

APPENDIX D:
ARBORIST REPORT AND
TREE REMOVAL PLAN





Preliminary Arborist Report

The Oaks Shopping Center
Cupertino, CA

Prepared for:
KT Urban
21710 Stevens Creek Boulevard
Cupertino, CA 95014

Prepared by:
HortScience, Inc.
325 Ray Street
Pleasanton CA 94566

July 2018



Preliminary Arborist Report
The Oaks Shopping Center, Cupertino CA

Table of Contents

	Page
Introduction and Overview	1
Assessment Methods	1
Description of Trees	2
Suitability for Preservation	4
Evaluation of Impacts and Recommendations	6
Tree Preservation Guidelines	9

List of Tables

Table 1. Condition ratings and frequency of occurrence for trees	4
Table 2. Tree suitability for preservation	5
Table 3. Recommendations for action	7

Exhibits

Tree Assessment Form

Tree Assessment Map

Introduction and Overview

KT Urban is proposing to redevelop the Oaks Shopping Center, located at the corners of Mary Ave. and Stevens Creek Blvd., in Cupertino, California. Currently, the site contains retail business, restaurants, a theater, parking lots and associated landscaping. The project proposes construction of a mixed-use development, including townhomes, row houses and residential/retail built above a subterranean garage. HortScience, Inc. was asked to prepare an **Arborist Report** for the project for review by the City of Cupertino.

This report provides the following information:

1. An assessment of the health and structural condition of those trees within and immediately adjacent to the project site.
2. Identification of all *Protected* trees as defined by the City of Cupertino Ordinance #07-2003, Ch. 14.18.
3. An assessment of the impacts of constructing the proposed project on the trees.
4. Guidelines for tree preservation during the design, construction and maintenance phases of development.

Assessment Methods

Trees were assessed on May 9, 2018. The assessment included all trees 6" and greater in diameter. The survey procedure consisted of the following steps:

1. Tagging each tree with a numerically coded metal tag.
2. Identifying the tree as to species;
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: Trees 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

Eighty-three (83) trees were evaluated, representing 11 species (Table 1, page 4). Trees #28, 43, 44 and 69 had been removed since we assessed the trees in March of 2015. Descriptions of each tree are found in the **Tree Assessment Forms**, and locations are shown on the **Tree Assessment Map** (see attachments).

The site is an aging shopping center with a mix of young trees planted throughout the parking lots, semi-mature trees along the perimeters and four (4) veteran oak trees likely preserved during the last site development. Veteran oaks may be indigenous to the site, but the remaining trees were planted exotics.

Twenty-four (24) Chinese pistache and 24 evergreen ash were assessed at the site and represented the two most frequently occurring species. Chinese pistache were located in the parking lot islands on the east (#11-14), north (#45-57) and south (#70-76) sides of the buildings. The trees were all young, with diameters between 5" and 11". Condition was poor (18 trees) to fair (6 trees) as a result of the topping that compromised the structure of the trees (**Photo 1**).



Photo 1: Looking east at Chinese pistache #76. The tree was young, at 5" in diameter and in poor condition. It had been topped and the branches reduced to stubs. This was the typical treatment of all Chinese pistache at the site.

Evergreen ash were located along the Mary Ave. frontage (#25, 26, 31, 32, and 58-64), the west side of the building (#33-40) and the Stevens Creek Blvd. frontage (#78-85). Diameters ranged from 12" to 34" with 6 young trees (12-18" in diameter), 9 semi-mature (19-24") and 9 mature trees (25-34"). Some of the evergreen ash had been topped, others had been root pruned to repair adjacent infrastructure. Twelve (12) were in fair condition, 6 were in good and 6 were in poor.

Coast live oak, with 18 trees, was also well represented. The species was concentrated on the west half of the site and included a range of age classes. There were 6 young trees (5-11" in diameter), 6 semi-mature (12-24"), 3 mature (24-36"), and 3 over-mature trees (36-50"). In general, they were in fair condition (10 trees), with 5 in good and 3 in poor. The over-mature trees were all in fair condition. These trees had seen many years of maintenance, producing large pruning wounds, cavities filled with concrete and non-industry standard cabling (**Photo 2**, following page). Coast live oaks in good condition included 3 young trees (5, 15 and 87), semi-mature coast live oak #16 and mature coast live oak #30. Coast live oaks #17, 19 and 77 were in poor condition; #17 leaned heavily north, and #19 and 77 had extensive dieback.

Photo 2: Looking east at coast live oak #19. The tree was mature, at 29" in diameter. It was in poor condition, with extensive dieback in the crown. Non-industry standard cables had been installed.



The remaining 10 species were represented by 3 or fewer individuals and included:

- Three (3) young crape myrtles, all in good condition and with slightly thin crowns. Trees #81 and 82 were located along Stevens Creek Blvd. and were in excellent condition. Tree #29 had been planted in an interior courtyard between the buildings.
- Three (3) Nichol's gum eucalyptus were growing along the west side of the property, adjacent to the freeway on-ramp. These were semi-mature and in good (#65 and 66) and poor (#67) condition.
- Two (2) mature callery pears. These were located on Mary Ave. and were in fair (#10) and poor (#9) condition.
- Two (2) young to semi-mature evergreen pears. These were located on the west side of the building and were in good (#41) and fair (#42) condition.
- Two (2) Victorian box. Both had been planted in interior courtyards between the buildings. Tree #20 was in poor condition and #27 was in fair condition.
- Mature Monterey pine #24 was located on Stevens Creek Blvd. It was in decline and in poor condition.
- One (1) holly oak, 1 Canary Island pine, 1 deodar cedar and 1 Japanese maple. The holly oak was semi-mature and in poor condition; the Canary Island pine and deodar cedar were new plantings and the Canary Island pine was not performing well but the deodar cedar was; and the Japanese maple was a courtyard tree in good condition.

The City of Cupertino defines certain species with a diameter of 10” for single-trunked trees, and 20” for multi-trunked trees, as *Protected*. Based on this definition, 15 of the coast live oaks qualified as *Protected*. *Protected* trees are identified in the **Tree Assessment Forms** (see Exhibits).

**Table 1: Condition ratings and frequency of occurrence of trees.
 The Oaks Shopping Center, Cupertino**

Common name	Scientific name	Condition			Total
		Poor (1-2)	Fair (3)	Good (4-5)	
Japanese maple	<i>Acer palmatum</i>	-	-	1	1
Deodar cedar	<i>Cedrus deodara</i>	-	-	1	1
Nichol's gum	<i>Eucalyptus nicholii</i>	1	-	2	3
Evergreen ash	<i>Fraxinus uhdei</i>	6	12	6	24
Crape myrtle	<i>Lagerstroemia indica</i>	-	-	3	3
Canary Island pine	<i>Pinus canariensis</i>	-	1	-	1
Monterey pine	<i>Pinus radiata</i>	1	-	-	1
Chinese pistache	<i>Pistacia chinensis</i>	18	6	-	24
Victorian box	<i>Pittosporum undulatum</i>	1	1	-	2
Callery pear	<i>Pyrus calleryana</i>	1	1	-	2
Evergreen pear	<i>Pyrus kawakamii</i>	-	1	1	2
Coast live oak	<i>Quercus agrifolia</i>	3	10	5	18
Holly oak	<i>Quercus ilex</i>	-	1	-	1
Total		31	33	19	83
		37%	40%	23%	100%

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 or creek channels, 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. Coast live oak #17 is an example of such a tree.

- **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, Monterey pine is intolerant of root loss and evergreen ash and coast live oak are tolerant 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 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. Cupertino is part of the Central West Floristic Province. None of the species present at The Oaks Shopping Center are considered invasive.

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 the suitability ratings. Suitability ratings for individual trees are included in the **Tree Assessment Form** (see attachments).

**Table 2: Tree Suitability for Preservation
The Oaks Shopping Center, Cupertino**

High	These are trees with good health and structural stability that have the potential for longevity at the site. Seven (7) trees were highly suitable for preservation; including 3 crape myrtles, 2 Nichol's gum, deodar cedar #86 and coast live oak #87.
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. Thirty-four (34) trees were of moderate suitability for preservation, including 14 evergreen ash, 13 coast live oaks, 2 evergreen pears, 2 Chinese pistache, and one (1) each of Victorian box, Japanese maple and Canary Island pine.
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. Forty-two (42) trees had low suitability for preservation, including 22 Chinese pistache, 10 evergreen ash, 4 coast live oaks, 2 callery pears and one (1) each of Monterey pine, holly oak, Victorian box and Nichol's gum.

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 Form** was the reference point for tree condition and quality. Potential impacts from construction were evaluated using the Grading and Drainage Plan (Sheet VTM-3) prepared Kimley Horn and Associates, Inc. (dated July 13th, 2018).

The plan proposes to construct a mix of row houses along the western boundary, with townhomes occupying the central portion of the site and apartment units above retail with a subterranean garage on the east side. New roads, plazas, parking and entry points onto Mary Ave. would be constructed across the site, connecting the new amenities.

The plan was preliminary in nature. Grading for buildings, roads, plazas and driveways were shown on the plans. Utilities and accurate tree locations were not depicted on the plans. As such, the following recommendations for tree removal and preservation must be considered preliminary as well.

Potential impacts from construction were estimated for each tree. The most significant impacts to the trees would occur as a result of the grading of the central portion of the site and excavation for the subterranean garage. The current design leaves limited space for tree preservation.

Based on my evaluation of the plans and associated impacts on the trees, 74 trees fall within grading for the row-houses, townhomes, subterranean garage, entries and City required right-of-way improvements along Steven's Creek Blvd., requiring their removal. Of the trees identified for removal, 42 had low suitability for preservation and 14 qualified as *Protected*. Table 3, following page, provides the recommended action for each tree, along with their *Protected* status and a description of impacts.

Nine (9) trees have been preliminarily identified for preservation, including *Protected* tree #68. Once the plans have been finalized and trunks have been located and plotted on plans, a final determination of if these trees can be preserved must be made by the Consulting Arborist. Preservation is predicated on establishing a **Tree Protection Zone** and other recommendations listed in the **Tree Preservation Guidelines** (page 9).

Trees identified for preservation are located on the perimeter of the site as follows:

- Trees #59-64 are proposed for preservation in the northeast corner of the site. The northwest corner is proposed as a park, with limited grading for pathways and amenities. Minimizing grading within the dripline of the trees, designing features to avoid impacts to trees, careful demolition of the existing infrastructure and root pruning will all be required if they are to be successfully preserved.
- Trees 65, 66 and 68 are proposed for preservation along the western boundary. These trees may in fact be off-site on the Caltrans right-of-way. They appear to be within the proposed set-backs in this area but may still be impacted by grading and drainage. Again, minimizing grading within the dripline of the trees, designing features to avoid impacts to trees, careful demolition of the existing infrastructure and root pruning will all be required if they are to be successfully preserved.

**Table 3: Recommendations for Action
 The Oaks Shopping Center, Cupertino**

Tree #	Species	Trunk Diameter (in)	Protected?	Impact
1	Coast live oak	39	Yes	Remove, within garage footprint
2	Coast live oak	16	Yes	Remove, within garage footprint
3	Coast live oak	21	Yes	Remove, impacted by drainage
4	Coast live oak	51	Yes	Remove, within parking lot
5	Coast live oak	11	Yes	Remove, within garage footprint
6	Coast live oak	34	Yes	Remove, within garage footprint
7	Coast live oak	15	Yes	Remove, within garage footprint
8	Coast live oak	22	Yes	Remove, within garage footprint
9	Callery pear	15	No	Remove, low suitability
10	Callery pear	17	No	Remove, low suitability
11	Chinese pistache	9	No	Remove, low suitability
12	Chinese pistache	10	No	Remove, low suitability
13	Chinese pistache	10	No	Remove, low suitability
14	Chinese pistache	7	No	Remove, low suitability
15	Coast live oak	7	No	Remove, within garage footprint
16	Coast live oak	23	Yes	Remove, within garage footprint
17	Coast live oak	13	Yes	Remove, low suitability
18	Coast live oak	49	Yes	Remove, low suitability
19	Coast live oak	29	Yes	Remove, low suitability
20	Victorian box	8,6,5,5	No	Remove, low suitability
21	Japanese maple	10,9,9	No	Remove, within townhomes
22	Coast live oak	11,10,10	Yes	Remove, within townhomes
23	Canary island pine	7	No	Remove, within garage footprint
24	Monterey pine	23	No	Remove, low suitability
25	Evergreen ash	23	No	Remove, impacted by new entry
26	Evergreen ash	29	No	Remove, impacted by new entry
27	Victorian box	10,10,8	No	Remove, within townhomes
29	Crape myrtle	5,5,4,3,3,2	No	Remove, within townhomes
30	Coast live oak	28,21	Yes	Remove, within townhomes
31	Evergreen ash	34	No	Remove, within townhomes
32	Evergreen ash	20	No	Remove, low suitability
33	Evergreen ash	25	No	Remove, low suitability
34	Evergreen ash	12	No	Remove, low suitability
35	Evergreen ash	22	No	Remove, low suitability
36	Evergreen ash	16	No	Remove, low suitability
37	Evergreen ash	16	No	Remove, low suitability
38	Holly oak	15	No	Remove, low suitability
40	Evergreen ash	21	No	Remove, low suitability
41	Evergreen pear	13	No	Remove, within townhomes
42	Evergreen pear	9	No	Remove, within townhomes
45	Chinese pistache	8	No	Remove, low suitability
46	Chinese pistache	8	No	Remove, low suitability

(Continued, following page)

Table 3: Recommendations for Action, continued
The Oaks Shopping Center, Cupertino

Tree #	Species	Trunk Diameter (in)	Protected?	Impact
47	Chinese pistache	9	No	Remove, low suitability
48	Chinese pistache	7	No	Remove, low suitability
49	Chinese pistache	7	No	Remove, low suitability
50	Chinese pistache	6	No	Remove, low suitability
51	Chinese pistache	5	No	Remove, low suitability
52	Chinese pistache	8	No	Remove, low suitability
53	Chinese pistache	10	No	Remove, low suitability
54	Chinese pistache	9	No	Remove, low suitability
55	Chinese pistache	10	No	Remove, low suitability
56	Chinese pistache	7	No	Remove, low suitability
57	Chinese pistache	6	No	Remove, low suitability
58	Evergreen ash	27	No	Remove, low suitability
59	Evergreen ash	26	No	Preserve?
60	Evergreen ash	23	No	Preserve?
61	Evergreen ash	14	No	Preserve?
62	Evergreen ash	18	No	Preserve?
63	Evergreen ash	20	No	Preserve?
64	Evergreen ash	18	No	Preserve?
65	Nichol's gum	23	No	Preserve?
66	Nichol's gum	22	No	Preserve?
67	Nichol's gum	17	No	Remove, low suitability
68	Coast live oak	11	Yes	Preserve?
70	Chinese pistache	8	No	Remove, low suitability
71	Chinese pistache	9	No	Remove, within townhomes
72	Chinese pistache	7	No	Remove, low suitability
73	Chinese pistache	11	No	Remove, within townhomes
74	Chinese pistache	9	No	Remove, low suitability
75	Chinese pistache	7	No	Remove, low suitability
76	Chinese pistache	5	No	Remove, low suitability
77	Coast live oak	5	No	Remove, low suitability
78	Evergreen ash	19	No	Remove, low suitability
79	Evergreen ash	28	No	Remove, within City req'd. improvements
80	Evergreen ash	26	No	Remove, within City req'd. improvements
81	Crape myrtle	6	No	Remove, within City req'd. improvements
82	Crape myrtle	5	No	Remove, within City req'd. improvements
83	Evergreen ash	24	No	Remove, within City req'd. improvements
84	Evergreen ash	30	No	Remove, within City req'd. improvements
85	Evergreen ash	25	No	Remove, low suitability
86	Deodar cedar	7	No	Remove, within garage footprint
87	Coast live oak	5	No	Remove, within garage footprint

Preliminary 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. Coordinating any construction activity inside the **TREE PROTECTION ZONE** can minimize these impacts.

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

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.
2. All plans affecting trees shall be reviewed by the Consulting arborist with regard to tree impacts. These include, but are not limited to, demolition plans, grading and utility plans, landscape and irrigation plans.
3. 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 identified in the following table. For design purposes, the **TREE PROTECTION ZONE** shall be established at the dripline in all directions. No grading, excavation, construction or storage of materials shall occur within that zone.
4. 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.
5. 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.
6. No underground services including utilities, sub-drains, water or sewer shall be placed in the **TREE PROTECTION ZONE**.
7. **Tree Preservation Notes**, prepared by the Consulting Arborist, should be included on all plans.
8. Do not lime within 50' of any tree. Lime is toxic to tree roots.
9. Any herbicides placed under paving materials must be safe for use around trees and labeled for that use.
10. Irrigation systems must be designed so that no trenching will occur not within the **TREE PROTECTION ZONE**.

Pre-construction treatments and recommendations

1. The 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 ft. chain link or equivalent as approved by Consulting Arborist. Fences are to remain until all grading and construction is completed.
3. Prune trees to be preserved to clean the crown and to provide clearance. 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).
4. 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.
5. Have brush from the pruning and removal operations chipped and spread beneath the trees within the **TREE PROTECTION ZONE**. Mulch shall be 2" to 4" in depth and kept a minimum of 3' from the base of the trees.

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. No grading, construction, demolition or other work shall occur within the **TREE PROTECTION ZONE**. Any modifications must be approved and monitored by the Consulting Arborist.
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 Consultant.
4. Construction trailers, traffic and storage areas must remain outside 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**. Any root pruning required for construction purposes shall receive the prior approval of, and be supervised by, the Consulting Arborist.
6. 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.
7. No excess soil, chemicals, debris, equipment or other materials shall be dumped or stored within the **TREE PROTECTION ZONE**.
8. Any additional tree pruning needed for clearance during construction must be performed by a Certified Arborist and not by construction personnel.

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 hazard potential is recommended.

HortScience, Inc.



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

Attached: ***Tree Assessment Form***

 Tree Assessment Map

Tree Assessment

The Oaks Shopping Center
Cupertino, California
March 2015



TREE No.	SPECIES	SIZE DIAMETER (in inches)	PROTECTED	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
1	Coast live oak	39	Yes	3	Moderate	Multiple attachments at 10'; borer damage; thinning canopy; cabled.
2	Coast live oak	16	Yes	3	Moderate	Twig dieback; sunscald SE; borer damage.
3	Coast live oak	21	Yes	3	Moderate	Twig dieback; thinning canopy.
4	Coast live oak	51	Yes	3	Moderate	Multiple attachments at 10'; several cavities filled with concrete; trunk sounds hollow; non-standard cabling; pruned hard NW; good vigor.
5	Coast live oak	11	Yes	4	Moderate	Codominant trunks at 8'; included bark; full crown.
6	Coast live oak	34	Yes	3	Moderate	Multiple attachments at 10'; heavy lateral N.; cables; borer damage; pruned hard; central leader bows N.; good vigor.
7	Coast live oak	15	Yes	3	Moderate	Multiple attachments at 4'; good form; minor twig dieback.
8	Coast live oak	22	Yes	3	Moderate	Low lateral S. at 5'; good vigor; twig dieback; decay in cavity on N.; branch failure on S.; reduce low lateral over parking.
9	Callery pear	15	No	2	Low	Multiple attachments at 5'; poor branch attachments; displacing infrastructure; thin crown with twig dieback.
10	Callery pear	17	No	3	Low	Codominant trunks at 8' with included bark; history of branch failure.
11	Chinese pistache	9	No	3	Low	Multiple attachments at 8'; topped at 15'; epicormics; thin crown.
12	Chinese pistache	10	No	2	Low	Multiple attachments at 8'; topped at 15'; epicormics' very thin crown.
13	Chinese pistache	10	No	3	Low	Multiple attachments at 8'; topped at 15'; epicormics.
14	Chinese pistache	7	No	2	Low	Small, thin crown; topped at 15'; epicormics.

Tree Assessment

The Oaks Shopping Center
Cupertino, California
March 2015



TREE No.	SPECIES	SIZE DIAMETER (in inches)	PROTECTED	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
15	Coast live oak	7	No	4	Moderate	Good young tree; a little one sided W.; recently pruned; crown lifted to 6'; codominant at 7'.
16	Coast live oak	23	Yes	4	Moderate	Multiple attachments at 10'; dieback in lower crown; sunscald; recently pruned.
17	Coast live oak	13	Yes	2	Low	Multiple attachments at 8'; heavy lean NE.; basal wound on compression side; recently pruned; bleeding on S. side on lower trunk.
18	Coast live oak	49	Yes	3	Low	Multiple attachments at 15'; decay in old pruning wounds; many cables in crown; heavy lateral W. over building; dieback in upper canopy; good vigor.
19	Coast live oak	29	Yes	2	Low	Multiple attachments at 12'; cables in crown; extensive dieback; thin crown; base of trunk flat on S.
20	Victorian box	8,6,5,5	No	2	Low	Multiple attachments at 3'; sunscald; extensive dieback.
21	Japanese maple	10,9,9	No	4	Moderate	Multiple attachments at 1'; one sided N.; old topping points; full, dense crown.
22	Coast live oak	11,10,10	Yes	3	Moderate	Multiple attachments at 2'; crown lifted to 8'; sunscald; dieback.
23	Canary island pine	7	No	3	Moderate	Poor color; codominants at 10'.
24	Monterey pine	23	No	2	Low	One sided E.; suppressed by tree #25; dieback.
25	Evergreen ash	23	No	3	Moderate	Multiple attachments at 12'; good form; minor dieback; displacing sidewalk and curb; good vigor; prune to reduce weight.
26	Evergreen ash	29	No	4	Moderate	Multiple attachments at 10'; good form; laterals N.; dieback; in 7' wide planter; extensive surface roots; prune to reduce weight.

Tree Assessment

The Oaks Shopping Center
Cupertino, California
March 2015



TREE No.	SPECIES	SIZE DIAMETER (in inches)	PROTECTED	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
27	Victorian box	10,10,8	No	3	Moderate	Multiple attachments at 3'; upright form; moderate dieback; in raised planter.
28	Removed					
29	Crape myrtle	5,5,4,3,3,2	No	4	High	Multiple attachments at base; upright; minor trunk
30	Coast live oak	28,21	Yes	4	Moderate	Codominant trunks at 2'; lateral NW.; twig dieback; full, dense crown.
31	Evergreen ash	34	No	4	Moderate	Multiple attachments at 10' with narrow attachments; new ramp on E.; full, dense crown.
32	Evergreen ash	20	No	2	Low	Codominant trunks at 10'; narrow form; old topping points; extensive dieback; poor color.
33	Evergreen ash	25	No	3	Low	Multiple attachments at 8'; heavily root pruned N.; extensive dieback; base of tree roots shaved at sidewalk edge; in 7' wide planter.
34	Evergreen ash	12	No	2	Low	Dead root S.; twig and branch dieback in upper crown; sunscald.
35	Evergreen ash	22	No	2	Low	Multiple attachments at 10'; narrow form; root pruned; extensive dieback; one central upright stem removed.
36	Evergreen ash	16	No	2	Low	Multiple attachments at 8'; poor form and structure; extensive dieback.
37	Evergreen ash	16	No	2	Low	Multiple attachments at 10'; poor form and structure; extensive dieback in upper crown; displacing sidewalk.
38	Holly oak	15	No	3	Low	Multiple attachments at 10'; trunk wounds; minor dieback.
39	Evergreen ash	20	No	3	Low	Codominant trunks at 8'; one sided N.; dead branches to 6".

Tree Assessment

The Oaks Shopping Center
Cupertino, California
March 2015



TREE No.	SPECIES	SIZE DIAMETER (in inches)	PROTECTED	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
40	Evergreen ash	21	No	4	Moderate	Multiple attachments at 15'; one sided S.; minor dieback.
41	Evergreen pear	13	No	4	Moderate	Multiple attachments at 7'; one sided & lateral N.; good form and structure.
42	Evergreen pear	9	No	3	Moderate	Small crown; one sided S.
43	Removed					
44	Removed					
45	Chinese pistache	8	No	1	Low	Multiple attachments at 8'; topped at 10'; epicormics;
46	Chinese pistache	8	No	1	Low	Small crown; topped at 12'; epicormics; pruned hard; little live foliage.
47	Chinese pistache	9	No	1	Low	Multiple attachments at 8'; topped at 10'; epicormics;
48	Chinese pistache	7	No	1	Low	Small crown; topped at 12'; epicormics; pruned hard; little live foliage.
49	Chinese pistache	7	No	1	Low	Small crown; topped at 12'; epicormics; pruned hard; little live foliage.
50	Chinese pistache	6	No	1	Low	Small crown; topped at 12'; epicormics; pruned hard; little live foliage.
51	Chinese pistache	5	No	1	Low	Small crown; topped at 12'; epicormics; pruned hard; little live foliage.
52	Chinese pistache	8	No	1	Low	Multiple attachments at 8'; topped at 12';
53	Chinese pistache	10	No	1	Low	Multiple attachments at 8'; topped at 12'; epicormics;
54	Chinese pistache	9	No	1	Low	Multiple attachments at 10'; topped at 15'; epicormics;
55	Chinese pistache	10	No	1	Low	Multiple attachments at 8'; topped at 12'; epicormics;
56	Chinese pistache	7	No	1	Low	Small crown; topped at 12'; epicormics; pruned hard; little live foliage.

Tree Assessment

The Oaks Shopping Center
Cupertino, California
March 2015



TREE No.	SPECIES	SIZE DIAMETER (in inches)	PROTECTED	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
57	Chinese pistache	6	No	1	Low	Small crown; topped at 12'; epicormics; pruned hard; little live foliage.
58	Evergreen ash	27	No	3	Low	Multiple attachments at 10'; extensive dieback; in 7' wide planter.
59	Evergreen ash	26	No	4	Moderate	Multiple attachments at 10'; good form and structure; minor dieback; slightly thin.
60	Evergreen ash	23	No	3	Moderate	Multiple attachments at 10'; old topping points; moderate dieback; displacing curb and asphalt.
61	Evergreen ash	14	No	3	Moderate	Multiple attachments at 10'; crowded; crown bowed S.; minor dieback.
62	Evergreen ash	18	No	3	Moderate	Codominant trunks at 10'; upright, narrow crown; dieback.
63	Evergreen ash	20	No	3	Moderate	Codominant trunks at 10'; one sided E.; moderate dieback.
64	Evergreen ash	18	No	3	Moderate	Multiple attachments at 10'; one sided SW.; moderate dieback.
65	Nichol's gum	23	No	4	High	Good form and structure; a little thin in upper canopy;
66	Nichol's gum	22	No	4	High	Lateral at 8'; good upright form.
67	Nichol's gum	17	No	2	Low	Lateral at 5'; very thin canopy.
68	Coast live oak	11	Yes	3	Moderate	Good young tree; one sided E.; pruned hard to E.; fence embedded at base.
69	Removed					
70	Chinese pistache	8	No	2	Low	Multiple attachments at 8'; topped at 15'; epicormics;
71	Chinese pistache	9	No	3	Moderate	Codominant at 7'; topped at 15'; epicormics; okay form;
72	Chinese pistache	7	No	2	Low	Multiple attachments at 8'; topped at 15'; epicormics;

Tree Assessment

The Oaks Shopping Center
Cupertino, California
March 2015



TREE No.	SPECIES	SIZE DIAMETER (in inches)	PROTECTED	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
73	Chinese pistache	11	No	3	Moderate	Multiple attachments at 8'; topped at 15' but left laterals; epicormics; minor dieback.
74	Chinese pistache	9	No	3	Low	Multiple attachments at 8'; topped at 15' but left laterals; epicormics; thin crown.
75	Chinese pistache	7	No	3	Low	Multiple attachments at 8'; topped at 15' but left laterals; epicormics; thin crown.
76	Chinese pistache	5	No	2	Low	Multiple attachments at 7'; pruned hard; thin crown.
77	Coast live oak	5	No	2	Low	Surrounded by lawn; thin canopy; replaced tree?; extensive dieback.
78	Evergreen ash	19	No	3	Low	Codominant trunks at 10'; narrow attachment; dead branches to 5"; epicormics; minor dieback.
79	Evergreen ash	28	No	4	Moderate	Multiple attachments at 10'; slightly thin; minor dieback; cut small girdling roots.
80	Evergreen ash	26	No	4	Moderate	Codominant trunks at 10'; upright, narrow form; dieback; recently pruned.
81	Crape myrtle	6	No	4	High	Multiple attachments at 6'; good young tree; slightly thin.
82	Crape myrtle	5	No	4	High	Multiple attachments at 6'; good young tree; slightly thin.
83	Evergreen ash	24	No	3	Moderate	Codominant trunks at 10'; upright, narrow form; high crown.
84	Evergreen ash	30	No	3	Moderate	Multiple attachments at 10'; slight lean S.; displacing infrastructure N.; dead branches to 2"; recently pruned.
85	Evergreen ash	25	No	2	Low	Codominant trunks at 10'; trunk wound & decay; dead branches to 4"; cabled; codominant stems fused together at 4'.

Tree Assessment

The Oaks Shopping Center
Cupertino, California
March 2015



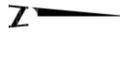
TREE No.	SPECIES	SIZE DIAMETER (in inches)	PROTECTED	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
86	Deodar cedar	7	No	4	High	Good young tree, crown lifted to 8'.
87	Coast live oak	5	No	4	High	Good young tree, multiple attachments at 6'; full crown.

Tree Assessment Plan

The Oaks
Cupertino, CA

Prepared for:
KT Urban
Cupertino, CA

May 2018


No Scale

Notes:
Base map provided by:
Charles W. Davidson
San Jose, CA
Numbered tree locations
are approximate.



325 Ray Street
Pleasanton, CA 94566
Phone 925.484.0211
Fax 925.484.0596
www.hortscience.com

