Appendix C-2

Tree Survey and Arborist Report

Tree Survey and Arborist Report

for the Ventana Specific Plan

In the City of Fontana, County of San Bernardino, California

Prepared for:

ELMT Consulting
Contact: Travis J. McGill, Director/Biologist
2201 N. Grand Avenue #10098 | Santa Ana, CA 92711

Prepared by:

Golden State Land & Tree Assessment
George J Wirtes, MS, *ISA Certified Arborist*

Report Date: July 4, 2021

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SECTION 1: EXECUTIVE SUMMARY

This arborist survey has been performed at the request of ELMT for a proposed residential development within the Ventana Specific Plan (excluding Planning Area 6) in the City of Fontana, California. The field survey associated with this report was performed on June 28th, 2021.

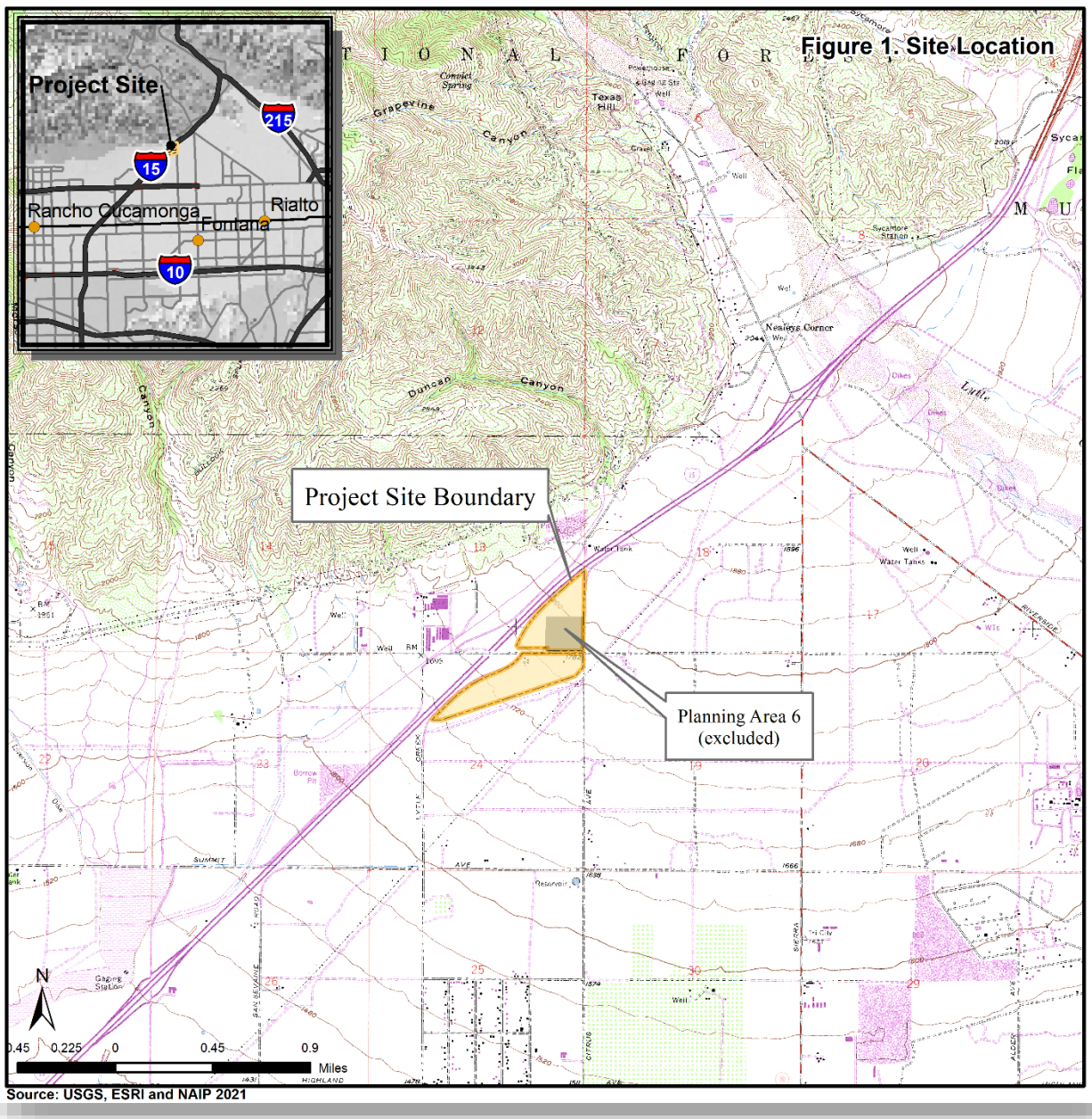
The subject trees were tagged with an aluminum tag containing a unique number. As part of this survey, details of each tree were recorded documenting their species, stature, health, local environment as well as conditions in which they occur. In all, 68 trees were assessed onsite involving *one* distinct species. The only species observed onsite was the red river gum (*Eucalyptus camaldulensis*) comprising 100% of the trees within the project site. Due to lack of irrigation, poor maintenance and landscaping, only 26 (38.2%) of the trees onsite are in fair to good health and can be preserved. In addition, 42 trees (61.8%) onsite qualify as "Heritage trees" given their position in existing windrows. No other trees onsite qualify as special status trees.

The City of Fontana's Municipal Code outlines provisions and guidelines for tree removal, installation, preservation, and maintenance within the City; this is especially important when considering native and special status tree species within the City. All trees that are intended for removal as part of a project require a removal permit and must be approved by the Planning Director. The Director must approve final mitigation involving replacement tree species and size as well.

SECTION 2: BACKGROUND

2.1 - Project Location and Description

The site is the Ventana North Fontana Specific Plan, located west of Citrus Avenue immediately adjacent to Duncan Canyon Avenue to the north and south; it is east of Interstate 15 and north of Interstate 210 in the City of Fontana in the County of San Bernardino (see Figure 1 below). The proposed project includes the improvement approximately 96.7 acres to a residential development with associated infrastructure and landscaping. Planning Area 6 is excluded in this assessment as its tree inventory was performed under separate cover in January of 2021.



2.2 - Site and Vicinity Characteristics

The elevation of the project area ranges from 1,820 to 1,700 feet above mean sea level and slopes gently to the southwest. For the vicinity, the Sunset Zone is 18, and the USDA Hardiness zone is 10a. As indicated in Table 1 below, one distinct soil series occurs within the site boundary. This soil series is described by the Natural Resource Conservation Service as alluvium, derived from granite (see Table 1 below).

Table 1. Soils on Site

Map Unit Symbol	Map Unit Name	Acres	Percent
HaC	HaC—Hanford coarse sandy loam, 2 to 9 percent slopes **Setting** • Landform: Alluvial fans • Landform position (two-dimensional): Backslope • Landform position (three-dimensional): Tread • Down-slope shape: Linear • Across-slope shape: Linear • Parent material: Alluvium derived from granite **Typical profile** • H1 - 0 to 12 inches: sandy loam • H2 - 12 to 60 inches: fine sandy loam	43.0	44.5%
TvC	Tujunga gravelly loamy sand, 0 to 9 percent slopes **Setting** • Landform: Alluvial fans • Landform position (two-dimensional): Backslope • Landform position (three-dimensional): Tread • Down-slope shape: Linear • Across-slope shape: Linear • Parent material: Alluvium derived from granite **Typical profile** • H1 - 0 to 36 inches: gravelly loamy sand • H2 - 36 to 60 inches: gravelly sand	53.7	55.5%
Totals for Area of Interest*		**96.7**	**100.0%**

** Includes the 17.2 acres of Planning Area 6.*

The vegetation community onsite includes non-native, ornamental trees, ruderal as well as native flora, and bare ground. The site contains no structures and can be easily accessed by pedestrian or vehicular traffic (see Plate 1 below).

Plate 1. This is a current (January 8, 2021), aerial view to the NW showing the position of windrows within the project site with east-west orientation.

2.3 - Assignment and Scope of Survey

The task assigned to Golden State Land & Tree Assessment (GSL&T) was to conduct a tree survey and health assessment of all trees within the project area as defined in Section 2.1 above. The survey was performed to identify the different tree species found within the project boundary, assess their health, and provide insight as to which trees may be retained as part of the planned improvement. A health assessment was performed cataloging the health and stature parameters of each tree onsite. This included, but was not limited to; recording total diameter at breast height (DBH), canopy spread, tree height, apparent disease/decay, other signs of potential hazard, and pest damage. A potential risk assessment was also conducted keeping public safety in mind. All documentation in this report is in compliance with standards and requirements published by the International Society of Arboriculture (ISA). This report includes recommendations and mitigation measures meant to satisfy all applicable ordinances and permit guidelines.

2.4 - Survey Method and Health Assessment

Prior to the field survey, the City of Fontana's website was accessed to review specific tree protection guidelines. An aerial photograph was used as a visual guide during the assessment. A handheld Global Positioning System (GPS) device and GPS-enabled smartphone with digitized project boundaries were used to identify the location of each subject tree. The crown-width was estimated by pacing, and the height of each subject tree was visually estimated using a tangent height gauge. These data were recorded on field sheets, and associated aluminum numeric tags were affixed to trees on the north side at BH for later reference. Aerial views were captured using a DJI Mavic Air 2 controlled by a DJI Fly smartphone app.

Tree status (relative condition, stature, and health) was conducted by ISA arborist/biologist, George Wirtes from ground level with the aid of binoculars. Canopy spread was assessed by pacing. To estimate wood integrity, a rubber mallet was occasionally used to assess possible decay within the tree stem and flare. As indicated earlier, no invasive procedures were performed. Visual characteristics were recorded on field sheets, and twig/leaf samples as well as digital photographs were taken as needed to assure accurate identification. Overall health and general appearance of each tree was numerically rated (Health/General Appearance Rating - 1-Good, 2-Fair, 3-Poor, 4-Decline/dead) based on the aforementioned conditions. The local environment was also assessed in relation to the tree species and conditions of its location (Local Environment Rating - 1-Good, 2-Fair, 3-Poor, 4-Inappropriate). For this rating, the species was considered in relation to the environment. Other conditions were also considered such as fence lines, utilities, competing canopies, grade cuts/slope, etc.

The position of the subject trees was recorded using a GPS whose data was exported into GIS for periodic illustration over aerial photographs.

2.5 - Hazard Risk Assessment

The International Society of Arboriculture (ISA) recommends a Hazard Assessment to be included with arborist reports. Such an assessment is an important component of any report and is critical if trees are to be located near public areas such as parks, walkways, residences, and buildings. This tree assessment includes a *Level 2 Basic Risk Assessment* as defined by ISA Best Management Practices. This type of assessment is limited to evaluating trees and obvious signs of defects such as:

- Dead or broken structures
- Cracks
- Weakly attached branches and co-dominant stems
- Missing or decayed wood
- Unusual tree architecture or distribution
- Obvious loss of root support

A risk rating is assigned to each tree based on its defects, aesthetics, apparent health, location and the nearby targets (people or property). As defined by ISA the ratings are defined below:

1. *Low* - Low-risk category applies when consequences are negligible, and likelihood is unlikely, or consequences are minor, and likelihood is somewhat likely.

2. *Moderate* - Moderate risk situations are those for which consequences are minor and likelihood is very likely or likely or likelihood is somewhat likely, and the consequences are significant or severe.

3. *High* - High-risk situations are those for which consequences are significant and likelihood is very likely or likely or Consequences are severe, and likelihood is likely.

4. *Extreme* - The extreme risk category applies in situations in which failure is imminent and there is a high likelihood of impacting the target and the consequence of the failure is severe. The tree risk assessor should recommend that mitigation measures be taken as soon as possible.

It is impossible to maintain a tree free of risk. A tree is considered hazardous when it has a structural defect that predisposes it to failure, and it is located near a target.

- A target is person or property that may sustain potential injury or property damage if a tree or a portion of a tree fails.
- Target areas include sidewalks, walkways, roads, vehicles, structures, playgrounds, or any other area where people are likely to gather.
- Structurally sound and healthy trees may also be hazardous if they interfere with utilities, roadways, walkways, and sidewalks, or if they obstruct motorist vision.
- Common hazards include dead and diseased trees, dead branches including bark, stubs from topping cuts, broken branches (hangers), multiple leaders, tight-angled crotches, and an unbalanced crown. Evaluation of risk is as follows: 1-Good, 2-Fair, 3-Poses risk, and 4-Hazardous.

2.6 - Local Tree Regulation (Fontana Municipal Code Section 28:61-75)

Chapter 28.61-.75 of the FMC (or Code) addresses tree protection, maintenance, and replacement policies. It outlines the definition of a “heritage tree”, “significant tree”, and “specimen tree” and the procedures necessary to replacing them within a property. As stated in the City’s Code, “Except as provided in section 28-65, no person shall remove or cause the removal of any heritage, significant or specimen tree unless a tree removal permit is first obtained.”

Heritage tree means any tree which:

1. Is of historical value because of its association with a place, building, natural feature or event of local, regional or national historical significance as identified by city council resolution; or
2. Is representative of a significant period of the city's growth or development (windrow tree, European Olive tree); or
3. Is a protected or endangered species as specified by federal or state statute; or
4. Is deemed historically or culturally significant by the city manager or his or her designee because of size, condition, location or aesthetic qualities.

Windrow means a series of trees (minimum of four), usually a variety of *eucalyptus*, planted in a closely spaced line (no more than ten feet apart) to provide a windbreak for the protection of property and/or agricultural crops.

Significant tree means any tree that is one of the following species:
Genus/species Common name

- *Juglans californica* Southern California black walnut **(*one specimen onsite*)**
- *Quercus agrifollia* Coast live oak
- *Cedrus deodora* Deodora cedar
- *Platanus racemosa* California (western) sycamore
- *Platanus acerifolia* London plane

Specimen tree is defined as a mature tree (which is not a heritage or significant tree) which is an excellent example of its species in structure and aesthetics and warrants preservation, relocation or replacement as provided in sections 28.66, 28.67 and 28.68. Specimen trees shall not include any tree located on a private parcel of property of less than one acre zoned for residential use.

2.7 - Limitations and Exceptions of Assessment

This survey was conducted in a manner that draws upon past education, acquired knowledge, training, experience, and research. It was conducted to the greatest extent feasible, and although the information gathered reduces risk of tree failure/decline, it does not fully remove it.

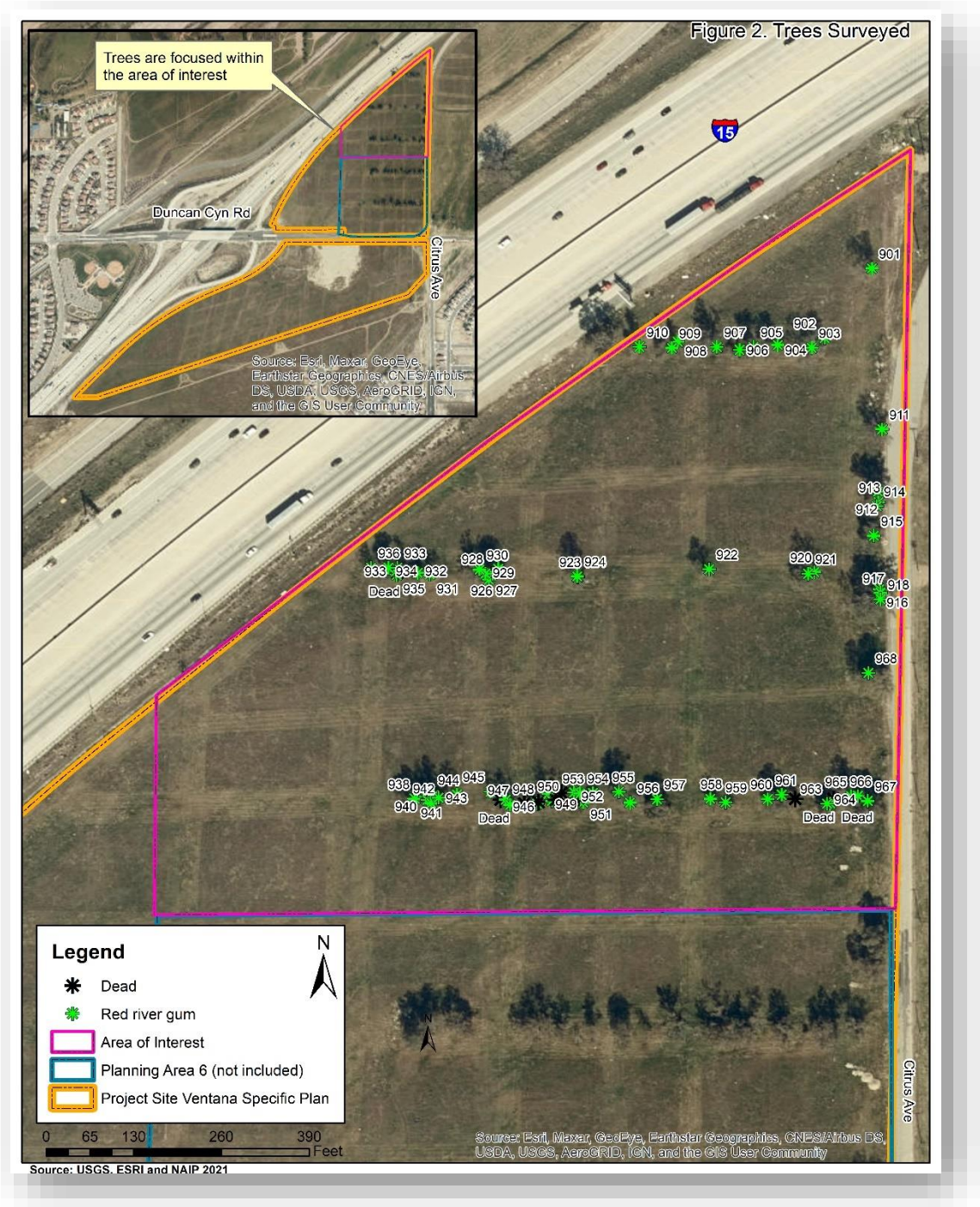
No diagnostic testing was performed during this assessment. This survey associated with this Arborist Report included no soil sampling, root excavation, trunk coring/drilling or any other invasive procedure. The determinations of damage due to pest infestation and decay were made solely on outward appearance and inspection of the tree structures. Not all tree defects may be visible from the ground. Epiphytic growth can also obscure defects on the stem and in the canopy of a tree. Arborists cannot detect every condition that could possibly lead to the structural failure of a tree. Trees are living organisms subject to attack by disease, insects, fungi and other forces of nature. Many aspects of tree health and environmental conditions are often not detectable (internal decay, poor root anchoring, etc.). Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period of time.

The statements made in this report do not take into account the effects of climate/wind extremes, vandalism, or accident (whether physical, chemical, or fire). In addition, this area is known to have periodic, high velocity Santa Ana winds from transient high-pressure ridges. Golden State Land & Tree Assessment cannot, therefore, accept any liability in connection with these factors, or where prescribed work is not carried out in a correct and professional manner in accordance with current ISA good practice. The authority of this report ceases at any stated time limit within it, after one year from the date of the survey (if none stated), when any site conditions change, or after pruning (or other activity) not specified in this report.

The goal of this survey is to recommend measures to limit risk exposure while enhancing the beauty and health of each tree onsite. Clients may choose to accept or disregard the recommendations contained within this report, or seek additional advice. ***To live near trees is to accept some degree of risk. The only way to eliminate all risk is to remove all trees onsite***.

SECTION 3: SUBJECT TREES AND OBSERVATIONS

During the site survey, specific measurements and parameters of all trees onsite were recorded on tree assessment worksheets; these data have been transferred into the table in Appendix A at the end of this document.



3.1 - Species Assessment

During the survey, tree assessments were conducted according to general ISA and City requirements; GPS waypoints were recorded, as were specific details of each tree. The tree species represented onsite are described in detail below, and a comprehensive table is provided in Appendix A of this report. In general, the species onsite were appropriate for the location. A species profile is provided below for each species observed along with their count.

Red river gum ** *Eucalyptus camaldulensis*	This species is native to Australia. Its bark and twigs can be a litter problem. Cal-IPC (California invasive plant council) classifies the invasiveness of this plant as limited. Its growth habit is erect or spreading and requires ample growing space. This species has evergreen foliage. Height: 45 - 150 feet. Width: 45 - 105 feet. Growth Rate: 36 or More Inches per Season. The longevity of this species is 50 to 150 years. It tolerates exposure of full sun to Partial Shade. This species prefers wet to dry soil and is drought tolerant. It prefers clay, loam or sand textured soil. It is susceptible to beetle borers, oak root rot and root rot. Its branch strength rated as medium and root damage potential rated as moderate.	68
** Cal-IPC (California Invasive Plant Council) invasive tree species		

Source: UFEI 2021

3.2 - Observations

In all, 68 trees consisting of *a single* distinct species were assessed (see Figure 2 below). The red river gum was the only species observed within the site accounting for 100% of the total number of trees within the project area. The age of the trees onsite ranged from mature to senescent and the health from rigorous to dead. Because of neglect and poor maintenance, 45 (52.9%) of the trees onsite must be removed due to potential for failure, poor form and aesthetics, declining health or damage.

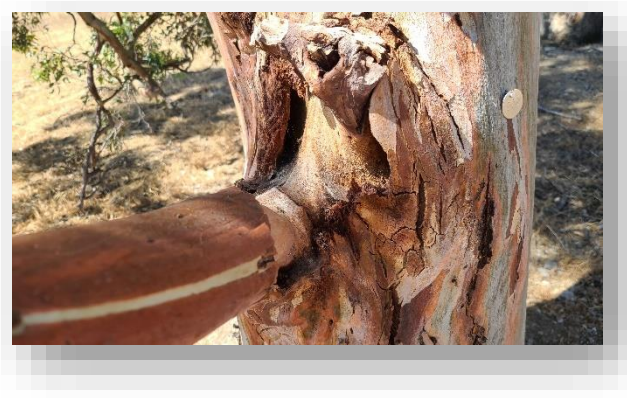


Plate 2. This a view of a cavity with internal decay above a branch collar (#902).

Plate 3. This is a view of internal deadwood with evidence of termites and borings (#903).

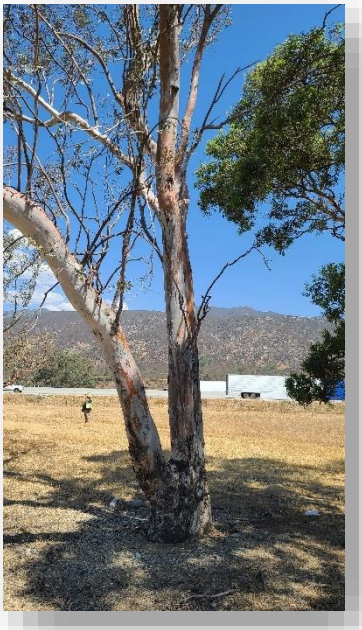


Plate 4. This is a view of a tree with a co-dominant stem (#903).

Plate 5. This is a view of upper canopy deadwood of a tree in decline (#906).

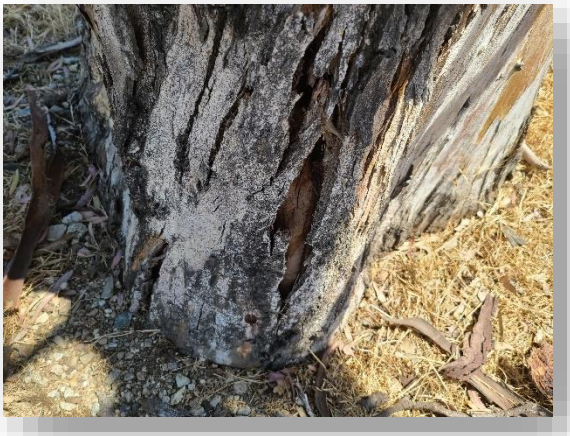


Plate 6. This is a view of exposed deadwood beneath infected tissue (#907).

Plate 7. This is a view of stained soil at the base of a tree likely due to disposed motor oil (#912).

Plate 8. This is a view of decayed wood within an unclosed branch cut (#917).

Plate 9. This is a view of a gallery produced by a borer (#916).

Plate 10. This is a view of stained wood possibly due to infected tissue (#919).

Plate 11. This is a view of internal deadwood within an unclosed wound (#919).

Plate 12. This is a view of a topped tree trunk with matured sprouters (#932).

Plate 13. This is a view of included bark within the crotch between two codominant stems (#934).

Plate 14. This is a view of a decay at a stem flare (#924).

Plate 15. This is a view of sprouters that matured into codominant stems closing a topped stump (#949).

Plate 16. This is a view of a stump that has sprouted leaving an unclosed area with weak branch attachment (#952).

SECTION 4: DISCUSSION AND RECOMMENDATIONS

4.1 - Conclusion

Within the project site boundary, 68 trees were assessed composed of *a single* distinct species within three windrows or relic windrows. No trees onsite were native to California, and all are of an invasive type, the red river gum (*Eucalyptus camaldulensis*). In addition, 42 of the 68 trees onsite were arranged within existing windrows qualifying them as Heritage Trees (according to the Fontana Municipal Code). No other trees onsite have any other special designations. If consistent with the site plan, 26 of the 68 trees (38.2%) are in fair to good health and may be preserved.

4.2 - Discussion

As indicated, most of the trees onsite are in poor to good condition due to inadequate maintenance and care. Many trees onsite were also dead or present a hazard to people and property. Of the trees present onsite, 42 (61.8%) should be considered for removal due to poor form, health, aesthetics or increased liability for failure.

4.3 - Recommendations

4.3.1 - Non-status Tree Replacement

Removal of living, native and non-native trees may result a biological impact. Recommended mitigation for non-status living trees removal is replanting in accordance with the City's municipal code as provided in the Appendix B below. Removal of any trees must be preceded by authorization from the City's Planning Department.

4.3.2 - Trees Preserved

If it is decided to preserve any trees onsite, an ongoing maintenance and monitoring plan is recommended; this is to ensure public safety and minimize liability due to potential tree failure. Strategic pruning compliant with ISA standards must be performed to subordinate non-primary, codominant stems, and canopy deadwood should be removed. Regular maintenance is recommended according to ISA standards.

4.3.3 - Migratory Bird Treaty Act

Pursuant to the Migratory Bird Treaty Act (MBTA) and CDFG Code, removal of any trees, shrubs, or any other potential nesting habitat should be conducted outside the avian nesting season. The nesting season generally extends from early February through August, but can vary slightly from year to year based upon seasonal weather conditions.

4.3.4 - Tree Protection during Construction

Building/grading near trees requires that they are healthy at the start of the project for the stand to recover well. Some older trees have little tolerance for root damage or other stress factors. Younger, more vital

trees are more tolerant of changes in their surroundings. However, each change in soil compaction, irrigation, under plantings, and other condition takes some of an older tree's strength and vigor and further diminishes its health. The main stresses and risks of construction are:

- Soil compaction
- Lack of water or changes in the site hydrology
- Change of grade in the root zone
- Physical damage to tree roots and structure
- Dumping of potentially toxic construction wastes
- Lack of pest control and other care
- Dust
- Human error

Mature trees take a long time to heal from, or respond to, injury. It could take 10 years for some trees to make a visible improvement in health after construction impacts occur. On the other hand, it could take 10 years for a tree to visibly start declining after cutting roots, compacting the soil, or raising the grade.

1. Dripline fencing must be placed a minimum of 1 foot in radius from the tree per 1 inch of diameter at breast height (for example, 6-inch trunk = 6 feet protection radius/12 feet diameter).
2. Dripline fencing must be erected so that it is visible and structurally sound enough to deter construction equipment, foot traffic, and the storing of equipment under tree canopies.
3. Raising or lowering the grade in the root zone of trees can be fatal or ruin the health of trees for years to come. Grade change and soil compaction force out the oxygen and literally press the life out of the soil. A retaining wall can be used to minimize the amount of the root zone that is affected, but it is essential that the footing is not continuous. Gravel and aeration pipes should be placed inside the retaining wall before the fill is placed. Consult with a qualified civil engineer for proper design calculations.
4. Trenching within the protection zone must be avoided wherever possible. Most of the roots are in the top 1 to 2 feet of soil, and trenching can sever a large percentage of roots.
5. Oil from construction equipment, cement, concrete washout, acid washes, paint, and solvents are toxic to tree roots. Signs should be posted on the fencing around trees notifying contractors of the fines for dumping. Portable latrines that are washed out with strong detergents can damage the fine roots of the trees. Portable latrines should not be placed near trees, nor where frequent and regular foot traffic to them will compact the soil below the trees.
6. Construction creates large amounts of dust, and the oaks and any other trees to be preserved will need to be kept clean. Dust reduces photosynthesis on all trees. Strict dust control measures must be implemented during construction to minimize this impact, and an occasional rinsing with a solution of water and insecticidal soap will help control pests.

SECTION 5: QUALIFICATIONS OF ARBORIST

Mr. Wirtes is a Certified Arborist (CH-08084) with the International Society of Arboriculture (ISA) and a Registered Consulting Arborist (#738) with the American Society of Consulting Arborists. Mr. Wirtes was ISA certified in November of 2005 and has conducted numerous tree assessments for residential properties that involve oak and other tree species. Most notably, Mr. Wirtes has created an oak regeneration plan for a 2.3-acre project site in Ventura County as mitigation within a specific plan development as well as a Joshua tree preservation plan in the City of Palmdale, CA. He has performed numerous tree surveys is Riverside, San Bernardino, and Los Angeles Counties on sites with as many as 400 trees. Mr. Wirtes' education includes a Bachelor of Science in Biology and a Master of Science in Environmental Science from California State University at Fullerton.

I certify that the details stated herein this report are true and accurate:

George Wirtes, MS, RCA 738

ISA Certified Arborist, CH-08084

SECTION 6: REFERENCES

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Cal-IPC 2021. Website at https://www.cal-ipc.org/plants/inventory/

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University of California, 2021. California Tree Failure Report Program website at http://ucanr.edu/sites/treefail/

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UFEI, 2021. Urban Forest Ecosystems Institute website at https://selectree.calpoly.edu/

Virginia Tech, Dendrology Dept. 2021. Website at http://www.cnr.vt.edu/DENDRO/dendrology/main.htm

Appendix A - Tree Species Observed

Note - This tree survey and the details recorded below are meant to characterize the trees within the property. The assessment is not exhaustive, but is a balance between the competing forces of in-depth description and cost effectiveness. The goal was to accumulate enough data to make a judgment as to what role, if any, the existing trees may have in the proposed project.

Tree Tag #	Species[1]	DBH (inches)							Height (feet)	Canopy Width (feet)				Canopy Width (feet)	Gen App	Env	Risk	Rating	Conclusion
		1st Trunk	2nd Trunk	3rd Trunk	4th Trunk	5th Trunk	6th Trunk	Total		N	E	S	W	(North on top)					
901	Red River Gum	24						24	55	6	14	20	16	6 / 16 / 14 / 20	2	2	2-3	75	Prune
Some psyllids, Lateral fissures, Some minor lean																			
902	Red River Gum	20						20	40	18	12	18	20	18 / 20 / 12 / 18	2	2-3	3	55	Remove
Severe decay mid-section, Increased liability, Poor prognosis																			
903	Red River Gum	12	13.5	13.5				39	48	4	8	26	16	4 / 16 / 8 / 26	3	3	3	45	Remove
Decay at crotch, In decline, Co-dominant stem																			
904	Red River Gum	26						26	38	8	16	21	12	8 / 12 / 16 / 21	2-3	2-3	2-3	65	Prune
Fossorial burrows, Some minor cankers, Trap ground squirrels																			
905	Red River Gum	33	6					39	40	9	6	22	10	9 / 10 / 6 / 22	2-3	2	2-3	65	Prune
Minor dieback																			
906	Red River Gum	14	3	3.5				20.5	25	3	6	16	6	3 / 6 / 6 / 16	3-4	2-3	3-4	40	Remove
Diseased																			
907	Red River Gum	34						34	50	16	15	19	21	16 / 21 / 15 / 19	3	2-3	3	55	Remove
Decay at flare																			
908	Red River Gum	13						13	33	5	8	20	18	5 / 18 / 8 / 20	2-3	2-3	2-3	60	Prune
Canopy Dieback, Marginal, Prune & Monitor																			
909	Red River Gum	13	14	6	3			36	33	8	10	19	12	8 / 12 / 10 / 19	2	2-3	2-3	65	Prune
Lean																			
910	Red River Gum	22						22	42	9	12	23	11	9 / 11 / 12 / 23	2-3	2-3	2-3	60	Prune
Vertical fissures, Severe Lean, Good Vigor																			
911	Red River Gum	26	6.5	7	8	4.5		52	38	12	18	26	20	12 / 20 / 18	3	3	3	50	Remove
Co-dominant stems, Decreased Vigor																			

														26					
912	Red River Gum	60						60	50	16	18	22	21	16		2-3	2-3	2-3	60	Prune
Mechanical Wound, Fossorial Burrows, Dumped construction materials at base, Co-dominant stem														21	18					
														22						
913	Red River Gum	10	3	4				17	35	6	6	18	16	6		2-3	2-3	2-3	55	Remove
Crowded canopy, Decline, Dieback, Poor planting														16	6					
														18						
914	Red River Gum	12	3	3.5	3			21.5	33	8	20	17	15	8		2-3	2-3	3	50	Remove
Crowded canopy, Mid-stem canker, Dieback														15	20					
														17						
915	Red River Gum	48	9	5	13			75	32	18	15	36	18	18		3	3	3	45	Remove
Multibranched, Increased decay at flare														18	15					
														36						
916	Red River Gum	16	12	10.5				38.5	38	18	16	8	24	18		3	3	3-4	45	Remove
Co-dominate stem, bore holes, Upper canopy dead wood, Dead central lean														24	16					
														8						
917	Red River Gum	18						18	36	8	18	18	24	8		3	3	3	45	Remove
Upper Canopy dead wood, Decay at base, Sweep lean, Debris at base														24	18					
														18						
918	Red River Gum	25						25	45	10	12	18	17	10		2-3	2-3	3	50	Remove
Minor upper canopy dead wood, large canker mid stem, Increased liability														17	12					
														18						
919	Red River Gum	24	20					44	52	10	18	34	16	10		2-3	2-3	2-3	55	Remove
Co-dominate stem, Fair to poor crotch, Decay at branch, Exuding sap, Increased liability														16	18					
														34						
920	Red River Gum	25	12					37	48	14	8	14	8	14		2-3	2-3	2-3	60	Prune
Upper canopy dead wood, Lower stem large canker, Co-dominate stem														8	8					
														14						
921	Red River Gum	38						38	40	12	20	16	16	12		2-3	2-3	2-3	60	Prune
Sloughing bark, Minor deadwood														13	20					
														16						
922	Red River Gum	23						23	38	18	12	22	14	18		2	2	2	75	Prune
Good specimen														14	12					
														22						
923	Red River Gum	11						11	32	6	6	8	5	6		2-3	2-3	2-3	65	Prune
Some upper canopy dead wood														5	6					
														8						
924	Red River Gum	10	30	9				49	41	14	12	20	18	14		2-3	3	3	55	Remove
Large canker at flare, Increased liability														18	12					
														20						
925	Red River Gum	29						29	52	8	14	16	16	8		2-3	2-3	2-3	65	Prune
Minor upper canopy dead wood, Crowded canopy														16	14					

														16					
926	Red River Gum	8.5						8.5	22	4	6	12	10	4		3	2-3	3	55	Remove
Crowded canopy, Stem decay, Poor placement, Poor prognosis														10	6					
														12						
927	Red River Gum	14						14	35	6	10	18	6	6		3	3	3-4	45	Remove
Major stem decay														6	10					
														18						
928	Red River Gum	8						8	24	6	7	5	5	6		2-3	3	3	50	Remove
Decreased canopy development, Vigor is fair to poor, Lean														5	7					
														5						
929	Red River Gum	20	10	6				36	52	12	6	24	18	12		2-3	3-4	3	50	Remove
Topped, Stem decay, Poor growth														18	6					
														24						
930	Red River Gum	18	7	6				31	42	10	8	18	6	10		3	2	2-3	65	Prune
Stressed, Large callus tissue mass in canopy														6	8					
														18						
931	Red River Gum	16						16	31	8	12	8	4	8		2-3	2-3	2-3	65	Prune
Diseased branch, Prune & monitor, Marginal, Decline														4	12					
														8						
932	Red River Gum	10	14					24	39	4	6	20	6	4		3	3	3-4	45	Remove
Large canker at stem, Topped with decay in stem at flare														6	6					
														20						
933	Red River Gum	10	8					18	22	5	8	22	16	5		3	3	3	45	Remove
Co-dominate stem, Decay at flare														16	8					
														22						
934	Red River Gum	27	4.5					31.5	40	8	12	26	14	8		2-3	2-3	2-3	65	Prune
Good vigor and form														14	12					
														26						
935	Red River Gum	15.5						15.5	36	12	4	18	16	12		2-3	2-3	2-3	65	Prune
Some upper canopy deadwood, Poor flare, Decline, Prune and monitor														16	4					
														18						
936	Red River Gum	13						13	30	6	14	13	5	6		2	2-3	2-3	70	Prune
Good form and vigor														5	14					
														13						
937	Red River Gum	16						16	41	8	18	14	6	8		2	2	2-3	70	Prune
Good form and vigor														6	18					
														14						
938	Red River Gum	9							36	11	4	12	6	11		2-3	2-3	2-3	65	Prune
Minor dieback														6	4					
														12						
939	Red River Gum	7.5	9						42	16	11	12	6	16		3	2-3	3	55	Remove
In decline, Upper canopy dead wood														6	11					

															12					
940	Red River Gum	10							38	6	3	4	2	6		2-3	3	3	50	Remove
Large canker at lower stem, Poor prognosis														2	3					
														4						
941	Red River Gum	28							45	8	12	16	8	8		2-3	2	2-3	70	Prune
Fissures, Included bark at branch attachment														8	12					
														16						
942	Red River Gum	8.5							48	0	8	22	5	0		3	3	3	50	Remove
Topped, Poor form														5	8					
														22						
943	Red River Gum	15							45	0	5	12	16	0		2-3	2-3	2-3	65	Prune
Minor decay at flare, off balance, strategically prune if saved														16	5					
														12						
944	Red River Gum	10							22	2	2	9	4	2		3	3	3	50	Remove
Borer damage														4	2					
														9						
945	Red River Gum	14							36	12	1	15	3	12		3	2-3	3	50	Remove
Stump sprouters, Decline, Stressed														3	1					
														15						
946	Red River Gum	18							38	8	6	20	12	8		2-3	2-3	2-3	65	Prune
Upper canopy dead wood, Good to fair vigor														12	6					
														20						
947	Red River Gum	9.5							22	4	5	4	4	4		3	3	2-3	50	Remove
Poor vigor and form														4	5					
														4						
948	Red River Gum	4.5	6						21	3	4	6	4	3		2	2-3	2	70	Prune
Stump sprouters, Co-dominate stem, Subordinate sprouters														4	4					
														6						
949	Red River Gum	10	7	4.5					42	5	8	6	14	5		'2-3	3	3	55	Remove
Decay in crotch, Poor development, Increased liability														14	8					
														6						
950	Red River Gum	18							42	10	14	10	12	10		2	2	2-3	75	Prune
Good form and vigor														12	14					
														10						
951	Red River Gum	7							24	0	1	8	3	0		2-3	3	3	55	Remove
Sprouters, Poor flare development														3	1					
														8						
952	Red River Gum	8	5.5						32	4	12	8	8	4		3-4	2-3	3-4	45	Remove
Major flare decay														8	12					
														8						
953	Red River Gum	6	5.5	2	2.5				21	6	5	8	4	6		2-3	3	2-3	55	Remove
Central stem decay, Distressed														4	5					

														8					
954	Red River Gum	9	5	2.5					25	4	4	6	4	4	4	4	3	3	3	50	Remove
In decline, Upper canopy dead wood														6							
955	Red River Gum	34							51	21	18	22	16	16	21	18	2-3	2-3	2-3	60	Remove
Massive flare														22							
956	Red River Gum	4	4	4.5					18	0	8	16	9	9	0	8	3	3	3	45	Remove
Topped, Decay at central section														16							
957	Red River Gum	12	12	6.5	10	11			36	14	15	24	16	16	14	15	3	3	3	45	Remove
Multi-stem, Topped with multiple sprouters														24							
958	Red River Gum	8.5	5	9	8				35	0	18	16	12	12	0	18	2	2-3	3	65	Prune
Good vigor, Multi-dominate, Brace and prune														16							
959	Red River Gum	3.5	3.5	4	5				25	6	6	6	6	6	6	6	3	3	3	50	Remove
Sprouters, Topped														6							
960	Red River Gum	9.5	12						40	6	6	22	14	14	6	6	2-3	3	3	55	Remove
Co-dominate stem, Upper canopy dead wood, Decay at flare														22							
961	Red River Gum	14	14						40	9	15	21	8	8	9	15	3	2-3	2-3	55	Remove
Diseased, Sloughing, Poor prognosis														21							
962	Red River Gum	9	4.5						28	7	8	6	5	5	7	8	3	3	3	50	Remove
Topped, Poor Form														6							
963	Red River Gum	13	7	3					26	5	7	21	18	18	5	7	2-3	3	3	50	Remove
Topped with sprouters, Poor branch attachment														21							
964	Red River Gum	8	8	5					26	3	4	18	10	10	3	4	2-3	3	3	50	Remove
Closed sprouters, Poor form														18							
965	Red River Gum	22	16						39	24	12	27	23	23	24	12	2-3	3	3	50	Remove
Co-dominate, Canker at base of large stem														27							
966	Red River Gum	9							21	4	6	4	4	4	4	6	3	2-3	3	50	Remove
Upper canopy dead wood, Diseased														4							
967	Red River Gum	32	20	17					42	15	15	34	18	18	15	15	2-3	2-3	2-3	65	Prune
Fair form, large specimen																					

														34						
968	Red River Gum	59	25						48	15	28	32	23	15			3	3	3	50	Remove
Central stem decay														23		28					
														32						

Appendix B - Fontana Municipal Code Mitigation Matrix

Heritage and Significant Tree Replacement

Table No. I for Trees Under Seven Inches in Diameter Trunk Diameter (Approximate)/Replace With

Scale Rating (10% to 100%)		0.75″/	2″/	3.25″/	4.5″/	6″/
Very poor	Below 45%	1/15 gal.	1/15 gal.	1/15 gal.	1/15 gal.	1/15 gal.
Poor	45%— 55%	1/15 gal.	1/15 gal.	1/15 gal.	1/15 gal.	1/15 gal.
Average	60%— 70%	1/15 gal.	1/24″ box	1/36″ box	1/48″ box	1/60″ box
Very good	75%— 85%	1/15 gal.	1/24″ box	2/36″ box	2/48″ box	2/60″ box
Excellent	90%—100%	1/15 gal.	1/24″ box	3/36″ box	3/48″ box	3/60″ box

Heritage and Significant Tree Replacement

Table No. II for Trees Seven Inches in Diameter or Greater

Scale Rating (10% to 100%)		Number Removed	Replace With	Minimum Size
Very poor	Below 45%	1	1	15 gallons
Poor	45%—55%	1	1	15 gallons
Average	60%	1	4	24″ box
	65%	1	4	24″ box
	70%	1	4	36″ box
Very good	75%	1	4	36″ box
	80%	1	4	48″ box
	85%	1	4	48″ box
Excellent	90%	1	4	60″ box
	95%	1	4	60″ box
	100%	1	4	72″ box

Other Tree Replacement

Table No. III for Trees under Seven Inches in Diameter Trunk Diameter (Approximate)/Replace With

Scale Rating (10% to 100%)		0.75″/	2″/	3.25″/	4.5″/	6″/
Very poor	Below 45%	1/15 gal.	1/15 gal.	1/15 gal.	1/15 gal.	1/15 gal.
Poor	45%— 55%	1/15 gal.	1/15 gal.	1/15 gal.	1/15 gal.	1/15 gal.
Average	60%— 70%	1/15 gal.	1/15 gal.	1/24″ box	1/36″ box	1/48″ box
Very good	75%— 85%	1/15 gal.	1/24″ box	1/36″ box	1/48″ box	2/48″ box
Excellent	90%—100%	1/15 gal.	1/24″ box	1/36″ box	2/48″ box	3/48″ box

Other Tree Replacement

Table No. IV for Trees Seven Inches in Diameter or Greater

Scale Rating (10% to 100%)		Number Removed	Replace With	Minimum Size
Very poor	Below 45%	1	1	15 gallons
Poor	45%—55%	1	1	15 gallons
Average	60%	1	4	24″ box
	65%	1	4	24″ box
	70%	1	4	36″ box
Very good	75%	1	4	36″ box
	80%	1	4	48″ box
	85%	1	4	48″ box