



October 23, 2025

Andres Ramirez, PMP, CCM, CEFP
Senior Project Manager
Claremont McKenna College
Facilities and Campus Services
742 Amherst Avenue
Claremont, California 91711

**Re: Tree Inventory and Impact Report – Amendment Letter, Revised 10.23.25
Roberts East Campus Sports Bowl, Claremont McKenna College, Claremont, California**

Dear Mr. Ramirez,

This letter addresses the proposed removal of 23 street trees located in the parkways and medians of Claremont Boulevard between Foothill Boulevard and Arrow Route as they pertain to the development of the Roberts East Campus Sports Park (Project). This letter amends our Tree Inventory and Impact Report, dated July 31, 2024.

We understand that there have been some updates and refinements to the streetscape and landscape plans since our original report. The improvements are illustrated on the Landscape Improvement Plans prepared by Pierre Landscape, 'Claremont McKenna College Offsite Improvements' (dated September 5, 2025). We understand that those plans have been submitted to the City of Claremont for review.

Based on the currently proposed plans for street and landscape renovations along Claremont Boulevard, 23 street trees will be removed, nine (9) of which are newly identified due to the refined plans. The street tree removals are required due to the modified location of the south parking lot driveway, refined locations of new streetlights and fire hydrants, the pedestrian tunnel and a left turn lane that will impact the medians, and new sidewalks, curb and gutter, and parkway renovations on both the east and west sides of Claremont Boulevard. In addition to the other renovations, a protected bike lane will be added to the west side of Claremont Boulevard.

Construction of the south parking lot driveway, new streetlights, and fire hydrants will result in removal of structural and absorptive roots that will compromise the health and structural integrity of the trees proposed for removal along the east side of Claremont Boulevard. The proposed driveways on the will require the removal of trees numbered ST8, ST9, and ST25. Placement of new fire hydrants will require the removal of trees numbered

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ST1, ST7, ST16, ST29 and ST58. New streetlights will require the removal of trees numbered ST22, ST30, ST32, ST36 and ST61.

Construction of the turn pocket in the median north of E. 9th Street will require removal of street trees numbered ST97 and ST98, and construction of the tunnel under Claremont Boulevard south of E. 9th Street will likely require removal of median trees number ST69 and ST70, and east side street tree number ST17.

Removal of five street trees numbered ST92, ST93, ST94, ST95, and ST96 on the west side of Claremont Boulevard is proposed due to sidewalk and parkway renovations, as well as curb and gutter repairs and street renovations that will add a protected bike lane to the west side of the street. Installation of the protected bike lane will include the addition of a landscaped median in the street that will separate cars from cyclists. The existing asphalt will be removed and regraded along the west side of Claremont Boulevard to fix any buckling pavement and to accommodate the bike lane and the new median. Demolition and reconstruction of the curb, gutter, and street, plus parkway and sidewalk demolition and improvements will result in removal of structural and absorptive roots on all four sides of the trunks that will compromise the health and structural integrity of these five Aleppo pines. These five trees are remnants of the approximately a dozen parkway trees that once existed in that stretch of parkway between E. 9th Street and E. 6th Street. The other Aleppo pines uprooted or suffered catastrophic branch/trunk failures in the windstorm of January 2022 and were removed by the City of Claremont. As remnant trees that are no longer partially protected from high winds by the other trees that once stood beside them, cutting and damaging roots on all four sides of their trunks would not only severely impact their health, but it would also significantly increase their risk for future windthrow failure.

Table 1, on the next page, summarizes the 23 street trees proposed for removal; an X in the last column of that table notes the nine newly identified removal trees. Table 2 includes all the trees included in the original inventory, both public and private, and their proposed dispositions. No changes to the private trees' dispositions have occurred. An updated Tree Impact Exhibit, dated 10.23.25, is enclosed. The private property trees have been greyed to focus the plan on the street trees.

Please let us know if you have any questions. Thank you.

Sincerely,

Christy Cuba

Christy Cuba
Senior Arborist
ASCA Registered Consulting Arborist, #502
ISA Certified Arborist, WE-1982A
ISA Tree Risk Qualified (TRAQ)
ASCA Tree and Landscape Appraisal Qualified (TPAQ)



TABLE 1 – AMENDED STREET TREES TO BE REMOVED FOR OFFSITE IMPROVEMENTS

ST/PP	Tree ID #	Common Name	Botanical Name	DBH	Height	Health	Structure	New Removal per Amendment 10.23.25
ST	1	valley oak	<i>Quercus lobata</i>	14.2	22	B	B	X
ST	7	valley oak	<i>Quercus lobata</i>	12.5	26	B	B	
ST	8	valley oak	<i>Quercus lobata</i>	12.8	28	B+	B	
ST	9	valley oak	<i>Quercus lobata</i>	15	28	A-	B+	
ST	16	valley oak	<i>Quercus lobata</i>	11.4	26	B	B	X
ST	17	valley oak	<i>Quercus lobata</i>	12	25	B	B	
ST	22	valley oak	<i>Quercus lobata</i>	14.5	20	A	B	X
ST	25	valley oak	<i>Quercus lobata</i>	12.2	25	A-	B	
ST	29	valley oak	<i>Quercus lobata</i>	9.5	25	A-	B	X
ST	30	valley oak	<i>Quercus lobata</i>	12	28	A-	B	X
ST	32	valley oak	<i>Quercus lobata</i>	10.8	20	B	B	X
ST	36	valley oak	<i>Quercus lobata</i>	8.3	18	A-	B	X
ST	58	valley oak	<i>Quercus lobata</i>	11.6	22	A	B	X
ST	61	valley oak	<i>Quercus lobata</i>	14.8	25	A	B	X
ST	69	desert willow	<i>Chilopsis linearis</i>	1, 1, .5	5	A	A-	
ST	70	red ironbark	<i>Eucalyptus sideroxylon</i>	28	40	B	B-	
ST	92	Italian stone pine	<i>Pinus pinea</i>	28.8	50	B	C	
ST	93	Italian stone pine	<i>Pinus pinea</i>	32.5	65	B	B	
ST	94	Italian stone pine	<i>Pinus pinea</i>	27.6	60	B	B	
ST	95	Italian stone pine	<i>Pinus pinea</i>	28.5	60	A	B	
ST	96	Italian stone pine	<i>Pinus pinea</i>	26.2	60	B	C	
ST	97	crape myrtle	<i>Lagerstroemia indica</i>	1.9	10	A	A-	
ST	98	crape myrtle	<i>Lagerstroemia indica</i>	1.6	10	A	A-	



TABLE 2 –TREE INVENTORY DATA

Street Tree (ST)/Private Property Tree (PP)	Tree ID #	Common Name	Botanical Name	DBH (in.)	CRZ 3' (Ft.)	CRZ 5' (Ft.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	ST Tree Trunk (center) Distance to Curb Face (in inches)	Tree Disposition (Preserve or Remove)	Comments
PP	1	Chinese flame	<i>Koelreuteria bipinnata</i>	.5, .5, .5, .5, 1			10	8	6	5	4	A	B		Remove	SS, at SW corner of property
PP	2	coast live oak	<i>Quercus agrifolia</i>	.5, .5			7	3	4	5	3	A	B		Remove	growing against and through chain fence on W PL
PP	3	carrotwood	<i>Cupaniopsis anacardioides</i>	1, 1, 1, .5			11	1	7	2	0	A-	B+		Remove	against chain fence
PP	4	coast live oak	<i>Quercus agrifolia</i>	3, .5			15	5	5	5	3	A	B		Remove	growing against and through chain fence on W PL
PP	5	California sycamore	<i>Platanus racemosa</i>	10.2			28	14	16	13	14	B+	B		Remove	base against chain fence, MPE, trunk has slight lean to E
PP	6	Chinese flame	<i>Koelreuteria bipinnata</i>	2.8			12	6	7	6	3	A	B+		Remove	one trunk removed
PP	7	California sycamore	<i>Platanus racemosa</i>	6, 10			26	10	13	17	12	A-	B		Remove	base against chain fence, MPE
PP	8	California pepper	<i>Schinus molle</i>	8.8, 11.5, 14.8			28	21	24	24	29	A	B		Remove	base against chain fence, MPE, EG, pipe adjacent to trunk on N
PP	9	California pepper	<i>Schinus molle</i>				30	12	18	28	25	A-	B		Remove	chain fence embedded into trunk
PP	10	coast live oak	<i>Quercus agrifolia</i>	1.3, .5, .5			8	5	6	8	3	A	B+		Remove	against chain fence
PP	11	elderberry	<i>Sambucus mexicana</i>	2, 1.5, 1.5			14	11	10	10	9	A	A-		Remove	sumac surrounding tree
PP	12	elderberry	<i>Sambucus mexicana</i>	1, 1, 1			14	9	10	9	9	A	A-		Remove	no access, not tagged



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PP	13	elderberry	<i>Sambucus mexicana</i>	1, 1.5, 1, 1.5, 1, 1, 2, 2, 2, 2, 2.5			15	10	12	12	10	A	A-		Remove	base obstructed
PP	14	elderberry	<i>Sambucus mexicana</i>	1, 1, 1, .5, .5, .5			12	6	5	4	6	A	A		Remove	sumac surrounding tree
PP	15	river red gum	<i>Eucalyptus camaldulensis</i>	9, 11, 13.5, 12, 14.5, 5, 7, 10.7			42	16	25	25	25	A-	B		Remove	some interior dieback, MPE, 9 inch trunk laying horizontal
PP	16	river red gum	<i>Eucalyptus camaldulensis</i>	2, 2.5, 3, 1			18	11	16	9	6	B+	B		Remove	not tagged, SS from dead parent trunk
PP	17	African sumac	<i>Searsia lancea</i>	5			16	7	10	15	13	A	B		Remove	against N fence, pruned for clearance to N, in drainage channel
PP	18	African sumac	<i>Searsia lancea</i>	1, 1, 1, 1, 1, 1.5, 1.5, 1.5, 1.5, 1.5, 2, 2, 2, 2.5, 2.5, 3			16	14	14	17	15	A	B+		Remove	in drainage channel
PP	19	elderberry	<i>Sambucus mexicana</i>	1			15	4	4	4	4	A	A-		Remove	surrounded by sumac
PP	20	elderberry	<i>Sambucus mexicana</i>	4			18	8	8	8	8	A	A-		Remove	surrounded by sumac
PP	21	elderberry	<i>Sambucus mexicana</i>	3, 2, 2			18	0	0	12	12	A	A-		Remove	surrounded by sumac, leans SW
PP	22	elderberry	<i>Sambucus mexicana</i>	5, 7.5, 12			18	5	6	5	6	B	C		Remove	
PP	23	California sycamore	<i>Platanus racemosa</i>	16.5			40	12	7	19	20	A-	B		Preserve	MPE, minor dieback, EG at base, trunk has slight lean to SW, PM
PP	24	California	<i>Platanus</i>	12.2			40	15	7	15	18	B	B		Preserve	MPE, a bit sparse,



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		sycamore	<i>racemosa</i>													EG at base, thinned, PM
PP	25	California sycamore	<i>Platanus racemosa</i>	17.1			45	20	20	15	15	A	B+		Preserve	trunk bows slight to SE, MPE, PM
PP	26	California sycamore	<i>Platanus racemosa</i>	19.9			35	21	23	16	10	A-	B		Preserve	construction materials being stored around base of tree, MPE, trunk leans E, additional small SS at base
PP	27	California sycamore	<i>Platanus racemosa</i>	19.3			50	18	17	23	15	A-	B		Remove	construction materials being stored around base of tree, MPE, trunk bows slight to SE, additional small SS at base, rocks/fill at base of trunk
ST	1	valley oak	<i>Quercus lobata</i>	14.2	3.5	5.9	22	20	15	15	15	B	B	64	Remove	pruned for clearance, MPE, utility box adjacent to SE, guy wire to the N 6 feet away
ST	2	valley oak	<i>Quercus lobata</i>	12.9	3.2	5.4	24	17	17	13	16	B	B	44	Preserve	pruned for clearance, MPE, power pole to S
ST	3	valley oak	<i>Quercus lobata</i>	14	3.5	5.8	25	16	18	18	16	B	B-	58	Preserve	pruned for clearance, MPE, large cavity on SW, likely hit by car, mechanical damage, excellent callous
ST	4	valley oak	<i>Quercus lobata</i>	13.5	3.4	5.6	25	14	21	18	21	B	B+	48	Preserve	pruned for clearance, MPE
ST	5	valley oak	<i>Quercus lobata</i>	10.8	2.7	4.5	22	16	18	16	18	B	B	52	Preserve	pruned for clearance, MPE, a bit sparse



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ST	6	valley oak	<i>Quercus lobata</i>	13.4	3.4	5.6	26	18	21	16	14	A-	B	58	Preserve	pruned for clearance, MPE, slight lean to N, GR on N side
ST	7	valley oak	<i>Quercus lobata</i>	12.5	3.1	5.2	26	20	17	21	16	B	B	50	Remove	pruned for clearance, MPE, a bit sparse
ST	8	valley oak	<i>Quercus lobata</i>	12.8	3.2	5.3	28	16	18	21	10	B+	B	50	Remove	pruned for clearance, MPE
ST	9	valley oak	<i>Quercus lobata</i>	15	3.8	6.3	28	16	20	16	15	A-	B+	42	Remove	pruned for clearance, MPE
ST	10	valley oak	<i>Quercus lobata</i>	15.5	3.9	6.5	25	15	20	16	13	B	B	44	Preserve	pruned for clearance, MPE, a bit sparse
ST	11	valley oak	<i>Quercus lobata</i>	13.9	3.5	5.8	24	15	24	22	10	B+	B-	42	Preserve	pruned for clearance, MPE, GR, mechanical damage on large root adjacent to curb
ST	12	valley oak	<i>Quercus lobata</i>	11.5	2.9	4.8	26	15	16	16	12	B	B	46	Preserve	pruned for clearance, MPE
ST	13	valley oak	<i>Quercus lobata</i>	10.8, 11.1	3.9	6.5	20	15	18	20	10	B	B	48	Preserve	pruned for clearance, MPE, a bit sparse
ST	14	valley oak	<i>Quercus lobata</i>	12.5	3.1	5.2	25	15	24	19	15	B	B	48	Preserve	pruned for clearance, MPE
ST	15	valley oak	<i>Quercus lobata</i>	10	2.5	4.2	28	14	15	12	8	B	B	54	Preserve	pruned for clearance, MPE
ST	16	valley oak	<i>Quercus lobata</i>	11.4	2.9	4.8	26	18	18	21	15	B	B	60	Remove	pruned for clearance, MPE
ST	17	valley oak	<i>Quercus lobata</i>	12	3	5	25	13	13	18	15	B	B	46	Preserve	pruned for clearance, MPE
ST	18	valley oak	<i>Quercus lobata</i>	14.2	3.5	5.9	24	16	15	19	15	B	B	40	Preserve	pruned for clearance, MPE, SE canopy is 19
ST	19	valley oak	<i>Quercus lobata</i>	12	3	5	25	15	17	13	18	A	B	56	Preserve	pruned for clearance, MPE



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ST	20	valley oak	<i>Quercus lobata</i>	15.4	3.9	6.4	24	18	17	19	24	A	B	36	Preserve	pruned for clearance, MPE
ST	21	valley oak	<i>Quercus lobata</i>	12	3	5	22	20	18	16	17	A	B	48	Preserve	pruned for clearance, MPE
ST	22	valley oak	<i>Quercus lobata</i>	14.5	3.6	6	20	16	20	18	22	A	B	40	Remove	pruned for clearance, MPE
ST	23	valley oak	<i>Quercus lobata</i>	15.8	4	6.6	22	13	18	18	16	A	B	42	Preserve	pruned for clearance, MPE
ST	24	valley oak	<i>Quercus lobata</i>	14.3	3.6	6	25	17	17	17	12	A-	B	42	Preserve	pruned for clearance, MPE
ST	25	valley oak	<i>Quercus lobata</i>	12.2	3	5.1	25	12	13	17	16	A-	B	44	Remove	pruned for clearance, MPE
ST	26	valley oak	<i>Quercus lobata</i>	9.3	2.3	3.9	18	11	11	12	13	B+	B	46	Preserve	pruned for clearance, MPE
ST	27	valley oak	<i>Quercus lobata</i>	11	2.8	4.6	20	15	17	14	17	B	B	48	Preserve	pruned for clearance, MPE, surface roots
ST	28	valley oak	<i>Quercus lobata</i>	12	3	5	22	19	17	15	16	B	B	40	Preserve	pruned for clearance, MPE
ST	29	valley oak	<i>Quercus lobata</i>	9.5	2.4	4	25	12	11	12	17	A-	B	24	Remove	pruned for clearance, MPE
ST	30	valley oak	<i>Quercus lobata</i>	12	3	5	28	13	16	16	18	A-	B	40	Remove	pruned for clearance, MPE
ST	31	valley oak	<i>Quercus lobata</i>	9.3	2.3	3.9	22	11	13	15	15	B-	B	48	Preserve	pruned for clearance, MPE, sparse
ST	32	valley oak	<i>Quercus lobata</i>	10.8	2.7	4.5	20	18	15	7	8	B	B	36	Remove	pruned for clearance, MPE, growing into canopy of adjacent onsite pepper tree
ST	33	valley oak	<i>Quercus lobata</i>	11	2.8	4.6	20	15	18	16	13	B	B	48	Preserve	pruned for clearance, MPE
ST	34	valley oak	<i>Quercus lobata</i>	12.7	3.2	5.3	22	13	18	13	13	B	B	40	Preserve	pruned for clearance, MPE
ST	35	valley oak	<i>Quercus lobata</i>	11.2	2.8	4.7	25	15	15	12	12	A-	B	40	Preserve	pruned for clearance, MPE



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ST	36	valley oak	<i>Quercus lobata</i>	8.3	2.1	3.5	18	13	14	12	10	A-	B	36	Remove	pruned for clearance, MPE
ST	37	valley oak	<i>Quercus lobata</i>	8.7	2.2	3.6	18	16	18	16	10	B	B	48	Preserve	pruned for clearance, MPE
ST	38	valley oak	<i>Quercus lobata</i>	8.9	2.2	3.7	20	20	10	10	13	B	B	52	Preserve	pruned for clearance, MPE
ST	39	valley oak	<i>Quercus lobata</i>	10.2	2.5	4.2	25	15	18	18	11	A	B	40	Preserve	pruned for clearance, MPE
ST	40	valley oak	<i>Quercus lobata</i>	8.4	2.1	3.5	16	12	6	9	15	B	B	34	Preserve	pruned for clearance, MPE, EG at base
ST	41	valley oak	<i>Quercus lobata</i>	10.3	2.6	4.3	18	18	14	10	8	A	B	34	Preserve	pruned for clearance, MPE
ST	42	valley oak	<i>Quercus lobata</i>	8.8	2.2	3.7	16	12	10	10	12	A	B	54	Preserve	pruned for clearance, MPE
ST	43	valley oak	<i>Quercus lobata</i>	9	2.2	3.8	20	13	12	8	12	A	B	40	Preserve	pruned for clearance, MPE, surface roots
ST	44	valley oak	<i>Quercus lobata</i>	8	2	3.3	17	10	11	10	8	A	B	44	Preserve	pruned for clearance, MPE
ST	45	valley oak	<i>Quercus lobata</i>	11.8	3	4.9	24	16	15	12	15	A	B	38	Preserve	pruned for clearance, MPE, bows to SW, surface roots
ST	46	valley oak	<i>Quercus lobata</i>	12.3	3.1	5.1	25	10	16	13	10	A	B	56	Preserve	pruned for clearance, MPE
ST	47	valley oak	<i>Quercus lobata</i>	11	2.8	5.6	24	12	11	16	15	A	B	48	Preserve	pruned for clearance, MPE
ST	48	valley oak	<i>Quercus lobata</i>	10.4	2.6	4.3	18	16	16	9	9	A	B	40	Preserve	pruned for clearance, MPE
ST	49	valley oak	<i>Quercus lobata</i>	5.2, 8.4	2.5	4.1	21	16	12	7	16	B	B	44	Preserve	pruned for clearance, MPE, moderate dieback
ST	50	valley oak	<i>Quercus lobata</i>	9.8	2.5	4.1	24	15	12	7	8	A	B	48	Preserve	pruned for clearance, MPE, codominant trunks at 6 feet



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ST	51	valley oak	<i>Quercus lobata</i>	7.6	1.9	3.2	15	10	13	7	6	B	B	43	Preserve	pruned for clearance, MPE, sparse
ST	52	valley oak	<i>Quercus lobata</i>	9.7	2.4	4	17	12	18	18	12	A	B	36	Preserve	pruned for clearance, MPE
ST	53	valley oak	<i>Quercus lobata</i>	7.4	1.9	3.1	16	12	13	11	14	A	B	43	Preserve	pruned for clearance, MPE
ST	54	valley oak	<i>Quercus lobata</i>	8.6	2.2	3.6	17	12	11	15	12	A	B	36	Preserve	pruned for clearance, MPE
ST	55	valley oak	<i>Quercus lobata</i>	4	1	1.7	12	8	7	7	8	A	B	40	Preserve	pruned for clearance, MPE
ST	56	valley oak	<i>Quercus lobata</i>	10.7	2.7	4.5	25	15	15	15	17	A	B	48	Preserve	pruned for clearance, MPE
ST	57	valley oak	<i>Quercus lobata</i>	7.6	1.9	3.2	19	14	15	14	10	B+	B	58	Preserve	pruned for clearance, MPE
ST	58	valley oak	<i>Quercus lobata</i>	11.6	2.9	4.8	22	15	17	12	12	A	B	62	Remove	pruned for clearance, MPE
ST	59	valley oak	<i>Quercus lobata</i>	11.3	2.8	4.7	25	14	21	18	13	A	B	55	Preserve	pruned for clearance, MPE
ST	60	valley oak	<i>Quercus lobata</i>	15.1	3.8	6.3	26	16	18	16	15	A	B	68	Preserve	pruned for clearance, MPE
ST	61	valley oak	<i>Quercus lobata</i>	14.8	3.7	6.2	25	20	23	15	14	A	B	58	Remove	pruned for clearance, MPE
ST	62	valley oak	<i>Quercus lobata</i>	11.7	2.9	4.9	22	16	14	15	12	A	B	58	Preserve	pruned for clearance, MPE
ST	63	crape myrtle	<i>Lagerstroemia indica</i>	2.2	0.6	0.9	10	6	6	6	6	A	B		Preserve	staked, stakes should be replaced due to mechanical damage, in center median
ST	64	crape myrtle	<i>Lagerstroemia indica</i>	3.1	0.8	1.3	10	6	8	6	8	A	B+		Preserve	in center median, dusty leaves from nearby construction
ST	65	shumard oak	<i>Quercus shumardii</i>	2	0.5	0.8	12	6	9	4	5	A	B+		Preserve	in center median, staked
ST	66	desert willow	<i>Chilopsis linearis</i>	1, 1	0.4	0.6	5	2	2	2	2	A	A-		Preserve	in center median



Street Tree (ST)/Private Property Tree (PP)	Tree ID #	Common Name	Botanical Name	DBH (in.)	CRZ 3' (Ft.)	CRZ 5' (Ft.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	ST Tree Trunk (center) Distance to Curb Face (in inches)	Tree Disposition (Preserve or Remove)	Comments
ST	67	valley oak	<i>Quercus lobata</i>	9.8	2.5	4.1	17	12	18	10	3	B	B		Preserve	in center median, dusty leaves from nearby construction, shaded out
ST	68	valley oak	<i>Quercus lobata</i>	12.5	3.1	5.2	32	20	14	18	18	B+	B		Preserve	in center median, dusty leaves from nearby construction
ST	69	desert willow	<i>Chilopsis linearis</i>	1, 1, .5	0.4	0.6	5	2	4	3	4	A	A-		Remove	in center median
ST	70	red ironbark	<i>Eucalyptus sideroxylon</i>	28	7	11.7	40	17	21	22	18	B	B-		Remove	in center median, large tear on SW side
ST	71	Italian stone pine	<i>Pinus pinea</i>	25	6.3	10.4	50	20	23	23	22	A-	B		Preserve	in center median, obstructed base
ST	72	golden trumpet tree	<i>Handroanthus chrysotrichus</i>	1.3	0.3	0.5	10	3	3	5	6	A	A		Preserve	in center median, staked, deciduous currently without leaves
ST	73	eastern redbud	<i>Cercis canadensis</i>	2.2	0.6	0.9	10	4	4	4	4	A	A		Preserve	in center median, staked, deciduous currently without leaves
ST	74	Willard acacia	<i>Mariosousa heterophylla</i>	2.4	0.6	1	15	8	6	11	13	A-	B		Preserve	in center median, staked
ST	75	Willard acacia	<i>Mariosousa heterophylla</i>	1.2	0.3	0.5	10	0	3	12	5	B	B		Preserve	in center median, staked, leans S
ST	76	Willard acacia	<i>Mariosousa heterophylla</i>	2	0.5	0.8	12	2	3	10	4	B	B		Preserve	in center median, staked, should be restaked
ST	77	Chinese flame	<i>Koelreuteria bipinnata</i>	2	0.5	0.8	12	12	9	7	1	A	B		Preserve	in center median, codominant trunks with included bark
ST	78	Chinese flame	<i>Koelreuteria bipinnata</i>	3.7	0.9	1.5	18	14	12	14	9	A	B		Preserve	in center median, MBA
ST	79	Chinese flame	<i>Koelreuteria bipinnata</i>	4	1	1.7	18	10	12	10	10	A	B		Preserve	in center median



Street Tree (ST)/Private Property Tree (PP)	Tree ID #	Common Name	Botanical Name	DBH (in.)	CRZ 3' (Ft.)	CRZ 5' (Ft.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	ST Tree Trunk (center) Distance to Curb Face (in inches)	Tree Disposition (Preserve or Remove)	Comments
ST	80	Chinese flame	<i>Koelreuteria bipinnata</i>	3.5	0.9	1.5	16	12	8	10	6	A	B		Preserve	in center median
ST	81	red ironbark	<i>Eucalyptus sideroxylon</i>	23	5.8	9.6	55	18	5	10	15	A-	B		Preserve	in center median, MPE
ST	82	golden trumpet tree	<i>Handroanthus chrysotrichus</i>	2	0.5	0.8	12	6	6	6	6	A	B+		Preserve	in center median
ST	83	ginkgo	<i>Ginkgo biloba</i>	2	0.5	0.8	12	5	5	5	5	A	A-		Preserve	in center median
ST	84	ginkgo	<i>Ginkgo biloba</i>	3.4	0.9	1.4	13	6	7	6	5	A	B+		Preserve	in center median
ST	85	ginkgo	<i>Ginkgo biloba</i>	2.8	0.7	1.2	12	5	7	5	3	A	B		Preserve	in center median
ST	86	ginkgo	<i>Ginkgo biloba</i>	2.2	0.6	0.9	13	5	6	5	4	A	A-		Preserve	in center median
ST	87	crape myrtle	<i>Lagerstroemia indica</i>	2.8	0.7	1.2	12	7	7	7	7	A	B+		Preserve	in center median
ST	88	crape myrtle	<i>Lagerstroemia indica</i>	2.4	0.6	1	11	6	8	7	6	A-	B		Preserve	in center median, mechanical damage on S with good callous
ST	89	crape myrtle	<i>Lagerstroemia indica</i>	2.6	0.7	1.1	15	7	7	7	7	A	B+		Preserve	in center median
ST	90	crape myrtle	<i>Lagerstroemia indica</i>	2.5	0.6	1	12	5	7	6	7	A	B+		Preserve	in center median
ST	91	valley oak	<i>Quercus lobata</i>	11	2.8	4.6	34	13	14	24	13	B+	B		Preserve	in center median, last median tree closest to Arrow
ST	92	Italian stone pine	<i>Pinus pinea</i>	28.8	7.2	12	50	19	19	21	25	B	C		Remove (Not from project)	MPE, HOB
ST	93	Italian stone pine	<i>Pinus pinea</i>	32.5	8.1	13.5	65	16	23	25	27	B	B		Remove (Not from project)	MPE, HOB
ST	94	Italian stone pine	<i>Pinus pinea</i>	27.6	6.9	11.5	60	22	22	18	25	B	B		Remove (Not from project)	MPE, HOB
ST	95	Italian stone pine	<i>Pinus pinea</i>	28.5	7.1	11.9	60	12	18	33	25	A	B		Remove (Not from project)	MPE, HOB



Street Tree (ST)/Private Property Tree (PP)	Tree ID #	Common Name	Botanical Name	DBH (in.)	CRZ 3' (Ft.)	CRZ 5' (Ft.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	ST Tree Trunk (center) Distance to Curb Face (in inches)	Tree Disposition (Preserve or Remove)	Comments
ST	96	Italian stone pine	<i>Pinus pinea</i>	26.2	6.6	10.9	60	18	23	22	20	B	C		Remove (Not from project)	MPE, HOB
ST	97	crape myrtle	<i>Lagerstroemia indica</i>	1.9	0.5	0.8	10	6	6	6	6	A	A-		Remove	in center median, staked
ST	98	crape myrtle	<i>Lagerstroemia indica</i>	1.6	0.4	0.7	10	6	6	6	6	A	A-		Remove	in center median, staked
ST	99	desert willow	<i>Chilopsis linearis</i>	2.1, 1.6, 2, 2.4, 2.3	1.2	1.9	12	7	7	7	7	A	B+		Preserve	in center median, codominant trunks at base, trunks measured at 2.5-3 feet
ST	100	desert willow	<i>Chilopsis linearis</i>	.9, .4, .6	0.3	0.5	9	2	4	4	5	A	A-		Preserve	in center median
ST	101	desert willow	<i>Chilopsis linearis</i>	2, 1.7, 1.8	0.8	1.3	10	4	5	6	6	A	A-		Preserve	in center median, ants, diameters measured low at 2 feet
ST	102	desert willow	<i>Chilopsis linearis</i>	1.8, .6, .7, .7, .7, .5	0.6	1	9	4	5	5	5	A	A-		Preserve	in center median, diameters measured low at 2.5 feet
ST	103	red ironbark	<i>Eucalyptus sideroxylon</i>	17.5	4.4	7.3	24	13	15	20	15	B-	B-		Preserve	in center median, MPE, topped, moderate dieback, exudation
ST	104	red ironbark	<i>Eucalyptus sideroxylon</i>	32.9	8.2	13.7	45	26	17	15	26	A-	B		Preserve	in center median, codominant trunks at 6 feet, tear in canopy, diameter measured low at 3 feet, MPE, EG, base obstructed



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Education

B.A., Environmental Analysis & Design, Cum Laude, University of California, Irvine, 1993
Graduate, International Society of Arboriculture Certification Study Program, April 1998
Graduate, Consulting Academy, American Society of Consulting Arborists, February 2008

Experience

Consulting Arborist, Carlberg Associates, 2011 - Present
Director of Environmental Services & Senior Arborist, Land Design Consultants, Pasadena, 1994 – 2011
Park Specialist/Naturalist, City of Monrovia, 1988-1996

Certificates

Certified Arborist, WE-1982A, International Society of Arboriculture, 1998
Registered Consulting Arborist, #502, American Society of Consulting Arborists, 2011
Qualified Tree Risk Assessor (TRAQ), International Society of Arboriculture, 2013
Qualified Tree & Landscape Appraiser (TPAQ), American Society of Consulting Arborists, 2025

AREAS OF EXPERTISE

Ms. Cuba is experienced in the following areas of tree management and preservation:

- Post-fire assessments & appraisals for urban, agricultural, and wildland trees for insurance claims and legal cases
- TRAQ Level 1, 2, & 3 Risk Assessments and reports – municipal, institutional, land development & residential
- Land development consulting – inventories, mapping, impact analysis, protection plans, removal, encroachment, and pruning permits, monitoring program development and implementation, mitigation compliance, fire fuel modification
- Value assessments (appraisals) for native and non-native trees
- Tree Inventories, Maintenance & Management Plans – health/structure evaluations, tree preservation/removal, succession planting, pruning, and maintenance recommendations
- Pest and disease identification and management
- Planning Commission, City Council, and community meetings representation
- Expert consultation / testimony

PREVIOUS CONSULTING EXPERIENCE

Ms. Cuba has performed thousands of tree inventories, health & structure evaluations, risk assessments, and appraisal value assessments for counties, cities, school districts, and universities, as well as private sector developers, architects, landscape architects, engineers, and homeowners. She has performed post-fire assessments and appraisals for landscape restoration claims on over 45,000 trees and shrubs in Los Angeles and San Diego Counties. In addition to more than 30 years of experience in arboriculture, she is also trained in environmental planning, state and federal regulatory permitting, preparation of CEQA analyses, fire-fuel modification planning, and habitat mitigation planning and monitoring. Representative clients include:

AT&T (Legal Department)
Washington & Finnegan (Claims Adjusters)
Los Angeles County DPW and Parks & Recreation
City of Pasadena (on-call arborist)
City of Santa Clarita (on-call arborist)
City of Sierra Madre
City of Claremont
Los Angeles Unified School District
Pulte/Centex Homes
Five Point Valencia (Formerly Newhall Ranch)
KB Homes
The New Home Company

San Diego Gas & Electric
Quinn, Emanuel, Urquhart and Sullivan (attorneys at law)
Gensler Architects
EPT Design
Rose Bowl Stadium
Clark & Green, Landscape Architects (cemetery specialists)
Occidental College
Caltech - California Institute of Technology
The Village Green HOA, Los Angeles (National Historic Register)
Children's Hospital of Los Angeles
USC Keck Medical Center
The Claremont Colleges

AFFILIATIONS

Ms. Cuba serves with the following national and regional professional organizations:

- Member, American Society of Consulting Arborists (Faculty member, ASCA Consulting Academy)
- Member, International Society of Arboriculture, Western Chapter
- Member, Street Tree Seminar (Past President) (Presenter at regional conferences)



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<u>Education</u>	B.A., Environmental Studies, University of California, Santa Barbara, 2000
<u>Experience</u>	Project Planner & Senior Arborist, Land Design Consultants, Inc. Pasadena, 1999 – 2014
<u>Certificates</u>	Certified Arborist, WE-7011A, International Society of Arboriculture, 2004 Qualified Tree Risk Assessor, International Society of Arboriculture, 2015

AREAS OF EXPERTISE

Mr. McAllaster is experienced in the following areas of tree management and preservation:

- Tree health & risk assessments
- Inventories & reports for native and non-native trees
- Master planning
- Evaluation of trees for preservation, encroachment, relocation, restoration, and hazards
- Construction monitoring and reporting
- Value assessments (appraisals) for native and non-native trees
- Post-fire inventories, assessments, and valuations for native and non-native trees
- Guidelines for tree preservation, planting, pruning and maintenance specifications
- Tree and landscape resource mapping – GPS and AutoCAD
- Planning Commission, City Council, and community meetings representation
- Review of landscape plans for mitigation compliance & fire fuel modification planning
- Performance of long-term mitigation compliance monitoring & reporting

PREVIOUS CONSULTING EXPERIENCE

Mr. McAllaster has performed hundreds of tree inventories, health evaluations, impact analyses, hazard, and value assessments for counties, cities, sanitation districts, and water districts, as well as private developers, architects, engineers, and homeowners. He has over 20 years of experience in arboriculture and is trained in environmental planning, state and federal regulatory permitting, preparation of CEQA analyses, and habitat mitigation planning and implementation. Representative clients include:

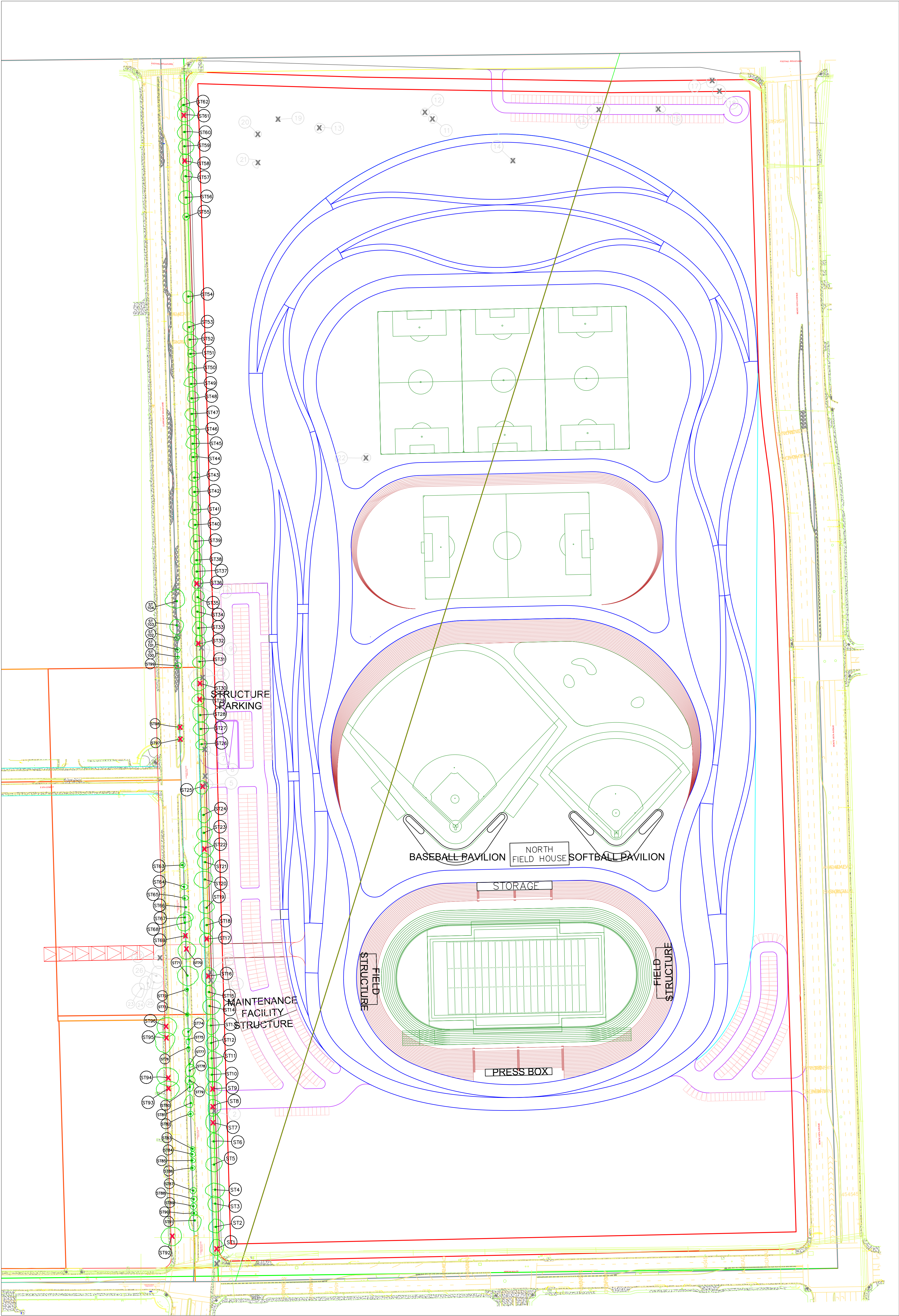
City of Pasadena	San Diego Gas & Electric
City of Santa Clarita	Corky McMillin Companies
City of Glendora	City of South Gate
Los Angeles County Fire Department	City of Arcadia
Los Angeles County Sanitation Districts	D2 Development
Newhall County Water District	Burrtec, Inc.
Pulte/Centex Homes	The Claremont Colleges
Newhall Land and Farming	The New Home Company
E & S Ring, Inc.	William Carey University
Hollywood Forever Cemetery	Claremont Golf Course
Archdiocese of Los Angeles	Universal Hilton
St. John's Hospital, Santa Monica	Gensler Architects
Kovac Architects	Marmol Radziner, Architects
Tim Barber, Ltd., Architects	NAC Architecture
Ojai Valley Community Hospital	Aurora/Signature Health Services
The Kibo Group	Monte Vista Grove Homes
El Monte Garden Senior Center	Highpointe Communities
IMT Capital, LLC	Claremont University Center

AFFILIATIONS

Mr. McAllaster serves with the following national and regional professional organizations:

- Member, International Society of Arboriculture, Western Chapter
- Member, Street Tree Seminar, Inc.





TREE INVENTORY LEGEND

PRIVATE PROPERTY TREE

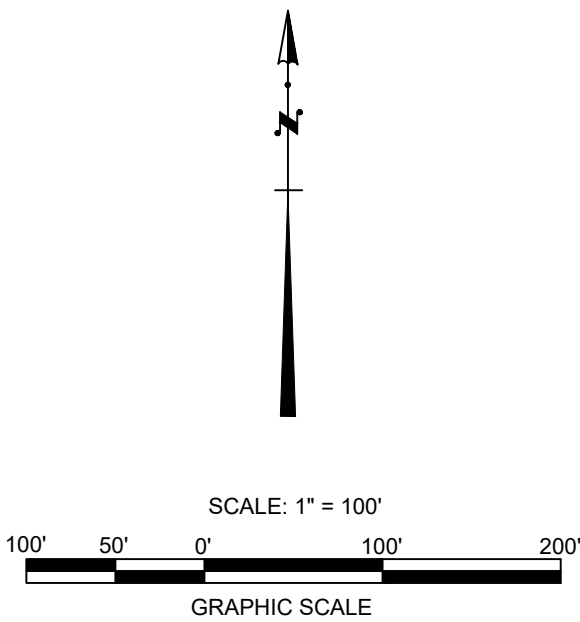
CITY OF CLAREMONT STREET TREE

STREET TREE PROPOSED FOR REMOVAL

PRIVATE PROPERTY TREE PROPOSED FOR REMOVAL

NOTES: LOCATIONS OF INTERIOR TREES #1-22 ARE APPROXIMATE AND ARE NOT PROFESSIONALLY SURVEYED.

DATE: 07/25/24
DATE AMENDED: 10/23/25
PREPARED BY: S. McALLISTER
ISA CERTIFIED ARBORIST
REVIEWED BY: CY CARLBERG, RCA #405



CARLBERG ASSOCIATES

Horticulturists and
Registered Consulting
ARBORISTS

TREE IMPACT EXHIBIT
CLAREMONT McKENNA COLLEGE
ROBERTS EAST CAMPUS SPORTS BOWL
PREPARED FOR: CLAREMONT McKENNA COLLEGE
207 HARVARD AVENUE, CLAREMONT, CA 91711

Date: 07.31.24
Date Amended: 10.23.25

By: S. McAllister

www.cycarlberg.com

JULY 31, 2024 ARBORIST REPORT FOR REFERENCE



Horticulturists and
Registered Consulting
ARBORISTS

**TREE INVENTORY AND IMPACT REPORT
ROBERTS EAST CAMPUS SPORTS BOWL
CLAREMONT MCKENNA COLLEGE
CLAREMONT, CALIFORNIA**

SUBMITTED TO:

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SENIOR PROJECT MANAGER
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JULY 31, 2024

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TREE INVENTORY AND IMPACT REPORT – ROBERTS EAST CAMPUS SPORTS BOWL

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TREE LOCATION EXHIBIT AND TREE IMPACT EXHIBIT (2 SHEETS, COLOR, 24" X 36", 1":100' SCALE)
 (SUBMITTED IN PDF FORMAT ELECTRONICALLY WITH THIS REPORT)





July 31, 2024

Andres Ramirez, PMP, CCM, CEF
Senior Project Manager
Claremont McKenna College
Facilities and Campus Services
742 Amherst Avenue
Claremont, California 91711

**Re: Tree Inventory and Impact Report
Roberts East Campus Sports Bowl, Claremont McKenna College, Claremont, California**

Dear Mr. Ramirez,

This report addresses our evaluation of the private property trees inside the proposed Claremont McKenna College east campus area and the rights-of-way trees lining the sides and center median of Claremont Boulevard between Foothill Boulevard and Arrow Route as they pertain to the development of the Roberts East Campus Sports Park (Project).

EXECUTIVE SUMMARY

Carlberg Associates (Carlberg) originally assessed most of the trees in 2016 and 2019 when early planning for the east campus was underway. This report includes an updated inventory of all trees over one inch in diameter at 4.5 feet above grade within the proposed sports bowl area and the west campus area immediately adjacent to the proposed tunnel entrance, as well as all of the right-of-way trees on Claremont Boulevard. Given the multi-phase nature of the project, parkway trees on Foothill Boulevard are only generally addressed in this report.

Carlberg assessed 131 trees of 18 species on and immediately adjacent to the Project area. Twenty-seven (27) of the trees are located on private property, and 104 are City of Claremont street trees. Twenty-three (23) of the 27 private property trees and nine (9) rights-of-way trees are proposed for removal to accommodate the Sports Bowl Project and public parkway renovations on the east and west sides of Claremont Boulevard. Claremont McKenna College will be responsible for construction of the parkway improvements on Claremont Boulevard.

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Four of the nine public trees proposed for removal are in conflict with the proposed tunnel location, as well as the installation of two driveways on the east side of Claremont Boulevard, and the placement of a new left-turn pocket on the south-bound lanes at the intersection of Claremont Boulevard and 9th Street. Five other parkway trees on the west side of Claremont Boulevard are proposed for removal and replacement in the renovated parkway landscape. The new trees will be consistent with the existing tree plantings on the east side of Claremont Boulevard and with the 2022 City of Claremont Designated Street Tree list.

The July 2024 Conceptual Site Plan includes a driveway off of Foothill Boulevard and an at-grade parking lot. This is a conceptual program feature that may be included in future phases of the Project. Due to the far future and uncertain nature of this aspect of the Project, parkway trees on Foothill Boulevard are only generally described in this report and impacts are not included for those trees.

Exhibits and photographs of the trees are enclosed, and general recommendations for tree preservation during construction are addressed.

BACKGROUND AND ASSIGNMENT

The one-time quarry, located on the east side of Claremont Boulevard, will be converted into athletic fields, ancillary buildings and parking spaces for the Roberts Campus Sports Bowl facilities. The roughly 75-acre project site is located south of Foothill Boulevard, west of Monte Vista Avenue, east of Claremont Boulevard and north of Arrow Route. Roughly 45 acres of the property is located in Upland and the remaining 30 acres are in Claremont. The dividing line runs diagonally through the property from northeast to southwest.

Carlberg performed a field inventory of all trees within the boundaries of the Roberts East Campus Sports Bowl project (Project) as defined by Claremont McKenna College (CMC), as well as individual parkway and median trees on Claremont Boulevard, and a general overview of the parkway trees on Foothill Boulevard. No public right-of-way trees exist on the east side of Monte Vista Avenue or on the north side of Arrow Route.

The inventory took place on June 4 and 19, 2024, and included all private trees over one (1) inch in diameter and all public trees regardless of size in the areas requested by Claremont McKenna College. The inventory included the following assessment factors:

- **Tree Number** (unique tree number correlates to the Tree Location Map; small metal tree number tags were affixed to each inventoried private property tree; public property trees were not tagged but are identified on the map with a 'ST' before the designated identification number)
- **Botanical and Common Name**
- **Trunk Diameter** (measured at 4.5 feet above natural grade)
- **Tree Height and Measured Canopy Spreads (N/E/S/W)**
- **Health and Structure Grades**
- **A Photograph of Each Inventoried Tree**
- **Parkway trees on Foothill Boulevard** - note the various species and number of each, no detailed information or mapping

Field data was collected on tablets, tree trunk locations were generally mapped on a 100-scale, 24" x 36" topographic sheet map, and photographs were recorded with digital cameras. Tree identification numbers, trunk locations, and tree canopies with protection zones are graphically represented on the Tree Location Exhibit



prepared in AutoCAD by Carlberg on base maps provided by CMC. Full-sized, color copies of the Tree Location Exhibit and the Tree Impact Exhibit, dated July 26, 2024 will be provided in digital PDF format with this report.

OBSERVATIONS

PROJECT SITE TREES AND CITY OF CLAREMONT PARKWAY AND MEDIAN TREES

Within the 75-acre, vacant quarry property, we inventoried and assessed 27 private property trees. In the median and on the east and west sides of Claremont Boulevard, we inventoried and assessed 104 public right-of-way trees. No street trees are present on the west side of Monte Vista Avenue or on the north side of Arrow Route. Parkway trees on the south side of Foothill Boulevard were only counted and photographed for the file. A summary count of those trees is listed after **Table 1**. **Table 1** summarizes the individually inventoried and assessed types of trees, their onsite, offsite, or street tree status, and how many of each type are included in the inventory.

TABLE 1 – INVENTORIED TREE SUMMARY

COMMON NAME	BOTANICAL NAME	TOTAL NO. ONSITE	TOTAL NO. STREET TREES	TOTAL NO. TREES
African sumac	<i>Searsia lancea</i>	2	0	2
California pepper	<i>Schinus molle</i>	2	0	2
California sycamore	<i>Platanus racemosa</i>	7	0	7
carrotwood	<i>Cupaniopsis anacardioides</i>	1	0	1
Chinese flame	<i>Koelreuteria bipinnata</i>	2	4	6
coast live oak	<i>Quercus agrifolia</i>	3	0	3
crape myrtle	<i>Lagerstroemia indica</i>	0	8	8
desert willow	<i>Chilopsis linearis</i>	0	6	6
Eastern redbud	<i>Cercis canadensis</i>	0	1	1
elderberry	<i>Sambucus mexicana</i>	8	0	8
ginkgo	<i>Ginkgo biloba</i>	0	4	4
golden trumpet tree	<i>Handroanthus chrysotrichus.</i>	0	2	2
Italian stone pine	<i>Pinus pinea</i>	0	6	6
red ironbark	<i>Eucalyptus sideroxylon</i>	0	4	4
river red gum	<i>Eucalyptus camaldulensis</i>	2	0	2
Shumard oak	<i>Quercus shumardii</i>	0	1	1
valley oak	<i>Quercus lobata</i>	0	65	65
Willard acacia	<i>Mariosousa heterophylla</i>	0	3	3
TOTALS		27	104	131



There are 28 total parkway trees on south side of Foothill Boulevard, between Claremont Boulevard and Monte Vista Avenue, in the newly renovated parkway (part of the 2018-2019 Foothill Boulevard Master Plan Improvement Project).

- Flooded Gum (mature) (*Eucalyptus rudis*) – 1
- Red ironbark (mature) (*Eucalyptus sideroxylon*) – 3
- Pink trumpet tree (new plantings) (*Handroanthus heptaphyllus*) – 9
- Brisbane box (new plantings) (*Lophostemon confertus*) – 10
- Red push pistache (new plantings) (*Pistache chinensis* 'Red Push') – 5

Photographs of these trees are on file at Carlberg's office. Since impacts, if any, to these trees are not expected to occur for at least 10 years, these trees were not assessed in detail. They will be reassessed in detail before any work occurs on the north side of the Project site that could potentially impact them.

Table 2 - Summary of Tree Data summarizes the inventoried tree data within the vacant quarry area and on Claremont Boulevard. **Exhibit A – Reduced Copy of the Tree Location Exhibit** provides an illustrative presentation of the existing trees assessed for the Project. The full-sized, color copy of the Tree Location Exhibit (24" x 36" sheet) is included with the submittal of this report.

The **Tree Photograph Exhibit**, included as **Exhibit E**, provides captioned photographs of the trees, and provides an idea of site context, tree densities, conformation, and vigor.

TABLE 2 – SUMMARY OF TREE DATA

STREET (ST)	TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.)	HEIGHT (FT.)	CANOPY N (FT.)	CANOPY E (FT.)	CANOPY S (FT.)	CANOPY W (FT.)	HEALTH GRADE	STRUCTURE GRADE
	1	Chinese flame	<i>Koelreuteria bipinnata</i>	.5, .5, .5, .5, 1	10	8	6	5	4	A	B
	2	coast live oak	<i>Quercus agrifolia</i>	.5, .5	7	3	4	5	3	A	B
	3	carrotwood	<i>Cupaniopsis anacardioides</i>	1, 1, 1, .5	11	1	7	2	0	A-	B+
	4	coast live oak	<i>Quercus agrifolia</i>	3, .5	15	5	5	5	3	A	B
	5	California sycamore	<i>Platanus racemosa</i>	10.2	28	14	16	13	14	B+	B
	6	Chinese flame	<i>Koelreuteria bipinnata</i>	2.8	12	6	7	6	3	A	B+
	7	California sycamore	<i>Platanus racemosa</i>	6, 10	26	10	13	17	12	A-	B
	8	California pepper	<i>Schinus molle</i>	8.8, 11.5, 14.8	28	21	24	24	29	A	B



TABLE 2 – SUMMARY OF TREE DATA

STREET (ST)	TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.)	HEIGHT (FT.)	CANOPY N (FT.)	CANOPY E (FT.)	CANOPY S (FT.)	CANOPY W (FT.)	HEALTH GRADE	STRUCTURE GRADE
	9	California pepper	<i>Schinus molle</i>		30	12	18	28	25	A-	B
	10	coast live oak	<i>Quercus agrifolia</i>	1.3, .5, .5	8	5	6	8	3	A	B+
	11	elderberry	<i>Sambucus mexicana</i>	2, 1.5, 1.5	14	11	10	10	9	A	A-
	12	elderberry	<i>Sambucus mexicana</i>	1, 1, 1	14	9	10	9	9	A	A-
	13	elderberry	<i>Sambucus mexicana</i>	1, 1.5, 1, 1.5, 1, 1, 2, 2, 2, 2, 2.5	15	10	12	12	10	A	A-
	14	elderberry	<i>Sambucus mexicana</i>	1, 1, 1, .5, .5, .5	12	6	5	4	6	A	A
	15	river red gum	<i>Eucalyptus camaldulensis</i>	9, 11, 13.5, 12, 14.5, 5, 7, 10.7	42	16	25	25	25	A-	B
	16	river red gum	<i>Eucalyptus camaldulensis</i>	2, 2.5, 3, 1	18	11	16	9	6	B+	B
	17	African sumac	<i>Searsia lancea</i>	5	16	7	10	15	13	A	B
	18	African sumac	<i>Searsia lancea</i>	1, 1, 1, 1, 1, 1.5, 1.5, 1.5, 1.5, 1.5, 1.5, 2, 2, 2, 2.5, 2.5, 3	16	14	14	17	15	A	B+
	19	elderberry	<i>Sambucus mexicana</i>	1	15	4	4	4	4	A	A-
	20	elderberry	<i>Sambucus mexicana</i>	4	18	8	8	8	8	A	A-
	21	elderberry	<i>Sambucus mexicana</i>	3, 2, 2	18	0	0	12	12	A	A-
	22	elderberry	<i>Sambucus mexicana</i>	add data							
	23	California sycamore	<i>Platanus racemosa</i>	16.5	40	12	7	19	20	A-	B
	24	California sycamore	<i>Platanus racemosa</i>	12.2	40	15	7	15	18	B	B
	25	California sycamore	<i>Platanus racemosa</i>	17.1	45	20	20	15	15	A	B+



TABLE 2 – SUMMARY OF TREE DATA

STREET (ST)	TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.)	HEIGHT (FT.)	CANOPY N (FT.)	CANOPY E (FT.)	CANOPY S (FT.)	CANOPY W (FT.)	HEALTH GRADE	STRUCTURE GRADE
	26	California sycamore	<i>Platanus racemosa</i>	19.9	35	21	23	16	10	A-	B
	27	California sycamore	<i>Platanus racemosa</i>	19.3	50	18	17	23	15	A-	B
ST	1	valley oak	<i>Quercus lobata</i>	14.2	22	20	15	15	15	B	B
ST	2	valley oak	<i>Quercus lobata</i>	12.9	24	17	17	13	16	B	B
ST	3	valley oak	<i>Quercus lobata</i>	14	25	16	18	18	16	B	B-
ST	4	valley oak	<i>Quercus lobata</i>	13.5	25	14	21	18	21	B	B+
ST	5	valley oak	<i>Quercus lobata</i>	10.8	22	16	18	16	18	B	B
ST	6	valley oak	<i>Quercus lobata</i>	13.4	26	18	21	16	14	A-	B
ST	7	valley oak	<i>Quercus lobata</i>	12.5	26	20	17	21	16	B	B
ST	8	valley oak	<i>Quercus lobata</i>	12.8	28	16	18	21	10	B+	B
ST	9	valley oak	<i>Quercus lobata</i>	15	28	16	20	16	15	A-	B+
ST	10	valley oak	<i>Quercus lobata</i>	15.5	25	15	20	16	13	B	B
ST	11	valley oak	<i>Quercus lobata</i>	13.9	24	15	24	22	10	B+	B-
ST	12	valley oak	<i>Quercus lobata</i>	11.5	26	15	16	16	12	B	B
ST	13	valley oak	<i>Quercus lobata</i>	10.8, 11.1	20	15	18	20	10	B	B
ST	14	valley oak	<i>Quercus lobata</i>	12.5	25	15	24	19	15	B	B
ST	15	valley oak	<i>Quercus lobata</i>	10	28	14	15	12	8	B	B
ST	16	valley oak	<i>Quercus lobata</i>	11.4	26	18	18	21	15	B	B



TABLE 2 – SUMMARY OF TREE DATA

STREET (ST)	TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.)	HEIGHT (FT.)	CANOPY N (FT.)	CANOPY E (FT.)	CANOPY S (FT.)	CANOPY W (FT.)	HEALTH GRADE	STRUCTURE GRADE
ST	17	valley oak	<i>Quercus lobata</i>	12	25	13	13	18	15	B	B
ST	18	valley oak	<i>Quercus lobata</i>	14.2	24	16	15	19	15	B	B
ST	19	valley oak	<i>Quercus lobata</i>	12	25	15	17	13	18	A	B
ST	20	valley oak	<i>Quercus lobata</i>	15.4	24	18	17	19	24	A	B
ST	21	valley oak	<i>Quercus lobata</i>	12	22	20	18	16	17	A	B
ST	22	valley oak	<i>Quercus lobata</i>	14.5	20	16	20	18	22	A	B
ST	23	valley oak	<i>Quercus lobata</i>	15.8	22	13	18	18	16	A	B
ST	24	valley oak	<i>Quercus lobata</i>	14.3	25	17	17	17	12	A-	B
ST	25	valley oak	<i>Quercus lobata</i>	12.2	25	12	13	17	16	A-	B
ST	26	valley oak	<i>Quercus lobata</i>	9.3	18	11	11	12	13	B+	B
ST	27	valley oak	<i>Quercus lobata</i>	11	20	15	17	14	17	B	B
ST	28	valley oak	<i>Quercus lobata</i>	12	22	19	17	15	16	B	B
ST	29	valley oak	<i>Quercus lobata</i>	9.5	25	12	11	12	17	A-	B
ST	30	valley oak	<i>Quercus lobata</i>	12	28	13	16	16	18	A-	B
ST	31	valley oak	<i>Quercus lobata</i>	9.3	22	11	13	15	15	B-	B
ST	32	valley oak	<i>Quercus lobata</i>	10.8	20	18	15	7	8	B	B
ST	33	valley oak	<i>Quercus lobata</i>	11	20	15	18	16	13	B	B
ST	34	valley oak	<i>Quercus lobata</i>	12.7	22	13	18	13	13	B	B



TABLE 2 – SUMMARY OF TREE DATA

STREET (ST)	TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.)	HEIGHT (FT.)	CANOPY N (FT.)	CANOPY E (FT.)	CANOPY S (FT.)	CANOPY W (FT.)	HEALTH GRADE	STRUCTURE GRADE
ST	35	valley oak	<i>Quercus lobata</i>	11.2	25	15	15	12	12	A-	B
ST	36	valley oak	<i>Quercus lobata</i>	8.3	18	13	14	12	10	A-	B
ST	37	valley oak	<i>Quercus lobata</i>	8.7	18	16	18	16	10	B	B
ST	38	valley oak	<i>Quercus lobata</i>	8.9	20	20	10	10	13	B	B
ST	39	valley oak	<i>Quercus lobata</i>	10.2	25	15	18	18	11	A	B
ST	40	valley oak	<i>Quercus lobata</i>	8.4	16	12	6	9	15	B	B
ST	41	valley oak	<i>Quercus lobata</i>	10.3	18	18	14	10	8	A	B
ST	42	valley oak	<i>Quercus lobata</i>	8.8	16	12	10	10	12	A	B
ST	43	valley oak	<i>Quercus lobata</i>	9	20	13	12	8	12	A	B
ST	44	valley oak	<i>Quercus lobata</i>	8	17	10	11	10	8	A	B
ST	45	valley oak	<i>Quercus lobata</i>	11.8	24	16	15	12	15	A	B
ST	46	valley oak	<i>Quercus lobata</i>	12.3	25	10	16	13	10	A	B
ST	47	valley oak	<i>Quercus lobata</i>	11	24	12	11	16	15	A	B
ST	48	valley oak	<i>Quercus lobata</i>	10.4	18	16	16	9	9	A	B
ST	49	valley oak	<i>Quercus lobata</i>	5.2, 8.4	21	16	12	7	16	B	B
ST	50	valley oak	<i>Quercus lobata</i>	9.8	24	15	12	7	8	A	B
ST	51	valley oak	<i>Quercus lobata</i>	7.6	15	10	13	7	6	B	B
ST	52	valley oak	<i>Quercus lobata</i>	9.7	17	12	18	18	12	A	B



TABLE 2 – SUMMARY OF TREE DATA

STREET (ST)	TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.)	HEIGHT (FT.)	CANOPY N (FT.)	CANOPY E (FT.)	CANOPY S (FT.)	CANOPY W (FT.)	HEALTH GRADE	STRUCTURE GRADE
ST	53	valley oak	<i>Quercus lobata</i>	7.4	16	12	13	11	14	A	B
ST	54	valley oak	<i>Quercus lobata</i>	8.6	17	12	11	15	12	A	B
ST	55	valley oak	<i>Quercus lobata</i>	4	12	8	7	7	8	A	B
ST	56	valley oak	<i>Quercus lobata</i>	10.7	25	15	15	15	17	A	B
ST	57	valley oak	<i>Quercus lobata</i>	7.6	19	14	15	14	10	B+	B
ST	58	valley oak	<i>Quercus lobata</i>	11.6	22	15	17	12	12	A	B
ST	59	valley oak	<i>Quercus lobata</i>	11.3	25	14	21	18	13	A	B
ST	60	valley oak	<i>Quercus lobata</i>	15.1	26	16	18	16	15	A	B
ST	61	valley oak	<i>Quercus lobata</i>	14.8	25	20	23	15	14	A	B
ST	62	valley oak	<i>Quercus lobata</i>	11.7	22	16	14	15	12	A	B
ST	63	crape myrtle	<i>Lagerstroemia indica</i>	2.2	10	6	6	6	6	A	B
ST	64	crape myrtle	<i>Lagerstroemia indica</i>	3.1	10	6	8	6	8	A	B+
ST	65	Shumard oak	<i>Quercus shumardii</i>	2	12	6	9	4	5	A	B+
ST	66	desert willow	<i>Chilopsis linearis</i>	1, 1	5	2	2	2	2	A	A-
ST	67	valley oak	<i>Quercus lobata</i>	9.8	17	12	18	10	3	B	B
ST	68	valley oak	<i>Quercus lobata</i>	12.5	32	20	14	18	18	B+	B
ST	69	desert willow	<i>Chilopsis linearis</i>	1, 1, .5	5	2	4	3	4	A	A-
ST	70	red ironbark	<i>Eucalyptus sideroxylon</i>	28	40	17	21	22	18	B	B-



TABLE 2 – SUMMARY OF TREE DATA

STREET (ST)	TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.)	HEIGHT (FT.)	CANOPY N (FT.)	CANOPY E (FT.)	CANOPY S (FT.)	CANOPY W (FT.)	HEALTH GRADE	STRUCTURE GRADE
ST	71	Italian stone pine	<i>Pinus pinea</i>	25	50	20	23	23	22	A-	B
ST	72	golden trumpet tree	<i>Handroanthus chrysotrichus</i>	1.3	10	3	3	5	6	A	A
ST	73	eastern redbud	<i>Cercis canadensis</i>	2.2	10	4	4	4	4	A	A
ST	74	Willard acacia	<i>Mariosousa heterophylla</i>	2.4	15	8	6	11	13	A-	B
ST	75	Willard acacia	<i>Mariosousa heterophylla</i>	1.2	10	0	3	12	5	B	B
ST	76	Willard acacia	<i>Mariosousa heterophylla</i>	2	12	2	3	10	4	B	B
ST	77	Chinese flame	<i>Koelreuteria bipinnata</i>	2	12	12	9	7	1	A	B
ST	78	Chinese flame	<i>Koelreuteria bipinnata</i>	3.7	18	14	12	14	9	A	B
ST	79	Chinese flame	<i>Koelreuteria bipinnata</i>	4	18	10	12	10	10	A	B
ST	80	Chinese flame	<i>Koelreuteria bipinnata</i>	3.5	16	12	8	10	6	A	B
ST	81	red ironbark	<i>Eucalyptus sideroxylon</i>	23	55	18	5	10	15	A-	B
ST	82	golden trumpet tree	<i>Handroanthus chrysotrichus</i>	2	12	6	6	6	6	A	B+
ST	83	ginkgo	<i>Ginkgo biloba</i>	2	12	5	5	5	5	A	A-
ST	84	ginkgo	<i>Ginkgo biloba</i>	3.4	13	6	7	6	5	A	B+
ST	85	ginkgo	<i>Ginkgo biloba</i>	2.8	12	5	7	5	3	A	B
ST	86	ginkgo	<i>Ginkgo biloba</i>	2.2	13	5	6	5	4	A	A-
ST	87	crape myrtle	<i>Lagerstroemia indica</i>	2.8	12	7	7	7	7	A	B+
ST	88	crape myrtle	<i>Lagerstroemia indica</i>	2.4	11	6	8	7	6	A-	B

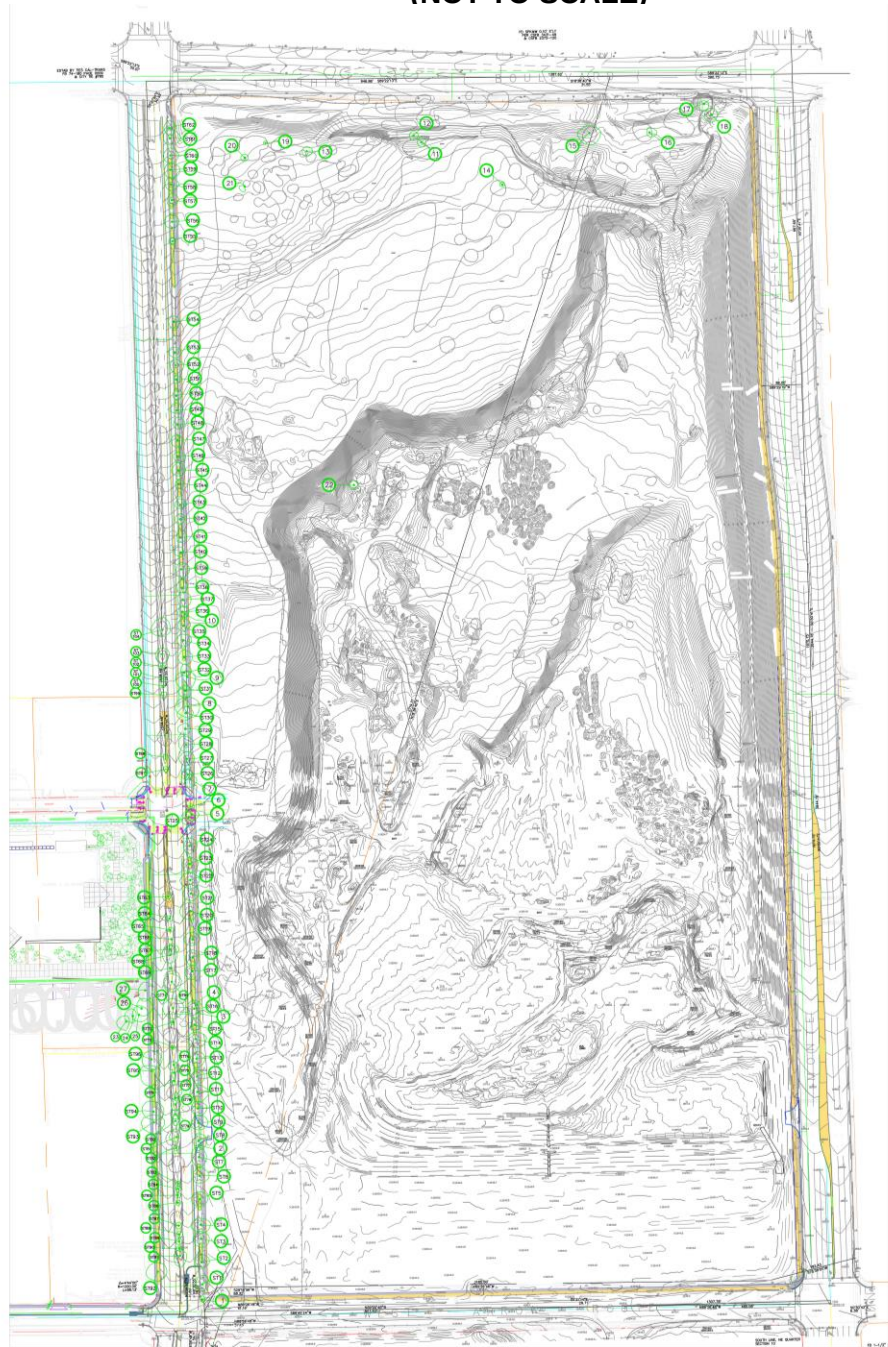


TABLE 2 – SUMMARY OF TREE DATA

STREET (ST)	TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.)	HEIGHT (FT.)	CANOPY N (FT.)	CANOPY E (FT.)	CANOPY S (FT.)	CANOPY W (FT.)	HEALTH GRADE	STRUCTURE GRADE
ST	89	crape myrtle	<i>Lagerstroemia indica</i>	2.6	15	7	7	7	7	A	B+
ST	90	crape myrtle	<i>Lagerstroemia indica</i>	2.5	12	5	7	6	7	A	B+
ST	91	valley oak	<i>Quercus lobata</i>	11	34	13	14	24	13	B+	B
ST	92	Italian stone pine	<i>Pinus pinea</i>	28.8	50	19	19	21	25	B	C
ST	93	Italian stone pine	<i>Pinus pinea</i>	32.5	65	16	23	25	27	B	B
ST	94	Italian stone pine	<i>Pinus pinea</i>	27.6	60	22	22	18	25	B	B
ST	95	Italian stone pine	<i>Pinus pinea</i>	28.5	60	12	18	33	25	A	B
ST	96	Italian stone pine	<i>Pinus pinea</i>	26.2	60	18	23	22	20	B	C
ST	97	crape myrtle	<i>Lagerstroemia indica</i>	1.9	10	6	6	6	6	A	A-
ST	98	crape myrtle	<i>Lagerstroemia indica</i>	1.6	10	6	6	6	6	A	A-
ST	99	desert willow	<i>Chilopsis linearis</i>	2.1, 1.6, 2, 2.4, 2.3	12	7	7	7	7	A	B+
ST	100	desert willow	<i>Chilopsis linearis</i>	.9, .4, .6	9	2	4	4	5	A	A-
ST	101	desert willow	<i>Chilopsis linearis</i>	2, 1.7, 1.8	10	4	5	6	6	A	A-
ST	102	desert willow	<i>Chilopsis linearis</i>	1.8, .6, .7, .7, .7, .5	9	4	5	5	5	A	A-
ST	103	red ironbark	<i>Eucalyptus sideroxylon</i>	17.5	24	13	15	20	15	B-	B-
ST	104	red ironbark	<i>Eucalyptus sideroxylon</i>	32.9	45	26	17	15	26	A-	B



EXHIBIT A – REDUCED COPY OF THE TREE LOCATION EXHIBIT
(NOT TO SCALE)



TREE INVENTORY LEGEND	
	PRIVATE PROPERTY TREE
	CITY OF CLAREMONT STREET TREE

NOTES: LOCATIONS OF INTERIOR TREES 80-90 ARE APPROXIMATE AND ARE NOT PROFESSIONALLY SURVEYED
DATE: 8/15/2018
PREPARED BY: JEN KENTON
REVIEWED BY: ST. CARLBERG, RCH 4452



DISCUSSION OF PROJECT IMPACTS

There are numerous potential consequences related to construction that may affect trees during and after a typical construction process. They are as follows:

- EXCAVATION - ROOT SEVERANCE
- SOIL COMPACTION (DURING AND POST-CONSTRUCTION)
- ALTERATION OF THE WATER TABLE/SITE DRAINAGE
- CHANGES IN GRADE – CUT OR FILL
- SUBSTANTIAL TRIMMING OF CANOPY OR ROOTS

A. Excavation/Trenching—Root Severance

Trenching can include excavation for irrigation, utility, or drainage lines. Trenching and excavation can also be required for foundations of structures and free-standing walls. Trenching and excavation removes soil and tree roots. When performed in the critical root zone (approximately 5x the trunk diameter of any tree) or within the dripline (outer edge of the natural canopy), there is the potential to remove large areas of root mass, and to shatter and tear roots that will remain connected to the tree(s). Torn and shattered roots cannot callous over or generate new roots in the manner of cleanly-cut roots. Torn and shattered roots are potentially unstable, are entry points for disease and decay organisms, and eventually die. Significant root loss and/or severance can be critical to the health and structure of trees to remain in a landscape.

B. Soil Compaction

Soil compaction is a complex set of physical, chemical, and biological constraints on tree growth. Principal components leading to limited growth are the loss of aeration and pore space, poor gas exchange with the atmosphere, lack of available water, and mechanical hindrance of root growth. Soil compaction is considered the largest single factor responsible for the decline of trees on construction sites.

C. Changes in Grade

Changes in grade, by the addition or removal of soil (filling or cutting), can be injurious. Lowering the grade around trees can have immediate and long-term effects on trees. The addition of soil and compaction for common engineering practices also results in long-term effects on trees. Typically, the vast majority of the root mass exists within the top three feet of soil, and most of the fine roots active in water and nutrient absorption are in the top 12 inches.

D. Alteration of the Water Table/Site Drainage

The water table is the upper surface of the zone in which soil macropores are saturated with water; water tables may vary seasonally. Rather than a flat, static surface, the water moves down a gradient. Its depth varies, depending on the structure of the soil and rocks through which it flows. A perched water table may form in soils that have impermeable strata.

Structures such as footings, basements, subterranean buildings, and retaining walls may intercept impermeable layers in the soil on which water perches. If adequate drainage is not provided, the water table uphill may gradually rise and interfere with tree roots. This type of damage usually takes a period of time to be recognized and diagnosed.¹

¹ Nelda Matheny and James R. Clark, Trees and Development: A Technical Guide to Preservation of Trees During Land Development, (Champaign, Illinois: International Society of Arboriculture, 1998), pp. 88-89.



Numerous trees are particularly susceptible to root infections, such as *Armillaria* and *Phytophthora*. Both of these fungal diseases can progressively weaken a root system, resulting in dead branches in the canopy of the tree, loss of stability of the entire tree because of decaying roots, and premature death of the tree. Trees form roots in accordance with existing soil composition and water availability. Minor drainage changes in the winter and spring months are significant to the health of the trees.

E. Canopy and Root Pruning

Leaves perform vital functions for trees. Through photosynthesis, they manufacture sugars that feed the tree and are used to create the building blocks of wood. Leaves help to move water and nutrients up from the roots and around the tree through their vascular system and cool the tree down through transpiration.

Leaves moderate temperatures beneath the tree, lessen the drying action of winds, and intercept rainfall, which reduces erosion. On the ground, they moderate soil temperatures, retain moisture, and as they decompose, return their nutrients back to the soil to be recycled and reused by the tree. A healthy canopy of leaves is essential to ensure an adequate food supply for the roots to perform their important functions.

Typically, root systems extend outward past the dripline, two to four times the diameter of the average tree's crown. Main root functions include water and mineral conduction, food and water storage, and anchorage of the tree to the soil. Root systems consist of short-lived, fine-textured, feeder roots and larger, woody, perennial roots. Feeder roots, while averaging only 1/16 inch in diameter, constitute the major portion of the root system's surface area. Feeder roots act like sponges, growing predominantly outward and upward from the large roots near the soil surface where minerals, water, and oxygen are usually abundant. Larger, woody roots and their subordinates tend to annually increase in diameter and grow horizontally. Predominantly located in the top 6 to 24 inches of the soil, these structural and storage roots usually do not grow deeper than three to seven feet. Root growth is generally inhibited by soil compaction and temperature. As the depth increases, soil compaction increases, and the availability of water, minerals, oxygen, and soil temperature all decrease.

Removal of significant amounts of the canopy and/or root system can lead to both immediate and long-term detrimental effects on trees. Effects can be physiological, structural, or both.

PROJECT IMPACTS

Project development will result in the removal of 23 of the 27 private property trees. Nine rights-of-way trees will require removal to accommodate the installation of two driveways along the east side of Claremont Boulevard and the placement of a new left-turn pocket on the south-bound lanes at the intersection of Claremont Boulevard and 9th Street.

The stone pines on the west side of Claremont Blvd. (ST92-ST96) are proposed for removal not due to construction/street improvements, but for replacement with new trees in the renovated parkway that will be consistent with the parkway landscaping palette on the east side of the street. These five stone pines are remnants of the parkway row of about a dozen stone pines that were impacted by the January 21, 2022 windstorm.

The major impact to the 55 rights-of-way trees to be preserved on the east side of Claremont Boulevard is the installation of a new 12-foot wide parkway, followed by a five-foot wide sidewalk on the east side of the street trees. The street trees on the east side of Claremont Boulevard are generally situated in a straight line from north to south, but they are not equidistant from the curb. The west side of the proposed sidewalk closest to the trees is 12 feet from the top of curb adjacent to Claremont Boulevard (see the detail on the following page). Distances



from the subject trees to the sidewalk are between six and nine feet, a distance that does not include grading and excavation for concrete forming. These distances are generally acceptable, but careful adherence to construction precautions will be critical to avoid the loss of structural roots and an excess of absorptive roots. A bioswale, included with the other parkway improvements, is proposed to meander around and between existing trees to remain. The intent is to preserve the trees on the east side of Claremont Boulevard that are not required for removal due to direct grading and construction impacts.

The proposed parking lot off Foothill Boulevard, if and when constructed in a future phase of the Project, may potentially impact the existing trees in the improved parkway section. There are 28 total parkway trees on south side of Foothill Boulevard, between Claremont Boulevard and Monte Vista Avenue, in the newly renovated parkway (part of the 2018-2019 Foothill Boulevard Master Plan Improvement Project). At this stage of the planning process, no specific plans for the northern parking lot are available. For the purposes of this report, we assume that all of the 28 parkway trees along Foothill Boulevard will be preserved.

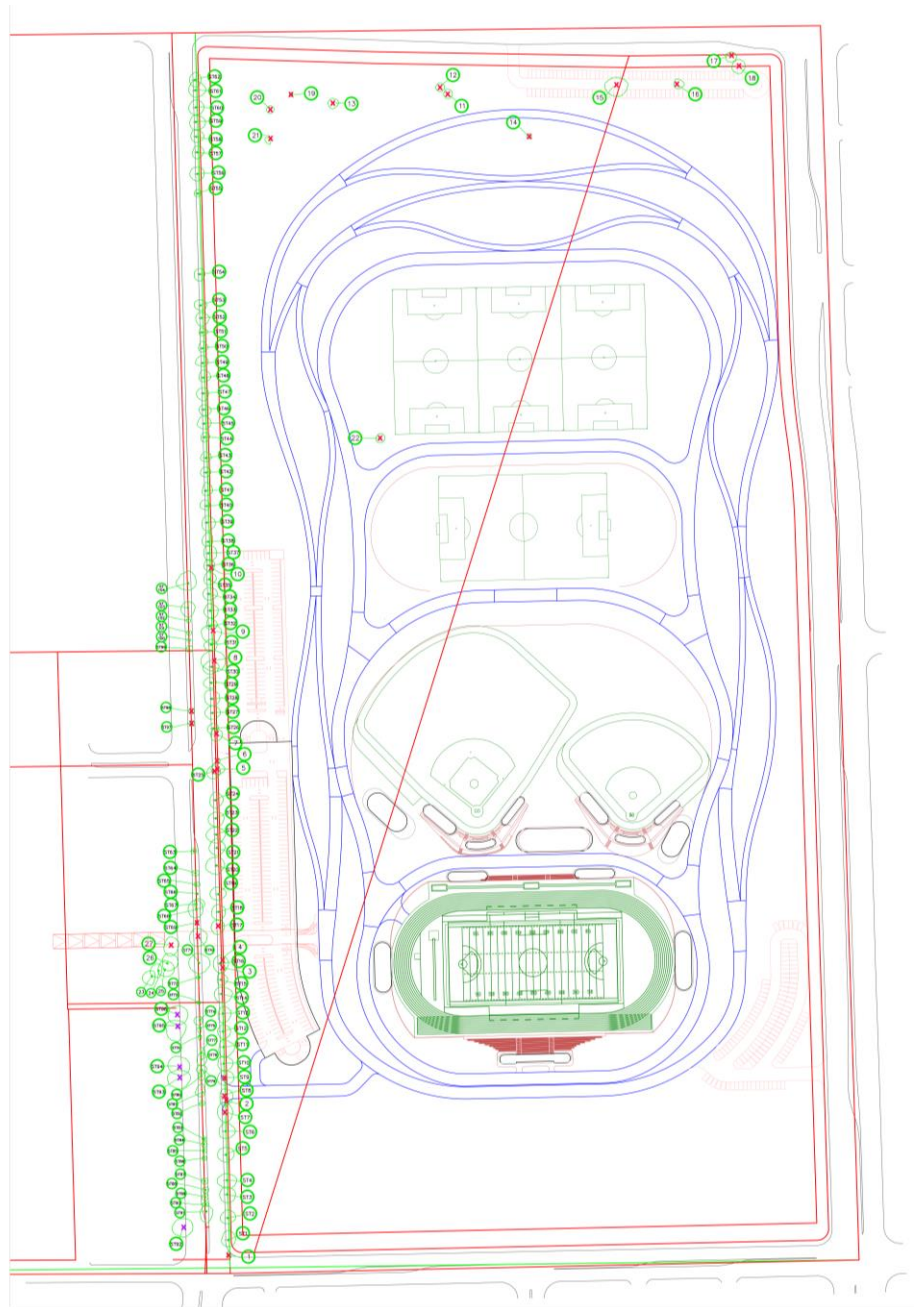
Trees to be preserved or removed in relation to the Project are illustrated on the reduced and full-sized copies of the **Tree Impact Exhibit**. The reduced copy is included as **Exhibit B** on page 16. A full-size, color, digital copy of the Tree Impact Exhibit will be included with the submittal of this report.

Tables 3 - 6 summarize the private property trees to be preserved and removed, and City street trees proposed to be removed and preserved.

In the fall of 2016, the City of Claremont Tree Commission approved the removal of tree nos. ST5, ST6, ST7 (southern driveway), ST25 (9th Street driveway), and ST49, ST50, and ST51 (northern driveway). Once the engineering plans were finalized, we determined that tree nos. ST6, ST7, and ST8 are affected by the southern driveway rather than ST5, ST6, and ST7.

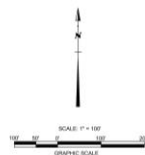


**EXHIBIT B – REDUCED COPY OF THE TREE IMPACT EXHIBIT
(NOT TO SCALE)**



TREE INVENTORY LEGEND	
	PRIVATE PROPERTY TREE
	CITY OF CLAREMONT STREET TREE
	TREE PROPOSED FOR REMOVAL DUE TO PROJECT DEVELOPMENT
	TREE PROPOSED FOR REMOVAL DUE TO REDUCED PARKWAY (NOT PROJECT RELATED)

NOTES:
 - LOCATIONS OF PRIVATE PROPERTY TREES MUST BE APPROVED AND ARE NOT JURISDICTION SUBJECTS
 DATE: 07/31/24
 PREPARED BY: S. MONTAGNER
 REVIEWED BY: C. CARLBERG, R. CARLBERG



Carlberg ASSOCIATES
 Registered Consulting
 ARBORISTS

TREE IMPACT EXHIBIT
 CLAREMONT MCKENNA COLLEGE
 ROBERTS EAST CAMPUS SPORTS BOWL
 PREPARED FOR: CLAREMONT MCKENNA COLLEGE
 741 MONTE AVENUE, CLAREMONT, CA 91711

www.carlberg.com Date: 07/31/24 By: S. Montagner



TABLE 3 – PRIVATE PROPERTY TREES TO BE PRESERVED

Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade
23	California sycamore	Platanus racemosa	16.5	40	12	7	19	20	A-	B
24	California sycamore	Platanus racemosa	12.2	40	15	7	15	18	B	B
25	California sycamore	Platanus racemosa	17.1	45	20	20	15	15	A	B+
26	California sycamore	Platanus racemosa	19.9	35	21	23	16	10	A-	B

TABLE 4 – PRIVATE PROPERTY TREES TO BE REMOVED

Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Reason for Removal
1	Chinese flame	<i>Koelreuteria bipinnata</i>	.5, .5, .5, .5, 1	10	8	6	5	4	A	B	Project grading
2	coast live oak	<i>Quercus agrifolia</i>	.5, .5	7	3	4	5	3	A	B	Project grading
3	carrotwood	<i>Cupaniopsis anacardioides</i>	1, 1, 1, .5	11	1	7	2	0	A-	B+	Project grading



TABLE 4 – PRIVATE PROPERTY TREES TO BE REMOVED

Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Reason for Removal
4	coast live oak	<i>Quercus agrifolia</i>	3, .5	15	5	5	5	3	A	B	Project grading
5	California sycamore	<i>Platanus racemosa</i>	10.2	28	14	16	13	14	B+	B	Project grading
6	Chinese flame	<i>Koelreuteria bipinnata</i>	2.8	12	6	7	6	3	A	B+	Project grading
7	California sycamore	<i>Platanus racemosa</i>	6, 10	26	10	13	17	12	A-	B	Project grading
8	California pepper	<i>Schinus molle</i>	8.8, 11.5, 14.8	28	21	24	24	29	A	B	Project grading
9	California pepper	<i>Schinus molle</i>		30	12	18	28	25	A-	B	Project grading
10	coast live oak	<i>Quercus agrifolia</i>	1.3, .5, .5	8	5	6	8	3	A	B+	Project grading
11	elderberry	<i>Sambucus mexicana</i>	2, 1.5, 1.5	14	11	10	10	9	A	A-	Project grading
12	elderberry	<i>Sambucus mexicana</i>	1, 1, 1	14	9	10	9	9	A	A-	Project grading
13	elderberry	<i>Sambucus mexicana</i>	1, 1.5, 1, 1.5, 1, 1, 2, 2, 2, 2, 2.5	15	10	12	12	10	A	A-	Project grading



TABLE 4 – PRIVATE PROPERTY TREES TO BE REMOVED

Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Reason for Removal
14	elderberry	<i>Sambucus mexicana</i>	1, 1, 1, .5, .5, .5	12	6	5	4	6	A	A	Project grading
15	river red gum	<i>Eucalyptus camaldulensis</i>	9, 11, 13.5, 12, 14.5, 5, 7, 10.7	42	16	25	25	25	A-	B	Project grading
16	river red gum	<i>Eucalyptus camaldulensis</i>	2, 2.5, 3, 1	18	11	16	9	6	B+	B	Project grading
17	African sumac	<i>Searsia lancea</i>	5	16	7	10	15	13	A	B	Project grading
18	African sumac	<i>Searsia lancea</i>	1, 1, 1, 1, 1, 1.5, 1.5, 1.5, 1.5, 1.5, 2, 2, 2, 2.5, 2.5, 3	16	14	14	17	15	A	B+	Project grading
19	elderberry	<i>Sambucus mexicana</i>	1	15	4	4	4	4	A	A-	Project grading
20	elderberry	<i>Sambucus mexicana</i>	4	18	8	8	8	8	A	A-	Project grading
21	elderberry	<i>Sambucus mexicana</i>	3, 2, 2	18	0	0	12	12	A	A-	Project grading
22	elderberry	<i>Sambucus mexicana</i>	5, 7.5, 12	18	5	6	5	6	B	C	Project grading
27	California sycamore	<i>Platanus racemosa</i>	19.3	50	18	17	23	15	A-	B	Arcade grading



TABLE 5 – STREET TREES TO BE PRESERVED

Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade
ST1	valley oak	<i>Quercus lobata</i>	14.2	22	20	15	15	15	B	B
ST2	valley oak	<i>Quercus lobata</i>	12.9	24	17	17	13	16	B	B
ST3	valley oak	<i>Quercus lobata</i>	14	25	16	18	18	16	B	B-
ST4	valley oak	<i>Quercus lobata</i>	13.5	25	14	21	18	21	B	B+
ST5	valley oak	<i>Quercus lobata</i>	10.8	22	16	18	16	18	B	B
ST6	valley oak	<i>Quercus lobata</i>	13.4	26	18	21	16	14	A-	B
ST10	valley oak	<i>Quercus lobata</i>	15.5	25	15	20	16	13	B	B
ST11	valley oak	<i>Quercus lobata</i>	13.9	24	15	24	22	10	B+	B-
ST12	valley oak	<i>Quercus lobata</i>	11.5	26	15	16	16	12	B	B
ST13	valley oak	<i>Quercus lobata</i>	10.8, 11.1	20	15	18	20	10	B	B
ST14	valley oak	<i>Quercus lobata</i>	12.5	25	15	24	19	15	B	B
ST15	valley oak	<i>Quercus lobata</i>	10	28	14	15	12	8	B	B



TABLE 5 – STREET TREES TO BE PRESERVED

Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade
ST16	valley oak	<i>Quercus lobata</i>	11.4	26	18	18	21	15	B	B
ST18	valley oak	<i>Quercus lobata</i>	14.2	24	16	15	19	15	B	B
ST19	valley oak	<i>Quercus lobata</i>	12	25	15	17	13	18	A	B
ST20	valley oak	<i>Quercus lobata</i>	15.4	24	18	17	19	24	A	B
ST21	valley oak	<i>Quercus lobata</i>	12	22	20	18	16	17	A	B
ST22	valley oak	<i>Quercus lobata</i>	14.5	20	16	20	18	22	A	B
ST23	valley oak	<i>Quercus lobata</i>	15.8	22	13	18	18	16	A	B
ST24	valley oak	<i>Quercus lobata</i>	14.3	25	17	17	17	12	A-	B
ST26	valley oak	<i>Quercus lobata</i>	9.3	18	11	11	12	13	B+	B
ST27	valley oak	<i>Quercus lobata</i>	11	20	15	17	14	17	B	B
ST28	valley oak	<i>Quercus lobata</i>	12	22	19	17	15	16	B	B
ST29	valley oak	<i>Quercus lobata</i>	9.5	25	12	11	12	17	A-	B
ST30	valley oak	<i>Quercus lobata</i>	12	28	13	16	16	18	A-	B



TABLE 5 – STREET TREES TO BE PRESERVED

Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade
ST31	valley oak	<i>Quercus lobata</i>	9.3	22	11	13	15	15	B-	B
ST32	valley oak	<i>Quercus lobata</i>	10.8	20	18	15	7	8	B	B
ST33	valley oak	<i>Quercus lobata</i>	11	20	15	18	16	13	B	B
ST34	valley oak	<i>Quercus lobata</i>	12.7	22	13	18	13	13	B	B
ST35	valley oak	<i>Quercus lobata</i>	11.2	25	15	15	12	12	A-	B
ST36	valley oak	<i>Quercus lobata</i>	8.3	18	13	14	12	10	A-	B
ST37	valley oak	<i>Quercus lobata</i>	8.7	18	16	18	16	10	B	B
ST38	valley oak	<i>Quercus lobata</i>	8.9	20	20	10	10	13	B	B
ST39	valley oak	<i>Quercus lobata</i>	10.2	25	15	18	18	11	A	B
ST40	valley oak	<i>Quercus lobata</i>	8.4	16	12	6	9	15	B	B
ST41	valley oak	<i>Quercus lobata</i>	10.3	18	18	14	10	8	A	B
ST42	valley oak	<i>Quercus lobata</i>	8.8	16	12	10	10	12	A	B
ST43	valley oak	<i>Quercus lobata</i>	9	20	13	12	8	12	A	B



TABLE 5 – STREET TREES TO BE PRESERVED

Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade
ST44	valley oak	<i>Quercus lobata</i>	8	17	10	11	10	8	A	B
ST45	valley oak	<i>Quercus lobata</i>	11.8	24	16	15	12	15	A	B
ST46	valley oak	<i>Quercus lobata</i>	12.3	25	10	16	13	10	A	B
ST47	valley oak	<i>Quercus lobata</i>	11	24	12	11	16	15	A	B
ST48	valley oak	<i>Quercus lobata</i>	10.4	18	16	16	9	9	A	B
ST49	valley oak	<i>Quercus lobata</i>	5.2, 8.4	21	16	12	7	16	B	B
ST50	valley oak	<i>Quercus lobata</i>	9.8	24	15	12	7	8	A	B
ST51	valley oak	<i>Quercus lobata</i>	7.6	15	10	13	7	6	B	B
ST52	valley oak	<i>Quercus lobata</i>	9.7	17	12	18	18	12	A	B
ST53	valley oak	<i>Quercus lobata</i>	7.4	16	12	13	11	14	A	B
ST54	valley oak	<i>Quercus lobata</i>	8.6	17	12	11	15	12	A	B
ST55	valley oak	<i>Quercus lobata</i>	4	12	8	7	7	8	A	B
ST56	valley oak	<i>Quercus lobata</i>	10.7	25	15	15	15	17	A	B



TABLE 5 – STREET TREES TO BE PRESERVED

Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade
ST57	valley oak	<i>Quercus lobata</i>	7.6	19	14	15	14	10	B+	B
ST58	valley oak	<i>Quercus lobata</i>	11.6	22	15	17	12	12	A	B
ST59	valley oak	<i>Quercus lobata</i>	11.3	25	14	21	18	13	A	B
ST60	valley oak	<i>Quercus lobata</i>	15.1	26	16	18	16	15	A	B
ST61	valley oak	<i>Quercus lobata</i>	14.8	25	20	23	15	14	A	B
ST62	valley oak	<i>Quercus lobata</i>	11.7	22	16	14	15	12	A	B
ST63	crape myrtle	<i>Lagerstroemia indica</i>	2.2	10	6	6	6	6	A	B
ST64	crape myrtle	<i>Lagerstroemia indica</i>	3.1	10	6	8	6	8	A	B+
ST65	shumard oak	<i>Quercus shumardii</i>	2	12	6	9	4	5	A	B+
ST66	desert willow	<i>Chilopsis linearis</i>	1, 1	5	2	2	2	2	A	A-
ST67	valley oak	<i>Quercus lobata</i>	9.8	17	12	18	10	3	B	B
ST68	valley oak	<i>Quercus lobata</i>	12.5	32	20	14	18	18	B+	B
ST71	Italian stone pine	<i>Pinus pinea</i>	25	50	20	23	23	22	A-	B



TABLE 5 – STREET TREES TO BE PRESERVED

Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade
ST72	golden trumpet tree	<i>Handroanthus chrysotrichus</i>	1.3	10	3	3	5	6	A	A
ST73	eastern redbud	<i>Cercis canadensis</i>	2.2	10	4	4	4	4	A	A
ST74	Willard acacia	<i>Mariosousa heterophylla</i>	2.4	15	8	6	11	13	A-	B
ST75	Willard acacia	<i>Mariosousa heterophylla</i>	1.2	10	0	3	12	5	B	B
ST76	Willard acacia	<i>Mariosousa heterophylla</i>	2	12	2	3	10	4	B	B
ST77	Chinese flame	<i>Koelreuteria bipinnata</i>	2	12	12	9	7	1	A	B
ST78	Chinese flame	<i>Koelreuteria bipinnata</i>	3.7	18	14	12	14	9	A	B
ST79	Chinese flame	<i>Koelreuteria bipinnata</i>	4	18	10	12	10	10	A	B
ST80	Chinese flame	<i>Koelreuteria bipinnata</i>	3.5	16	12	8	10	6	A	B
ST81	red ironbark	<i>Eucalyptus sideroxylon</i>	23	55	18	5	10	15	A-	B
ST82	golden trumpet tree	<i>Handroanthus chrysotrichus</i>	2	12	6	6	6	6	A	B+
ST83	ginkgo	<i>Ginkgo biloba</i>	2	12	5	5	5	5	A	A-
ST84	ginkgo	<i>Ginkgo biloba</i>	3.4	13	6	7	6	5	A	B+



TABLE 5 – STREET TREES TO BE PRESERVED

Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade
ST85	ginkgo	<i>Ginkgo biloba</i>	2.8	12	5	7	5	3	A	B
ST86	ginkgo	<i>Ginkgo biloba</i>	2.2	13	5	6	5	4	A	A-
ST87	crape myrtle	<i>Lagerstroemia indica</i>	2.8	12	7	7	7	7	A	B+
ST88	crape myrtle	<i>Lagerstroemia indica</i>	2.4	11	6	8	7	6	A-	B
ST89	crape myrtle	<i>Lagerstroemia indica</i>	2.6	15	7	7	7	7	A	B+
ST90	crape myrtle	<i>Lagerstroemia indica</i>	2.5	12	5	7	6	7	A	B+
ST91	valley oak	<i>Quercus lobata</i>	11	34	13	14	24	13	B+	B
ST99	desert willow	<i>Chilopsis linearis</i>	2.1, 1.6, 2, 2.4, 2.3	12	7	7	7	7	A	B+
ST100	desert willow	<i>Chilopsis linearis</i>	.9, .4, .6	9	2	4	4	5	A	A-
ST101	desert willow	<i>Chilopsis linearis</i>	2, 1.7, 1.8	10	4	5	6	6	A	A-
ST102	desert willow	<i>Chilopsis linearis</i>	1.8, .6, .7, .7, .7, .5	9	4	5	5	5	A	A-
ST103	red ironbark	<i>Eucalyptus sideroxylon</i>	17.5	24	13	15	20	15	B-	B-
ST104	red ironbark	<i>Eucalyptus sideroxylon</i>	32.9	45	26	17	15	26	A-	B



TABLE 6 – STREET TREES TO BE REMOVED DUE TO PROJECT DEVELOPMENT

Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Reason for Removal
ST7	valley oak	<i>Quercus lobata</i>	12.5	26	20	17	21	16	B	B	Driveway entrance
ST8	valley oak	<i>Quercus lobata</i>	12.8	28	16	18	21	10	B+	B	Driveway entrance
ST9	valley oak	<i>Quercus lobata</i>	15	28	16	20	16	15	A-	B+	Driveway entrance
ST17	valley oak	<i>Quercus lobata</i>	12	25	13	13	18	15	B	B	Arcade grading
ST25	valley oak	<i>Quercus lobata</i>	12.2	25	12	13	17	16	A-	B	Driveway entrance
ST69	desert willow	<i>Chilopsis linearis</i>	1, 1, .5	5	2	4	3	4	A	A-	Arcade grading
ST70	red ironbark	<i>Eucalyptus sideroxylon</i>	28	40	17	21	22	18	B	B-	Arcade grading
ST97	crape myrtle	<i>Lagerstroemia indica</i>	1.9	10	6	6	6	6	A	A-	Turning lane
ST98	crape myrtle	<i>Lagerstroemia indica</i>	1.6	10	6	6	6	6	A	A-	Turning lane



TABLE 7 – STREET TREES TO BE REMOVED DUE TO PARKWAY RENOVATION (NOT PROJECT)

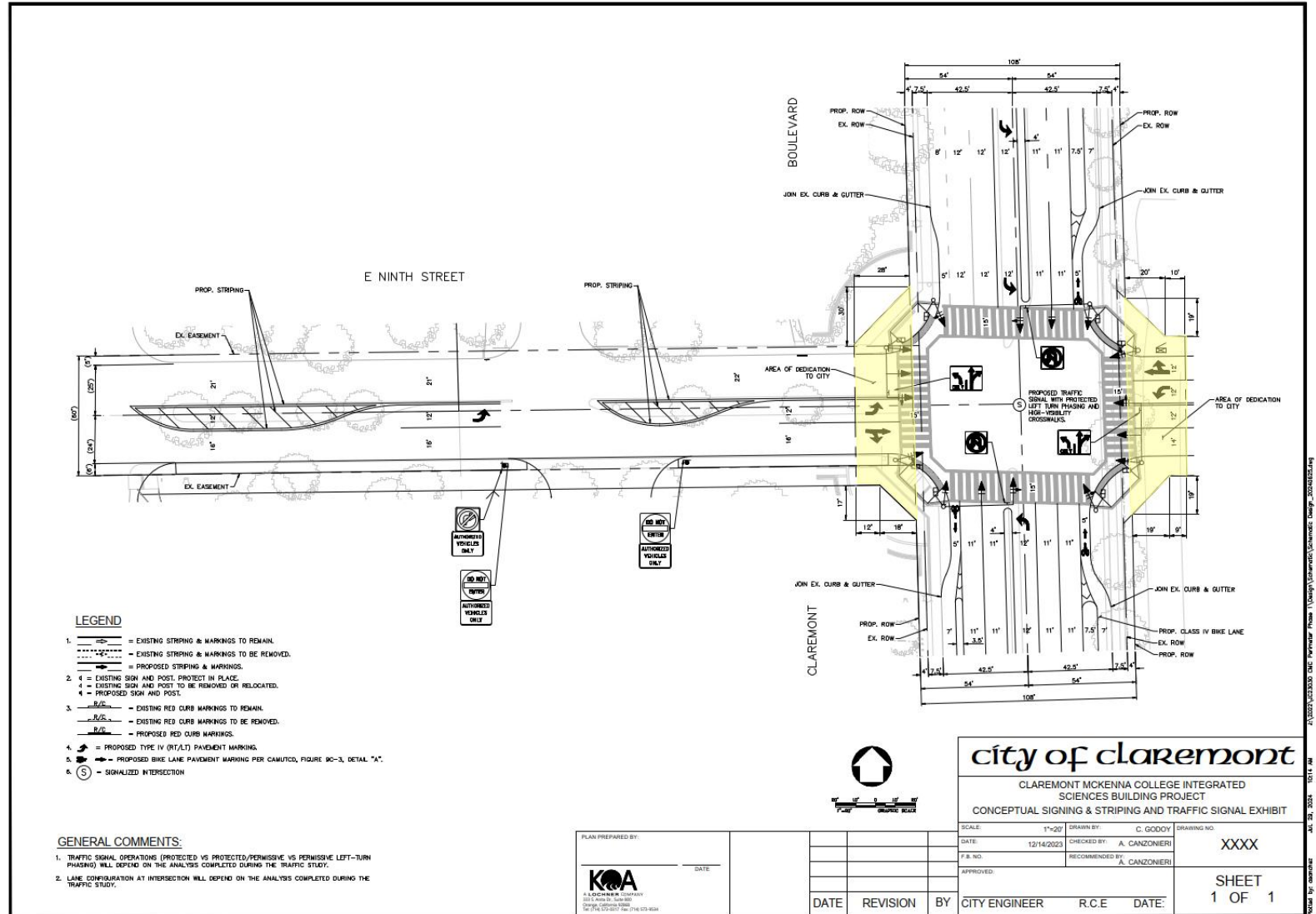
Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Reason for Removal
ST92	Italian stone pine	<i>Pinus pinea</i>	28.8	50	19	19	21	25	B	C	Parkway renovation
ST93	Italian stone pine	<i>Pinus pinea</i>	32.5	65	16	23	25	27	B	B	Parkway renovation
ST94	Italian stone pine	<i>Pinus pinea</i>	27.6	60	22	22	18	25	B	B	Parkway renovation
ST95	Italian stone pine	<i>Pinus pinea</i>	28.5	60	12	18	33	25	A	B	Parkway renovation
ST96	Italian stone pine	<i>Pinus pinea</i>	26.2	60	18	23	22	20	B	C	Parkway renovation

As summarized in the tables:

- 9 street trees will be removed for project development
- 5 street trees will be removed for parkway renovation (not for project construction)
- 90 street trees will be preserved
- 23 private property trees will be removed
- 4 private property trees will be preserved



EXHIBIT C – REDUCED COPY OF THE 9th STREET / CLAREMONT BOULEVARD INTERSECTION DESIGN
(NOT TO SCALE)



CONCLUSION AND RECOMMENDATIONS

Implementation of the Roberts East Campus Sports Bowl Project, including grading and landscaping, will likely result in the following:

Total Onsite trees = 27
Removals = 23
Preserve = 4

Total Street trees = 104
Removals = 14
Preserve = 90

Table 7, Tree Inventory Field Data & Proposed Dispositions, can be found near the back of the report and comprises the complete field data spreadsheet for all trees. Numerical expression of the critical root zones for each tree, distances from the top of curb to the center of each tree trunk, and our opinions on the impacts are also included in Table 7.

In my professional opinion, the following Best Management Practices (BMPs), recommendations, and conditions should be implemented:

The City of Claremont's Tree Policies and Guidelines Manual (adopted February 2007, latest revision, May 2020) excerpted below addresses tree protection strategies for the preservation and protection of City street trees. These strategies supplement the arboricultural industry standards and BMPs beginning on the following page.

CONSTRUCTION MANAGEMENT

Section 12.26.090 of the Claremont Municipal Code (Appendix A) and Section 435 of the Land Use and Development Code prescribe protections for pre-existing or native trees that may be impacted by new development in the City. Following are excerpted clauses from the City's Tree Policies and Guidelines Manual.

Protective Fencing. Temporary, protective fencing shall be installed around any existing tree that is to be preserved on a project site. This fencing must be made of a material that has high visibility, such as fluorescent-colored, and must be posted at regular intervals around the tree. This fencing shall be placed at a minimum distance of fifteen (15') feet from the trunk of the tree or five (5') feet outside the drip line of the tree, whichever distance is greater. No activity shall take place within this fenced in area.

Construction Mulching. If department staff determines that traffic encroachment within the drip line of a preserved tree is unavoidable, then a six (6") to twelve (12") inch layer of temporary mulch shall be placed over the affected area to disperse the weight of traffic and equipment. Additional weight dispersal and mobility may require the placement of large plywood sheets over the mulched area. Construction mulching and plywood must be removed carefully, so as not to damage the tree, as soon as the required activity within the drip line of the tree has been completed.

Excavation Requirements. Whenever possible, services such as water lines and utilities shall be routed around the drip line of trees that are being preserved on a site. If department staff determines that excavation within the



drip line of a preserved tree is unavoidable, then every effort shall be made to tunnel under or through the tree's root system with a minimal amount of pruning, rather than to trench across the tree's roots. All root pruning shall be in accordance with the Maintenance Guidelines established for such activity in this manual.

Grade Changes. A change of grade around a tree, even well outside of a tree's root zone, can have serious impact on the tree due to reduced aeration or poor drainage. Department staff shall recommend that development specifications include requirements for mitigating such impacts to trees that are to be preserved on a project site based upon the type of grade changes that are to be implemented, tree species, drainage patterns, soil conditions and future irrigation and maintenance plans.

Section 12.26.070 of the Claremont Municipal Code sets the conditions for the acquisition of a permit for any work involving City trees. No person shall plant or otherwise disturb any City tree without first obtaining a permit from the Community Services Department. Whenever possible, removal of any of a tree's root system should be avoided. In instances where there exists a need to install subsurface structures or utilities, every effort shall be made to avoid encroachment within the drip line of a tree. If it becomes necessary to excavate within a tree's dripline, every effort shall be made to tunnel under or through the tree's root system with a minimal amount of pruning, rather than to trench across the tree's roots

(End of City's Requirements)

Street Tree Preservation and Removal:

1. Street trees approved for removal will be mitigated by a container size and quantity determined by the City of Claremont's Community Services Department. Any guarantee or bonding will be established by the City.
2. If they deem necessary, the Community Services Department will provide additional tree preservation measures beyond those provided in this report. Carlberg Arborists will be present during tree removal operations to ensure that the proper trees are removed. Carlberg will be available for a pre- and/or post-tree removal site meeting with a Community Services Department arborist.
3. Final parkway design should reflect consideration for the Critical Root Zones of the trees to remain. The sidewalk and drainage swales, irrigation, etc. may need to meander around the existing trees.
4. Carlberg will be present to monitor different phases of construction (e.g., approval of protective fencing, excavation within Tree Protection Zones, etc.).

General Recommendations and Best Management Practices:

1. Any demolition, digging, excavating, or trenching within the protected zone of any tree to remain shall be monitored by the Project Arborist.
2. Exposed roots to remain should be covered with burlap, carpet remnants or other material that may be kept moist until soil can be replaced. No root greater than 2 inches in diameter shall be cut without approval from the Project Arborist.
3. This report shall be part of the set of plans given to the contractors. Contractors should be familiar with the specific instructions and responsibilities pertaining to protected trees. Carlberg will meet with the contractor and his personnel prior to commencement of the project.



4. If canopy pruning is found to be necessary for trees to remain, it should only be performed by a qualified ISA Certified Arborist or ISA Certified Tree Worker. Climbing “gaffs” shall not be used by any tree climber except in an emergency to reach an injured climber or when removing a tree.
5. Protected trees shall not be removed until/unless approval is granted by the Community Services Department.
6. Pruning or Removals should occur outside of the nesting bird season as defined by the California Department of Fish and Wildlife and other jurisdictional agencies. If removals must occur in nesting bird season, biological monitoring should be required.
7. Construction monitoring reports for City street trees will be submitted to the Community Services Department at appropriate intervals. Intervals may vary depending on the level of activity on-site.
8. Equipment, materials, and vehicles shall not be stored, parked, or operated within the protected zone of trees to remain.
9. Equipment with overhead exhaust shall not be placed in such a manner as to scorch overhanging branches or foliage. Smaller equipment shall be used in such areas as deemed necessary by the monitoring arborist.

Please feel welcome to contact me at our Sierra Madre office if you have any immediate questions or concerns.

Respectfully submitted,

Christy Cuba (electronic signature)

Christy Cuba
ASCA Registered Consulting Arborist #502
ISA Certified Arborist, WE-1982A
Qualified Tree Risk Assessor



Conditions represented in this report are limited to the inventory dates and times. Formal risk assessments were not performed for the purposes of this report. Ratings for health, aesthetics, and structure do not constitute a health or structural guarantee beyond that date and time.



CERTIFICATION OF PERFORMANCE

I, Christine Cuba, certify:

- That I have personally inspected the tree(s) and/or the property referred to in this report and have stated my findings accurately. The extent of the evaluation and appraisal is stated in the attached report and the Terms of Assignment.
- That I have no current or prospective interest in the vegetation or the property that is the subject of this report and have no personal interest or bias with respect to the parties involved.
- That the analysis, opinions, and conclusions stated herein are my own.
- That my analysis, opinions, and conclusions were developed, and this report has been prepared according to commonly accepted arboricultural practices.
- That no one provided significant professional assistance to the consultant, except as indicated within the report.
- That my compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client or any other party.

I further certify that I am a Registered Consulting Arborist and member of the American Society of Consulting Arborists, and that I acknowledge, accept, and adhere to the ASCA Standards of Professional Practice. I am an International Society of Arboriculture Certified Arborist and Qualified Tree Risk Assessor and have been involved in the practice of arboriculture and the study of trees for over twenty-five years.

Signed:

Christy Cuba (electronic signature)

Date: July 31, 2024

Christy Cuba
ASCA Registered Consulting Arborist #502
ISA Certified Arborist, WE-1982A
Qualified Tree Risk Assessor



ARBORIST DISCLAIMER STATEMENT

Arborists are tree specialists who use their education, knowledge, training, and experience to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce the risk of living near trees. Clients may choose to accept or disregard the recommendations of the arborist, or to seek additional advice.

Arborists cannot detect every condition that could possibly lead to the structural failure of a tree. Trees are living organisms that fail in ways we do not fully understand. Conditions are often hidden within trees and below ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period of time. Likewise, remedial treatments, like any medicine, cannot be guaranteed.

Treatment, pruning and removal of trees may involve considerations beyond the scope of the arborist's services such as property boundaries, property ownership, site lines, disputes between neighbors, and other issues. Arborists cannot take such considerations into account unless complete and accurate information is disclosed to the arborist. An arborist should then be expected to reasonably rely upon the completeness and accuracy of the information provided.

Trees contribute greatly to our enjoyment and appreciation of life. Nonetheless, they are subject to the laws of gravity and physiological decline. Therefore, neither arborists nor tree owners can be reasonably expected to warrant unfailing predictability or elimination of risk.

Trees can be managed, but they cannot be controlled. To live near trees is to accept some degree of risk. The only way to eliminate all risk associated with trees is to eliminate all trees.



CHRISTY CUBA

CARLBERG ASSOCIATES

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Education

B.A., Environmental Analysis & Design, Cum Laude, University of California, Irvine, 1993
Graduate, International Society of Arboriculture Certification Study Program, April 1998
Graduate, Consulting Academy, American Society of Consulting Arborists, February 2008

Experience

Senior Arborist/Associate, Carlberg Associates, 2011 - Present
Director of Environmental Services & Senior Arborist, Land Design Consultants, Pasadena, 1994 – 2011
Park Specialist/Naturalist, City of Monrovia, 1988-1996

Certificates

Certified Arborist, WE-1982A, International Society of Arboriculture, 1998
Registered Consulting Arborist, #502, American Society of Consulting Arborists, 2011
Qualified Tree Risk Assessor, International Society of Arboriculture, 2013

AREAS OF EXPERTISE

Ms. Cuba is experienced in the following areas of tree management and preservation:

- Tree health & risk assessments
- Inventories & reports for native and non-native trees
- Master planning
- Evaluation of trees for preservation, encroachment, relocation, restoration, and hazards
- Value assessments (appraisals) for native and non-native trees
- Post-fire inventories, assessments, and valuations for native and non-native trees
- Guidelines for tree preservation, planting, pruning and maintenance specifications
- Pest and disease identification
- Tree and landscape resource mapping – GPS, GIS, and AutoCAD
- Planning Commission, City Council, and community meetings representation
- Review of landscape plans for mitigation compliance & fire fuel modification planning
- Preparation of native habitat and woodland management plans
- Performance of long-term mitigation compliance monitoring & reporting
- Expert testimony

PREVIOUS CONSULTING EXPERIENCE

Ms. Cuba has performed hundreds of tree inventories, health evaluations, impact analyses, hazard, and value assessments for counties, cities, sanitation districts, and water districts, as well as private developers, architects, engineers, and homeowners. She has over 30 years of experience in arboriculture and is trained in environmental planning, state and federal regulatory permitting, preparation of CEQA analyses, and habitat mitigation planning and implementation. Representative clients include:

City of Pasadena	San Diego Gas & Electric
City of Monrovia	Quinn, Emanuel, Urquhart and Sullivan (attorneys at law)
City of Santa Clarita	The New Home Company
City of Glendora	City of South Gate
Los Angeles County Fire Department	City of Sierra Madre
California Institute of Technology	Belzberg Architects
Mia Lehrer + Associates	Occidental College
Pulte/Centex Homes	Rose Bowl Stadium
Newhall Land and Farming	Las Encinas Hospital/Aurora Health Services
KOVAC Design Studio	The Claremont Colleges (Pomona College, Claremont University Consortium,
EPT Design	Claremont Graduate University)
Pamela Burton & Company	Gensler Architects
Chandler School	Mesivta of Greater Los Angeles

AFFILIATIONS

Ms. Cuba serves with the following national and regional professional organizations:

- Member, American Society of Consulting Arborists
- Member, International Society of Arboriculture, Western Chapter
- Member, Los Angeles Oak Woodland Habitat Conservation Strategic Alliance
- Past President (2015), Street Tree Seminar, Inc.



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Education B.A., Environmental Studies, University of California, Santa Barbara, 2000

Experience Project Planner & Senior Arborist, Land Design Consultants, Inc.
Pasadena, 1999 – 2014

Certificates Certified Arborist, WE-7011A, International Society of Arboriculture, 2004
Qualified Tree Risk Assessor, International Society of Arboriculture, 2015

AREAS OF EXPERTISE

Mr. McAllaster is experienced in the following areas of tree management and preservation:

- Tree health & risk assessments
- Inventories & reports for native and non-native trees
- Master planning
- Evaluation of trees for preservation, encroachment, relocation, restoration, and hazards
- Construction monitoring and reporting
- Value assessments (appraisals) for native and non-native trees
- Post-fire inventories, assessments, and valuations for native and non-native trees
- Guidelines for tree preservation, planting, pruning and maintenance specifications
- Tree and landscape resource mapping – GPS, GIS, and AutoCAD
- Planning Commission, City Council, and community meetings representation
- Review of landscape plans for mitigation compliance & fire fuel modification planning
- Performance of long-term mitigation compliance monitoring & reporting

PREVIOUS CONSULTING EXPERIENCE

Mr. McAllaster has performed hundreds of tree inventories, health evaluations, impact analyses, hazard, and value assessments for counties, cities, sanitation districts, and water districts, as well as private developers, architects, engineers, and homeowners. He has over 17 years of experience in arboriculture and is trained in environmental planning, state and federal regulatory permitting, preparation of CEQA analyses, and habitat mitigation planning and implementation. Representative clients include:

City of Pasadena	San Diego Gas & Electric
City of Santa Clarita	Corky McMillin Companies
City of Glendora	City of South Gate
Los Angeles County Fire Department	City of Arcadia
Los Angeles County Sanitation Districts	D2 Development
Newhall County Water District	Burrtec, Inc.
Pulte/Centex Homes	The Claremont Colleges
Newhall Land and Farming	The New Home Company
E & S Ring, Inc.	William Carey University
Hollywood Forever Cemetery	Claremont Golf Course
Archdiocese of Los Angeles	Universal Hilton
St. John's Hospital, Santa Monica	Gensler Architects
Kovac Architects	Marmol Radziner, Architects
Tim Barber, Ltd., Architects	NAC Architecture
Ojai Valley Community Hospital	Aurora/Signature Health Services
The Kibo Group	Monte Vista Grove Homes
El Monte Garden Senior Center	Highpointe Communities
IMT Capital, LLC	Claremont University Center

AFFILIATIONS

Mr. McAllaster serves with the following national and regional professional organizations:

- Member, International Society of Arboriculture, Western Chapter
- Member, Street Tree Seminar, Inc.



EXHIBIT C – DEFINITION OF HEALTH AND STRUCTURE GRADES

Health and structure ratings of the trees are based on the archetype tree of the same species through a subjective evaluation of its physiological health, aesthetic quality, and structural integrity.

Overall physiological condition (health) and structural condition were rated A-F:

Health

- A) Outstanding – Exceptional trees of good growth form and vigor for their age class; exhibiting very good to excellent health as evidenced by normal to exceptional shoot growth during current season, good bud development and leaf color, lack of leaf, twig or branch dieback throughout the crown, and the absence of decay, bleeding, or cankers. Common leaf and/or twig pests may be noted at very minor levels.
- B) Above average – Good to very good trees that exhibit minor necrotic or physiological symptoms of stress and/or disease; shoot growth is less than reasonably expected, leaf color is less than optimal in some areas, the crown may be thinning, minor levels of leaf, twig, and branch dieback may be present, and minor areas of decay, bleeding, or cankers may be manifesting. Minor amounts of epicormic growth may be present. Minor amounts of fire damage or mechanical damage may be present. Still healthy, but with moderately diminished vigor and vitality. No significant decline noted.
- C) Average – Average, moderately good trees whose growth habit and physiological or fire-induced symptoms indicate an equal chance to either decline or continue with good health into the near future. Most of these trees exhibit moderate to significant small deadwood in outer crown areas, decreased shoot growth and diminished leaf color and mass. Some stem and branch dieback are usually present and epicormic growth may be moderate to extensive. Cavities, pockets of decay, relatively significant fire damage, bark exfoliation, or cracks may be present. Moderate to significant amounts of insect or disease symptoms may be present; the tree may be shaded or crowded in such a way that it is expected to negatively impact the lifespan of the tree. Tree may be in early decline.
- D) Below Average/Poor - trees whose growth habit and physiological or fire-induced symptoms indicate significant, irreversible decline. Most of these trees exhibit significant dieback of wood in the crown, possibly accompanied by significant epicormic sprouting. Shoot growth and leaf color and mass is either significantly diminished or nonexistent throughout the crown. Cavities, pockets of decay, significant fire damage, bark exfoliation, and/or cracks may be present. Significant amounts of insect or disease symptoms may be present; the tree may be shaded or crowded in such a way that it has negatively impacted the lifespan of the tree. Tree appears to be in irreversible decline.
- F) Dead or in spiral of decline – this tree exhibits very little to no signs of life.

STRUCTURE

- A) Outstanding – Trees with outstanding structure for their species exhibit trunk and branch arrangement and orientation that result in a sturdy form or architecture that resists failure under normal circumstances. The spacing, orientation, and size of the branches relative to the trunk are quintessential for the species and free from defects. No outward sign of decay or pathological disease is present. Some trees exhibit naturally inherent branching defects, like multiple, narrow points of attachment from one point on the trunk, which would preclude them from achieving an “A” grade.



- B) Above average - Trees with good to very good structure for their species. They exhibit trunk and branch arrangement and orientation that result in a relatively sturdy form or architecture that resists failure under normal circumstances, but may have some mechanical damage, over-pruning, or other minor structural defects. The spacing, orientation, and size of the branches relative to the trunk are still in the normal range for the species, but they exhibit a minor degree of defects. Minor, sub-critical levels of decay or pathological disease may be present, but the degree of damage is not yet structurally significant. Trees that exhibit naturally inherent branching defects, like multiple, narrow points of attachment from one point on the trunk, would generally fall in to this category. A small percentage of the canopy may be shaded or crowded, but not in such a way that it is expected to negatively impact the structural integrity or lifespan of the tree.
- C) Average - Trees with moderately good structure for their species, but with obvious defects. They exhibit trunk and branch arrangement and orientation that result in a less than sturdy form or architecture, which reduces their resistance to failure under normal circumstances. Moderate levels of mechanical damage, over-pruning, or other structural defects may be present. The spacing, orientation, and size of some of the branches relative to the trunk are not in the normal range for the species. Moderate to significant levels of decay or pathological disease may be present that increase the likelihood of structural instability. Influences such as an excessive trunk lean, slope erosion, root pruning, or other growth-inhibiting factors may be present. A moderate to significant percentage of the canopy may be shaded or crowded in such a way that it is expected to negatively impact the structural integrity or lifespan of the tree. Risk of full or partial failure in the near future appears to be moderately elevated.
- D) Well Below Average/Poor - Trees poor structure for their species and with obvious defects. They exhibit trunk and branch arrangement and orientation that result in a significantly less than sturdy form or architecture, significantly reducing their resistance to failure under normal circumstances. Significant levels of mechanical damage, over-pruning, or other structural defects may be present. The spacing, orientation, and size of many of the branches relative to the trunk are not in the normal range for the species. Significant levels of decay or pathological disease may be present that increase the likelihood of structural instability. Influences such as an excessive trunk lean, slope erosion, root pruning, or other growth-inhibiting factors may be present. A significant percentage of the canopy may be shaded or crowded in such a way that it is expected to negatively impact the structural integrity or lifespan of the tree. Risk of full or partial failure in the near future appears to be advanced.
- F) Severely Compromised – trees with very poor structure and numerous or severe defects due to growing conditions, historical or recent pruning, mechanical damage, history of limb or trunk failures, advanced decay, disease, or severe fire damage. Risk of full or partial failure in the near future appears to be severe.



EXHIBIT D - GLOSSARY OF ARBORICULTURAL & DENDROLOGICAL TERMS

Abiotic: Non-living agents including environmental, physiological, & other nonbiological factors (i.e., aeration or water deficit, mechanical injury, or gas line leak).

Arboriculture: Management of individual trees or groups of trees primarily for their amenity value.

Basal wound: A cut or puncture at the base of the trunk of a tree, particularly bad in younger (developing) specimens. Often these wounds are caused by mowers and other gardening equipment and can be prevented by protective staking and the creation of dirt (no turf) surrounding areas - adjacent to the trunk.

Bleeding (from wood): Flow of sap, typically from pruning wounds.

Branch collar: The swelling at the base of a branch, to be left intact in any pruning.

Callus / wound wood: Lignified, partially differentiated tissue which develops from the callus associated with wounds.

Cambium / cambial: Meristematic tissue that gives rise to phloem & xylem.

Canker: An area of dead or malformed bark caused by a pathogen.

Canopy: A term used for the crown or spread of a tree's branches to emphasize its size and enclosing character. Parts of the tree above the trunk, including scaffold limbs, lateral branches, twigs, and leaves. The canopy spread is often measured in feet.

Cavity: A void in a tree trunk, branch or root that may or may not be open to the exterior, generally created by decay. Over many years the wound may become entirely grown over (occluded) while the decay progresses within.

Co-dominant stems: Branches and stems that are nearly equal in size and relative importance

Compartmentalization: A form of defense in woody plants, in which barriers resistant to invasion by pathogens or wood decay fungi are laid down while the wood is living (sapwood), and which continue to act passively once the wood is incorporated into heartwood.

Conifer: A botanical definition embracing trees with cones (i.e. seeds not formed within ovaries), mostly with needle-like or scale-like leaves and mostly evergreen. Sometimes conifers are called 'softwoods'.

Critical Root Zone (CRZ): Area of soil around a tree where the minimum amount of roots considered critical to the structural stability or health of the tree are located. CRZ determination is sometimes based on the dripline or a multiple of dbh, but because root growth is often asymmetric due to site conditions, on-site investigation is preferred.

Crotch: Where two branches of a tree intersect. A narrow crotch arise at an acute (narrow) angle, as when both branches are close to the vertical. The union is relatively weak if there is included bark.

Crown: The branches, twigs and foliage of a tree, considered collectively.

Crown thinning, crown reduction and crown raising: Crown thinning removes branches from the crown without reducing the extent of the crown. Crown reduction decreases the extent of the crown without decreasing its density. Crown raising increases the headroom to the base of the canopy by removing lower branches.

Crown cleaning: The removal of dead, dying, damaged or diseased wood from the crown of a tree.

Deadwood: In the growth and development of a tree, branches compete with each other and weaker branches are eventually suppressed and die. The deadwood is then liable to fall (sometimes called 'natural pruning'). Deadwood develops naturally, largely in the inner and lower crown, of all trees that are mature and unmanaged.

Decay: The progressive degradation of woody tissues caused by specialized fungi & bacteria through decomposition of cellulose & lignin. The pathogen typically enters through wounds in the roots (root rots), main stem or branches (butt and stem rots) and can then extend internally, over a timescale of years or decades, longitudinally or horizontally.



Deciduous: Leaves are lost in winter, as opposed to evergreen.

Diameter at breast height (dbh): The diameter of a tree measured at height 4.5 feet above natural grade. Typically used as a representation of tree size.

Dieback: Death of shoots or roots starting at the extremities.

Dripline: The outermost edge of the tree's canopy. When depicted on a map, the dripline will appear as an irregular shape that follows the contour of the tree's branches as seen from overhead.

Epicormic shoots: Shoots arising from the base of a tree, its trunk or main framework branches, from buds dormant more than one season. May be stimulated by pruning (which increases the light reaching the lower part of the tree), or indicative of damage or decline in the upper crown.

Evergreen: Foliated throughout the year (although there is a gradual turnover of leaves).

Flush cut: A pruning cut that removes the branch collar and/or part of the branch ridge, slowing the occlusion of the wound or damaging its compartmentalization.

Framework: Typically, the main branches (sometimes also called scaffold branches), each of which supports a significant portion of the crown. They largely determine the shape of the tree's crown depending on their height of origin, orientation etc. There is no precise distinction between framework branches and other lesser branches.

Gall: Abnormal growth of leaves, buds, stems etc. in reaction to the presence of an intrusive parasite, often an insect or mite.

Girdle/girdling: Damage that kills the bark all the way round the stem; such as caused by wires or ties that were never removed when the tree was young. That which circles & constricts the stem or roots causing death of phloem &/or cambial tissue.

Habit (growth habit): Giving a tree its characteristic form, for example owing to the stoutness and orientation (fastigiated, ascending, spreading, pendulous, weeping etc.) of a tree's branches.

Hanger: Dead branch fallen from the crown but caught by, and resting on, branches lower down, which be liable to fall.

Heart rot: Decay in the center of the tree (heartwood).

Included bark: Areas of bark on adjacent parts of a tree, typically on the inner faces of a narrow fork, which becomes grown over to occupy part of the internal joint. The bark-to-bark contact is weaker than the more usual woody union.

Lateral branch / limb: The next order of branch that rises from the scaffold limbs.

Leader: The topmost vertical shoot of a tree, present if the tree has strong apical dominance, characteristic of young trees and conifers. Trees with a rounded crown have no leader.

Mulch: a material (such as decaying leaves, bark, or compost) spread around or over a plant to enrich or insulate the soil.

Parasite: An organism that exploits another, e.g., for food, to the prejudice of the host. Parasites may kill their hosts, be pathogenic or have little significant effect.

Pathogen: A kind of parasite that causes disease.

Phloem: A transport tissue characterized by sieve tubes and companion cells, found the vascular bundles of higher plants. Functions in the transport of dissolved organic substances by translocation.

Photosynthesis: The chemical process by which chlorophyll-containing plants use light to convert carbon dioxide and water into carbohydrates, releasing oxygen as a by-product.

Pruning: The cutting off or cutting back of shoots or branches from a tree, whether to direct growth (formative pruning), make safe, to remove an obstructing or diseased part, to increase longevity (veteran trees), to maintain productivity (fruit trees) etc.



Root crown /collar / Root flare: The outwardly curving base of a tree where it joins the roots, often distinguishable as individual root buttresses.

Root crown inspection: Extensive examination of the junction of root & stem, including the area immediately below, aimed at determining stability, presence of disease, decay, etc.

Root plate: The area needed by a tree's root system to keep the tree stable; broadly, that part of the root system displaced when a tree is uprooted.

Root zone: The area of ground around the base of a tree that supports root growth; often extends far beyond the dripline of a tree.

Scaffold branch / limb: The first order of limbs or branches that arise from the trunk of a tree.

Soil: A mixture of mineral particles, often of various sizes due to weathering, roots and other living things, soil organic matter and the associated voids (pores) filled with air and/or water.

Soil aeration: The movement of gases in soil, primarily by diffusion through the soil pores. For example, oxygen diffuses from the atmosphere to the vicinity of the plant root while carbon dioxide diffuses in the opposite direction. The rate of diffusion is related to the proportion of the soil volume that contains air

Soil compaction: An increase in bulk density due to the pressure exerted by animals, vehicles, (locally) by root growth etc. Pore space is reduced, which may also restrict soil aeration, water infiltration and drainage.

Soil structure: The aggregation of soil particles into clumps (peds) of various shapes and the associated spaces between them, affecting many properties of soil including its porosity to air and water, and its fertility.

Soil texture: The size of the mineral particles in the soil, classified (from fine to coarse) as clay, silt, sand, gravel or stones, or some mixture of these to give a characteristic particle size distribution. Sandy soils give a light texture, clayey soils give a heavy texture.

Stub: That part of a pruned branch protruding beyond the branch collar. It is not good practice to leave stubs since they impede occlusion and are prone to decay.

Suckers: Shoots arising from the roots of a tree, which can arise surprisingly far from the parent.

Target: A target is the subject of injury or damage within range of a tree hazard

Topping: A kind of pruning in which the branches of a tree are all decapitated to reduce the tree to a specific height. An indiscriminate form of pruning not regarded as good practice, to which some trees, such as most conifers, are intolerant.

Training: To change the shape of a tree by means other than (formative) pruning, typically by tying young branches into a particular position.

Tree Protection Zone (TPZ): Defined area within which certain activities are prohibited or restricted to prevent or minimize potential injury to designated trees, especially during construction or development.

Transpiration: Loss of water vapor from the surface of leaves & other aboveground parts of the plant.



EXHIBIT E – LIST OF ACRONYMS

ANTH – Anthracnose disease

BT – brown trunk – commonly used to measure palm tree trunk heights instead of diameters; it excludes the palm head, or canopy

CANK – canker – an area of dead tissue; can be caused by sunburn or disease

CLPD – common leaf pests and diseases (usually subcritical and non-lethal to tree)

COD – codominant stems or trunks – similar diameter trunks or stems arising from the same point of origin – can be a defect depending on the angle of attachment

Compass directions – N=north, E=east, S=south, W=west

CRZ – Critical Root Zone

DBH – Diameter at breast height (4 ft. 6 in. from grade) – a standard forestry term / protocol used for measuring tree trunk diameter

DSH – Diameter Standard Height – same as DBH but politically correct without the reference to breasts

DN – drippy nut (acorn) disease (common and non-lethal bacterial infection of acorns)

DW – dead wood

EG – epicormic growth – usually stress-induced growth that originates from previously dormant buds located on trunks or branches

GR – girdling root – can cause structural instability

HOB – history of breakage – usually refers to branches, not twiggy growth

HR – heart rot – decay of the heartwood

H2O – water or irrigation

IB – included bark – can cause structurally weak attachments

LCR – live crown ratio – a ratio of canopy foliage to bare trunk – informs structural grade, as low LCR can increase likelihood of failures

Lerp psyllid / Tipu psyllid – sap sucking insects

Lg - large

MBA – multiple branch attachments – can be a structural defect

Mech. Dam or MD – mechanical damage

MPE – multiple pruning events – can lead to reduced structural integrity based on secondary growth characteristics

P/D – pest/disease

PP – poor pruning – usually refers to stub cuts, flush cuts, excessive thinning, topping, etc.

Prune/DPR-QA - prune out dead/infested/diseased portion(s) & consult a licensed Department of Pesticide Regulation Qualified Applicator for potential chemical pest/disease treatments

RRD – root rot disease

SB – sycamore borer – a clear-winged moth that lays eggs on the bark of trees (mostly sycamore and oak species) – larvae burrow and feed in bark layer, usually non-damaging to tree

SS – stump sprouts – epicormic growth that arises from cut trunks – can originate from the remaining trunk tissue or the root crown

T – trunk

TG – Twig girdler – a stem girdling insect (this condition may also be noted under the umbrella of 'CLPD')

Topping cuts – refers to the substandard practice of arbitrarily pruning with no regard to lateral branch points; can include excessive and disfiguring pruning

TG – Tree Protection Zone (see above definition)

WW – wound wood – callus tissue growing over a wound

Xylella = suspected bacterial infection with *Xylella fastidiosa*



EXHIBIT F - TREE PHOTOGRAPHS



**Claremont McKenna College
Roberts East Campus Sports Bowl Project
Tree Photographs**

130 Pages

Tree OS# = Offsite tree, Tree ST# = street tree, median, or right-of-way tree.



- Tree 1
- *Koelreuteria bipinnata*
- Arborist's opinion - Volunteer
- Facing south





- Tree 2
- *Quercus agrifolia*
- Arborist's opinion - Volunteer
- Facing west





- Tree 3
- *Cupaniopsis anacardioides*
- Arborist's opinion - Volunteer
- Facing southwest





- Tree 4
- *Quercus agrifolia*
- Arborist's opinion - Volunteer
- Facing west





- Tree 5
- *Platanus racemosa*
- Arborist's opinion - Planted
- Facing northwest





- Tree 6
- *Koelreuteria bipinnata*
- Arborist's opinion - Volunteer
- Facing northwest





- Tree 7
- *Platanus racemosa*
- Arborist's opinion - Planted
- Facing west





- Tree 8
- *Schinus molle*
- Arborist's opinion - Planted
- Facing north





- Tree 9
- *Schinus molle*
- Arborist's opinion - Planted
- Facing west





- Tree 10
- *Quercus agrifolia*
- Arborist's opinion - Volunteer
- Facing west





- Tree 11
- *Sambucus mexicana*
- Arborist's opinion - Volunteer
- Facing northeast





- Tree 12
- *Sambucus mexicana*
- Arborist's opinion - Volunteer
- Facing northeast





- Tree 13
- *Sambucus mexicana*
- Arborist's opinion - Volunteer
- Facing northwest





- Tree 14
- *Sambucus mexicana*
- Arborist's opinion - Volunteer
- Facing northeast





- Tree 15
- *Eucalyptus camaldulensis*
- Arborist's opinion - Planted
- Facing northwest





- Tree 16
- *Eucalyptus camaldulensis*
- Arborist's opinion - Planted
- Facing southwest





- Tree 17
- *Searsia lancea*
- Arborist's opinion - Volunteer
- Facing east





- Tree 18
- *Searsia lancea*
- Arborist's opinion - Volunteer
- Facing west





- Tree 19
- *Sambucus mexicana*
- Arborist's opinion - Volunteer
- Facing west





- Tree 20
- *Sambucus mexicana*
- Arborist's opinion - Volunteer
- Facing south





- Tree 21
- *Sambucus mexicana*
- Arborist's opinion - Volunteer
- Facing south





- Tree 22
- *Sambucus mexicana*
- Arborist's opinion - Volunteer
- Facing south





- Tree 23
- *Platanus racemosa*
- Arborist's opinion - Planted
- Facing north





- Tree 24
- *Platanus racemosa*
- Arborist's opinion - Planted
- Facing north





- Tree 25
- *Platanus racemosa*
- Arborist's opinion - Planted
- Facing north





- Tree 26
- *Platanus racemosa*
- Arborist's opinion - Planted
- Facing south





- Tree 27
- *Platanus racemosa*
- Arborist's opinion - Planted
- Facing south





- Tree ST1
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing northwest





- Tree ST2
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing north





- Tree ST3
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing north





- Tree ST4
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST5
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST6
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST7
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST8
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST9
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST10
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST11
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST12
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST13
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST14
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST15
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST16
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST17
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST18
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST19
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST20
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST21
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST22
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST23
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST24
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST25
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST26
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST27
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST28
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST29
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST30
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST31
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST32
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST33
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST34
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST35
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST36
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST37
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST38
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST39
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST40
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST41
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST42
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST43
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST44
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST45
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST46
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST47
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST48
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST49
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST50
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST51
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST52
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST53
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST54
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST55
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST56
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST57
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST58
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST59
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST60
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST61
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST62
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing east





- Tree ST63
- *Lagerstroemia indica*
- Arborist's opinion - Planted
- Facing west





- Tree ST64
- *Lagerstroemia indica*
- Arborist's opinion - Planted
- Facing west





- Tree ST65
- *Quercus shumardii*
- Arborist's opinion - Planted
- Facing west





- Tree ST66
- *Chilopsis linearis*
- Arborist's opinion - Planted
- Facing west





- Tree ST67
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing west





- Tree ST68
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing west





- Tree ST69
- *Chilopsis linearis*
- Arborist's opinion - Planted
- Facing west





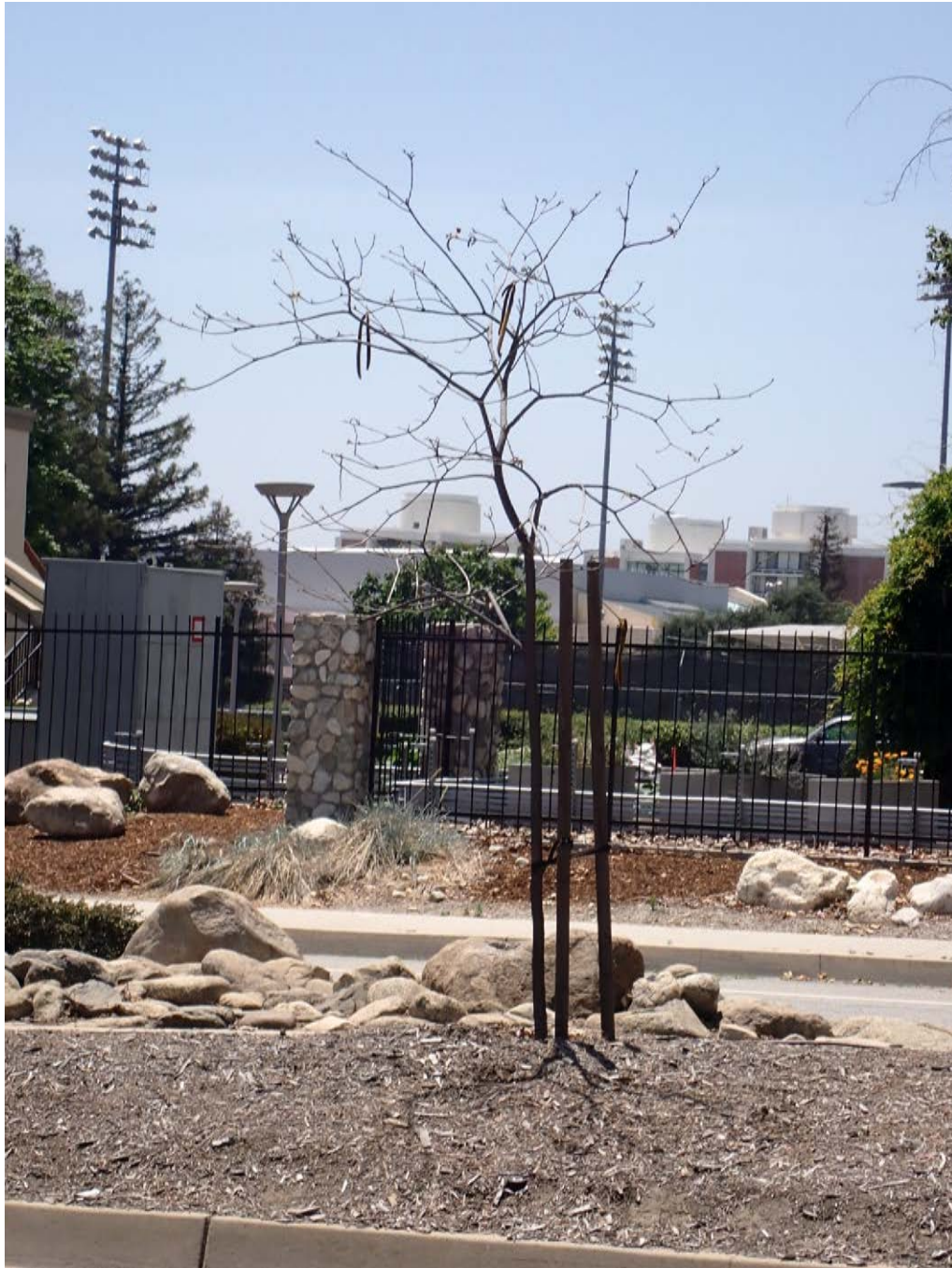
- Tree ST70
- *Eucalyptus sideroxylon*
- Arborist's opinion - Planted
- Facing west





- Tree ST71
- *Pinus pinea*
- Arborist's opinion - Planted
- Facing west





- Tree ST72
- *Handroanthus chrysotrichus*
- Arborist's opinion - Planted
- Facing west





- Tree ST73
- *Cercis canadensis*
- Arborist's opinion - Planted
- Facing west





- Tree ST74
- *Mariosousa heterophylla*
- Arborist's opinion - Planted
- Facing west





- Tree ST75
- *Mariosousa heterophylla*
- Arborist's opinion - Planted
- Facing west





- Tree ST76
- *Mariosousa heterophylla*
- Arborist's opinion - Planted
- Facing west





- Tree ST77
- *Koelreuteria bipinnata*
- Arborist's opinion - Planted
- Facing west





- Tree ST78
- *Koelreuteria bipinnata*
- Arborist's opinion - Planted
- Facing west





- Tree ST79
- *Koelreuteria bipinnata*
- Arborist's opinion - Planted
- Facing west





- Tree ST80
- *Koelreuteria bipinnata*
- Arborist's opinion - Planted
- Facing west





- Tree ST81
- *Eucalyptus sideroxylon*
- Arborist's opinion - Planted
- Facing west





- Tree ST82
- *Handroanthus chrysotrichus*
- Arborist's opinion - Planted
- Facing west





- Tree ST83
- *Ginkgo biloba*
- Arborist's opinion - Planted
- Facing west





- Tree ST84
- *Ginkgo biloba*
- Arborist's opinion - Planted
- Facing west





- Tree ST85
- *Ginkgo biloba*
- Arborist's opinion - Planted
- Facing west





- Tree ST86
- *Ginkgo biloba*
- Arborist's opinion - Planted
- Facing west





- Tree ST87
- *Lagerstroemia indica*
- Arborist's opinion - Planted
- Facing west





- Tree ST88
- *Lagerstroemia indica*
- Arborist's opinion - Planted
- Facing west





- Tree ST89
- *Lagerstroemia indica*
- Arborist's opinion - Planted
- Facing west





- Tree ST90
- *Lagerstroemia indica*
- Arborist's opinion - Planted
- Facing west





- Tree ST91
- *Quercus lobata*
- Arborist's opinion - Planted
- Facing west





- Tree ST92
- *Pinus pinea*
- Arborist's opinion - Planted
- Facing west





- Trees ST93-ST94 (L-R)
- *Pinus pinea*
- Arborist's opinion - Planted
- Facing west





- Trees ST95-ST96 (L-R)
- *Pinus pinea*
- Arborist's opinion - Planted
- Facing west





- Tree ST97
- *Lagerstroemia indica*
- Arborist's opinion - Planted
- Facing south





- Tree ST98
- *Lagerstroemia indica*
- Arborist's opinion - Planted
- Facing northwest





- Tree ST99
- *Chilopsis linearis*
- Arborist's opinion - Planted
- Facing north





- Tree ST100
- *Chilopsis linearis*
- Arborist's opinion - Planted
- Facing north





- Tree ST101
- *Chilopsis linearis*
- Arborist's opinion - Planted
- Facing southeast





- Tree ST102
- *Chilopsis linearis*
- Arborist's opinion - Planted
- Facing northeast





- Tree ST103
- *Eucalyptus sideroxylon*
- Arborist's opinion - Planted
- Facing north





- Tree ST104
- *Eucalyptus sideroxylon*
- Arborist's opinion - Planted
- Facing north



TABLE 7 – TREE FIELD DATA & PROPOSED DISPOSITIONS

THE FOLLOWING SHEETS ARE 11" X 17"



TABLE 7 – TREE FIELD DATA & PROPOSED DISPOSITIONS

Street Tree / ST	Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Disposition (Preserve, Remove)	Reason for Removal	Comments	3X Critical Root Zone (in feet)*	5X Critical Root Zone (in feet)*	ST Tree Trunk (center) Distance to Curb Face (In.)
	1	Chinese flame	<i>Koelreuteria bipinnata</i>	.5, .5, .5, .5, 1	10	8	6	5	4	A	B	Remove	Project grading	SS, at SW corner of property			
	2	coast live oak	<i>Quercus agrifolia</i>	.5, .5	7	3	4	5	3	A	B	Remove	Project grading	growing against and through chain fence on W PL			
	3	carrotwood	<i>Cupaniopsis anacardioides</i>	1, 1, 1, .5	11	1	7	2	0	A-	B+	Remove	Project grading	against chain fence			
	4	coast live oak	<i>Quercus agrifolia</i>	3, .5	15	5	5	5	3	A	B	Remove	Project grading	growing against and through chain fence on W PL			
	5	California sycamore	<i>Platanus racemosa</i>	10.2	28	14	16	13	14	B+	B	Remove	Project grading	base against chain fence, MPE, trunk has slight lean to E			
	6	Chinese flame	<i>Koelreuteria bipinnata</i>	2.8	12	6	7	6	3	A	B+	Remove	Project grading	one trunk removed			
	7	California sycamore	<i>Platanus racemosa</i>	6, 10	26	10	13	17	12	A-	B	Remove	Project grading	base against chain fence, MPE			
	8	California pepper	<i>Schinus molle</i>	8.8, 11.5, 14.8	28	21	24	24	29	A	B	Remove	Project grading	base against chain fence, MPE, EG, pipe adjacent to trunk on N			
	9	California pepper	<i>Schinus molle</i>		30	12	18	28	25	A-	B	Remove	Project grading	chain fence embedded into trunk			
	10	coast live oak	<i>Quercus agrifolia</i>	1.3, .5, .5	8	5	6	8	3	A	B+	Remove	Project grading	against chain fence			
	11	elderberry	<i>Sambucus mexicana</i>	2, 1.5, 1.5	14	11	10	10	9	A	A-	Remove	Project grading	sumac surrounding tree			
	12	elderberry	<i>Sambucus mexicana</i>	1, 1, 1	14	9	10	9	9	A	A-	Remove	Project grading	no access, not tagged			
	13	elderberry	<i>Sambucus mexicana</i>	1, 1.5, 1, 1.5, 1, 1, 2, 2, 2, 2.5	15	10	12	12	10	A	A-	Remove	Project grading	base obstructed			



TABLE 7 – TREE FIELD DATA & PROPOSED DISPOSITIONS

Street Tree / ST	Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Disposition (Preserve, Remove)	Reason for Removal	Comments	3X Critical Root Zone (in feet)*	5X Critical Root Zone (in feet)*	ST Tree Trunk (center) Distance to Curb Face (In.)
	14	elderberry	<i>Sambucus mexicana</i>	1, 1, 1, .5, .5, .5	12	6	5	4	6	A	A	Remove	Project grading	sumac surrounding tree			
	15	river red gum	<i>Eucalyptus camaldulensis</i>	9, 11, 13.5, 12, 14.5, 5, 7, 10.7	42	16	25	25	25	A-	B	Remove	Project grading	some interior dieback, MPE, 9 inch trunk laying horizontal			
	16	river red gum	<i>Eucalyptus camaldulensis</i>	2, 2.5, 3, 1	18	11	16	9	6	B+	B	Remove	Project grading	not tagged, SS from dead parent trunk			
	17	African sumac	<i>Searsia lancea</i>	5	16	7	10	15	13	A	B	Remove	Project grading	against N fence, pruned for clearance to N, in drainage channel			
	18	African sumac	<i>Searsia lancea</i>	1, 1, 1, 1, 1, 1.5, 1.5, 1.5, 1.5, 2, 2, 2, 2.5, 2.5, 3	16	14	14	17	15	A	B+	Remove	Project grading	in drainage channel			
	19	elderberry	<i>Sambucus mexicana</i>	1	15	4	4	4	4	A	A-	Remove	Project grading	surrounded by sumac			
	20	elderberry	<i>Sambucus mexicana</i>	4	18	8	8	8	8	A	A-	Remove	Project grading	surrounded by sumac			
	21	elderberry	<i>Sambucus mexicana</i>	3, 2, 2	18	0	0	12	12	A	A-	Remove	Project grading	surrounded by sumac, leans SW			
	22	elderberry	<i>Sambucus mexicana</i>	add data								Remove	Project grading				
	23	California sycamore	<i>Platanus racemosa</i>	16.5	40	12	7	19	20	A-	B	Preserve		MPE, minor dieback, EG at base, trunk has slight lean to SW, PM			
	24	California sycamore	<i>Platanus racemosa</i>	12.2	40	15	7	15	18	B	B	Preserve		MPE, a bit sparse, EG at base, thinned, PM			
	25	California sycamore	<i>Platanus racemosa</i>	17.1	45	20	20	15	15	A	B+	Preserve		trunk bows slight to SE, MPE, PM			
	26	California sycamore	<i>Platanus racemosa</i>	19.9	35	21	23	16	10	A-	B	Preserve		construction materials being stored around base of tree, MPE, trunk leans E, additional small SS at base			



TABLE 7 – TREE FIELD DATA & PROPOSED DISPOSITIONS

Street Tree / ST	Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Disposition (Preserve, Remove)	Reason for Removal	Comments	3X Critical Root Zone (in feet)*	5X Critical Root Zone (in feet)*	ST Tree Trunk (center) Distance to Curb Face (In.)
	27	California sycamore	<i>Platanus racemosa</i>	19.3	50	18	17	23	15	A-	B	Remove	Project grading	construction materials being stored around base of tree, MPE, trunk bows slight to SE, additional small SS at base, rocks/fill at base of trunk			
ST	1	valley oak	<i>Quercus lobata</i>	14.2	22	20	15	15	15	B	B	Preserve		pruned for clearance, MPE, utility box adjacent to SE, guy wire to the N 6 feet away	3.5	5.9	64
ST	2	valley oak	<i>Quercus lobata</i>	12.9	24	17	17	13	16	B	B	Preserve		pruned for clearance, MPE, power pole to S	3.2	5.4	44
ST	3	valley oak	<i>Quercus lobata</i>	14	25	16	18	18	16	B	B-	Preserve		pruned for clearance, MPE, large cavity on SW, likely hit by car, mechanical damage, excellent callous	3.5	5.8	58
ST	4	valley oak	<i>Quercus lobata</i>	13.5	25	14	21	18	21	B	B+	Preserve		pruned for clearance, MPE	3.4	5.6	48
ST	5	valley oak	<i>Quercus lobata</i>	10.8	22	16	18	16	18	B	B	Preserve		pruned for clearance, MPE, a bit sparse	2.7	4.5	52
ST	6	valley oak	<i>Quercus lobata</i>	13.4	26	18	21	16	14	A-	B	Preserve		pruned for clearance, MPE, slight lean to N, GR on N side	3.4	5.6	58
ST	7	valley oak	<i>Quercus lobata</i>	12.5	26	20	17	21	16	B	B	Remove	Driveway entrance	pruned for clearance, MPE, a bit sparse	3.1	5.2	50
ST	8	valley oak	<i>Quercus lobata</i>	12.8	28	16	18	21	10	B+	B	Remove	Driveway entrance	pruned for clearance, MPE	3.2	5.3	50
ST	9	valley oak	<i>Quercus lobata</i>	15	28	16	20	16	15	A-	B+	Remove	Driveway entrance	pruned for clearance, MPE	3.8	6.3	42
ST	10	valley oak	<i>Quercus lobata</i>	15.5	25	15	20	16	13	B	B	Preserve		pruned for clearance, MPE, a bit sparse	3.9	6.5	44
ST	11	valley oak	<i>Quercus lobata</i>	13.9	24	15	24	22	10	B+	B-	Preserve		pruned for clearance, MPE, GR, mechanical damage on large root adjacent to curb	3.5	5.8	42
ST	12	valley oak	<i>Quercus lobata</i>	11.5	26	15	16	16	12	B	B	Preserve		pruned for clearance, MPE	2.9	4.8	46
ST	13	valley oak	<i>Quercus lobata</i>	10.8, 11.1	20	15	18	20	10	B	B	Preserve		pruned for clearance, MPE, a bit sparse	3.9	6.5	48
ST	14	valley oak	<i>Quercus lobata</i>	12.5	25	15	24	19	15	B	B	Preserve		pruned for clearance, MPE	3.1	5.2	48
ST	15	valley oak	<i>Quercus lobata</i>	10	28	14	15	12	8	B	B	Preserve		pruned for clearance, MPE	2.5	4.2	54
ST	16	valley oak	<i>Quercus lobata</i>	11.4	26	18	18	21	15	B	B	Preserve		pruned for clearance, MPE	2.9	4.8	60
ST	17	valley oak	<i>Quercus lobata</i>	12	25	13	13	18	15	B	B	Remove	Arcade grading	pruned for clearance, MPE	3	5	46



TABLE 7 – TREE FIELD DATA & PROPOSED DISPOSITIONS

Street Tree / ST	Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Disposition (Preserve, Remove)	Reason for Removal	Comments	3X Critical Root Zone (in feet)*	5X Critical Root Zone (in feet)*	ST Tree Trunk (center) Distance to Curb Face (In.)
ST	18	valley oak	<i>Quercus lobata</i>	14.2	24	16	15	19	15	B	B	Preserve		pruned for clearance, MPE, SE canopy is 19	3.5	5.9	40
ST	19	valley oak	<i>Quercus lobata</i>	12	25	15	17	13	18	A	B	Preserve		pruned for clearance, MPE	3	5	56
ST	20	valley oak	<i>Quercus lobata</i>	15.4	24	18	17	19	24	A	B	Preserve		pruned for clearance, MPE	3.9	6.4	36
ST	21	valley oak	<i>Quercus lobata</i>	12	22	20	18	16	17	A	B	Preserve		pruned for clearance, MPE	3	5	48
ST	22	valley oak	<i>Quercus lobata</i>	14.5	20	16	20	18	22	A	B	Preserve		pruned for clearance, MPE	3.6	6	40
ST	23	valley oak	<i>Quercus lobata</i>	15.8	22	13	18	18	16	A	B	Preserve		pruned for clearance, MPE	4	6.6	42
ST	24	valley oak	<i>Quercus lobata</i>	14.3	25	17	17	17	12	A-	B	Preserve		pruned for clearance, MPE	3.6	6	42
ST	25	valley oak	<i>Quercus lobata</i>	12.2	25	12	13	17	16	A-	B	Remove	Driveway entrance	pruned for clearance, MPE	3	5.1	44
ST	26	valley oak	<i>Quercus lobata</i>	9.3	18	11	11	12	13	B+	B	Preserve		pruned for clearance, MPE	2.3	3.9	46
ST	27	valley oak	<i>Quercus lobata</i>	11	20	15	17	14	17	B	B	Preserve		pruned for clearance, MPE, surface roots	2.8	4.6	48
ST	28	valley oak	<i>Quercus lobata</i>	12	22	19	17	15	16	B	B	Preserve		pruned for clearance, MPE	3	5	40
ST	29	valley oak	<i>Quercus lobata</i>	9.5	25	12	11	12	17	A-	B	Preserve		pruned for clearance, MPE	2.4	4	24
ST	30	valley oak	<i>Quercus lobata</i>	12	28	13	16	16	18	A-	B	Preserve		pruned for clearance, MPE	3	5	40
ST	31	valley oak	<i>Quercus lobata</i>	9.3	22	11	13	15	15	B-	B	Preserve		pruned for clearance, MPE, sparse	2.3	3.9	48
ST	32	valley oak	<i>Quercus lobata</i>	10.8	20	18	15	7	8	B	B	Preserve		pruned for clearance, MPE, growing into canopy of adjacent onsite pepper tree	2.7	4.5	36
ST	33	valley oak	<i>Quercus lobata</i>	11	20	15	18	16	13	B	B	Preserve		pruned for clearance, MPE	2.8	4.6	48
ST	34	valley oak	<i>Quercus lobata</i>	12.7	22	13	18	13	13	B	B	Preserve		pruned for clearance, MPE	3.2	5.3	40
ST	35	valley oak	<i>Quercus lobata</i>	11.2	25	15	15	12	12	A-	B	Preserve		pruned for clearance, MPE	2.8	4.7	40

TABLE 7 – TREE FIELD DATA & PROPOSED DISPOSITIONS

Street Tree / ST	Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Disposition (Preserve, Remove)	Reason for Removal	Comments	3X Critical Root Zone (in feet)*	5X Critical Root Zone (in feet)*	ST Tree Trunk (center) Distance to Curb Face (In.)
ST	36	valley oak	<i>Quercus lobata</i>	8.3	18	13	14	12	10	A-	B	Preserve		pruned for clearance, MPE	2.1	3.5	36
ST	37	valley oak	<i>Quercus lobata</i>	8.7	18	16	18	16	10	B	B	Preserve		pruned for clearance, MPE	2.2	3.6	48
ST	38	valley oak	<i>Quercus lobata</i>	8.9	20	20	10	10	13	B	B	Preserve		pruned for clearance, MPE	2.2	3.7	52
ST	39	valley oak	<i>Quercus lobata</i>	10.2	25	15	18	18	11	A	B	Preserve		pruned for clearance, MPE	2.5	4.2	40
ST	40	valley oak	<i>Quercus lobata</i>	8.4	16	12	6	9	15	B	B	Preserve		pruned for clearance, MPE, EG at base	2.1	3.5	34
ST	41	valley oak	<i>Quercus lobata</i>	10.3	18	18	14	10	8	A	B	Preserve		pruned for clearance, MPE	2.6	4.3	34
ST	42	valley oak	<i>Quercus lobata</i>	8.8	16	12	10	10	12	A	B	Preserve		pruned for clearance, MPE	2.2	3.7	54
ST	43	valley oak	<i>Quercus lobata</i>	9	20	13	12	8	12	A	B	Preserve		pruned for clearance, MPE, surface roots	2.2	3.8	40
ST	44	valley oak	<i>Quercus lobata</i>	8	17	10	11	10	8	A	B	Preserve		pruned for clearance, MPE	2	3.3	44
ST	45	valley oak	<i>Quercus lobata</i>	11.8	24	16	15	12	15	A	B	Preserve		pruned for clearance, MPE, bows to SW, surface roots	3	4.9	38
ST	46	valley oak	<i>Quercus lobata</i>	12.3	25	10	16	13	10	A	B	Preserve		pruned for clearance, MPE	3.1	5.1	56
ST	47	valley oak	<i>Quercus lobata</i>	11	24	12	11	16	15	A	B	Preserve		pruned for clearance, MPE	2.8	5.6	48
ST	48	valley oak	<i>Quercus lobata</i>	10.4	18	16	16	9	9	A	B	Preserve		pruned for clearance, MPE	2.6	4.3	40
ST	49	valley oak	<i>Quercus lobata</i>	5.2, 8.4	21	16	12	7	16	B	B	Preserve		pruned for clearance, MPE, moderate dieback	2.5	4.1	44
ST	50	valley oak	<i>Quercus lobata</i>	9.8	24	15	12	7	8	A	B	Preserve		pruned for clearance, MPE, codominant trunks at 6 feet	2.5	4.1	48
ST	51	valley oak	<i>Quercus lobata</i>	7.6	15	10	13	7	6	B	B	Preserve		pruned for clearance, MPE, sparse	1.9	3.2	43
ST	52	valley oak	<i>Quercus lobata</i>	9.7	17	12	18	18	12	A	B	Preserve		pruned for clearance, MPE	2.4	4	36
ST	53	valley oak	<i>Quercus lobata</i>	7.4	16	12	13	11	14	A	B	Preserve		pruned for clearance, MPE	1.9	3.1	43
ST	54	valley oak	<i>Quercus lobata</i>	8.6	17	12	11	15	12	A	B	Preserve		pruned for clearance, MPE	2.2	3.6	36
ST	55	valley oak	<i>Quercus lobata</i>	4	12	8	7	7	8	A	B	Preserve		pruned for clearance, MPE	1	1.7	40
ST	56	valley oak	<i>Quercus lobata</i>	10.7	25	15	15	15	17	A	B	Preserve		pruned for clearance, MPE	2.7	4.5	48
ST	57	valley oak	<i>Quercus lobata</i>	7.6	19	14	15	14	10	B+	B	Preserve		pruned for clearance, MPE	1.9	3.2	58
ST	58	valley oak	<i>Quercus lobata</i>	11.6	22	15	17	12	12	A	B	Preserve		pruned for clearance, MPE	2.9	4.8	62
ST	59	valley oak	<i>Quercus lobata</i>	11.3	25	14	21	18	13	A	B	Preserve		pruned for clearance, MPE	2.8	4.7	55
ST	60	valley oak	<i>Quercus lobata</i>	15.1	26	16	18	16	15	A	B	Preserve		pruned for clearance, MPE	3.8	6.3	68
ST	61	valley oak	<i>Quercus lobata</i>	14.8	25	20	23	15	14	A	B	Preserve		pruned for clearance, MPE	3.7	6.2	58
ST	62	valley oak	<i>Quercus lobata</i>	11.7	22	16	14	15	12	A	B	Preserve		pruned for clearance, MPE	2.9	4.9	58
ST	63	crape myrtle	<i>Lagerstroemia indica</i>	2.2	10	6	6	6	6	A	B	Preserve		staked, stakes should be replaced due to mechanical damage, in center median	0.6	0.9	



TABLE 7 – TREE FIELD DATA & PROPOSED DISPOSITIONS

Street Tree / ST	Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Disposition (Preserve, Remove)	Reason for Removal	Comments	3X Critical Root Zone (in feet)*	5X Critical Root Zone (in feet)*	ST Tree Trunk (center) Distance to Curb Face (In.)
ST	64	crape myrtle	<i>Lagerstroemia indica</i>	3.1	10	6	8	6	8	A	B+	Preserve		in center median, dusty leaves from nearby construction	0.8	1.3	
ST	65	Shumard oak	<i>Quercus shumardii</i>	2	12	6	9	4	5	A	B+	Preserve		in center median, staked	0.5	0.8	
ST	66	desert willow	<i>Chilopsis linearis</i>	1, 1	5	2	2	2	2	A	A-	Preserve		in center median	0.4	0.6	
ST	67	valley oak	<i>Quercus lobata</i>	9.8	17	12	18	10	3	B	B	Preserve		in center median, dusty leaves from nearby construction, shaded out	2.5	4.1	
ST	68	valley oak	<i>Quercus lobata</i>	12.5	32	20	14	18	18	B+	B	Preserve		in center median, dusty leaves from nearby construction	3.1	5.2	
ST	69	desert willow	<i>Chilopsis linearis</i>	1, 1, .5	5	2	4	3	4	A	A-	Remove	Arcade grading	in center median	0.4	0.6	
ST	70	red ironbark	<i>Eucalyptus sideroxylon</i>	28	40	17	21	22	18	B	B-	Remove	Arcade grading	in center median, large tear on SW side	7	11.7	
ST	71	Italian stone pine	<i>Pinus pinea</i>	25	50	20	23	23	22	A-	B	Preserve		in center median, obstructed base	6.3	10.4	
ST	72	golden trumpet tree	<i>Handroanthus chrysotrichus</i>	1.3	10	3	3	5	6	A	A	Preserve		in center median, staked, deciduous currently without leaves	0.3	0.5	
ST	73	eastern redbud	<i>Cercis canadensis</i>	2.2	10	4	4	4	4	A	A	Preserve		in center median, staked, deciduous currently without leaves	0.6	0.9	
ST	74	Willard acacia	<i>Mariosousa heterophylla</i>	2.4	15	8	6	11	13	A-	B	Preserve		in center median, staked	0.6	1	
ST	75	Willard acacia	<i>Mariosousa heterophylla</i>	1.2	10	0	3	12	5	B	B	Preserve		in center median, staked, leans S	0.3	0.5	
ST	76	Willard acacia	<i>Mariosousa heterophylla</i>	2	12	2	3	10	4	B	B	Preserve		in center median, staked, should be restake	0.5	0.8	
ST	77	Chinese flame	<i>Koelreuteria bipinnata</i>	2	12	12	9	7	1	A	B	Preserve		in center median, codominant trunks with included bark	0.5	0.8	
ST	78	Chinese flame	<i>Koelreuteria bipinnata</i>	3.7	18	14	12	14	9	A	B	Preserve		in center median, MBA	0.9	1.5	
ST	79	Chinese flame	<i>Koelreuteria bipinnata</i>	4	18	10	12	10	10	A	B	Preserve		in center median	1	1.7	
ST	80	Chinese flame	<i>Koelreuteria bipinnata</i>	3.5	16	12	8	10	6	A	B	Preserve		in center median	0.9	1.5	
ST	81	red ironbark	<i>Eucalyptus sideroxylon</i>	23	55	18	5	10	15	A-	B	Preserve		in center median, MPE	5.8	9.6	
ST	82	golden trumpet tree	<i>Handroanthus chrysotrichus</i>	2	12	6	6	6	6	A	B+	Preserve		in center median	0.5	0.8	
ST	83	ginkgo	<i>Ginkgo biloba</i>	2	12	5	5	5	5	A	A-	Preserve		in center median	0.5	0.8	
ST	84	ginkgo	<i>Ginkgo biloba</i>	3.4	13	6	7	6	5	A	B+	Preserve		in center median	0.9	1.4	
ST	85	ginkgo	<i>Ginkgo biloba</i>	2.8	12	5	7	5	3	A	B	Preserve		in center median	0.7	1.2	



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Street Tree / ST	Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Disposition (Preserve, Remove)	Reason for Removal	Comments	3X Critical Root Zone (in feet)*	5X Critical Root Zone (in feet)*	ST Tree Trunk (center) Distance to Curb Face (In.)
ST	86	ginkgo	<i>Ginkgo biloba</i>	2.2	13	5	6	5	4	A	A-	Preserve		in center median	0.6	0.9	
ST	87	crape myrtle	<i>Lagerstroemia indica</i>	2.8	12	7	7	7	7	A	B+	Preserve		in center median	0.7	1.2	
ST	88	crape myrtle	<i>Lagerstroemia indica</i>	2.4	11	6	8	7	6	A-	B	Preserve		in center median, mechanical damage on S with good callous	0.6	1	
ST	89	crape myrtle	<i>Lagerstroemia indica</i>	2.6	15	7	7	7	7	A	B+	Preserve		in center median	0.7	1.1	
ST	90	crape myrtle	<i>Lagerstroemia indica</i>	2.5	12	5	7	6	7	A	B+	Preserve		in center median	0.6	1	
ST	91	valley oak	<i>Quercus lobata</i>	11	34	13	14	24	13	B+	B	Preserve		in center median, last median tree closest to Arrow	2.8	4.6	
ST	92	Italian stone pine	<i>Pinus pinea</i>	28.8	50	19	19	21	25	B	C	Remove	Parkway renovation, not construction	MPE, HOB	7.2	12	
ST	93	Italian stone pine	<i>Pinus pinea</i>	32.5	65	16	23	25	27	B	B	Remove	Parkway renovation, not construction	MPE, HOB	8.1	13.5	
ST	94	Italian stone pine	<i>Pinus pinea</i>	27.6	60	22	22	18	25	B	B	Remove	Parkway renovation, not construction	MPE, HOB	6.9	11.5	
ST	95	Italian stone pine	<i>Pinus pinea</i>	28.5	60	12	18	33	25	A	B	Remove	Parkway renovation, not construction	MPE, HOB	7.1	11.9	
ST	96	Italian stone pine	<i>Pinus pinea</i>	26.2	60	18	23	22	20	B	C	Remove	Parkway renovation, not construction	MPE, HOB	6.6	10.9	
ST	97	crape myrtle	<i>Lagerstroemia indica</i>	1.9	10	6	6	6	6	A	A-	Remove	Turning lane	in center median, staked	0.5	0.8	
ST	98	crape myrtle	<i>Lagerstroemia indica</i>	1.6	10	6	6	6	6	A	A-	Remove	Turning lane	in center median, staked	0.4	0.7	
ST	99	desert willow	<i>Chilopsis linearis</i>	2.1, 1.6, 2, 2.4, 2.3	12	7	7	7	7	A	B+	Preserve		in center median, codominant trunks at base, trunks measured at 2.5-3 feet	1.2	1.9	
ST	100	desert willow	<i>Chilopsis linearis</i>	.9, .4, .6	9	2	4	4	5	A	A-	Preserve		in center median	0.3	0.5	
ST	101	desert willow	<i>Chilopsis linearis</i>	2, 1.7, 1.8	10	4	5	6	6	A	A-	Preserve		in center median, ants, diameters, measured low at 2 feet	0.8	1.3	
ST	102	desert willow	<i>Chilopsis linearis</i>	1.8, .6, .7, .7, .7, .5	9	4	5	5	5	A	A-	Preserve		in center median, diameters measured low at 2.5 feet	0.6	1	
ST	103	red ironbark	<i>Eucalyptus sideroxylon</i>	17.5	24	13	15	20	15	B-	B-	Preserve		in center median, MPE, topped, moderate dieback, exudation	4.4	7.3	
ST	104	red ironbark	<i>Eucalyptus sideroxylon</i>	32.9	45	26	17	15	26	A-	B	Preserve		in center median, codominant trunks at 6 feet, tear in canopy,	8.2	13.7	

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Street Tree / ST	Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Disposition (Preserve, Remove)	Reason for Removal	Comments	3X Critical Root Zone (in feet)*	5X Critical Root Zone (in feet)*	ST Tree Trunk (center) Distance to Curb Face (In.)
														diameter measured low at 3 feet, MPE, EG, base obstructed			

* **Critical Root Zone (CRZ):** Area of soil around a tree where the minimum amount of roots considered critical to the structural stability or health of the tree are located. CRZ determination is sometimes based on the dripline or a multiple of dbh, but because root growth is often asymmetric due to site conditions, on-site investigation is preferred.

EXHIBIT F – BIBLIOGRAPHY OF GENERAL REFERENCES USED TO PREPARE THE DOCUMENT

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TREE LOCATION EXHIBIT
&
TREE IMPACT EXHIBIT
(COLOR, 36" X 48", 1":100' SCALE)

These maps are submitted in PDF format with this report.

