



# California Tree and Landscape Consulting, Inc.

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Via Email: [mwoltering@hrgarchitects.com](mailto:mwoltering@hrgarchitects.com)

## REVISED<sup>1</sup> PRE-DEVELOPMENT ARBORIST REPORT & TREE INVENTORY

**RE: Mary Ann’s Bakery, (APNs 003-0112-003, -004, -021, -018, -020 & -017); City of Sacramento Jurisdiction**

### Executive Summary:

Mary Woltering of HRGA, on behalf of the property owner, contacted California Tree and Landscape Consulting, Inc. to inventory and evaluate the trees on the site or within 25’ of development for purposes of providing preliminary tree information for planning for development of the parcel. The property encompasses the majority of the block of 30th St., D St., Alhambra Blvd. and C St. and includes 6 parcels: APNs 003-0112-003, -004, -021, -018, -020 & -017 within the jurisdiction of the City of Sacramento. See Supporting Information Appendix A –Tree Location Map.

Edwin E. Stirtz, ISA Certified Arborist #WE-0510A, was on site March 11, 2024. A total of 45 trees were evaluated. 11 trees are on the property, 2 of which are considered ‘Private-Protected’ by the City of Sacramento Tree Preservation code chapter 12.56. 34 trees are protected City street trees.

**Table 1 - Tree Inventory Summary**

Tree Species	Trees Inventoried	Trees located on the Parcel <sup>2</sup>	Protected by Sacramento City Tree Preservation Code	Proposed for Removal	Trees impacted by the proposed development and requiring special protection measures
American elm, <i>Ulmus americana</i>	2	0	2 (Street Trees)	1	0
American sweetgum, <i>Liquidambar styraciflua</i>	1	0	1 (Street Tree)	0	0
Chinese elm, <i>Ulmus parvifolia</i>	1	1	1 (Private Protected)	1	0
Chinese hackberry, <i>Celtis sinensis</i>	1	1	0	1	0
Chinese pistache, <i>Pistacia chinensis</i>	5	0	5 (Street Trees)	0	0

<sup>1</sup> Revised to update protection status of Tree #8954 and to update development status of Trees #59880, #59890, #59888 & #59879.

<sup>2</sup> CalTLC is not a licensed land surveyor. Tree ownership was not determined. Conclusions within this report are based on existing fences or other landmarks which may not represent the actual property boundary.

Tree Species	Trees Inventoried	Trees located on the Parcel <sup>2</sup>	Protected by Sacramento City Tree Preservation Code	Proposed for Removal	Trees impacted by the proposed development and requiring special protection measures
Coast live oak, <i>Quercus agrifolia</i>	2	1	1 (Street Tree)	1	0
Coast redwood, <i>Sequoia sempervirens</i>	1	0	1 (Street Tree)	1	0
Eastern redbud, <i>Cercis canadensis</i>	1	0	1 (Street Tree)	0	0
Evergreen pear, <i>Pyrus kawakamii</i>	1	0	1 (Street Tree)	0	0
Fruiting pear, <i>Pyrus sp.</i>	1	1	0	0	0
Glossy privet, <i>Ligustrum lucidum</i>	1	1	0	1	0
Italian cypress, <i>Cupressus sempervirens</i>	1	1	0	1	0
London plane tree, <i>Platanus × hispanica</i>	11	0	11 (Street Trees)	0	0
Maidenhair tree, <i>Ginkgo biloba</i>	2	0	2 (Street Trees)	0	0
Monterey pine, <i>Pinus radiata</i>	1	1	0	0	0
Pecan, <i>Carya illinoensis</i>	3	3	1 (Private Protected)	3	0
Red oak, <i>Quercus rubra</i>	1	0	1 (Street Tree)	0	0
Scarlet oak, <i>Quercus coccinea</i>	1	0	1 (Street Tree)	0	0
Tree-of-Heaven, <i>Ailanthus altissima</i>	1	1	0	1	0
Zelkova, <i>Zelkova serrata</i>	7	0	7 (Street Trees)	0	0
<b>Total</b>	<b>45</b>	<b>11</b>	<b>36</b>	<b>11</b>	<b>0</b>

See Appendices for specific information on each tree and preservation requirements and/or restrictions

## METHODS

**Appendix 2** in this report is the detailed inventory and recommendations for the trees. The following terms and Table A – Ratings Description will further explain our findings.

A Level 2 – Basic Visual Assessment was performed in accordance with the International Society of Arboriculture's best management practices. This assessment level is limited to the observation of conditions and defects which are readily visible. Additional limiting factors, such as blackberries, poison oak, and/or debris piled at the base of a tree can inhibit the visual assessment.

**Tree Location:** The GPS location of each tree was collected using the ESRI's ArcGIS collector application on an Apple iPhone or Samsung. The data was then processed in ESRI's ArcMap to produce the tree location map.

**Tree Measurements:** DBH (diameter at breast height) is normally measured at 4'6" (above the average ground height for "Urban Forestry"), but if that varies then the location where it is measured is noted. A steel diameter tape was used to measure the DBH for trees less than 23" in diameter and a steel diameter tape for trees greater than 23". A Stanley laser distance meter was used to measure distances. Canopy radius measurements may also have been estimated due to obstructions.

**TERMS**

Field Tag #	The pre-stamped tree number on the tag which is installed at approximately 6 feet above ground level on the north side of the tree.
City Tag #	The number listed on the City of Sacramento tree inventory in the ARC GIS system found online at: <a href="http://saccity.maps.arcgis.com">saccity.maps.arcgis.com</a>
Species	The species of a tree is listed by our local and correct common name and botanical name by genus (capitalized) and species (lower case). Oaks frequently cross-pollinate and hybridize, but the identification is towards the strongest characteristics.
DBH	Diameter at breast height is normally measured at 4'6" (above the average ground height for "Urban Forestry"), but if that varies then the location where it is measured is noted in the next column "measured at"
DSH	"Diameter at standard height" is the same as DBH except as follows (according to the City of Sacramento requirements): (1) For a tree that branches at or below 4.5 feet, DSH means the diameter at the narrowest point between the grade and the branching point; and (2) For a tree with a common root system that branches at the ground, DSH means the sum of the diameter of the largest trunk plus one-half the cumulative diameter of the remaining trunks at 4.5 feet above natural grade.
Measured at	Height above average ground level where the measurement of DBH was taken
Canopy radius and Protection Zone Area	The farthest extent of the crown composed of leaves and small twigs. Most trees are not evenly balanced. This measurement represents the longest extension from the trunk to the outer canopy. The dripline measurement is from the center point of the tree and is shown on the Tree Location Map as a circle. This measurement further defines the radius of the protection zone to be specified on any development plans unless otherwise indicated in the arborist recommendations, Appendix 2.
Critical Root Zone	The radius of the critical root zone is a circle equal to the trunk diameter inches converted to feet and factored by tree age, condition and health pursuant to the industry standard. Best Management Practices: Managing Trees During Construction, the companion publication to the Approved American National Standard, provides guidance regarding minimum tree root protection zones for long term survival. In instances where a tree is multi-stemmed the protected root zone is equal to the extrapolated diameter (sum of the area of each stem converted to a single stem) factored by tree age, condition and health.
Arborist Rating	Subjective to condition and is based on both the health and structure of the tree. All of the trees were rated for condition, per the recognized national standard as set up by the Council of Tree and Landscape Appraisers and the International Society of Arboriculture (ISA) on a numeric scale of 5 (being the highest) to 0 (the worst condition, dead) as in Chart A. The rating was done in the field at the time of the measuring and inspection.

Arborist Ratings

No problem(s)	Excellent	<b>5</b>
No apparent problem(s)	Good	<b>4</b>
Minor problem(s)	Fair	<b>3</b>
Major problem(s)	Fair to Poor	<b>2</b>
Extreme problem(s)	Poor	<b>1</b>
Dead	Dead	<b>0</b>

Rating #0: This indicates a tree that has no significant sign of life.

Rating #1: The problems are extreme. This rating is assigned to a tree that has structural and/or health problems that no amount of work or effort can change. The issues may or may not be considered a dangerous situation.

Rating #2: The tree has major problems. If the option is taken to preserve the tree, its condition could be improved with correct arboricultural work including, but not limited to: pruning, cabling, bracing, bolting, guying, spraying, mistletoe removal, vertical mulching, fertilization, etc. If the recommended actions are completed correctly, hazard can be reduced and the rating can be elevated to a 3. If no action is taken the tree is considered a liability and should be removed.

Rating #3: The tree is in fair condition. There are some minor structural or health problems that pose no immediate danger. When the recommended actions in an arborist report are completed correctly the defect(s) can be minimized or eliminated.

Rating #4: The tree is in good condition and there are no apparent problems that a Certified Arborist can see from a visual ground inspection. If potential structural or health problems are tended to at this stage future hazard can be reduced and more serious health problems can be averted.

Rating #5: No problems found from a visual ground inspection. Structurally, these trees have properly spaced branches and near perfect characteristics for the species. Highly rated trees are not common in natural or developed landscapes. No tree is ever perfect especially with the unpredictability of nature, but with this highest rating, the condition should be considered excellent.

**Notes:** Provide notable details about each tree which are factors considered in the determination of the tree rating including: (a) condition of root crown and/or roots; (b) condition of trunk; (c) condition of limbs and structure; (d) growth history and twig condition; (e) leaf appearance; and (f) dripline environment. Notes also indicate if the standard tree evaluation procedure was not followed (for example - why dbh may have been measured at a location other than the standard 54”). Additionally, notes will list any evaluation limiting factors such as debris at the base of a tree.

**Development Restrictions/Actions** Recommended actions to increase health and longevity.

**Development Impacts** Projected development impacts are based solely on distance relationships between tree location and grading. Field inspections and findings during the project at the time of grading and trenching can change relative impacts. Closely followed guidelines and requirements can result in a higher chance of survival, while requirements that are overlooked can result in a dramatically lower chance of survival. Impacts are measured as follows:



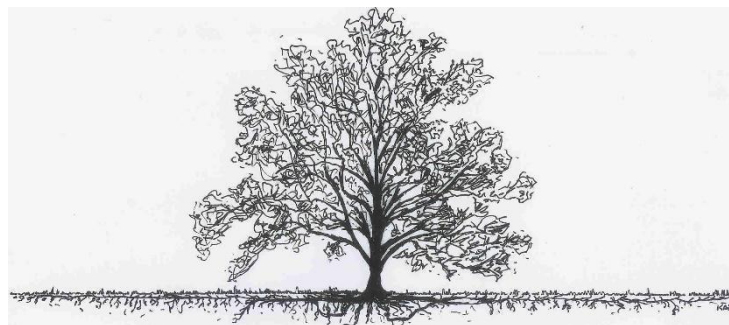
Impact Term:	Long Term Result of Impact:
Negligible	Tree is unlikely to show any symptoms. Chance of survival post development is excellent. Impacts to the Protected Root Zone are less than 5%.
Minor	Tree is likely to show minor symptoms. Chance of survival post development is good. Impacts to the Protected Root Zone are less than 15% and species tolerance is good.
Moderate	Tree is likely to show moderate symptoms. Chance of survival post development is fair. Impacts to the Protected Root Zone are less than 35% and species tolerance is good or moderate.
Severe	Tree is likely to show moderate symptoms annually and a pattern of decline. Chance of long term survival post development is low. Impacts to the Protected Root Zone are up to 50% and species tolerance is moderate to poor.
Critical	Tree is likely to show moderate to severe symptoms annually and a pattern of decline. Chance of long term survival post development is negligible. Impacts to the Protected Root Zone are up to 80%.

**Discussion**

Trees need to be protected from normal construction practices if they are to remain healthy and viable on the site. Our recommendations are based on experience and the County ordinance requirements to enhance tree longevity. This requires their root zones remain intact and viable despite the use of heavy equipment to install foundations, driveways, underground utilities, and landscape irrigation systems. Simply walking and driving on soil can have serious consequences for tree health. Tree Protection measures should be incorporated into the site plans in order to protect the trees.

**Root Structure**

The majority of a tree’s roots are contained in a radius from the main trunk outward approximately two to three times the canopy of the tree. These roots are located in the top 6” to 3’ of soil. It is a common misconception that a tree underground resembles the canopy. The correct root structure of a tree is in the drawing below. All plants’ roots need both water and air for survival. Poor canopy development or canopy decline in mature trees after development is often the result of inadequate root space and/or soil compaction.



The reality of where roots are generally located

Our native oak trees are easily damaged or killed by having the soil within the Protected Root Zone (PRZ) disturbed or compacted. All of the work initially performed around protected trees that will be saved should be done by people rather than by wheeled or track type tractors. Oaks are fragile giants that can take little change in soil grade, compaction, or warm season watering. Don't be fooled into believing that warm season watering has no adverse effects on native oaks. Decline and eventual death can take as long as 5-20 years with poor care and inappropriate watering. Oaks can live hundreds of years if treated properly during construction, as well as later with proper pruning, and the appropriate landscape/irrigation design.

### Arborist Classifications

There are different types of Arborists:

**Tree Removal and/or Pruning Companies:** These companies may be licensed by the State of California to do business, but they do not necessarily know anything about trees;

**Arborists:** Arborist is a broad term. It is intended to mean someone with specialized knowledge of trees but is often used to imply knowledge that is not there.

**ISA Certified Arborist:** An International Society of Arboriculture Certified Arborist is someone who has been trained and tested to have specialized knowledge of trees. You can look up certified arborists at the International Society of Arboriculture website: [isa-arbor.org](http://isa-arbor.org).

**Consulting Arborist:** An American Society of Consulting Arborists Registered Consulting Arborist is someone who has been trained and tested to have specialized knowledge of trees and trained and tested to provide high quality reports and documentation. You can look up registered consulting arborists at the American Society of Consulting Arborists website: [asca-consultants.org](http://asca-consultants.org)

## RECOMMENDATIONS: SUMMARY OF TREE PROTECTION MEASURES FOR SITE PLANNING

The Owner and/or Developer should ensure the project arborist's protection measures are incorporated into the site plans and followed. Tree specific protection measures can be found in Appendix 2 – Tree Information Data.

- **The stumps of the trees to be removed that are within the root zone of the City trees shall be removed using a backhoe or other piece of grading equipment only with supervision by the project arborist.** Roots from the other nearby trees may have intertwined and will be required to be severed and cut clean during the removal process. Pulling on the stumps with equipment will likely result in the lifting of the asphalt in the parking areas on the adjacent parcels.
- Clearance pruning should include removal of all the lower foliage that may interfere with equipment PRIOR to having grading or other equipment on site or in the access path. The Project Arborist should approve the extent of foliage elevation and oversee the pruning to be performed by a contractor who is an ISA Certified Arborist.
- Clearly designate an area on the site outside the drip line of all trees on the adjacent parcels where construction materials may be stored and parking can take place. No materials or parking shall take place within the root zones of trees to be retained.
- Sewer line installation and trenching inside the root protection zone of trees to remain on the site shall be directly supervised by the project arborist. A hydraulic or air spade may be required for digging and placement of pipes underneath the roots, or boring of deeper trenches underneath the roots.
- Follow all of the General Development Guidelines, Appendix 3, for all trees not identified as requiring special preservation measures in the summary and in Appendix 2.

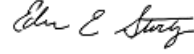
- ALL construction related activities within the critical root zone of any protected tree shall conform/comply with the ANSI Standards for Tree Maintenance & Safety as well as the ISA Best Management practices for the applicable activities.

Report Prepared by:

Project Arborist:



Caroline Nicholas  
Arborist Assistant



Edwin E. Stirtz  
Consulting Arborist  
ISA Certified Arborist #WE-0510A, TRAQ

Appendix 1 – Tree Location Map

Appendix 2 – Tree Data and Tree Specific Recommendations

Appendix 3 – General Development Guidelines

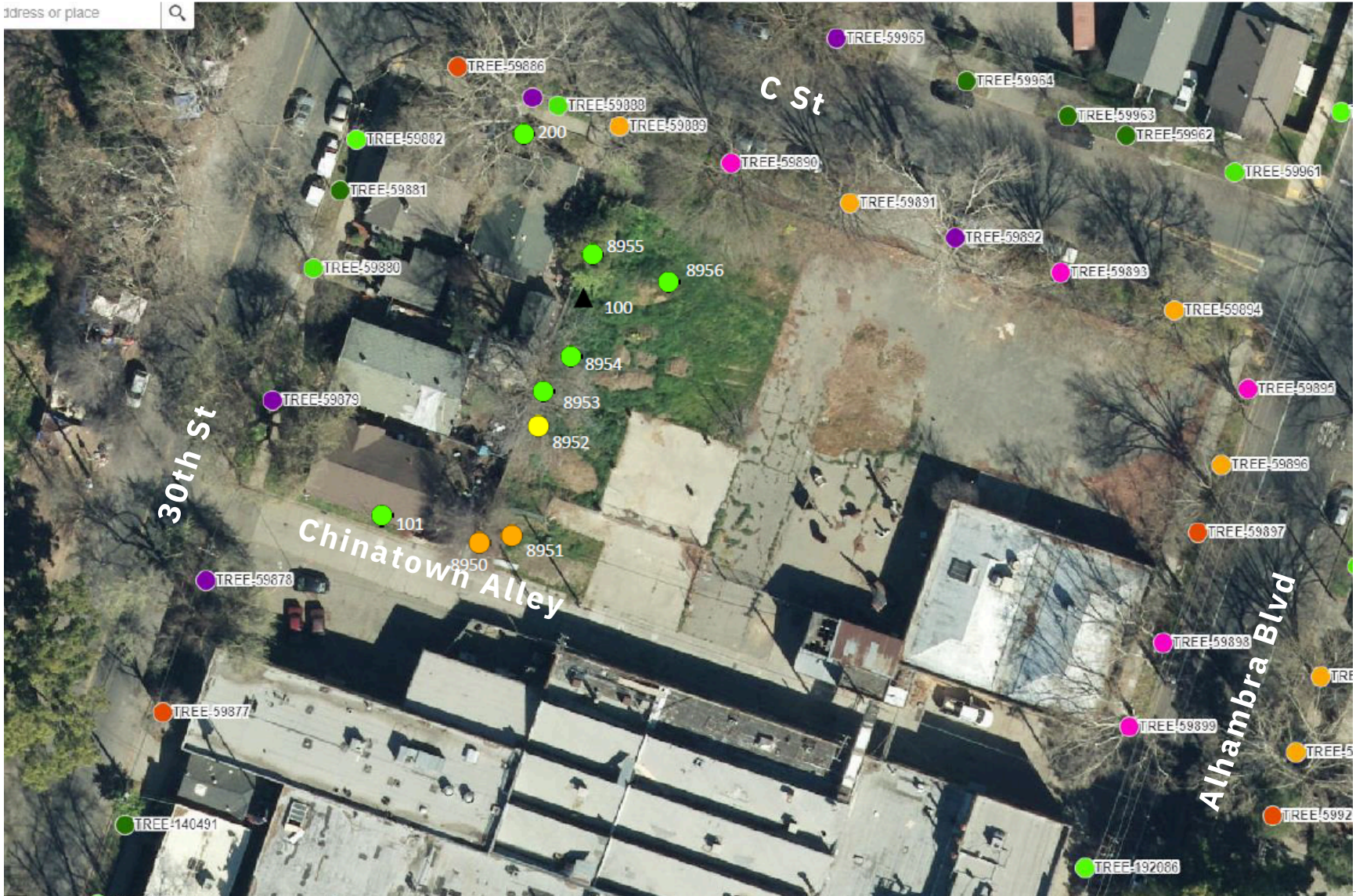
Appendix 4 – Site Photographs

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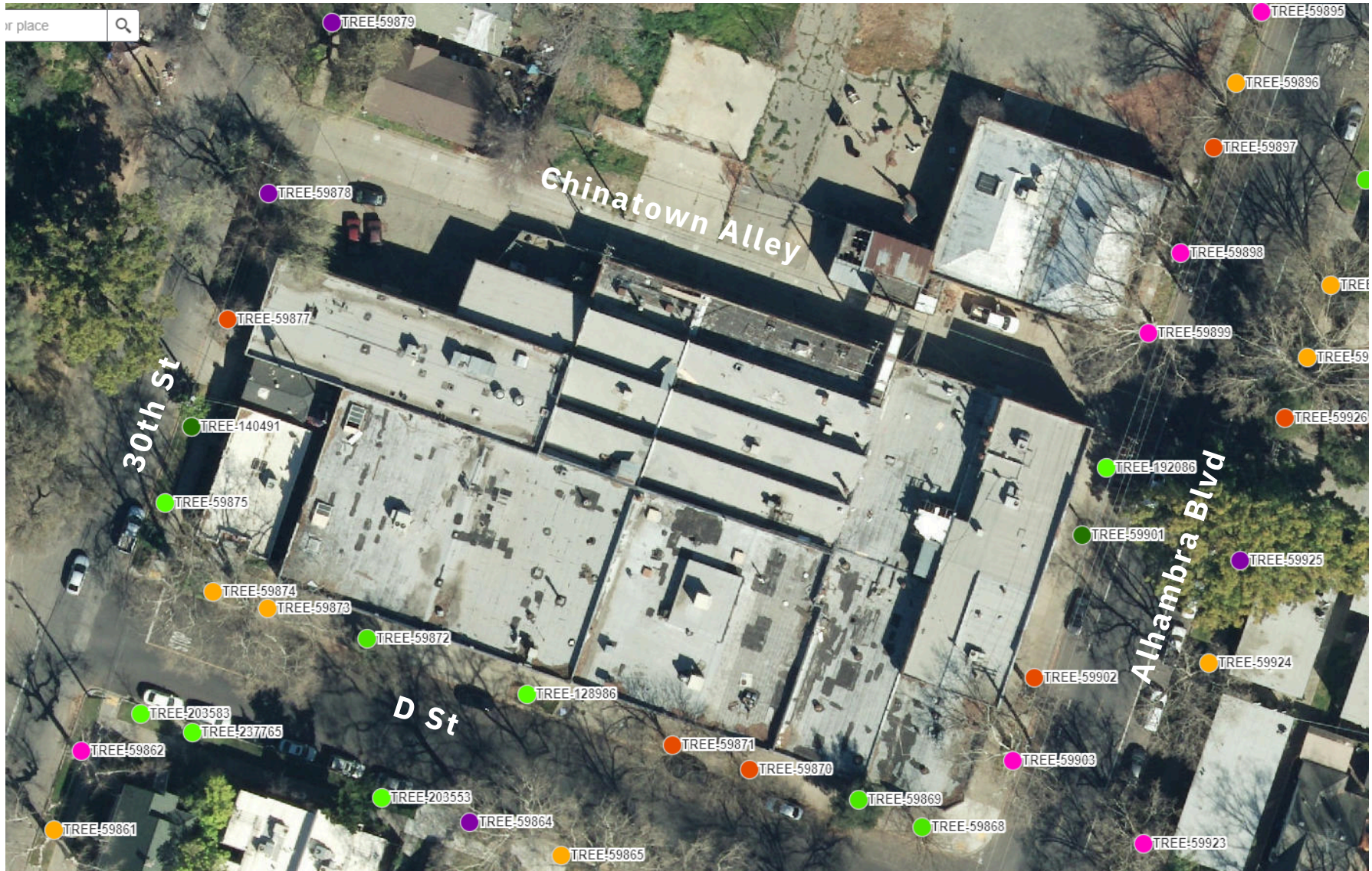


Mary Ann's Bakery - North Portion  
Sacramento, CA  
Prepared for: HRGA  
Map of Property Showing Approximate Tree Locations





Mary Ann's Bakery - South Portion  
Sacramento, CA  
Prepared for: HRGA  
Map of Property Showing Approximate Tree Locations



## APPENDIX 2 – TREE DATA

Tag #	Old Tag #	Protected By Code	Street Tree	Offsite	Species Common Name	Species Botanical Name	DSH (in.)	DSH Multi-Stem (in.)	Measured At (in.)	Canopy Radius (ft.)	Arborist Rating	Notes	Development Status	Pruning Requirement
100		No		No	Fruiting pear	<i>Pyrus sp.</i>	5		54	7	666-Unprotected		Retain	NA
101		No		No	Pecan	<i>Carya illinoensis</i>	6		54	8	3-Minor Problems	Growing between the existing residence and the concrete dry concrete alley surface for Chinatown Alley	Proposed for removal	NA
102		No		No	Monterey pine	<i>Pinus radiata</i>	11		54	13	3-Minor Problems	Leans west	Retain	NA
200		No		No	Italian Cypress	<i>Cupressus sempervirens</i>	14		12	3	3-Minor Problems	Growing in the front yard approximately 3 feet away from the existing house. Height is 35 feet tall and conflicting with the adjacent plane tree.	Proposed for removal	NA
8950		No		No	Chinese hackberry	<i>Celtis sinensis</i>	12.5	5,6,7	36	15	1-Extreme Structure or Health Problems	Growing through chain-link fence, forks, 2 feet above grade grafted, 3 1/2 to 4 feet above grade one sided south	Proposed for removal	NA
8951		Yes		No	Chinese elm	<i>Ulmus parvifolia</i>	34	5,9,20,14	42	25	1-Extreme Structure or Health Problems	Growing through chain-link fence, forks, one to the 3 feet above grade, we attachments hissing wounds, where the stems have begun to engulf the top on the fence the largest stem bends at that	Proposed for removal	NA

Tag #	Old Tag #	Protected By Code	Street Tree	Offsite	Species Common Name	Species Botanical Name	DSH (in.)	DSH Multi-Stem (in.)	Measured At (in.)	Canopy Radius (ft.)	Arborist Rating	Notes	Development Status	Pruning Requirement
												point towards the west towards the house.		
8952		No		No	Tree-of-Heaven	<i>Ailanthus altissima</i>	17.5	11,12	54	17	2-Major Structure or health problems	Lower portion not visible, due to fence screening, forks, somewhere close to grade above average amount of dead branches of Collen wounds from pruning on the lower stems	Proposed for removal	NA
8953		No		No	Pecan	<i>Carya illinoensis</i>	15		54	21	3-Minor Problems	Growing against the chain-link fence to the north, very upright, with limited lateral branching, some dead branches.	Proposed for removal	NA
8954		Yes		No	Pecan	<i>Carya illinoensis</i>	29		54	28	3-Minor Problems	Growing against chain-link fence to the west, above average amount of dead branches	Proposed for removal	NA
8955		No		No	Glossy privet	<i>Ligustrum lucidum</i>	15		12	12	3-Minor Problems	Growing on the west side of the chain-link fence that separates the commercial from the residential we attachments.	Proposed for removal	NA
8956		No		No	Coast live oak	<i>Quercus agrifolia</i>	6		54	10	3-Minor Problems	Leans northeast	Proposed for removal	NA
59868		Yes	Yes	Yes	Chinese pistache	<i>Pistacia chinensis</i>	14		54	16	3-Minor Problems	Above average amount of dead branches.	Retain	Standard reduction "tip" prune.



Tag #	Old Tag #	Protected By Code	Street Tree	Offsite	Species Common Name	Species Botanical Name	DSH (in.)	DSH Multi-Stem (in.)	Measured At (in.)	Canopy Radius (ft.)	Arborist Rating	Notes	Development Status	Pruning Requirement
59869		Yes	Yes	Yes	Coast live oak	<i>Quercus agrifolia</i>	13		54	16	2- Major Structure or health problems	Reaction growth over sidewalk. Removal may be necessary.	Retain	1x3", ~5% of canopy.
59870		Yes	Yes	Yes	Zelkova	<i>Zelkova serrata</i>	15		54	17	3-Minor Problems	Above average amount of dead branches.	Retain	Standard reduction "tip" prune.
59871		Yes	Yes	Yes	Zelkova	<i>Zelkova serrata</i>	19		54	22	3-Minor Problems	Above average amount of dead branches.	Retain	Standard reduction "tip" prune.
59872		Yes	Yes	Yes	Chinese pistache	<i>Pistacia chinensis</i>	14		54	21	2- Major Structure or health problems	Ivy covering root collar/lower trunk, leans south. Remove ivy & reinspect. Diameter estimated due to ivy.	Retain	None, leans away from buildings
59873		Yes	Yes	Yes	London plane tree	<i>Platanus x hispanica</i>	32		54	30	3-Minor Problems	Ivy covering root collar/lower trunk, leans south. Remove ivy & reinspect. Diameter estimated due to ivy.	Retain	Remove branch or reduction prune - 3 to 4x4", <20% of canopy.
59874		Yes	Yes	Yes	London plane tree	<i>Platanus x hispanica</i>	35		54	30	3-Minor Problems	Diameter estimated due to ivy.	Retain	Remove branch or reduction prune - 3 to 4x4", <20% of canopy.
59875		Yes	Yes	Yes	Eastern redbud	<i>Cercis canadensis</i>	5		54	6	3-Minor Problems		Retain	None
59877		Yes	Yes	Yes	American sweetgum	<i>Liquidambar styraciflua</i>	14		54	16	2-Major Structure or health problems	Topped for utility line clearance, above average amount of dead branches.	Retain	None
59878		Yes	Yes	Yes	American elm	<i>Ulmus americana</i>	38		54	28	2-Major Structure or	Topped for utility line clearance, above	Retain	Remove branch or



Tag #	Old Tag #	Protected By Code	Street Tree	Offsite	Species Common Name	Species Botanical Name	DSH (in.)	DSH Multi-Stem (in.)	Measured At (in.)	Canopy Radius (ft.)	Arborist Rating	Notes	Development Status	Pruning Requirement
											health problems	average amount of dead branches.		reduction prune - 4x10" to 14", ~35% of canopy.
59879		Yes	Yes	Yes	American elm	<i>Ulmus americana</i>	38		54	31	3-Minor Problems	Topped for utility line clearance, above average amount of dead branches.	Proposed for removal	NA
59880		Yes	Yes	Yes	Red oak	<i>Quercus rubra</i>	14		54	17	2-Major Structure or health problems	Topped for utility line clearance, above average amount of dead branches.	Retain	Minor reduction prune east side, minor encroachment for driveway R&R
59881		Yes	Yes	Yes	Maidenhair tree	<i>Ginkgo biloba</i>	6		54	6	3-Minor Problems		Retain	None
59882		Yes	Yes	Yes	Maidenhair tree	<i>Ginkgo biloba</i>	5		54	6	3-Minor Problems		Retain	None
59886		Yes	Yes	Yes	London plane tree	<i>Platanus × hispanica</i>	18		54	21	2-Major Structure or health problems	Trunk wound south side 6' above grade with minor to moderate decay. One sided west.	Retain	Remove branch or reduction prune - 1x6", ~5% of canopy.
59887		Yes	Yes	Yes	London plane tree	<i>Platanus × hispanica</i>	42		54	35	3-Minor Problems	Root collar lower trunk covered in ivy	Retain	Remove branch or reduction prune - 1x28", 1x18", 1x12". ~35% to 45% of canopy.
59888		Yes	Yes	Yes	Coast redwood	<i>Sequoia sempervirens</i>	9		54	12	2-Major Structure or health problems	Stump sprout from within the stump.	Proposed for removal	NA

Tag #	Old Tag #	Protected By Code	Street Tree	Offsite	Species Common Name	Species Botanical Name	DSH (in.)	DSH Multi-Stem (in.)	Measured At (in.)	Canopy Radius (ft.)	Arborist Rating	Notes	Development Status	Pruning Requirement
59889		Yes	Yes	Yes	London plane tree	<i>Platanus × hispanica</i>	34		54	29	3-Minor Problems	One sided east. Root collar/lower trunk covered in ivy. Remove ivy & reinspect.	Retain	Remove branch or reduction prune - 1x14", 1x6". ~15% to 20% of canopy.
59890		Yes	Yes	Yes	Chinese pistache	<i>Pistacia chinensis</i>	22		54	25	3-Minor Problems	Girdling root over root south side.	Retain	Minor reduction prune south side
59891		Yes	Yes	Yes	Zelkova	<i>Zelkova serrata</i>	31		54	28	3-Minor Problems	Codominant with inclusion, 13" stem east side with decay cavity. Remove 13" stem.	Retain	Remove branch or reduction prune - 1x12", 2x9", ~20% of canopy.
59892		Yes	Yes	Yes	London plane tree	<i>Platanus × hispanica</i>	40		54	38	3-Minor Problems	Above average amount of dead branches.	Retain	Remove branch or reduction prune - 1x12" ~15% of canopy.
59893		Yes	Yes	Yes	Zelkova	<i>Zelkova serrata</i>	24		54	25	3-Minor Problems	Above average amount of dead branches.	Retain	Remove branch or reduction prune - 6x4" to 6". ~20% of canopy.
59894		Yes	Yes	Yes	Zelkova	<i>Zelkova serrata</i>	35		54	29	3-Minor Problems	Above average amount of dead branches.	Retain	Remove branch or reduction prune - 1x12", 3x4". ~20% of canopy.
59895		Yes	Yes	Yes	Zelkova	<i>Zelkova serrata</i>	21		36	20	2-Major Structure or	Weak attachments, above average	Retain	Remove branch or

Tag #	Old Tag #	Protected By Code	Street Tree	Offsite	Species Common Name	Species Botanical Name	DSH (in.)	DSH Multi-Stem (in.)	Measured At (in.)	Canopy Radius (ft.)	Arborist Rating	Notes	Development Status	Pruning Requirement
											health problems	amount of dead branches.		reduction prune -6x4" to 5", ". ~20% of canopy.
59896		Yes	Yes	Yes	Zelkova	<i>Zelkova serrata</i>	30		36	27	2-Major Structure or health problems	Topped for utility line clearance, above average amount of dead branches. Root damage evident.	Retain	Remove branch or reduction prune - 1x12", 1x9". ~15% of canopy.
59897		Yes	Yes	Yes	London plane tree	<i>Platanus × hispanica</i>	18			16	2- Major Structure or health problems	Topped for utility line clearance, above average amount of dead branches.	Retain	Remove branch or reduction prune - 1x8", ~10% of canopy.
59898		Yes	Yes	Yes	London plane tree	<i>Platanus × hispanica</i>	25		54	28	2- Major Structure or health problems	Topped for utility line clearance, above average amount of dead branches.	Retain	Remove branch or reduction prune - 1x16", 1x20", 1x6". ~35% of canopy.
59899		Yes	Yes	Yes	London plane tree	<i>Platanus × hispanica</i>					2- Major Structure or health problems	Topped for utility line clearance, above average amount of dead branches.	Retain	Remove branch or reduction prune - 1x16", 1x15", 1x14", 1x11", 1x8", NON Standard. ~40% of canopy.
59901		Yes	Yes	Yes	Chinese pistache	<i>Pistacia chinensis</i>	7			8	3-Minor Problems	Ivy covering root collar/lower trunk.	Retain	None
59902		Yes	Yes	Yes	London plane tree	<i>Platanus × hispanica</i>	14		54	10	2- Major Structure or	Topped for utility line clearance, above	Retain	Remove branch or

Tag #	Old Tag #	Protected By Code	Street Tree	Offsite	Species Common Name	Species Botanical Name	DSH (in.)	DSH Multi-Stem (in.)	Measured At (in.)	Canopy Radius (ft.)	Arborist Rating	Notes	Development Status	Pruning Requirement
											health problems	average amount of dead branches.		reduction prune - 2x8", 2x6"". ~25% of canopy.
59903		Yes	Yes	Yes	London plane tree	<i>Platanus × hispanica</i>	20		54	16	2- Major Structure or health problems	Topped for utility line clearance, above average amount of dead branches.	Retain	Remove branch or reduction prune - 2x8", 2x6"". ~25% of canopy.
	D St													
128986		Yes	Yes	Yes	Scarlet oak	<i>Quercus coccinea</i>	4		54	6	3-Minor Problems		Retain	None
	30th St													
140491		Yes	Yes	Yes	Evergreen pear	<i>Pyrus kawakamii</i>	6		12		2-Major Structure or health problems	Forks at grade, weak attachments	Retain	None
	Alhambra Blvd													
192086		Yes	Yes	Yes	Chinese pistache	<i>Pistacia chinensis</i>	5		54	7	3-Minor Problems		Retain	None

## APPENDIX 3 – GENERAL PRACTICES FOR TREE PROTECTION

### Definitions

**Root zone:** The roots of trees grow fairly close to the surface of the soil, and spread out in a radial direction from the trunk of tree. A general rule of thumb is that they spread 2 to 3 times the radius of the canopy, or 1 to 1 ½ times the height of the tree. It is generally accepted that disturbance to root zones should be kept as far as possible from the trunk of a tree.

**Inner Bark:** The bark on large valley oaks and coast live oaks is quite thick, usually 1" to 2". If the bark is knocked off a tree, the inner bark, or cambial region, is exposed or removed. The cambial zone is the area of tissue responsible for adding new layers to the tree each year, so by removing it, the tree can only grow new tissue from the edges of the wound. In addition, the wood of the tree is exposed to decay fungi, so the trunk present at the time of the injury becomes susceptible to decay. Tree protection measures require that no activities occur which can knock the bark off the trees.

### Methods Used in Tree Protection:

No matter how detailed Tree Protection Measures are in the initial Arborist Report, they will not accomplish their stated purpose unless they are applied to individual trees and a Project Arborist is hired to oversee the construction. The Project Arborist should have the ability to enforce the Protection Measures. The Project Arborist should be hired as soon as possible to assist in design and to become familiar with the project. He must be able to read and understand the project drawings and interpret the specifications. He should also have the ability to cooperate with the contractor, incorporating the contractor's ideas on how to accomplish the protection measures, wherever possible. It is advisable for the Project Arborist to be present at the Pre-Bid tour of the site, to answer questions the contractors may have about Tree Protection Measures. This also lets the contractors know how important tree preservation is to the developer.

**Root Protection Zone (RPZ):** Since in most construction projects it is not possible to protect the entire root zone of a tree, a Root Protection Zone is established for each tree to be preserved. The minimum Root Protection Zone is the area underneath the tree's canopy (out to the dripline, or edge of the canopy), plus 10'. The Project Arborist must approve work within the RPZ.

**Fence:** Fence around the Root Protection Zone and restrict activity therein to prevent soil compaction by vehicles, foot traffic or material storage. The fenced area shall be off limits to all construction equipment, unless there is express written notification provided by the Project Arborist, and impacts are discussed and mitigated prior to work commencing.

No storage or cleaning of equipment or materials, or parking of any equipment can take place within the fenced off area, known as the RPZ.

The fence should be highly visible, and stout enough to keep vehicles and other equipment out. I recommend the fence be made of orange plastic protective fencing, kept in place by t-posts set no farther apart than 6'.

In areas of intense impact, a 6' chain link fence is preferred.

In areas with many trees, the RPZ can be fenced as one unit, rather than separately for each tree.

Where tree trunks are within 3' of the construction area, place 2" by 4" boards vertically against the tree trunks, even if fenced off. Hold the boards in place with wire. Do not nail them directly to the tree. The purpose of the boards is to protect the trunk, should any equipment stray into the RPZ.

**Elevate Foliage:** Where indicated, remove lower foliage from a tree to prevent limb breakage by equipment. Low foliage can usually be removed without harming the tree, unless more than 25% of the foliage is removed. Branches

need to be removed at the anatomically correct location in order to prevent decay organisms from entering the trunk. For this reason, a contractor who is an ISA Certified Arborist should perform all pruning on protected trees.<sup>3</sup>

Expose and Cut Roots: Breaking roots with a backhoe, or crushing them with a grader, causes significant injury, which may subject the roots to decay. Ripping roots may cause them to splinter toward the base of the tree, creating much more injury than a clean cut would make. At any location where the root zone of a tree will be impacted by a trench or a cut (including a cut required for a fill and compaction), the roots shall be exposed with either a backhoe digging radially to the trunk, by hand digging, or by a hydraulic air spade, and then cut cleanly with a sharp instrument, such as chainsaw with a carbide chain. Once the roots are severed, the area behind the cut should be moistened and mulched. A root protection fence should also be erected to protect the remaining roots, if it is not already in place. Further grading or backhoe work required outside the established RPZ can then continue without further protection measures.

Protect Roots in Deeper Trenches: The location of utilities on the site can be very detrimental to trees. Design the project to use as few trenches as possible, and to keep them away from the major trees to be protected. Wherever possible, in areas where trenches will be very deep, consider boring under the roots of the trees, rather than digging the trench through the roots. This technique can be quite useful for utility trenches and pipelines.

Protect Roots in Small Trenches: After all construction is complete on a site, it is not unusual for the landscape contractor to come in and sever a large number of "preserved" roots during the installation of irrigation systems. The Project Arborist must therefore approve the landscape and irrigation plans. The irrigation system needs to be designed so the main lines are located outside the root zone of major trees, and the secondary lines are either laid on the surface (drip systems), or carefully dug with a hydraulic or air spade, and the flexible pipe fed underneath the major roots.

Design the irrigation system so it can slowly apply water (no more than ¼" to ½" of water per hour) over a longer period of time. This allows deep soaking of root zones. The system also needs to accommodate infrequent irrigation settings of once or twice a month, rather than several times a week.

Monitoring Tree Health During and After Construction: The Project Arborist should visit the site at least twice a month during construction to be certain the tree protection measures are being followed, to monitor the health of impacted trees, and make recommendations as to irrigation or other needs. After construction is complete, the arborist should monitor the site monthly for one year and make recommendations for care where needed. If longer term monitoring is required, the arborist should report this to the developer and the planning agency overseeing the project.

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<sup>3</sup> International Society of Arboriculture (ISA), maintains a program of Certifying individuals. Each Certified Arborist has a number and must maintain continuing education credits to remain Certified.



**APPENDIX 4 – SITE PHOTOGRAPHS** by Edwin E. Stirtz, March 11, 2024

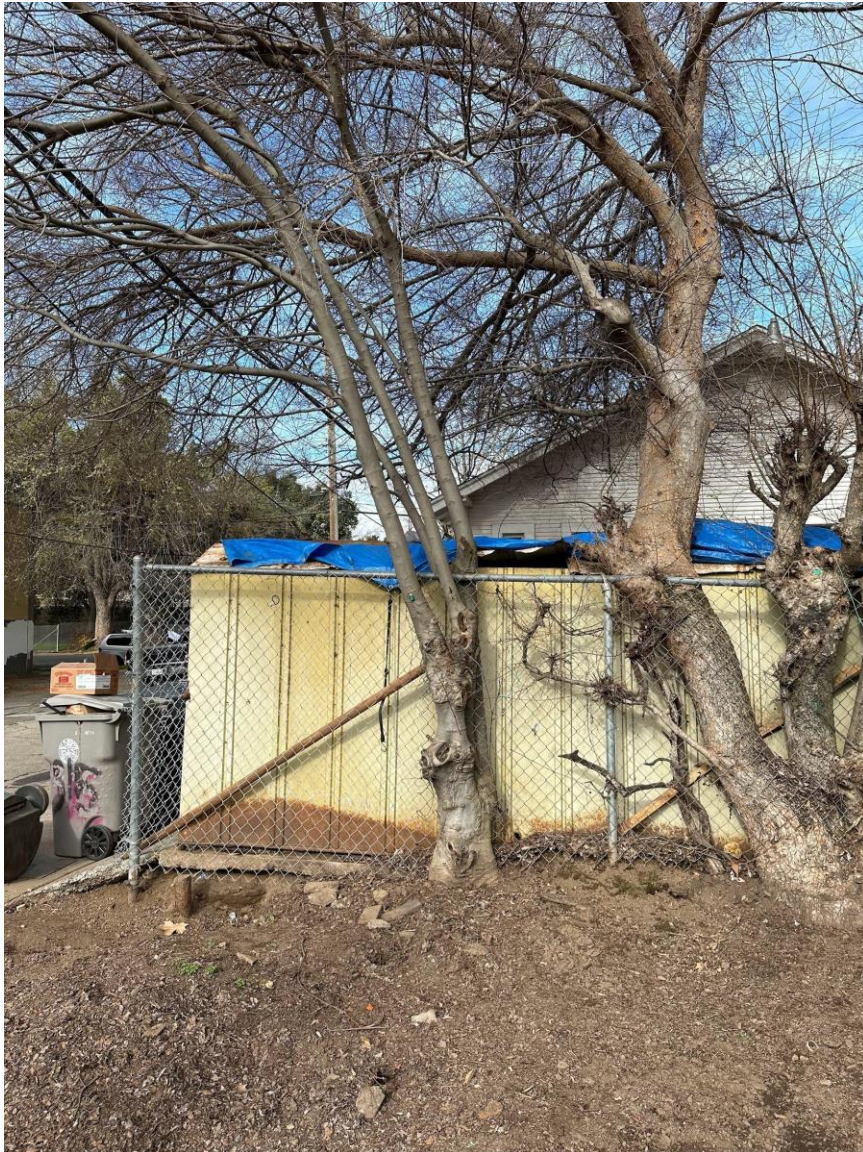


Photo #1, Shows Trees #8950 & #8951



Photo #2, Shows Tree #8952





Photo #3, Shows Tree #8956



Photo #4, Shows Tree #8954





Photo #5, Shows Tree #101



Photo #6, Shows C St., looking west & Tree #59894 in foreground





Photo #7, Shows Alhambra Blvd., view north from Chinatown Alley & Tree #59899 in front



Photo #8, Shows Alhambra Blvd., view south from Chinatown Alley & Tree #192086 in foreground



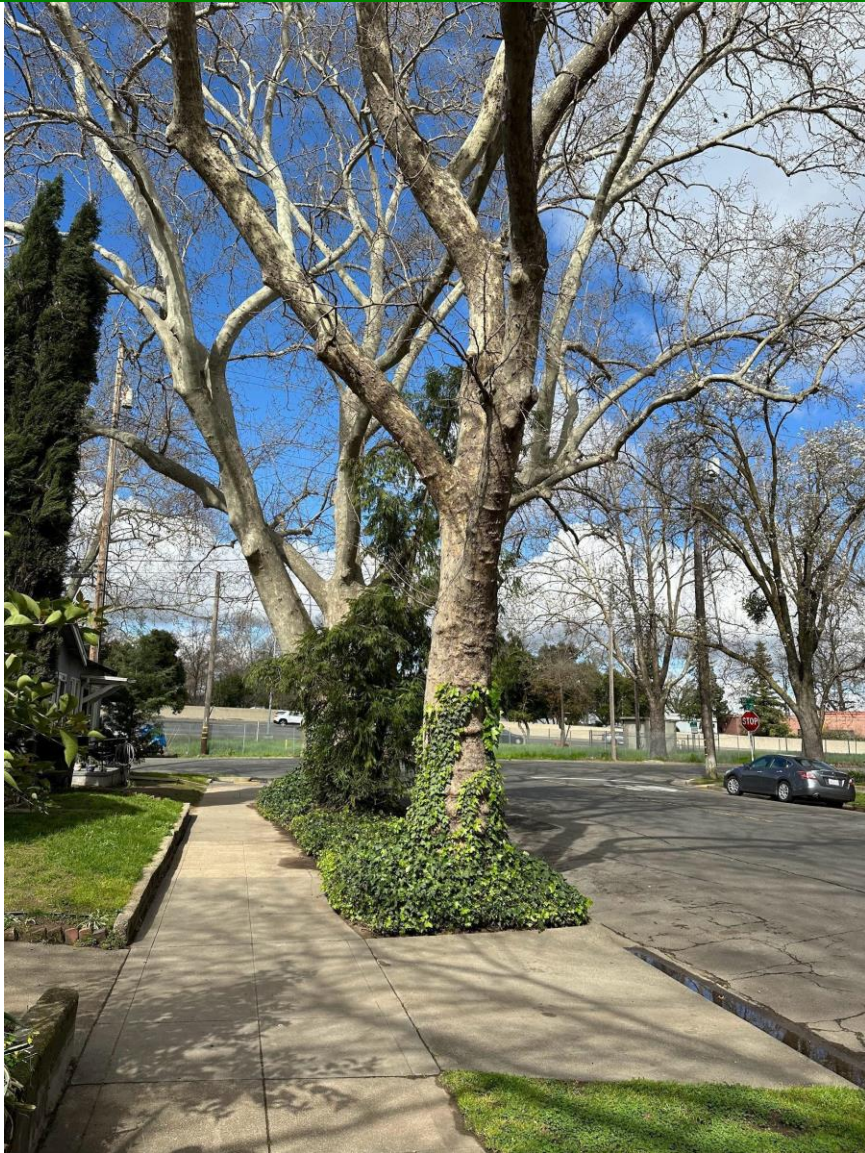


Photo #9, Shows C St., looking west & Tree #59889 in front



Photo #10, Shows Tree #59888





Photo #11, Shows Tree #59887 with typical ivy growth



Photo #12, Shows Tree #59886 with cavity/decay





Photo #13, Shows 30th St., view south & Tree #59882 in foreground



Photo #14, Shows Tree #59872



**SITE PHOTOGRAPHS** by Edwin E. Stirtz, June 17, 2024, Showing pruning cuts



Photo #15, Shows Tree #59894, with pruning cuts





Photo #16, Shows Trees #59893 (left) & #59894 (right), with pruning cuts





Photo #17, Shows Trees #59891 (back) & #59892 (front), with pruning cuts





Photo #18, Shows Tree #59891, with pruning cuts



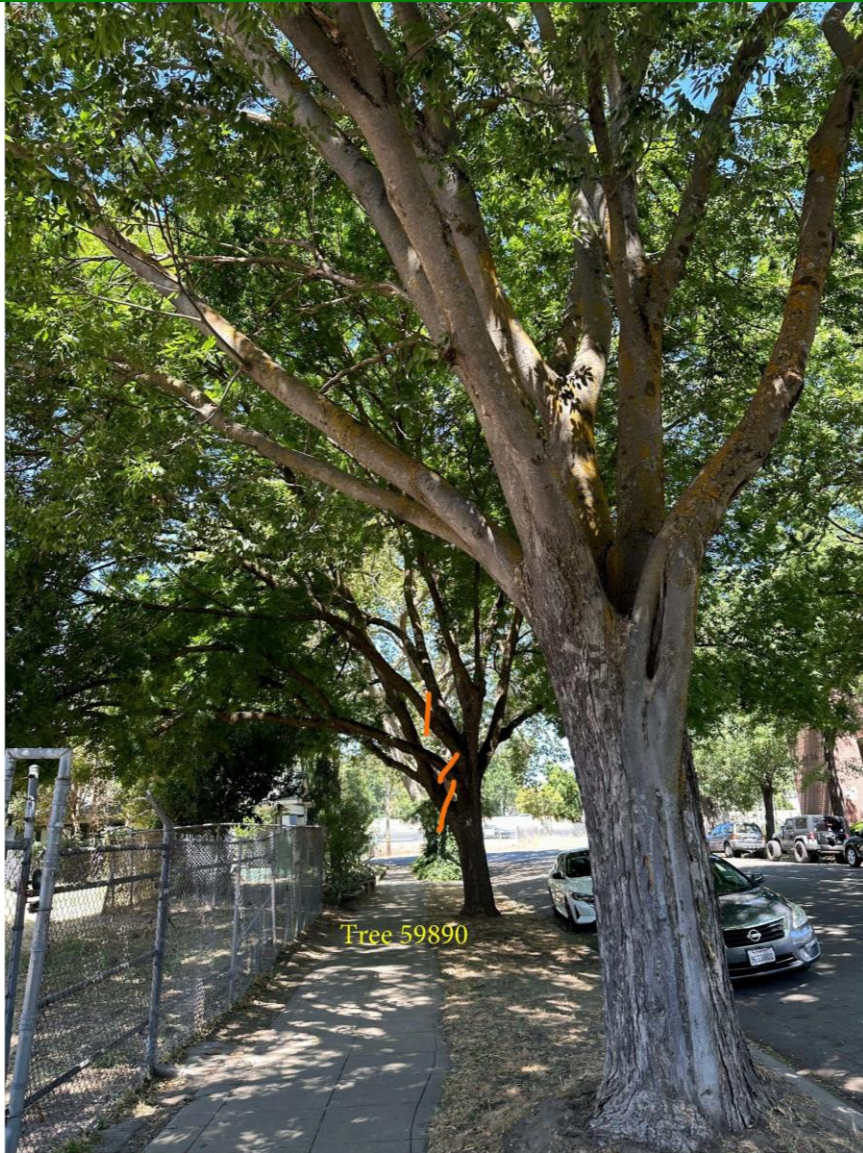


Photo #19, Shows Tree #59890, with pruning cuts



Photo #20, Shows Trees #59887 (back), #59888 (left) & #59889 (front/right), with pruning cuts





Photo #21, Shows Tree #59886, with pruning cuts



Photo #22, Shows Tree #59895, with pruning cuts





Photo #23, Shows Tree #59896, with pruning cuts

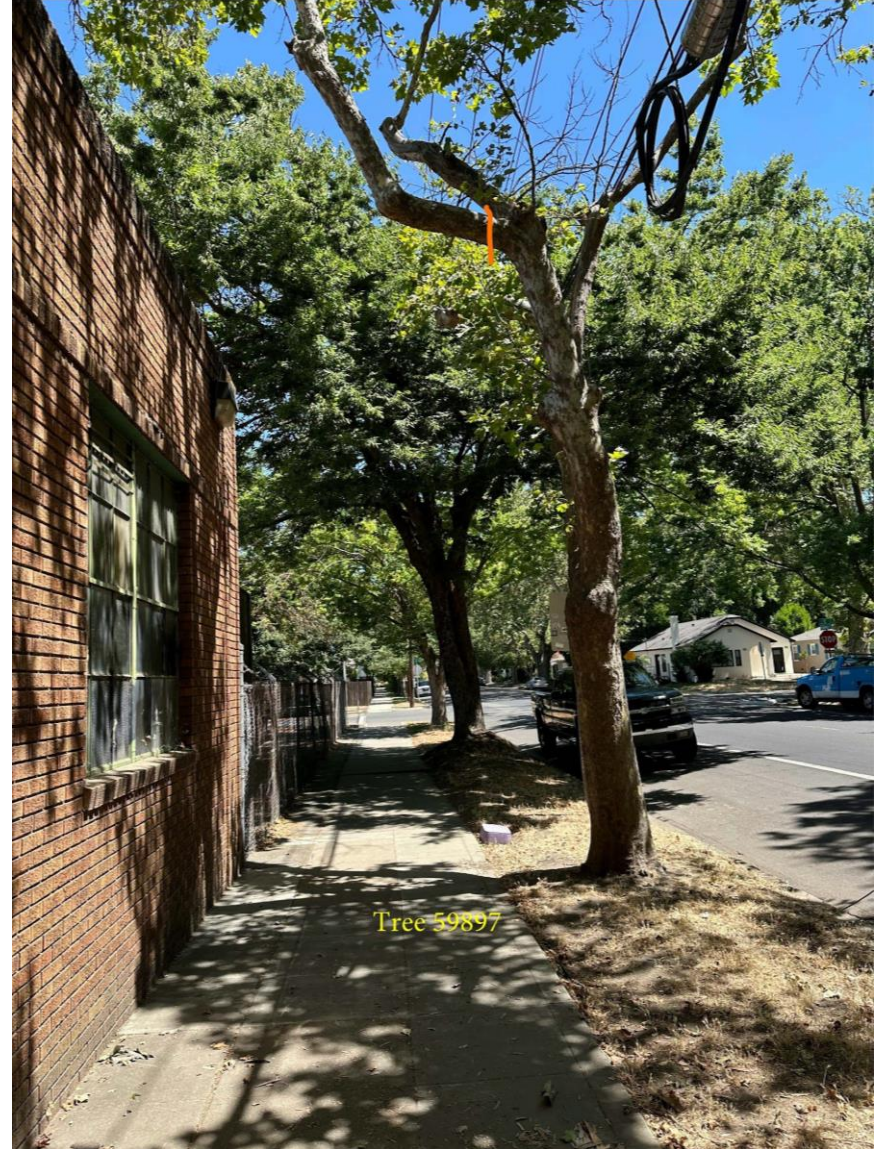
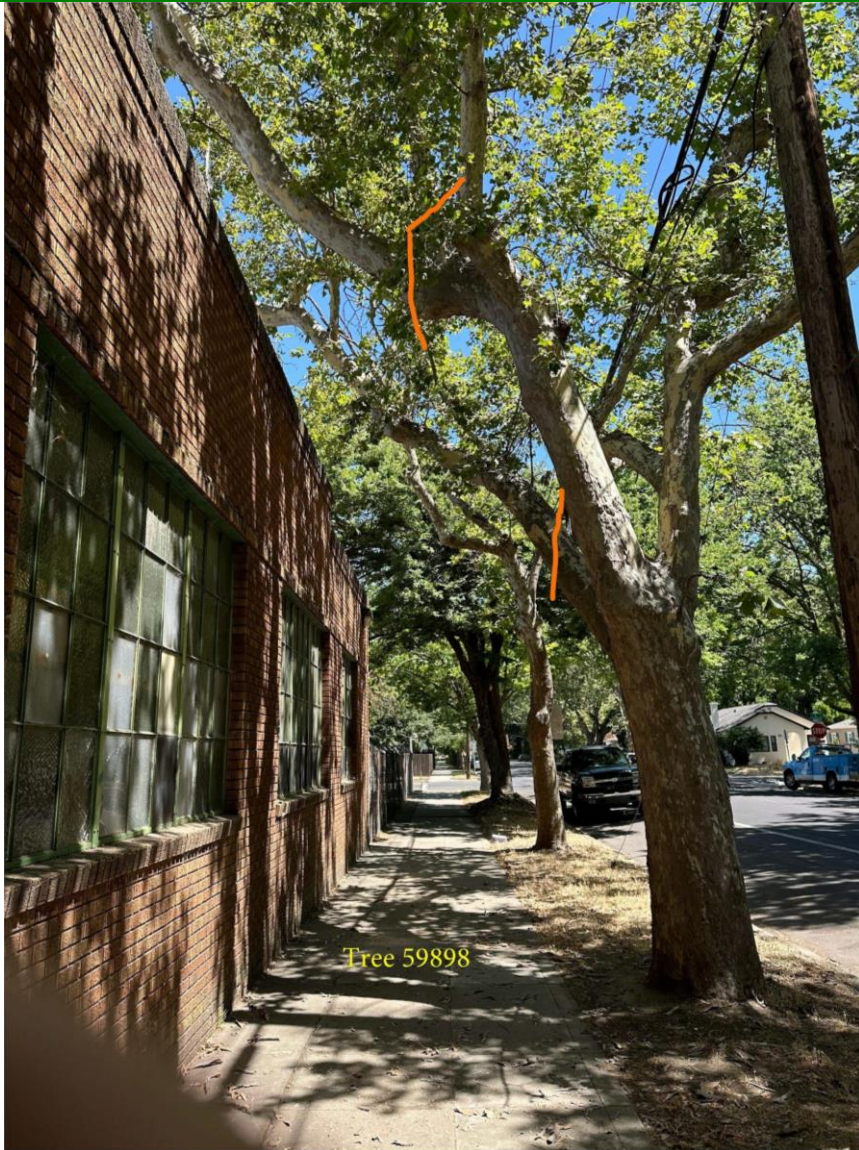


Photo #24, Shows Tree #59897, with pruning cuts





Tree 59898

Photo #25, Shows Tree #59898, with pruning cuts



Tree 59899

Photo #26, Shows Tree #59899, with pruning cuts