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ENTERPRISES

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July 10, 2020

Charles Laflamme
4575 6th Avenue
Corning CA, 96021

Re: Tree Survey for the Village At Ruddy Creek Project – Oroville, Butte County, California.

Mr. Laflamme,

As requested, Gallaway Enterprises conducted a Tree Survey for the Village at Ruddy Creek Project (Project) on March 26 and April 1, 2020. Please find enclosed a summary of the results of the survey conducted.

Project Location and Environmental Setting

The Project site is located within Thermalito, a census-designated place, which lies west of central Oroville and the Feather River. The site falls within the Fernandez Land Grant: Section 14, Township 19N, Range 3E; latitude 39.505791, longitude -121.602019. The majority of the land within the Project site was historically converted to orchards, but has partially removed and unused since at least 1998 based on review of historic aerials. Currently the site contains a mosaic of annual grassland, oak trees and orchard trees, primarily almond and olive trees. A house was present in the north central portion of the Project site, but only the foundation currently exists. The area surrounding the Project site to the east, west, northwest and south consists of existing residential development. A small area of oak woodland occurs northeast of the Project site.

Regulatory Framework

City of Oroville

The Project site is currently located within an unincorporated area of Butte County; however, as part of the Project, the site is being proposed to be annexed into the Oroville City Limits. As such, the Project will need to be compliant with the Oroville Municipal Code. Pursuant to the Oroville Municipal Code Chapter 17.12.065 Oak Tree Loss Mitigation, all native oak trees with a single main trunk of 6 inches or greater or multiple trunks in aggregate of 10 inches or greater in diameter at breast height (DBH) must be surveyed and mitigated for their loss is regulated by the City. Further, any heritage trees, which are defined as a tree with a 24 inch diameter or greater, are to be identified and their removal are subject to approval and mitigation. Therefore, this Tree Survey was conducted to identify any trees with a 6 inch diameter or greater within the Project site.

Senate Bill No. 1334/Assembly Bill No. 242 – Oak Woodlands Conservation Act

The Oak Woodlands Conservation Act (Act) was enacted in order to prevent the continued loss of oak woodlands within California. This Act requires a county to determine the level of CEQA review required and "to determine whether a project in its jurisdiction may result in a conversion of oak woodlands that will have a significant effect on the environment, and would require the county, if it determines there may be a significant effect to oak woodlands, to require one or more of specified mitigation alternatives to mitigate the significant effect of the conversion of oak woodlands."

Pursuant to the Act, an oak woodland is defined as an oak stand with a greater than 10% canopy cover or that may have historically supported greater than 10% canopy cover.

Survey Method

The Tree Survey was conducted on March 26 and April 1, 2020 by ISA Certified Arborist Elena Gregg. Trees present within the Project site with a dbh of 6 inches or greater or 10 inches in aggregate or greater were identified and their locations recorded using a Trimble Geo Explorer 6000 Series GPS Receiver. Gallaway Enterprises then conducted a health assessment for all of these trees. A level 2 basic visual assessment (per ISA's ANSI A300 Part 9 and companion BMP guidelines) of each tree was conducted from the ground by walking completely around the tree and looking at the site, trunk, trunk collar, and branches.

Following this visual assessment, each inventoried tree was assigned a health rating of 1 to 5, with 1 being poor and 5 being excellent. The health ratings were based on the following standards:

1: These trees have a major defect and are considered a potential hazard. The defect is typically extensive decay located within the trunk.

2: These are generally sound trees but often have prominent leans, trunk elongation, or general branching defects. Other potential health detractors include excessive deadwood from competition with other trees.

3: These are average trees; generally in good health and without prominent defects in their branching pattern and overall structure. These trees also have adequate growing room and are not overgrown with mistletoe or ivy.

4: These trees are above average, with good branch form. The trees are not overcrowded or light-starved and have plenty of room to grow. These trees often look much like a "3" except they are larger, older, and better established in the tree stand.

5: These trees are considered excellent in all aspects: form, branching, and structure.

Results of the Survey

Since the site is a dilapidated almond and olive orchard, few large trees occur within the Project site. Native oaks have returned to the site, though, and there are many smaller trees averaging 8.5 inches in dbh. The primary species of oak present within the Project site is blue oak (*Quercus douglasii*), however live oaks (*Quercus wislizeni*) and valley oaks (*Quercus lobata*) also occur scattered throughout the site. A total of 88 blue oaks, 22 live oaks and 14 valley oaks were surveyed within the Project site.

Only two native live oak trees (T011 and T050) were identified as having a single trunk 24 inches or greater in dbh within the Project site (**Attachment A**). A table listing each tree surveyed within the Project site and its assessed health rating is provided in **Attachment A** along with the tree location map. A few pictures of the site are provided as **Attachment B**.

A level 2 basic visual assessment from ground level was conducted; however, visual signs of decline may not have been outwardly evident or evident from the ground surface. As such, the accuracy of the heath rating is limited by the visual appearance of the trees at the time of the survey. An Arborist's Disclaimer Statement is provided as **Attachment C**.

Although the Project site was historically an orchard, numerous native oak trees were observed scattered throughout the Project site during the site visit. The amount of oak tree canopy present within the Project site has been estimated at approximately 3 acres[1], which constitutes just over 10 percent of the Project site. Therefore, the oak trees within the Project site meet the definition under the Oak Woodlands Conservation Act to be considered oak woodland. Therefore, the California Environmental Quality Act (CEQA) lead agency for the proposed Project will have to determine if the proposed Project will have a significant effect on oak woodlands and if mitigation for the loss of oak woodland present within the Project site will be required.

Recommendations

It is recommended that as many healthy oak trees (trees with a health rating of 3 or greater, **Attachment A**) as feasible be retained within the Project site due to their aesthetics and usefulness to wildlife. In June of 2020 a site visit was conducted by the City of Oroville's Arborist, Wade Atteberry, to assess the two heritage trees on the Project site (T011 and T050). Following this site visit the City's Arborist did not recommend retaining the two heritage trees due to the fact that these large mature trees were in a state of 'heavy decline.'

The removal of any regulated trees on the Project site must be in compliance with the City's zoning ordinance. If regulated trees are proposed to be removed on the site, a tree removal permit will be required to be obtained from the City. Mitigation for removal of trees will be determined through consultation with the City.

If any of the trees present within the Project site are proposed for preservation, care should be taken to avoid construction activities including stockpiling of equipment or materials within the dripline of the tree canopy. If construction activities or soil compaction occurs within the dripline of a tree proposed for preservation, these activities may harm the tree to the point of failure. Preserved trees in close proximity to structures or walkways should be regularly monitored by a qualified arborist following construction activities for signs of stress or failure.

[1] Oak canopy was roughly estimated by assuming an average 20-foot diameter dripline for each oak tree with a 5 inch or greater dbh identified on the Project site.

Should you have any questions or need any additional information on managing trees during construction, please do not hesitate to contact me at (530) 332-9909 or elena@gallawayenterprises.com.

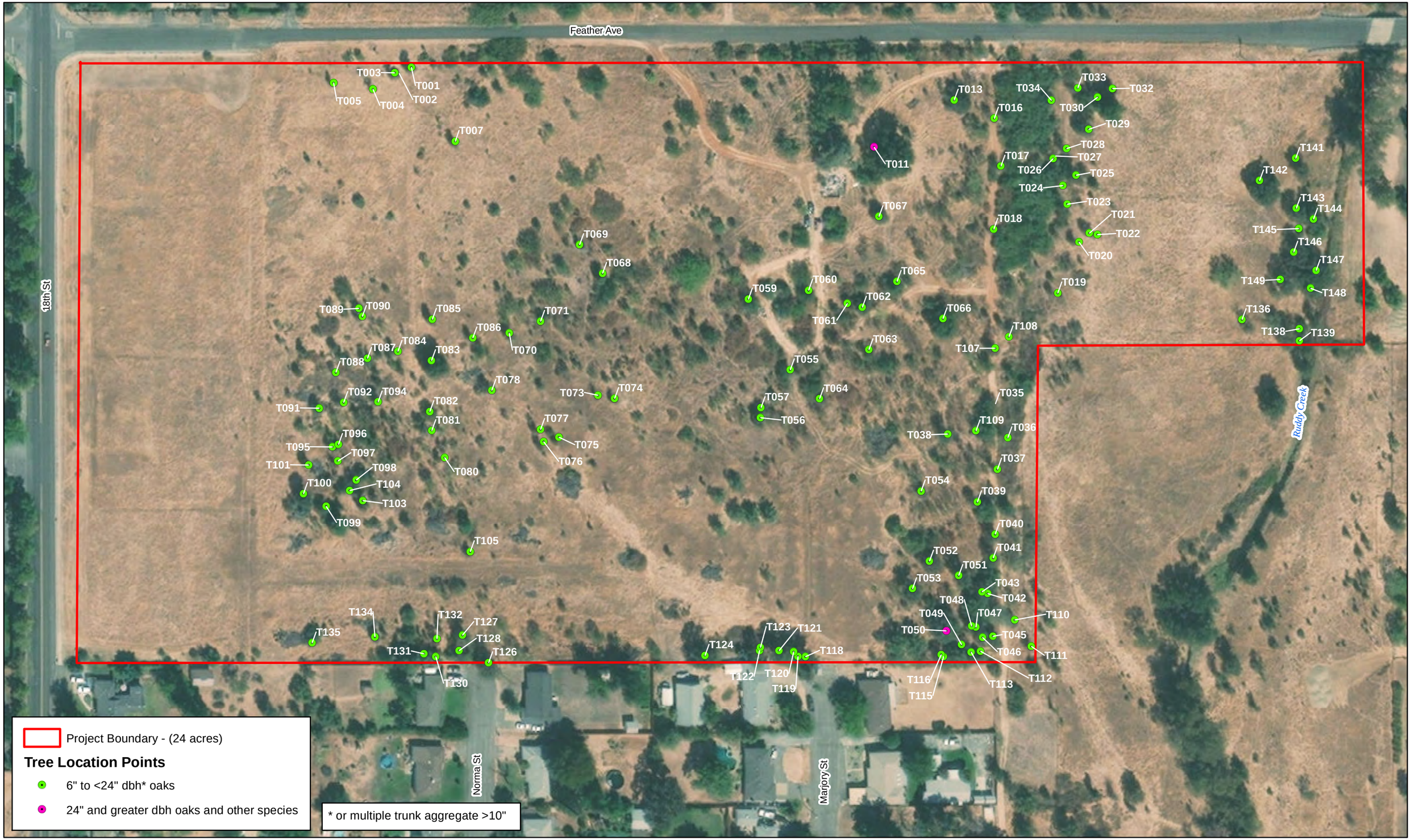
Sincerely,

Elena Gregg, ISA Certified Arborist (WE-8033A)
Gallaway Enterprises

Attachment A: Tree Location Map and Tree Data Table
Attachment B: Project Site Photos
Attachment C: Arborist's Disclaimer

Attachment A

Tree Location Map and Tree Data Table



1:1,300
0 100 200 Feet

NORTH

Data Sources: ESRI, Butte County, Maxar 09/10/18

The Village at Ruddy Creek
Tree Location Points Map
Attachment A

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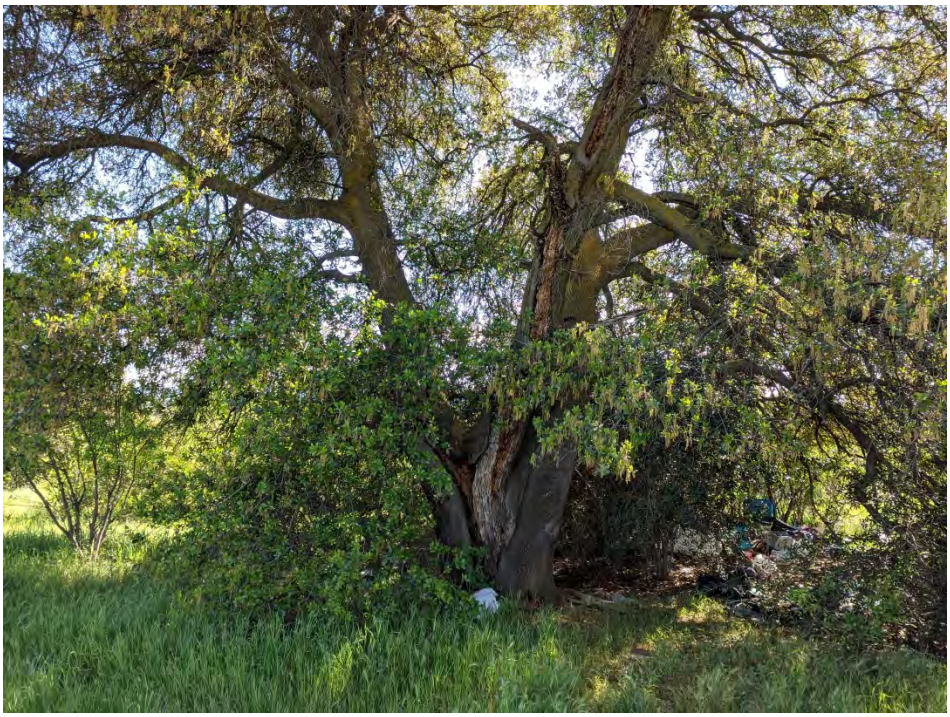
GE: #19-142 Map Date: 07/10/20

Tree #	Species	dbh1	dbh2	dbh3	dbh4	dbh5	dbh6	Combined DBH	Dripline (ft)	Health (1-5)	Comments
T001	QULO	7	7					14	7	3	average
T003	QUWI	8						8	9	3	average but slight decay
T004	QUDO	4	6					10	8	3	average but some weak crotches
T005	QULO	6						6	5	4	above average
T007	QULO	10						10	8	2	healthy but included bark in crotch (weak)
T011	QUWI	65						65	30	1	(see pic)
T013	QUDO	10	15					25	20	1	extreme decay in trunk
T016	QUDO	6						6	7	3	average
T017	QUDO	5	5.5					10.5	8	3	poor form
T018	QUDO	6	3					9	7	1	extensive decay
T019	QULO	6						6	6	3	average but crowded crotches
T020	QULO	7						7	6	4	above average
T021	QUDO	6	4					10	7	3	poor branch form
T022	QUDO	6						6	6	3	average
T023	QUDO	7	4					11	8	2	poor/crowded crotch but healthy
T024	QUDO	6	6					12	8	3	average
T025	QUDO	3	4	7	6			20	8	2	very crowded crotch
T026	QUDO	6						6	8	3	average
T028	QUDO	6	4					10	8	3	average
T029	QUDO	7	12					19	12	2	poor form but healthy
T030	QUDO	5	4	3				12	10	2	poor growth form
T032	QUDO	6						6	8	3	slight poor form/lean
T033	QUDO	6	4	4				14	8	1	cavity + decay in mature trunk
T034	QUWI	12	5	4				21	13	4	above average
T036	QUDO	5	4	3	3			15	12	2	poor form
T037	QUDO	6	6	4	2	2	3	23	8	2	poor form/crowded
T038	QUDO	15						15	13	3	average
T039	QUDO	6	6	4				16	8	2	poor crotches but healthy
T040	QUDO	6	6	5	3			20	12	3	poor form
T041	QUDO	9	8	8				25	15	2	some decay, poor crotches
T042	QUDO	9						9	8	2	decay in trunk
T043	QUDO	10						10	12	2	decay in trunk
T045	QUDO	15						15	18	3+	average
T046	QUDO	7	5					12	8	3	some poor branching
T047	QUDO	13						13	12	3	average
T048	QUWI	13	8					21	12	2	dead branches
T049	QUDO	9						9	10	3	average
T050	QUWI	24						24	18	3	average but slight decay
T051	QUDO	13						13	15	3	average with some decay in cut branch
T052	QUDO	14						14	15	2	splitting bark
T053	QUDO	15						15	18	2	some cracking in trunk bark
T054	QUDO	7	7					14	8	3	average
T055	QUWI	7	7					14	8	3	average
T056	QUDO	6	5					11	8	3	average
T057	QUWI	6						6	8	3	average
T059	QUWI	7	5	3	4			19	12	3	average
T060	QUWI	10	7					17	12	2	lean + poor form only
T061	QUDO	7						7	12	3	average
T062	QUWI	10						10	15	2	poor form, some decay
T063	QUWI	6						6	10	3	average
T064	QUDO	6	5					11	12	2	crowded crotches, poor form
T065	QUWI	7	7	6	5	6		31	12	3	average
T066	QUWI	11	14	20				45	20	3+	some decay in one trunk base is only reason not a 4
T067	QUDO	10	7					17	12	3	healthy but poor form
T068	QUDO	10						10	8	3	average but slight lean
T069	QUDO	6						6	5	3	average
T070	QUDO	9						9	12	3	crowded crotch + some poor branching
T071	QUWI	6	5					11	12	2	leans
T073	QUDO	5	5.5					10.5	8	3	crowded crotches
T074	QUDO	6						6	6	2	suckering
T075	QUDO	6						6	8	3	average
T076	QUDO	7						7	10	2	leans excessively
T077	QUDO	6.5						6.5	8	2	split up trunk
T078	QUDO	7						7	12	3	slight poor form
T080	QUDO	6						6	8	3	average
T081	QUWI	7	6	5	4	4	3	29	12	2	poor form/crowded
T082	QUWI	7	5	4	4	3		23	12	3	average
T083	QUWI	18						18	17	4	leans

Tree #	Species	dbh1	dbh2	dbh3	dbh4	dbh5	dbh6	Combined DBH	Dripline (ft)	Health (1-5)	Comments
T084	QUDO	8						8	10	3	average
T085	QUDO	9						9	10	3	average
T086	QUDO	6	6					12	8	2	twisted costems
T087	QUDO	6	5					11	10	3	average
T088	QUDO	5.5	5					10.5	10	2	splits + decay + poor crotch
T089	QUDO	7						7	8	2	poor crotch
T090	QUDO	6						6	8	3	average
T091	QUWI	6	3					9	10	3	average
T092	QUDO	5	5					10	8	2	poor form
T094	QUDO	6	5	6				17	12	2	crowded, poor form
T095	QUDO	6						6	12	3	average
T096	QUDO	6						6	8	2+	crowded, some decay, elongate
T097	QUDO	6	5					11	10	2+	average but poor form
T098	QUWI	6	5	4				15	12	2	decay at base
T099	QUWI	6	4	3				13	12	3	average
T100	QULO	13						13	14	4	above average
T101	QUDO	8						8	12	3	average
T103	QULO	6	6					12	10	3	average
T104	QUWI	6	4					10	12	3	average
T105	QUDO	6						6	10	3	average
T107	QUDO	10	5					15	8	3	average
T108	QUDO	6	5	4	4			19	10	2	poor form but healthy
T109	QUDO	6						6	8	3	average
T110	QUDO	5.5	5					10.5	10	2	poor crotch
T111	QUDO	6	4	3				13	8	2	poor crotches but healthy
T112	QUDO	6						6	8	3	average
T113	QUDO	6						6	8	3	elongate
T115	QUDO	10						10	12	3	average
T116	QUDO	6	2					8	10	3	average but crowded
T118	QUDO	12	8					20	12	3	some poor crotches
T119	QUDO	10						10	12	2	crowded + some suckers but otherwise healthy
T120	QUWI	9						9	12	3	average
T121	QULO	15						15	15	4	above average
T122	QUDO	10						10	12	2	poor form and crowded but healthy
T123	QUDO	7						7	10	2	crowded, elongate but healthy
T124	QUDO	17						17	18	5	excellent
T126	QUDO	15						15	20	4	some suckering
T127	QULO	12						12	10	2	some dead branches + suckering
T128	QULO	10						10	12	3	average
T130	QULO	6						6	8	2	crowded, elongate
T131	QULO	6	7					13	10	3	average but lots of galls
T132	QUDO	6	5					11	10	3	average
T134	QULO	6	5	3				14	8	3	poor form
T135	QUDO	6	4					10	8	2	poor form + crowded but healthy
T136	QUDO	9						9	12	3	average
T138	QUDO	7						7	10	3	average
T139	QUDO	9	9					18	12	2	weak crotch
T141	QUDO	13						13	15	3	average
T142	QUDO	10	8	9	15			42	20	2	decay present
T143	QUDO	10	10					20	15	3	average
T144	QULO	12	10	7	6			35	15	3	average
T145	QUDO	13						13	15	4	above average
T146	QUDO	9	8	7	6			30	15	3	average
T147	QUDO	9	9	8				26	18	3	average
T148	QUDO	9	7	7	4			27	15	3	average
T149	QUDO	9						9	10	3	average

Attachment B

Project Site Photos



Tree # 11 – large protected/heritage live oak with extensive decay

Overview of southern boundary of the site

Attachment C

Arborist's Disclaimer

Arborist Disclaimer Statement

Arborists are tree specialists who use their education, knowledge, training, experience, and research to examine trees and woodlands. Arborists recommend measures to enhance the beauty and health of trees and forests, while attempting to reduce the risk of living near them. 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 subject to attack by disease, insects, fungi and other forces of nature. There are some inherent risks with trees that cannot be predicted with any degree of certainty, even by a skilled and experienced arborist. Arborists cannot predict acts of nature including, without limitation, storms of sufficient strength, which can cause even a healthy tree to fail. Any entity who develops land and builds structures with a tree in the vicinity should be aware and inform future residents of the risks of living with trees and this arborists disclaimer.

Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period of time. Likewise remedial treatments cannot be guaranteed 100%.

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

Neither this author nor Gallaway Enterprises has assumed any responsibility for liability associated with the trees on or adjacent to this project site, their future demise and/or any damage, which may result therefrom. To live near trees is to accept some degree of risk.

Elena Gregg
ISA Certified Arborist WE-8033A
Gallaway Enterprises