June 9, 2021
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Protected Tree Report

For: Proposed Ararat Home Site Expansion

15105 Mission Hills Road, Mission Hills

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Table of Contents

Introduction

Project Description and Background

The applicant, Ararat Home of LA, is planning to add a new 12 acres to their existing campus in the Mission Hills area of the City of Los Angeles. Plans include: a skilled nursing center, memory care, assisted living and independent living facility for elders, a total of about 200 beds on the lower part and about 100 units on the upper part.

Rincon Consultants did a preliminary Biological Resources Assessment and found "No special-status plant species or sensitive natural communities are documented or expected to occur onsite. No special-status wildlife species identified by the U.S. Fish and Wildlife Service (USFWS) or California Department of Fish and Game (CDFW) were observed or otherwise detected and are not expected to occur on the project site."

There are two homes in the upper (north) end of this site. One home appears vacant and unmaintained, but there was a car parked at the second home and it appears occupied. A third home is north of the site, and is occupied, but not included. There are no street trees adjoining this property and none included in this report. The existing structures will be removed and the existing landscaping will be removed. The whole property and landscaping were examined on October 7, 2019, June 6, 2020, and July 2, 2020 and all protected trees over 4 inch and all other indicated trees over 8-inch caliper are included in this report. At the time of the first site visit a large number of trees had been removed and there were many brush piles being removed by

workers. Stumps remain of most of the removed trees and are now sprouting. Photographs of the protected trees and present conditions are enclosed.

Assignment

Arborgate Consulting, Inc. was retained by Nora Sarkissian of ZWA Architects, and asked to provide this tree report for their review.

Arborgate Consulting was asked to provide an arboricultural evaluation of about 250 trees' health and condition, professional opinions and report as appropriate for the City of Los Angeles Urban Forestry Division. Arborgate will identify the protected trees, and indicated non-protected trees over 8" caliper, assist with defining the number of replacement trees that will be required based on your current plans, and clarify the required space/requirements needed to save the trees that you want to keep (highlighted on the provided survey sheet) that are in the proximity of the proposed structures and if there are any other measures that are needed to protect the trees during construction.

Project Size

Project site square footage (entire property and existing structures)

Entire property square footage: 465,188 SF per Arch Entitlement Sheet A0.10 01/26/2021

Existing structures square footage: 2,675 sf + 1,847 sf = 4,522 sf per assessor profile detail

Proposed structures total square footage (building footprint)

Proposed square footage Lower Campus, 40,000 sf +

Proposed square footage Upper Campus, 54,000 sf = 94,000 sf per Arch Entitlement Sheet A0.10 01/26/2021

Purpose for Removals

The primary reason for the listed removals is for grading and to clear a space for the planned structures. There are several dead or mostly dead trees and shrubs that could be left on site to promote biotic diversity. They could be chipped and spread for mulch and/or logs left, staked cross slope to reduce erosion. Some may have been removed during recent week control efforts.

Aerial View of Site

Findings

General Conditions Affecting the Trees' Health

Most of the site is unused and unoccupied. The lower portion was recently cleared. Along Mission Hills Road there is a single herringbone row of parking spaces. Inside the fence is more parking on the eastern half. There are several terraces and rows of California peppers on the slopes in-between terraces. One hundred thirteen of the 189 trees are California peppers.

The trees in the lower part are maintained, but poorly. Nearly all trees in this part are California peppers, except an unmanaged hedge of Brazil peppers along the west wall. These are more like shrubs than trees, being composed of a tangle of root sprouts and seedlings. A little further up in a steep gully there is a mixed "planting" of palms, eucalypts and California peppers. Most of the larger trees are around the two homes or the driveway up to them. On the east side of the site is a small wet area with many Mexican fan palms and weed trees.

The trees on the residential properties are of mixed species, California pepper, with some eucalypts and pines. The few protected trees, a coast live oak, two valley oaks and a sycamore, are all around the unoccupied home. The oaks are all more understory, below large eucalypts. The sycamore appears to have been topped around ten years ago.

Unfortunately, this recent removal, clearing and pruning was hired out to a brush removal company. The "pruning" included many flush cuts, heading and topping. Most of the multi-trunked peppers were severely cut back to single or double stems and

then limbed-up. Being about the worst time of year to pruning California peppers, the long-term prospects for these trees is lacking. These trees and the stumps of the removed trees are sprouting profusely.

Matrix of Tree Observations

Following this table is an explanation of the codes used in the comments column. Health and structure grades are like school grades: A= excellent; B= good; C = okay; D = poor or declining; and F = dead or close to it.

"m" preceding an abbreviation means a minor condition. Underlined abbreviations are more severe.

Key to Abbreviations

ll road = parallels the road
1s = one-sided
1sRF = one-sided root flare
2long= too long
Brks = breaks
Cod = codominant 1sRF
Cr = crowded, Cr#x = crowds tree number
Crk = cracked
CrS = crowded scaffolds
Db = dieback
Dk = decay
DL = dogleg branching
DLS = dogleg scaffold limb
D/W = driveway
Epis = epicormic shoots
FC = flush cut
Hd = headed
Horiz-T = horizontal trunk
Inc = included bark
LB = low branched
Lt = lion-tailed
noRF = no root flare
OL = over-lifted (high headed)
OP = over-pruned
Sh = shallow roots
Sp = sparse
TO = torn out limb
Tinj = trunk injury
T-bow = bowed trunk
Topd = topped
Xing = crossing limbs
B = base, e.g. DkB = decayed base
R = root, e.g. R-epis=root shoots
S = scaffold limb
T = trunk, e.g. T-cut = trunk cut
N. = north
S. = south
E. = east
W. = west

Matrix of Findings

Matrix of Non-Protected Trees

Tag#	Species	DBH	Ht.	Wd.	Clearance	Health	Structure	Comments
1	Schinus molle	24	20	17	24	C	D	Cod top'd LB epi
2	Schinus molle	10+7+18	20	30	22	C-	D	FC mDb top'd 10" T horizontal
3	Schinus molle	7.5	18	18	11.25	C	D	1s FCs
4	Schinus molle	15	20	20	15	C	D	FCs cod
5	Schinus molle	7.5	18	12	11.25	C	D	1s DLT Cr#6
6	Schinus molle	8	18	12	12	C-	D	1s FCs epis mDb
7	Schinus molle	16	20	30	16	C	D	Top'd cod FCs TO
8	Schinus molle	16	18	22	24	C	D	1s T-bow epi top'd
9	Schinus molle	12	20	15	18	C-	D	1s 1sRF FCs Cr epi
10	Schinus molle	6.6	18	12	9.9	C	D	1s FC@base T-bow
11	Schinus molle	10+7	20	16	13	C-	D	Cod FC top'd epi mDb
12	Schinus molle	10	18	18	15	C-	D	1s 1sRF FC mDb epi
13	Schinus molle	8+9+14	18	18	19	C	D	Cod top'd FC epi
14	Schinus molle	11	20	18	16.5	C	D	1s FC top'd epi
15	Schinus molle	8	18	16	12	C	D	1s FC top'd epi
16	Schinus molle	9+9	20	24	13	C	D	Cod FC top'd epi
17	Schinus molle	8+10+16	22	30	21	C	D	Cod inc FC top'd epi
18	Schinus molle	13	22	30	19.5	C	D	1s FC@base epi T-bow
19	Schinus molle	13	28	30	19.5	C	D	1s FC T-cut
20	Schinus molle	10+12	22	35	22	C	D	1s FC XingTs cod
21	Schinus molle	16 @ 3'	25	30	24	C	D	1s FC sup#20 T-bow
22	Schinus molle	17	28	35	25.5	C	D	1s FC@base Cr#21&23
23	Schinus molle	12+12	16	35	25	C	D	1s cod FC sup#22 epi
24	Schinus molle	13	224	35	19.5	C	D	1s FC T-bow epi

Tag#	Species	DBH	Ht.	Wd.	Clearance	Health	Structure	Comments
25	Schinus molle	12	20	35	18	C	D	1s FC T-bow epi Dk
26	Schinus molle	8+11	18	30	21	C	D	1s FC cod T-bow epi DLT-crk 8"T
27	Schinus terebinthifolius	5 x 2"	16	12	N/A	D	D	1s FC cod inc Db
28	Schinus molle	14	36	36	14	C	C-	Cod FC @ base
29	Schinus molle	9	30	20	13.5	C	D	1s FC Cr#28&30
30	Schinus molle	6.5+14	30	30	20	C	D	1s FC cod epi mDb
31	Schinus molle	5.5	18	14	8.25	C-	D	1s FC epi T-cut @ base
32	Schinus molle	14+9	28	30	17	C	D	FC cod inc DL
33	Schinus molle	14	28	20	21	C	D	1s FC T-cut @ base
34	Schinus molle	14	28	30	21	C	D	1s FC Dk T-cut @ base
35	Fraxinus uhdei	8	30	20	N/A	D	D-	Db-top sun-scald cod
36	Schinus terebinthifolius	thicket	12	12	DL	C	D	Mess of R-epi + seedlings, a hedge?
37	Schinus molle	20	32	32	20	C	D	Leans cod by FC @ DL 3-Ts cut OL
38	Schinus molle	26	40	32	26	C	D	OL NW of palm. Big cuts
39	Phoenix canariensis	4'th	4'th	12	5'	C	C	OP
40	Washingtonia robusta	22'th	22'th	11	4	A	A	okay
41	Phoenix canariensis	22'th	22'th	24	4	B	A	OP
42	Schinus molle	8	18	14	12	C	D	1s cod Sh OL
43	Schinus molle	7.5+10	20	30	13	C	D	Cod OL FC Dk 3-Ts cut
44	Schinus molle	11	25	25	11	C	D	DLS OP OL FC 3-Ts cut
45	Schinus molle	6	18	14	6	C	D	T-bow 1s 3-Ts cut
46	Schinus molle	9	25	25	9	C	D	m1s 3-Ts cut
47	Schinus molle	10	24	28	10	C	D	Cod inc 2-Ts cut
48	Schinus molle	8	20	18	8	C	D	DLT OL 3-Ts cut
49	Schinus molle	7	20	12	7	C	D	DLT OL 5-Ts cut
50	Schinus molle	12	20	16	12	C	D	DLT OL 3-Ts cut
51	Schinus molle	16 @ 2'	20	18	15	C	D	DLT OL 1s
52	Pinus halepensis	28	55	40	28	C-	C	OL FC mDb
53	Schinus molle	18	40	30	27	C	D	1s FC OL

Tag#	Species	DBH	Ht.	Wd.	Clearance	Health	Structure	Comments
54	Quercus agrifolia	25 @ 3'	35	45	23	B	B	1sRF LB cod 2long
55	Quercus lobata	15	35	40	15	C-	B	Cod Db, elm crowds
56	Platanus racemosa	25	50	40	25	C	C-	Cod old-topping DLS dry
57	Pinus halepensis	24	60	45	24	C	C-	Cod top old-topping 2long top-DB
58	Pinus halepensis	18"b	35	30	16	C	D	Cod bases DLT Dk@DLT
59	Cupressus sempervirens	8.5	40	4	8.5	A	B	1st 3' cleared
60	Cupressus sempervirens	8	35	4	8	A	B	1st 3' cleared
61	Thuya orientalis	3+3+6	12	8	8	C	C	1st 4' cleared
62	Juniperus chinensis cv	8"b	10	9	7	C	C	1st 3' cleared
63	Juniperus chinensis cv	6"b	4	7	5	C	C	1st 18" cleared
64	Schinus molle	9 @ 2'	16	16	7	B	B	Cod epi
65	Schinus molle	5.2	14	9	5.2	C	D	DLT FC
66	Schinus molle	13	25	25	13	B	C	Leans cod Sh epi 1-T cut
67	Schinus molle	17 @ 3'	28	35	15	B	D	FC cod Xing epi
68	Schinus molle	18 @ 3'	26	30	15	C	D	Cod-split, DLT epi
69	Eucalyptus sideroxylon	15	40	30	15	B	C	Cod Xing top'd
70	Schinus molle	11	40	30	11.25	B	C-	1s Cod Dk
71	Schinus molle	13	5	35	8.25	B	C	Cod
72	Schinus molle	11	32	30	9.75	B	C	Cod mLean
73	Jacaranda mimosifolia	10	30	26	8.25	B	C	Sh leans cod mDL
74	Schinus molle	6+6+7	18	20	N/A	C	D	Cod DkB FC Hd
75	Washingtonia robusta	10'th	10'th	10	4	C	C	Skinny
76	Washingtonia robusta	50'th	50'th	10	4	A	A	Long skirt
77	Washingtonia robusta	45'th	45'th	10	4	A	A	Long skirt
78	Washingtonia robusta	50'th	50'th	10	4	A	A	Long skirt
79	Washingtonia robusta	50'th	50'th	10	4	A	A	Long skirt
80	Washingtonia robusta	40'th	40'th	10	4	A	A	Long skirt
81	Washingtonia robusta	16'th	16'th	10	4	A	A	Sml skirt
82	Washingtonia robusta	5'th	5'th	10	4	B	C	Skinny

Tag#	Species	DBH	Ht.	Wd.	Clearance	Health	Structure	Comments
83	Washingtonia robusta	50'th	50'th	10	4	A	A	Long skirt
84	Eucalyptus globulus	18	50	30	N/A	D-	D	Db
85	Eucalyptus globulus	30+30	60	40	N/A	C	D	Leans 60° cod inc Xing
86	Quercus lobata	9	35	15	9	C	B	FC OL suppressed
87	Schinus molle	20+7+5	28	26	16.5	B	C-	may be in fence, cod Xing
88	Schinus molle	10+10+10	24	35	13.5	B	C-	Cod inc Xing
89	Schinus molle	10+11+20	30	40	18.2	B	B	DL
90	Schinus molle	7	22	14	5.25	B	C-	DL 2-Ts cut
91	Schinus molle	10+12	28	35	12	B	C	Cod 1-T cut
92	Schinus molle	10+10	25	28	10.5	C	C	Cod inc
93	Schinus molle	10+8	24	28	9	C	C-	Cod inc DL
94	Schinus molle	10	24	22	7.5	C	C	1s 1-T cut DL
95	Schinus molle	8+12	24	28	10.875	B	C	1-T TO
96	Schinus molle	14 @ 2'	26	28	9.375	B	D	
97	Schinus molle	5+10	26	16	8.75	B	C-	
98	Schinus molle	5+5+5	25	20	6.5	B	D	1s Xing cod
99	Pinus halepensis	16	40	40	12	B	C-	45° lean, 2-Ts cut
100	Pinus halepensis	14	45	30	10.5	B	C	Cod inc mlean
201	Pinus halepensis	20	36	36	15	B	C-	Cod inc topd
202	Schinus molle	9+10	25	25	10.12	A	C	Cod inc DLT
203	Schinus molle	9+11	28	30	10.5	B	C	
204	Schinus molle	9	25	20	6.75	D	C-	B-epis Sp 1s
205	Magnolia grandiflora	11	24	16	8.25	C-	C-	Db Sp pale
206	Magnolia x soulangeana	4+4+4	15	16	5.25	B	C-	Cod Xing by foundation mDb
207	Juniperus chinensis cv	6+6	8	11	6.45	C	C	DL
208	Juniperus chinensis cv	5+6	9	12	6	C	D	Xing DL Sh mDb
209	Schinus molle	17+12	22	30	15.75	C	C	DL 2long
210	Schinus molle	9+10	20	25	10.12	C	C-	Lt TO
211	Schinus molle	9 @ 2'	15	18	6	C	C-	1s TO cod

Tag#	Species	DBH	Ht.	Wd.	Clearance	Health	Structure	Comments
212	Schinus molle	5.5	15	12	4.125	C	C	no tag 1s
213	Schinus molle	5+5	13	13	5.25	B	C-	Cod Xing
214	Schinus molle	16+6.5	28	32	13.5	C	C-	1-T cut DL Cav, soil pile below
215	Schinus molle	12+13+12	30	36	18	C	C-	Cod inc Lt Sp 2long
216	Schinus molle	16 @ 2'	30	30	10.5	B	B	Cod Hd
217	Schinus molle	20+28	45	55	25.88	B	B	TO
218	Schinus molle	10	28	22	7.5	B	C	Cod inc Xing 2long
219	Schinus molle	12+12	24	28	12.75	B	B	Cod
220	Schinus molle	5+8+9+11	22	28	12.75	B	C	Cod inc Xing 2long
221	Schinus molle	11	22	20	8.25	C	C-	Sp
222	Schinus molle	15	24	20	11.25	B	C	1s cod
223	Schinus molle	15	24	22	11.25	B	C	Cod inc
224	Schinus molle	4+5+8	24	16	7.65	C	C-	Cod
225	Schinus molle	20	28	25	15	B	C	Cod inc
226	Schinus molle	14	24	24	10.5	B	C	OP
227	Schinus molle	10	20	20	7.65	B	C-	2-Ts cut, big 1 at base DKB
228	Schinus molle	10	24	24	7.5	B	D	DKB no RF, in fence
229	Schinus molle	10+6	22	20	9	D	D	
230	Schinus molle	6+7+6	15	16	8	D	D	
231	Schinus molle	12	11	6	9	F	F	
232	Schinus molle	8 @ 2'	23	14	5.3	C-	D	Cr#81, cod Xing 1s
233	Schinus molle	15	28	20	11.25	B	C-	60° lean, DLT 1s Sh
234	Schinus molle	14+24	40	40	21	C	C	1-T cut 1s DK DL Lt
235	Schinus molle	22	40	40	16.5	A	B	DL, in fence
236	Schinus molle	18	40	38	13.5	B	C	in fence 1s DL B-epis DK
237	Schinus molle	10	22	22	7.5	B	C-	in fence 1s FC
238	Ailanthus altissima	12+5	30	24	21	C-	D	Sup# by #57 1s
239	Ailanthus altissima	8.5+6	32	22	7.785	C	C-	1s
240	Schinus molle	11	28	18	8.25	C	D	1s 3-big cuts, noRF

Tag#	Species	DBH	Ht.	Wd.	Clearance	Health	Structure	Comments
241	Fraxinus uhdei	6+7+8+8	40	30	10.875	C	C-	1s cod inc
242	Schinus molle	20	40	35	15	C	D	Cod leans 1s 2-big cuts, 1-FC
243	Schinus molle	16	38	35	12	C-	C	Leans DLs 1sRF Sp
244	Schinus molle	7	22	20	5.25	C-	D-	1s OL
245	Schinus molle	13	25	24	9.75	C	C-	Lean DLT T-bow OL
246	Schinus molle	18	40	45	13.5	C	C-	T-bow OL cod
247	Schinus molle	16	35	35	12	C	C-	1s cod leans brk
248	Schinus molle	15	30	24	11.25	C-	C-	OL 2-cuts 1s
249	Corymbia citriodora	17	75	40	12.75	C	C-	OL 1s
250	Corymbia citriodora	24	80	50	18	C	B	2long DW
251	Eucalyptus sideroxylon	41+28	70	80	62	B	C	TO cod inc 2long leans
252	Eucalyptus sideroxylon	22	60	40	16.5	C-	C	Cod inc Sp Cr#251
253	Corymbia citriodora	21	90	45	15.75	C	C-	1s Cr oak #54
254	Eucalyptus camaldulensis	28+24	90	65	37	B	C	cod inc brk Hd Cr#255
255	Corymbia citriodora	22	80	60	16.5	C	C	1s Cr#254 mLean
256	Eucalyptus sideroxylon	21	45	45	15.75	C-	C-	Db Sp Cr#255
257	Corymbia citriodora	37	90	70	27.75	C-	C-	Cod Sp DW brk Db 2long
258	Eucalyptus sideroxylon	35	45	45	26.25	C	C-	Big FC cod inc 2long
259	Eucalyptus polyanthemos	23	60	45	17.25	C-	C-	Cod inc TO 1s Sp gird DW
260	Corymbia citriodora	13	90	25	9.75	C	C	OL Cr#259 & 261
261	Corymbia citriodora	21	80	50	15.75	C-	C-	Brk 1s cod bowed
262	Corymbia citriodora	12	80	45	9	C-	C-	Lean bowed 1s
263	Ulmus parvifolia	17	40	36	12.75	C	D	Lean OL cod brks +TOs DL
264	Eucalyptus polyanthemos	15+15	38	36	21	C-	C	Cod inc DL 1s
265	Casimiroa edulis	9	22	15	6.75	C	C	NoRF big cut near base
266	Grevillea robusta	12	40	20	9	B	C	Cod top
267	Eucalyptus sideroxylon	10+12+11	24	20	19	C	D	Topd cod, overhead wires
268	Eucalyptus sideroxylon	27	50	40	20.25	B	C-	Cod inc Hd 1s
269	Eucalyptus sideroxylon	27	60	40	20.25	C	C-	Cod Hd DL brk

Tag#	Species	DBH	Ht.	Wd.	Clearance	Health	Structure	Comments
270	Eucalyptus sp.	32	55	45	24	C	D	Topd Hd DL wires
271	Schinus molle	15+14	25	25	16	C	C-	Cod FC brk
272	Corymbia citriodora	31	90	55	23.25	C	C-	DW cod DL Cr#273
273	Corymbia citriodora	17	70	45	12.75	C	C-	1s Cr#272 2long
274	Grevillea robusta	21	55	28	15.75	B	B	FC
275	Grevillea robusta	18	55	25	13.5	B	C	Cod
276	Grevillea robusta	15	35	20	11.25	B	B	Leans
277	Cedrus deodara	18+7	35	30	15	A	B	Lost top
278	Eucalyptus sideroxylon	20+12	35	35	23	C	C	TO
279	Pinus canariensis	19	35	30	14.25	B	D	Topd 2long topd
280	Schinus molle	16	30	30	12	C	C-	DK brk
281	Acacia farnesiana	12	22	15	9	D	D	Big cuts 1s
282	Fraxinus uhdei	20	60	35	15	D	D-	Cod
283	Eucalyptus sideroxylon	24	55	30	18	C-	C-	Cod inc noRF Sp
284	Eucalyptus sp.	15+18	50	45	23	C	C	Sup# by #285 2long
285	Eucalyptus camaldulensis	45	100	70	33.75	B	A	Good
286	Schinus molle	10+12	35	35	14	B	C	OL cod
287	Washingtonia robusta	50'th	50'th	10	17	B	B	Okay
288	Fraxinus uhdei	9+5	38	36	8	D	D	Crowded
289	Fraxinus uhdei	23	24	24	17.25	B	C-	Crowded
885	Grevillea robusta	11	25	16	8.25	C	C	TO headed
886	Eucalyptus sideroxylon	11+12	30	24	15	C	D	Topd TD stump sprouts
887	Eucalyptus sideroxylon	15	24	16	11.25	C	C-	Cod Db
888	Fraxinus uhdei	12	32	14	9	D	C-	Cod Db
889	Schinus molle	20	36	38	15	B	B	Cod Sh
890	Schinus terebinthifolius	14	18	30	10.5	B	D	Cod sup Sh Db
891	Olea europea	10	20	18	7.5	B	C	Cod dominant
892	Schinus terebinthifolius	10	20	22	7.5	C-	D	Cod Db Cr#891 Sh

There are 197 trees altogether, with two breaks in tag numbers.

Matrix of Protected Tree Removals

Per Adrian Sanchez, with Los Angeles Urban Forestry Division, all sycamores, bay, walnuts, oaks, Mexican elderberry and toyon are considered protected under the ordinance, unless someone has proof they were planted, e.g. nursery receipts or photographs of them being planted. The obvious landscape setting is not sufficient.

Tree#	Species	DBH	Ht	Wd.	Health	Structure	Comments	Reason
54	Quercus agrifolia	25 @ 3'	35	45	B	B	1sRF LB cod 2long	Project grading
55	Quercus lobata	15	35	40	C-	B	Cod Db, elm crowds	Project grading
56	Platanus racemosa	25	50	40	C	C-	Cod old-topping DLS dry	Project grading
86	Quercus lobata	5	8	7	A	A	1sRF LB cod 2long	Project grading

Removal Justification

The one coast live oak is large, but over-topped by large eucalypts. The root zone and clearance requirements are daunting, especially considering the adjoining patio and home that need to be demolished. Part of the critical root zone is paved over, part is on a slope and part is flat. Its roots are intertwined with the large eucalypts.

One valley oak (#55) is in a small planter, not much bigger than the trunk. Removal of the brick planter and surrounding paving would either expose roots or bury them under almost 2 feet of fill. This would cause the immediate decline of the tree.

The other valley oak (#86) is also intertwined and under large eucalypts. Protection should go by the diameter of the trunk rather than the dripline, because it is so narrow. If the City measures by the DBH, it will be difficult to remove the surrounding trees and protect its roots.

The sycamore behind the home (#56) will need a large amount of protection to protect its health, but there will be existing building and paving demolition and then grading in its critical root zone.

There are only a few protected trees, but none can be preserved in place. Transplanting the smaller valley oak is possible, but not advisable. If any survive, they will be set back for about a decade or more.

There are no protected shrubs on this site - Mexican elderberry (Sambucus mexicana) or toyon (Heteromeles arbutifolia), recently added under Ord. 186873 effective date 02/04/2021.

Matrix of Non-Protected Removals

Tag#	Species	DBH	Ht.	Wd.	Clearance	Health	Structure
1	Schinus molle	24	20	17	N/A	C	D
2	Schinus molle	10+7+18	20	30	N/A	C-	D
3	Schinus molle	7.5	18	18	N/A	C	D
4	Schinus molle	15	20	20	N/A	C	D
5	Schinus molle	7.5	18	12	N/A	C	D
6	Schinus molle	8	18	12	N/A	C-	D
7	Schinus molle	16	20	30	N/A	C	D
8	Schinus molle	16	18	22	N/A	C	D
9	Schinus molle	12	20	15	N/A	C-	D
10	Schinus molle	6.6	18	12	N/A	C	D
11	Schinus molle	10+7	20	16	N/A	C-	D
12	Schinus molle	10	18	18	N/A	C-	D
13	Schinus molle	8+9+14	18	18	N/A	C	D
14	Schinus molle	11	20	18	N/A	C	D
15	Schinus molle	8	18	16	N/A	C	D
16	Schinus molle	9+9	20	24	N/A	C	D
17	Schinus molle	8+10+16	22	30	N/A	C	D
18	Schinus molle	13	22	30	N/A	C	D
19	Schinus molle	13	28	30	N/A	C	D
20	Schinus molle	10+12	22	35	N/A	C	D
21	Schinus molle	16 at 3'	25	30	N/A	C	D

Tag#	Species	DBH	Ht.	Wd.	Clearance	Health	Structure
22	Schinus molle	17	28	35	N/A	C	D
23	Schinus molle	12+12	16	35	N/A	C	D
24	Schinus molle	13	224	35	N/A	C	D
25	Schinus molle	12	20	35	N/A	C	D
26	Schinus molle	8+11	18	30	N/A	C	D
27	Schinus terebinthifolius	5 x 2"	16	12	N/A	D	D
28	Schinus molle	14	36	36	N/A	C	C-
29	Schinus molle	9	30	20	N/A	C	D
30	Schinus molle	6.5+14	30	30	N/A	C	D
31	Schinus molle	5.5	18	14	N/A	C-	D
32	Schinus molle	14+9	28	30	N/A	C	D
33	Schinus molle	14	28	20	N/A	C	D
34	Schinus molle	14	28	30	N/A	C	D
35	Fraxinus uhdei	8	30	20	N/A	D	D-
36	Schinus terebinthifolius	thicket	12	12	N/A	C	D
37	Schinus molle	20	32	32	N/A	C	D
38	Schinus molle	26	40	32	N/A	C	D
42	Schinus molle	8	18	14	N/A	C	D
43	Schinus molle	7.5+10	20	30	N/A	C	D
44	Schinus molle	11	25	25	N/A	C	D
45	Schinus molle	6	18	14	N/A	C	D
46	Schinus molle	9	25	25	N/A	C	D
47	Schinus molle	10	24	28	N/A	C	D

Tag#	Species	DBH	Ht.	Wd.	Clearance	Health	Structure
48	Schinus molle	8	20	18	N/A	C	D
49	Schinus molle	7	20	12	N/A	C	D
50	Schinus molle	12	20	16	N/A	C	D
51	Schinus molle	16 @ 2'	20	18	N/A	C	D
53	Schinus molle	18	40	30	N/A	C	D
54	Quercus agrifolia	25 @ 3'	35	45	N/A	B	B
55	Quercus lobata	15	35	40	N/A	C-	B
56	Platanus racemosa	25	50	40	N/A	C	C-
57	Pinus halepensis	24	60	45	N/A	C	C-
58	Pinus halepensis	18"b	35	30	N/A	C	D
59	Cupressus sempervirens	8.5	40	4	N/A	A	B
60	Cupressus sempervirens	8	35	4	N/A	A	B
61	Thuya orientalis	3+3+6	12	8	N/A	C	C
62	Juniperus chinensis cv	8"b	10	9	N/A	C	C
63	Juniperus chinensis cv	6"b	4	7	N/A	C	C
64	Schinus molle	9 @ 2'	16	16	N/A	B	B
65	Schinus molle	5.2	14	9	N/A	C	D
66	Schinus molle	13	25	25	N/A	B	C
67	Schinus molle	17 @ 3'	28	35	N/A	B	D
68	Schinus molle	18 @ 3'	26	30	N/A	C	D
69	Eucalyptus sideroxylon	15	40	30	N/A	B	C
70	Schinus molle	11	40	30	N/A	B	C-
71	Schinus molle	13	5	35	N/A	B	C

Tag#	Species	DBH	Ht.	Wd.	Clearance	Health	Structure
72	Schinus molle	11	32	30	N/A	B	C
73	Jacaranda mimosifolia	10	30	26	N/A	B	C
74	Schinus molle	6+6+7	18	20	N/A	C	D
75	Washingtonia robusta	10'th	10'th	10	N/A	C	C
78	Washingtonia robusta	50'th	50'th	10	N/A	A	A
79	Washingtonia robusta	50'th	50'th	10	N/A	A	A
81	Washingtonia robusta	16'th	16'th	10	N/A	A	A
82	Washingtonia robusta	5'th	5'th	10	N/A	B	C
83	Washingtonia robusta	50'th	50'th	10	N/A	A	A
84	Eucalyptus globulus	18	50	30	N/A	D-	D
85	Eucalyptus globulus	30+30	60	40	N/A	C	D
86	Quercus lobata	9	35	15	N/A	C	B
88	Schinus molle	10+10+10	24	35	N/A	B	C-
89	Schinus molle	10+11+20	30	40	N/A	B	B
90	Schinus molle	7	22	14	N/A	B	C-
91	Schinus molle	10+12	28	35	N/A	B	C
92	Schinus molle	10+10	25	28	N/A	C	C
93	Schinus molle	10+8	24	28	N/A	C	C-
94	Schinus molle	10	24	22	N/A	C	C
95	Schinus molle	8+12	24	28	N/A	B	C
96	Schinus molle	14 @ 2'	26	28	N/A	B	D
97	Schinus molle	5+10	26	16	N/A	B	C-
98	Schinus molle	5+5+5	25	20	N/A	B	D

Tag#	Species	DBH	Ht.	Wd.	Clearance	Health	Structure
99	Pinus halepensis	16	40	40	N/A	B	C-
100	Pinus halepensis	14	45	30	N/A	B	C
201	Pinus halepensis	20	36	36	N/A	B	C-
202	Schinus molle	9+10	25	25	N/A	A	C
203	Schinus molle	9+11	28	30	N/A	B	C
204	Schinus molle	9	25	20	N/A	D	C-
205	Magnolia grandiflora	11	24	16	N/A	C-	C-
206	Magnolia x soulangeana	4+4+4	15	16	N/A	B	C-
207	Juniperus chinensis cv	6+6	8	11	N/A	C	C
208	Juniperus chinensis cv	5+6	9	12	N/A	C	D
228	Schinus molle	10	24	24	N/A	B	D
229	Schinus molle	10+6	22	20	N/A	D	D
230	Schinus molle	6+7+6	15	16	N/A	D	D
231	Schinus molle	12	11	6	N/A	F	F
232	Schinus molle	8 @ 2'	23	14	N/A	C-	D
238	Ailanthus altissima	12+5	30	24	N/A	C-	D
239	Ailanthus altissima	8.5+6	32	22	N/A	C	C-
240	Schinus molle	11	28	18	N/A	C	D
241	Fraxinus uhdei	6+7+8+8	40	30	N/A	C	C-
242	Schinus molle	20	40	35	N/A	C	D
244	Schinus molle	7	22	20	N/A	C-	D-
245	Schinus molle	13	25	24	N/A	C	C-
246	Schinus molle	18	40	45	N/A	C	C-

Tag#	Species	DBH	Ht.	Wd.	Clearance	Health	Structure
247	Schinus molle	16	35	35	N/A	C	C-
248	Schinus molle	15	30	24	N/A	C-	C-
251	Eucalyptus sideroxylon	41+28	70	80	N/A	B	C
252	Eucalyptus sideroxylon	22	60	40	N/A	C-	C
253	Corymbia citriodora	21	90	45	N/A	C	C-
254	Eucalyptus camaldulensis	28+24	90	65	N/A	B	C
255	Corymbia citriodora	22	80	60	N/A	C	C
256	Eucalyptus sideroxylon	21	45	45	N/A	C-	C-
257	Corymbia citriodora	37	90	70	N/A	C-	C-
258	Eucalyptus sideroxylon	35	45	45	N/A	C	C-
259	Eucalyptus polyanthemos	23	60	45	N/A	C-	C-
260	Corymbia citriodora	13	90	25	N/A	C	C
261	Corymbia citriodora	21	80	50	N/A	C-	C-
262	Corymbia citriodora	12	80	45	N/A	C-	C-
263	Ulmus parvifolia	17	40	36	N/A	C	D
264	Eucalyptus polyanthemos	15+15	38	36	N/A	C-	C
265	Casimiroa edulis	9	22	15	N/A	C	C
266	Grevillea robusta	12	40	20	N/A	B	C
267	Eucalyptus sideroxylon	10+12+11	24	20	N/A	C	D
268	Eucalyptus sideroxylon	27	50	40	N/A	B	C-
269	Eucalyptus sideroxylon	27	60	40	N/A	C	C-
270	Eucalyptus sp.	32	55	45	N/A	C	D
271	Schinus molle	15+14	25	25	N/A	C	C-

Tag#	Species	DBH	Ht.	Wd.	Clearance	Health	Structure
272	Corymbia citriodora	31	90	55	N/A	C	C-
273	Corymbia citriodora	17	70	45	N/A	C	C-
274	Grevillea robusta	21	55	28	N/A	B	B
275	Grevillea robusta	18	55	25	N/A	B	C
276	Grevillea robusta	15	35	20	N/A	B	B
277	Cedrus deodara	18+7	35	30	N/A	A	B
278	Eucalyptus sideroxylon	20+12	35	35	N/A	C	C
279	Pinus canariensis	19	35	30	N/A	B	D
280	Schinus molle	16	30	30	N/A	C	C-
281	Acacia farnesiana	12	22	15	N/A	D	D
282	Fraxinus uhdei	20	60	35	N/A	D	D-
283	Eucalyptus sideroxylon	24	55	30	N/A	C-	C-
284	Eucalyptus sp.	15+18	50	45	N/A	C	C
285	Eucalyptus camaldulensis	45	100	70	N/A	B	A
288	Schinus molle	12	38	369	9	C	C-
885	Washingtonia robusta	50'th	50'th	10	17	B	B
886	Fraxinus uhdei	9+5	38	36	8	D	D
887	Fraxinus uhdei	23	24	24	17.25	B	C-
888	Grevillea robusta	11	25	16	8.25	C	C
890	Eucalyptus sideroxylon	15	24	16	11.25	C	C-
892	Schinus molle	20	36	38	15	B	B

Non-protected Tree Health and Condition

After the recent clearing and “pruning”, very few of the non-protected trees would be an asset to the new facilities. So far, the protected trees have not been damaged, except by crowding.

Around the two homes there are several one-of-a -kind trees. A sweet acacia is such a species, and this one is in poor health, probably near the end of its life. The one white sapote, Casimiroa edulis, is another such tree. It is in fair health, but confined to very small planter in the patio. By the garage is one deodar cedar, a nice looking and healthy tree, and worthwhile, if it can be saved in place. The one Jacaranda and the one saucer magnolia by the occupied home are also fine trees, but its very unlikely they can be saved and protected in place. The jacaranda, *Jacaranda mimosifolia*, has good health, but it leans and is codominant.

The saucer magnolia does not have very good structure, but as a small bushy tree it’s defects are not significant. The southern magnolia in the same area is not a worthwhile specimen, even if it can be protected in place. There is only one Canary Island pine on site, even though it’s a better species than the Aleppo pine, but this one has been topped, or the top was removed after storm damage. The one Chinese elm in the patio is healthy, but in poor structural condition.

There were several groups of Italian cypress on site, but only two were large enough to be included. Most are in good health and structural condition. About 3-4 feet of lower foliage was removed. Unfortunately, they are difficult to transplant.

Several different species of eucalypts occur across the property, though none are found on the lower slopes and only a few listed for inclusion on the upper site. Only one included tree was a really good specimen, though several included ones near the lower residence have adequate appearance to be worth saving if they were not in the way or suppressing protected species. Most are one-sided or leaning due to crowding. The demolition and grading of the patio area will probably prevent keeping most of them. The two blue gums on the lower driveway are in poor condition and should be removed.

Several Shamel ash, *Fraxinus uhdei,* are scattered around the property. Only three were large enough for inclusion in this report. Other ash trees are adequate enough to be kept for their shade and fast growth. It is also a common weed tree, and one with aggressive shallow roots. Its winged seeds can travel quite far, and many sprouted around the lower wet area.

There are two Canary Island date palms, *Phoenix canariensis*, on the west side in a steep gully. This is an expensive palm to purchase. Both were over-pruned, but can recover. However, judging by other work, I doubt their pruning tools were

sterilized. The main disease of Canary Island date palms is fusarium wilt, which is spread by pruning tools. Time will tell if they were infected. If they are not infected, the larger one would be about the only plant really worth transplanting.

Six Aleppo pines, *Pinus halepensis,* are included here. The Aleppo pine typically has a wide range of structural problems, pest problems and root problems. In this setting they have been over lifted, over-pruned and have marginal health. The group of three, 99,100 and 201 are in good health, but only fair structure. The largest one was severely over-lifted and most of the pruning cuts were flush cuts.

The Brazil peppers, *Schinus terebinthifolius*, on site are in fair health and poor structure, with many root shoots, seedling, and many have broken limbs. Nearly all, except two, are in a row along the lower west wall. This group could only be saved as a large hedge. This is one of the world's most invasive weed trees. They are fairly drought tolerant, real survivors and difficult to get rid of.

The California peppers, *Schinus molle*, is the most common species in this immediate area (113 of 197 trees). Many are also found on the nearby agriculture fields. On this site the recent clearing has removed a large number, as indicated by their sprouting stumps. The remaining ones were unmanaged multi-trunk trees. The recent work has tried to make them look more tree like, by turning them into single trunk or multi-trunked trees and removed a large number of their lower limbs and trunks. They were limbed up and many of the cuts were large flush cuts. This is a decay prone species and a large number of epicormic shoots are emerging as should be expected, both off the stumps and the remaining trees. They were cut in about the worst season for heavy pruning on California peppers. The immediate problem will be controlling sprouts, and the long term problem will be decay in both the trunks and root crowns of the remaining trees.

Mexican fan palms, *Washingtonia robusta,* can also be weedy, starting from birds or wind-blown seed. This is the least expensive common landscape palm. If they are not in the right place for future use, it is usually less expensive to cut them down and plant new ones. The group by the lower road (75 to 83 + 287) is in a swampy area, which they are well suited to. The Mexican fan palms and California peppers are the two most common trees on site.

Protected Tree Health and Condition

The California sycamore, *Platanus racemosa*, is a protected species, and protected status due to lack of sufficient evidence that it is a planted nursery grown specimen, according to Adrian Sanchez. He said, "All protected tree species are protected under the protected tree ordinance unless you have proof that the tree was purchased at a nursery and planted." He said it would take a photograph of them being planted, landscape plans for the area, or a nursery receipt. Where this sycamore is growing there are no and were no streams, gullies or ravines, and this is a riparian species. As an arboricultural expert, I am convinced this tree is not naturally occurring in its present location. The sloping, bare, dry soil around it is not a suitable habitat for a riparian species. It was topped a decade or more ago, and the resulting main limbs are attached to the trunk at a decayed section.

The coast live oak, *Quercus agrifolia,* is unlikely to be naturally occurring under much larger eucalypts, but occurring on graded and landscaped grounds. There are larger adjoining eucalyptus that are much taller and shading this oak. Its limbs are very long, probably due to reaching for light. The main structure appears sound. With a few years of corrective pruning and removal of the adjoining larger trees it might be a useful specimen. However, due the slope it is on and the adjoining paving, providing enough clearance is unlikely.

Two valley oaks, *Quercus lobata*, were found on site below the lower home. The larger one (#55) is in a small round raised brick planter. It is a relatively young tree, obviously planted, and has good primary structure. It is partly suppressed by a large Chinese elm tree. The foliage is sparse. I doubt it could survive transplanting, but grading, removal of the brick planter and surrounding paving would kill it otherwise. It can't last as it is, and it can't last in the coming site use.

The smaller valley oak (#86) is also suppressed by surrounding trees. The health is fair, but it is over-lifted and not worth transplanting.

Protected Shrubs

There are no protected shrubs - Mexican elderberry (Sambucus mexicana) or toyon (Heteromeles arbutifolia), - recently added under Ord. 186873 effective date 02/04/2021.

Botanic name / Common name Cross-Reference

Botanical name	Common name	Count
Acacia farnesiana	Sweet acacia	1
Ailanthus altissima	Tree of “heaven”	2
Cedrus deodara	Deodar cedar	1
Casimiroa edulis	White sapote	1
Corymbia citriodora	Lemon gum	10
Cupressus sempervirens	Italian cypress	2
Eucalyptus camaldulensis	River red gum	2
Eucalyptus globulus	Blue gum	2
Eucalyptus polyanthemos	Silver Mt. gum	2
Eucalyptus sideroxylon	Red ironbark	12
Eucalyptus sp.	Unknown eucalypt species	2
Fraxinus uhdei	Shamel ash	6
Grevillea robusta	Silk oak	5
Jacaranda mimosifolia	Jacaranda	1
Juniperus chinensis cv	Chinese juniper cultivar	4
Magnolia grandiflora	Southern magnolia	1
Magnolia x soulangeana	Saucer magnolia	1
Olea europea	Olive	1
Phoenix canariensis	Canary Island date palm	2
Pinus canariensis	Canary Island pine	1
Pinus halepensis	Aleppo pine	6
Platanus racemosa	California sycamore	1
Quercus agrifolia	Coast live oak	1
Quercus lobata	Valley oak	2
Schinus molle	California pepper	111
Schinus terebinthifolius	Brazil pepper	3+thicket
Thuja orientalis cv	Arborvitae	1
Ulmus parvifolia	Chinese elm	1
Washingtonia robusta	Mexican can palm	11
	Total =	197

Light green rows are protected species

Discussion

Construction Accommodations

Considering the planned care facility development and required grading, there is little known opportunity to protect trees in place, and there are few that deserve to be saved, and even fewer trees that merit transplanting, except one palm. There will be many opportunities in the new landscaping and around the perimeter to plant replacement trees. The typical landscape design will include a substantial tree canopy both for aesthetics as well as comfort in the warm Valley climate. Both the protected trees and other site trees should be removed and replaced or mitigated where your landscape architects believe it will be best to do so.

Native oaks need the surrounding landscape to be suited for the conditions benefitting oak growth – not lawn or other thirsty plantings. The removed protected trees must be mitigated by planting four new 24" box native oak trees or other protected species. The mitigation trees would probably be best in the more remote areas where they have more natural conditions. The City may require some mitigation for the non-protected trees as well.

California peppers are the most common tree on this site. They are compatible with the needs of oak trees. There is a total of 111 California peppers spread over the whole site. The sprouting stumps should be removed. They will never make good trees after being cut down. Only about thirty-six are in good health, but nearly all have fair to poor structure. The California peppers on this site were not very large, and now after the brush clearance contractor has pruned them, they are relatively small. The piles of dead cut brush from these trees are large and are another indication of how much has been removed.

Another cause was that they had almost no previous training or maintenance pruning. Most are in poor structural condition. Very few are recommended to remain, but now to keep them from falling apart or going back to being big bushes, at least annual crown restoration pruning and quarterly monitoring will be needed over the next four to five years. They will need good maintenance pruning done over their remaining years. Very few tree services seem to understand this process, but it is possible if only select companies can selected to bid. Experienced supervision by a board-certified master arborist or registered consulting arborist will be needed for each annual crown restoration pruning cycle. A tree risk assessment qualified arborist should hired for monitoring. So, retaining most of them will be costly, and their location may not suit the new land use plan.

No trees should be transplanted. Few have sufficient quality and health to justify the risk and expense. There is no place to store trees on site during grading and no room to work around them unless the work is done in phases or space is rented from the hospital or cemetery. Preserving any trees by transplanting them is not practical or cost effective, unless it saves a useful tree for a good place on site, which is unlikely to apply to any of these trees. California peppers are difficult to transplant and must be dug during early summer. Transplanted trees lose about 90 percent of their roots and take years to recover, if they ever do. In my experience planting new, young, better suited trees of appropriate species, would provide the better solution. In just a few years newly established trees, appropriately trained and cared for, will be full and useful to the site and to the community.

Mitigation and Replacement Trees

Under Ord. No. 177, 404, protected trees include: native oak species, California sycamore, southern California black walnut, and California bay. An newer ordinance amending provisions of Sections 12.21, 17.02, 17.05, 17.06, 17.51, 46.00, 46.01,46.02, 46.03, 46.04, and 46.06 of the Los Angeles Municipal Code (LAMC) has been written to include the Mexican Elderberry (*Sambucus mexicana*) and Toyon *(Heteromeles arbutifolia)* shrubs in the class of protected trees and shrubs.

There are only four protected trees on the site, 2 valley oaks, a coast live oak, and one sycamore, all of which should be removed and mitigated. Mitigation will require sixteen 24" box trees protected trees. There are no protected shrubs.

On a new campus with all or mostly all new trees, fitting in 16 mitigation trees should not be difficult. However, the mitigation trees should be planted where they have room to grow and be combined with compatible underplanting. Established oaks, from conditions like these, do not tolerate turf being planted in their root zones unless the percolation is fast.

Combining drought tolerant trees with underplantings that require much more water will make shallow rooted oaks and possibly lead to disease. There are good lists of recommended trees of similar requirements, and such trees should be used for this site. If there are lawns in the new landscape plans, trees should be kept out. Lawn conditions will make most trees shallow rooted, and as surface roots expand in diameter they are often damaged by lawn maintenance equipment. Those wounds can then decay and lead to whole tree failure.

There will be many opportunities to plant other trees. We don't know how much water will be available in years to come. Planting more drought tolerant trees and more woody shrubs and underplantings will reduce the need for water. Many common and attractive trees, e.g. ficus and fern pines are very drought tolerant once established.

Within the scope of this report there is no soil testing included. Real top soil is a great asset for any new landscape. However, when grading takes place, the top soil is not always considered as valuable. Top soil should be stockpiled as necessary to make sure topsoil remains on top. It takes decades for subsoils to weather sufficiently to function even nearly as well as the topsoil that is already here. To aid in selection of the new landscape trees the soil should be tested by an agronomic laboratory. If topsoil will be protected and stockpiled, it can be tested now. If not, the new topsoil, actually subsoils, should be tested after grading and the tree list amended as needed based on the soil test results.

There will be a large number of trees removed, but hopefully not taken to the land fill. Organic matter in the soil helps buffer salts, returns most elements to the ground for use by the new trees, and is a basis of a healthy soil biological web that helps protect and feed the new trees. If the existing trees and tree debris can be fed through a tub-grinder, this resource can save dump fees and help the new landscape trees and shrubs as surface mulch. No composting is needed.

Alternately, if the recommended clearances and protective measures of followed, most of the peppers, not in the path of grading or construction, could be retained, restored through proper crown restoration pruning, monitored and maintained. This may aid the City approval process. However, everyone should expect, budget and anticipate gradual replacement over the next ten to twenty years for those with weaker structure.

Recommendations

Specific Recommendations

1. Remove the 157 designated existing trees in the matrix below.
2. Only 40 of 197 trees were recommended for possible retention. For those, follow the “Tree Preservation Specifications”
3. Deep rip and remove the roots from the areas where trees were removed, but stay outside the protection radius of trees to remain. If there are signs of disease, take them to the dump.
4. Stockpile top soil as necessary where the grade will be changed.
5. Tub-grind the removed trees and tree debris. Use for mulch around existing trees to remain.
6. For weedy species like the Brazil pepper, tree of heaven, and Shamel ash, keep them separate and stockpile the grindings and turn the piles to compost the mulch to kill off possible seeds and weeds. Apply mulch 2-3” deep to the soil surface below new trees or existing trees that remain.
7. Follow pruning recommendations listed for trees to remain.
8. Monitor existing trees that remain for health and safety for the next ten years.

Mitigation

1. With the Urban Forestry Division's approval, chose new appropriate mitigation tree species for this site.
2. Plant the 16 new mitigation trees for the sycamore and oaks in the best planting spaces available. The mitigation trees must be protected *tree* species.

Tree Preservation Specifications

1. Protection Barrier: A protection barrier shall be installed around the tree or trees to be preserved. The barrier shall be constructed of durable fencing material, such as chain-link fencing. The barrier shall be placed as far from the base of the tree(s) as possible, at least 1-foot per inch of trunk diameter and beyond the drip-line. The fencing shall be maintained in good repair throughout the duration of the project, and shall not be removed, relocated, or encroached upon without permission of the arborist involved.

2. Storage of Materials: There shall be NO storage of materials or supplies of any kind within the area of the protection barriers. Concrete and cement materials, block, stone, sand and soil shall not be placed within the drip-line of the tree.

3. Fuel Storage: Fuel storage shall NOT be permitted within 150 feet of any tree to be preserved. Refueling, servicing and maintenance of equipment and machinery shall NOT be permitted within 150 feet of protected trees.

4. Debris and Waste Materials: Debris and waste from construction or other activities shall NOT be permitted within protected areas. Wash down of concrete or cement handling equipment, in particular, shall NOT be permitted within 150 feet of protected trees.

5. Planting near Trees Designated for Protection: Any digging within designated protection zones shall done using supersonic air (AirSpade or AirKnife) directly as the digging medium, by means of a nozzle, whose nominal rated input pressure (available from manufacturer's literature) must not exceed 130 psig (pounds per square inch at gage) unless otherwise approved. Nozzles designed for input above 130 psig can damage fine roots and are not recommended. Air compressors rated between 100 to 125 psig recommended.

6. Grade Changes: Any grade changes proposed should be approved by a Registered Consulting Arborist before construction begins, and precautions taken to mitigate potential injuries. Grade changes can be particularly damaging to trees. Even as little as two inches of fill can cause the death of a tree. Lowering the grade can destroy major portions of a root system.

7. Damages: Any tree damages or injuries should be reported to the project arborist as soon as possible. Severed roots shall be pruned cleanly to healthy tissue, using proper pruning tools. Broken branches or limbs shall be pruned according to International Society of Arboriculture Pruning Guidelines and ANSI A-300 Pruning Standards.

8. Preventive Measures: Before construction begins, irrigation and fertilization of the affected trees is recommended to improve tree vigor and health. Soil analysis testing should be completed to assure fertilization with the appropriate fertilizer products. Pruning of the tree canopies and branches should be done at the direction of the project arborist to remove any dead or broken branches, and to provide the necessary clearances for the construction equipment.

Matrix of Recommendations

Tag#	Species	DBH	Ht.	Wd.	Clearance	Health	Structure	Pruning	Other recommendations
1	Schinus molle	24	20	17	N/A	C	D	N/A	Remove - work
2	Schinus molle	10+7+18	20	30	N/A	C-	D	N/A	Remove - work
3	Schinus molle	7.5	18	18	N/A	C	D	N/A	Remove - work
4	Schinus molle	15	20	20	N/A	C	D	N/A	Remove - work
5	Schinus molle	7.5	18	12	N/A	C	D	N/A	Remove - work
6	Schinus molle	8	18	12	N/A	C-	D	N/A	Remove - work
7	Schinus molle	16	20	30	N/A	C	D	N/A	Remove - work
8	Schinus molle	16	18	22	N/A	C	D	N/A	Remove - work
9	Schinus molle	12	20	15	N/A	C-	D	N/A	Remove - work
10	Schinus molle	6.6	18	12	N/A	C	D	N/A	Remove - work
11	Schinus molle	10+7	20	16	N/A	C-	D	N/A	Remove - work
12	Schinus molle	10	18	18	N/A	C-	D	N/A	Remove - work
13	Schinus molle	8+9+14	18	18	N/A	C	D	N/A	Remove - work
14	Schinus molle	11	20	18	N/A	C	D	N/A	Remove - work
15	Schinus molle	8	18	16	N/A	C	D	N/A	Remove - work
16	Schinus molle	9+9	20	24	N/A	C	D	N/A	Remove - work
17	Schinus molle	8+10+16	22	30	N/A	C	D	N/A	Remove - work
18	Schinus molle	13	22	30	N/A	C	D	N/A	Remove - work
19	Schinus molle	13	28	30	N/A	C	D	N/A	Remove - work
20	Schinus molle	10+12	22	35	N/A	C	D	N/A	Remove - work
21	Schinus molle	16 @ 3'	25	30	N/A	C	D	N/A	Remove - work
22	Schinus molle	17	28	35	N/A	C	D	N/A	Remove - work
23	Schinus molle	12+12	16	35	N/A	C	D	N/A	Remove - work
24	Schinus molle	13	224	35	N/A	C	D	N/A	Remove - work
25	Schinus molle	12	20	35	N/A	C	D	N/A	Remove - work
26	Schinus molle	8+11	18	30	N/A	C	D	N/A	Remove - work

Tag#	Species	DBH	Ht.	Wd.	Clearance	Health	Structure	Pruning	Other recommendations
27	Schinus terebinthifolius	5 x 2"	16	12	N/A	D	D	N/A	Remove - work
28	Schinus molle	14	36	36	N/A	C	C-	N/A	Remove - work
29	Schinus molle	9	30	20	N/A	C	D	N/A	Remove - work
30	Schinus molle	6.5+14	30	30	N/A	C	D	N/A	Remove - work
31	Schinus molle	5.5	18	14	N/A	C-	D	N/A	Remove - work
32	Schinus molle	14+9	28	30	N/A	C	D	N/A	Remove - work
33	Schinus molle	14	28	20	N/A	C	D	N/A	Remove - work
34	Schinus molle	14	28	30	N/A	C	D	N/A	Remove - work
35	Fraxinus uhdei	8	30	20	N/A	D	D-	N/A	Remove - work
36	Schinus terebinthifolius	thicket	12	12	N/A	C	D	N/A	Remove - work
37	Schinus molle	20	32	32	N/A	C	D	N/A	Remove - structure
38	Schinus molle	26	40	32	N/A	C	D	N/A	Remove - work
39	Phoenix canariensis	4'th	4'th	12	5'	C	C	N/A	Remove - work
40	Washingtonia robusta	22'th	22'th	11	4	A	A	N/A	Remove - work
41	Phoenix canariensis	22'th	22'th	24	4	B	A	N/A	Remove - work
42	Schinus molle	8	18	14	N/A	C	D	N/A	Remove - work
43	Schinus molle	7.5+10	20	30	N/A	C	D	N/A	Remove - work
44	Schinus molle	11	25	25	N/A	C	D	N/A	Remove - work
45	Schinus molle	6	18	14	N/A	C	D	N/A	Remove - structure
46	Schinus molle	9	25	25	N/A	C	D	N/A	Remove - structure
47	Schinus molle	10	24	28	N/A	C	D	N/A	Remove - structure
48	Schinus molle	8	20	18	N/A	C	D	N/A	Remove - structure
49	Schinus molle	7	20	12	N/A	C	D	N/A	Remove - structure
50	Schinus molle	12	20	16	N/A	C	D	N/A	Remove - structure
51	Schinus molle	16 @ 2'	20	18	N/A	C	D	N/A	Remove - structure
52	Pinus halepensis	28	55	40	28	C-	C	Reduce longer limbs	Protect in place
53	Schinus molle	18	40	30	N/A	C	D	N/A	Remove - work
54	Quercus agrifolia	25 @ 3'	35	45	N/A	B	B	N/A	Remove & mitigate

Tag#	Species	DBH	Ht.	Wd.	Clearance	Health	Structure	Pruning	Other recommendations
55	Quercus lobata	15	35	40	N/A	C-	B	N/A	Remove & mitigate
56	Platanus racemosa	25	50	40	N/A	C	C-	N/A	Remove & mitigate
57	Pinus halepensis	24	60	45	N/A	C	C-	N/A	Remove - condition
58	Pinus halepensis	18"b	35	30	N/A	C	D	N/A	Remove - work
59	Cupressus sempervirens	8.5	40	4	N/A	A	B	N/A	Remove - work
60	Cupressus sempervirens	8	35	4	N/A	A	B	N/A	Remove - work
61	Thuya orientalis	3+3+6	12	8	N/A	C	C	N/A	Remove - work
62	Juniperus chinensis cv	8"b	10	9	N/A	C	C	N/A	Remove - work
63	Juniperus chinensis cv	6"b	4	7	N/A	C	C	N/A	Remove - work
64	Schinus molle	9 @ 2'	16	16	N/A	B	B	N/A	Remove - work
65	Schinus molle	5.2	14	9	N/A	C	D	N/A	Remove - work
66	Schinus molle	13	25	25	N/A	B	C	N/A	Remove - work
67	Schinus molle	17 @ 3'	28	35	N/A	B	D	N/A	Remove - work
68	Schinus molle	18 @ 3'	26	30	N/A	C	D	N/A	Remove - work
69	Eucalyptus sideroxylon	15	40	30	N/A	B	C	N/A	Remove - work
70	Schinus molle	11	40	30	N/A	B	C-	N/A	Remove - work
71	Schinus molle	13	5	35	N/A	B	C	N/A	Remove - work
72	Schinus molle	11	32	30	N/A	B	C	N/A	Remove - work
73	Jacaranda mimosifolia	10	30	26	N/A	B	C	N/A	Remove - work
74	Schinus molle	6+6+7	18	20	N/A	C	D	N/A	Remove - work
75	Washingtonia robusta	10'th	10'th	10	N/A	C	C	N/A	Remove - work
76	Washingtonia robusta	50'th	50'th	10	4	A	A	N/A	Remove - work
77	Washingtonia robusta	45'th	45'th	10	4	A	A	N/A	Remove - work
78	Washingtonia robusta	50'th	50'th	10	N/A	A	A	N/A	Remove - work
79	Washingtonia robusta	50'th	50'th	10	N/A	A	A	N/A	Remove - work
80	Washingtonia robusta	40'th	40'th	10	4	A	A	N/A	Remove - work
81	Washingtonia robusta	16'th	16'th	10	N/A	A	A	N/A	Remove - work
82	Washingtonia robusta	5'th	5'th	10	N/A	B	C	N/A	Remove - work

Tag#	Species	DBH	Ht.	Wd.	Clearance	Health	Structure	Pruning	Other recommendations
83	Washingtonia robusta	50'th	50'th	10	N/A	A	A	N/A	Remove - work
84	Eucalyptus globulus	18	50	30	N/A	D-	D	N/A	Remove - work
85	Eucalyptus globulus	30+30	60	40	N/A	C	D	N/A	Remove - work
86	Quercus lobata	9	35	15	N/A	C	B	N/A	Remove & mitigate
87	Schinus molle	20+7+5	28	26	16.5	B	C-	N/A	Remove - work
88	Schinus molle	10+10+10	24	35	N/A	B	C-	N/A	Remove - work
89	Schinus molle	10+11+20	30	40	N/A	B	B	N/A	Remove - work
90	Schinus molle	7	22	14	N/A	B	C-	N/A	Remove - work
91	Schinus molle	10+12	28	35	N/A	B	C	N/A	Remove - work
92	Schinus molle	10+10	25	28	N/A	C	C	N/A	Remove - work
93	Schinus molle	10+8	24	28	N/A	C	C-	N/A	Remove - work
94	Schinus molle	10	24	22	N/A	C	C	N/A	Remove - work
95	Schinus molle	8+12	24	28	N/A	B	C	N/A	Remove - work
96	Schinus molle	14 @ 2'	26	28	N/A	B	D	N/A	Remove - work
97	Schinus molle	5+10	26	16	N/A	B	C-	N/A	Remove - work
98	Schinus molle	5+5+5	25	20	N/A	B	D	N/A	Remove - work
99	Pinus halepensis	16	40	40	N/A	B	C-	N/A	Remove - work
100	Pinus halepensis	14	45	30	N/A	B	C	N/A	Remove - work
201	Pinus halepensis	20	36	36	N/A	B	C-	N/A	Remove - work
202	Schinus molle	9+10	25	25	N/A	A	C	N/A	Remove - work
203	Schinus molle	9+11	28	30	N/A	B	C	N/A	Remove - work
204	Schinus molle	9	25	20	N/A	D	C-	N/A	Remove - work
205	Magnolia grandiflora	11	24	16	N/A	C-	C-	N/A	Remove - work
206	Magnolia x soulangeana	4+4+4	15	16	N/A	B	C-	N/A	Remove - work
207	Juniperus chinensis cv	6+6	8	11	N/A	C	C	N/A	Remove - work
208	Juniperus chinensis cv	5+6	9	12	N/A	C	D	N/A	Remove - work
209	Schinus molle	17+12	22	30	15.75	C	C	N/A	Remove - work
210	Schinus molle	9+10	20	25	10.12	C	C-	N/A	Remove - work

Tag#	Species	DBH	Ht.	Wd.	Clearance	Health	Structure	Pruning	Other recommendations
211	Schinus molle	9 @ 2'	15	18	6	C	C-	N/A	Remove - work
212	Schinus molle	5.5	15	12	4.125	C	C	N/A	Remove - work
213	Schinus molle	5+5	13	13	5.25	B	C-	N/A	Remove - work
214	Schinus molle	16+6.5	28	32	13.5	C	C-	N/A	Remove - work
215	Schinus molle	12+13+12	30	36	18	C	C-	N/A	Remove - work
216	Schinus molle	16 @ 2'	30	30	10.5	B	B	Subordinate	Protect in place
217	Schinus molle	20+28	45	55	25.88	B	B	Reduction	Protect in place
218	Schinus molle	10	28	22	7.5	B	C	Reduce +Subordinate	Protect in place
219	Schinus molle	12+12	24	28	12.75	B	B	N/A	Remove - work
220	Schinus molle	5+8+9+11	22	28	12.75	B	C	N/A	Remove - work
221	Schinus molle	11	22	20	8.25	C	C-	N/A	Remove - work
222	Schinus molle	15	24	20	11.25	B	C	N/A	Remove - work
223	Schinus molle	15	24	22	11.25	B	C	N/A	Remove - work
224	Schinus molle	4+5+8	24	16	7.65	C	C-	N/A	Remove - work
225	Schinus molle	20	28	25	15	B	C	N/A	Remove - work
226	Schinus molle	14	24	24	10.5	B	C	N/A	Remove - work
227	Schinus molle	10	20	20	7.65	B	C-	N/A	Remove - work
228	Schinus molle	10	24	24	N/A	B	D	N/A	Remove - condition
229	Schinus molle	10+6	22	20	N/A	D	D	N/A	Remove - condition
230	Schinus molle	6+7+6	15	16	N/A	D	D	N/A	Remove - work
231	Schinus molle	12	11	6	N/A	F	F	N/A	Remove - work
232	Schinus molle	8 @ 2'	23	14	N/A	C-	D	N/A	Remove - work
233	Schinus molle	15	28	20	11.25	B	C-	Balance	Protect in place
234	Schinus molle	14+24	40	40	21	C	C	Light reduction	Protect in place
235	Schinus molle	22	40	40	16.5	A	B	Reduce DL	Protect in place
236	Schinus molle	18	40	38	13.5	B	C	Reduce DL	Protect in place
237	Schinus molle	10	22	22	7.5	B	C-	N/A	Remove - work
238	Ailanthus altissima	12+5	30	24	N/A	C-	D	N/A	Remove - work

Tag#	Species	DBH	Ht.	Wd.	Clearance	Health	Structure	Pruning	Other recommendations
239	Ailanthus altissima	8.5+6	32	22	N/A	C	C-	N/A	Remove - weed
240	Schinus molle	11	28	18	N/A	C	D	N/A	Remove - work
241	Fraxinus uhdei	6+7+8+8	40	30	N/A	C	C-	N/A	Remove - work
242	Schinus molle	20	40	35	N/A	C	D	N/A	Remove - work
243	Schinus molle	16	38	35	12	C-	C	N/A	Remove - work
244	Schinus molle	7	22	20	N/A	C-	D-	N/A	Remove - work
245	Schinus molle	13	25	24	N/A	C	C-	N/A	Remove - work
246	Schinus molle	18	40	45	N/A	C	C-	N/A	Remove - work
247	Schinus molle	16	35	35	N/A	C	C-	N/A	Remove - work
248	Schinus molle	15	30	24	N/A	C-	C-	N/A	Remove - work
249	Corymbia citriodora	17	75	40	12.75	C	C-	Hold off	Protect in place
250	Corymbia citriodora	24	80	50	18	C	B	N/A	Remove - work
251	Eucalyptus sideroxylon	41+28	70	80	N/A	B	C	N/A	Remove - work
252	Eucalyptus sideroxylon	22	60	40	N/A	C-	C	N/A	Remove - work
253	Corymbia citriodora	21	90	45	N/A	C	C-	N/A	Remove - work
254	Eucalyptus camaldulensis	28+24	90	65	N/A	B	C	N/A	Remove - work
255	Corymbia citriodora	22	80	60	N/A	C	C	N/A	Remove - work
256	Eucalyptus sideroxylon	21	45	45	N/A	C-	C-	N/A	Remove - work
257	Corymbia citriodora	37	90	70	N/A	C-	C-	N/A	Remove - work
258	Eucalyptus sideroxylon	35	45	45	N/A	C	C-	N/A	Remove - work
259	Eucalyptus polyanthemos	23	60	45	N/A	C-	C-	N/A	Remove - work
260	Corymbia citriodora	13	90	25	N/A	C	C	N/A	Remove - work
261	Corymbia citriodora	21	80	50	N/A	C-	C-	N/A	Remove - work
262	Corymbia citriodora	12	80	45	N/A	C-	C-	N/A	Remove - work
263	Ulmus parvifolia	17	40	36	N/A	C	D	N/A	Remove - work
264	Eucalyptus polyanthemos	15+15	38	36	N/A	C-	C	N/A	Remove - work
265	Casimiroa edulis	9	22	15	N/A	C	C	N/A	Remove - work
266	Grevillea robusta	12	40	20	N/A	B	C	N/A	Remove - work

Tag#	Species	DBH	Ht.	Wd.	Clearance	Health	Structure	Pruning	Other recommendations
267	Eucalyptus sideroxylon	10+12+11	24	20	N/A	C	D	N/A	Remove - work
268	Eucalyptus sideroxylon	27	50	40	N/A	B	C-	N/A	Remove - work
269	Eucalyptus sideroxylon	27	60	40	N/A	C	C-	N/A	Remove - work
270	Eucalyptus sp.	32	55	45	N/A	C	D	N/A	Remove - work
271	Schinus molle	15+14	25	25	N/A	C	C-	N/A	Remove - work
272	Corymbia citriodora	31	90	55	N/A	C	C-	N/A	Remove - work
273	Corymbia citriodora	17	70	45	N/A	C	C-	N/A	Remove - work
274	Grevillea robusta	21	55	28	N/A	B	B	N/A	Remove - work
275	Grevillea robusta	18	55	25	N/A	B	C	N/A	Remove - work
276	Grevillea robusta	15	35	20	N/A	B	B	N/A	Remove - work
277	Cedrus deodara	18+7	35	30	N/A	A	B	N/A	Remove - work
278	Eucalyptus sideroxylon	20+12	35	35	N/A	C	C	N/A	Remove - work
279	Pinus canariensis	19	35	30	N/A	B	D	N/A	Remove - work
280	Schinus molle	16	30	30	N/A	C	C-	N/A	Remove - work
281	Acacia farnesiana	12	22	15	N/A	D	D	N/A	Remove - work
282	Fraxinus uhdei	20	60	35	N/A	D	D-	N/A	Remove - work
283	Eucalyptus sideroxylon	24	55	30	N/A	C-	C-	N/A	Remove - work
284	Eucalyptus sp.	15+18	50	45	N/A	C	C	N/A	Remove - work
285	Eucalyptus camaldulensis	45	100	70	N/A	B	A	N/A	Remove - work
286	Schinus molle	10+12	35	35	14	B	C	N/A	Remove - work
287	Schinus molle	17+10	35	40	17	B	C	N/A	Remove - work
288	Schinus molle	12	38	369	9	C	C-	N/A	Remove - work
289	Schinus molle	23	24	24	17.25	B	C-	Balance	Protect in place
885	Washingtonia robusta	50'th	50'th	10	17	B	B	N/A	Remove - work
886	Fraxinus uhdei	9+5	38	36	8	D	D	N/A	Remove - work
887	Fraxinus uhdei	23	24	24	17.25	B	C-	N/A	Remove - work
888	Grevillea robusta	11	25	16	8.25	C	C	N/A	Remove - work
889	Eucalyptus sideroxylon	11+12	30	24	15	C	D	N/A	Remove - work

Tag#	Species	DBH	Ht.	Wd.	Clearance	Health	Structure	Pruning	Other recommendations
890	Eucalyptus sideroxylon	15	24	16	11.25	C	C-	N/A	Remove - work
891	Fraxinus uhdei	12	32	14	9	D	C-	N/A	Remove - work
892	Schinus molle	20	36	38	15	B	B	N/A	Remove - work

All trees preserved in place must have a 6-foot-high chain link fence set outside the dripline and the prescribed clearance. The fence must be in place before demolition and clearing and remain in place throughout construction. Urban Forestry will require fencing be set in place before they review this report and inspect the site.

Not knowing the exact grading plans, planting plans or hardscape plans, the above recommendations assume no conflict other than as shown on the provided plans. Where there is a conflict make a good effort to preserve the few recommended for preservation or changes the plans to accommodate the trees.

Pruning Recommendations

The column titled “Pruning” in intended to be general guidance. In all cases pruning should be in the proper season, i.e. early summer for the peppers or winter for the one pine. All pruning must be done by a well-equipped and properly licensed and insured tree service, supervised by at least a certified arborist. All pruning must adhere to American National Standards Institute A300, part 1 standards. Specification should be prepared for each tree before pruning begins.

The previous pruning has done considerable damage to the remaining trees. Flush cut, over-pruning and heading have created defects and wounds that cannot be corrected before decay starts. Monitoring of decay and continuing control of epicormic shoots will be necessary for the foreseeable future.

Clearance Recommendations

The listed clearance recommendations are minimums. If grading or trenching is done anytime other than early summer, clearance radii should be increased by 30%. The same is true for the one Aleppo pine, if the work is not done during winter. All clearance radii assume clean cuts to all roots over 1-inch diameter.

The clearance recommendations in the matrix above are calculated assuming good protection measures and maintenance during the construction period. Trees adjoining the ones to remain should have their roots cut outside the protection zone before they are ripped out. Their roots are probably intertwined with the trees to be retained, and ripping them out is likely to damage the roots of the trees to remain. The clearance distances are based on the ISA book, *Trees & Development*, by Matheny and Clark. They are intended to protect a minimum amount of roots. The canopy should also be protected. Good monitoring of soil moisture should be carried out inside the protection zone, so leave an access point in the protection fence.

A Photographic Documentation

Google Street View – taken before site clearance began.

Aerial view of site prior to recent “pruning” and site clearance. .

Pepper #2, #1 is in back by the gate

Peppers #3 to 5. The brush of new shoots hides the heading and topping cuts.

Peppers #6 to 14. #14 is in the back corner, #15 is at the far right.

Pepper #15 (far left) to #18 at far right. Note severe lean of #18

Peppers #19 to 22

Peppers #23 to 27

Peppers #28 to 34

#35 Shamel ash at end of the row – note dieback.

Pepper #37

Brazil pepper thicket #36 at west wall.

Close up of Brazil pepper thicket #36

The first row above is included.

Pepper #38 (left) Mexican fan palm #40 (back) and #39 (right)

Canary Island date palm #41

Peppers #42, 43 and 44, left to right. Note stumps of removed trees.

Pepper #45

Pepper #46

Pine #52 (distant left) and peppers #47 to 50, left to right.

Peppers #47 to 50, left to right

Note stumps between peppers 45 to 51

Note stumps between peppers 45 to 51

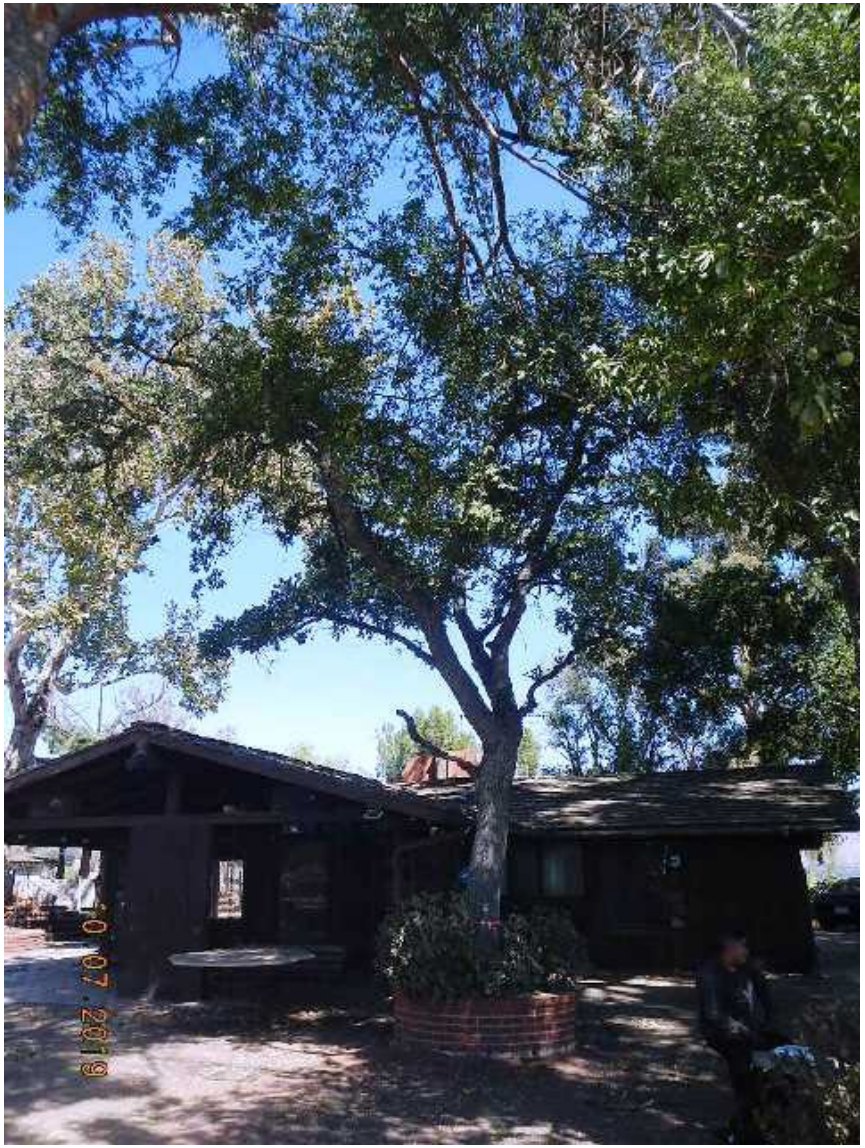
Note old internal crack .

Aleppo pine #52

Pepper #53 – note large flush cuts near base.

Coast live oak #54 below large lemon gum.

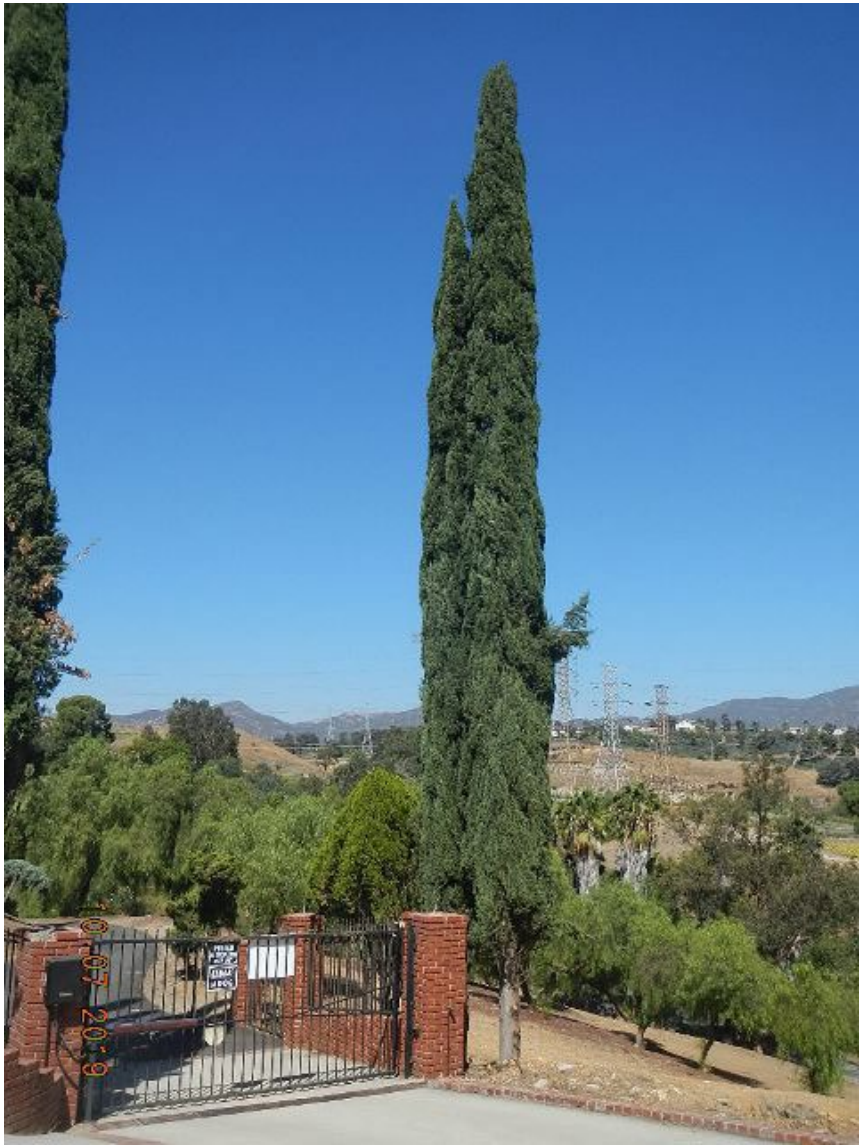
Oak #54 is behind the three eucalypts.



Valley oak #55 – note brick planter.

Sycamore #56 – note planter at base of slope

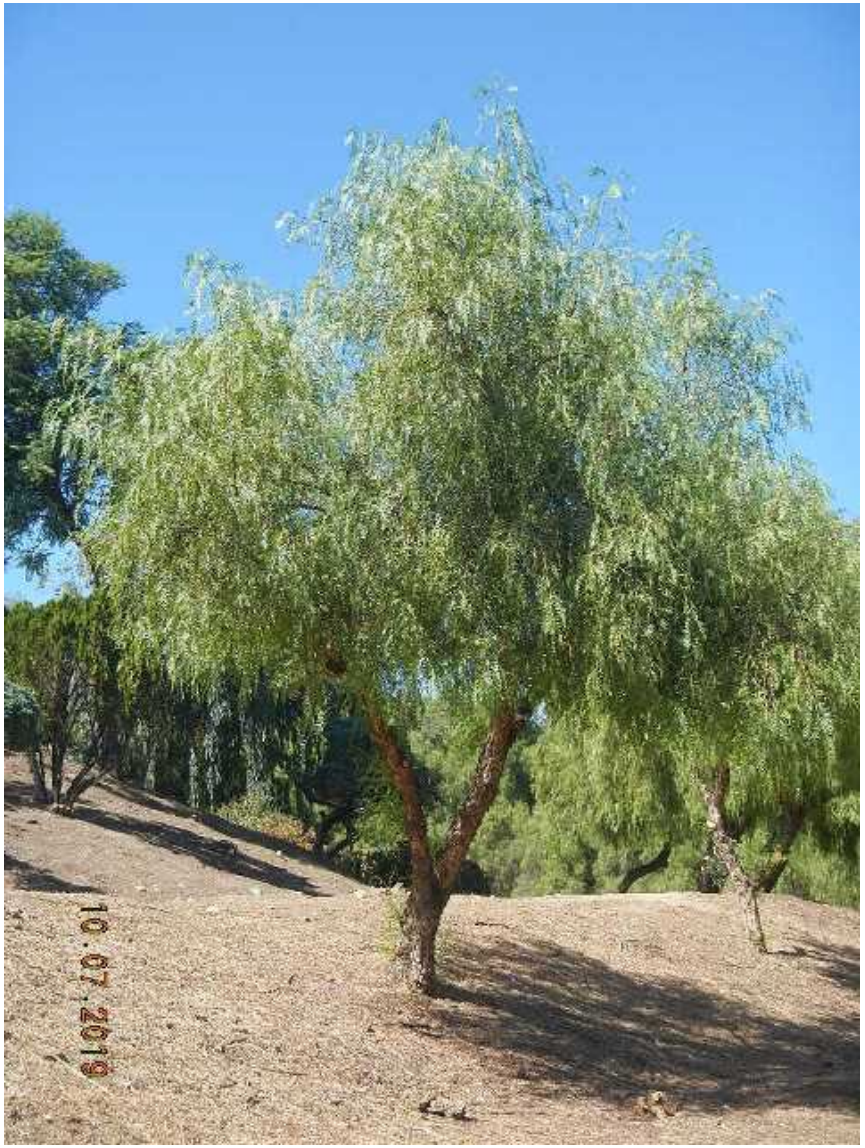
Aleppo pines #57 and 58, right to left.



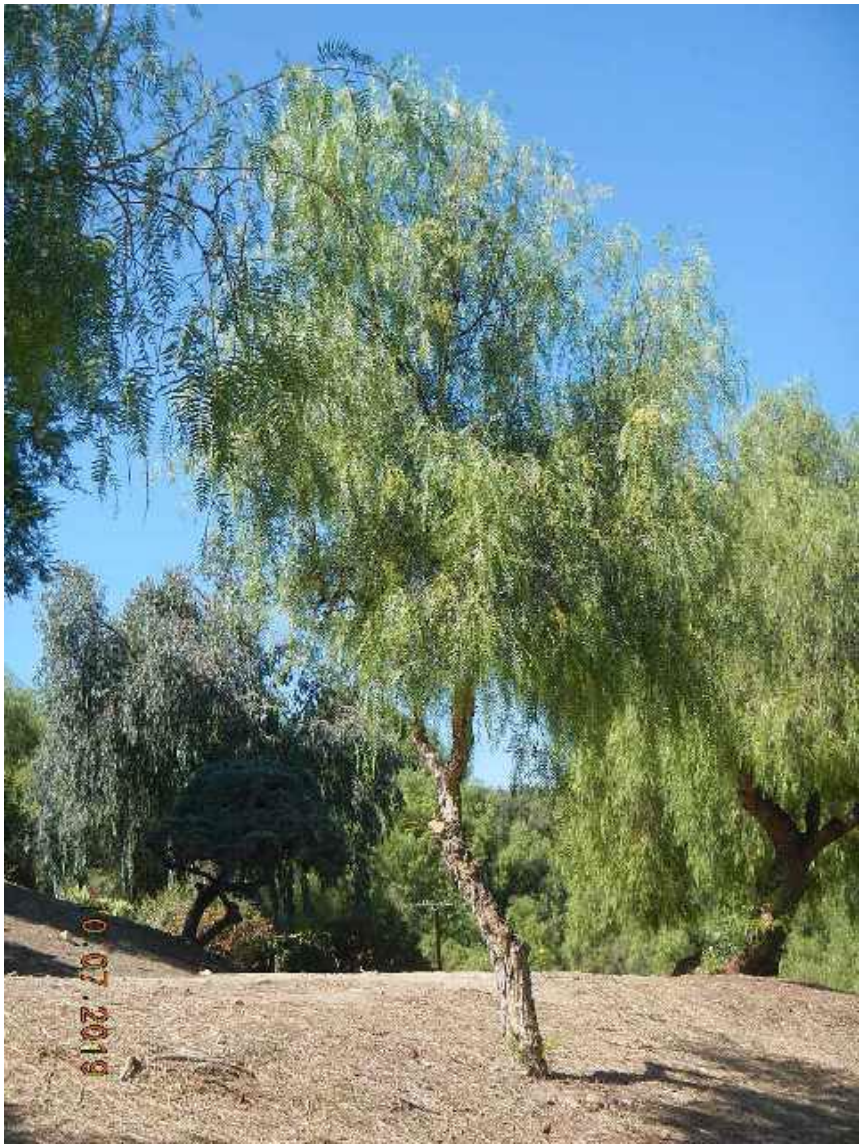
Italian cypress #59 and 60, right to left

Arborvitae #61

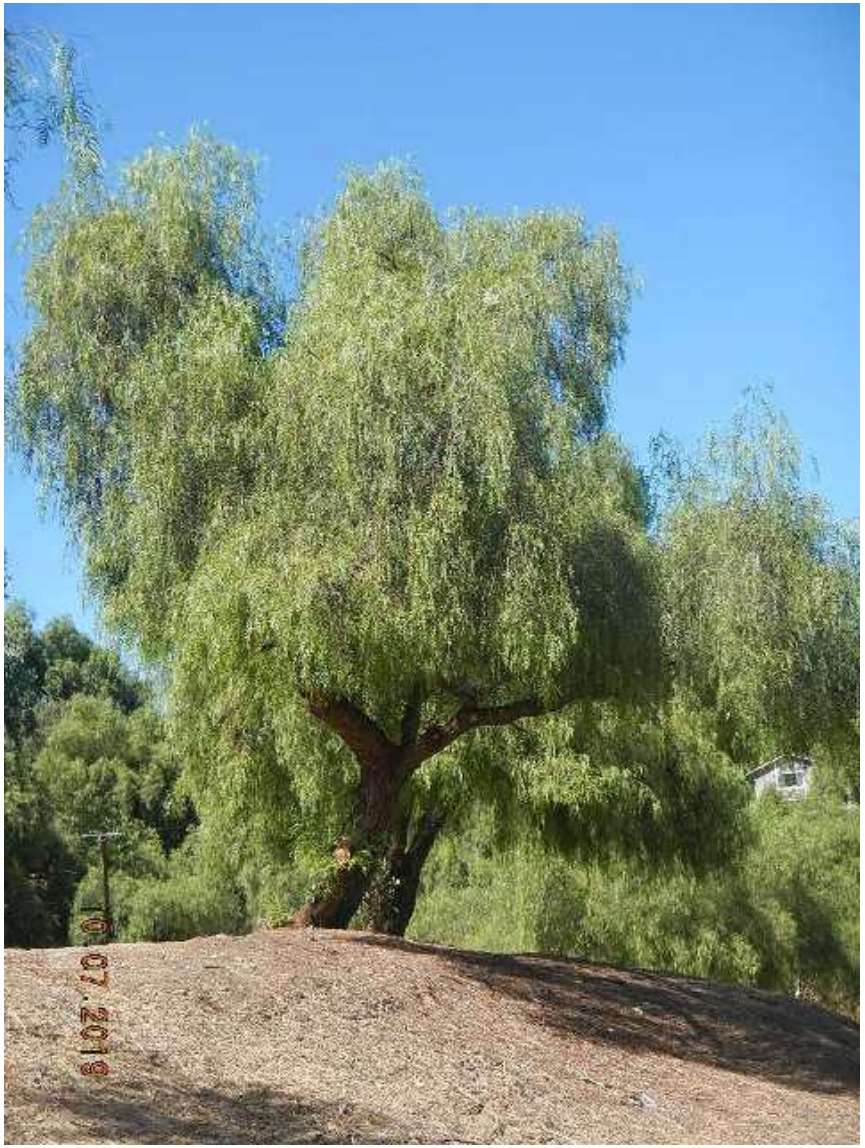
Chinese junipers #62 and 63, left to right.



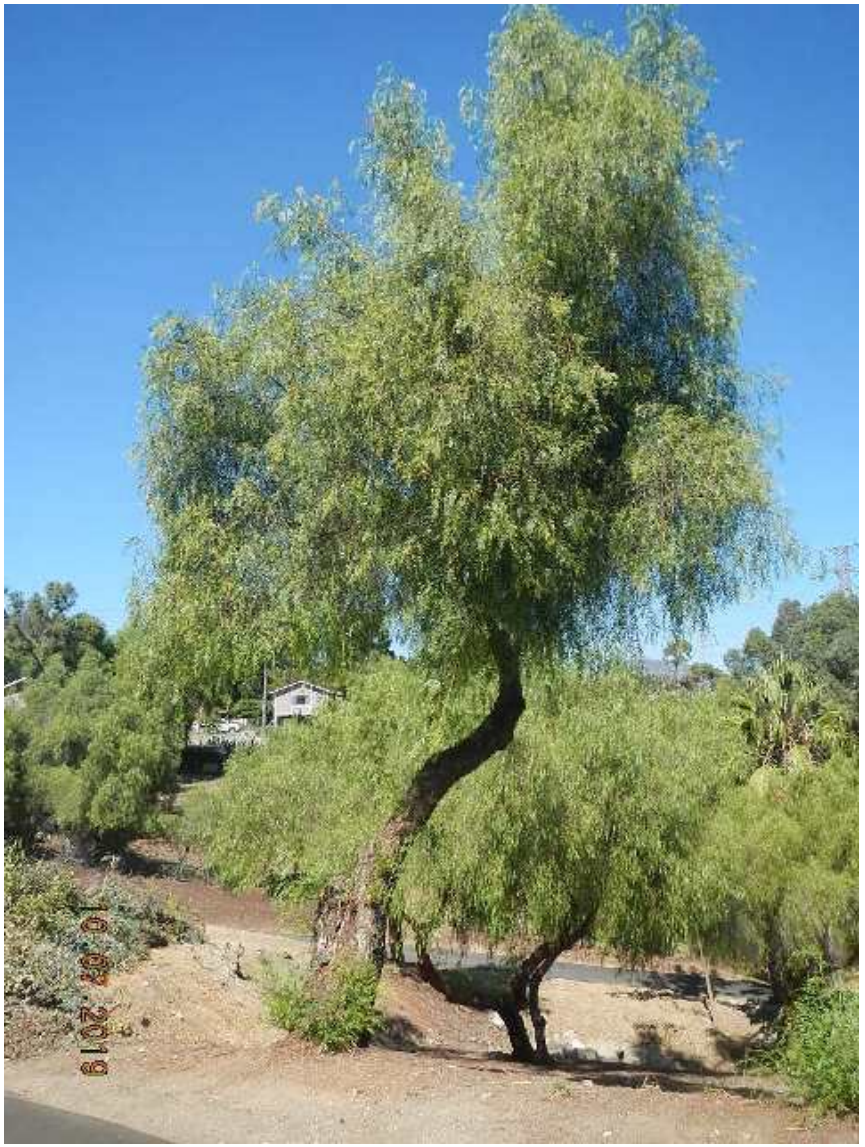
Pepper #64



Pepper #65



Pepper #66



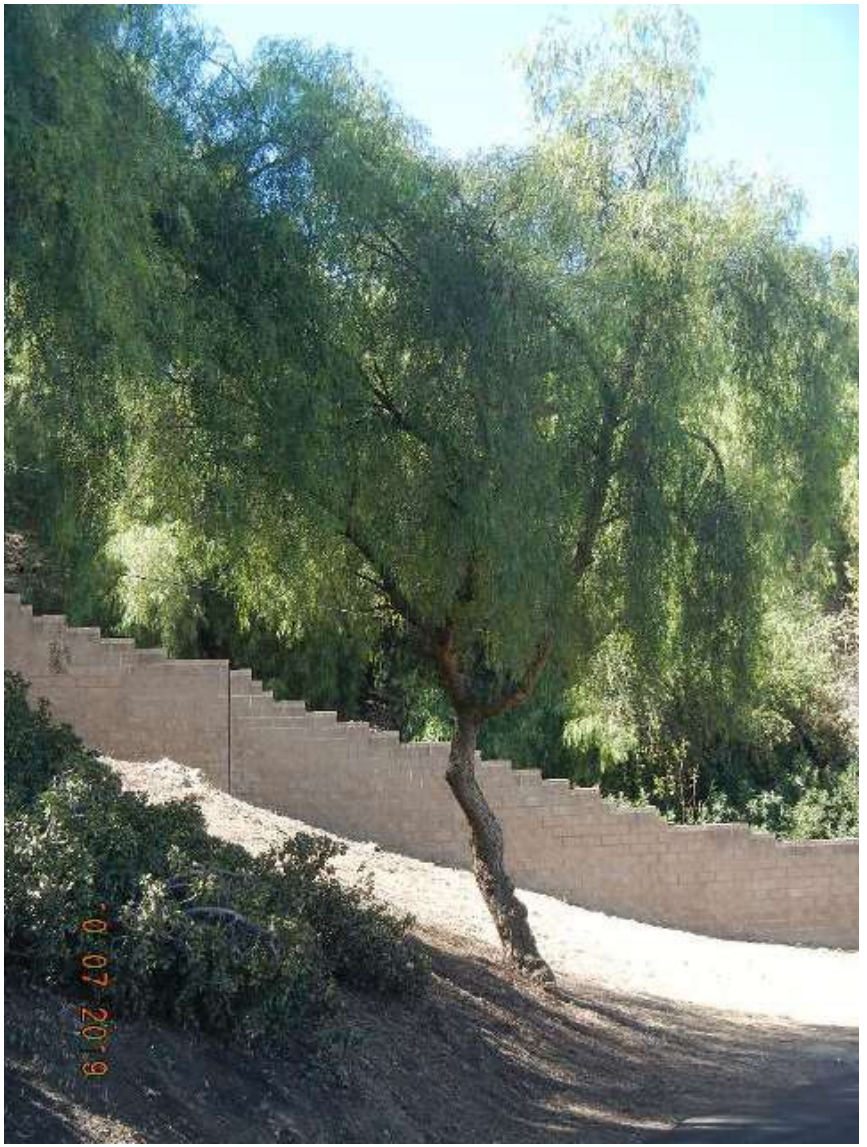
Pepper #68 has a split base

Pepper #67

Red ironbark # 69

Jacaranda #73

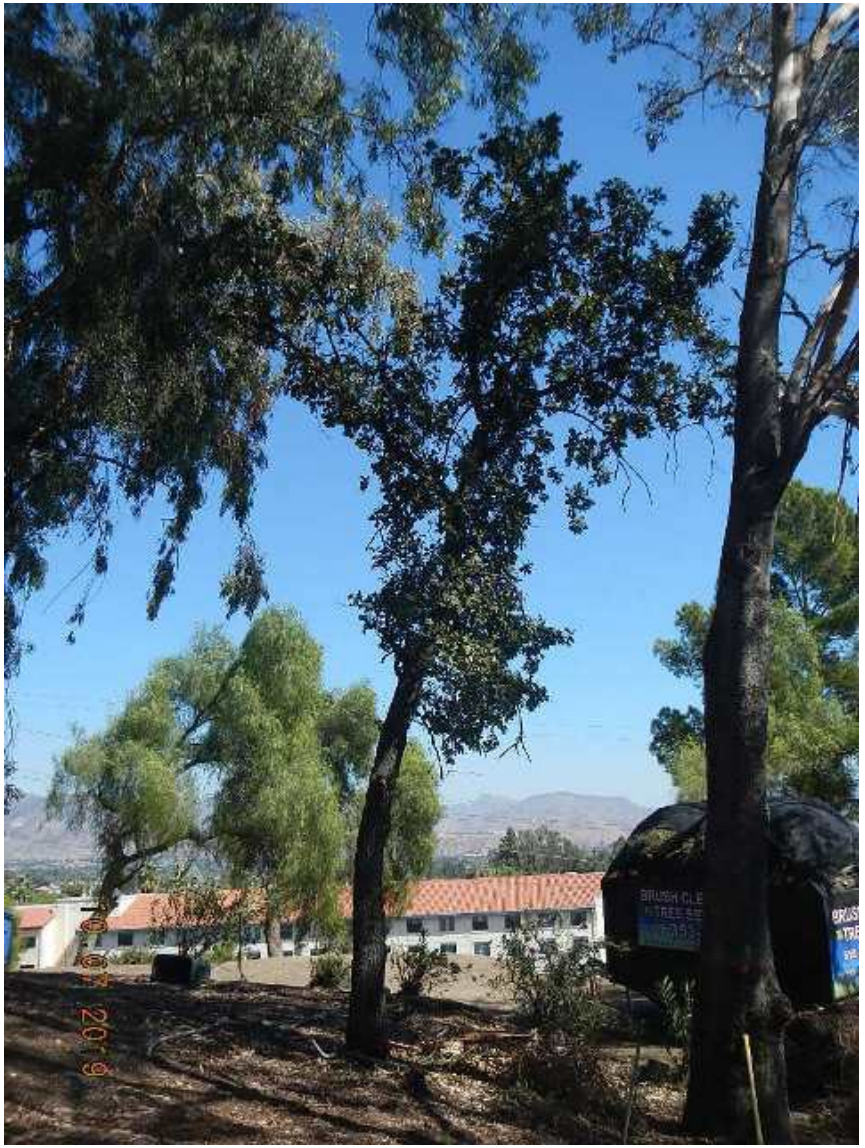
Peppers #70 and 71, left to right.



Pepper #72

This row of small peppers is on the other side of the property line fence.

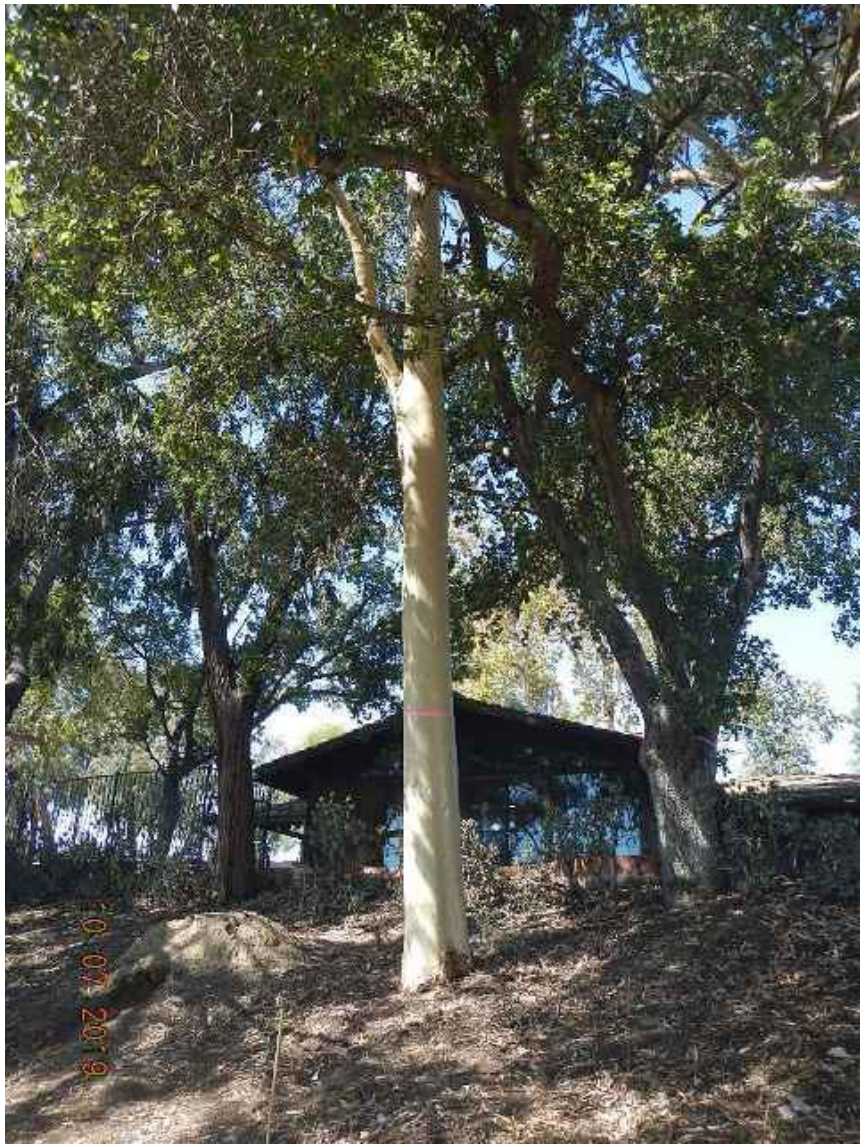
The base of pepper #68.



Valley oak #86

Coast live oak #54 surrounded by larger exotic species

Large eucalypts west of oak #54



Coast live oak #54 surrounded by larger exotic species

Large deformed lemon gum.

Pepper #74 – note decayed base.

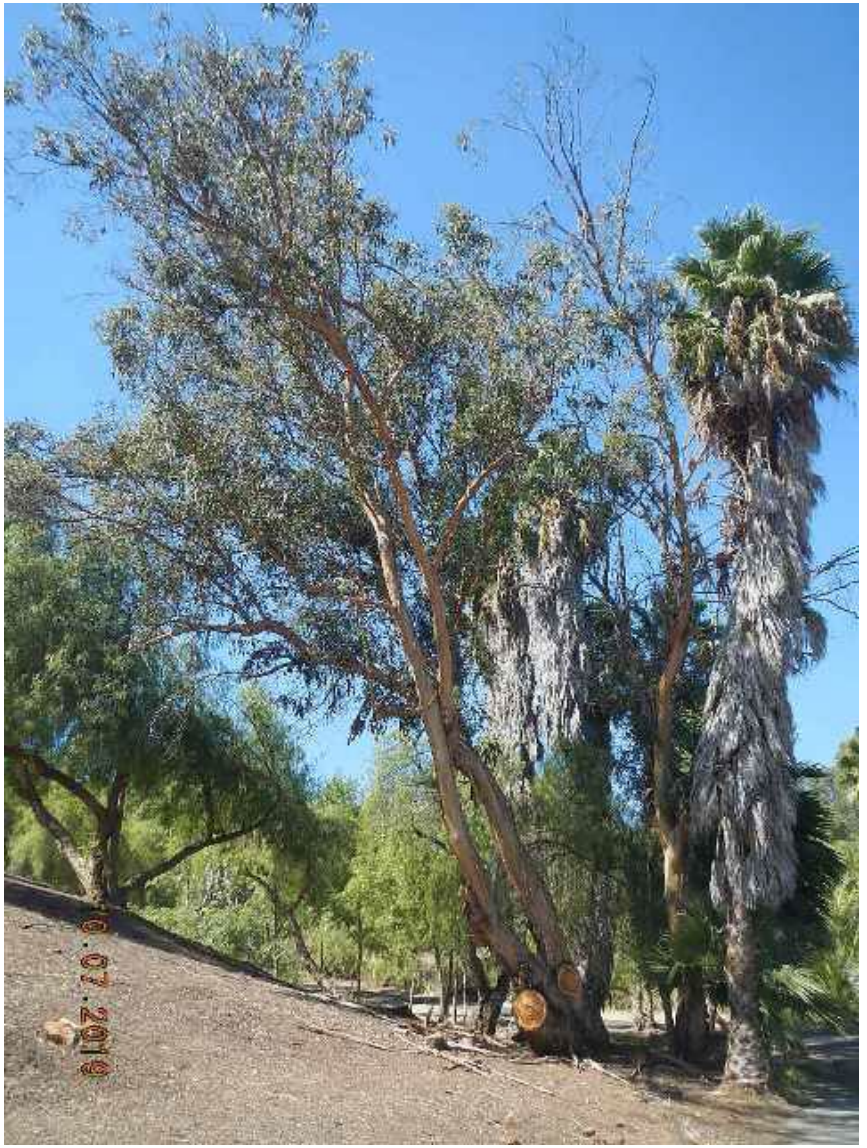
Grove of Mexican fan palms by drain outlet.

Grove of Mexican fan palms by drain outlet, viewed from above. Note blue gums at right.

Mixture of two aggressive weeds, golden bamboo and giant reed, Arundo donax.

Mixture of two aggressive weeds, golden bamboo and giant reed, Arundo donax.

Blue gums #84 and 85, right to left.



Blue gums #84 and 85, right to left.

Upper half of the site prior to site clearance and “pruning”.

Disclaimer

Since Arborgate Consulting may not have direct review or supervision of demolition or construction as it takes place, we must remind you that there are certain risks involved. Trees are living, dynamic organisms that respond to changes in their environment, sometimes quickly and sometimes slowly. Tree work near high tension wires is a high risk business and only professional tree services familiar with line clearance should perform this work. Working around trees in this condition will also be risky.

Good, current information on tree preservation has been applied. A complete risk assessment was not requested or performed. Weather, winds and the magnitude and direction of storms are not predictable and a failure may still occur despite the best application of high professional standards. Future maintenance will also affect the trees' health and stability and is not under the supervision or scrutiny of this consultant. This consultant does not assume liability for any tree failures involved with this property.

Appendix

A. Resume
B. Glossary
C. Tree Map (attached)
D. Verification of Current Registration and Certifications

A. Resume

GREGORY W. APPLEGATE, ASCA

Registered Consulting Arborist #365

PROFESSIONAL REGISTRATIONS:

American Society of Consulting Arborists, Registered Consulting Arborist #365
International Society of Arboriculture, Certified Arborist Number WE-0180a
American Society of Consulting Arborists, Tree & Plant Appraisal Qualified
International Society of Arboriculture, Tree Risk Assessment Qualified

EXPERIENCE:

Mr. Applegate is an independent consulting arborist. He has been in the horticulture field since 1963, providing professional arboricultural consulting since 1984 within both private and public sectors. His expertise includes appraisal, tree preservation, diagnosis of tree growth problems, construction impact mitigation, environmental assessment, expert witness testimony, hazard evaluation, pruning programs, species selection and tree health monitoring.

Mr. Applegate has consulted for insurance companies, major developers, theme parks, homeowners, homeowners' associations, landscape architects, landscape contractors, property managers, attorneys and governmental bodies.

Notable projects on which he has consulted are: Disneyland, Disneyland Hotel, DisneySeas-Tokyo, Disney's Wild Animal Kingdom, the New Tomorrowland, Disney's California Adventure, Disney Hong Kong project, Knott's Berry Farm, J. Paul Getty Museums, Tustin Ranch, Newport Coast, Crystal Court, Newport Fashion Island Palms, Bixby Ranch Country Club, Playa Vista, Laguna Canyon Road and Myford Road for The Irvine Company, MTA Expo and Purple Lines, MWD-California Lakes, Paseo Westpark Palms, Loyola-Marymount campus, Cal Tech, Cal State Long Beach, Pierce College, The Irvine Concourse, UCI, USC, UCLA, LA City College, LA Trade Tech, Riverside City College, Crafton Hills College, MTA projects, and the State of California review of the Landscape Architecture License exam (re: plant materials)

EDUCATION:

Bachelor of Science in Landscape Architecture, California State Polytechnic University, Pomona 1973
ASCA Arboricultural Consulting Academy, Arbor-Day Farm, Kansas City 1995, #3 graduate
Continuing Education Courses in Arboriculture required to maintain Certified Arborist status and for ASCA membership

PROFESSIONAL AFFILIATIONS:

American Society of Consulting Arborists (ASCA), Registered Member
American Society of Landscape Architects (ASLA), Emeritus
International Society of Arboriculture (ISA), Regular Member
California Tree Failure Report Program, UC Davis, Participant
Street Tree Seminar (STS), Associate Member

COMMUNITY AFFILIATIONS:

SoCalif ASLA visibility committee	1980-82
Landscape Arch. License Exam prep, Instructor, Cal Poly Pomona	(1986-90)
American Institute of Landscape Architects, LA Chapter Board of Directors	(1980-82)
California Landscape Architect Student Scholarship Fund-Chairman	(1985)
International Society of Arboriculture-Examiner-tree worker certification	(1990)
ASCA, Industry definitions committee and A3G committee	2009-2010
ASCA web site, west coast tree question responder	(2007 and continuing)

Guest lecturer at UCLA, Cal Poly, Saddleback College, & Palomar Junior College

B. Glossary

ANSI-A300	American National Standards Institute performance standards for the care and maintenance of trees, shrubs and other woody plants. Copies are available from International Society of Arboriculture bookstore 888-ISA-TREE
ANSI-Z60-1	American National Standards Institute standards sizing and describing trees, shrubs and other nursery stock.
Appraisal	Plant appraisal - The act or process of developing an opinion of a defined value or defined cost. This may apply to plants, landscape elements, or services. (per Council of Tree and Landscape Appraisers)
Arboricultural	Pertaining to the awareness, care, evaluation, identification, growing, maintenance, management, planting, selection, treatment, understanding, valuation and so forth of trees and other woody plants and their growing environments, particularly in shade and ornamental (non-crop/commodity) settings.
Arboriculture	The selection, cultivation, and care of trees, vines, and shrubs.
Arborist	A person possessing the technical competence through experience and related training to provide for or supervise the management of trees or other woody plants in a landscape setting.
ASCA	The American Society of Consulting Arborists, Inc. a professional society, as described in its by-laws.
Bark	Tissue on the outside of the vascular cambium. Bark is usually divided into inner bark - active phloem and aging and dead crushed phloem - and outer bark.
Basal flare	Most trees have a rapid increase in diameter as the trunk meets the soil line or root crown. This area is associated with both trunk and root tissue.
Caliper	Diameter of a tree trunk. Larger trees are usually measured at 4½ feet (see DBH) Trees with calipers 4 inches and below are measured at 6 inches above grade(ANSI Z60-1-1990) Trees above 4 inches, but still transplantable are measured at 12 inches above grade.
Canopy	The live, foliage-bearing part of a tree.
Codominant	Leaders equal in size and relative importance, developed from 2 apical buds at the top of a stem. Each codominant stem is an extension of the stem below it. There are no branch collars or trunk collars at the bases of codominant stems**.**
Compaction	(Soil Compaction) The compression of soil, causing a reduction of pore space and an increase in the bulk density of the soil. Tree roots cannot grow in compacted soil.
Crotch	The union of two or more branches; the axillary zone between branches.
Crown	The upper portions of a tree or shrub, including the main limbs, branches, and twigs.
Crown reduction	Reducing the size of the canopy using thinning versus heading cuts. Should not exceed 20 to 25 percent branch removal.

Crown restoration Restoration of natural and/or structurally sound form to a tree which has been previously topped, headed or damaged. (synonym – crown restructure pruning)

Cultivar A unique form or type propagated through selective breeding and maintained for specific purposes and retains those attributes in further propagation. An acronym for "cultivated variety"; cultivars can be naturally occurring plants, but usually have been cultivated with specific desirable characteristics in appearance and/or resilience. Maybe a field selection or a horticultural variety that has originated and persisted under cultivation. Usually enclosed in single quotes after the genus and species names.

DBH Diameter of the trunk, measured at breast height or 54 inches above the average grade. See caliper.

Decay Progressive deterioration of organic tissues, usually caused by fungal or bacterial organisms, resulting in loss of cell structure, strength, and function. In wood, the loss of structural strength.

Decline Progressive reduction of health or vigor of a plant.

Deep ripping Sub-soiling. - Cultivating below normal plow or roto-tiller depth.

Dog-leg crooked or bent like a dog's hind leg.

Dominant crown class Trees with crowns above the upper layer of the canopy and generally receiving light from above and the sides. (syn-emergent)

Epicormic Epi - upon; cormic – stem. Branches that are upon the stem, i.e. sprouting from either dormant buds in the cambial zone, or from buds sprung anew from ray traces. Epicormic shoots are a sign that energy reserves have been lowered.

Excurrent Referring to crowns having a strong central leader.

Foliage The live leaves or needles of the tree; the plant part primarily responsible for photosynthesis.

Flush cut Pruning technique in which both branch and stem tissue are removed, generally considered poor practice

Full skirt Dead fronds retained on palms trunks to near the ground.

Girdling root A root that partially or entirely encircles the trunk and/or buttress roots, which could restrict growth and downward movement of photosynthate and/or water and nutrients up.

Ground cover Plants, usually herbaceous, used to spread, stay low and cover ground. They are usually not suited for foot traffic and do not usually need to be mowed and as such are distinguished from lawns. Any relatively low-growing plant. Can be Herbaceous or Woody.

Heading Pruning techniques where the cut is made to a bud, weak lateral branch or stub.

Included bark	The pattern of development at branch junctions where bark is turned inward rather than pushed out forming a branch bark ridge. Bark embedded within the crotch between a branch and the trunk or between two or more stems that prevents the formation of a normal branch bark ridge. This often occurs in branches with narrow-angled attachments or branches resulting from the loss of the leader. Such attachments are weak and subject to splitting out.
Lion-tailing	The removal of all, or a great deal of, the inner branches and/or watersprouts from the crown of a tree. Lion's Tailing is not an acceptable pruning practice, see ANSI A-300.10.1.7.
Live crown ratio	The relative proportion of green crown to overall tree height.
Mature	Plant will respond to flower-inducing conditions, in contrast with juvenile.
Mulch	Substances spread on top of the ground to conserve water, protect against erosion, retain moisture, and protect the roots of trees from heat, cold or drought. The substances are typically organic, such as compost, manure or bark chips.
Narrow crotch	for eucalyptus a branch angle of less than 15 degrees – for other trees a branch angle less than 30 degrees.
Native	A plant that grows naturally in a particular country, state, or region, and is neither introduced through planting, nor naturalized.
Over pruned	removal of more than 10 to 30 percent, depending on health, species and time of year – often evidenced by formation of epicormic shoots.
Over-lifted	removing more than the lower one third of scaffold limbs.
Palm	A tropical or subtropical monocotyledonous tree or shrub, usually having a woody, unbranched trunk and large, evergreen, fan or feather-shaped leaves at the top.
Pencil	In palms, declining health resulting in diminishing trunk diameter.
Percolation	The downward movement of water through soil.
Reduction cut	(drop crotch cut) pruning cut that ereduces the length of a branch or stem back to a live lateral branch large enough to assume apical dominance that is typically at least one-third the diameter of the cut stem; also cutting back a stem or branch to an existing, smaller, lateral branch that is large enough to prevent bark death on the retained lateral branch.
Root crown	Area at the base of a tree where the roots and stem merge (synonym - root flare)
Root system	The portion of the tree containing the root organs, including buttress roots, transport roots, and fine absorbing roots; all underground parts of the tree.
Root zone	The area and volume of soil around the tree in which roots are normally found. May extend to three or more times the branch spread of the tree, or several times the height of the tree.
Scaffold limb	Primary structural branch of the crown.
Species	Taxonomic classification below genus.. 1. A group of plants with common characteristics or consistent differences in morphology, ecology or reproductive behavior, distinct from others of the same genus. 2. The

	basic unit in plant taxonomy; the Latin binomial consisting of the genus and specific epithet; it is both singular and plural.
Stress	"Stress is a potentially injurious, reversible condition, caused by energy drain, disruption, or blockage, or by life processes operating near the limits for which they were genetically programmed." Alex Shigo
Suppressed	Trees which have been overtopped and whose crown development is restricted from above. They usually occupy the understory and grow slowly.
Topping	Pruning technique to reduce height - heading of large branches.
Value	The relative worth, merit, or importance of a thing, expressed as a single point, a range, or a relationship to a benchmark.
Wound	Any injury, which induces a compartmentalization response.
Woundwood	Partially differentiated tissue responsible for closing wounds. Woundwood develops from callus associated with wounds

Tree Map

Attached separately

Verification of Current Registration and Certifications

The International Society of Arboriculture

Hereby Announces That

Gregory W. Applegate

Has Earned the Credential

ISA Certified Arborist ®

By successfully meeting ISA Certified Arborist certification requirements through demonstrated attainment of relevant competencies as supported by the ISA Credentialing Council

Caitlyn Pollihan
CEO & Executive Director

28 July 1997	30 June 2024	WE-0180A
Issue Date	Expiration Date	Certification Number

ANAB
ANSI National Accreditation Board
ACCREDITED
ISO/IEC 17024
PERSONNEL CERTIFICATION BODY
#0847
ISA Certified Arborist

The International Society of Arboriculture

Hereby Announces That

Gregory W. Applegate

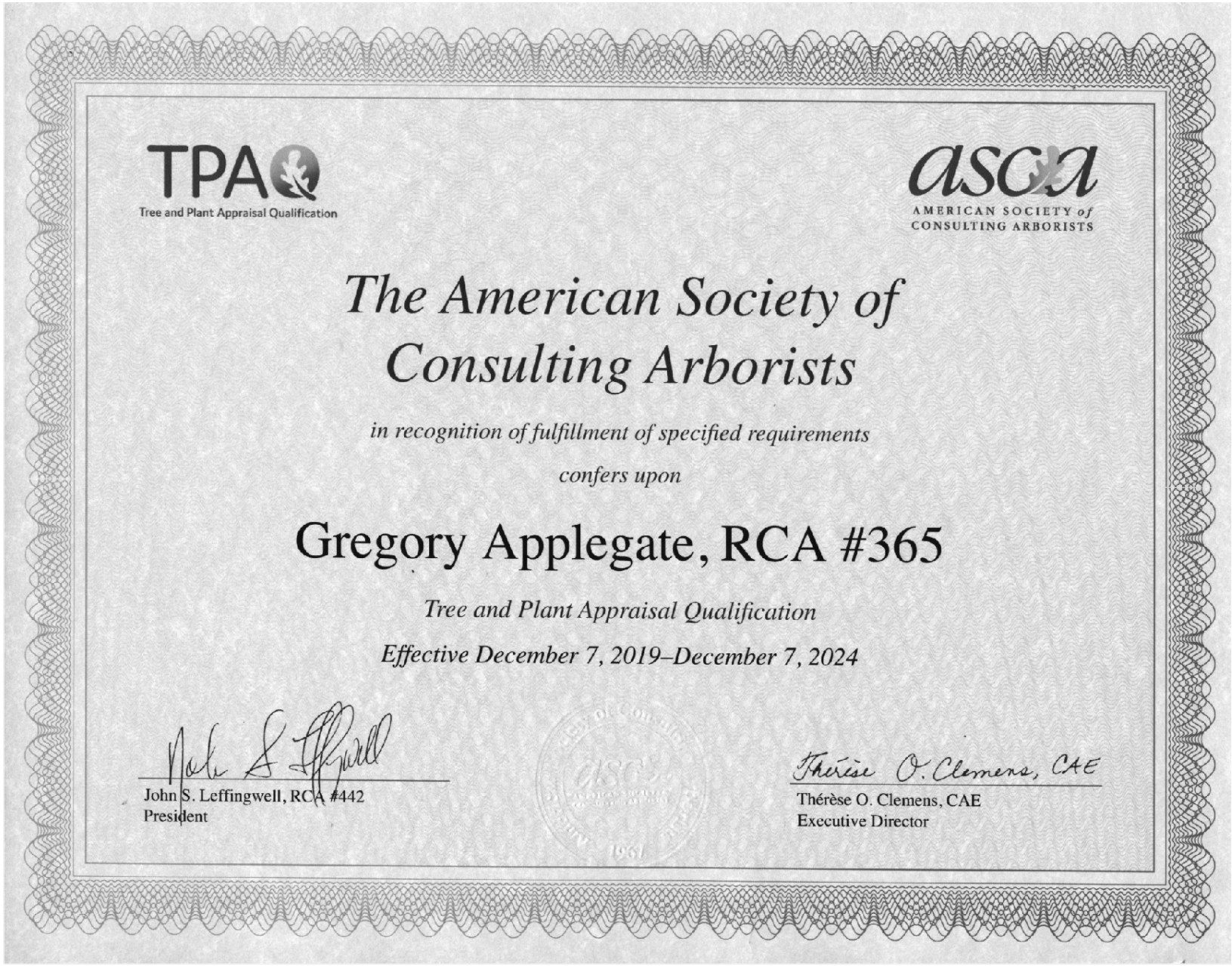
Has Earned the Credential

ISA Tree Risk Assessment Qualification®

By successfully meeting ISA Tree Risk Assessment Qualification certification requirements through demonstrated attainment of relevant competencies as supported by the ISA Credentialing Council

Caitlyn Pollihan
CEO & Executive Director

11 February 2013	30 September 2022
Issue Date	Expiration Date



TPA
Tree and Plant Appraisal Qualification

asca
AMERICAN SOCIETY of CONSULTING ARBORISTS

The American Society of Consulting Arborists

in recognition of fulfillment of specified requirements

confers upon

Gregory Applegate, RCA #365

Tree and Plant Appraisal Qualification

Effective December 7, 2019–December 7, 2024

John S. Leffingwell, RCA #442
President

Thérèse O. Clemens, CAE
Executive Director

Gregory Applegate, RCA #365

Profile Pages Connect

Greg

My Engagement

Last updated: 9/2/2020

Mr. Gregory Applegate, RCA #365

Registered

greg@arborgate.occoxmail.com

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(714) 731-6138 (Fax)
Visit Website »

Arborist Type: Private Full Time Consultant, Support to Landscape Architecture Projects, Working for a Consulting Company

The American Society
of
Consulting Arborists

in recognition of fulfillment of the requirements for

Registered Consulting Arborist® status

confers upon

Gregory W. Applegate, RCA #365

Registered Membership

Dr. James R. Clark, RCA #357
President

Beth W. Palys, FASAE,CAE
Executive Director

Certification

I, Gregory W. Applegate, certify to the best of my knowledge and belief:

That the statements of fact contained in this report, are true and correct. That the report analysis, opinions, and conclusions are limited only the reported assumptions and limiting conditions, and are my personal unbiased professional analysis, opinions and conclusions.

That I have no present or prospective interest in the vegetation that is the subject of this report, and I have no personal interest or bias with respect to the parties involved.

That my compensation is not contingent upon the reporting or a predetermined outcome that favors the cause of the client, or the attainment of stipulated result.

That my analysis, opinions, and conclusions were developed, and this report has been prepared, in conformity with the standards of ASCA and customary arboricultural practice.

That I have made a personal inspection of the plants that are the subject of this report. No one provided significant professional assistance to the person signing this report.

Arborgate Consulting, Inc.
Gregory W. Applegate, ASCA_____ Date: 6/30/2021
Registered Consulting Arborist #365
Certified Arborist #WE-0180a