

# Appendix C

## Arborist Report

June 17, 2015

Ms. Nora Monette  
Principal Project Manager  
David J. Powers & Associates  
1885 The Alameda # 204  
San Jose, California

Re: Protected Tree Appraisal Report, 2<sup>nd</sup> & Walpert, Hayward, California

Dear Ms. Monette:

The purpose of this letter is to inform you of the results of the arborist survey and tree appraisal performed in March 2015 at the proposed project site at 2<sup>nd</sup> and Walpert Streets, Hayward, California (Study Area). The survey was conducted by WRA's ISA-Certified Arborists for the purpose of identifying the presence, and appraising the value of protected trees per the City of Hayward Tree Preservation ordinance within and directly adjacent to the limit of grade of the proposed project. This letter report updates the previous arborist report dated October 20, 2014 (WRA 2014), and addresses additional information as requested by the City of Hayward, including: a health assessment rating for each previously surveyed protected tree; appraisal of each previously surveyed protected tree within the project grading plan envelope; and survey and appraisal the value of the first row of riparian trees at the southern extent of the Study Area.

The approximately 15.4-acre Study Area is located at 2<sup>nd</sup> and Walpert Streets in the City of Hayward (City) and consists of undeveloped parcels and developed single-family residential parcels. The Study Area consists of mostly flat ruderal annual grassland with clumps of native oak (*Quercus spp.*) and non-native, ornamental trees, and developed single-family residences with native and ornamental trees. The southern section of the Study Area is a south-facing hillside. At the base of the hillside there is a tree-line comprised of mixed hardwood riparian forest which borders Ward Creek, the southern border of the Study Area. Land uses adjacent to the Study Area include residential development and Hayward High School to the north and east, water storage facilities and residential development to the west, and undeveloped riparian forest to the south. Elevation of the Study Area ranges from approximately 280 feet in the north section to approximately 180 feet in the southern portion of the site.



## Regulatory Background

### City of Hayward Tree Preservation Ordinance

The City of Hayward Tree Preservation Ordinance encourages the preservation and avoidance of trees during development projects. The City of Hayward Municipal Code, Section 10-15.20 declares it unlawful to “remove, destroy, cut branches over one-inch diameter, disfigure or cause to be removed or destroyed any protected tree within the City without first obtaining a

Tree Removal and Cutting Permit.” Protected trees are defined in Section 10-5.13 as those with a minimum diameter at breast height (DBH) of 8 inches, street trees, memorial trees dedicated by a City-recognized entity, specimen trees that define a neighborhood or community, and those trees planted to replace a protected tree. In addition, 13 native tree species are protected at 4 inches DBH and above. The native species protected at 4 inches DBH and above include:

- big leaf maple (*Acer macrophyllum*)
- California buckeye (*Aesculus californica*)
- madrone (*Arbutus menziesii*)
- western dogwood (*Cornus nuttallii*)
- California sycamore (*Platanus racemosa*)
- coast live oak (*Quercus agrifolia*)
- canyon live oak (*Quercus chrysolepis*)
- blue oak (*Quercus douglasii*)
- Oregon oak (*Quercus garryana*)
- California black oak (*Quercus kelloggii*)
- valley oak (*Quercus lobata*)
- interior live oak (*Quercus wislizeni*)
- California bay (*Umbellularia californica*)

As per Section 10-15.13, when measuring multi-trunk trees to determine protected status, the diameters of the largest three trunks shall be added together. For instance, a multi-trunk tree of the 13 native species listed above must have an aggregate diameter of the three largest trunks that equals 4 inches DBH, and any other tree species must have an aggregate diameter of the three largest trunks that equals 8 inches in DBH to be considered protected.

As per section 10-15.20, the City requires a permit for the removal, relocation, cutting or reshaping of protected trees. Replacement of removed protected trees with like-size, like-kind trees, or equal-value trees, is often required as a condition of approval. In cases where like-size, like-kind trees are not available, the value of protected trees shall be determined using *Guide for Plant Appraisal, 9<sup>th</sup> Edition* (Council of Tree and Landscape Appraisers “CTLA” 2000).

## Methods

On June 26 and October 13, 2014, and during March, 2015 the Study Area was traversed on foot to inventory all protected trees per the City of Hayward Tree Preservation Ordinance within and directly adjacent to the limit of grade of the Study Area. WRA’s ISA-Certified Arborists traversed the Study Area and recorded relevant information for each protected tree including tree species, DBH (as measured 4.5 feet above grade), condition rating, approximate dripline radius, and estimated height.



Diameter at breast height was calculated for protected trees by measuring the trunk diameter at 4.5 ft. above grade. For multi-trunk trees, DBH was calculated by measuring each individual trunk and calculating the sum total of trunk diameters. In cases where multi-trunk trees had trunks that were inaccessible to measure, total DBH was estimated. In each case where DBH was estimated the multi-trunk trees were clearly large

enough in total DBH to be considered protected per the City of Hayward Tree Preservation Ordinance. Dripline radii were recorded to the nearest foot in two directions where possible, using a measuring tape from the trunk to the edge of dripline. In cases where there was an enclosed canopy and radii measurements were not feasible, dripline radius was estimated. Final dripline radii measurements are reported as the longest of the two radii. All heights of protected trees were estimated in feet. Protected tree locations within the Study Area were recorded using a GPS unit, and tagged with an aluminum tree tag with a unique identifying number.

## Appraisal Methodology

The “Trunk Formula Method” described in *Guide for Plant Appraisal, 9<sup>th</sup> Edition* (CTLA) was used to appraise the value of the protected trees within the Study Area. This method is commonly used to appraise the value of landscaped trees that are larger than the largest commercially available transplantable nursery specimen, or 24”-box tree (WC-ISA 2004). The Trunk Formula Method begins by considering the cost to buy and install a 24”-box replacement tree (Installed Tree Cost; determined by WC-ISA as twice the average wholesale cost of a 24”-box tree \$345.46), and calculates a cost per square-inch trunk area (Unit Tree Cost) for replacement trees. The Basic Tree Cost of an appraised tree is determined by subtracting the trunk area of the 24”-box replacement tree from the trunk area of the appraised tree, multiplying the difference by the unit tree cost, and adding the installed tree cost. The Basic Tree Cost is then reduced by three depreciation factors, including species, condition, and location ratings to determine the Appraised Value. If the appraised tree is valued at less than the installed tree cost, the appraised value

Species ratings rank overall desirability of the species for landscaping purposes, based on site suitability, hardiness, structural integrity, and longevity. Species ratings range from 10 percent to 90 percent as determined by the Northern California Regional Plant Appraisal Subcommittee (WC-ISA 2004). Species present within the Study Area are listed in Table A below, along with associated ratings. *Species Classification and Group Assignment* (WC-ISA 2004), allows the appraiser to add or deduct 10 percent from individual species ratings based on local considerations. As such, species listed on the California Invasive Plant Council (Cal-IPC) Invasive Plant Inventory Database, were reduced by 10 percent due to their negative ecological impact.

Table A. Species Ratings of Appraised Trees within Study Area

Species	Common Name	Species Rating	Comments
<i>Acacia melanoxylon</i>	black acacia	20%	Reduced rating by 10% due to Cal-IPC invasive species rating.
<i>Cedrus deodara</i>	Deodore cedar	90%	Non-native, ornamental.
<i>Citrus x limon</i>	lemon	50%	Non-native, ornamental
<i>Cryptomeria japonica</i>	Japanese cryptomeria	90%	Non-native, ornamental
<i>Eucalyptus globulus</i>	blue gum	10%	Cal-IPC invasive species.
<i>Eucalyptus leucoxylon</i>	white ironbark	50%	Non-native, ornamental.
<i>Heteromeles arbutifolia</i>	toyon		Native to Study Area.
<i>Liquidambar styraciflua</i>	sweetgum	90%	Non-native, ornamental.
<i>Olea europeaea</i>	olive	60%	Reduced rating by 10% due to Cal-IPC invasive species rating.
<i>Populus nigra 'Italica'</i>	Lombardy poplar	30%	Non-native, ornamental
<i>Prunus cerasifera</i>	cherry plum	20%	Reduced rating by 10% due to Cal-IPC invasive species rating.
<i>Quercus agrifolia</i>	coast live oak	90%	Native to Study Area.
<i>Quercus douglasii</i>	blue oak	70%	Native to Study Area.
<i>Quercus ilex</i>	holly oak	70%	Non-native, ornamental.
<i>Quercus lobata</i>	valley oak	90%	Native to Study Area.
<i>Sambucus nigra ssp. caerulea</i>	blue elderberry	30%	Native to Study Area.
<i>Schinus molle</i>	pepper tree	40%	Reduced rating by 10% due to Cal-IPC invasive species rating.
<i>Sequoia sempervirens</i>	coast redwood	90%	Native to California.
<i>Umbellularia californica</i>	California bay	70%	Native to Study Area.

Overall condition ratings for each tree were determined following “Table 4.3: Guide to Judging Plant Condition” from *Guide for Plant Appraisal, 9<sup>th</sup> Edition*. Condition rating is determined by rating the structure and health of the roots, trunk, and scaffold branches, and health of small branches and foliage for each appraised tree. Each of the eight attributes was given a score of 1 to 4, with 1 signifying “extreme problems” and 4 signifying “no apparent problems”. The total score was divided by the total number of available points to arrive at a percentage condition score.

Location ratings for each tree are determined by the placement of the appraised tree, functional and aesthetic contribution, and the overall rating of the property compared to similar properties in the same city, county or region. The site rating, contribution rating and placement rating are averaged to obtain a location rating for each tree. Site ratings are predicated on the overall appearance of the site from an anthropocentric perspective, in regards to the quality of buildings, landscape structures and plantings on site. For example, a site with a well-maintained house and a meticulously designed landscape may receive a high rating, while an unmaintained, naturally occurring woodland may receive a low rating. Contribution rating refers to the functional and aesthetic benefits the appraised tree has on the site overall, and placement rating rates the effectiveness of realizing the appraised tree’s benefits based on its placement

within the site. A very small percentage of the Study Area contains buildings, and the majority of the Study Area consists of an unmanaged, non-native grassland landscape intermixed with patches of unmaintained native and non-native woodland. The Study Area was given a “Very Low” site rating of 50%. Contribution ratings for each tree were based mainly on size of the tree in DBH. The majority of trees within the Study Area are small (12 inches DBH and under), overcrowded, suppressed trees that do not contribute as much aesthetic or functional value to the site as the larger trees. Therefore, trees with diameters up to and including 12 inches DBH were given a “very low” rating of 30%; trees between 13 to 24 inches DBH were given a 40% rating; and trees 25 inches DBH and larger were given a 50% contribution rating. Any Cal-IPC listed species was given a 30% contribution rating regardless of size. Placement ratings range from 50% to 70% and are based on proximity to existing structures (Figure A). Trees on the existing residence in the northwest corner of the property received a 70% rating, whereas trees within the first row of the riparian canopy, far away from any of the Study Area’s existing structures received the lower rating.

### **Suitability for Preservation**

In order to evaluate the preservation suitability of individual trees related to development, it is important to consider the overall condition rating, species, and location of the tree in relation to proposed development. Trees selected for preservation on development sites should be selected carefully, considering the potential for the individual tree to survive development impacts, adapt to new conditions and perform well in the new environment.

Potential impacts from construction were evaluated using the latest tree mitigation and planting plans from Golden Associates (2015). The plans depict the preliminary limits of grading, location of planned residences and roads, locations of trees to be removed and locations trees to be retained. Our analysis of preservation suitability focuses on trees to be retained within the limit of grade of the proposed project, and trees located within 20 feet of the preliminary limit of grade. Trees within these areas are more likely to incur impacts related to development, and if these trees were to fail, they would be in close proximity to potential targets, including people, buildings and infrastructure once the site is developed. Trees located outside of 20 feet from the preliminary limit of grade were not analyzed for preservation suitability, as significant impacts from development are less likely to occur, and the risk of a tree striking a potential target is low.

Selected trees were rated for preservation suitability based on species, size, condition, and proximity to proposed development. Assessment of the preservation suitability of specific trees was conducted according to the narratives described in Table B. Trees with good preservation suitability are considered the best candidates for preservation. Trees with moderate preservation suitability may be suitable for preservation with some care, and depending on the intensity of the site changes. Trees with poor preservation suitability are generally not recommended for preservation if they are located in close proximity to potential targets, including people and property.

Table B Preservation Suitability Rating Descriptions

<b>Preservation Suitability Rating</b>	
Good	Generally large, healthy trees, reasonably free of signs and symptoms of disease, with good structure and form. Generally native trees or trees that are not listed as invasive by Cal-IPC.
Moderate	Generally mid-sized trees, in fair health, with moderate vigor, moderate twig and small branch dieback, and/or moderate structural defects that might be mitigated with regular care. Generally native or ornamental trees that are not listed as invasive by Cal-IPC.
Poor	Generally small trees and/or trees in slight to severe decline, with poor crown form and structure; dieback of scaffold branches and/or trunk; or extensive structural defects that cannot be abated. Includes most trees listed as invasive by Cal-IPC.

## Results

A total of 207 trees were appraised within the Study Area. The results and appraisal calculations are shown in Appendix A and B. Appendix A shows the values of the 81 protected trees within the non-riparian section of the Study Area, and Appendix B shows the values of the 126 trees that comprise the first row of trees within the riparian corridor. The results of preservation suitability analysis of selected trees is shown in Appendix C.

## Limitations

The Study Area included multiple occupied residences where access was limited. At 1252 Walpert St, access was not possible due to a perimeter fence and the residence being occupied. Trees within this property (WRA ID #86-90) were surveyed from outside of the fence. Diameters for these trees were estimated, and condition ratings were based on limited visual assessment. All condition ratings were determined based on visual assessment of health, condition and structure of subject trees at the time of the survey. Advance diagnostic tools were not used.

Precise measurements of dripline radii and DBH were hindered due to access. In some cases, multi-trunk trees had trunks that were too numerous to measure, or had inaccessible trunks that were too close together, fused or impossible to reach. Additionally, in areas where dense poison oak (*Toxicodendron diversilobum*) was growing on protected trees, or thick brush prevented access, DBH was estimated. In areas of dense, closed canopy, dripline radii were estimated.

## Tree Protection Measures

In order to avoid and minimize damage to existing trees which are not proposed for direct impact by project activities, the following measures should be implemented during construction:

- All construction activity (grading, filling, paving, landscaping etc.) shall respect the root protection zone (RPZ) around all trees within the vicinity of the project area. The RPZ should be a distance of 1.0 times the dripline radius measured from the trunk of the tree. Exception to this standard could be considered on a case-by-case basis, provided that it is

demonstrated that an encroachment into the RPZ will not affect the root system or the health of the tree, and is authorized by an ISA-Certified Arborist or comparable specialist.

- Temporary protective fencing shall be installed around the dripline of existing trees prior to commencement of any construction activity conducted within 25' of the tree canopy. The fence shall be clearly marked to prevent inadvertent encroachment by heavy machinery.
- Drainage will not be allowed to pond around the base of any tree.
- An ISA-Certified Arborist or tree specialist shall be retained to perform any necessary pruning of trees during construction activity.
- Should any utility lines encroach within the tree protection zone, a single, shared utility conduit shall be used where possible to avoid negative impact to trees.
- Roots exposed, as a result of construction activities shall be covered with wet burlap to avoid desiccation, and should be buried as soon as practicable.
- Construction materials or heavy equipment shall not be stored within the root protection zone.
- Only an ISA-Certified Arborist or comparable specialist will make specific recommendations as to where any existing trees can safely tolerate some level of fill within the drip line.
- Trenches which are required within the RPZ of existing protected trees shall be bored (tunneled) under the root(s) using an auger or drill, rather than trenched, to avoid root disturbance.
- Trenching within RPZ shall be done under the field supervision of an ISA-Certified Arborist and shall be hand dug as much as possible in addition to using auger or drill.
- Construction materials shall be properly stored away from existing trees to avoid spillage or damage to trees.
- A tree removal permit shall be obtained from the City of Hayward Planning Division for removal of any existing protected trees in addition to a grading permit.
- A tree pruning permit shall be obtained from the City of Hayward Planning Division prior to pruning any existing protected trees unless pruning shall be done by an Annual Pruning Certification holder.
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Please feel free to contact me or the Project Manager, Leslie Lazarotti if you have any questions or concerns.

Sincerely yours,



Scott Yarger  
Plant Biologist, ISA Certified Arborist #WE-9300A  
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## REFERENCES

California Invasive Plant Council (Cal-IPC). 2015. California Invasive Plant Inventory Database. California Invasive Plant Council: Berkeley, CA. Available online at: <http://www.cal-ipc.org/paf/>. Accessed April 2015.

- Council of Tree and Landscape Appraisers (CTLA). 2000. Guide for Plant Appraisal. 9th Ed. International Society of Arboriculture. Chicago, Illinois.
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Appendix A. 2nd and Walpert Protected Tree Appraisal - Non-Riparian Trees

April 2015

Original Tree ID	Tree Tag #	Species	Common Name	Species Rating	Multi-stem	Total DBH (In.)	Total DBH (Rounded) (In.)	Estimated Height (Ft.)	Crown Radius (Ft.)	Condition Rating	Site Rating	Contribution Rating	Placement Rating	Location Rating	Installed Tree Cost	Unit Tree Cost	Protected Tree Area (Sq. In.)	Adjusted Trunk Area (Sq. In.)	Replacement Tree Trunk Area (Sq. In.)	Appraised Tree Trunk Increase (Protected Tree - Replacement Tree Trunk Area) (Sq. In.)	Basic Tree Cost (Appraised Tree Trunk Increase X Unit Tree Cost + Installed Tree Cost)	Appraised Value (Basic Tree Cost X Species Rating X Condition Location)	Appraised Value Rounded (to nearest \$100 if >\$5000; to \$10 if <\$5000)
53	1651	Quercus agrifolia	coast live oak	90%	yes	6	6	10	9	75%	50%	40%	60%	50.00%	\$345.46	\$2.82	28.3	28	2.09	26.2	\$2,167.40	\$731.50	\$730.00
82	1617	Quercus agrifolia	coast live oak	90%	yes	8.5	9	14	10	91%	50%	40%	60%	50.00%	\$345.46	\$2.82	63.6	64	2.09	61.5	\$5,093.02	\$2,077.00	\$2,080.00
81	1618	Quercus agrifolia	coast live oak	90%	yes	10	10	15	8	84%	50%	40%	60%	50.00%	\$345.46	\$2.82	78.5	79	2.09	76.4	\$6,328.28	\$2,402.77	\$2,400.00
80	1619	Quercus agrifolia	coast live oak	90%	yes	30.4	30	18	14	84%	50%	60%	60%	56.67%	\$345.46	\$2.82	706.5	707	2.09	704.4	\$58,339.24	\$25,104.10	\$25,100.00
64	1620	Quercus agrifolia	coast live oak	90%	no	5.5	6	8	8	69%	50%	40%	60%	50.00%	\$345.46	\$2.82	28.3	28	2.09	26.2	\$2,167.40	\$579.10	\$580.00
40	1621	Quercus agrifolia	coast live oak	90%	yes	17.5	18	15	9	84%	50%	50%	60%	53.33%	\$345.46	\$2.82	254.3	254	2.09	252.3	\$20,891.35	\$8,460.99	\$8,500.00
41	1622	Prunus cerasifera	cherry plum	20%	yes	8.4	8	8	9	56%	50%	30%	60%	46.67%	\$345.46	\$6.36	50.2	50	4.75	45.5	\$1,654.02	\$86.84	\$90.00
79	1623	Quercus agrifolia	coast live oak	90%	yes	6	6	8	7	75%	50%	40%	60%	50.00%	\$345.46	\$2.82	28.3	28	2.09	26.2	\$2,167.40	\$731.50	\$730.00
76	1624	Quercus agrifolia	coast live oak	90%	yes	13	13	9	8	81%	50%	50%	60%	53.33%	\$345.46	\$2.82	132.7	133	2.09	130.6	\$10,814.22	\$4,217.55	\$4,200.00
78	1625	Quercus agrifolia	coast live oak	90%	yes	10.4	10	10	13	69%	50%	40%	60%	50.00%	\$345.46	\$2.82	78.5	79	2.09	76.4	\$6,328.28	\$1,957.81	\$1,960.00
77	1626	Quercus agrifolia	coast live oak	90%	yes	11.4	11	8	10	81%	50%	40%	60%	50.00%	\$345.46	\$2.82	95.0	95	2.09	92.9	\$7,693.56	\$2,812.96	\$2,810.00
75	1627	Quercus agrifolia	coast live oak	90%	no	6.4	6	20	12	78%	50%	40%	60%	50.00%	\$345.46	\$2.82	28.3	28	2.09	26.2	\$2,167.40	\$761.98	\$760.00
74	1628	Quercus agrifolia	coast live oak	90%	yes	37	37	18	18	78%	50%	60%	60%	56.67%	\$345.46	\$2.82	1074.7	1018	2.09	1016.4	\$84,177.83	\$33,539.61	\$33,500.00
73	1629	Quercus agrifolia	coast live oak	90%	yes	19.8	20	18	15	81%	50%	50%	60%	53.33%	\$345.46	\$2.82	314.0	314	2.09	311.9	\$25,832.39	\$10,074.63	\$10,100.00
68	1630	Quercus agrifolia	coast live oak	90%	yes	10.6	11	10	8	78%	50%	40%	60%	50.00%	\$345.46	\$2.82	95.0	95	2.09	92.9	\$7,693.56	\$2,704.77	\$2,700.00
69	1631	Quercus agrifolia	coast live oak	90%	no	5.3	5	8	6	38%	50%	40%	60%	50.00%	\$345.46	\$2.82	19.6	20	2.09	17.5	\$1,452.25	\$571.92	\$570.00
70	1632	Quercus agrifolia	coast live oak	90%	yes	18.9	19	20	13	81%	50%	50%	60%	53.33%	\$345.46	\$2.82	283.4	283	2.09	281.5	\$9,085.77	\$3,005.77	\$3,100.00
72	1633	Quercus agrifolia	coast live oak	90%	no	6	6	8	8	88%	50%	40%	60%	50.00%	\$345.46	\$2.82	28.3	28	2.09	26.2	\$2,167.40	\$853.41	\$850.00
71	1634	Quercus agrifolia	coast live oak	90%	no	4	4	8	8	88%	50%	40%	60%	50.00%	\$345.46	\$2.82	12.6	13	2.09	10.5	\$867.13	\$341.43	\$340.00
62	1635	Quercus agrifolia	coast live oak	90%	yes	5.6	6	8	7	78%	50%	40%	60%	50.00%	\$345.46	\$2.82	28.3	28	2.09	26.2	\$2,167.40	\$761.98	\$760.00
63	1636	Quercus agrifolia	coast live oak	90%	yes	13.6	14	15	13	84%	50%	50%	60%	53.33%	\$345.46	\$2.82	153.9	154	2.09	151.8	\$12,569.59	\$5,090.68	\$5,100.00
66	1637	Quercus agrifolia	coast live oak	90%	no	6	6	15	8	91%	50%	40%	60%	50.00%	\$345.46	\$2.82	28.3	28	2.09	26.2	\$2,167.40	\$883.89	\$880.00
67	1638	Quercus agrifolia	coast live oak	90%	no	8.4	8	15	14	94%	50%	40%	60%	50.00%	\$345.46	\$2.82	50.2	50	2.09	48.2	\$3,987.78	\$1,682.35	\$1,680.00
61	1639	Quercus agrifolia	coast live oak	90%	no	17	17	20	16	81%	50%	50%	60%	53.33%	\$345.46	\$2.82	226.9	227	2.09	224.8	\$18,615.87	\$7,260.19	\$7,300.00
42	1640	Quercus agrifolia	coast live oak	90%	yes	31.1	31	18	14	81%	50%	60%	60%	56.67%	\$345.46	\$2.82	754.4	739	2.09	737.3	\$61,061.12	\$25,320.20	\$25,300.00
43	1641	Quercus agrifolia	coast live oak	90%	no	4.2	4	10	12	81%	50%	40%	60%	50.00%	\$345.46	\$2.82	12.6	13	2.09	10.5	\$867.13	\$317.04	\$320.00
44	1642	Quercus agrifolia	coast live oak	90%	yes	21.9	22	25	9	84%	50%	50%	60%	53.33%	\$345.46	\$2.82	379.9	380	2.09	377.9	\$31,293.54	\$12,673.88	\$12,700.00
45	1643	Quercus agrifolia	coast live oak	90%	no	4.3	4	12	13	81%	50%	40%	60%	50.00%	\$345.46	\$2.82	12.6	13	2.09	10.5	\$867.13	\$317.04	\$320.00
46	1644	Quercus agrifolia	coast live oak	90%	yes	7.7	8	12	8	81%	50%	40%	60%	50.00%	\$345.46	\$2.82	50.2	50	2.09	48.2	\$3,987.78	\$1,458.03	\$1,460.00
49	1645	Quercus agrifolia	coast live oak	90%	no	4	4	15	4	81%	50%	40%	60%	50.00%	\$345.46	\$2.82	12.6	13	2.09	10.5	\$867.13	\$317.04	\$320.00
48	1646	Quercus agrifolia	coast live oak	90%	no	6	6	15	10	81%	50%	40%	60%	50.00%	\$345.46	\$2.82	28.3	28	2.09	26.2	\$2,167.40	\$792.46	\$790.00
47	1647	Quercus agrifolia	coast live oak	90%	no	19	19	25	14	84%	50%	50%	60%	53.33%	\$345.46	\$2.82	283.4	283	2.09	281.3	\$23,296.85	\$9,435.23	\$9,400.00
52	1648	Quercus agrifolia	coast live oak	90%	yes	24.7	25	20	20	75%	50%	60%	60%	56.67%	\$345.46	\$2.82	490.6	491	2.09	488.5	\$40,460.47	\$15,476.13	\$15,500.00
50	1649	Quercus agrifolia	coast live oak	90%	yes	10.4	10	12	8	81%	50%	40%	60%	50.00%	\$345.46	\$2.82	78.5	79	2.09	76.4	\$6,328.28	\$2,313.78	\$2,310.00
51	1650	Quercus agrifolia	coast live oak	90%	yes	8.6	9	15	10	81%	50%	40%	60%	50.00%	\$345.46	\$2.82	63.6	64	2.09	61.5	\$5,093.02	\$1,862.13	\$1,860.00
54	1652	Umbellularia californica	California bay	70%	yes	7.5	8	12	9	81%	50%	40%	60%	50.00%	\$345.46	\$7.04	50.2	50	2.24	48.0	\$3,697.92	\$1,051.60	\$1,050.00
55	1653	Quercus agrifolia	coast live oak	90%	yes	11.5	12	10	13	78%	50%	40%	60%	50.00%	\$345.46	\$2.82	113.0	113	2.09	111.0	\$9,188.88	\$3,230.47	\$3,230.00
56	1654	Quercus agrifolia	coast live oak	90%	yes	9	9	20	8	69%	50%	40%	60%	50.00%	\$345.46	\$2.82	63.6	64	2.09	61.5	\$5,093.02	\$1,575.65	\$1,580.00
57	1655	Quercus agrifolia	coast live oak	90%	yes	26.6	27	15	15	91%	50%	60%	60%	56.67%	\$345.46	\$2.82	572.3	572	2.09	570.2	\$47,221.89	\$21,825.37	\$21,800.00
58	1656	Quercus agrifolia	coast live oak	90%	yes	25	25	18	13	78%	50%	60%	60%	56.67%	\$345.46	\$2.82	490.6	491	2.09	488.5	\$40,460.47	\$16,120.97	\$16,100.00
59	1657	Quercus agrifolia	coast live oak	90%	yes	5.8	6	8	8	81%	50%	40%	60%	50.00%	\$345.46	\$2.82	28.3	28	2.09	26.2	\$2,167.40	\$792.46	\$790.00
60	1658	Quercus agrifolia	coast live oak	90%	yes	36.2	36	18	18	84%	50%	60%	60%	56.67%	\$345.46	\$2.82	1017.4	974	2.09	971.6	\$90,463.77	\$34,624.57	\$34,600.00
14	1659	Quercus agrifolia	coast live oak	90%	yes	22.6	23	25	30	84%	50%	50%	60%	53.33%	\$345.46	\$2.82	415.3	415	2.09	413.2	\$34,219.15	\$13,858.76	\$13,900.00
31	1660	Prunus cerasifera	cherry plum	20%	yes	20	20	15	12	38%	50%	30%	60%	46.67%	\$345.46	\$6.36	314.0	314	4.75	309.3	\$11,244.33	\$393.55	\$390.00
30	1661	Acacia melanoxylon	black acacia	20%	yes	15.2	15	18	7	78%	50%	30%	60%	46.67%	\$345.46	\$6.36	176.6	177	4.75	171.9	\$6,249.38	\$454.95	\$450.00
13	1662	Quercus agrifolia	coast live oak	90%	yes	25.1	25	12	12	78%	50%	60%	60%	56.67%	\$345.46	\$2.82	490.6	491	2.09	488.5	\$40,460.47	\$16,120.97	\$16,100.00
06	1663	Eucalyptus leucocylon	white ironbark	50%	no	23.2	23	65	8	66%	50%	50%	60%	53.33%	\$345.46	\$4.56	415.3	415	3.8	411.5	\$18,705.20	\$3,273.41	\$3,270.00
29	1664	Prunus cerasifera 'Atropurpurea'	cherry plum	20%	yes	25.3	25	12	10	0%	50%	30%	60%	46.67%	\$345.46	\$6.36	490.6	491	4.75	485.9	\$17,666.42	\$0.00	\$0.00
04	1665	Quercus lobata	valley oak	90%	no	26.4	26	35	20	88%	50%	60%	60%	56.67%	\$345.46	\$2.82	530.7	531	2.09	528.6	\$43,776.17	\$19,535.11	\$19,500.00
05	1666	Quercus douglasii	blue oak	70%	no	35.0	35	40	25	88%	50%	60%	60%	56.67%	\$345.46	\$7.04	961.6	928	2.24	925.9	\$71,330.18	\$24,757.52	\$24,800.00
16	1667	Quercus agrifolia	coast live oak	90%	yes	22.9	23	28	12	78%	50%	50%	60%	53.33%	\$345.46	\$2.82	415.3	415	2.09	413.2	\$34,219.15	\$12,832.18	\$12,800.00
28	1668	Citrus x limon	lemon	50%	yes	11.2	11	12	7	53%	50%	40%	60%	50.00%	\$345.46	\$5.46	95.0	95	3.8	91.2	\$4,145.27	\$550.54	\$550.00
27	1669	Populus nigra 'italica'	Lombardy poplar	30%	yes	21.5	22	28	13	38%	50%	50%	60%	53.33%	\$345.46	\$6.36	379.9	380	4.75	375.2	\$13,641.91	\$816.51	\$820.00
09	1670	Populus nigra 'italica'	Lombardy poplar	30%	yes	100.0	100	85	11	63%	50%	60%	60%	56.67%	\$345.46	\$6.36	7850.0	2493	4.75	2488.5	\$90,472.77	\$9,612.73	\$9,600.00
N/A	1671*	Olea europaea	olive	60%	yes	12	12	8	15	47%	50%	30%	60%	46.67%	\$345.46	\$7.04	113.0	113	2.24	110.8	\$8,536.03	\$1,120.35	\$1,120.00
08	1672	Cedrus deodora	Deodare cedar	90%	no	8.1	8	25	15	75%	50%	40											

Original Tree ID	Tree Tag #	Species	Common Name	Species Rating	Multi-stem	Total DBH (In.)	Total DBH (In.) Rounded	Estimated Height (Ft.)	Crown Radius (Ft.)	Condition Rating	Site Rating	Contribution Rating	Placement Rating	Location Rating	Installed Tree Cost	Unit Tree Cost	Protected Tree Trunk Area (Sq. In.)	Adjusted Trunk Area (Sq. In.)	Replacement Tree Trunk Area (Sq. In.)	Appraised Tree Trunk Increase (Protected Tree Trunk Area - Replacement Tree Trunk Area) (Sq. In.)	Basic Tree Cost X Unit Tree Cost + Installed Tree Cost	Appraised Value (Basic Tree Cost X Species Rating X Condition Location)	Appraised Value Rounded (to nearest \$100 if >\$5000; to \$10 if <\$5000)
38	N/A	<i>Pinus thunbergii</i>	Japanese black pine	N/A	no	10	10	20	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
32***	N/A	<i>Quercus agrifolia</i>	coast live oak	N/A	no	6.5	7	18	7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
34	N/A	<i>Olea europaea</i>	olive	N/A	yes	15	15	14	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
33	N/A	<i>Quercus agrifolia</i>	coast live oak	N/A	yes	21	21	15	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
35	N/A	<i>Quercus agrifolia</i>	coast live oak	N/A	no	26.9	27	28	25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
37	N/A	<i>Juniperus chinensis</i>	Chinese juniper	N/A	no	28.5	29	30	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
36	N/A	<i>Quercus agrifolia</i>	coast live oak	N/A	yes	29.8	30	20	19	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
39	N/A	<i>Quercus agrifolia</i>	coast live oak	N/A	no	36	36	30	40	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
90****	No Tag	<i>Liquidambar styraciflua</i>	sweetgum	50%	no	12	12	25	15	81%	50%	40%	70%	53.33%	\$345.46	\$ 45.46	113.0	113	3.8	109.2	\$4,966.05	\$1,075.98	\$1,080.00
86	No Tag	<i>Sequoia sempervirens</i>	coast redwood	90%	no	24	24	60	10	84%	50%	50%	70%	56.67%	\$345.46	\$ 82.82	452.2	452	2.09	450.1	\$37,274.80	\$16,039.81	\$16,000.00
87	No Tag	<i>Eucalyptus sp.</i>	eucalyptus	10%	yes	8	8	25	10	78%	50%	30%	70%	50.00%	\$345.46	\$ 36.36	50.2	50	4.75	45.5	\$1,654.02	\$64.61	\$60.00
88	No Tag	<i>Eucalyptus sp.</i>	eucalyptus	10%	yes	8	8	25	10	78%	50%	30%	70%	50.00%	\$345.46	\$ 36.36	50.2	50	4.75	45.5	\$1,654.02	\$64.61	\$60.00
89	No Tag	<i>Eucalyptus sp.</i>	eucalyptus	10%	yes	8	8	25	10	78%	50%	30%	70%	50.00%	\$345.46	\$ 36.36	50.2	50	4.75	45.5	\$1,654.02	\$64.61	\$60.00
																					<b>Total Tree Values</b>		\$607,230.00

\* Trees #1671 and #1678 were added from the previous survey.

\*\* Species of tree #1679, #1681, and #1682 were corrected from the previous survey. Tree #1679 is not protected as it is a non-native oak and less than 8 inches DBH.

\*\*\* Trees #32 through #39 were not appraised as they are located on existing residences that are not within the project grading plan. These trees are not shown on Figure A.

\*\*\*\*Trees #86 through #90 were not tagged, as they are located on an occupied residence. Trees were appraised from limited visual assessment.

Appendix B. 2nd and Walpert Protected Tree Appraisal - Riparian Trees

Tree Tag #	Species	Common Name	Species Rating	Multistem	Total DBH (In.)	Total DBH Rounded	Estimated Height (Ft.)	Crown Radius (Ft.)	Condition Rating	Site Rating	Contribution Rating	Placement Rating	Location Rating	Installed Tree Cost	Unit Tree Cost	Protected Tree Trunk Area (Sq. In.)	Adjusted Trunk Area (Sq. In.)	Replacement Tree Trunk Area (Sq. In.)	Appraised Tree Trunk Increase (Appraised Tree Trunk Area - Replacement Tree Trunk Area) (Sq. In.)	Basic Tree Cost X Unit Tree Cost + Installed Tree Cost	Appraised Value (Basic Tree Cost X Species Rating X Condition Location)	Appraised Value Rounded (to nearest \$100 if >\$5000; to \$10 if <=\$5000)
1615	Quercus agrifolia	coast live oak	90.00%	no	12.2	12	20	10	84%	50%	40%	50%	46.67%	\$345.46	\$82.82	113.0	113	2.09	111.0	\$9,534.34	\$3,363.71	\$3,400.00
1694	Quercus agrifolia	coast live oak	90.00%	yes	18.3	18	20	15	84%	50%	50%	50%	50.00%	\$345.46	\$82.82	254.3	254	2.09	252.3	\$21,236.81	\$8,063.35	\$8,100.00
1695	Quercus agrifolia	coast live oak	90.00%	yes	12.1	12	20	15	75%	50%	40%	50%	46.67%	\$345.46	\$82.82	113.0	113	2.09	111.0	\$9,534.34	\$3,003.32	\$3,000.00
1696	Quercus agrifolia	coast live oak	90.00%	yes	14.7	15	20	15	81%	50%	50%	50%	50.00%	\$345.46	\$82.82	176.6	177	2.09	174.5	\$14,800.45	\$5,411.41	\$5,400.00
1697	Quercus agrifolia	coast live oak	90.00%	yes	10.1	10	18	10	66%	50%	40%	50%	46.67%	\$345.46	\$82.82	78.5	79	2.09	76.4	\$6,673.74	\$1,839.45	\$1,840.00
1698	Quercus agrifolia	coast live oak	90.00%	no	4.1	4	18	8	75%	50%	40%	50%	46.67%	\$345.46	\$82.82	12.6	13	2.09	10.5	\$1,212.59	\$381.96	\$380.00
1699	Quercus agrifolia	coast live oak	90.00%	no	6.2	6	15	8	66%	50%	40%	50%	46.67%	\$345.46	\$82.82	28.3	28	2.09	26.2	\$2,512.86	\$692.61	\$690.00
1700	Eucalyptus globulus	blue gum	10.00%	no	55.4	55	55	25	75%	50%	30%	50%	43.33%	\$345.46	\$36.36	2374.6	1711	4.75	1706.4	\$62,389.26	\$2,027.65	\$2,030.00
1709	Quercus agrifolia	coast live oak	90.00%	no	5.6	6	15	9	88%	50%	40%	50%	46.67%	\$345.46	\$82.82	28.3	28	2.09	26.2	\$2,512.86	\$923.48	\$920.00
1710	Quercus agrifolia	coast live oak	90.00%	no	9.7	10	17	19	75%	50%	40%	50%	46.67%	\$345.46	\$82.82	78.5	79	2.09	76.4	\$6,673.74	\$2,102.23	\$2,100.00
1711	Heteromeles arbutifolia	toyon	30.00%	yes	8.6	9	16	16	72%	50%	40%	50%	46.67%	\$345.46	\$36.36	63.6	64	4.75	58.8	\$2,484.70	\$250.02	\$250.00
1712	Quercus agrifolia	coast live oak	90.00%	no	7.5	8	20	18	63%	50%	40%	50%	46.67%	\$345.46	\$82.82	50.2	50	2.09	48.2	\$4,333.24	\$1,137.48	\$1,140.00
1713	Quercus agrifolia	coast live oak	90.00%	yes	18.1	18	17	16	75%	50%	50%	50%	50.00%	\$345.46	\$82.82	254.3	254	2.09	252.3	\$21,236.81	\$7,167.42	\$7,200.00
1714	Quercus agrifolia	coast live oak	90.00%	yes	13.7	14	22	16	72%	50%	50%	50%	50.00%	\$345.46	\$82.82	153.9	154	2.09	151.8	\$12,915.05	\$4,177.21	\$4,200.00
1715	Quercus agrifolia	coast live oak	90.00%	yes	15.4	15	20	12	81%	50%	50%	50%	50.00%	\$345.46	\$82.82	176.6	177	2.09	174.5	\$14,800.45	\$5,411.41	\$5,400.00
1716	Umbellularia californica	California bay	70.00%	yes	4.3	4	12	6	66%	50%	40%	50%	46.67%	\$345.46	\$77.04	12.6	13	2.24	10.3	\$1,140.51	\$244.50	\$240.00
1717	Quercus agrifolia	coast live oak	90.00%	yes	47.4	47	23	22	81%	50%	60%	50%	53.33%	\$345.46	\$82.82	1734.1	1430	2.09	1428.0	\$118,612.01	\$46,258.68	\$46,300.00
1718	Quercus agrifolia	coast live oak	90.00%	yes	11.6	12	12	12	63%	50%	40%	50%	46.67%	\$345.46	\$82.82	113.0	113	2.09	111.0	\$9,534.34	\$2,502.76	\$2,500.00
1719	Quercus agrifolia	coast live oak	90.00%	yes	15.1	15	23	18	75%	50%	50%	50%	50.00%	\$345.46	\$82.82	176.6	177	2.09	174.5	\$14,800.45	\$4,995.15	\$5,000.00
1720	Quercus agrifolia	coast live oak	90.00%	yes	27.3	27	22	26	75%	50%	60%	50%	53.33%	\$345.46	\$82.82	572.3	572	2.09	570.2	\$47,567.35	\$17,124.25	\$17,100.00
1721	Eucalyptus globulus	blue gum	10.00%	no	33.6	34	38	36	75%	50%	30%	50%	43.33%	\$345.46	\$36.36	907.5	882	4.75	877.2	\$32,240.09	\$1,047.80	\$1,050.00
1722	Eucalyptus globulus	blue gum	10.00%	no	29.1	29	45	20	63%	50%	30%	50%	43.33%	\$345.46	\$36.36	660.2	660	4.75	655.4	\$24,177.08	\$654.80	\$650.00
1723	Quercus agrifolia	coast live oak	90.00%	no	10.6	11	23	18	72%	50%	40%	50%	46.67%	\$345.46	\$82.82	95.0	95	2.09	92.9	\$8,039.02	\$2,426.78	\$2,430.00
1724	Quercus agrifolia	coast live oak	90.00%	yes	11.9	12	20	18	75%	50%	40%	50%	46.67%	\$345.46	\$82.82	113.0	113	2.09	111.0	\$9,534.34	\$3,003.32	\$3,000.00
1725	Quercus agrifolia	coast live oak	90.00%	yes	12.1	12	18	16	75%	50%	40%	50%	46.67%	\$345.46	\$82.82	113.0	113	2.09	111.0	\$9,534.34	\$3,003.32	\$3,000.00
1726	Quercus agrifolia	coast live oak	90.00%	yes	32.3	32	20	16	81%	50%	60%	50%	53.33%	\$345.46	\$82.82	803.8	788	2.09	785.5	\$65,398.09	\$25,505.25	\$25,500.00
1727	Quercus agrifolia	coast live oak	90.00%	yes	27.8	28	18	15	78%	50%	60%	50%	53.33%	\$345.46	\$82.82	615.4	615	2.09	613.4	\$51,143.11	\$19,178.67	\$19,200.00
1728	Quercus agrifolia	coast live oak	90.00%	yes	18.9	19	25	20	63%	50%	50%	50%	50.00%	\$345.46	\$82.82	283.4	283	2.09	281.3	\$23,642.31	\$6,649.40	\$6,600.00
1729	Quercus agrifolia	coast live oak	90.00%	no	7.8	8	15	15	81%	50%	40%	50%	46.67%	\$345.46	\$82.82	50.2	50	2.09	48.2	\$4,333.24	\$1,478.72	\$1,480.00
1730	Quercus agrifolia	coast live oak	90.00%	yes	56.3	56	25	25	75%	50%	60%	50%	53.33%	\$345.46	\$82.82	2461.8	1743	2.09	1741.2	\$144,547.50	\$52,037.10	\$52,000.00
1731	Quercus agrifolia	coast live oak	90.00%	yes	24.9	25	20	20	81%	50%	60%	50%	53.33%	\$345.46	\$82.82	490.6	491	2.09	488.5	\$40,805.93	\$15,914.31	\$15,900.00
1732	Quercus agrifolia	coast live oak	90.00%	yes	88.8	89	27	22	78%	50%	60%	50%	53.33%	\$345.46	\$82.82	6218.0	2427	2.09	2425.1	\$201,190.17	\$75,446.31	\$75,400.00
1733	Prunus cerasifera	cherry plum	20.00%	yes	10.6	11	10	15	81%	50%	30%	50%	43.33%	\$345.46	\$36.36	95.0	95	4.75	90.2	\$3,626.40	\$255.36	\$260.00
1734	Quercus agrifolia	coast live oak	90.00%	no	15.9	16	25	20	72%	50%	50%	50%	50.00%	\$345.46	\$82.82	201.0	201	2.09	198.9	\$16,815.87	\$5,438.88	\$5,400.00
1735	Quercus agrifolia	coast live oak	90.00%	yes	25.0	25	27	20	81%	50%	60%	50%	53.33%	\$345.46	\$82.82	490.6	491	2.09	488.5	\$40,805.93	\$15,914.31	\$15,900.00
1736	Quercus agrifolia	coast live oak	90.00%	yes	44.6	45	33	28	84%	50%	60%	50%	53.33%	\$345.46	\$82.82	1589.6	1353	2.09	1351.0	\$112,238.18	\$45,456.46	\$45,500.00
1737	Quercus agrifolia	coast live oak	90.00%	yes	4.0	4	12	8	81%	50%	40%	50%	46.67%	\$345.46	\$82.82	12.6	13	2.09	10.5	\$1,212.59	\$413.79	\$410.00
1738	Quercus agrifolia	coast live oak	90.00%	no	13.6	14	13	12	81%	50%	50%	50%	50.00%	\$345.46	\$82.82	153.9	154	2.09	151.8	\$12,915.05	\$4,722.07	\$4,700.00
1739	Quercus agrifolia	coast live oak	90.00%	no	4.0	4	15	5	69%	50%	40%	50%	46.67%	\$345.46	\$82.82	12.6	13	2.09	10.5	\$1,212.59	\$350.13	\$350.00
1740	Quercus agrifolia	coast live oak	90.00%	yes	34.4	34	16	16	84%	50%	60%	50%	53.33%	\$345.46	\$82.82	907.5	882	2.09	879.9	\$73,214.64	\$29,651.93	\$29,700.00
1741	Quercus agrifolia	coast live oak	90.00%	yes	4.0	4	8	9	75%	50%	40%	50%	46.67%	\$345.46	\$82.82	12.6	13	2.09	10.5	\$1,212.59	\$381.96	\$380.00
1742	Quercus agrifolia	coast live oak	90.00%	yes	23.6	24	19	17	47%	50%	40%	50%	50.00%	\$345.46	\$82.82	452.2	452	2.09	450.1	\$37,620.26	\$7,935.52	\$7,900.00
1743	Quercus agrifolia	coast live oak	90.00%	no	7.2	7	16	20	84%	50%	40%	50%	46.67%	\$345.46	\$82.82	38.5	38	2.09	36.4	\$3,358.04	\$1,190.00	\$1,190.00
1744	Quercus agrifolia	coast live oak	90.00%	yes	79.5	80	30	22	63%	50%	60%	50%	53.33%	\$345.46	\$82.82	5024.0	2313	2.09	2310.9	\$191,735.03	\$57,520.51	\$57,500.00
1745	Quercus agrifolia	coast live oak	90.00%	yes	19.0	19	17	12	81%	50%	50%	50%	50.00%	\$345.46	\$82.82	283.4	283	2.09	281.3	\$23,642.31	\$8,644.22	\$8,600.00
1746	Quercus agrifolia	coast live oak	90.00%	no	10.2	10	22	20	78%	50%	40%	50%	46.67%	\$345.46	\$82.82	78.5	79	2.09	76.4	\$6,673.74	\$2,189.82	\$2,190.00
1747	Quercus agrifolia	coast live oak	90.00%	no	6.5	7	16	10	72%	50%	40%	50%	46.67%	\$345.46	\$82.82	38.5	38	2.09	36.4	\$3,358.04	\$1,013.71	\$1,010.00
1748	Quercus agrifolia	coast live oak	90.00%	no	10.8	11	18	22	50%	50%	40%	50%	46.67%	\$345.46	\$82.82	95.0	95	2.09	92.9	\$8,039.02	\$1,688.20	\$1,690.00
1749	Quercus agrifolia	coast live oak	90.00%	no	11.7	12	29	22	78%	50%	40%	50%	46.67%	\$345.46	\$82.82	113.0	113	2.09	111.0	\$9,534.34	\$3,128.45	\$3,130.00
1750	Quercus agrifolia	coast live oak	90.00%	no	9.7	10	9	8	81%	50%	40%	50%	46.67%	\$345.46	\$82.82	78.5	79	2.09	76.4	\$6,673.74	\$2,277.41	\$2,280.00
1751	Quercus agrifolia	coast live oak	90.00%	no	18.3	18	30	12	59%	50%	50%	50%	50.00%	\$345.46	\$82.82	254.3	254	2.09	252.3	\$21,236.81	\$5,674.21	\$5,700.00
1752	Quercus agrifolia	coast live oak	90.00%	no	16.0	16	35	22	91%	50%	50%	50%	50.00%	\$345.46	\$82.82	201.0	201	2.09	198.9	\$16,815.87	\$6,857.72	\$6,900.00
1753	Quercus agrifolia	coast live oak	90.00%	no	9.7	10	10	20	84%	50%	40%	50%	46.67%	\$345.46	\$82.82	78.5	79	2.09	76.4	\$6,673.74	\$2,365.01	\$2,370.00
1754	Quercus agrifolia	coast live oak	90.00%	no	11.2	11	30	20	66%	50%	40%	50%	46.67%	\$345.46	\$82.82	95.0	95	2.09	92.9	\$8,039.02	\$2,215.76	\$2,220.00
1755	Quercus agrifolia	coast live oak	90.00%	no	15.5	16	26	17	72%	50%	50%	50%	50.00%	\$345.46	\$82.82	201.0	201	2.09	198.9	\$16,815.87	\$5,438.88	\$5,400.00
1756	Quercus agrifolia	coast live oak	90.00%	no	20.0	20	30	15	75%	50%	50%	50%	50.00%	\$345.46	\$82.82							

Tree Tag #	Species	Common Name	Species Rating	Multi-stem	Total DBH (In.)	Total DBH Rounded	Estimated Height (Ft.)	Crown Radius (Ft.)	Condition Rating	Site Rating	Contribution Rating	Placement Rating	Location Rating	Installed Tree Cost	Unit Tree Cost	Protected Tree Trunk Area (Sq. In.)	Adjusted Trunk Area (Sq. In.)	Replacement Tree Trunk Area (Sq. In.)	Appraised Tree Trunk Increase (Protected Tree Trunk Area - Replacement Tree Trunk Area) (Sq. In.)	Basic Tree Cost (Appraised Tree Trunk Increase X Unit Tree Cost + Installed Tree Cost)	Appraised Value (Basic Tree Cost X Species Rating X Condition Location)	Appraised Value Rounded (to nearest \$100 if >\$5000; to \$10 if <\$5000)
1769	Quercus agrifolia	coast live oak	90.00%	yes	6.1	6	7	6	75%	50%	40%	50%	46.67%	\$345.46	\$82.82	28.3	28	2.09	26.2	\$2,512.86	\$791.55	\$790.00
1770	Quercus agrifolia	coast live oak	90.00%	no	8.8	9	12	16	75%	50%	40%	50%	46.67%	\$345.46	\$82.82	63.6	64	2.09	61.5	\$5,438.48	\$1,713.12	\$1,710.00
1771	Quercus agrifolia	coast live oak	90.00%	no	9.6	10	22	18	72%	50%	40%	50%	46.67%	\$345.46	\$82.82	78.5	79	2.09	76.4	\$6,673.74	\$2,014.63	\$2,010.00
1772	Quercus agrifolia	coast live oak	90.00%	yes	32.6	33	22	17	81%	50%	60%	50%	53.33%	\$345.46	\$82.82	854.9	835	2.09	833.0	\$69,334.11	\$27,040.30	\$27,000.00
1773	Quercus agrifolia	coast live oak	90.00%	yes	12.8	13	20	20	78%	50%	50%	50%	50.00%	\$345.46	\$82.82	132.7	133	2.09	130.6	\$11,159.68	\$3,923.33	\$3,900.00
1774	Quercus agrifolia	coast live oak	90.00%	no	11.4	11	19	15	81%	50%	40%	50%	46.67%	\$345.46	\$82.82	95.0	95	2.09	92.9	\$8,039.02	\$2,743.32	\$2,740.00
1775	Umbellularia californica	California bay	70.00%	yes	25.1	25	22	27	78%	50%	60%	50%	53.33%	\$345.46	\$77.04	490.6	491	2.09	488.5	\$37,982.20	\$11,078.14	\$11,100.00
1776	Umbellularia californica	California bay	70.00%	no	5.5	6	18	20	78%	50%	40%	50%	46.67%	\$345.46	\$82.82	28.3	28	2.09	26.2	\$2,512.86	\$641.30	\$640.00
1777	Umbellularia californica	California bay	70.00%	yes	35.0	35	30	20	75%	50%	60%	50%	53.33%	\$345.46	\$77.04	961.6	928	2.09	926.0	\$71,687.20	\$20,072.41	\$20,100.00
1778	Quercus agrifolia	coast live oak	90.00%	no	6.6	7	17	20	78%	50%	40%	50%	46.67%	\$345.46	\$82.82	38.5	38	2.09	36.4	\$3,358.04	\$1,101.86	\$1,100.00
1779	Quercus agrifolia	coast live oak	90.00%	no	10.3	10	12	17	75%	50%	40%	50%	46.67%	\$345.46	\$82.82	78.5	79	2.09	76.4	\$6,673.74	\$2,102.23	\$2,100.00
1780	Quercus agrifolia	coast live oak	90.00%	no	15.3	15	16	19	75%	50%	50%	50%	50.00%	\$345.46	\$82.82	176.6	177	2.09	174.5	\$14,800.45	\$4,995.15	\$5,000.00
1781	Umbellularia californica	California bay	70.00%	yes	67.0	67	30	17	75%	50%	60%	50%	53.33%	\$345.46	\$77.04	3523.9	2052	2.09	2050.2	\$158,292.48	\$44,321.90	\$44,300.00
1782	Quercus agrifolia	coast live oak	90.00%	no	5.8	6	9	16	81%	50%	40%	50%	46.67%	\$345.46	\$82.82	28.3	28	2.09	26.2	\$2,512.86	\$857.51	\$860.00
1783	Quercus agrifolia	coast live oak	90.00%	no	11.1	11	18	13	47%	50%	40%	50%	46.67%	\$345.46	\$82.82	95.0	95	2.09	92.9	\$8,039.02	\$1,582.68	\$1,580.00
1784	Quercus agrifolia	coast live oak	90.00%	yes	14.5	15	18	15	84%	50%	50%	50%	50.00%	\$345.46	\$82.82	176.6	177	2.09	174.5	\$14,800.45	\$5,619.55	\$5,600.00
1785	Quercus agrifolia	coast live oak	90.00%	no	4.2	4	10	7	72%	50%	40%	50%	46.67%	\$345.46	\$82.82	12.6	13	2.09	10.5	\$1,212.59	\$366.05	\$370.00
1786	Quercus agrifolia	coast live oak	90.00%	no	12.1	12	0	13	78%	50%	40%	50%	46.67%	\$345.46	\$82.82	113.0	113	2.09	111.0	\$9,534.34	\$3,128.45	\$3,130.00
1787	Quercus agrifolia	coast live oak	90.00%	no	6.6	7	16	7	63%	50%	40%	50%	46.67%	\$345.46	\$82.82	38.5	38	2.09	36.4	\$3,358.04	\$881.48	\$880.00
1788	Quercus agrifolia	coast live oak	90.00%	no	11.4	11	20	12	84%	50%	40%	50%	46.67%	\$345.46	\$82.82	95.0	95	2.09	92.9	\$8,039.02	\$2,848.83	\$2,850.00
1789	Quercus agrifolia	coast live oak	90.00%	no	11.5	12	20	18	72%	50%	40%	50%	46.67%	\$345.46	\$82.82	113.0	113	2.09	111.0	\$9,534.34	\$2,878.18	\$2,880.00
1790	Quercus agrifolia	coast live oak	90.00%	yes	29.1	29	25	22	78%	50%	60%	50%	53.33%	\$345.46	\$82.82	660.2	660	2.09	658.1	\$54,848.89	\$20,568.33	\$20,600.00
1791	Quercus agrifolia	coast live oak	90.00%	yes	40.1	40	23	16	81%	50%	60%	50%	53.33%	\$345.46	\$82.82	1256.0	1149	2.09	1146.9	\$95,332.55	\$37,179.69	\$37,200.00
1792	Quercus agrifolia	coast live oak	90.00%	yes	16.8	17	16	23	78%	50%	50%	50%	50.00%	\$345.46	\$82.82	226.9	227	2.09	224.8	\$18,961.33	\$6,666.09	\$6,700.00
1793	Umbellularia californica	California bay	70.00%	yes	81.6	82	31	27	63%	50%	60%	50%	53.33%	\$345.46	\$77.04	5278.3	2343	2.24	2340.8	\$180,682.23	\$42,159.19	\$42,200.00
1794	Quercus agrifolia	coast live oak	90.00%	yes	18.1	18	20	16	72%	50%	50%	50%	50.00%	\$345.46	\$82.82	254.3	254	2.09	252.3	\$21,236.81	\$6,868.78	\$6,900.00
1795	Quercus agrifolia	coast live oak	90.00%	no	11.0	11	21	17	75%	50%	40%	50%	46.67%	\$345.46	\$82.82	95.0	95	2.09	92.9	\$8,039.02	\$2,532.29	\$2,530.00
1796	Quercus agrifolia	coast live oak	90.00%	no	10.6	11	17	14	75%	50%	40%	50%	46.67%	\$345.46	\$82.82	95.0	95	2.09	92.9	\$8,039.02	\$2,532.29	\$2,530.00
1797	Quercus agrifolia	coast live oak	90.00%	no	8.2	8	19	15	75%	50%	40%	50%	46.67%	\$345.46	\$82.82	50.2	50	2.09	48.2	\$4,333.24	\$1,364.97	\$1,360.00
1798	Quercus agrifolia	coast live oak	90.00%	no	16.9	17	25	20	66%	50%	50%	50%	50.00%	\$345.46	\$82.82	226.9	227	2.09	224.8	\$18,961.33	\$5,599.52	\$5,600.00
1799	Quercus agrifolia	coast live oak	90.00%	yes	9.5	10	15	10	59%	50%	40%	50%	46.67%	\$345.46	\$82.82	78.5	79	2.09	76.4	\$6,673.74	\$1,664.26	\$1,660.00
1800	Quercus agrifolia	coast live oak	90.00%	no	9.1	9	20	18	75%	50%	40%	50%	46.67%	\$345.46	\$82.82	63.6	64	2.09	61.5	\$5,438.48	\$1,713.12	\$1,710.00
1801	Quercus agrifolia	coast live oak	90.00%	yes	18.4	18	20	17	69%	50%	50%	50%	50.00%	\$345.46	\$82.82	254.3	254	2.09	252.3	\$21,236.81	\$6,570.14	\$6,600.00
1802	Quercus agrifolia	coast live oak	90.00%	no	12.2	12	23	17	81%	50%	40%	50%	46.67%	\$345.46	\$82.82	113.0	113	2.09	111.0	\$9,534.34	\$3,253.59	\$3,250.00
1803	Quercus agrifolia	coast live oak	90.00%	yes	23.5	24	18	18	88%	50%	50%	50%	50.00%	\$345.46	\$82.82	452.2	452	2.09	450.1	\$37,620.26	\$14,812.98	\$14,800.00
1804	Quercus agrifolia	coast live oak	90.00%	yes	16.5	16	9	8	72%	50%	50%	50%	50.00%	\$345.46	\$82.82	201.0	201	2.09	198.9	\$16,815.87	\$5,438.88	\$5,400.00
1805	Quercus agrifolia	coast live oak	90.00%	no	7.8	8	10	8	78%	50%	40%	50%	46.67%	\$345.46	\$82.82	50.2	50	2.09	48.2	\$4,333.24	\$1,421.85	\$1,420.00
1806	Quercus agrifolia	coast live oak	90.00%	yes	13.1	13	16	10	84%	50%	50%	50%	50.00%	\$345.46	\$82.82	132.7	133	2.09	130.6	\$11,159.68	\$4,237.19	\$4,200.00
1807	Quercus agrifolia	coast live oak	90.00%	no	4.8	5	13	9	81%	50%	40%	50%	46.67%	\$345.46	\$82.82	19.6	20	2.09	17.5	\$1,797.71	\$613.47	\$610.00
1808	Quercus agrifolia	coast live oak	90.00%	yes	17.9	18	13	8	81%	50%	50%	50%	50.00%	\$345.46	\$82.82	254.3	254	2.09	252.3	\$21,236.81	\$7,764.71	\$7,800.00
1809	Quercus agrifolia	coast live oak	90.00%	yes	4.8	5	9	4	78%	50%	40%	50%	46.67%	\$345.46	\$82.82	19.6	20	2.09	17.5	\$1,797.71	\$589.87	\$590.00
1810	Quercus agrifolia	coast live oak	90.00%	no	5.1	5	18	16	75%	50%	40%	50%	46.67%	\$345.46	\$82.82	19.6	20	2.09	17.5	\$1,797.71	\$566.28	\$570.00
1811	Quercus agrifolia	coast live oak	90.00%	no	4.6	5	18	16	72%	50%	40%	50%	46.67%	\$345.46	\$82.82	19.6	20	2.09	17.5	\$1,797.71	\$542.68	\$540.00
1812	Quercus agrifolia	coast live oak	90.00%	no	6.1	6	15	9	72%	50%	40%	50%	46.67%	\$345.46	\$82.82	28.3	28	2.09	26.2	\$2,512.86	\$758.57	\$760.00
1813	Quercus agrifolia	coast live oak	90.00%	no	4.8	5	16	16	78%	50%	40%	50%	46.67%	\$345.46	\$82.82	19.6	20	2.09	17.5	\$1,797.71	\$589.87	\$590.00
1814	Eucalyptus globulus	blue gum	10.00%	no	13.5	14	40	25	72%	50%	30%	50%	43.33%	\$345.46	\$36.36	153.9	154	4.75	149.1	\$5,767.10	\$179.62	\$180.00
1815	Eucalyptus globulus	blue gum	10.00%	no	30.4	30	50	25	81%	50%	30%	50%	43.33%	\$345.46	\$36.36	706.5	707	4.75	701.8	\$25,861.09	\$910.53	\$910.00
1816	Quercus agrifolia	coast live oak	90.00%	yes	39.9	40	18	17	69%	50%	60%	50%	53.33%	\$345.46	\$82.82	1256.0	1149	2.09	1146.9	\$95,332.55	\$31,459.74	\$31,500.00
1817	Umbellularia californica	California bay	70.00%	yes	6.1	6	19	8	78%	50%	40%	50%	46.67%	\$345.46	\$77.04	28.3	28	2.24	26.0	\$2,350.04	\$599.75	\$600.00
1818	Umbellularia californica	California bay	70.00%	yes	8.3	8	15	8	75%	50%	40%	50%	46.67%	\$345.46	\$77.04	50.2	50	2.24	48.0	\$4,043.38	\$990.63	\$990.00
1819	Umbellularia californica	California bay	70.00%	yes	10.6	11	15	16	81%	50%	40%	50%	46.67%	\$345.46	\$77.04	95.0	95	2.24	92.7	\$7,490.53	\$1,988.11	\$1,990.00
1820	Eucalyptus globulus	blue gum	10.00%	yes	36.7	37	48	30	75%	50%	30%	50%	43.33%	\$345.46	\$36.36	1074.7	1018	4.75	1013.7	\$37,200.86	\$1,209.16	\$1,210.00
1821	Eucalyptus globulus	blue gum	10.00%	no	25.3	25	45	35	78%	50%	30%	50%	43.33%	\$345.46	\$36.36	490.6	491	4.75	485.9	\$16,011.88	\$609.78	\$610.00
1822	Umbellularia californica	California bay	70.00%	yes	9.5	10	17	12	81%	50%	40%	50%	46.67%	\$345.46	\$77.04	78.5	79	2.24	76.3	\$6,620.53	\$1,651.03	\$1,650.00
1823	Umbellularia californica	California bay	70.00%	no	6.5	7	16	8	78%	50%	40%	50%	46.67%	\$345.46	\$77.04	38.5	38	2.24	36.2	\$3,136.23	\$800.39	\$800.00
1824	Umbellularia californica	California bay	70.00%	yes	7.9	8	10	8	75%	50%	40%	50%	46.67%	\$345.46	\$77.04	50.2	50	2.24	48.0	\$4,043.38	\$990.63	\$990.00
1825	Quercus agrifolia	coast live oak	90.00%	yes	18.0	18	18	12	84%	50%	50%	50%	50.00%	\$345.46	\$82.82	254.3	254	2.09	252.3	\$		

Appendix C. Summary of Preservation Suitability

Original Tree ID	Tree Tag #	Species	Common Name	Species Rating	Multi-stem	Total DBH (In.)	Total DBH (In.) Rounded	Estimated Height (Ft.)	Crown Radius (Ft.)	Condition Rating	Preservation Suitability
N/A	1615	<i>Quercus agrifolia</i>	coast live oak	90%	no	12.2	12	20	10	84%	Good
N/A	1678	<i>Sambucus nigra ssp. caerulea</i>	blue elderberry	30%	yes	11.0	11	8	12	34%	Poor
82	1617	<i>Quercus agrifolia</i>	coast live oak	90%	yes	8.5	9	14	10	91%	Good
81	1618	<i>Quercus agrifolia</i>	coast live oak	90%	yes	10.0	10	15	8	84%	Good
80	1619	<i>Quercus agrifolia</i>	coast live oak	90%	yes	30.4	30	18	14	84%	Good
58	1656	<i>Quercus agrifolia</i>	coast live oak	90%	yes	25.0	25	18	13	78%	Moderate
14	1659	<i>Quercus agrifolia</i>	coast live oak	90%	yes	22.6	23	25	30	84%	Good
04	1665	<i>Quercus lobata</i>	valley oak	90%	no	26.4	26	35	20	88%	Good
05	1666	<i>Quercus douglasii</i>	blue oak	70%	no	35.0	35	40	25	88%	Good
07	1673	<i>Schinus molle</i>	pepper tree	40%	yes	56.7	57	20	13	72%	Moderate
10	1674	<i>Quercus agrifolia</i>	coast live oak	90%	yes	20.4	20	15	11	88%	Good
15	1677	<i>Quercus agrifolia</i>	coast live oak	90%	no	10.2	10	20	5	88%	Good
N/A	1798	<i>Quercus agrifolia</i>	coast live oak	90%	no	16.9	17	25	20	66%	Moderate
N/A	1799	<i>Quercus agrifolia</i>	coast live oak	90%	yes	9.5	10	15	10	59%	Moderate
N/A	1805	<i>Quercus agrifolia</i>	coast live oak	90%	no	7.8	8	10	8	78%	Good
N/A	1806	<i>Quercus agrifolia</i>	coast live oak	90%	yes	13.1	13	16	10	84%	Good
N/A	1808	<i>Quercus agrifolia</i>	coast live oak	90%	yes	17.9	18	13	8	81%	Good
N/A	1822	<i>Umbellularia californica</i>	California bay	70%	yes	9.5	10	17	12	81%	Good
N/A	1823	<i>Umbellularia californica</i>	California bay	70%	no	6.5	7	16	8	78%	Good
N/A	1824	<i>Umbellularia californica</i>	California bay	70%	yes	7.9	8	10	8	75%	Good
N/A	1825	<i>Quercus agrifolia</i>	coast live oak	90%	yes	18.0	18	18	12	84%	Good
N/A	1826	<i>Umbellularia californica</i>	California bay	70%	no	5.5	6	20	8	81%	Good