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Department of Conservation and Development

Preliminary Arborist Report

**Senior Housing
Contra Costa County, CA**

**PREPARED FOR
Speiker Senior Development Partners
2 Las Estrellas Loop
Rancho Mission Viejo, CA 92694**

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**Preliminary Arborist Report
Senior Housing
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Table of Contents

	Page
Introduction and Overview	1
Tree Assessment Methods	1
Description of Trees	2
Suitability for Preservation	5
Preliminary Evaluation of Impacts	7
Preliminary Mitigation Recommendations	10
Preliminary Tree Preservation Guidelines	10

List of Tables

Table 1. Tree condition and frequency of occurrence	2
Table 2. Tree suitability for preservation	6
Table 3. Trees preliminarily identified for preservation	8

Exhibits

Tree Assessment Form

Tree Assessment Map

Preliminary Arborist Report

Senior Housing

Contra Costa County, CA

Introduction and Overview

Spieker Senior Development Partners is proposing to redevelop a 30+ acre site in Contra Costa County. Currently the site is mostly open, rolling hills with a residential building and outbuildings at the west end. With development plans still in the conceptual stage, HortScience | Bartlett Consulting (HBC), Divisions of the F. A. Bartlett Tree Expert Co., was asked to prepare a **Preliminary Arborist Report** for the project.

This report provides the following information:

1. Assessment of the health and structural condition of the trees within the proposed project area based on a visual inspection from the ground.
2. A preliminary assessment of impacts to trees from the proposed changes and identification of trees for preservation and removal.
3. Preliminary guidelines for tree preservation during the design, construction and maintenance phases of development.

Tree Assessment Methods

Trees were assessed in March of 2020. The assessment included all trees 6" in diameter and greater, located within and adjacent to the proposed project area. 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 0 – 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 that 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

Four hundred and eighty-five (485) trees representing 28 species were evaluated (Table 1). Forty-three (43) off-site trees, with portions of their canopy extending onto the development site, were included in the assessment (#191, 192, 195, 260, 415, 417, 423, 425-427, 429, 436-450 and 466-481). Descriptions of each tree are found in the **Tree Assessment Form** and locations are shown on the **Tree Assessment Map** (see Exhibits).

**Table 1. Condition ratings and frequency of occurrence of trees
Senior Housing – Contra Costa County, CA**

Common Name	Scientific Name	Condition				Total
		Dead (0)	Poor (1-2)	Fair (3)	Good (4-5)	
Bailey acacia	<i>Acacia baileyana</i>	-	1	-	-	1
Calif. buckeye	<i>Aesculus californica</i>	-	-	-	2	2
River sheoak	<i>Allocasuarina cunninghamiana</i>	-	-	13	2	15
Ash sp.	<i>Ash sp.</i>	-	1	-	-	1
Arizona cypress	<i>Cupressus arizonica</i>	-	2	3	-	5
River red gum	<i>Eucalyptus camaldulensis</i>	-	26	48	15	89
Blue gum	<i>Eucalyptus globulus</i>	-	-	1	2	3
Manna gum	<i>Eucalyptus viminalis</i>	-	-	3	1	4
Evergreen ash	<i>Fraxinus uhdei</i>	-	-	1	-	1
Calif. black walnut	<i>Juglans hindsii</i>	-	10	-	-	10
Privet	<i>Ligustrum japonicum</i>	-	-	2	1	3
Olive	<i>Olea europaea</i>	-	-	-	2	2
Canary Island palm	<i>Phoenix canariensis</i>	-	-	-	1	1
Canary island pine	<i>Pinus canariensis</i>	-	-	-	1	1
Aleppo pine	<i>Pinus halepensis</i>	-	-	1	2	3
Monterey pine	<i>Pinus radiata</i>	1	-	2	-	3
Foothill pine	<i>Pinus sabiniana</i>	-	-	-	1	1
Chinese pistache	<i>Pistacia chinensis</i>	-	-	1	-	1
Plum	<i>Prunus domestica</i>	-	1	-	-	1
Almond	<i>Prunus dulcis</i>	-	3	12	3	18
Coast live oak	<i>Quercus agrifolia</i>	-	-	-	1	1
Valley oak	<i>Quercus lobata</i>	-	8	100	191	299
Black locust	<i>Robinia pseudoacacia</i>	-	-	1	-	1
Arroyo willow	<i>Salix lasiolepis</i>	-	5	1	-	6
Calif. pepper	<i>Schinus molle</i>	-	-	5	-	5
Siberian elm	<i>Ulmus pumila</i>	-	-	-	1	1
Calif. bay	<i>Umbellularia californica</i>	-	-	2	2	4
Mexican fan palm	<i>Washingtonia robusta</i>	-	-	1	2	3
Total		1	57	197	230	485
		<1%	12%	41%	47%	100%

The 30.8-acre site is currently occupied by an older ranch house with several outbuildings, without intensive agricultural activities. The landscape includes a series of open, rolling hills dotted with mature valley oaks. The majority of the non-native, landscape trees were concentrated around the driveway and residence/outbuildings. Native oaks were spread across the site, with more than a hundred concentrated along the driveway and old Seven Hills Ranch Rd. that cuts across the property.

Valley oak (299 trees) and river red gum (89 trees) were the most common species and represented 80% of the trees assessed. Valley oaks dominated the landscape and formed the backbone of what is a remnant oak savannah. They were growing among the red river gums along the entry to the property and in groups along old Seven Hills Ranch Rd., west of the existing residence and generally along the perimeters of the property. One-hundred and seventy-six (176) were young trees with trunk diameters from 6" to 12", 91 were semi-mature (12" to 24"), 28 were mature (24" to 36") and 4 were over-mature (>36" – Photo 1). One hundred ninety-one were in good to excellent condition, 100 were in fair and only 8 were in poor.

Photo 1: Looking northeast at valley oak #428, one of a handful of valley oaks with trunk diameters above 36" on the site. Valley oak #428 measured 50" in diameter and was in good condition, with a spreading crown.



Most of the 89 river red gums lined the entry to the property (Photo 2, following page), with the remaining ~30 growing around the residence and outbuildings. Generally, those along the entry were young to semi-mature, with an average trunk diameter of 14", and those around the residence were mature with an average trunk diameter of 22". River red gum had not performed as well as the native oaks and 15 were in good condition, 48 were in fair and 26 were in poor.

Almond (18 trees) and Calif. black walnut (10 trees) represented a relatively small percent of the overall population and were likely remnants of the farming that once occurred. Groups of almonds were located in the western corner of the property and along the road. They were multi-stemmed and in fair condition. Calif. black walnuts were in poor condition.

Fifteen (15) off-site river sheoaks were assessed in the northeast corner of the site. The trees were on the adjacent Seven Hills School property, with portions of their crowns extending onto the development site. They were semi-mature, with 13 in fair condition and 2 in good. They formed a solid row and provided screening along the property line.



Photo 2 (L): Looking west along the entry drive onto the property from Seven Hills Ranch Road. The entry was lined with ~60 young to semi-mature river red gums and ~20 young to semi-mature valley oaks.

In general, valley oaks were better adapted to the environmental condition at the site and had performed better in the landscape.

The remaining 23 species were represented by 6 or fewer individuals and included the following:

- Six (6) arroyo willows, all of which were growing in the public right-of-way between the property and Glen View Terr. To the south. As is typical of the species, most of the arroyo willows continue to grow vigorously despite having failed at the base, with trunks laying on the ground. Five (5) were in poor condition and #470 was in fair.
- Five (5) Calif. peppers were assessed, all of which had been planted around the residence and outbuildings. Three were mature and 2 were young. All were in fair condition.
- Five (5) Arizona cypress had also been planted around the residence and outbuildings. Three (3) were young and 2 were mature and condition varied from fair (3 trees) to poor (2 trees).
- Four (4) Calif. bay laurels were growing on the western property lines. They were young to semi-mature and in fair (2 trees) and good (2 trees) condition.
- Four (4) manna gums were growing at the top of a steep cliff in the northeast corner of the site. They were semi-mature to mature, with #451 in good condition and #452-454 in fair.
- Three (3) Mexican fan palms, including #125 near the residence and #353 and 374 growing in and around the drainage, mid-property.
- Three (3) Monterey pines, all of which had been planted around the residence. They were mature, with trunk diameters from 22" to 25". #146 was dead and #174 and 175 were in fair condition.
- Three (3) Aleppo pines, including #173 and 200 growing around the residence and #426 was off-site in the southeast corner of the property. They were young (#200) and mature (#173 and 426) and in fair to good condition.

- Three (3) privets, with #123 and 124 growing around the residence and #472 located in the public right-of-way to the south. They were young and in fair to good condition.
- Three (3) blue gum eucalyptus, with #242 and 251 growing in the northwest corner of the site and #425 located in the southeast corner of the property. They were mature and in fair to good condition.
- Two (2) multi-stemmed olives and 2 Calif. buckeyes. All were semi-mature and in good condition.
- One (1) each of Siberian elm, black locust, coast live oak, plum, Chinese pistache, foothill pine, Canary Island pine, Canary Island palm, evergreen ash, ash sp. and Baileys acacia.

Among the off-site trees was a group of 16 located in the public right-of-way between the property and Glen View Terr. to the south. These trees were included in the assessment in anticipation of possible construction and included primarily young to semi-mature valley oaks in good condition and mature arroyo willows in poor condition.

For any 'undeveloped property' within any district, Contra Costa County Tree Protection and Preservation Ordinance 816-6 defines any tree with a trunk diameter of 6.5" or greater as 'Protected'. Based on this definition, 434 of the trees met Contra Costa County's definition for 'Protected' tree status. Protected status of each tree is provided in the **Tree Assessment Form** (see Exhibits).

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. Red river gums #4, 31 and 54 and valley oak #389 are examples of such trees.

- **Species response**
There is a wide variation in the response of individual species to construction impacts and changes in the environment. For instance, valley oak and river red gum are moderately tolerant of construction impacts. While Calif. black walnut is intolerant of root loss.
- **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.
- **Species invasiveness**
Species that 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. Contra Costa County is part of the Central West Floristic Province. Red river gum, Calif. pepper and European olive were the only species assessed at the site that are listed as having 'limited' invasiveness.
- **Fire Risk**
Several of the species assessed at the site are identified by the California Invasive Plant Inventory as "increasing risk of catastrophic wildland fires". This is NOT something we consider when determining an individual tree's Suitability for Preservation and was not taken into account in the ratings described in Table 2 and in the **Tree Assessment Form**. However, we were asked to address the fact that several of the species, including river red gum, blue gum eucalyptus and Mexican fan palm can contribute to increased risk for wildland fires and that these species may not be appropriate for retention, irrespective of their Suitability for Preservation ratings.

Each tree was rated for suitability for preservation based upon its age, health, structural condition and ability to safely coexist within a development environment (see **Tree Assessment Forms** in Exhibits, and Table 2). 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
Senior Housing – Contra Costa County, CA**

High	These are trees with good health and structural stability that have the potential for longevity at the site. One hundred and thirty-two (132) trees had high suitability for preservation, including: 115 valley oaks, 4 river red gums, 2 Mexican fan palms, 2 Calif. bays, 2 blue gum eucalyptus and one (1) each of the following Siberian elm, olive, Foothill pine, coast live oak, Canary Island palm, Calif. buckeye and Aleppo pine.
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**Table 2: Tree suitability for preservation, continued
Senior Housing – Contra Costa County, CA**

Moderate

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. Two hundred and forty (240) trees had moderate suitability for preservation, including: 158 valley oaks, 39 river red gums, 13 river sheoaks, 11 almonds, 4 manna gums, 3 privets, 2 Calif. bays, 2 Aleppo pines, and one (1) each of Monterey pine, evergreen ash, Canary Island pine, Calif. pepper, Arizona cypress, Mexican fan palm, olive and Calif. buckeye.

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. The species or individual tree may possess either characteristics that are undesirable in landscape settings or be unsuited for use areas. One hundred and thirteen (113) trees had low suitability for preservation, including: 46 red river gum, 26 valley oak, 10 Calif. black walnuts, 7 almonds, 6 arroyo willows, 4 Calif. peppers, 4 Arizona cypress, 2 river sheoaks, 2 Monterey pines, and one (1) each of plum, Chinese pistache, black locust, Bailey acacia, ash sp. and blue gum eucalyptus.

Preliminary 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 March 2020 ***Tree Assessment Form*** was the reference point for tree condition and quality. Potential impacts from construction were evaluated using the Preliminary Grading Plan prepared by BKF Engineers, Inc. (dated June 26, 2020).

The plan was preliminary and depicted the layout for a senior living center, with two main areas of construction on the west and east halves of the site. Preliminary grading and retaining wall information were included on the plans, as were tree driplines (except for the trees within the ROW adjacent to Glen View Terrace). Accurate trunk locations, utility, drainage and bioswale information were not included. As such, this assessment of impacts to the trees must be considered preliminary. Additional trees may be identified for preservation or removal as plans are refined.

Club View Terr.

Potential impacts from construction were estimated for each tree. Precise impacts will have to be determined once trees have been located and plotted, and the plans are finalized. The most significant impacts to trees would be associated with demolition and grading of the west and east halves of the site for the construction of the senior living units and associated care facilities.

Based on my review of the Preliminary Grading Plan prepared by BKF Engineers, Inc. 82 trees have been identified for preservation, including some of the largest and most impressive valley oaks on the site (Table 3, following page). Eighty-one (81) of the trees qualified as *Protected*.

All 82 trees preliminarily identified for preservation will need to be accurately located by the surveyors and plotted on the plans. I would also recommend the 16 trees in the ROW adjacent to Glen View Terr. be located, as there may be opportunities for tree preservation in this area.

Club View Terr.

Fifteen (15) of the trees identified for preservation may require design modifications to successfully preserve. Once trunks have been located and plotted on plans, and the plans are refined, we will work with Spieker Development Partners to design around all of the trees and provide sufficient space for successful preservation.

The remaining 403 trees have been identified for removal to accommodate the proposed development. Trees identified for removal included 149 landscape trees along the driveway and around the existing residence. Three hundred and fifty-three (353) of the trees identified for removal qualified as *Protected*.

**Table 3. Trees Preliminarily Identified for Preservation
 Senior Housing – Contra Costa County CA.**

Tag #	Species	Diameter	Protected?	Recommendation
182	Valley oak	26	Yes	May require design mod.
183	Valley oak	35	Yes	May require design mod.
194	Valley oak	8	Yes	Preserve , off-site
195	Valley oak	13	Yes	Preserve , off-site
232	Valley oak	15,12	Yes	Preserve , 20' from grading
233	Valley oak	16	Yes	Preserve , 15'-20' from grading
252	Valley oak	33	Yes	May require design mod.
253	Ash sp.	13,12	Yes	Preserve , outside impacts
254	Valley oak	58	Yes	Preserve , outside impacts
255	Valley oak	26	Yes	Preserve , outside impacts
256	Calif. bay	16,15,14	Yes	Preserve , outside impacts
257	Calif. bay	7	Yes	Preserve , outside impacts
258	Calif. bay	13,12	Yes	Preserve , outside impacts
259	Valley oak	32	Yes	Preserve , outside impacts
260	Valley oak	10	Yes	Preserve , outside impacts
261	Valley oak	32	Yes	Preserve , outside impacts
262	Valley oak	15	Yes	Preserve , 20' from grading
263	Valley oak	10	Yes	Preserve , 12' from grading
264	Valley oak	13	Yes	Preserve , outside impacts
265	Valley oak	9	Yes	Preserve , outside impacts
266	Valley oak	16	Yes	Preserve , outside impacts
267	Almond	10,6,6,6,6,6	Yes	Preserve , outside impacts
268	Valley oak	10	Yes	Preserve , outside impacts
269	Valley oak	19	Yes	Preserve , outside impacts
270	Valley oak	23	Yes	Preserve , outside impacts
271	Valley oak	11	Yes	Preserve , outside impacts
272	Valley oak	11,6	Yes	Preserve , outside impacts
273	Valley oak	7	Yes	Preserve , outside impacts
274	Valley oak	9	Yes	Preserve , outside impacts
275	Valley oak	7	Yes	Preserve , outside impacts
276	Valley oak	11,9	Yes	Preserve , outside impacts
277	Valley oak	23	Yes	Preserve , outside impacts
278	Valley oak	14,11	Yes	Preserve , outside impacts
280	Valley oak	29	Yes	Preserve , ~16' from grading
285	Valley oak	31	Yes	Preserve , outside impacts
287	Valley oak	18	Yes	Preserve , outside impacts
288	Valley oak	28	Yes	Preserve , outside impacts
289	Valley oak	31	Yes	Preserve , ~20' from grading
290	Valley oak	28	Yes	Preserve , outside impacts
291	Valley oak	22	Yes	Preserve , ~15' from grading

(Continued, following page)

**Table 3. Trees Preliminarily Identified for Preservation, continued
 Senior Housing – Contra Costa County CA.**

297	Valley oak	22	Yes	Preserve , ~20' from grading
298	Valley oak	17	Yes	Preserve , ~12' from grading
352	Valley oak	22,7	Yes	May require design mod.
353	Mexican fan palm	18	Yes	May require design mod.
354	Valley oak	10	Yes	May require design mod.
355	Almond	8,3	No	May require design mod.
356	Valley oak	22	Yes	May require design mod.
359	Valley oak	31	Yes	Preserve , 25' from grading on 3 sides
370	Valley oak	51	Yes	Preserve , 40' from grading on 3 sides
386	Valley oak	24	Yes	Preserve , ~25' from grading
387	Valley oak	15	Yes	May require design mod.
389	Valley oak	42	Yes	Poor health
412	Valley oak	16	Yes	May require design mod.
415	Valley oak	25	Yes	Preserve , off-site, ~25' from grading
416	Valley oak	13	Yes	Preserve , ~10' from grading
425	Blue gum	20	Yes	Preserve , off-site
426	Aleppo pine	35,16	Yes	Preserve , off-site
427	Valley oak	19	Yes	Preserve , off-site
428	Valley oak	50	Yes	Preserve , 30'-50' from grading on all sides
429	Valley oak	17	Yes	Preserve , ~15' from grading
430	Valley oak	9	Yes	May require design mod.
435	Valley oak	15	Yes	Preserve , ~20' from grading
436	River sheoak	14	Yes	Preserve , off-site
437	River sheoak	25	Yes	Preserve , off-site
438	River sheoak	15	Yes	Preserve , off-site
439	River sheoak	12	Yes	Preserve , off-site
440	River sheoak	14	Yes	Preserve , off-site
441	River sheoak	15	Yes	Preserve , off-site
442	River sheoak	16	Yes	Preserve , off-site
443	River sheoak	18	Yes	Preserve , off-site
444	River sheoak	20	Yes	Preserve , off-site
445	River sheoak	15	Yes	Preserve , off-site
446	River sheoak	13	Yes	Preserve , off-site
447	River sheoak	17	Yes	Preserve , off-site
448	River sheoak	14	Yes	Preserve , off-site
449	River sheoak	12,8	Yes	Preserve , off-site
450	River sheoak	8	Yes	Preserve , off-site
451	Manna gum	26	Yes	May require design mod.
452	Manna gum	15	Yes	May require design mod.
453	Manna gum	17,16	Yes	May require design mod.
454	Manna gum	15,13,8	Yes	May require design mod.
455	Valley oak	17	Yes	Preserve , ~15' from grading

Preliminary Mitigation Recommendations

I was asked by Spieker Senior Development Partners to provide recommendations for mitigation of trees proposed for removal as part of the project. In general, I consider the greatest loss of current and potential future environmental benefits to be associated with the removal of native tree species of moderate and high suitability for preservation. These are the trees we would expect to be the best adapted to site conditions and have the greatest potential for longevity.

Based on my review of the data, there were 230 native trees of moderate and high suitability for preservation proposed for removal as part of the project, 193 of which qualified as *Protected*. I recommend mitigation of all *Protected* native trees of moderate and high suitability for preservation at a 1:1 ratio with 15-gallon container size.

In my experience, 15-gallon containers have been in the pots/nursery for the least amount of time and have the greatest potential to have a well formed, but not defective, root system. These trees also often catch-up with 24" box trees in terms of overall size and development, within a few years of being planted.

Where the immediate visual impact of a larger tree is desired, consider using a 24" or 48" box. I would recommend that each 24" box be counted as two (2) 15 gallon trees and each 48" box be counted as four (4) 15-gallon trees.

Valley and coast live oak are well adapted to, and have performed well on the site and would be appropriate to consider for mitigation plantings. Other California native trees that can be expected to perform well would include California sycamore (*Platanus racemosa*), California buckeye (*Aesculus californica*), and Toyon (*Heteromeles arbutifolia*).

Preliminary Tree Preservation Guidelines

The following recommendations will help reduce impacts to trees from development as well as maintain and improve their health and vitality through the clearing, grading and construction phases.

Impacts can be minimized by coordinating demolition and construction activities within the **TREE PROTECTION ZONE**. The following recommendations will help maintain and improve the health and vitality of trees preserved at the Senior Housing site.

Design recommendations

1. Have the vertical and horizontal locations of all the trees identified for preservation established and plotted on all plans. Forward these plans to the Consulting Arborist for review and comment. Additional trees may be identified for preservation or removal as a result.
2. Project plans affecting the trees shall be reviewed by the Consulting Arborist with regard to tree impacts. These include, but are not limited to, demolition plans, site plans, improvement plans, utility and drainage plans, grading plans, and landscape and irrigation plans.
3. A **Tree Protection Zone** shall be established around each tree to be preserved. No grading, excavation, construction or storage of materials shall occur within that zone. For design purposes, the dripline shall be considered the minimum **Tree Protection Zone**. Once trees have been located and plotted on plans and a final determination of which trees will be preserved is made, specific **TREE PROTECTION ZONES** will be identified for each tree to be preserved.
4. Include **Tree Preservation Notes**, trees to be preserved and **Tree Protection Zones (TPZs)** on all construction plans.

5. Underground services including utilities, sub-drains, water or sewer shall be routed around the **TREE PROTECTION ZONE**. Where encroachment cannot be avoided, special construction techniques such as hand digging or tunneling under roots shall be employed where necessary to minimize root injury.
6. Irrigation systems must be designed so that no trenching will occur within the **Tree Protection Zone**.
7. As trees withdraw water from the soil, expansive soils may shrink within the root area. Therefore, foundations, footings and pavements on expansive soils near trees should be designed to withstand differential displacement.

Pre-construction treatments and recommendations

1. Fence all trees to be retained to completely enclose the **Tree Protection Zone** prior to demolition, grubbing or grading. Fences shall be 6 ft. chain link or equivalent as approved by the Consulting Arborist. Fences are to remain until all grading and construction is completed.
2. Prune trees to be preserved to clean the crown of dead branches 2" and larger in diameter and raise canopies as needed for construction activities. All pruning shall be done by a State of California Licensed Tree Contractor (C61/D49). All pruning shall be done by Certified Arborist or Certified Tree Worker in accordance with the Best Management Practices for Pruning (International Society of Arboriculture, 2002) and adhere to the most recent editions of the American National Standard for Tree Care Operations (Z133.1) and Pruning (A300). The Consulting Arborist will provide pruning specifications prior to site demolition. Branches extending into the work area that can remain following demolition shall be tied back and protected from damage.
3. 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. Tree pruning and removal should be scheduled outside of the breeding season to avoid scheduling delays. Breeding bird surveys should be conducted prior to tree work. Qualified biologists should be involved in establishing work buffers for active nests.
4. Tree(s) to be removed that have branches extending into the canopy of tree(s) to remain must 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. Apply and maintain 3-4" of wood chip mulch within the **TREE PROTECTION ZONE**. Use of course wood chips from trees removed on the site is ideal for this purpose.

Recommendations for tree protection during construction

1. Prior to beginning work, the 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. All contractors shall conduct operations in a manner that will prevent damage to trees to be preserved.
3. Any excavation within the dripline or other work that is expected to encounter tree roots should be approved and monitored by the Consulting Arborist. Roots shall be cut by manually digging a trench and cutting exposed roots with a sharp saw. The Consulting Arborist will identify where root pruning is required and monitor all root pruning activities.

4. 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.
5. Construction trailers, traffic and storage areas must remain outside fenced areas at all times.
6. Prior to grading, pad preparation, excavation for foundations/footings/walls, trenching, etc. 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, 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.
7. All underground utilities, drain lines or irrigation lines shall 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.
8. No materials, equipment, spoil, waste or wash-out water may be deposited, stored, or parked within the **TREE PROTECTION ZONE** (fenced area).
9. Any additional tree pruning needed for clearance during construction must be performed by a qualified arborist and not by construction personnel.
10. Any herbicides placed under paving materials must be safe for use around trees and labeled for that use. Any pesticides used on-site must be tree-safe and not easily transported by water.
11. Any roots damaged during grading or construction shall be exposed to sound tissue and cut cleanly with a saw.
12. 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

Preserved trees will 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. In addition, provisions for monitoring both tree health and structural stability following construction must be made a priority. As trees age, the likelihood of failure of branches or entire trees increases. Therefore, annual inspection for structural condition is recommended.

HortScience | Bartlett Consulting



John Leffingwell
Board Certified Master Arborist WE-3966B
Registered Consulting Arborist #442



Exhibits

Tree Assessment Form

Tree Assessment Map



Tree Assessment

Spieker Development Partners
 Contra Costa County, California
 March 2020



TREE No.	SPECIES	SIZE DIAMETER (in inches)	PROTECTED	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
1	Valley oak	6	No	4	Moderate	Under utility lines; lost central leader.
2	Valley oak	7	Yes	4	Moderate	Under utility lines; codominant at 8'.
3	Valley oak	7	Yes	3	Moderate	Under utility lines; bows to north.
4	River red gum	36	Yes	2	Low	Extensive decay; topped for utility clearance; one upright stem remains.
5	River red gum	14,6	Yes	2	Low	Topped for utility lines; poor form and structure.
6	River red gum	24	Yes	3	Low	Main stem bows to west; decay present.
7	River red gum	14	Yes	3	Low	Severe bow to south.
8	River red gum	20,17,8,7	Yes	1	Low	Multiple attachments at base; topped for utility line clearance; extensive twig dieback.
9	Valley oak	7	Yes	3	Low	Grows within base of tree #8; poor form and structure.
10	River red gum	12,10,10,6,5,4	Yes	3	Low	Multiple attachments at base; poor form and structure.
11	River red gum	7	Yes	3	Low	Topped for utility lines; single stem.
12	Valley oak	8	Yes	4	Moderate	Sinuuous form; single stem.
13	Valley oak	7	Yes	4	Moderate	Sinuuous form; good upright structure.
14	Valley oak	11	Yes	4	Moderate	Multiple attachments at 8'; topped for utility line
15	Valley oak	16	Yes	3	Low	Topped for utility lines; heavy lateral to east.
16	River red gum	6,4	No	2	Low	Codominant at base; topped for utility lines; poor form and structure.
17	River red gum	5,5	No	1	Low	Codominant at 4'; poor form and structure; decay in upright leader.
18	River red gum	12	Yes	3	Moderate	Codominant high in crown; upright form.
19	River red gum	6,5,5	Yes	3	Low	Multiple attachments at base; topped for utility line clearance.
20	River red gum	16,5,4	Yes	1	Low	Declining; poor color; thin crown; twig dieback.
21	Valley oak	6	No	3	Moderate	Codominant high in crown; suppressed.

Tree Assessment

Spieker Development Partners
 Contra Costa County, California
 March 2020



TREE No.	SPECIES	SIZE DIAMETER (in inches)	PROTECTED	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
22	River red gum	16,6	Yes	1	Low	Failing at base; trunk decay; poor color; declining.
23	River red gum	6,4,3	Yes	1	Low	4" stem failing; twig dieback.
24	River red gum	13	Yes	4	Moderate	Good upright form; full crown.
25	Valley oak	9	Yes	4	Moderate	Slight lean to north; codominant high in crown.
26	River red gum	6,5	No	2	Low	Topped for line clearance; codominant at base.
27	River red gum	10	Yes	2	Low	Topped for line clearance; excessive reprints.
28	River red gum	27,10	Yes	3	Low	27" stem grows through fence to south; heavy weight to south.
29	River red gum	24	Yes	3	Moderate	Sinuous upright form; twig dieback; heavy lateral limbs.
30	River red gum	32	Yes	3	Low	Heavy weight to south; side pruned for utility line clearance.
31	River red gum	13	Yes	1	Low	Extensive basal decay; extensive decay throughout.
32	Valley oak	21,6	Yes	2	Low	Codominant at 4'; twig dieback; thin crown; topped for utility line clearance.
33	Valley oak	14,8	Yes	3	Moderate	Codominant at 3' with included bark; full crown.
34	Almond	10	Yes	3	Low	Poor form and structure; grows through fence.
35	Calif. black walnut	13,8,4	Yes	2	Low	Topped for utility line clearance; extensive dieback.
36	River red gum	24,22	Yes	3	Moderate	Codominant at base; 22" stem has crook high in crown to west.
37	River red gum	19	Yes	3	Low	Codominant high in crown with wide attachment; twig dieback.
38	River red gum	21	Yes	2	Low	Heavy lean to east; poor form; twig dieback.
39	River red gum	13	Yes	3	Low	Codominant high in crown; poor form and structure.
40	River red gum	28	Yes	3	Moderate	Codominant at 20'; one stem bows north; twig dieback.
41	River red gum	8	Yes	3	Moderate	Single stem; high, small crown.

Tree Assessment

Spieker Development Partners
 Contra Costa County, California
 March 2020



TREE No.	SPECIES	SIZE DIAMETER (in inches)	PROTECTED	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
42	River red gum	14	Yes	2	Low	Suppressed by tree #38; poor form and structure; codominant at 15'.
43	River red gum	16	Yes	2	Low	Extensive diebac in upper crown; poor form and structure.
44	River red gum	14	Yes	3	Moderate	Narrow single stem; twig dieback.
45	Valley oak	8	Yes	4	Moderate	Codominant at 5'; full crown.
46	River red gum	17	Yes	3	Low	Narrow form; thin crown; twig dieback.
47	River red gum	23	Yes	3	Moderate	Codominant high in crown; twig dieback; thin crown.
48	River red gum	10	Yes	2	Low	Base sweeps to north; leans north; twig dieback.
49	River red gum	7	Yes	3	Low	Poor form and structure; small, thin crown.
50	River red gum	7	Yes	2	Low	Poor form and structure; suppressed; twig dieback.
51	River red gum	11	Yes	3	Moderate	Tall, narrow form; small crown.
52	River red gum	25	Yes	4	Moderate	Slightly thin; slight crook high in crown.
53	River red gum	15	Yes	3	Moderate	One-sided to north; codominant high in crown.
54	River red gum	21	Yes	2	Low	History of branch failures; decay in north stem.
55	River red gum	8,8	Yes	2	Low	Codominant at base with narrow attachment; narrow form.
56	River red gum	15,14,11	Yes	3	Moderate	Codominant at base and 3'; 14" & 11" stems bow to north; twig dieback.
57	River red gum	6	No	3	Low	Small, thin crown; no vigor; poor form and structure.
58	River red gum	13	Yes	2	Low	Poor form and structure; sap sucker damage; bows to north.
59	River red gum	12,11	Yes	2	Low	Codominant at 1' with included bark; twig dieback.
60	River red gum	8	Yes	3	Low	Sinuuous form; small crown.
61	River red gum	10	Yes	3	Moderate	Tall, narrow form; sweeps at base.
62	Valley oak	9	Yes	4	Moderate	Narrow form; codominant high in crown.

Tree Assessment

Spieker Development Partners
 Contra Costa County, California
 March 2020



TREE No.	SPECIES	SIZE DIAMETER (in inches)	PROTECTED	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
63	River red gum	11	Yes	3	Moderate	Tall, narrow form; sweeps at 4'.
64	River red gum	18	Yes	3	Moderate	Codominant high in crown; slightly thin.
65	River red gum	8,7	Yes	3	Low	Codominant at 1' with narrow attachment; narrow form.
66	Valley oak	11	Yes	4	High	Multiple attachments at 8'; full crown.
67	River red gum	14	Yes	3	Moderate	Codominant high in crown; with wide attachment; twig dieback.
68	River red gum	6	No	3	Low	Poor form and structure; crook high in crown.
69	River red gum	15	Yes	3	Moderate	Leans to northwest; full crown.
70	River red gum	11	Yes	3	Low	Heavy lean tto north; codominant at 15'.
71	River red gum	10	Yes	3	Moderate	Narrow, upright form; minor dieback.
72	Valley oak	8,6	Yes	3	Moderate	Codominant at base with wide attachment; 8" bows north; lower branches dead.
73	River red gum	6	No	1	Low	Partial failure; thin crown.
74	River red gum	17	Yes	4	High	Excellent upright form; good vigor.
75	River red gum	8	Yes	3	Moderate	Narrow form; slightly thin.
76	Valley oak	14,10	Yes	4	High	Codominant at 1'; full, dense crown.
77	Valley oak	15	Yes	3	Moderate	Suppressed and one-sided to east.
78	River red gum	31,23	Yes	4	High	Codominant at 2'; twig and branch dieback; full crown.
79	Valley oak	25	Yes	3	Low	Cavity on west; hollow trunk root and basal decay; twig dieback.
80	River red gum	46,21,8	Yes	4	High	History of branch failures; full, beautiful crown; codominant at 1'.
81	Almond	7,7,6,5,5,4	Yes	2	Low	Basal decay; poor form and structure; twig dieback.
82	Valley oak	8	Yes	3	Moderate	Sinuuous form; within canopy of tree #81.
83	Valley oak	8	Yes	4	Moderate	Multiple attachments at 6'; slightly thin.
84	Valley oak	5,5,3	Yes	4	Moderate	Codominant at 1'; slightly thin.

Tree Assessment

Spieker Development Partners
 Contra Costa County, California
 March 2020



TREE No.	SPECIES	SIZE DIAMETER (in inches)	PROTECTED	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
85	Valley oak	8	Yes	4	Moderate	Codominant at 6'; full crown.
86	Valley oak	6	No	5	High	Good young tree.
87	Valley oak	6	No	4	Moderate	Sinuous form; at fence line; narrow form.
88	Valley oak	6	No	5	High	Good young tree; full crown.
89	Valley oak	7,7	Yes	4	Moderate	Codominant at 2' with seam below attachment; full
90	Valley oak	10	Yes	4	Moderate	One-sided to north.
91	Valley oak	9	Yes	4	Moderate	One-sided to south.
92	Valley oak	11	Yes	4	High	Excellent form and structure; codominant at 18'.
93	Valley oak	7	Yes	4	Moderate	Narrow form; codominant at 6'.
94	Valley oak	7	Yes	4	Moderate	Narrow form; interior tree.
95	Valley oak	17	Yes	4	High	Multiple attachments at 6'; slightly thin; minor dieback.
96	Valley oak	8	Yes	3	Moderate	Trunk bows to north; suppressed.
97	Valley oak	12	Yes	3	Moderate	Multiple attachments at 20'; narrow form.
98	Valley oak	13	Yes	4	Moderate	Codominant at 10'; one-sided and suppressed to south.
99	Valley oak	14	Yes	4	Moderate	Codominant at 8'; one-sided to east; minor dieback.
100	Valley oak	13	Yes	4	Moderate	Codominant at 5' with seam below attachment; full
101	Valley oak	26	Yes	4	Moderate	Multiple attachments at 8'; long laterals; spreading form.
102	Valley oak	9	Yes	5	High	Good young tree; mistletoe; minor twig dieback.
103	Valley oak	9	Yes	4	Moderate	Leans NE.; twig dieback.
104	Valley oak	14	Yes	4	Moderate	Multiple attachments at 10'; to be sided SE.; twig dieback.
105	Valley oak	7	Yes	5	High	Codominant trunks are 8'; mistletoe; minor twig dieback.
106	Valley oak	7	Yes	4	High	Slight lean S.; twig dieback.
107	Valley oak	8	Yes	5	High	Crown bowed N.; mistletoe; minor twig dieback.
108	Valley oak	10	Yes	5	High	Codominant trunks are 6'; wide attachment; minor twig dieback.

Tree Assessment

Spieker Development Partners
 Contra Costa County, California
 March 2020



TREE No.	SPECIES	SIZE DIAMETER (in inches)	PROTECTED	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
109	Valley oak	12	Yes	4	Moderate	Good form; low branches; epicormics/twig dieback.
110	Calif. pepper	11,10,7	Yes	3	Low	Multiple attachments at 2'; one sided S.; trunk decay; twig dieback.
111	Valley oak	7	Yes	3	Moderate	Crowded; leans S.; twig dieback.
112	Calif. pepper	38	Yes	3	Low	Multiple attachments at 8'; one sided SW.; ganoderma; twig dieback.
113	Almond	11	Yes	4	Moderate	One sided W. ; sapsucker damage.
114	Calif. pepper	34	Yes	3	Low	Multiple attachments at 8'; low branches touch the ground; trunk wound N. @ 10'; twig dieback.
115	Valley oak	12	Yes	4	Moderate	Codominant trunks at 10'; asymmetric form; twig dieback.
116	Valley oak	8	Yes	3	Moderate	Crowded; asymmetric form; twig dieback.
117	Valley oak	7	Yes	3	Moderate	Crowded; leans W.; twig dieback.
118	Bailey acacia	14	Yes	2	Low	Trunk wound/decay; leans W.
119	River red gum	34	Yes	3	Moderate	Large stem removed N.; very one sided SW.
120	Evergreen ash	17	Yes	3	Moderate	Codominant trunks at 10'; moderate dieback.
121	Valley oak	7	Yes	3	Moderate	Crowded; leans SW. to horizontal; twig dieback.
122	Valley oak	15	Yes	4	Moderate	Codominant trunks at 12'; intertwined w/ #123; twig dieback.
123	Privet	10	Yes	3	Moderate	Multiple attachments at 10'; intertwined w/ #122.
124	Privet	7,5,5	Yes	3	Moderate	Multiple attachments at 3'; one sided E.
125	Mexican fan palm	14	Yes	4	High	Slight lean S.; pencilling at 20'; 35' of brown trunk.
126	Calif. pepper	11	Yes	3	Moderate	Multiple attachments at 6'; twig dieback.
127	Siberian elm	7	Yes	5	High	Good young tree; basal sprouts.
128	River red gum	59	Yes	4	Moderate	Multiple attachments at 10'; history of branch failures; large trunk wound N.
129	River red gum	23	Yes	3	Moderate	Codominant trunks at 5'; crowded and one sided W.

Tree Assessment

Spieker Development Partners
 Contra Costa County, California
 March 2020



TREE No.	SPECIES	SIZE DIAMETER (in inches)	PROTECTED	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
130	Canary island pine	22	Yes	4	Moderate	Upright form; small crown.
131	Arizona cypress	18	Yes	3	Moderate	Codominant trunks at 8'; a little one sided W.
132	Calif. buckeye	8,7,6,6,5,4,4	Yes	4	Moderate	Multiple attachments at 2'; one sided NE.
133	Valley oak	14	Yes	4	Moderate	Codominant trunks at 10'; intertwined w/ #132; slight lean N.
134	Valley oak	27	Yes	4	Moderate	Multiple attachments at 8'; wide attachment; spreading form; developed on rocks.
135	Valley oak	7	Yes	5	High	Good young tree.
136	Valley oak	14	Yes	5	High	Good form and structure; minor twig dieback.
137	River red gum	19	Yes	2	Low	Strongly bowed W.; cracks forming on tension side.
138	River red gum	10	Yes	3	Moderate	Slight lean W.; narrow form.
139	Arizona cypress	22,9,7	Yes	3	Low	Multiple attachments at 3'; one sided E.; moderate dieback.
140	River red gum	16	Yes	2	Low	Crowded; strong lean SE.
141	River red gum	41	Yes	4	Moderate	Multiple attachments at 12'; one sided SW.; dieback.
142	River red gum	17	Yes	3	Moderate	Crowded; crown bowed SW.
143	Arizona cypress	11	Yes	2	Low	Trunk sweeps S.; moderate dieback.
144	Arizona cypress	9	Yes	3	Low	Narrow form; moderate dieback.
145	Arizona cypress	10	Yes	2	Low	Leans S.; moderate dieback.
146	Monterey pine	22	Yes	0	Low	Dead.
147	River red gum	16	Yes	3	Moderate	Crowded; one sided & bowed W.
148	River red gum	17,15,10	Yes	3	Moderate	Crowded; narrow form; one sided W.
149	River red gum	29	Yes	4	Moderate	Multiple attachments at 15'; low lateral & one sided W.
150	River red gum	14	Yes	3	Moderate	Upright, narrow form; dieback.
151	River red gum	18	Yes	2	Low	One sided E.; moderate dieback.
152	River red gum	20	Yes	4	Moderate	Codominant trunks at 12'; food form; dieback.

Tree Assessment

Spieker Development Partners
 Contra Costa County, California
 March 2020



TREE No.	SPECIES	SIZE DIAMETER (in inches)	PROTECTED	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
153	Valley oak	20	Yes	5	High	Multiple attachments at 4'; good form and structure; minor twig dieback.
154	Valley oak	20	Yes	3	Moderate	Codominant trunks at 6'; small crown; dieback.
155	Valley oak	29	Yes	4	Moderate	Codominant trunks at 5'; spreading form; mistletoe; dieback.
156	River red gum	14	Yes	3	Moderate	Crowded & one sided W.; dieback.
157	River red gum	20	Yes	4	Moderate	Spreading form; low branch S.; dieback.
158	River red gum	25	Yes	3	Moderate	One sided NE.; dieback.
159	River red gum	19	Yes	4	Moderate	Upright, narrow form; dieback.
160	River red gum	25	Yes	4	Moderate	Crowded; asymmetric form; dieback.
161	River red gum	25	Yes	4	Moderate	Crowded; one sided E.; minor dieback.
162	Valley oak	17	Yes	4	Moderate	Crown bowed N.; fair structure; dieback; growing over rocks.
163	Valley oak	36	Yes	4	High	Codominant trunks at 6'; spreading form w/ branches to ground; dieback; growing over rocks.
164	River red gum	12	Yes	3	Low	Crowded & one sided N.; dead top.
165	River red gum	23,17,8	Yes	3	Low	Failed at base and sprouted.
166	River red gum	24	Yes	4	Moderate	Codominant trunks at 12'; good, upright form.
167	River red gum	16	Yes	3	Low	Suppressed; leans W.
168	River red gum	13, 12,10,9	Yes	3	Moderate	Multiple attachments at 2'; upright, narrow form; moderate dieback.
169	River red gum	21	Yes	2	Low	Codominant trunks at 8'; one stem small/dead top.
170	Valley oak	6	No	3	Moderate	Suppressed; leans SW.
171	River red gum	35	Yes	4	High	Multiple attachments at 8'; spreading form; low lateral S.
172	Valley oak	10	Yes	3	Moderate	Crowded; one sided SE.
173	Aleppo pine	23	Yes	4	Moderate	Slight lean S.; good form and structure.

Tree Assessment

Spieker Development Partners
 Contra Costa County, California
 March 2020



TREE No.	SPECIES	SIZE DIAMETER (in inches)	PROTECTED	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
174	Monterey pine	24	Yes	3	Moderate	One sided S.; good form; minor dieback.
175	Monterey pine	25	Yes	3	Low	Poor form and structure; dieback.
176	Valley oak	10	Yes	3	Moderate	Fair form and structure; one sided S.
177	Valley oak	10	Yes	5	High	Good young tree.
178	Valley oak	10,9	Yes	5	High	Codominant trunks at 3' & 6'; seams in attachments; twig dieback.
179	Valley oak	8	Yes	5	High	Slight lean W.; twig dieback.
180	Valley oak	10,9	Yes	5	High	Codominant trunks at 5'; moderate dieback.
181	Valley oak	15	Yes	4	High	Codominant trunks at 7'; crown bowed S.; moderate dieback.
182	Valley oak	26	Yes	3	Moderate	Codominant trunks at 5'; crowded & one sided E.; moderate dieback.
183	Valley oak	35	Yes	4	High	Multiple attachments at 10'; good form and structure; dieback.
184	Almond	7	Yes	3	Moderate	Growing on slope; slight lean S.
185	Valley oak	7	Yes	5	High	Good young tree.
186	Almond	9	Yes	3	Moderate	Slight lean S.; low branch.
187	Almond	8	Yes	3	Low	Slight lean E.; moderate dieback.
188	Calif. bay	6	No	3	Moderate	Crowded; leans N.; bowed trunk.
189	Valley oak	12	Yes	4	High	Codominant trunks at 5'; good form; twig dieback.
190	Almond	11, 7,7,,6	Yes	3	Moderate	Multiple attachments at 1'; one sided SW.; moderate dieback.
191	Olive	7,6,6	Yes	4	High	Off-site, no tag; multiple attachments at 1'; extends 15' N. over fence.
192	Valley oak	12	Yes	3	Low	Off-site; entire crown on project side of fence; all root S. removed.

Tree Assessment

Spieker Development Partners
 Contra Costa County, California
 March 2020



TREE No.	SPECIES	SIZE DIAMETER (in inches)	PROTECTED	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
193	Valley oak	8	Yes	5	High	Good young tree.
194	Valley oak	8	Yes	3	Moderate	Off-site; entire crown on project side of fence; moderate dieback.
195	Valley oak	13	Yes	4	Moderate	Off-site; upright form; dieback.
196	Valley oak	11	Yes	5	High	Multiple attachments at 3'; good young tree.
197	Valley oak	7	Yes	5	High	Good young tree; low branch N.
198	Valley oak	19	Yes	3	Moderate	Lateral S.; sparse crown/moderate dieback
199	Valley oak	32	Yes	5	High	Codominant trunks at 10'; good form and structure; mistletoe.
200	Aleppo pine	12	Yes	4	High	Sweeps N. from base; good form and structure.
201	Valley oak	19	Yes	4	Moderate	Multiple attachments at 6'; upright, narrow form; high, sparse crown.
202	Valley oak	9	Yes	5	High	Good young tree; high crown; twig dieback.
203	Valley oak	8	Yes	5	High	Good young tree; asymmetric form; twig dieback.
204	Valley oak	9	Yes	3	Moderate	Crown bowed NE.; fair structure; twig dieback.
205	Valley oak	8	Yes	4	Moderate	One sided S.; dieback of lower branches.
206	Valley oak	9	Yes	5	High	Good young tree; twig dieback.
207	Valley oak	6	No	3	Moderate	Fair form and structure; low branch N.; dieback.
208	Valley oak	9	Yes	5	High	Good young tree; twig dieback.
209	Calif. pepper	26,15,15,13,13	Yes	3	Low	Multiple attachments at base; branches to the ground S.; extensive trunk decay; dieback.
210	Almond	10	Yes	3	Moderate	Codominant trunks at 4'; stems twisted around each other; dieback.
211	Valley oak	7	Yes	4	High	Good young tree; narrow form; twig dieback.
212	Valley oak	9	Yes	5	High	Good young tree; mistletoe; twig dieback.
213	Valley oak	8,7	Yes	4	High	Codominant trunks at base; fair structure; twig dieback.

Tree Assessment

Spieker Development Partners
 Contra Costa County, California
 March 2020



TREE No.	SPECIES	SIZE DIAMETER (in inches)	PROTECTED	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
214	Valley oak	26	Yes	3	Moderate	Crown bowed NE.; fair structure; moderate dieback.
215	Valley oak	15	Yes	3	Moderate	Crowded; one sided E.; fair structure; dieback.
216	Valley oak	18	Yes	4	Moderate	Crowded; one sided S.; dieback.
217	Valley oak	22	Yes	4	Moderate	Crowded; one sided NE.; dieback.
218	Valley oak	22	Yes	5	High	Multiple attachments at 8'; low branches S.; good form; minor dieback.
219	Valley oak	18	Yes	4	High	Multiple attachments at 20'; good form; moderate dieback.
220	Valley oak	19	Yes	3	Moderate	Codominant trunks at 4'; epicormics & moderate dieback.
221	Valley oak	13	Yes	3	Moderate	Crowded; one sided S.; moderate dieback.
222	Valley oak	22	Yes	5	High	Multiple attachments at 8'; good form and structure; minor dieback.
223	Almond	8	Yes	3	Moderate	Multiple attachments at 2'; dieback.
224	Valley oak	16	Yes	2	Low	Small crown; extensive mistletoe & dieback.
225	Almond	9	Yes	4	Moderate	Upright form; growing on rocks.
226	Valley oak	19	Yes	4	High	Multiple attachments at 8'; good form and structure; dieback of small branches.
227	Valley oak	18	Yes	3	Moderate	Fair form and structure; embedded barbed wire;
228	Valley oak	22	Yes	5	High	Multiple attachments at 6'; good form and structure; epicormics & dieback
229	Coast live oak	6	No	5	High	Good young tree.
230	Almond	7,6,4,3	Yes	3	Moderate	Upright form; dieback.
231	River red gum	23	Yes	3	Moderate	Codominant trunks at 8'; seam in attachment; upright form.
232	Valley oak	15,12	Yes	3	Moderate	Codominant trunks at 1'; dead top on 12" stem; dieback.

Tree Assessment

Spieker Development Partners
 Contra Costa County, California
 March 2020



TREE No.	SPECIES	SIZE DIAMETER (in inches)	PROTECTED	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
233	Valley oak	16	Yes	4	High	Codominant trunks at 7'; a little one sided E.; minor dieback.
234	Valley oak	13	Yes	5	High	Multiple attachments at 7'; good form and structure.; minor dieback.
235	Almond	7	Yes	1	Low	Small resprout from otherwise dead stump.
236	Valley oak	17	Yes	4	High	Codominant trunks at 7'; one sided E.; minor dieback.
237	Valley oak	17	Yes	3	Moderate	Crown bowed N. to horizontal; dieback.
238	Valley oak	16	Yes	4	High	Codominant trunks at 12'; narrow form; minor dieback.
239	Valley oak	8	Yes	3	Moderate	Crowded; bowed W.; minor dieback.
240	River red gum	12	Yes	2	Low	Codominant trunks at 8'; one sided S.; dead top.
241	River red gum	29	Yes	3	Low	Crowded; upper crown bowed S.; dead top.
242	Blue gum	33	Yes	3	Low	Codominant trunks at 8'; dead top.
243	Valley oak	6	No	3	Moderate	Crowded; small crown; minor dieback.
244	Valley oak	6	No	3	Moderate	Crowded; bowed E.; minor dieback.
245	Olive	8,8,7,6,6	Yes	4	Moderate	Multiple attachments at 1'; good form; moderate
246	Valley oak	17	Yes	4	High	Codominant trunks at 8'; wide attachment; dieback.
247	Black locust	7,3	No	3	Low	Dead top.
248	Calif. black walnut	9,7	Yes	1	Low	Mostly dead.
249	Calif. buckeye	6,6,6,5	Yes	4	High	Multiple attachments at 1'; one sided SE.
250	Valley oak	12	Yes	5	High	Good form and structure; twig dieback.
251	Blue gum	44	Yes	4	High	Multiple attachments 15'; spreading form.
252	Valley oak	33	Yes	2	Low	One sided S.; dead top.
253	Ash sp.	13,12	Yes	2	Low	Codominant trunks at base; crown bowed S.; moderate dieback.
254	Valley oak	58	Yes	3	Low	Multiple attachments at 6'; large cavity & decay N.; 14" stem failed on N. side.

Tree Assessment

Spieker Development Partners
 Contra Costa County, California
 March 2020



TREE No.	SPECIES	SIZE DIAMETER (in inches)	PROTECTED	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
255	Valley oak	26	Yes	3	Moderate	Partial failure; laying on slope S.
256	Calif. bay	16,15,14	Yes	5	High	Multiple attachments at 1'; good, upright form; dieback.
257	Calif. bay	7	Yes	3	Moderate	Suppressed; leans N.; small branch failure.
258	Calif. bay	13,12	Yes	4	High	Multiple attachments at 1'; a little crowded; dieback.
259	Valley oak	32	Yes	3	Moderate	Partial failure; laying on slope E.
260	Valley oak	10	Yes	5	High	Off-site; growing against fence; good young tree.
261	Valley oak	32	Yes	4	High	Good form and structure; one sided S.; engulfed in poison oak.
262	Valley oak	15	Yes	5	High	Good young tree; minor dieback.
263	Valley oak	10	Yes	5	High	Good young tree; minor dieback.
264	Valley oak	13	Yes	4	Moderate	Crowded & one sided N.; minor dieback.
265	Valley oak	9	Yes	4	Moderate	Crowded; narrow form; lateral S.; minor dieback.
266	Valley oak	16	Yes	5	High	Codominant trunks at base & 7'; good form; minor dieback.
267	Almond	10,6,6,6,6,6	Yes	3	Moderate	Multiple attachments at base; perched on steep slope; dead stems.
268	Valley oak	10	Yes	4	Moderate	Crowded; one sided S.; minor dieback.
269	Valley oak	19	Yes	4	Moderate	Multiple attachments at 5'; seam in attachment; one sided SE.; minor dieback.
270	Valley oak	23	Yes	4	High	Codominant trunks at 20'; upright form; minor dieback.
271	Valley oak	11	Yes	3	Low	Crowded; crown bowed N. to horizontal.
272	Valley oak	11,6	Yes	3	Moderate	Crowded; crown bowed N.
273	Valley oak	7	Yes	3	Moderate	Crowded; crown bowed N.
274	Valley oak	9	Yes	3	Moderate	Crowded; crown bowed N.
275	Valley oak	7	Yes	3	Moderate	Crowded; upright form.
276	Valley oak	11,9	Yes	3	Moderate	Crowded; crown bowed NE. to horizontal.

Tree Assessment

Spieker Development Partners
 Contra Costa County, California
 March 2020



TREE No.	SPECIES	SIZE DIAMETER (in inches)	PROTECTED	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
277	Valley oak	23	Yes	4	High	Good form; slight lean NE.
278	Valley oak	14,11	Yes	3	Moderate	Crowded; crown bowed SE.
279	Valley oak	28	Yes	3	Moderate	Codominant trunks at 3' & 7'; good form and structure; moderate dieback.
280	Valley oak	29	Yes	4	High	Multiple attachments at 3'; good form and structure; includes bark.
281	Valley oak	20	Yes	4	High	Good form and structure; a little one sided SE.; minor dieback.
282	Foothill pine	14	Yes	4	High	Good young tree; slight lean W.
283	Valley oak	18	Yes	4	Moderate	Asymmetric form; minor dieback.
284	Valley oak	36	Yes	4	High	Multiple attachments at 10'; good form and structure; small pockets of decay along branches.
285	Valley oak	31	Yes	4	High	Codominant trunks at 8'; good form and structure; long lateral S.
286	Almond	7	Yes	4	Moderate	Good young tree; sapsucker damage.
287	Valley oak	18	Yes	3	Moderate	Codominant trunks at 8'; one sided S.; basal cavity; trunk wound in upper crown.
288	Valley oak	28	Yes	3	Moderate	Multiple attachments at 8'; one sided E.; mistletoe & dieback.
289	Valley oak	31	Yes	3	Moderate	Multiple attachments at 6'; one sided N.; moderate dieback.
290	Valley oak	28	Yes	4	Moderate	Multiple attachments at 7'; low branch N.; minor dieback.
291	Valley oak	22	Yes	4	High	Codominant trunks at 8'; one sided SE.; minor dieback.
292	Valley oak	8	Yes	5	High	Good young tree.
293	Valley oak	7	Yes	5	High	Good young tree.
294	Valley oak	10	Yes	5	High	Good young tree.

Tree Assessment

Spieker Development Partners
 Contra Costa County, California
 March 2020



TREE No.	SPECIES	SIZE DIAMETER (in inches)	PROTECTED	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
295	Valley oak	8	Yes	3	Low	Poor form and structure; one stem removed at fence
296	Valley oak	12	Yes	5	High	Good young tree; slight lean N.
297	Valley oak	22	Yes	4	High	Codominant trunks at 6'; good form; included bark; minor dieback.
298	Valley oak	17	Yes	4	High	Multiple attachments at 7'; good form; embedded fence; minor dieback.
299	Valley oak	20	Yes	4	Moderate	Multiple attachments at 6'; good form; long laterals; dieback.
300	Valley oak	22	Yes	4	High	Multiple attachments at 3'; good form; included bark; minor dieback.
301	Valley oak	6	No	3	Moderate	Codominant at 5'; epicormic growth.
302	Valley oak	8	Yes	3	Moderate	Codominant at 6'; narrow form.
303	Valley oak	8	Yes	3	Moderate	One-sided to west.
304	Valley oak	7	Yes	3	Moderate	Codominant at 6' with narrow attachment.
305	Valley oak	6,3	No	3	Moderate	Codominant at 3'; 6" stem has crook at 6'.
306	Valley oak	6	No	4	Moderate	Interior tree; narrow form; full crown.
307	Valley oak	6,2	No	4	High	Narrow, upright form.
308	Valley oak	6	No	4	Moderate	Narrow, upright form; codominant high in crown.
309	Valley oak	6	No	3	Moderate	One-sided to west; suppressed form.
310	Valley oak	8,5	Yes	3	Moderate	Codominant at 2' with included bark; narrow form.
311	Valley oak	7	Yes	4	Moderate	Good form and structure; slightly thin.
312	Valley oak	8	Yes	3	Moderate	Codominant at 12'; epicormic growth.
313	Valley oak	6	No	2	Low	Very thin, narrow crown.
314	Valley oak	6	No	4	High	Good young tree; good form and structure; narrow form.
315	Valley oak	6	No	3	Moderate	Thin crown.
316	Valley oak	6	No	3	Moderate	Sinuous form; narrow crown.

Tree Assessment

Spieker Development Partners
 Contra Costa County, California
 March 2020



TREE No.	SPECIES	SIZE DIAMETER (in inches)	PROTECTED	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
317	Valley oak	6	No	3	Moderate	Narrow, suppressed form.
318	Valley oak	14	Yes	3	Moderate	Codominant at 6' with included bark; thin crown.
319	Valley oak	7	Yes	3	Moderate	Narrow, upright form; thin crown.
320	Valley oak	8,5	Yes	3	Moderate	Codominant at 4'; epicormic growth.
321	Valley oak	9	Yes	3	Low	Under utility lines; bows to north.
322	Calif. black walnut	5,5	No	1	Low	All but dead.
323	Valley oak	4,4	Yes	3	Low	Codominant at base; stems twist around each other.
324	Valley oak	6	No	3	Moderate	Crooked trunk.
325	Valley oak	6	No	4	High	Good upright form; epicormic growth.
326	Valley oak	8,4	No	4	High	4" stem is a low limb; full crown.
327	Calif. black walnut	9,4,4,4	Yes	1	Low	All but dead.
328	Calif. black walnut	15,11,9	Yes	1	Low	All but dead.
329	Valley oak	9	Yes	4	Moderate	Codominant at 12'; slightly thin.
330	Calif. black walnut	11	Yes	2	Low	Very thin crown; twig dieback.
331	Valley oak	6	No	4	High	Crooked trunk; otherwise good.
332	Calif. black walnut	14,11,8	Yes	2	Low	Extensive dieback in upper crown.
333	Valley oak	8	Yes	3	Moderate	One-sided to west; codominant at 7'.
334	Valley oak	28	Yes	4	Moderate	Multiple attachemtns at 5'; full, wide spreading crown; slightly thin.
335	Valley oak	18,11	Yes	4	High	Codominant at base; minor dieback; slightly thin.
336	Valley oak	10	Yes	4	Moderate	Top bows to east; full crown; codominant at 15'.
337	Valley oak	6	No	4	Moderate	Narrow, upright form.
338	Valley oak	7	Yes	3	Moderate	Codominant at 20' & 6' with wide attachment; narrow form.
339	Valley oak	11	Yes	4	Moderate	Multiple attachemtns at 8'; epicormic growth.
340	Valley oak	8	Yes	4	Moderate	Tall, narrow form; thin crown.

Tree Assessment

Spieker Development Partners
 Contra Costa County, California
 March 2020



TREE No.	SPECIES	SIZE DIAMETER (in inches)	PROTECTED	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
341	Valley oak	13,4	Yes	4	Moderate	Slightly thin; minor twig dieback.
342	Valley oak	13	Yes	3	Moderate	Codominant at 6' with seam below attachment; thin crown.
343	Valley oak	11,10	Yes	3	Low	Codominant at 4'; thin crown; twig dieback.
344	Valley oak	6	No	3	Low	Top bows to north; thin crown.
345	Valley oak	12	Yes	3	Moderate	Lower branches dead; twig dieback.
346	Valley oak	11	Yes	3	Moderate	Central leader bows to north; narrow form.
347	Almond	5,5	No	2	Low	Very thin crown; codominant at 1'.
348	Valley oak	13	Yes	4	Moderate	Codominant at 15'; one-sided to south.
349	Valley oak	7	Yes	3	Low	Poor form and structure; thin crown.
350	Valley oak	14	Yes	4	High	Okay form; epicormic growth.
351	Valley oak	14	Yes	3	Moderate	Central leader has corrected form; thin crown.
352	Valley oak	22,7	Yes	4	Moderate	Good form and structure; slightly thin; twig and branch dieback; low lateral had branch failure over road.
353	Mexican fan palm	18	Yes	3	Moderate	45' brown trunk.
354	Valley oak	10	Yes	3	Moderate	Top of tree bows to southeast.
355	Almond	8,3	No	3	Low	Poor form and structure; thin crown.
356	Valley oak	22	Yes	4	High	Multiple attachments at 10'; one sided SE.; dieback.
357	Valley oak	16	Yes	3	Low	Crown one sided & bowed N. over the road; poor form and structure.
358	Valley oak	6,5	No	3	Moderate	Codominant trunks at base; suppressed.
359	Valley oak	31	Yes	4	High	Multiple attachments at 8'; good form; minor dieback.
360	Valley oak	6	No	4	High	Good young tree; a little crowded.
361	Valley oak	6	No	4	Moderate	Good young tree; one sided E.
362	Valley oak	10	Yes	4	Moderate	Good young tree; one sided SE.
363	Valley oak	10	Yes	4	Moderate	Crowded; one sided E.

Tree Assessment

Spieker Development Partners
 Contra Costa County, California
 March 2020



TREE No.	SPECIES	SIZE DIAMETER (in inches)	PROTECTED	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
364	Valley oak	20	Yes	4	High	Good form and structure; mistletoe; twig dieback; growing at edge of road.
365	Valley oak	10	Yes	4	High	Good young tree; a little one sided E.
366	Valley oak	10	Yes	4	High	Good young tree; a little crowded & bowed NE.
367	Valley oak	8	Yes	3	Moderate	Crowded; one sided SW.
368	Almond	11,7,4	Yes	3	Low	Multiple attachments at 1'; dieback; sapsucker damage.
369	Calif. black walnut	8,6,5	Yes	1	Low	Mostly dead.
370	Valley oak	51	Yes	4	Moderate	Codominant trunks at 6'; spreading form; long laterals to ground SW.; moderate dieback.
371	Valley oak	9	Yes	5	High	Good young tree.
372	Valley oak	8	Yes	4	Moderate	Slight crooks; beneath overhead utility lines.
373	Valley oak	11	Yes	4	Moderate	Slight lean N.; beneath overhead utility lines.
374	Mexican fan palm	12	Yes	5	High	Growing in creek; good form; 4' of clear trunk.
375	Canary Island palm	36	Yes	5	High	Good form; 1' of clear trunk.
376	Valley oak	12	Yes	3	Low	Suppressed; bowed W. to horizontal.
377	Valley oak	12	Yes	3	Low	Suppressed; bowed N. to horizontal.
378	Valley oak	29	Yes	3	Moderate	Multiple attachments at 15'; upright form; dieback.
379	Valley oak	6	No	3	Low	Suppressed; bowed SE. to horizontal.
380	Valley oak	6	No	5	High	Crowded; upright, narrow form.
381	Valley oak	8	Yes	5	High	Crowded; upright, narrow form.
382	Valley oak	9	Yes	4	Moderate	Crowded; one sided W.
383	Valley oak	6	No	4	High	Crowded; slight lean N.
384	Valley oak	8	Yes	5	High	Upright form; beneath overhead utilities.
385	Valley oak	8	Yes	4	High	Slight crook at 3'; beneath overhead utilities.
386	Valley oak	24	Yes	4	High	Multiple attachments at 8'; good form and structure; mistletoe.

Tree Assessment

Spieker Development Partners
 Contra Costa County, California
 March 2020



TREE No.	SPECIES	SIZE DIAMETER (in inches)	PROTECTED	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
387	Valley oak	15	Yes	3	Moderate	Leans E.; moderate dieback.
388	Valley oak	17	Yes	4	Moderate	Leans E.; branches to ground; dieback.
389	Valley oak	42	Yes	2	Low	Leans E.; extensive trunk decay; topped for overhead utilities.
390	Valley oak	13,11,10,10	Yes	5	High	Multiple attachments at base; good form and structure.
391	Valley oak	12	Yes	4	Moderate	Growing against fence; one sided N.; beneath overhead utilities.
392	Valley oak	23,22	Yes	2	Low	Partial failure; laying on ground E.; trunk decay.
393	Valley oak	13	Yes	2	Low	Leans E.; dieback.
394	Valley oak	10	Yes	5	High	Crowded; slight lean E.
395	Valley oak	8	Yes	5	High	Crowded; slight lean E.
396	Calif. black walnut	11	Yes	1	Low	Mostly dead.
397	Valley oak	11	Yes	3	Moderate	Suppressed; leans N. to horizontal.
398	Valley oak	9	Yes	5	High	Crowded; upright form.
399	Valley oak	7	Yes	4	High	Crowded; one sided N.
400	Calif. black walnut	10,9	Yes	2	Low	Codominant trunks at base; dieback; mistletoe.
401	Valley oak	7	Yes	3	Moderate	Growing on rocks; stunted.
402	Valley oak	13	Yes	5	High	Multiple attachments at 4'; good form and structure.
403	Valley oak	9	Yes	4	High	Codominant trunks at 4'; small crown; mistletoe.
404	Valley oak	6	No	4	Moderate	Growing at edge of road; asymmetric form; mistletoe.
405	Valley oak	10	Yes	4	High	Growing on rocks; slight lean N.
406	Valley oak	7	Yes	5	High	Growing on cut bank; good young tree.
407	Valley oak	6,5	No	4	High	Codominant trunks at 4'; one stem leans E.
408	Valley oak	27	Yes	5	High	Codominant trunks at 8'; slight lean E.; good form; dieback
409	Valley oak	17	Yes	4	Moderate	Growing on cut bank; strong lean E.

Tree Assessment

Spieker Development Partners
 Contra Costa County, California
 March 2020



TREE No.	SPECIES	SIZE DIAMETER (in inches)	PROTECTED	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
410	Valley oak	8	Yes	4	Moderate	Codominant trunks at 3'; asymmetric form; large surface root displacing asphalt.
411	Valley oak	10	Yes	5	High	Good young tree; mistletoe.
412	Valley oak	16	Yes	5	High	Growing against fence; good form and structure.
413	Valley oak	6,5	No	4	High	Codominant trunks at 1'; good young tree; twig dieback.
414	Valley oak	6	No	5	High	Good young tree.
415	Valley oak	25	Yes	5	High	Off-site; multiple attachments art 8'; good form and structure; mistletoe; extends 20' S. over fence.
416	Valley oak	13	Yes	5	High	Good young tree; twig dieback.
417	Valley oak	25	Yes	5	High	Off-site; multiple attachments art 8'; good form and structure; extends 25' S. over fence.
418	Valley oak	6	No	5	High	Good young tree; growing against fence.
419	Valley oak	6,6,3	Yes	5	High	Multiple attachments at 1'; good young tree; twig
420	Valley oak	6,6,4,4	Yes	4	Moderate	Multiple attachments at 2'; seam n attachment; twig dieback.
421	Valley oak	8	Yes	5	High	Good young tree.
422	Valley oak	10	Yes	4	High	Good young tree; slight crook at 3'.
423	Valley oak	6	No	5	High	Off-site; good young tree; growing against fence.
424	Valley oak	8,6	Yes	4	Moderate	Codominant tanks at 3'; seam n attachment; one sided NW.
425	Blue gum	20	Yes	5	High	Off-site; good form; low branches growing through
426	Aleppo pine	35,16	Yes	3	Moderate	Off-site, tagged on branch; sparse crown; large, low laterals extend 25' W. over fence.
427	Valley oak	19	Yes	4	Moderate	Off-site; good form and structure; extend 20' N. over fence.

Tree Assessment

Spieker Development Partners
 Contra Costa County, California
 March 2020



TREE No.	SPECIES	SIZE DIAMETER (in inches)	PROTECTED	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
428	Valley oak	50	Yes	4	Moderate	Codominant trunks 10'; spreading crown; trunk cavities & decay; twig dieback.
429	Valley oak	17	Yes	4	High	Off-site; good form and structure; pruned on W. for overhead utilities; extend 25' N. over fence.
430	Valley oak	9	Yes	3	Moderate	Topped for overhead utilities.
431	Valley oak	12,11,8,6	Yes	3	Moderate	Multiple attachments at 1'; narrow attachments; topped for overhead utilities.
432	Valley oak	15	Yes	3	Moderate	One sided & bowed N.; topped for overhead utilities.
433	Valley oak	8	Yes	5	High	Good young tree.
434	Valley oak	9	Yes	4	High	Codominant trunks at 5'; included bark.
435	Valley oak	15	Yes	3	Moderate	Topped for overhead utilities.
436	River sheoak	14	Yes	3	Moderate	Off-site; crowded & one sided SE.; extend 15' S. over fence.
437	River sheoak	25	Yes	4	Moderate	Off-site; multiple attachments at 8'; low lateral extend 20' S. over fence.
438	River sheoak	15	Yes	3	Moderate	Off-site; multiple attachments at 8'; narrow form; extends 15' S. over fence.
439	River sheoak	12	Yes	3	Moderate	Off-site; multiple attachments at 8'; narrow form; low lateral extends 15' S. over fence.
440	River sheoak	14	Yes	3	Moderate	Off-site; multiple attachments at 8'; narrow form; low lateral extends 10' S. over fence.
441	River sheoak	15	Yes	3	Moderate	Off-site; multiple attachments at 8'; narrow form; extends 15' S. over fence.
442	River sheoak	16	Yes	3	Moderate	Off-site; narrow form; extends 15' S. over fence.
443	River sheoak	18	Yes	3	Moderate	Off-site; multiple attachments at 6'; narrow form; extends 10' S. over fence.

Tree Assessment

Spieker Development Partners
 Contra Costa County, California
 March 2020



TREE No.	SPECIES	SIZE DIAMETER (in inches)	PROTECTED	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
444	River sheoak	20	Yes	3	Moderate	Off-site; codominant trunks at 6'; narrow form; extends 20 S. over fence.
445	River sheoak	15	Yes	3	Moderate	Off-site; codominant trunks at 6'; included bark; narrow form; extends 20 S. over fence.
446	River sheoak	13	Yes	3	Moderate	Off-site; crowded & one sided SW.; extend 15' N. over fence.
447	River sheoak	17	Yes	4	Moderate	Off-site; one sided SW.; extend 20' N. over fence.
448	River sheoak	14	Yes	3	Moderate	Off-site; codominant trunks at 8'; narrow form; extends 20 S. over fence.
449	River sheoak	12,8	Yes	3	Low	Off-site; codominant trunks at 3'; suppressed; extends 20 S. over fence.
450	River sheoak	8	Yes	3	Low	Off-site; codominant trunks at 3'; suppressed; extends 10 S. over fence.
451	Manna gum	26	Yes	4	Moderate	Codominant trunks at 6'; good form; dieback.
452	Manna gum	15	Yes	3	Moderate	Codominant trunks at 6'; suppressed; dieback.
453	Manna gum	17,16	Yes	3	Moderate	Codominant trunks at 6'; suppressed; leans SE.; dieback.
454	Manna gum	15,13,8	Yes	3	Moderate	Multiple attachments at 2'; one sided NW.; dieback.
455	Valley oak	17	Yes	3	Low	Growing on steep slope; burls & decay at 8'; leans E
456	Valley oak	12	Yes	3	Moderate	Crook at 8'; leans E.; small crown.
457	Valley oak	11,10	Yes	3	Moderate	Codominant trunks at base; one stem leaning against rocks.
458	Valley oak	7,6	Yes	3	Moderate	Codominant trunks at 3'; small crown.
459	Valley oak	31	Yes	4	Moderate	Codominant trunks at 6'; spreading form; growing over rocks; moderate dieback.
460	Valley oak	22	Yes	2	Low	Leans SE.; large decay column N. ; dieback.

Tree Assessment

Spieker Development Partners
 Contra Costa County, California
 March 2020



TREE No.	SPECIES	SIZE DIAMETER (in inches)	PROTECTED	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
461	Valley oak	32	Yes	4	Moderate	Multiple attachments at 10'; growing on steep Slope w/ large surface root; dieback.
462	Valley oak	20	Yes	3	Moderate	Growing against rocks; upright form; dieback.
463	Valley oak	24	Yes	3	Moderate	Growing on steep slope; leans SE.; dieback.
464	Valley oak	17	Yes	3	Moderate	Codominant trunks at 8'; basal decay; barbed wire in upper crown; dieback.
465	Valley oak	22	Yes	4	Moderate	Codominant trunks at 6'; crown one sided N.; dieback.
466	Valley oak	18,15,13,11	Yes	4	High	Multiple attachments at 1'; narrow attachments; one sided SE.; dieback.
467	Valley oak	10	Yes	3	Low	Crowded; crown bowed W. to horizontal.
468	Valley oak	11	Yes	3	Moderate	Crowded; leans W..
469	Chinese pistache	5	No	3	Low	Crowded; crown bowed SW. to horizontal.
470	Arroyo willow	14	Yes	3	Low	Suppressed; poor form and structure.
471	Arroyo willow	18,16	Yes	2	Low	Codominant trunks at base; major limb failures; trunk decay.
472	Privet	8	Yes	4	Moderate	Upright form.
473	Valley oak	23	Yes	4	Moderate	Partial failure; strong lean E.; branches to the ground.
474	Arroyo willow	7,7,5,5,4	Yes	2	Low	Failed and laying on ground; trunk decay.
475	Arroyo willow	21,7,5	Yes	2	Low	Failed and laying on ground; trunk decay.
476	Arroyo willow	25,12,9	Yes	2	Low	Failed and laying on ground; trunk decay.
477	Arroyo willow	18,8,5	Yes	2	Low	Failed and laying on ground; trunk decay.
478	Plum	8,6,5,4	Yes	2	Low	Multiple attachments at base; 8" stem dead; extensive dieback.
479	Valley oak	18	Yes	5	High	Multiple attachments at 10'; good, upright form.
480	Valley oak	17	Yes	4	High	Multiple attachments at 5'; wide attachment(a little one sided SE.

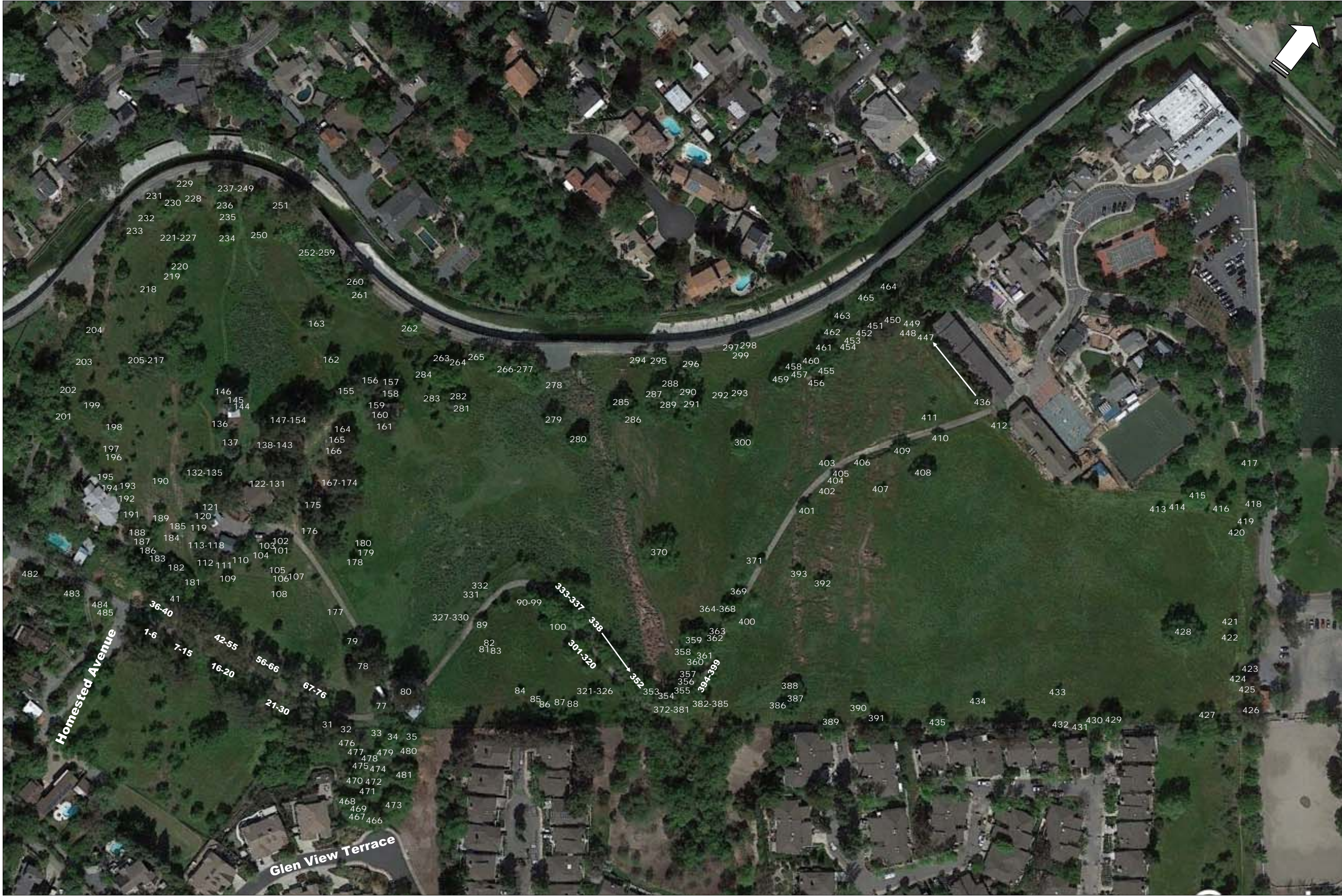
Tree Assessment

Spieker Development Partners
 Contra Costa County, California
 March 2020



TREE No.	SPECIES	SIZE DIAMETER (in inches)	PROTECTED	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
481	Valley oak	21	Yes	5	High	Multiple attachments at 10'; good form and structure; low lateral W.
482	Valley oak	14	Yes	5	High	Upright form; stem removed at 20' for overhead utility clearance.
483	Valley oak	11	Yes	4	Moderate	Codominant trunks at 8'; topped for overhead utility clearance.
484	Valley oak	10,8	Yes	4	Moderate	Codominant trunks at base; 8" stem topped for overhead utility clearance.
485	Almond	8,7,6,5,5	Yes	3	Moderate	Multiple attachments at base; growing through fence; dieback.

Tree Assessment Map



Senior Housing Project
Seven Hills Ranch Road
Walnut Creek, CA

Prepared for:
Speiker Senior
Development Partners
Rancho Mission Viejo, CA

March 2020

No Scale

Notes

- Base map provided by: Google Maps
- Numbered tree locations are approximate.



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