



## PRELIMINARY ARBORIST REPORT

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**Hall Equities  
Second & Main  
Walnut Creek, CA**

**PREPARED FOR**  
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**HORT SCIENCE**

**BARTLETT CONSULTING**

Divisions of The F.A. Bartlett Tree Expert Company

**Preliminary Arborist Report**  
**Hall Equities**  
**Second & Main Walnut Creek**

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# Preliminary Arborist Report

## Hall Equities

### Second & Main

### Walnut Creek, CA

#### ***Introduction and Overview***

The Hall Equities Group has proposed to redevelop the property located at the corners of Second and Main Street in Walnut Creek. The site currently consists of retail stores, storage structures, parking and associated landscaping. HortScience I Bartlett Consulting, Divisions of The Bartlett Tree Expert Company, was asked to prepare a **Preliminary Arborist Report** addressing the development for submission to the City of Walnut Creek.

This report provides the following information:

1. An assessment of trees within and immediately adjacent to the project.
2. An assessment of the impacts of construction on the trees.
3. Recommendations for tree preservation and removal.
4. The appraise value of all surveyed trees using the techniques described in the Guide for Plant Appraisal, 9<sup>th</sup> edition (International Society of Arboriculture).
5. Guidelines for tree preservation during the design, construction and maintenance phases.

#### ***Assessment Methods***

Trees were assessed in May 2016. All trees 9" or greater in diameter, within the project area or with portions of their crowns extending into the project area, were included (per Walnut Creek Ordinance No. 1966). The assessment procedure consisted of the following steps:

1. Identifying the tree as to species;
2. Tagging each tree with an identifying number and recording its location on a map;
3. Measuring the trunk diameter at a point 54" above grade;
4. Evaluating the health and structural condition using a scale of 1–5:
  - 5** - A healthy, vigorous tree, reasonably free of signs and symptoms of disease, with good structure and form typical of the species.
  - 4** - Tree with slight decline in vigor, small amount of twig dieback, minor structural defects that could be corrected.
  - 3** - Tree with moderate vigor, moderate twig and small branch dieback, thinning of crown, poor leaf color, moderate structural defects that might be mitigated with regular care.
  - 2** - Tree in decline, epicormic growth, extensive dieback of medium to large branches, significant structural defects that cannot be abated.
  - 1** - Tree in severe decline, dieback of scaffold branches and/or trunk; most of foliage from epicormics; extensive structural defects that cannot be abated.
5. Rating the suitability for preservation as "high", "moderate" or "low". Suitability for preservation considers the health, age and structural condition of the tree, and its potential to remain an asset to the site for years to come.

**High:** Trees with good health and structural stability that have the potential for longevity at the site.

**Moderate:** Trees with somewhat declining health and/or structural defects than can be abated with treatment. The tree will require more intense management and monitoring, and may have shorter life span than those in 'high' category.

**Low:** Tree in poor health or with significant structural defects that cannot be mitigated. Tree is expected to continue to decline, regardless of treatment. The species or individual may have characteristics that are undesirable for landscapes, and generally are unsuited for use areas.

### **Description of Trees**

Thirty-one (31) trees were evaluated, representing 12 species, including thirteen (13) off-site trees whose canopies extended onto the development and may be impacted. Descriptions of each tree are found in the **Tree Assessment Form** and locations are plotted on the **Tree Assessment Map** (see Exhibits).

#### **On-site trees:**

There was a total of fifteen on-site trees at this site

Four sawleaf zelkova trees were located in the parking lots in areas too small for the potential mature size of these trees. Three were in fair condition and one tree (#18) was in poor (photo 1). All but one were multi-trunk trees. One tree (#10) was young (5-7") and 3 were semi-mature (13-17"). The largest single trunked tree (#11) had a diameter of 18". Tree #11 had poor form and structure and had been topped.

Three Chinese pistache trees were assessed and located in the east portion of the parking lot. All three were young with trunk diameters between 9" and 12". One was in excellent condition, one was in good condition and one in fair. Tree #4 had poor form and structure, leaning to the north with a one-sided canopy to the south.

There were two species represented by two trees each and included:

- Two valley oaks (#5, 6) were assessed and on-site of the project. Tree #6 was juvenile with a 9" trunk diameter. Tree #5 was mature with a 26" diameter. Both trees were in good condition. Tree #5 was located near the toe of a berm on parcel 2 (photo 2).
- Silver dollar trees (#12 and 14) were located along the western portion of the property near the south entrance. Both were multi-trunked mature trees and in fair condition. Tree #14 had a trunk failure at the base.

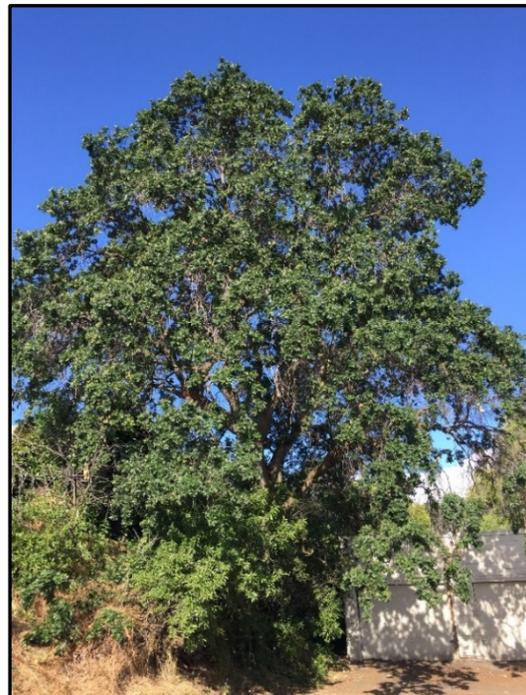
The following species were represented by one or less trees each and included:

- Coast redwood #1 was in excellent condition with a nice canopy and good color. It was located near the corner of Second and Main.
- Firethorn #7 was multi-trunked and in poor condition. It had poor form and structure with twig and branch dieback.
- Glossy privet #8 was growing along a berm located in the middle of the property. It was multi-trunked and in fair condition.



**Photo 1 (above):** This multi-trunk Sawleaf zelkova #18 was in poor condition. The root system was displacing the parking lot.

**Photo 2 (below):** Valley oak #5 was located at the toe of the berm on parcel 2 and was in good condition.



- Monterey pine #13 was a mature tree in fair condition. It had a thin canopy and was leaning to the south.

**Property line trees:**

There was a total of three trees on the property line at this site

- Valley oak (#19) was a young tree with a 10" trunk diameter in good condition.
- California black walnut (#20 and 22) were located along the western border of the property line. Both were multiple-trunked trees. Although tree #20 was growing in a small, tight space with a fence embedded at the base, it was in fair condition. Tree #22 had been severely topped and was in poor condition. The largest trunk on tree #20 was 4" and the largest trunk on tree #22 was 6".

**Off-site trees:**

There was a total of thirteen off-site trees at this site.

- Nine off-site valley oaks were assessed. Six oaks were located north of the property line (#23-26, 29 and 30) at the top of the slope above the canal trail. Three valley oaks (#15-17) were located on the western edge of the property. Six of the trees were juvenile, with diameters ranging from 9 to 17", two were semi-mature (18-24") and one was mature (31"). One tree (#26) was in fair condition. Tree #30 was in excellent condition. Seven of these off-site oaks were in good condition.
- Canary Island pines (#27 and 28) were located off-site along the north property line of the property. Both were semi-mature (11" and 13") and in good condition with nice color.
- English walnut #31 was growing off-site on the north end of the property near N. Main Street. It was a multi-trunked tree in fair condition
- London plane #21 was a mature off-site tree in good condition.

The off-site trees that were inaccessible, were not tagged, were assessed from the project site and based on estimation. Off-site trees were located adjacent to the west (#15, 16, 17 and 21) and north property lines (#23-31). The distance that tree canopies extended over existing buildings are listed below.

**Off-Site Tree Canopy Extensions Over Buildings**

<b>Tree No.</b>	<b>Species</b>	<b>Trunk Diameter (in.)</b>	<b>Canopy Extension</b>
15	Valley oak	15	5' E
16	Valley oak	23, 16	5' E
17	Valley oak	17	5' E
19	Valley oak	10	5' E
21	London plane	30	5' E
23	Valley oak	31	25' S
24	Valley oak	15	5' S
25	Valley oak	22	10' S
26	Valley oak	16	1' S
27	Canary Island pine	13	2' E
28	Canary Island pine	11	3' S
29	Valley oak	9, 7	1' S
30	Valley oak	20	5' S

Walnut Creek Ordinance No. 1966 defines certain native species with diameters of 9" or greater as *Highly Protected* and includes the following: valley oak, blue oak., coast live oak, California black oak, canyon live oak, interior live oak, madrone California buckeye, California black walnut, and grey pine. Based on this definition, 14 trees qualified as *Highly Protected*. Two are on-site valley oaks (#5 and 6). Three of the protected trees are located on the property line and include two small California black walnuts (#20 and 22) and one valley oak (#19). Nine of the protected trees are located off-site and include 9 valley oaks (#23-26, 29 and 30). *Highly Protected* trees are identified in the **Tree Assessment Form** (see Exhibits).

Average tree condition for the site was fair, with 13 trees or 42% of the population in that category. Twelve (12) trees were in good condition (39%). Those in poor and excellent condition were both represented by 3 trees each or 10% of the population. Table 1 provides a summary of condition by species.

**Table 1. Tree condition and frequency of occurrence.  
 Second and Main site, Walnut Creek**

Common Name	Scientific Name	Condition				Total
		Poor (1-2)	Fair (3)	Good (4)	Excell (5)	
Silver dollar tree	<i>Eucalyptus cinerea</i>	-	2	-	-	2
California black walnut	<i>Juglans hindsii</i>	1	1	-	-	2
English Walnut	<i>Juglans regia</i>	-	1	-	-	1
Glossy privet	<i>Ligustrum lucidum</i>	-	1	-	-	1
Firethorn	<i>Pyranantha coccinea</i>	1	-	-	-	1
Sawleaf zelkova	<i>Zelkova serrata</i>	1	3	-	-	4
Canary Island pine	<i>Pinus canariensis</i>	-	-	2	-	2
Monterey pine	<i>Pinus radiata</i>	-	1	-	-	1
Chinese pistache	<i>Pistacia chinensis</i>	-	1	1	1	3
London plane	<i>Platanus x hispanica</i>	-	-	1	-	1
Valley oak	<i>Quercus lobata</i>	-	3	8	1	12
Coast redwood	<i>Sequoia sempervirens</i>	-	-	-	1	1
<b>Total</b>		<b>3</b>	<b>13</b>	<b>12</b>	<b>3</b>	<b>31</b>

**Suitability for Preservation**

Before evaluating the impacts that will occur during development, it is important to consider the quality of the tree resource itself, and the potential for individual trees to function well over an extended length of time. Trees that are preserved on development sites must be carefully selected to make sure that they may survive development impacts, adapt to a new environment and perform well in the landscape.

Our goal is to identify trees that have the potential for long-term health, structural stability and longevity. For trees growing in open fields, away from areas where people and property are present, structural defects and/or poor health presents a low risk of damage or injury if they fail. However, we must be concerned about safety in use areas. Therefore, where development encroaches into existing plantings, we must consider their structural stability as well as their potential to grow and thrive in a new environment. Where development will not occur, the normal life cycles of decline, structural failure and death should be allowed to continue.

Evaluation of suitability for preservation considers several factors:

- **Tree health**  
Healthy, vigorous trees are better able to tolerate impacts such as root injury, demolition of existing structures, changes in soil grade and moisture, and soil compaction than are non-vigorous trees.
- **Structural integrity**  
Trees with significant amounts of wood decay and other structural defects that cannot be corrected are likely to fail. Such trees should not be preserved in areas where damage to people or property is likely.
- **Species response**  
There is a wide variation in the response of individual species to construction impacts and changes in the environment. In our experience, for example, California black walnut are sensitive to construction impacts while Canary Island pine and valley oak are moderately sensitive. Valley oaks are intolerant of fill soil.
- **Tree age and longevity**  
Old trees, while having significant emotional and aesthetic appeal, have limited physiological capacity to adjust to an altered environment. Young trees are better able to generate new tissue and respond to change.
- **Invasiveness**  
Species which spread across a site and displace desired vegetation are not always appropriate for retention. This is particularly true when indigenous species are displaced. The California Invasive Plant Inventory Database (<http://www.cal-ipc.org/paf/>) lists species identified as being invasive. Walnut Creek is part of the Central West Floristic Province. *Pyracantha coccinea* was the only species assessed at the Second & Main site considered to have 'Limited' invasiveness.

Each tree was rated for suitability for preservation based upon its age, health, structural condition and ability to safely coexist within a development environment. Table 2, provides a summary of suitability ratings. Suitability ratings for individual trees are provided in the ***Tree Assessment Forms*** (see Exhibits).

We consider trees with high suitability for preservation to be the best candidates for preservation. We do not recommend retention of trees with low suitability for preservation in areas where people or property will be present. Retention of trees with moderate suitability for preservation depends upon the intensity of proposed site changes.

**Table 2: Tree Suitability for Preservation  
Second and Main site, Walnut Creek**

<b>High</b>	These are trees with good health and structural stability that have the potential for longevity at the site. Fifteen of the trees were highly suitable for preservation, including: 9 valley oaks #5, 6, 17, 19, 23-25, 29, 30, 2 Canary Island pines #27 and 28, 2 pistache #2 and 3, and one each of London plane #21 and coast redwood #1.
<b>Moderate</b>	Trees in this category have fair health and/or structural defects that may be abated with treatment. Trees in this category require more intense management and monitoring, and may have shorter life-spans than those in the "high" category. Seven of the trees were of moderate suitability for preservation, including: 2 sawleaf zelkova #9 and 10, 2 valley oaks #16 and 26, and one each of glossy privet #8, silver dollar tree #12 and Monterey pine #13.

**Low** Trees in this category are in poor health or have significant defects in structure that cannot be abated with treatment. These trees can be expected to decline regardless of management. Nine of the trees were of low suitability for preservation, including: 2 sawleaf zelkova #11 and 18, 2 California black walnuts #20 and 22 and one each of Chinese pistache #4, English walnut #31, valley oak #15, firethorn #7, and silver dollar tree #14.

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### ***Evaluation of Impacts and Recommendations***

Appropriate tree retention develops a practical match between the location and intensity of construction activities and the quality and health of trees. The **Tree Assessment** was the reference point for tree condition and quality. Potential impacts from construction were evaluated using the Preliminary Landscape Plan prepared by Camp & Camp Associates (revision dated April 2017).

The plans depicted the design for one new building in the middle of the site and improvements to the west of the existing building located on the north of the property. Parking lots, driveways and bio-retention planters would be added. Existing parking lots would be reconfigured. Accurate trunk locations for most of the trees were shown on the plans. Potential impacts from construction were estimated for each tree. The most significant impacts will be associated with constructing the new building, reconfiguring the parking lots and driveways.

Based on my assessment of the plans, removal is required for fifteen on-site trees (#1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 and 18) and two trees (#20 and 22) on the property line. The majority of the trees identified for removal would be directly impacted by the new building, driveways and parking lots. Two trees (#2 and 11) will be impacted by the new driveway. Identified for removal are those trees impacted by the new building (#3 and 4). There are three trees along the southwest portion of the property (#12, 13 and 14) that would be impacted by a new wall. Three trees (#9, 10 and 18) will be impacted by the rear parking lot. Four trees (#5, 6, 7 and 8) will be impacted by grade change. Pyracantha (#7) and glossy privet (#8) were large shrubs or small, multiple branched trees. Coast redwood #1 will be impacted by grading.

Four (4) trees were of low suitability for preservation and are considered inappropriate for retention (#7, 18, 20 and 22). Both #20 and 22 are located on the property line. Two of the on-site trees (#5 and 6) identified for preservation qualified as *Highly Protected*. Table 3 (page 7) lists trees recommended for removal along with a description of the impacts and their *Highly Protected* status.

Hall Equities would like to preserve all the off-site trees. Of the 13 off-site trees, nine are *Highly Protected* trees. Three trees (#16, 17 and 21) located west of the property are outside of impacts. Trees # 23, 24 and 25 have the potential to be impacted by the new parking lot. The parking lot design includes a diamond shaped parking lot cut out south of valley oak #23. A bio-retention is to be installed south of valley oak #25, however it is approximately 8' from the trunk.

Root and canopy pruning can be expected for construction clearance and prior to grading. Root and canopy pruning recommendations are provided in the **Tree Preservation Guidelines** (pages 9-11). Specific recommendations to provide adequate space for preservation of these trees is provided in the **Tree Preservation Guidelines**.

Preservation of trees is predicated on following the **Tree Preservation Guidelines** provided on page 9. A dripline encroachment permit issued by the City of Walnut Creek will be required for 4 trees (#16, 17, 21 and 31).

**Table 3. Trees identified for removal  
 Second and Main site, Walnut Creek**

Tree No.	Common name	Trunk Diameter (in.)	Highly Protected ?	Impacts
1	Coast redwood	19	No	Remove, new grade & curb
2	Chinese pistache	12	No	Remove, within driveway
3	Chinese pistache	9	No	Remove, within new building
4	Chinese pistache	9	No	Remove, within new building
5	Valley oak*	26	Yes	Remove, new grade
6	Valley oak*	9	Yes	Remove, new grade
7	Firethorn	5,4,3,2,2	No	Remove, poor condition
8	Glossy privet	6,4,4,1	No	Potential removal
9	Sawleaf zelkova	17,13	No	Remove, rear parking lot
10	Sawleaf zelkova	9,7,5	No	Remove, rear parking lot
11	Sawleaf zelkova	18	No	Remove, new driveway
12	Silver dollar tree	40, 22	No	Remove, new wall
13	Monterey pine	40, 22	No	Remove, new wall
14	Silver dollar tree	36,3,2,2,1	No	Remove, new wall
15	Valley oak *	15	Yes	<b>Preserve</b> , outside impacts
16	Valley oak *	23,16	Yes	<b>Preserve</b> , outside impacts
17	Valley oak *	17	Yes	<b>Preserve</b> , outside impacts
18	Sawleaf zelkova	15,15,15	No	Remove, rear parking lot
19	Valley oak *	10	Yes	<b>Preserve</b> , outside impacts
20	Calif. black walnut*	4,4,3,3	Yes	Remove, poor suitability for preservation
21	London plane *	30	No	<b>Preserve</b> , outside impacts
22	Calif. black walnut *	6,5,4	Yes	Remove, poor condition
23	Valley oak *	31	Yes	<b>Preserve</b> , outside impacts
24	Valley oak *	15	Yes	<b>Preserve</b> , outside impacts
25	Valley oak *	22	Yes	<b>Preserve</b> , outside impacts
26	Valley oak *	16	Yes	<b>Preserve</b> , outside impacts
27	Canary Island pine *	13	No	<b>Preserve</b> , outside impacts
28	Canary Island pine *	11	No	<b>Preserve</b> , outside impacts
29	Valley oak *	9,7	Yes	<b>Preserve</b> , outside impacts
30	Valley oak *	20	Yes	<b>Preserve</b> , outside impacts
31	English walnut *	10,10,8,8, 8,7,6	No	<b>Preserve</b> , outside impacts

**Note: \*Asterisks indicate off-site or property line trees.**

**Appraisal of Value**

As part of the submittal requirements, City of Walnut Creek requires that the value of all of the surveyed trees be established prior to development. To accomplish this, I employed the standard methods found in **Guide for Plant Appraisal**, 9th edition (published in 2000 by the International Society of Arboriculture, Savoy IL). In addition, I referred to **Species Classification and Group Assignment** (1992), a publication of the Western Chapter of the International Society of Arboriculture. These two documents outline the methods employed in tree appraisal.

The value of landscape trees is based upon four factors: size, species, condition and location. Size is measured as trunk diameter at 54" above grade. The species factor considers the adaptability and appropriateness of the plant in the inland valley of the East Bay Area. The **Species Classification and Group Assignment** lists recommended species ratings and evaluations. The location factor considers the site, placement and contribution of the tree in its surrounding landscape.

The appraised value of the fifteen on-site trees recommended for removal was \$72,750. (Table 4). The appraised value of the two property line trees to be remove (#20 & 22) was \$550.00. The appraised value of the 13 off-site trees was \$105,450.00. Valley oak #19, located on the property line was valued at \$2350.00

**Table 4. Appraised value of on-site trees identified for removal  
 Second and Main site, Walnut Creek**

Tree No.	Species	Trunk Diameter (in.)	Highly Protected?	Appraised Value
1	Coast redwood	19	No	4800
2	Chinese pistache	12	No	3150
3	Chinese pistache	9	No	1400
4	Chinese pistache	9	No	1000
5	Valley oak	26	Yes	14650
6	Valley oak*	9	Yes	1800
7	Pyracantha	5,4,3,2,2	No	100
8	Glossy privet	6,4,4,1	No	200
9	Sawleaf zelkova	17,13	No	3950
10	Sawleaf zelkova	9,7,5	No	1350
11	Sawleaf zelkova	18	No	2800
12	Silver dollar tree	40, 22	No	17650
13	Monterey pine	40, 22	No	5000
14	Silver dollar tree	36,3,2,2,1	No	11400
15	Valley oak*	15	Yes	4150
18	Sawleaf zelkova	15,15,15	No	3500
				<b>\$86,400.00</b>

### **Tree Preservation Guidelines**

The goal of tree preservation is not merely tree survival during development but maintenance of tree health and beauty for many years. Trees retained on sites that are either subject to extensive injury during construction or are inadequately maintained become a liability rather than an asset. The response of individual trees will depend on the amount of excavation and grading, the care with which demolition is undertaken, and the construction methods.

1. A **TREE PROTECTION ZONE** must be established for trees to be preserved, in which no disturbance is permitted. **TREE PROTECTION ZONES** for trees identified for preservation are provided in the following table. No grading, excavation, construction or storage of materials shall occur within that zone.

#### **Specific Tree Protection Zones**

<b>Tree No.</b>	<b>TPZ</b>
15, 16, 17, 19, 21	Back of new curb E of trees
23-30	Back of new curb S of trees
31	Back of new curb S, E, & W of trees

2. **Tree Preservation Guidelines** prepared by the Consulting Arborist should be included on all plans.
3. No underground services including utilities, sub-drains, water or sewer should be placed in the **TREE PROTECTION ZONE**. To minimize impacts to trees, locate underground services to provide as much room as possible from trees identified for preservation.
4. Any herbicides placed under paving materials must be safe for use around trees and labeled for that use.
5. Irrigation systems should be designed to avoid trenching within the **TREE PROTECTION ZONE**.
6. Do not apply lime to soil for stabilization within 25' of trees to be preserved. Lime is toxic to tree roots.
7. Maintain the existing irrigation system. If the existing irrigation system is not functional, have a temporary system installed (using soaker hoses or pvc laid on the ground and covered with mulch) as soon as possible to supply the trees with water and help them recover and prepare them for impacts associated with the demolition and construction process.

#### **Pre-construction treatments and recommendations**

1. The demolition contractor and construction superintendent shall meet with the Consulting Arborist before beginning work to discuss work procedures and tree protection.
2. Fence all trees to be retained to completely enclose the **TREE PROTECTION ZONE** prior to demolition, grubbing or grading. Fences shall be 6' chain link held in place with rebar 'staples' as required by the City of Walnut Creek. Fences are to remain until all grading and construction is completed. Place weather proof signs, 2' x 2', on the fencing that read "**Tree Protection Zone** Keep Out" (e.g. one sign for each of the four compass points).
3. Where possible, cap and abandon all existing underground utilities within the **TPZ** in place. Removal of utility boxes by hand is acceptable but no trenching should be performed within the **TPZ** in an effort to remove utilities, irrigation lines, etc.

4. Tree(s) to be removed that have branches extending into the canopy of tree(s) to remain should be removed by a qualified arborist and not by demolition or construction contractors. The qualified arborist shall remove the tree in a manner that causes no damage to the tree(s) and understory to remain. Stumps shall be ground below grade.
5. Any brush clearing required within the **TREE PROTECTION ZONE** shall be accomplished with hand-operated equipment.
6. Any work within the **TREE PROTECTION ZONE** shall be approved and monitored by the Consulting Arborist.
7. Prune trees to be preserved to provide adequate clearance and correct any existing defects in structure. All pruning shall be completed by a Certified Arborist or Tree Worker and adhere to the latest edition of the ANSI Z133 and A300 standards as well as the *Best Management Practices -- Tree Pruning* published by the International Society of Arboriculture.
8. All tree work shall comply with the Migratory Bird Treaty Act as well as California Fish and Wildlife code 3503-3513 to not disturb nesting birds. To the extent feasible tree pruning and removal should be scheduled outside of the breeding season. Breeding bird surveys should be conducted prior to tree work. Qualified biologists should be involved in establishing work buffers for active nests.
9. Apply and maintain 4-6" of wood chip mulch within the **TREE PROTECTION ZONE**.

#### **Recommendations for tree protection during construction**

1. Prior to beginning work, all contractors working in the vicinity of trees to be preserved are required to meet with the Consulting Arborist at the site to review all work procedures, access routes, storage areas and tree protection measures.
2. If injury should occur to any tree during construction, it should be evaluated as soon as possible by the Consulting Arborist so that appropriate treatments can be applied.
3. Fences have been erected to protect trees to be preserved. Fences define a specific **TREE PROTECTION ZONE** for each tree or group of trees. Fences are to remain until all site work has been completed. Fences may not be relocated or removed without permission of the Consulting Arborist. Fences may be temporarily moved if necessary.
4. Construction trailers, traffic and storage areas must remain outside TPZ fenced areas at all times.
5. Prior to grading, pad preparation, excavation for foundations/footings/walls, trenching, trees may require root pruning outside the **TREE PROTECTION ZONE** by cutting all roots cleanly to the depth of the excavation. Roots shall be cut by manually digging a trench and cutting exposed roots with a saw, with a vibrating knife, rock saw, narrow trencher with sharp blades, or other approved root pruning equipment. The Consulting Arborist will identify where root pruning is required and monitor all root pruning activities.
6. All underground utilities, drain lines or irrigation lines should be routed outside the **TREE PROTECTION ZONE**. If lines must traverse through the protection area, they shall be tunneled or bored under the tree as directed by the Consulting Arborist.
7. No materials, equipment, spoil, waste or wash-out water may be deposited, stored, or parked within the **TREE PROTECTION ZONE** (fenced area).

8. Any additional tree pruning needed for clearance during construction must be performed by a qualified arborist and not by construction personnel.
9. If temporary haul or access roads must pass over the root area of trees to be retained, a road bed of 6" of mulch or gravel shall be created to protect the soil. The road bed material shall be replenished as necessary to maintain a 6" depth.

**Maintenance of impacted trees**

Trees preserved at the Second and Main Street site may experience a physical environment different from that pre-development. As a result, tree health and structural stability should be monitored. Occasional pruning, fertilization, mulch, pest management, replanting and irrigation may be required.

**HortScience, Inc.**



Maryellen Bell  
Consulting Arborist #5643A

**Attached:**     ***Tree Assessment Form***  
  
                  ***Tree Assessment Map***  
  
                  ***Tree Appraisal***

# Tree Assessment

Second & N. Main  
Walnut Creek, CA  
May 20, 2016



Tree No.	Species	Trunk Diameter (in.)	Protected Tree?	Condition 1=poor 5=excellent	Suitability for Preservation	Comments
1	Coast redwood	19	No	5	High	Some drought damage; new growth.
2	Chinese pistache	12	No	5	High	Multiple branch attachments@6';epicormic growth; twig dieback.
3	Chinese pistache	9	No	4	High	Multiple branch attachments@7'; twig dieback.
4	Chinese pistache	9	No	3	Low	Leans N; poor form and structure; twig dieback; canopy one-side to S.
5	Valley oak	26	Yes	4	High	Twig and branch dieback; long lateral limb touching ground on E.
6	Valley oak	9	Yes	4	High	Twig dieback; high narrow crown.
7	Pyracantha	5,4,3,2,2	No	2	Low	Branch and twig dieback; poor form and structure.
8	Glossy privet	6,4,4,1	No	3	Moderate	History of branch failure.
9	Sawleaf zelkova	17,13	No	3	Moderate	Long lateral limbs; twig dieback; codominant @ 2'; included bark; codominant @ 4'.
10	Sawleaf zelkova	9,7,5	No	3	Moderate	Codominant @ base; codominant @ 2'; twig and branch dieback; wire girdling branch.
11	Sawleaf zelkova	18	No	3	Low	Growing at fence line; metal wire embedded in trunk on E @ 5'; has been topped in past; poor form and structure.
12	Silver dollar tree	40, 22	No	3	Moderate	Codominant @ 3'; twig and branch dieback; beetle activity; somewhat suppressed on N from pine.
13	Monterey pine	40, 22	No	3	Moderate	Twig and branch dieback; thin canopy; leans S.
14	Silver dollar tree	36,3,2,2,1	No	3	Low	Codominant @ base with trunk failure; Codoinant trunk @ 4' on E; poor form and structure; poor branch attachment on E @ 8'.
15	Valley oak	15	Yes	3	Low	Off-site; suppressed by off site oak; branch and twig dieback; epicormic growth; poor pruning cuts; fungi growth on E branch @ 15'; poor form and structure.
16	Valley oak	23,16	Yes	3	Moderate	Off-site; no tag; epicormic growth; thin canopy.
17	Valley oak	17	Yes	4	High	Off-site; leans W; epicormic growth; thin canopy.

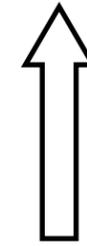
# Tree Assessment

Second & N. Main  
Walnut Creek, CA  
May 20, 2016



Tree No.	Tree Species	Trunk Diameter (in.)	Protected Tree?	Condition 1=poor 5=excellent	Suitability for Preservation	Comments
18	Sawleaf zelkova	15,15,15	No	2	Low	Has been topped in the past; codominant @ base; N trunk is codominant @ 3'; rebar embedded in S trunk at 6'; tree displacing parking lot.
19	Valley oak	10	Yes	4	High	Tall narrow crown; leans E over building; codominant @ 8'; suppressed by off-site oak.
20	California black walnut	4,4,3,3	Yes	3	Low	Off-site; no tag; suppressed under sycamore; growing between fence lines; poor pruning cuts.
21	London plane	30	No	4	High	Off-site; no tag; good color; nice tree.
22	California black walnut	6,5,4	Yes	2	Low	Codominant @ base growing next to building; been topped in past; twig and branch dieback.
23	Valley oak	31	Yes	4	High	Off-site; codominant @ 5'; canopy over building; twig and branch dieback.
24	Valley oak	15	Yes	4	High	Off-site; trunk 7' from building; canopy extends over building; twig and branch dieback; epicormic growth.
25	Valley oak	22	Yes	4	High	Off-site; trunk 5' from building; canopy over building; twig and branch dieback; epicormic growth.
26	Valley oak	16	Yes	3	Moderate	Off-site; trunk 5' from building; tall narrow crown; twig and branch dieback; thin crown; epicormic growth.
27	Canary Island pine	13	No	4	High	Off-site; 5' from building; canopy slightly over building; nice color.
28	Canary Island pine	11	No	4	High	Off-site; 4.5' from building; canopy over building; poor pruning cuts; nice color.
29	Valley oak	9,7	Yes	4	High	Off-site; trunk 9' from building; canopy slightly over building; codominant @ base; twig and branch dieback; thin crown; epicormic growth.
30	Valley oak	20	Yes	5	High	Off-site; trunk 6' from building; canopy over building; twig and branch dieback; epicormic growth.
31	English walnut	10,10,8,8, 8,7,6	No	3	Low	Thin canopy; multiple cavities in branches; multiple trunks @ base; twig dieback; poor pruning cuts.

# Tree Assessment Map



**Second & Main**  
Walnut Creek, CA

*Prepared for:*  
**Hall Equities Group**  
Walnut Creek, CA

June 2016

No Scale

**Notes:**

- Base map provided by:  
Aliquot Associates, Inc.  
Walnut Creek, CA
- Driplines and numbered tree locations  
are approximate.



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# Tree Appraisal

Tree No.	Species	Trunk Diameter (in.)	Heritage Tree?	Appraised Value
1	Coast redwood	19	No	4800
2	Chinese pistache	12	No	3150
3	Chinese pistache	9	No	1400
4	Chinese pistache	9	No	1000
5	Valley oak	26	Yes	14650
6	Valley oak	9	Yes	1800
7	Pyracantha	5,4,3,2,2	No	100
8	Glossy privet	6,4,4,1	No	200
9	Sawleaf zelkova	17,13	No	3950
10	Sawleaf zelkova	9,7,5	No	1350
11	Sawleaf zelkova	18	No	2800
12	Silver dollar tree	40, 22	No	17650
13	Monterey pine	40, 22	No	5000
14	Silver dollar tree	36,3,2,2,1	No	11400
15	Valley oak	15	Yes	4150
16	Valley oak	23,16	Yes	14300
17	Valley oak	17	Yes	7400
18	Sawleaf zelkova	15,15,15	No	3500
19	Valley oak	10	Yes	2350
20	California black walnut	4,4,3,3	Yes	300
21	London plane	30	No	10550
22	California black walnut	6,5,4	Yes	250
23	Valley oak	31	Yes	24000
24	Valley oak	15	Yes	5800
25	Valley oak	22	Yes	12350
26	Valley oak	16	Yes	4700
27	Canary Island pine	13	No	2600
28	Canary Island pine	11	No	1900
29	Valley oak	9,7	Yes	3350
30	Valley oak	20	Yes	13150
31	English Walnut	10,10,8,8,8,7,6	No	1200

\$181,100.00