1		X	Recommend remove one of two codominant mainstems at the fork at 1 foot elevation.			
1106				8.0					8.0			southern magnolia	<i>Magnolia grandiflora</i>	20/16	50/50	50% fair	poor to mod									X	Roots damaged on grade from mowing activities.			
1107				6.8					6.8			southern magnolia	<i>Magnolia grandiflora</i>	20/16	50/50	50% fair	poor to mod								X	Roots damaged on grade from mowing activities.				
1108				9.0					9.0			southern magnolia	<i>Magnolia grandiflora</i>	23/20	55/55	55% fair	poor to mod								X	Roots damaged on grade from mowing activities.				
1109	X			41.8					41.8			Shamel ash	<i>Fraxinus uhdei</i>	65/60	80/60	73% good	good	E							X	Roots damaged from recent curb replacement activities.				
1110	X			10.5					10.5			Shamel ash	<i>Fraxinus uhdei</i>	35/20	30/30	30% poor	poor	W			X	gr		6	X	Roots damaged from recent curb replacement activities.				
1111	X			14.7					14.7			Shamel ash	<i>Fraxinus uhdei</i>	40/20	30/30	30% poor	poor	E			X	gr		10	X	Roots damaged from recent curb replacement activities.				
1112	X			26.6					26.6			Shamel ash	<i>Fraxinus uhdei</i>	65/35	60/60	60% fair	moderate	SW				gr			X	Roots damaged from recent curb replacement activities.				

Tree Tag #	To be Removed Per Current Specification	Author Recommendations Removal Due to Very Poor Condition or Elevated Risk of Failure	Project Team Desires to Transplant	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Trunk 6 (in.)	Adjusted Trunk Diameter (inches) @ 54° A.G. (+2.5% +4.5%)	Reported Total Tree Diameter at Curbstone Cutout (10.0' single stem, 20' multi, various specified species, some non-native species)	Common Name	Scientific Name (Genus, species)	Height and Canopy Spread (ft.)	Health & Structural Rating Range (0-100% each)	Overall Condition Rating (0-100%)	Live Wt. Density (Very Low, Low, Med., High, Ex.)	Lopsided Canopy (Direction Note)	Trunk Lean (Direction Note)	Historical Stem Split/Out Evidence (Note Elevation)	Topped or Severely Pruned on Past	Buried Root Crown (BRC) or Girdling Roots (GR)	Sap Decay (Note Elevation)	Root Extension Restricted in Painter	Soil Moisture Deficit ("Soil Weight Stress %")	WLCA Notes from Spring 2015 Survey	Record Notes on Actual Status of Tree Over Time (removed, pruned, declining, irrigation regime, etc.)
1113	X			33.5					33.5			Shamel ash	<i>Fraxinus uhdei</i>	70/70	65/55	60% fair	moderate			35	gr			X	High risk situation: Split "hanger" limb noted at 35 feet elevation on north side of canopy needs to be removed. High risk!		
1114				19.2					19.2			Shamel ash	<i>Fraxinus uhdei</i>	35/35	85/65	75% good	good	S	S		X			X			
1115	(monitor the girdling root situation)			22.9					22.9			Shamel ash	<i>Fraxinus uhdei</i>	35/35	80/30	45% poor	good	E	E			serious girdling root		X	Roots damaged on grade. Note severe girdling root situation.		
1116				24.2					24.2			Shamel ash	<i>Fraxinus uhdei</i>	40/40	80/55	65% fair	good				X	gr		X	Roots damaged on grade from mowing activities.		
1117				24.7					24.7			Shamel ash	<i>Fraxinus uhdei</i>	45/40	40/30	35% poor	poor		E				throughout canopy		X	Roots damaged on grade from mowing activities.	
1118				23.0					23.0			Shamel ash	<i>Fraxinus uhdei</i>	55/40	60/50	55% fair	moderate	W	W		X			X	Roots damaged on grade from mowing activities.		
1119	X			18.6					18.6			Shamel ash	<i>Fraxinus uhdei</i>	45/20	15/15	15% very poor	very poor				X	gr			Roots damaged on grade from mowing activities. Recommend remove tree due to very poor overall condition.		
1120				26.7					26.7			Shamel ash	<i>Fraxinus uhdei</i>	50/40	75/65	70% good	good	N	E		X			X	Roots damaged on grade from mowing activities.		
1121				19.7					19.7			Shamel ash	<i>Fraxinus uhdei</i>	50/35	80/65	76% good	good	W	W		X			X	Roots damaged on grade from mowing activities.		
1122				21.4					21.4			Shamel ash	<i>Fraxinus uhdei</i>	60/35	40/40	40% poor	poor	W			X		0 to 2		X	Roots damaged on grade from mowing activities. Vehicle collision caused damage to trunk between zero and 2 feet elevation.	
1123				18.5					18.5			Shamel ash	<i>Fraxinus uhdei</i>	55/30	65/55	58% fair	moderate	W			X	gr			X	Roots damaged on grade from mowing activities. Root plate upper surfaces are exposed.	
1124				15.5					15.5			Shamel ash	<i>Fraxinus uhdei</i>	30/18	40/30	35% poor	poor	W			X	gr			X	Roots damaged on grade from mowing activities. Root plate upper surfaces are exposed.	
1125				13.8					13.8			Shamel ash	<i>Fraxinus uhdei</i>	40/20	50/30	40% poor	moderate	W	S		X	serious girdling root			X	Roots damaged on grade from mowing. Note severe girdling root situation.	

Notes:

1. On-site survey trees include all existing specimens of tree species with at least one (1) mainstem measuring greater than or equal to 4 inches diameter at 4.5 feet above grade.

2. Trees were tagged with professional grade round-shaped aluminum tags numbering "1" through "999". For alternate lot west, and N. Wolfe Road median trees, the tag run went over #999, which is the cutoff point for round tags. Tags numbering #1,000 and above are race-track shaped.

3. Heights of some trees were measured using a Nikon 550 Forestry Pro hypsometer. Diameters of all trees were measured at 4.5 feet or at a narrow point, using a forestry D-tape that converts circumference to an average diameter.

#### Protection and Maintenance Specifications

RP2: Root protection zone fence, chain link, with 2" diameter iron posts driven 24" into the ground, 6 to 8 feet on center max. spacing.

RB: Root buffer consisting of vertical chain link mesh over existing soil as a 12 inch thick layer, overlaid with 1 inch or greater plywood strapped together with metal plates. This root buffer or soil buffer should be placed over the entire width of the construction corridor between tree trunks and construction.

RP3: Root Buffer: Prune 4" wide area immediately in front or behind the trunk to a depth of 12 inches into the soil around each root using small hand tools until an area is reached where the root is undamaged. Clearly cut through the root at right angle to the root growth direction, using professional grade pruning equipment and/or a Sawzall with wood pruning blade. Backfill around the cut root immediately (same day), and thoroughly irrigate the area to saturate the uppermost 24 inches of the soil profile.

TB: Trunk buffer consists of 20-40 wraps of orange plastic snow fencing to create a 2 inch thick buffer over the lowest 5 feet of tree trunk (usually takes at least an entire roll of orange fencing). Lay 2x4 wood boards vertically, side by side, around the entire circumference of the trunk. Secure buffer using duct tape (not wires).

F: Fertilization with Greenbelt 22-14-14 tree formula.

M: 4-6" deep layer of wood chips (lyngreen self pickup). Do not use bark chips or shredded redwood bark.

W: Irrigate using various methods to be determined through discussion with General Contractor. Irrigation frequency and duration to be determined through discussion.

P: Pruning per specifications noted elsewhere. All pruning must be performed only under direct site supervision of an ISA Certified Arborist, or performed directly by an ISA Certified Arborist, and shall conform to all ANSI A300 standards.

MON: Project Arborist must be present to monitor specific work as noted in the notes box for each tree.

OWNER: VALICO PROPERTY OWNER LLC  
2982 BAND HILL ROAD, SUITE 241, MENLO PARK, CA 94025  
T: 650-344-1500

ARCHITECTURE: RAFAEL VINOLY ARCHITECTS  
3 UNION SQUARE STREET, NEW YORK, NY 10013  
T: 212-924-5980

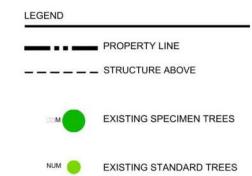
LANDSCAPE ARCHITECTURE: OLIN PARTNERSHIP LTD.  
150 S. INDEPENDENCE HALL W. SUITE 1100, PHILADELPHIA, PA 19106

CIVIL: SANDO CIVIL ENGINEERS SURVEYORS PLANNERS, INC.  
1700 S. WINCHESTER BLVD., SUITE 200, CAMPBELL, CA 95088  
T: 408-836-0000

STRUCTURE ENGINEERING: ARUP NORTH AMERICA, LTD.  
580 MISSION STREET SUITE 700 SAN FRANCISCO CA 94102  
T: 415-957-9444

PARKING ENGINEERING - WATRY DESIGN INC.  
100 UNION CENTER COURT, SUITE 600, SAN JOSE, CA 95112  
T: 408-392-7900

SUSTAINABILITY ADVISORS: BRIGHTWORKS  
1624 FRANKLIN ST, OAKLAND, CA 94612  
T: 415-992-6850



TREE SUMMARY

	QUANTITY
EXISTING STANDARD TREES	888 TREES
EXISTING SPECIMEN TREES	6 TREES
<b>TOTAL EXISTING TREES</b>	<b>894 TREES</b>

TREE SPECIES BREAKDOWN

	QUANTITY
FLOWER TREES (VARIUS)	39 TREES
GUM SPECIES	3 TREES
FIG SPECIES	7 TREES
ASH SPECIES	399 TREES
TULIP TREE SPECIES	7 TREES
MAGNOLIA SPECIES	21 TREES
REDWOOD SPECIES	325 TREES
PINE SPECIES	58 TREES
SYCAMORE SPECIES	6 TREES
OAK SPECIES	8 TREES
ELM SPECIES	17 TREES
OTHER (NON IDENTIFIED)	4 TREES

TREE CONDITION BREAKDOWN

	QUANTITY
UNCERTAIN	1 TREES
DEAD	28 TREES
VERY POOR	141 TREES
POOR	275 TREES
FAIR	338 TREES
GOOD	109 TREES
EXCELLENT	2 TREES

DISCLAIMER  
THE ARCHITECT / ENGINEER SHALL HAVE NO RESPONSIBILITY FOR ANY INFORMATION CONTAINED IN THIS DOCUMENT, ARISING FROM OR RELATED TO ANY USE OF THIS DOCUMENT FOR ANY PURPOSE OTHER THAN ITS INTENDED PURPOSE ON THIS PROPERTY. THE INFORMATION CONTAINED IN THIS DOCUMENT, IN CONJUNCTION WITH ALL RELATED DOCUMENTATION, ANY DISCREPANCIES IDENTIFIED IN THIS DOCUMENT MUST BE REPORTED AND CORRECTED BY THE CONTRACTOR PRIOR TO PROCEEDING. CONTRACTORS MUST VERIFY ALL DIMENSIONS PRIOR TO PROCEEDING WITH ANY WORK. ONLY FIGURED DIMENSIONS ARE TO BE USED FOR VERIFICATION.

REVITALIZATION PROPOSAL

REV	DESCRIPTION	DATE
REV-0	PLANNING APPLICATION	09/03/2013



KEY PLAN AND NORTH ARROW

ARCHITECT'S PROJECT NUMBER 708000

PROJECT PHASE PLANNING APPLICATION

IF THIS DRAWING IS NOT 36"X48" IT IS A REDUCED PRINT;  
REFER TO GRAPHIC SCALE

SCALE: 0 64' 128' 1/64" x 1'-0"

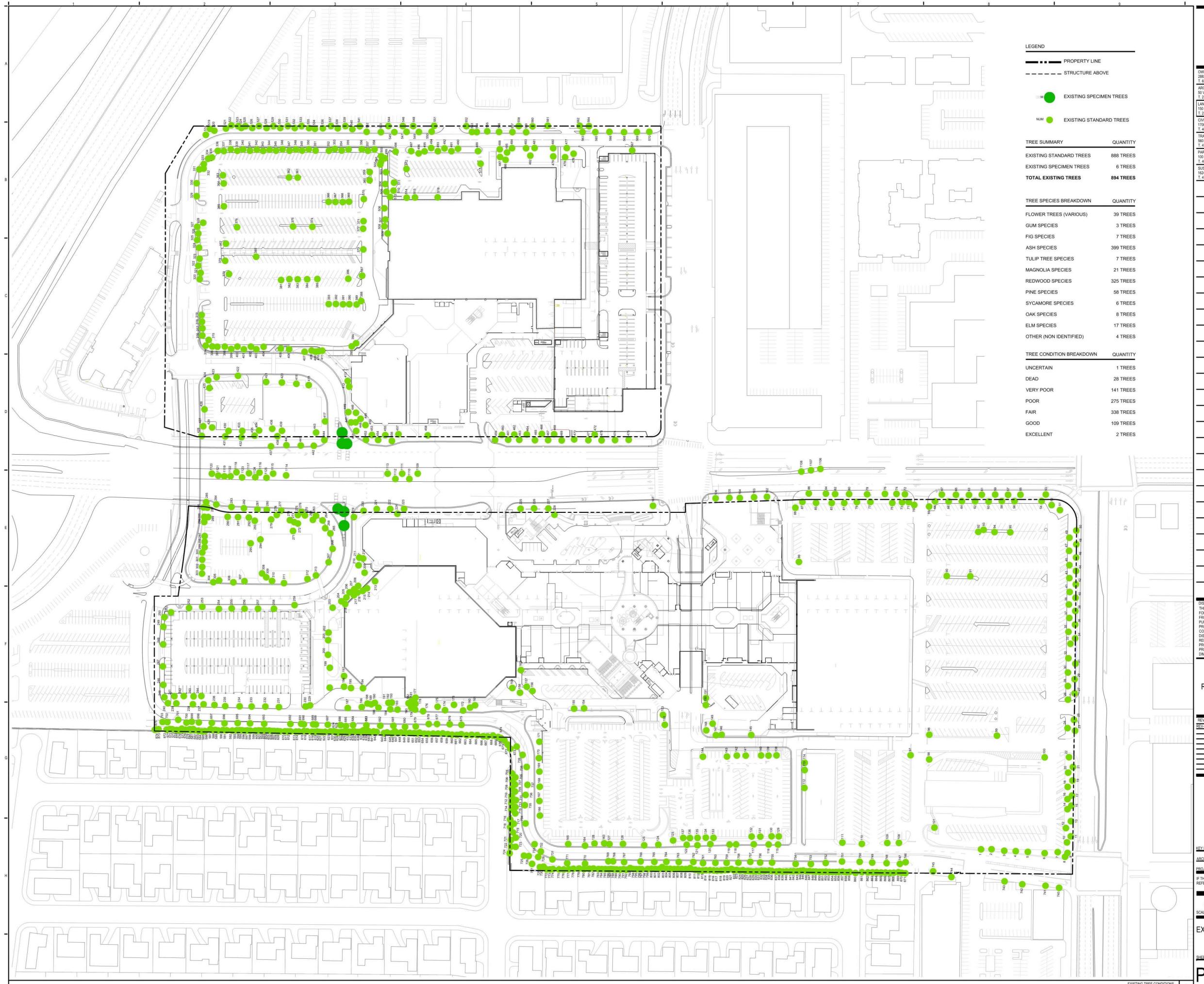
EXISTING TREE CONDITIONS

SHEET TITLE P-0601

SHEET NUMBER 1

164" x 1"-0"

© 2015 RAFAEL VINOLY ARCHITECTS PC





## ***Sequoia sempervirens* Coast Redwood<sup>1</sup>**

Edward F. Gilman and Dennis G. Watson<sup>2</sup>

### **INTRODUCTION**

*Sequoia sempervirens*, the Coast Redwoods of California, are the tallest trees in the world (Fig. 1). They can vary greatly when grown from seed, but varieties are available now which have been vegetatively propagated and they retain true characteristics. Redwoods grow three to five feet per year and are remarkably pest-free. They live to be many hundreds of years old; some live to several thousand years. Bark is particularly beautiful, turning a bright orange on older trees. It may grow poorly in zones 9 and 10 in Florida.

### **GENERAL INFORMATION**

**Scientific name:** *Sequoia sempervirens*

**Pronunciation:** see-KWOY-uh sem-per-VYE-renz

**Common name(s):** Coast Redwood

**Family:** Taxodiaceae

**USDA hardiness zones:** 7 through 10A (Fig. 2)

**Origin:** native to North America

**Uses:** screen; specimen; no proven urban tolerance

**Availability:** grown in small quantities by a small number of nurseries

### **DESCRIPTION**

**Height:** 60 to 120 feet

**Spread:** 25 to 35 feet

**Crown uniformity:** symmetrical canopy with a regular (or smooth) outline, and individuals have more or less identical crown forms

**Crown shape:** pyramidal

**Crown density:** moderate

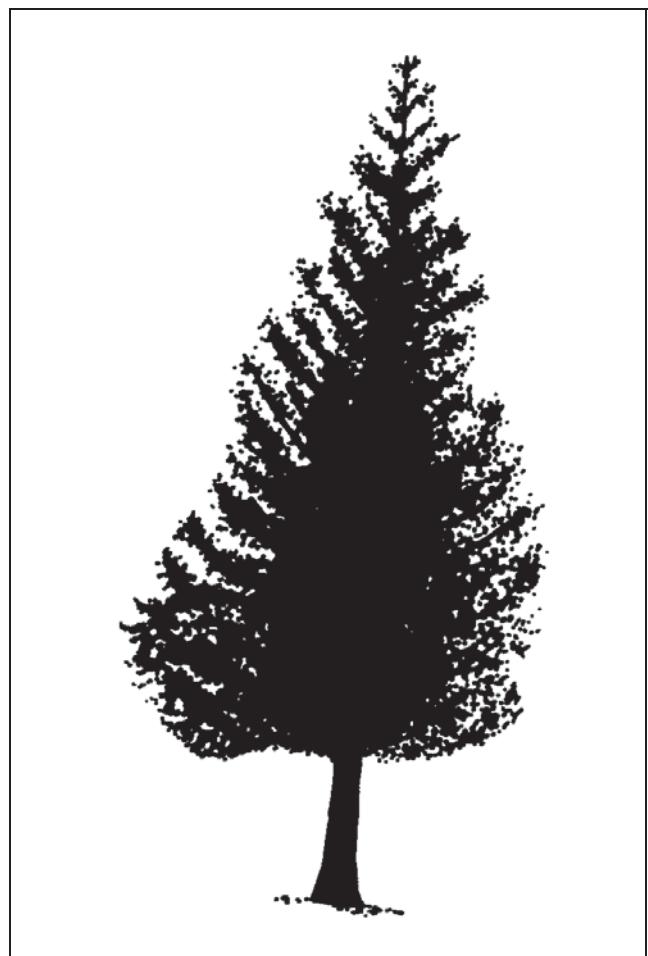


Figure 1. Mature Coast Redwood.

**Growth rate:** medium

**Texture:** fine

1. This document is adapted from Fact Sheet ST-589, a series of the Environmental Horticulture Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Publication date: October 1994.
2. Edward F. Gilman, associate professor, Environmental Horticulture Department; Dennis G. Watson, associate professor, Agricultural Engineering Department, Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville FL 32611.



**Figure 2.** Shaded area represents potential planting range.

## Foliage

**Leaf arrangement:** alternate; spiral

**Leaf type:** simple

**Leaf margin:** entire

**Leaf shape:** needle-like (filiform)

**Leaf venation:** none, or difficult to see; parallel

**Leaf type and persistence:** evergreen; needle leaf evergreen

**Leaf blade length:** less than 2 inches

**Leaf color:** green

**Fall color:** no fall color change

**Fall characteristic:** not showy

## Flower

**Flower characteristics:** inconspicuous and not showy

## Fruit

**Fruit shape:** oval; round

**Fruit length:** .5 to 1 inch

**Fruit covering:** dry or hard

**Fruit color:** brown

**Fruit characteristics:** does not attract wildlife; inconspicuous and not showy; no significant litter problem

## Trunk and Branches

**Trunk/bark/branches:** droop as the tree grows, and will require pruning for vehicular or pedestrian clearance beneath the canopy; should be grown with a single leader; very showy trunk; no thorns

**Pruning requirement:** needs little pruning to develop a strong structure

**Breakage:** resistant

**Current year twig color:** brown; green

**Current year twig thickness:** medium; thin

**Wood specific gravity:** 0.35

## Culture

**Light requirement:** tree grows in part shade/part sun; tree grows in full sun

**Soil tolerances:** clay; loam; sand; slightly alkaline; acidic; occasionally wet; well-drained

**Drought tolerance:** moderate

## Other

**Roots:** surface roots are usually not a problem

**Winter interest:** tree has winter interest due to unusual form, nice persistent fruits, showy winter trunk, or winter flowers

**Outstanding tree:** not particularly outstanding

**Invasive potential:** little, if any, potential at this time

**Ozone sensitivity:** tolerant

**Verticillium wilt susceptibility:** not known to be susceptible

**Pest resistance:** long-term health usually not affected by pests

## USE AND MANAGEMENT

Redwood maintains a pyramidal form and dark green foliage throughout the year. Planted in a row 15 to 20 feet apart they make a nice screen. In areas outside California and the Northwest, it is probably best used occasionally as a novelty specimen.

Redwood is tolerant of flooding, making best growth along stream banks and flood plains. Irrigation helps maintain a vigorous tree in other sites. Allow plenty of soil space for proper development.

Propagation is possible from seed and through vegetative propagation.

## Pests

Few insects were noted for *Sequoia* species.

## Diseases

No diseases are of major concern.

*Sequoia sempervirens* is resistant to oak root fungus.