David J. Powers & Associates

Preliminary Tree Report
Columbus Park

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HORT SCIENCE
BARTLETT CONSULTING
Divisions of The F.A. Bartlett Tree Expert Company

Preliminary Tree Report

Columbus Park
San Jose CA

Table of Contents

List of Tables

Attachments

Preliminary Tree Report

Columbus Park
San Jose CA

Introduction and Overview

The City of San Jose is planning to redevelop the property at Columbus Park located in San Jose CA. Current site use is a park with recreational facilities. David J. Powers & Associates requested that HortScience | Bartlett Consulting, Divisions of The F.A. Bartlett Tree Expert Co., prepare a **Preliminary Tree Report** for the proposed project. This report provides the following information:

1. A survey of trees currently growing on the site.
2. An assessment of the impacts of constructing the proposed project on trees.
3. Recommendations for action.
4. Guidelines for tree preservation during the design, construction and maintenance phases of development.

Assessment Methods

The scope encompassed all trees over 5 in. in diameter located within, and immediately adjacent to, the property. The assessment procedure consisted of the following steps:

1. Identify the tree as to species.

2. Attach a numerically coded metal tag to the trunk of each tree.

3. Record the tree's location on a map.

4. Measure the trunk diameter at a point 54 in. above grade.

5. Evaluate the health and structural condition using a scale of 0 – 5 where 0 = dead, 1 = poor and 5 = excellent condition.

5. Comment on presence of defects in structure, insects or diseases and other aspects of development.

6. Assess the tree's suitability for preservation as low, moderate or high.

Several trees located on Irene Street could not be tagged due to the presence of temporary structures around the trunk (Photo 1). Such trees were given a number, then assessed and mapped in normal manner. Trunk diameters were estimated. These trees are noted in the ***Tree Assessment Form***.

Photo 1. Structures were present around the base and lower trunk of this Chinese pistache as well as several others in the area.

Description of Trees

One hundred and five (105) trees were evaluated, representing 25 species (Table 1). Species present were typical of those found in landscapes in the San Jose area. Calif. buckeye, western redbud, coast live oak, valley oak, elderberry and western sycamore are native to the San Jose area. Trees of these species appeared to have been planted rather than indigenous to the site.

Table 1. Species present and tree condition. Columbus Park. San Jose CA.

Common name	Scientific name	Condition					No. of Trees	
		Dead (0)	Poor (1,2)	Fair (3)	Good (4)	Excell. (5)	Permit	Total
Norway maple	*Acer platanoides*	7	11	3	1	--	14	22
Calif. buckeye	*Aesculus californica*	--	--	--	--	2	2	2
Tree of heaven	*Ailanthus altissima*	--	--	1	--	--	1	1
Marina madrone	*Arbutus* 'Marina'	--	--	--	1	--	--	1
River she oak	*Casuarina cunninghamiana*	--	--	1	1	--	1	2
Deodar cedar	*Cedrus deodara*	--	--	--	1	--	1	1
Chinese hackberry	*Celtis sinensis*	--	--	--	2	--	2	2
W. redbud	*Cercis canadensis*	--	--	--	--	1	1	1
Raywood ash	*Fraxinus angustifolia* 'Raywood'	--	2	--	--	--	2	2
Modesto ash	*Fraxinus velutina* 'Modesto'	--	2	9	1	--	12	12
Southern magnolia	*Magnolia grandiflora*	--	--	--	1	--	1	1
Mulberry	*Morus* sp.	--	--	3	--	--	3	3
Chinese pistache	*Pistacia chinensis*	--	4	3	1	2	10	10
W. sycamore	*Platanus racemosa*	--	--	--	2	2	4	4
London plane	*Platanus* x *hispanica*	--	--	1	--	1	2	2
Callery pear	*Pyrus calleryana* cv.	--	--	4	1	--	--	5
Coast live oak	*Quercus agrifolia*	--	--	11	3	--	12	14
Holly oak	*Quercus ilex*	--	1	1	2	--	1	4
Valley oak	*Quercus lobata*	--	--	3	1	--	4	4
Coffeeberry	*Rhamnus californica*	--	1	--	--	--	--	1
Purple Robe locust	*Robinia ambigua* 'Purple Robe'	--	1	--	--	--	1	1
Elderberry	*Sambucus cerulea*	--	1	--	--	--	1	1
Calif. pepper	*Schinus molle*	--	--	1	--	--	--	1
Water gum	*Tristaniopsis laurina*	--	--	2	--	--	--	2
Mexican fan palm	*Washingtonia filifera*	--	--	--	1	5	6	6
Total, all trees assessed		**7**	**23**	**43**	**19**	**13**	**81**	**105**

Norway maple was the most frequently occurring species with 22 trees. Maples were planted as street trees along Asbury, Walnut, Spring and Irene Streets (Photo 2). Trees were mature in development with trunk diameters between 8 and 18 in. Lack of irrigation has resulted in the death of seven trees and the poor condition of another 11. Norway maples #101, 116 and 177 were in fair condition while tree #205 was in good condition. Trees of this species can be expected to continue to decline in health due to lack of irrigation.

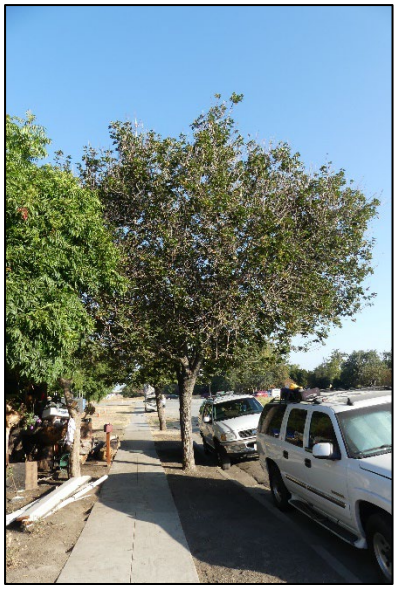

Photo 2. Typical Norway maple street tree. Note extensive twig dieback.

Fourteen coast live oaks were concentrated in the south side of the park and along Taylor Street (Photo 3). Trees ranged from young to mature in development with trunk diameters from 7 to 30 in. Half of the trees had more than one stem that arose near ground level. The lower trunks of several trees were embedded in chain link fencing.

Photo 3. Coast live oak #148 had trunks of 26 and 25 in. and was in fair condition.

Most coast live oaks (11 trees) were in fair condition while trees #125, 183 and 188 were in good condition. Factors influencing tree condition included overall form and structure, the presence of codominant stems and multiple attachments and overall canopy density.

Twelve Modesto trees were present: 11 on Taylor Street and tree #203 on Asbury Street. All were street trees located between the sidewalk and curb (Photo 4). All were mature in development. Trunk diameters ranged from 24 to 32 in. It appeared that more trees had been present at one time as there were gaps in the canopy and trees had asymmetric crowns. Tree condition was generally fair (9 trees). Ashes #154 and 196 were in poor condition. Tree #154 had a cracked scaffold branch over the sidewalk that was ready to fail at any time. Modesto ash #134 was in good condition.

Photo 4. Looking west along Taylor Street at Modesto ash #133.

Ten Chinese pistache were concentrated along Spring and Irene Streets (Photo 1). Trees were largely mature in development with trunk diameters that varied from 12 to 27 in. Tree condition was variable. Pistache #118, 120, 185, and 187 were in poor condition while #110, 113 and 186 were fair. Tree #115 was in good condition and trees #112 and 114 were excellent. Tree condition was directly related to history of pruning. Trees in poor condition had been poorly pruned, removing large branches and resulting in poor structure.

Six Mexican fan palms were present. Palm #109 was located between the sidewalk and curb along Irene St. It was mature in development, in good condition, and had 35' of brown trunk. The remaining palms were located in a park area. These were younger plants in excellent condition with less than 10 ft. of brown trunk.

Five semi-mature Callery pears were between 7 and 10 in. Trees #138, 139, 140, and 141 were in fair condition while #137 was good.

None of the remaining species were represented by more than four trees. Included in this group were:

- Calif. buckeye #156 and 197 were semi-mature trees located along Taylor Street. Both were in excellent condition.
- Calif. pepper #111 was 8 in. and in fair condition with a crown that was one-sided to the E.
- Chinese hackberry #166 and 167 were located in a park area near Spring Street. Both trees were 14 in. and in good condition.
- Coffeeberry #131 was a large shrub in poor condition.
- Deodar cedar #146 was 35 in. and in good condition with codominant trunks at 5 ft. and a well-formed canopy (Photo 5).

Photo 5. Looking west at Deodar cedar #146.

- Holly oaks #126, 127, 130 and 199 were small trees along Taylor Street. Trunk diameters ranged from 4 to 8 in. Tree #127 was in poor condition; #126 was fair; and #130 and 199 were good.
- London plane #168 and 169 were mature trees along Asbury St. near Irene St. Trunk diameters were 18 and 12 in. respectively. Tree #168 was in fair condition while #169 was excellent.
- Marina madrone #135 was a large shrub on Taylor Street. Tree condition was good.

- Mulberry #165 was located near Spring St. It was 42 in. and in fair condition, having decay in the trunk and a history of topping (Photo 6). Trees #200 and 201 were located near the intersection of Taylor and Walnut Streets. They were 20 and 16 in. in diameter. Both were in fair condition.

Photo 6. Looking west at mulberry #165.

- Purple Robe locust #158 was a semi-mature street tree in poor condition.
- Raywood ash #195 was a street tree with a diameter of 18 in. Tree condition was poor due to extensive crown dieback. Raywood ash #204 was 38 in., located along Asbury St. (Photo 7). It was also in poor condition with extensive crown dieback.

Photo 7. Looking northwest at Raywood ash #204. Note the extensive dieback in the crown.

- River she oak #174 and 175 were located near the restrooms at the intersection of Asbury and Irene Streets. Tree #174 was 11 in. and in good condition; while #175 was 19 in. and fair.
- Southern magnolia #147 was 18 in. and in good condition (Photo 8).

Photo 8. Looking west at southern magnolia #147.

- Tree of heaven #121 was a street tree on Taylor Street. It had trunks of 4 and 3 in. and was in fair condition.

- Valley oaks #150 and 151 were located next to one another and were 24 and 28 in. respectively (Photo 9). Both were in fair condition. Valley oak #180 was 15 in. and in fair condition. Valley oak #198 was 14 in. and in good condition. It was located at the intersection of Walnut and Taylor Streets.

Photo 9. Looking west at valley oak #151. Note dead branches in upper crown.

- Western redbud #191 was a large, multi-stem shrub in excellent condition.

- Western sycamores #170, 171, 172 and 173 formed a grove along Asbury Street (Photo 10). Trees were mature in development with trunks diameters between 14 and 29 in. Trees #172 and 173 were in good condition while #170 and 171 were excellent.

Photo 10. Looking west at grove of western sycamores.

- Water gums #153 and 181 were small trees in fair condition.

San Jose Municipal Code Section 13.32 identifies the types of tree that require a permit for removal

1. Street trees in the public right-of-way between curb and sidewalk.
2. Heritage trees as identified by the City of San Jose.
3. Ordinance-size trees with a single trunk of 38 inches or more in circumference (12 in. in diameter) measured at 4½ ft. above ground.

Eighty-one (81) trees met the above criteria including 39 street trees and 42 ordinance-size trees. Based on a review of the August 29, 2014 list of Heritage trees, no Heritage trees were present.

Description of individual trees is found on the enclosed ***Tree Assessment Form***. Tree locations are found on the ***Tree Assessment Plan***. Both are included as **Attachments**.

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.

- **Species response**
  There is a wide variation in the response of individual species to construction impacts and changes in the environment. In our experience, London plane, coast live oak, olive and coast redwood are tolerant of site disturbance while Modesto ash and valley oak are more moderate in response.

- **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 (www.cal-ipc.org) lists species identified as having being invasive. San Jose is part of the Central West Floristic Province. Species identified as invasive include tree of heaven, Callery pear and Mexican fan palm.

Tree condition (health and structure) is the starting point for assessing suitability for preservation. In addition, suitability for preservation considers species response to impacts and invasiveness.

Each tree was rated for suitability for preservation based upon its age, health, structural condition and ability to safely coexist within a development environment (Table 2).

Table 2. Tree suitability for preservation. Columbus Park. San Jose CA.

High	Trees in good condition that have the potential for longevity at the site. Eighteen (18) trees were rated as having high suitability for preservation: Mexican fan palm #123, 142, 143, 144, 145; W. sycamore #170, 171, 172, 173; Calif. buckeye #156, 197; Chinese pistache #112, 114; coast live oak #125; Deodar cedar #146; London plane #169; valley oak #198; and W. redbud #191.
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 in. category. Twenty-eight (28) trees were rated as having moderate suitability for preservation: coast live oaks #122, 124, 132, 148, 149, 182, 183, 184, 188; holly oak #126, 130, 199; Modesto ash #134, 152, 159; Chinese hackberry #166, 167; valley oak #150, 151; Callery pear #137, London plane #168, Marina madrone #135, Mexican fan palm #109, mulberry #165, Norway maple #205, river she oak #174 and southern magnolia #147.
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. Fifty-nine (59) trees were rated as having low suitability for preservation including 14 Norway maple, 9 Modesto ash, 7 Chinese pistache and 4 Callery pear.

Note. Table does not include Norway maples #102, 104, 106, 108, 163, 176, and 190

We consider trees with high suitability for preservation to be the best candidates for preservation. We do not normally 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.

The City of San Jose mitigation requirements are:

Diameter of Tree to be Removed	Type of Tree to be Removed			Minimum Size of Each Replacement Tree
	Native	Non-Native	Orchard	
12 inches or greater	5:1	4:1	3:1	24-inch box
6 to 12 inches	3:1	2:1	none	24-inch box
less than 6 inches	1:1	1:1	none	24-inch box

x:x = tree replacement to tree loss ratio

Note: Trees greater than 12 inches diameter shall not be removed unless a Tree Removal Permit, or equivalent, has been approved for the removal of such trees.

Where trees have more than one trunk, the diameters of individual trunks are added together to establish the diameter class for mitigation purposes.

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 may 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 $775 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

Plans for redevelopment of Columbus Park have not yet been reviewed, so specific recommendations for tree preservation cannot be made at this time. Trees with high and moderate suitability for preservation are the best candidates for retention. Trees with low suitability are unlikely to be assets to the new facilities. Trees that may be retained in groups such as #146 – 151 and 168 – 173. People at the site expressed a strong desire to retain mulberry #165.

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

Design recommendations

1. Locate the trunk of all trees assessed. Include trunk locations and tree tag numbers on all plans.

2. Establish a **TREE PROTECTION ZONE** around each tree to be preserved. For design purposes, the **TREE PROTECTION ZONE** shall be the dripline. No grading, excavation, construction or storage of materials shall occur within that zone.

3. Use only herbicides safe for use around trees and labeled for that use, even below pavement.

4. Design irrigation systems so that no excavation or trenching occurs 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.

2. The trunks of trees located near chain link fencing may be embedded in the nearby wire fence. Remove fencing by hand, cutting close to the trunk. Leave embedded pieces in the trunk.

3. Trees to be preserved may require pruning to provide adequate clearance from construction activities and/or to correct defects in structure. All pruning shall be performed by a licensed State of California contractor possessing the C61 classification license and the D49 specification. All pruning shall adhere to the latest editions of the American National Standards Institute Z133 and A300 standards.

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. Install tree protective fencing at the edge of the **TREE PROTECTION ZONE.** No grading, construction, installation or other activity is permitted within this area.

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. Any grading, construction, demolition or other work that is expected to encounter tree roots should be monitored by the Consulting Arborist.

3. 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.

4. Fences have been erected to protect trees to be preserved. Fences are to remain until all site work has been completed. Fences may not be relocated or removed without permission of the project superintendent.

5. Construction trailers, traffic and storage areas must remain outside fenced areas at all times.

6. No materials, equipment, spoil, waste or wash-out water may be deposited, stored, or parked within the **TREE PROTECTION ZONE** (fenced area).

7. Any additional tree pruning needed for clearance during construction must be performed by a qualified arborist and not by construction personnel.

8. Any roots damaged during grading or construction shall be exposed to sound tissue and cut cleanly with a saw.

Summary

One hundred five (105) trees representing 25 species were assessed. Norway maple (22 trees), coast live oak (14), Modesto ash (12) and Chinese pistache (10) were the most frequently occurring species and comprised just over half of the assessed trees. Tree condition was variable: 7 Norway maples were dead, 23 trees were in poor condition, 43 were fair, 19 were good and 13 were excellent. Tree condition appeared related to two factors: 1) lack of supplemental irrigation and 2) history of poor pruning. Eighty-one (81) trees met the City of San Jose's requirements for a tree removal permit. No Heritage trees were present.

HortScience | Bartlett Consulting

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Certified Arborist WE-0846

Attachments

Tree Assessment Form

Tree Location Map

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Tree Assessment

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San Jose CA
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TREE No.	SPECIES	TRUNK DIAMETER (in.)	PERMIT REQ'D?	CONDITION 0=dead 5=excel-lent	SUITABILITY for PRESERVATION	COMMENTS
101	Norway maple	10	Yes	3	Low	Street tree; bowed W.; no vigor.
102	Norway maple	14	No	0	--	Street tree; dead.
103	Norway maple	10	Yes	2	Low	Street tree; no vigor; twig dieback throughout.
104	Norway maple	11	No	0	--	Street tree; dead.
105	Norway maple	11	Yes	2	Low	Street tree; no vigor; twig dieback throughout.
106	Norway maple	13	No	0	--	Street tree; dead.
107	Norway maple	10	Yes	1	Low	Street tree; largely dead; ext. twig & branch
108	Norway maple	10	No	0	--	Street tree; dead.
109	Mexican fan palm	26	Yes	4	Moderate	Street tree; base pushed against curb; good vigor; 35' brown trunk.
110	Chinese pistache	12	Yes	3	Low	Codominant trunks @ 6'; spread apart; wider than tall.
111	Calif. pepper	8	No	3	Low	One-sided to E.; codominant trunks @ 5'.
112	Chinese pistache	15	Yes	5	High	**No tag;** surrounded by structure; good tree.
113	Chinese pistache	14	Yes	3	Low	**No tag;** surrounded by structure; crown reduced on N.
114	Chinese pistache	27	Yes	5	High	Good tree.
115	Chinese pistache	15	Yes	4	Moderate	**No tag;** surrounded by structure; sinuous trunk; codominant trunks @ 6'.
116	Norway maple	12	Yes	3	Low	Street tree; leans S.; twig dieback; no vigor.
117	Norway maple	12	Yes	2	Low	Street tree; okay form; ext. twig dieback.
118	Chinese pistache	17	Yes	2	Low	**No tag;** surrounded by structure; poor form & structure; trunk wounds.
119	Elderberry	11,9,6,6,5	Yes	2	Low	Partly consumed by fire; multiple attachments @ base.
120	Chinese pistache	7,5	Yes	2	Low	Lower trunk embedded on fence; codominant trunks @ 1'.

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TREE No.	SPECIES	TRUNK DIAMETER (in.)	PERMIT REQ'D?	CONDITION 0=dead 5=excel-lent	SUITABILITY for PRESERVATION	COMMENTS
121	Tree of heaven	4,3	Yes	3	Low	Street tree; codominant trunks @ base; high crown.
122	Coast live oak	6,6,5	Yes	3	Moderate	Codominant trunks @ base & 3'; dense canopy.
123	Mexican fan palm	19	Yes	5	High	9' brown trunk.
124	Coast live oak	8,8,7,7	Yes	3	Moderate	Multiple attachments @ base; dense canopy.
125	Coast live oak	15	Yes	4	High	Good tree; crown raised.
126	Holly oak	8	No	3	Moderate	High crown; multiple attachments @ 15'; slight bow.
127	Holly oak	8,6	Yes	2	Low	Poor form & structure.
128	Coast live oak	7	No	3	Low	Bowed SW.; part of crown burned.
129	Coast live oak	4,4	No	3	Low	At fence; codominant trunks @ base; high crown.
130	Holly oak	4	No	4	Moderate	Crown lifted.
131	Coffeeberry	4	No	2	Low	Poor form & structure.
132	Coast live oak	10,7,6,4	Yes	3	Moderate	Base embedded in fence; multiple attachments @ base; nice canopy.
133	Modesto ash	27	Yes	3	Low	Street tree; multiple attachments @ 8'; scaffold branch failure; one-sided to W.
134	Modesto ash	24	Yes	4	Moderate	Street tree; codominant trunks @ 12'; multiple attachments above.
135	Marina madrone	6,5	No	4	Moderate	Codominant trunks @ base; crown lifted.
136	Coast live oak	7,6	Yes	3	Low	Base embedded in fence; crown lifted.
137	Callery pear	7	No	4	Moderate	Typical form & structure.
138	Callery pear	10	No	3	Low	Typical form & structure but with bowed out stems; some twig dieback.
139	Callery pear	11	No	3	Low	Typical form & structure but with very bowed out stems.
140	Callery pear	7	No	3	Low	Typical form & structure; crown lifted.
141	Callery pear	9	No	3	Low	Typical form & structure; bowed out stems.
142	Mexican fan palm	26	Yes	5	High	7' brown trunk.

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143	Mexican fan palm	25	Yes	5	High	8' brown trunk.
144	Mexican fan palm	19	Yes	5	High	7' brown trunk.
145	Mexican fan palm	20	Yes	5	High	8' brown trunk.
146	Deodar cedar	35	Yes	4	High	Codominant trunks @ 5'; vertical; nice tree.
147	Southern magnolia	18	Yes	4	Moderate	Multiple attachments @ 6'; otherwise nice tree.
148	Coast live oak	26,25	Yes	3	Moderate	Codominant trunks @ 3'; small gap in canopy where W. stem bows out; bark beetles present; canopy somewhat thin.
149	Coast live oak	25	Yes	3	Moderate	Codominant trunks @ 6' & 8'; bowed apart; high crown; good canopy.
150	Valley oak	24	Yes	3	Moderate	Good vase-shaped form; thin canopy; twig dieback.
151	Valley oak	28	Yes	3	Moderate	Good vase-shaped form; codominant trunks @ 5'; small dead branches in upper crown.
152	Modesto ash	25	Yes	3	Moderate	Street tree; series of codominant attachments; twig & branch dieback.
153	Water gum	3,2	No	3	Low	Codominant trunks @ base; crown lifted.
154	Modesto ash	26	Yes	2	Low	Street tree; cracked branch over sidewalk; typical form.
155	Modesto ash	24	Yes	3	Low	Street tree; leans S.; multiple attachments @ 12'; rangy form.
156	Calif. buckeye	8,6,5,5,5	Yes	5	High	Multiple attachments @ 1'.
157	Modesto ash	28	Yes	3	Low	Street tree; multiple attachments @ 10' poor attachments; twig dieback.
158	Purple Robe locust	13	Yes	2	Low	Street tree; typical form & structure; ext. twig & branch dieback.
159	Modesto ash	31	Yes	3	Moderate	Street tree; typical form & structure.

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160	Norway maple	8	Yes	2	Low	Street tree; multiple attachments @ 7'; twig dieback; no vigor.
161	Norway maple	8	No	1	Low	Street tree; all but dead.
162	Norway maple	10	Yes	2	Low	Street tree; multiple attachments @ 7'; twig dieback; no vigor.
163	Norway maple	7,6	No	0	--	Street tree; dead.
164	Norway maple	14	Yes	2	Low	Street tree; bowed N.; ext. twig dieback.
165	Mulberry	42	Yes	3	Moderate	Multiple attachments @ 5'; included bark on N.; decay below attachment; previously topped; full dense canopy.
166	Chinese hackberry	14	Yes	4	Moderate	Typical vase shape; crown lifted.
167	Chinese hackberry	14	Yes	4	Moderate	Typical rounded form; multiple attachments @ 7'.
168	London plane	18	Yes	3	Moderate	Leans E.; recent branch failure; multiple attachments @ 8'.
169	London plane	12	Yes	5	High	Good tree.
170	W. sycamore	29	Yes	5	High	Good tree.
171	W. sycamore	14	Yes	5	High	Good tree.
172	W. sycamore	21	Yes	4	High	Low lateral with sweep; codominant trunks high in crown.
173	W. sycamore	20	Yes	4	High	Codominant trunks high in crown.
174	River she oak	11	No	4	Moderate	Crook high in crown; narrow form.
175	River she oak	19	Yes	3	Low	Upper crown bowed flat to E.
176	Norway maple	10	No	0	--	Street tree; dead.
177	Norway maple	14	Yes	3	Low	Street tree; codominant trunks @ 6'; wide crown; lacks vigor.
178	Norway maple	15	Yes	2	Low	Street tree; multiple attachments @ 7'; thin canopy; twig dieback.

Tree Assessment

Columbus Park
San Jose CA
August 2021

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TREE No.	SPECIES	TRUNK DIAMETER (in.)	PERMIT REQ'D?	CONDITION 0=dead 5=excel-lent	SUITABILITY for PRESERVATION	COMMENTS
179	Norway maple	13	Yes	1	Low	Street tree; multiple attachments @ 7'; thin canopy; ext. twig dieback.
180	Valley oak	15	Yes	3	Low	Bowed N.; codominant trunks @ 15'; okay canopy.
181	Water gum	5,4	No	3	Low	Below canopy of adj. trees; codominant trunks @ 2' & 6'; crown lifted.
182	Coast live oak	21	Yes	3	Moderate	Multiple attachments @ 8'; one-sided to E.
183	Coast live oak	30	Yes	4	Moderate	Codominant trunks @ 10' & above; gaps starting to develop.
184	Coast live oak	25	Yes	3	Moderate	Lost central leader; rangy form.
185	Chinese pistache	25	Yes	2	Low	Poor form & structure; lost central leader; big tree.
186	Chinese pistache	14	Yes	3	Low	Multiple attachments @ 8'; 1 stem x'd.
187	Chinese pistache	21	Yes	2	Low	Poor form & structure; lost central leader; big tree; branch failures.
188	Coast live oak	18	Yes	4	Moderate	Corrected lean S.; codominant trunks @ 10'; good canopy.
189	Coast live oak	12,11,11	Yes	3	Low	Codominant trunks @ 2' & 3'; good canopy.
190	Norway maple	11	No	0	--	Street tree; dead.
191	W. redbud	4,4,4,3,3,2	Yes	5	High	Multiple attachments @ base; good tree.
192	Modesto ash	32	Yes	3	Low	Street tree; codominant trunks @ 4' with included bark; rangy form.
193	Modesto ash	29	Yes	3	Low	Street tree; codominant trunks @ 5' with included bark; vase-shaped crown.
194	Modesto ash	26	Yes	3	Low	Street tree; codominant trunks @ 6' with included bark; rangy form.
195	Raywood ash	18	Yes	2	Low	Street tree; multiple attachments @ 5'; ext. twig & branch dieback.

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TREE No.	SPECIES	TRUNK DIAMETER (in.)	PERMIT REQ'D?	CONDITION 0=dead 5=excel-lent	SUITABILITY for PRESERVATION	COMMENTS
196	Modesto ash	25	Yes	2	Low	Street tree; codominant trunks @ 8' & 10' both with poor attachments; rangy form.
197	Calif. buckeye	7,5	Yes	5	High	Codominant trunks @ base; good tree.
198	Valley oak	14	Yes	4	High	Good tree.
199	Holly oak	5,5	No	4	Moderate	Below canopy but okay.
200	Mulberry	20	Yes	3	Low	Leans SE.; codominant trunks @ 6'; dense canopy.
201	Mulberry	16	Yes	3	Low	Lost central leader; codominant trunks @ 6' & 7'; wider than tall.
202	Norway maple	15	Yes	2	Low	Street tree; bowed S.; poor form & structure; ext. twig dieback.
203	Modesto ash	27	Yes	3	Low	Street tree; multiple attachments @ 6'; scaffold branches removed on S.; very wide crown.
204	Raywood ash	38	Yes	2	Low	Street tree; multiple attachments @ 6'; ext. twig & branch dieback to 6".
205	Norway maple	18	Yes	4	Moderate	Street tree; codominant trunks @ 6'; flat form.

Tree Assessment Plan

Columbus Park
San Jose, CA

Prepared for:
David J. Powers & Associates
San Jose, CA

August 2021

No Scale

Notes:
Base map provided by:
RRM Design Group
San Luis Obispo, CA

Numbered tree locations with no survey point were approximately located in the field.

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