

Santana Row West

Tree Assessment

Winchester Blvd. San Jose CA

Prepared for:
David J. Powers & Associates
1871 The Alameda, Suite 200
San Jose CA 95126

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

January 2016



Tree Assessment

Santana Row West Winchester Blvd. San Jose CA

Table of Contents

	Page
Introduction and Overview	1
Assessment Methods	1
Description of Trees	1
Suitability for Preservation	7
Tree Mitigation	9
Tree Preservation Guidelines	10
Summary	12
List of Tables	
Table 1. Tree condition & frequency of occurrence. Table 2. Suitability for preservation. Table 3. Tree mitigation.	2 8 10
Attachments	

Tree Assessment Form

Tree Assessment Map

Introduction and Overview

David J. Powers & Associates is assisting in planning the redevelopment Santana Row West project, located on S. Winchester Blvd. in San Jose, CA. Current site use consists of the movie theaters, a historical mansion, parking and associated landscape features. David J. Powers & Associates requested that HortScience, Inc. prepare a Tree Assessment for the site. This report provides the following information:

- 1. A survey of trees currently growing on the site.
- 2. Guidelines for tree preservation during the design, construction, and maintenance phases of development.

Assessment Methods

Trees were assessed in October 2015. Trees were evaluated through a visual assessment from the ground and consisted of the following steps:

- 1. Tagging each tree with an identifying number and record its location on a map.
- 2. Identifying the tree as to species.
- 3. Measuring the trunk diameter at 24" 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.
 - 0 Tree is dead.
- 5. Noting any significant structural characteristics including decay, poor crown conformation, dieback and a history of failure.
- 6. 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.

Each tree is described in the attached *Tree Assessment Form* and its approximate location plotted in the *Tree Assessment Map* located in the Attachments.

Description of Trees

One hundred ninety-four (194) trees were evaluated, representing 34 species (Table 1, following page). All of the trees were planted, most likely when the complex was constructed. Coast live oak is native to the San Jose area but was not indigenous to the site. Species present were typical of landscape plants used in the San Jose area.

Table 1. Species present and tree condition. Santana Row West. South Winchester Blvd. San Jose CA.

Common Name	Scientific Name		Con	dition		No. of Tr	ees
	Poor (1-2)	Fair (3)	Good (4)	Excell (5)	Ordinance Size	Total	
Bailey acacia	Acacia baileyana		1				1
Blackwood acacia	Acacia melanoxylon	4	3			4	7
Japanese maple	Acer palmatum			1			1
Strawberry tree	Arbutus unedo			1		1	1
King palm	Archontophoenix cunninghamiana		1				1
Bottle tree	Brachychiton populneus			2		2	2
Guadalupe palm	Brahea edulis			4		3	4
Blue Atlas cedar	Cedrus atlantica 'Glauca'		1	1		2	2
Camphor	Cinnamomum camphora		1	1			2
Cordyline	Cordyline australis		2	2		3	4
Silver dollar gum	Eucalyptus polyanthemos	3	21	1		24	25
Silk oak	Grevillea robusta	3	2			5	5
Calif. black walnut	Juglans hindsii		1			1	1
Hollywood juniper	<i>Juniperus chinensis</i> 'Torulosa'	1	15	1		6	17
Glossy privet	Ligustrum lucidum	3	6			6	9
Sweetgum	Liquidambar styraciflua		3				3
Mayten	Maytenus boaria	6	3				9
Bottlebrush	Melaleuca citrina		2	1		1	3
Mulberry	Morus sp.	2	1				3
Olive	Olea europaea		1			1	1
Canary Island date palm	Phoenix canariensis			1	2	3	3
Canary Island pine	Pinus canariensis	1	3	5		9	9
Aleppo pine	Pinus halepensis		2			1	2
Monterey pine	Pinus radiata	7	5			10	12
Fremont cottonwood	Populus fremontii		1			1	1
Hollyleaf cherry	Prunus ilicifolia	1	3			2	4
Firethorn	Pyracantha cv.	3	1				4
Evergreen pear	Pyrus kawakamii	2					2
Coast live oak	Quercus agrifolia	2	5	1		2	8
California pepper	Schinus molle		2			2	2
Coast redwood	Sequoia sempervirens	9	3	1		7	13
Queen palm	Syagrus romanzoffianum			2			2
Windmill palm	Trachycarpus fortunei	1	11	14			26
Mexican fan palm	Washingtonia robusta			5		5	5
Total, all trees assess	sed	48	100	44	2	100	194

The City of San Jose defines "Ordinance Sized Tree" as any live or dead woody perennial plant having a main stem or trunk 56 inches or more in circumference (18 inches in diameter) at a height measured 24 inches above natural grade slope (SJMC 13.32.20.1). One hundred (100) trees met this criterion. Ordinance Sized Trees are identified on the **Tree Assessment Form** and representative photographs are included below. Heritage Trees are those specifically designated by the City; none were present at the site.

Twenty-six (26) windmill palms were located along Olsen Drive and in the parking lot of 3164 Olsen. They were in fair to good conditions. They were semi-mature in development 3" to 9" in diameter. Brown trunk ranged from 4' to 32'. Tree #176 was the largest windmill palm with 32' of brown trunk. It condition was fair. Most windmill palms (14 of 26) were in good condition while 11 were fair. Palm #167 was in poor condition having been suppressed by adjacent trees.

Twenty-five (25) silver dollar gums were located behind the buildings along the property line. They had all been topped to clear overhead utility lines (Photo 1). Trees were mature in development. Trunk diameters ranged from 16" to 37". The largest silver dollar gum, #44, was in poor condition. Over 50% of the trees were 24" or larger. Overall condition was fair (21 trees). Silver dollar gum #134 was in good condition. Gums #10, 18 and 44 were in poor condition.



Photo 1. Silver dollar gum were located behind buildings on the south and west sides of the property under utility lines.

Seventeen (17) Hollywood junipers were present. Trunk diameters ranged from 7" to 14". Most trees were multi stemmed. Hollywood junipers were located throughout the assessment area. All except two were in fair condition.

Thirteen (13) coast redwoods were present. Trees ranged from young to mature in development with diameters between 8" and 24". About half of the redwoods were 20" or large. Tree condition was largely poor (11). Redwoods #100 – 106 were in a parking lot median planter and were drought stressed. Trees #61 - 65 were grouped together near along Olin Avenue. Redwood #62 was in good condition while #64 and 65 were fair.

Twelve (12) Monterey pine trees were mature in development. Trunk diameters ranged between 16" and 39". Half the trees were 25" or larger. All but one (#133) had been reduced to clear overhead utility lines (Photo 2). Among Monterey pines, seven were in poor condition and 5 were fair.

Photo 2. Monterey pine (#53) located along Olin Ave. The tree was close to an existing building and had been pruned to clear energized conductors. Its condition was fair.



Nine Canary Island pines were located on the northwest corner of the property (Photo 3). Trees were mature in development with trunk diameters between 19" and 34" Tree condition varied widely: tree #76 was poor; #74, 75, and 199 were fair; while #72, 73, 88, 89, and 92 were good. Trees along Olin Avenue had been pruned to clear utility lines. This pruning was the primary reason for differences in condition.

Photo 3. Canary Island pines (#88 & 89) located along Winchester Blvd. Both were in good condition.



No other species was represented by morethan 9 trees. Included in this group were:

- 8 glossy privets were located along the west perimeter of the property with one additional tree on Olsen Dr. Trees were typical of the species numerous multiple stems. Tree condition was either fair (3 trees) or poor (6)..
- 7 mayten trees were located in small parking lot planters and 2 others were near the Mystery House. Trees were mature in development with trunk diameters between 7" and 15". Six (6) trees were in poor condition; 3 were fair. Health was directly related to drought stress. Trees #174 and 189 near Olsen Dr. were in fair condition.
- 8 coast live oaks were young or semi-mature in developing, ranging from 6" to 19" in diameter. The largest oaks were #165 (19", fair condition) and #166 (18, 13", fair condition). Tree condition was variable: #5 and 9 were poor; #2, 12, 33, 165, 166 were fair; and tree #14 was good. All but #165 and 166 had been topped o clear overhead utilities.
- 7 blackwood acacias were located near Olsen Dr. Trees from 7" to 28" in diameter. Tree condition was either poor (4) or fair (3).

- 5 silk oaks were mature in development (20" to 32") and either poor or fair condition. All had poor form and structure.
- 5 Mexican fan palms were mature in development (20" to 32") and all in good condition. All but one (#78) were located near Olsen Dr.
- Guadalupe palms #179, 180, 184 and 185 were located on the corner of Olsen and Winchester.
 All were in good condition (Photo 4).





- Cordyline #81, 82 and 83 were multi-stem small trees typical of the species.
 Tree #77 had a large single stem. Trees #77 and 82 were in fair condition; #81 and 83 were good.
- Hollyleaf cherries #19, 29, 31 and 70 were large, multi-stem shrubs. Tree #19 was in poor condition; other trees were fair.
- Firethorns #16, 28, 34 and 39 were large, multistem shrubs. They had been topped to clear overhead utilities.
- Sweetgums #46, 47 and 48 were located in the planter on the south side of the Olin Ave. building. Trees were in fair condition and 15" to 17" in diameter.
- Bottlebrush trees #49, 50 and 71 were in the same planter as the sweetgum.
 Trees were multi-stem, in fair to good condition and 2" to 7" in diameter.
- Mulberries #56, 57 and 58 were located in the south planter next to the middle building. Trees were in poor to fair condition and 8" to 17" in diameter.
- Canary Island date palms (#79, 170 and 188) were located on Olsen Dr. and in the Mystery House parking lot. Two trees (#170 and 188) were in excellent condition and #79 in good. They were 36", 37" and 47" in diameter.
- Bottle trees (#93, and 94) were located in a parking lot planter on the corner of Winchester and Olsen Dr. Trees were in good condition and 24" and 32" in diameter and 20' to 25' of brown trunk.
- Blue Atlas cedars (#90 and 91) were located in narrow parking lot planters on the east side of the property near Winchester. Tree #90 was in fair while #91 was good. Trees were 28" and 38" in diameter.
- Aleppo pines (#118 and 120) were off-site along the west property line and in fair condition. They were 9" and 19" in diameter.
- Queen palms (#45 and 115) were located in small parking lot planters, 12" to 13" in diameter and in good condition.

- Camphor trees (#113 and 114) were located in small parking lot planters, 6" and
 8" in diameter. One was in fair and the other in good condition.
- California peppers (#95 and 186) were in fair condition and 52" and 60" in diameter (photo 5). One was located near the corner on Winchester and Olsen and the other in the Mystery House parking lot. An active bee hive was in tree #95 and tree #186 was riddled with wood decaying fungi.

Photo 5. California pepper #186 located in Mystery House parking lot.

- Bailey acacia #132 was located off-site,
 10" in diameter and in fair condition.
- Japanese maple #67 was in good condition, located in the entrance planter at the Olin Ave building and 7" and 5" in diameter.



- California black walnut #190 was located in the Mystery House parking lot, 24" in diameter, and in fair condition.
- Olive #26 was located on the west property line, 12", 7" and 6" in diameter and in fair condition.
- Fremont cottonwood #54 was located next to the building, in fair condition and was 27" in diameter.

Photo 6. Fremont cottonwood #54 located on the north side of the middle building.



 Strawberry tree #60 was located next to a gas line and meter close to the building. This tree was multi stem (10", 11" and 12") and in good condition.



Suitability for Preservation

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. 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. Silver dollar gum has demonstrated the propensity for branch failure.

Species response

There is a wide variation in the response of individual species to construction impacts and changes in the environment. For example, coast redwood and Mexican fan palm are relatively tolerant of construction impacts while mature Monterey pine and silver dollar gum are sensitive.

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 having being invasive. San Jose is part of the Central West Floristic Province. Blackwood acacia, Mexican fan palm, Canary Island date palm, olive and Calif. pepper are noted as being 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).

Table 2. Tree suitability for preservation. Santana Row West. South Winchester Blvd. San Jose CA.

High

Trees with good health and structural stability that have the potential for longevity at the site. Twenty-three (23) trees were rated as having good suitability for preservation: windmill palm #136,137, 140, 150, 151, 153, 154, 191; Mexican fan palm #145, 164, 168, 187; Canary Island date palm #79, 170, 188; Canary Island pine #88, 89, 92; Blue Atlas cedar #91, bottle tree #94, Queen palm #45, cordyline #81, and Hollywood juniper #155.

Moderate

Trees in fair health and/or possessing 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. Sixty-five (65) trees were rated as having moderate suitability for preservation including: 15 windmill palms, 11 Hollywood juniper, 4 silver dollar gum, 4 Guadalupe palm, 3 Monterey pine, 3 sweetgum and 3 Canary Island pines.

Low

Trees in poor health or possessing 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 six (106) trees were rated as having poor suitability for preservation including: 21 silver dollar gum, 11 coast redwood, 9 Monterey pine, 8 common privet, 7 mayten, 7 blackwood acacia, 6 coast live oaks, 5 Hollywood juniper, 5 silk oak 4 holly leaf cherry and 4 firethorn.

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.

Tree Mitigation

The City of San Jose requires mitigation of trees removed on development sites. The species and exact number of trees to be planted on the site will be determined in consultation with the City Arborist and the Department of Planning, Building, and Code Enforcement.

All trees that are to be removed shall be replaced at the following ratios:

	Туре с	of Tree to be R		
Diameter of Tree to be Removed	Native	Non-Native	Orchard	Minimum Size of Each Replacement Tree
18 inches or greater	5:1	4:1	3:1	24-inch box
12 - 18 inches	3:1	2:1	none	24-inch box
less than 12 inches	1:1	1:1	none	15-gallon container

x:x = tree replacement to tree loss ratio

Note: Trees greater than 18" diameter shall not be removed unless a Tree Removal Permit, or equivalent, has been approved for the removal of such trees.

No trees were indigenous to the site. Coast live oak is native to the San Jose area. Calif. black walnut #190 was considered an "orchard" tree. Mayten #108, 110, 111, coast redwood #103, 106 and silk oak #97 were all but dead and not included in the mitigation calculations.

Table 3. Tree mitigation. Santana Row West. South Winchester Blvd.. San Jose CA.

Diameter of tree to be removed	Number	of Trees to be	Removed	Replaceme	nt tree size
DO TOMOVOU	Native	Non-Native	Orchard	15 Gallon	24" Box
18 inches or greater					
12 - 18 inches			0		
less than 12 inches			0		
Total					

Diameter of tree to be removed	Numb	per of Mitigation Required	n Trees	Replaceme	nt tree size
be removed	Native	Non-Native	Orchard	15 Gallon	24" Box
18 inches or greater				-	
12 - 18 inches			0	-	
less than 12 inches				-	
Total					

Alternative Mitigation Measures

In the event the project site does not have sufficient area to accommodate the required tree mitigation, one or more of the following measures will be implemented, to the satisfaction of the City's Environmental Principal Planner, at the development permit stage:

- The size of a 15-gallon replacement tree can be increased to 24-inch box and count as two replacement trees.
- An alternative site(s) will be identified for additional tree planting. Alternative sites may include local parks or schools or installation of trees on adjacent properties for screening
- A donation of \$300 per mitigation tree to Our City Forest or San Jose Beautiful for in-lieu off-site tree planting in the community. These funds will be used for tree planting and maintenance of planted trees for approximately three years. A donation receipt for off-site tree planting will be provided to the Planning Project Manager prior to issuance of a development permit.

Tree Preservation Guidelines

The following are recommendations for design and construction phases that will assist in successful tree preservation.

Design recommendations

- 1. Include the location and tag numbers of all trees on all plans.
- 2. Allow the Consulting Arborist to review all future project submittals including grading, utility, drainage, irrigation, and landscape plans.
- 3. Establish a **TREE PROTECTION ZONE** around any trees to be preserved. For design purposes, the **TREE PROTECTION ZONE** shall be the dripline. Erect chainlink fence at the edge of the **TREE PROTECTION ZONE**.
- 4. Route underground services including utilities, sub-drains, water or sewer 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. Use only herbicides safe for use around trees and labeled for that use, even below pavement.
- 6. Design irrigation systems so that no trenching will occur within the **TREE PROTECTION ZONE**.

Pre-construction and demolition treatments and recommendations

- 1. The demolition contractor shall meet with the Consulting Arborist before beginning work to discuss work procedures and tree protection.
- Install protection at the TREE PROTECTION ZONE prior to demolition, grubbing, or grading.
- 3. No entry is permitted into a **TREE PROTECTION ZONE** without permission of the project superintendent.

4. Trees to be preserved may require pruning to clean the crown and to provide clearance. All pruning shall be completed by an ISA Certified Arborist or Tree Worker and adhere to the latest editions of the American National Standards for tree work (Z133 and A300) and International Society of Arboriculture Best Management Practices, Pruning.

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.
- Trees to be removed shall be felled so as to fall away from TREE PROTECTION
 ZONE and avoid pulling and breaking of roots of trees to remain. If roots are
 entwined, the consultant may require first severing the major woody root mass
 before extracting the trees, or grinding the stump below ground.
- 3. Trees to be preserved must be irrigated during the construction period. The irrigation schedule to be determined by the Consulting Arborist. Each irrigation shall wet the soil within the TREE PROTECTION ZONE to a depth of 30". For planning purposes, expect to irrigate each tree weekly during months with no or low rainfall.
- 4. Any grading, construction, demolition or other work that is expected to encounter roots of trees to be preserved should be monitored by the Consulting Arborist.
- 5. If injury occurs to any tree during construction, it should be evaluated as soon as possible by the Consulting Arborist so that appropriate treatments can be applied.
- 6. Fences are to remain until all site work has been completed. Fences may not be relocated or removed without permission of the project superintendent.
- 7. Construction trailers, traffic and storage areas must remain outside fenced areas at all times.
- 8. No materials, equipment, soil, 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 roots damaged during grading or construction shall be exposed to sound tissue and cut cleanly with a saw.

Tree Assessment HortScience, Inc. Santana Row West. South Winchester Blvd. David J. Powers & Associates Page 12

Summary

One hundred ninety-four (194) trees were assessed in the Santana Row West area. Thirty-four (34) species were represented, all of which were common to landscapes in the San Jose area. All trees had been planted; no trees were indigenous to the site. Coast live oak is native to the San Jose area.

Windmill palm (26 trees), silver dollar gum (25), Hollywood juniper (17), coast redwood (13), Monterey pine (12), glossy privet (9), mayten (9) and Canary Island pine (9) were the most frequently occurring species and together accounted for 62% of all trees. Twenty-six (26) species were comprised of 5 or fewer trees. Overall tree condition was fair (100 of 194 trees) with equal numbers of trees in poor and good/excellent condition. Tree preservation efforts should focus on the 23 trees with high suitability for preservation.

HortScience, Inc.

James R. Clark, Ph.D.

Certified Arborist WE-0846A

Registered Consulting Arborist #357

Attachments

Tree Assessment Form

Tree Location Map

Tree Assessment

Santana Row West

San Jose, CA October 2015



TREE No.	SPECIES	TRUNK DIAMETER (in.)	ORDINANCE SIZE?	CONDITION 1=poor 5=excell.	SUITABILITY for PRESERVATION	COMMENTS
1	Silver dollar gum	24	Yes	3	Low	Topped to clear overhead utility lines; multiple attachments @ 4'; history of branch failure on N.; leans N
2	Coast live oak	9	No	3	Low	Topped to clear overhead utility lines; suppressed under silver dollar gum; codominant trunks @ 3'.
3	Glossy privet	4,3,2,2	No	3	Low	Topped to clear overhead utility lines; asymmetric form due to adjacent silver dollar gum.
4	Silver dollar gum	20	Yes	3	Low	Topped to clear overhead utility lines; multiple attachments @ 6'.
5	Coast live oak	6	No	2	Low	Topped to clear overhead utility lines; asymmetric form.
6	Glossy privet	5,3,2,2	No	2	Low	Topped to clear overhead utility lines; multiple attachments @ base.
7	Glossy privet	7,4,4,2	No	2	Low	Topped to clear overhead utility lines; asymmetric form due to adjacent silver dollar gum.
8	Silver dollar gum	32	Yes	3	Low	Topped to clear overhead utility lines; multiple attachments @ 3' & 6'.
9	Coast live oak	5	No	2	Low	Asymmetric form due to adjacent silver dollar gum.
10	Silver dollar gum	32	Yes	2	Low	Topped to clear overhead utility lines; decay in
11	Glossy privet	7,6,2,2,2	Yes	3	Low	Topped to clear overhead utility lines.
12	Coast live oak	9	No	3	Low	Topped to clear overhead utility lines; canopy one- sided to S.
13	Silver dollar gum	24	Yes	3	Low	Topped to clear overhead utility lines; history of branch failure on E.; multiple attachments @ 6'.



TREE No.	SPECIES	TRUNK DIAMETER (in.)	ORDINANCE SIZE?	CONDITION 1=poor 5=excell.	SUITABILITY for PRESERVATION	COMMENTS
14	Coast live oak	8	No	4	Low	Topped to clear overhead utility lines; suppressed under silver dollar gum.
15	Silver dollar gum	26	Yes	3	Low	Topped to clear overhead utility lines.
16	Firethorn	4,3,2,2	No	2	Low	Topped to clear overhead utility lines; multiple attachments @ base.
17	Monterey pine	17	No	2	Low	Topped to clear overhead utility lines; poor form & structure.
18	Silver dollar gum	22	Yes	2	Low	Topped to clear overhead utility lines; multiple attachments @ 6'; decay in top; thin crown.
19	Hollyleaf cherry	5,5,4,4,2	Yes	2	Low	Topped to clear overhead utility lines; suppressed under silver dollar gum;
20	Glossy privet	5,5,4,4,4,4	Yes	3	Low	Topped to clear overhead utility lines; suppressed under silver dollar gum.
21	Monterey pine	19	Yes	2	Low	Topped to clear overhead utility lines; upper crown is dead; dead branches; leans E.
22	Silver dollar gum	27	Yes	3	Low	Topped for utility clearance on the W. side; multiple attachments @ 6'.
23	Glossy privet	7,6,5,3,2	Yes	3	Low	Topped to clear overhead utility lines; dead twigs; multiple attachments @ base.
24	Silver dollar gum	22	Yes	3	Low	Topped to clear overhead utility lines; poor form & structure.; multiple attachments @ 7'.
25	Monterey pine	16	No	2	Low	Topped to clear overhead utility lines; branch dieback; poor pruning.
26	Olive	12,7,6	Yes	3	Low	Topped to clear overhead utility lines; multiple attachments @ base; suppressed to W.
27	Silver dollar gum	31	Yes	3	Low	Topped to clear overhead utility lines; leans N.; multiple attachments @ 2'.



TREE No.	SPECIES	TRUNK DIAMETER (in.)	ORDINANCE SIZE?	CONDITION 1=poor 5=excell.	SUITABILITY for PRESERVATION	COMMENTS
28	Firethorn	5,5,4	No	2	Low	Topped to clear overhead utility lines; suppressed under adj. silver dollar gum.
29	Hollyleaf cherry	6,4,4	No	3	Low	Topped to clear overhead utility lines; multiple attachments @ base; suppressed by #30.
30	Monterey pine	28	Yes	2	Low	Topped to clear overhead utility lines; poor form & structure; twig & branch dieback.
31	Hollyleaf cherry	6,5,3	No	3	Low	Topped to clear overhead utility lines; suppressed by adj. tree; multiple attachments @ base.
32	Silver dollar gum	27	Yes	3	Low	Topped to clear overhead utility lines; multiple attachments @ 4'.
33	Coast live oak	9	No	3	Low	Topped to clear overhead utility lines; suppressed from adj. tree E.; asymmetric form.
34	Firethorn	5,4,3 2	No	3	Low	Topped to clear overhead utility lines; multiple attachments @ base.
35	Monterey pine	39	Yes	3	Low	Topped to clear overhead utility lines; multiple attachments @ 4'; branch dieback; heavy lateral limb toward E.
36	Silver dollar gum	22	Yes	3	Low	Topped to clear overhead utility lines; codominant trunks @ 4'; heavy lateral limbs toward E.
37	Monterey pine	29	Yes	2	Low	Topped to clear overhead utility lines; history of branch failure on E.; branch dieback.
38	Monterey pine	22	Yes	2	Low	Topped to clear overhead utility lines; branch dieback; asymmetric form.
39	Firethorn	7,4	No	2	Low	Topped to clear overhead utility lines; multiple attachments @ 3'.
40	Silver dollar gum	20	Yes	3	Low	Topped to clear overhead utility lines; branch dieback; multiple attachments @ 5' & 6'.



TREE No.	SPECIES	TRUNK DIAMETER (in.)	ORDINANCE SIZE?	CONDITION 1=poor 5=excell.	SUITABILITY for PRESERVATION	COMMENTS
41	Monterey pine	26	Yes	2	Low	Topped to clear overhead utility lines; multiple attachments @ 3'; poor form & structure.
42	Silver dollar gum	19	Yes	3	Low	Topped to clear overhead utility lines; branch dieback.
43	Silver dollar gum	22	Yes	3	Low	Topped to clear overhead utility lines; leans E.; multiple attachments @ 3' & 6'.
44	Silver dollar gum	37	Yes	2	Low	Topped to clear overhead utility lines; history of branch failure; leans S.
45	Queen palm	12	No	4	High	Good form & structure; 6' planter.
46	Sweetgum	17	No	3	Moderate	Thin canopy; branch dieback & decay; good form & structure.
47	Sweetgum	17	No	3	Moderate	Thin canopy; history of branch failure; good form & structure; girdling roots.
48	Sweetgum	15	No	3	Moderate	Thin canopy; history of branch failure; codominant trunks @ 1'; one-sided on W.
49	Bottlebrush	5,3,2,2,2	No	3	Low	Suppressed under sweetgum.
50	Bottlebrush	6,3,3	No	3	Low	Suppressed by adjacent tree; canopy thin on W.
51	Hollywood juniper	17,7	Yes	3	Moderate	Coast live oak is next to building; asymmetric form; inside fenced area without tag.
52	Hollywood juniper	13,12,10	Yes	3	Moderate	Coast live oak is next to building; asymmetric form; inside fenced area without tag.
53	Monterey pine	23	Yes	3	Low	Multiple attachments @ 15'; topped to clear overhead utilities; girdling roots.
54	Fremont cottonwood	27	Yes	3	Moderate	3' from building; thin canopy.
55	Hollywood juniper	7	No	3	Moderate	Leans E.; suppressed under adj. mulberry tree.
56	Mulberry	17	No	3	Low	Thinning canopy; asymmetric form; close to sidewalk.
57	Mulberry	8	No	1	Low	All but dead.



TREE No.	SPECIES	TRUNK DIAMETER (in.)	ORDINANCE SIZE?	CONDITION 1=poor 5=excell.	SUITABILITY for PRESERVATION	COMMENTS
58	Mulberry	9	No	2	Low	Thinning canopy; codominant trunks trunks @ 5' & 7'; next to sidewalk.
59	Hollywood juniper	7	No	2	Low	Topped; growing under building; asymmetric form.
60	Strawberry tree	12,11,10,8	Yes	4	Moderate	Near gas line & meter; multiple attachments @ base; 1' from building.
61	Coast redwood	24	Yes	2	Low	Topped under utility line; thin canopy; sucker growth @ base.
62	Coast redwood	24	Yes	4	Moderate	Leans E. with corrected form.
63	Coast redwood	8	No	2	Low	Suppressed under canopy of adj. tree; twig & branch dieback; next to sidewalk.
64	Coast redwood	23	Yes	3	Moderate	Suppressed from adj. tree.
65	Coast redwood	24	Yes	3	Low	Poor form & structure; 4' from building.
66	Monterey pine	37	Yes	3	Moderate	Side-trimmed away from utility lines; low lateral branch @ 15'; displacing curb @ parking lot entrance.
67	Japanese maple	7,5	No	4	Moderate	Raised planter.
68	Hollywood juniper	14	No	3	Moderate	Raised planter; 5' from building; leaning toward E.
69	Hollywood juniper	10	No	3	Low	Leans E.; 2' from building.
70	Hollyleaf cherry	5,4,4,4,3,3	Yes	3	Low	Suppressed from adj. tree; 1' from building.
71	Bottlebrush	7,6,6,5,5	Yes	4	Moderate	Leans E.; twig & branch dieback.
72	Canary Island pine	24	Yes	4	Moderate	Topped; located 12' from utility lines.
73	Canary Island pine	23	Yes	4	Moderate	Pruned back on NW. side near utility pole.
74	Canary Island pine	27	Yes	3	Low	Located 4' from utility lines; heavy pruning on NW. side; heavy lateral limbs.
75	Canary Island pine	34	Yes	3	Low	Next to sidewalk; heavy pruning to clear utility lines.

Tree Assessment



TREE No.	SPECIES	TRUNK DIAMETER (in.)	ORDINANCE SIZE?	CONDITION 1=poor 5=excell.	SUITABILITY for PRESERVATION	COMMENTS
76	Canary Island pine	29	Yes	2	Low	Crowded; heavy lateral limbs on E.; poor form &
						structure.
77	Cordyline	17	No	3	Moderate	3' from building.
78	Mexican fan palm	24	Yes	4	Moderate	55' brown trunk.
79	Canary Island date palm	37	Yes	4	High	20' brown trunk.
80	Hollywood juniper	9,6	No	3	Moderate	Pruned into a topiary form.
81	Cordyline	16,13,12,10	Yes	4	High	Planter @ parking entrance; drought stressed.
82	Cordyline	13,10,8 7,5	Yes	3	Low	History of trunk removal.
83	Cordyline	13,8,5	Yes	4	Moderate	Parking lot planter; drought stressed.
84	King palm	9	No	3	Moderate	1' from building; sweeping trunk.
85	Hollywood juniper	7	No	3	Low	Pruned into topiary form; decay @ topping point.
86	Hollywood juniper	10	No	3	Low	Pruned into topiary form; decay @ topping point.
87	Hollywood juniper	8	No	3	Low	Pruned into topiary form; decay @ topping point.
88	Canary Island pine	27	Yes	4	High	Parking lot planter @ entrance; broken branch.
89	Canary Island pine	28	Yes	4	High	Good form & structure.
90	Blue Atlas cedar	28	Yes	3	Moderate	History of branch failure; twig dieback.
91	Blue Atlas cedar	38	Yes	4	High	Damage to trunk @ 1' & 3'.
92	Canary Island pine	32	Yes	4	High	Good form & structure.
93	Bottle tree	24	Yes	4	Moderate	Codominant trunks @ 5'.
94	Bottle tree	32	Yes	4	High	Codominant trunks @ 8'.
95	Calif. pepper	52	Yes	3	Moderate	Multiple attachments @ 8'; branch decay @ 8'; history of branch failure; heavy end weight; active bee hive on S.
96	Silk oak	24	Yes	2	Low	Thin canopy; branch dieback.
97	Silk oak	20	Yes	1	Low	All but dead.
98	Silk oak	25	Yes	2	Low	Branch dieback.
99	Coast redwood	24	Yes	2	Low	Parking lot planter; thin canopy; branch dieback; no central leader.



TREE No.	SPECIES	TRUNK DIAMETER (in.)	ORDINANCE SIZE?	CONDITION 1=poor 5=excell.	SUITABILITY for PRESERVATION	COMMENTS
100	Coast redwood	20	Yes	3	Low	Parking lot planter; thin canopy.
101	Coast redwood	11	No	2	Low	Crowded between adj. coast redwood trees.
102	Coast redwood	9,7	No	2	Low	Parking lot planter; codominant trunks @ base.
103	Coast redwood	15	No	1	Low	Parking lot planter; all but dead.
104	Coast redwood	17	No	2	Low	Parking lot planter; thin crown; drought stressed.
105	Coast redwood	11,11	Yes	2	Low	Parking lot planter; drought stressed.
106	Coast redwood	13	No	1	Low	Parking lot planter; all but dead.
107	Mayten	9	No	2	Low	Leans E.; twig & branch dieback.
108	Mayten	9	No	1	Low	All but dead.
109	Mayten	8	No	3	Low	Branch dieback.
110	Mayten	13	No	1	Low	All but dead.
111	Mayten	15	No	1	Low	All but dead.
112	Mayten	7	No	2	Low	Thin canopy; leans E.
113	Camphor	8	No	3	Low	Multiple attachments @ 5'.
114	Camphor	6	No	4	Moderate	Good form & structure.
115	Queen palm	13	No	4	Moderate	Good form & structure.
116	Mayten	7	No	2	Low	Thin canopy; multiple attachments @ 2'.
117	Monterey pine	36	Yes	3	Moderate	Off-site & no tag; side-trimmed for utility clearance; branch extends 15' into property.
118	Aleppo pine	19	Yes	3	Moderate	Off-site & no tag; topped to clear overhead utility lines; heavy lateral branching.
119	Canary Island pine	19	Yes	3	Moderate	Off-site & no tag; topped to clear overhead utility lines.
120	Aleppo pine	9	No	3	Low	Off-site & no tag; topped to clear overhead utility lines; poor form & structure.
121	Silver dollar gum	27	Yes	3	Moderate	Heavy pruning to clear overhead utility lines.
122	Silver dollar gum	27	Yes	3	Low	Heavy pruning to clear overhead utility lines; history of branch failure.



TREE No.	SPECIES	TRUNK DIAMETER (in.)	ORDINANCE SIZE?	CONDITION 1=poor 5=excell.	SUITABILITY for PRESERVATION	COMMENTS
123	Silver dollar gum	16	No	3	Moderate	Heavy pruning to clear overhead utility lines.
124	Silver dollar gum	26	Yes	3	Moderate	Heavy pruning to clear overhead utility lines; multiple attachments @ 7'.
125	Glossy privet	multi	No	3	Moderate	Off-site & no tag; row of 20 shrubs with 6" & smaller dbh.
126	Silver dollar gum	20	Yes	3	Low	Leans S.; cable from utility pole is embedded in trunk where codominant trunks emerge @ 20'; heavy pruning to clear overhead utility lines.
127	Silver dollar gum	18	Yes	3	Low	Enlarged base; heavily pruned to clear overhead utility lines; crooked trunk.
128	Silk oak	28	Yes	3	Low	History of branch failure on W.; moderate branch dieback.
129	Silk oak	32	Yes	3	Low	History of branch failure; minor branch dieback, codominant trunks @ 12' with wide attachment.
130	Silver dollar gum	24	Yes	3	Low	Lifting curb in parking lot; heavy pruning to clear overhead utility lines.
131	Silver dollar gum	25,16,13	Yes	3	Low	Asymmetric form due to pruning to clear overhead utility lines; embedded in fence.
132	Bailey acacia	10	No	3	Low	Off-site; lost central leader; suppressed on N. from adj. tree.
133	Monterey pine	31	Yes	3	Moderate	History of branch failure; branch dieback; high crown.
134	Silver dollar gum	23	Yes	4	Moderate	Codominant trunks @ 15'.
135	Windmill palm	7	No	3	Moderate	Small crook in trunk; brown trunk 15'.
136	Windmill palm	7	No	4	High	20' brown trunk.
137	Windmill palm	9	No	4	High	Tagged as #27 within fenced area.



TREE No.	SPECIES	TRUNK DIAMETER (in.)	ORDINANCE SIZE?	CONDITION 1=poor 5=excell.	SUITABILITY for PRESERVATION	COMMENTS
138	Windmill palm	8	No	3	Moderate	Tagged as #26 within fenced area; crowded growth under stairs.
139	Windmill palm	5	No	4	Moderate	18' brown trunk; trunk slightly crooked.
140	Windmill palm	6	No	4	High	18' brown trunk.
141	Windmill palm	7	No	4	Moderate	18' brown trunk; trunk slightly crooked.
142	Hollywood juniper	7,6,5,5	Yes	3	Moderate	Side-trimmed along sidewalk.
143	Hollywood juniper	10,5,5	Yes	3	Moderate	Side-trimmed along sidewalk.
144	Windmill palm	5	No	4	Moderate	15' brown trunk.
145	Mexican fan palm	26	Yes	4	High	20' brown trunk.
146	Hollywood juniper	8,6,6	Yes	3	Moderate	Heavily pruned.
147	Hollywood juniper	12	No	3	Moderate	Heavily pruned.
148	Hollywood juniper	7,7	No	3	Moderate	Heavily pruned.
149	Hollywood juniper	9,6,6	Yes	3	Moderate	Side-trimmed along sidewalk.
150	Windmill palm	6	No	4	High	20' brown trunk.
151	Windmill palm	7	No	4	High	15' brown trunk.
152	Windmill palm	7	No	4	Moderate	20' brown trunk.
153	Windmill palm	3	No	4	High	4' brown trunk.
154	Windmill palm	8	No	4	High	20' brown trunk.
155	Hollywood juniper	9	No	4	High	Good form & structure.
156	Windmill palm	6	No	4	Moderate	25' brown trunk; crook @ 5'.
157	Blackwood acacia	19	Yes	3	Low	Leans S.; small parking lot planter along fence line.
158	Blackwood acacia	11	No	3	Low	Leans W.; heavy canopy; codominant trunks @ 4'.
159	Blackwood acacia	7	No	3	Low	Leans over sidewalk on N.
160	Blackwood acacia	28	Yes	2	Low	Conk @ base; history of branch failure & decay @ 25'.
161	Blackwood acacia	15,14	Yes	2	Low	Codominant trunks @ base are separating.

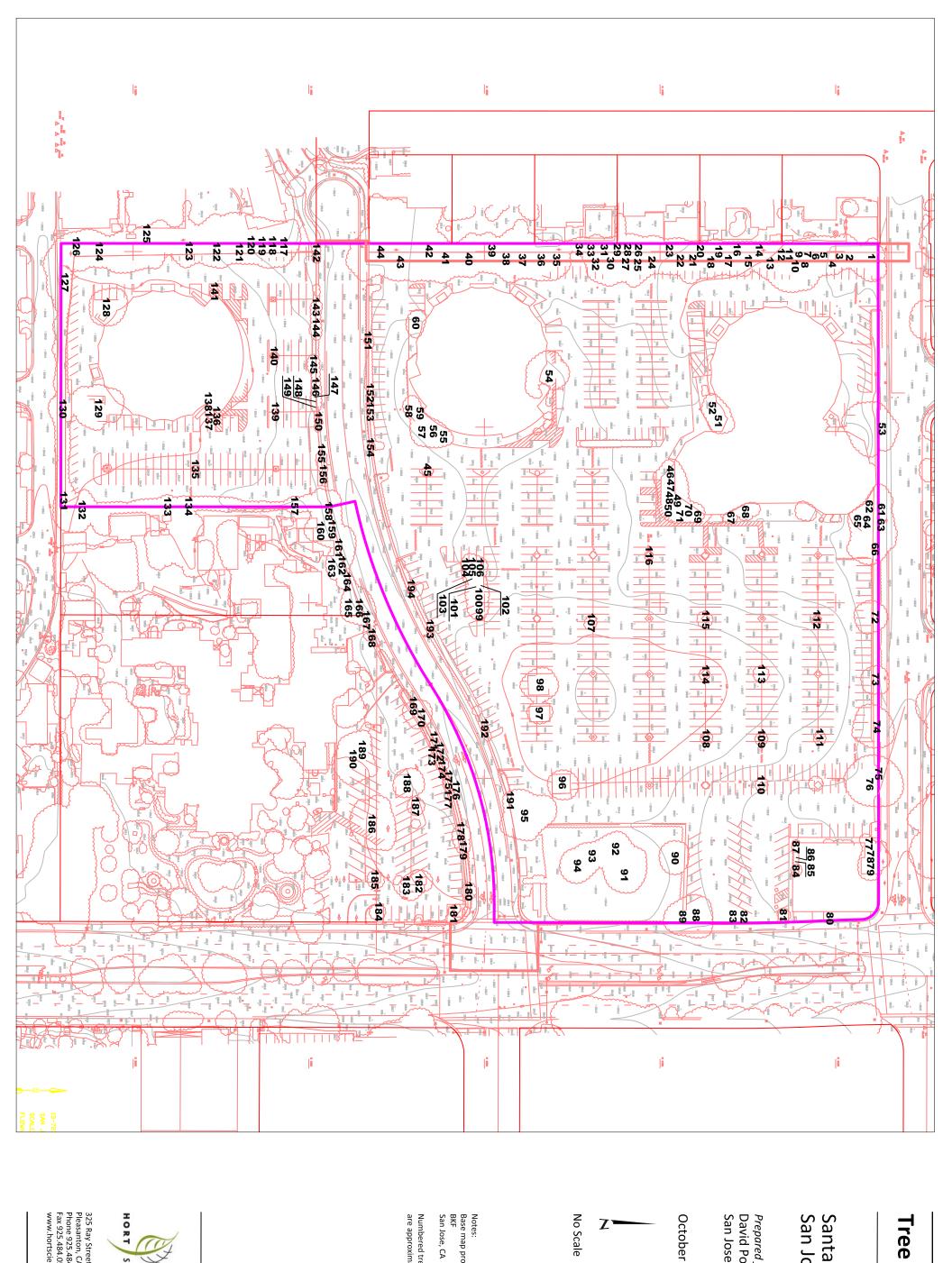


TREE No.	SPECIES	TRUNK DIAMETER (in.)	ORDINANCE SIZE?	CONDITION 1=poor 5=excell.	SUITABILITY for PRESERVATION	COMMENTS
162	Blackwood acacia	15,8	Yes	2	Low	Codominant trunks @ base; leans E.
163	Blackwood acacia	9	No	2	Low	Suppressed to E; located on the other side of fence.
164	Mexican fan palm	32	Yes	4	High	35' brown trunk.
165	Coast live oak	19	Yes	3	Moderate	Codominant trunks @ 5' & 7'; one-sided to S.
166	Coast live oak	18,13	Yes	3	Moderate	Codominant trunks @ 6' & 3'; leans N.
167	Windmill palm	6	No	2	Low	Suppressed under adj. oak; small crown.
168	Mexican fan palm	32	Yes	4	High	30' brown trunk.
169	Evergreen pear	10	No	2	Low	Poor form & structure; no central leader.
170	Canary Island date palm	36	Yes	5	High	20' brown trunk.
171	Windmill palm	10	No	3	Moderate	15' brown trunk.
172	Windmill palm	6	No	3	Low	25' brown trunk; crook in trunk @ 20'.
173	Windmill palm	9	No	3	Moderate	11' brown trunk.
174	Mayten	7,4,2	No	3	Moderate	Codominant trunks @ 4'.
175	Windmill palm	10	No	3	Moderate	15' brown trunk; drought stressed.
176	Windmill palm	6	No	3	Low	32' brown trunk; leans W.
177	Windmill palm	9	No	3	Moderate	18' brown trunk.
178	Glossy privet	10,9,7	Yes	3	Low	Twiggy undergrowth; multiple attachments @ 5' & 6'.
179	Guadalupe palm	16	No	4	Moderate	Mottled yellow spots indicate micronutrient deficiency.
180	Guadalupe palm	19	Yes	4	Moderate	Mottled yellow spots indicate micronutrient deficiency.
181	Windmill palm	5	No	4	Moderate	20' brown trunk; drought stressed; leans W.
182	Glossy privet	14,12,10,7	Yes	1	Low	Drought stressed; declining.
183	Evergreen pear	16	No	2	Low	Extensive fireblight throughout canopy; poor form & structure.

Tree Assessment



TREE No.	SPECIES	TRUNK DIAMETER (in.)	ORDINANCE SIZE?	CONDITION 1=poor 5=excell.	SUITABILITY for PRESERVATION	COMMENTS
184	Guadalupe palm	19	Yes	4	Moderate	Mottled yellow spots indicate micronutrient deficiency.
185	Guadalupe palm	19	Yes	4	Moderate	Large 2' wound on trunk.
186	Calif. pepper	60	Yes	3	Low	Ganoderma conks throughout; multiple attachments @ 5'; low lateral branch over parking.
187	Mexican fan palm	29	Yes	4	High	40' brown trunk.
188	Canary Island date palm	47	Yes	5	High	25' brown trunk.
189	Mayten	5,5,5	No	3	Moderate	Multiple attachments @ 1'.
190	Calif. black walnut	24	Yes	3	Moderate	Thin canopy.
191	Windmill palm	7	No	4	High	15' brown trunk; suppressed, under adj. tree.
192	Windmill palm	7	No	3	Moderate	20' brown trunk.
193	Windmill palm	5	No	3	Moderate	20' brown trunk; drought stressed; leans W.
194	Windmill palm	6	No	3	Moderate	26' brown trunk; small injury @ 20'.



Tree Assessment Plan

San Jose, CA Santana Row West

Prepared for:
David Powers & Associates
San Jose, CA

October 2015

No Scale

Notes: Base map provided by: BKF

Numbered tree locations are approximate.

HORT SCIENCE

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