

PLANNING & ECONOMIC
DEVELOPMENT DEPARTMENT

AUG 10 2016

CITY OF SANTA ROSA
Santa Rosa, CA

HORTICULTURAL *Associates*

Consultants in Horticulture and Arboriculture

TREE INVENTORY REPORT

201 Farmers Lane
Santa Rosa, CA

Prepared for:

Bruce Shimizu
P.O. Box 1874
Windsor, CA 95425

Prepared by:

John C. Meserve
Consulting Arborist and Horticulturist
American Society of Consulting Arborists
ISA Certified Arborist, WE #0478A
ISA Tree Risk Assessment Qualified

October 31, 2014

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Mr. Bruce Shimizu
P.O. Box 1874
Windsor, CA 95425

Re: Completed *Tree Inventory Report*, 201 Farmers Lane, Santa Rosa

Bruce,

Attached you will find our *Tree Inventory Report* for the above noted site in Santa Rosa. A total of thirty six trees were evaluated on the property, and this includes all trees that are present except for most in the riparian corridor. Only three riparian trees were included because they overhang the project area and may be impacted by construction activity.

Each tree in this report was evaluated and documented for species, size, health, and structural condition. No development plan is available yet for review in relationship to trees and this report is a simple inventory to be used as a tool during design of the project. The *Tree Inventory Chart* also includes information about whether the tree is located on site or immediately off site, whether it is a Heritage tree in the City of Santa Rosa, and whether it is exempt from preservation. This is all information that may be helpful as you design this project.

The *Tree Location Plan* shows the location and numbering sequence of all evaluated trees. It also illustrates the approximate area of the dripline, or tree protection zone. It would be ideal to stay out of the dripline areas with construction activities, or at the maximum impact no more than 25% of that area. Driplines are generally not uniform in shape and those shown on the plan are intended to be areas of protection not actual driplines.

This report is intended to be a basic inventory of trees present at this site, which includes a general review of tree health and structural condition. No in-depth evaluation has occurred, and assessment has included only external visual examination without probing, drilling, coring, root collar examination, root excavation, or dissecting any tree part. Failures, deficiencies, and problems may occur in these trees in the future, and this inventory in no way guarantees or provides a warranty for their condition.

EXISTING SITE CONDITION SUMMARY

The project site consists of an undeveloped urban property. Conditions at the site appear natural and I did not observe remnant structures, foundations, features, or other indications of past use.

The tree population is generally found throughout the property. Mowed non-native grasses and weeds cover most of the site.

Other residential and commercial development immediately surrounds the site.

EXISTING TREE SUMMARY

The most common species present is the native Valley Oak (*Quercus lobata*). Some Coast Live Oaks (*Quercus agrifolia*) are also present. Other native species include Big Leaf Maple, Douglas Fir, and California Bay Laurel.

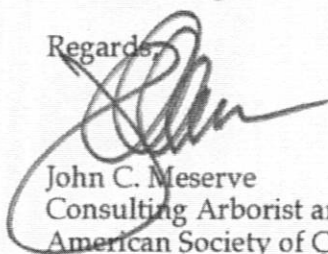
Ornamental trees include Sweetgum, Walnut, Glossy Privet, Stone Pine, and Raywood Ash. Glossy Privet is a species exempt from preservation and is not recommended for retention.

CONSTRUCTION IMPACT SUMMARY

Construction impacts are unknown at this time, and further review will be necessary once project footprints and grading requirements are better understood.

Please feel free to contact me if you have questions regarding this report, or if further discussion would be helpful.

Regards,


John C. Meserve
Consulting Arborist and Horticulturist
American Society of Consulting Arborists
ISA Certified Arborist, WE #0478A
ISA Tree Risk Assessment Qualified



TREE INVENTORY CHART

Tree #	Species	Common Name	Trunk (dbh ± inches)	Height (± feet)	Radius (± feet)	Health 1 - 5	Structure 1 - 4	On/Off Site	Exempt Species	Heritage Tree	Recommendations
1	<i>Liquidambar styraciflua</i>	Sweetgum	13	16	14	4	3	Off			13
2	<i>Liquidambar styraciflua</i>	Sweetgum	12.5	16	14	4	3	Off			13
3	<i>Quercus lobata</i>	Valley Oak	11	40	16	4	3	On		X	13
4	<i>Quercus lobata</i>	Valley Oak	13	40	20	4	3	On		X	13
5	<i>Quercus lobata</i>	Valley Oak	4	18	10	4	3	On			13
6	<i>Juglans nigra-regia</i>	Black and English Walnut	9+12+9	35	18	3	2.5	On			13
7	<i>Ligustrum lucidum</i>	Glossy Privet	multiple	25	12	4	3	On	X		13
8	<i>Quercus agrifolia</i>	Coast Live Oak	9+7+6+6	25	17	4	3	On		X	13
9	<i>Fraxinus oxy. 'Raywoodii'</i>	Raywood Ash	22	40	16	2	2	Off			13
10	<i>Fraxinus oxy. 'Raywoodii'</i>	Raywood Ash	14	40	16	3	3	Off			13
11	<i>Fraxinus oxy. 'Raywoodii'</i>	Raywood Ash	11	40	16	3	3	Off			13
12	<i>Fraxinus oxy. 'Raywoodii'</i>	Raywood Ash	16	45	18	3	3	Off			13
13	<i>Pinus pinea</i>	Stone Pine	20.5	45	25	4	3	Off			13
14	<i>Ligustrum lucidum</i>	Glossy Privet	4.5+4.5+3	25	12	4	3	On	X		13
15	<i>Fraxinus oxy. 'Raywoodii'</i>	Raywood Ash	7.5	35	14	3	2.5	Off			13
16	<i>Pseudotsuga menziesii</i>	Douglas Fir	35	75	24	3.5	3	On		X	13
17	<i>Ligustrum lucidum</i>	Glossy Privet	multiple	35	16	4	3	On	X		13
18	<i>Quercus agrifolia</i>	Coast Live Oak	40	50	30	4	3	On		X	13
19	<i>Quercus agrifolia</i>	Coast Live Oak	±15+18	50	25	4	3	Off		X	13
20	<i>Quercus agrifolia</i>	Coast Live Oak	±36	50	25	4	3	Off		X	13
21	<i>Ligustrum lucidum</i>	Glossy Privet	15+16+16	45	20	4	3	On	X		13
22	<i>Ligustrum lucidum</i>	Glossy Privet	20	45	20	4	3	On	X		13
23	<i>Ligustrum lucidum</i>	Glossy Privet	7+4+3	40	12	4	3	On	X		13
24	<i>Ligustrum lucidum</i>	Glossy Privet	5+3+2+1	35	12	4	3	On	X		13
25	<i>Quercus agrifolia</i>	Coast Live Oak	28	40	21	4	2	On		X	13
26	<i>Quercus lobata</i>	Valley Oak	12+4	30	16	4	3	On		X	13
27	<i>Quercus lobata</i>	Valley Oak	6+8	30	15	4	3	On		X	13
28	<i>Quercus lobata</i>	Valley Oak	7	25	14	4	3	On		X	13
29	<i>Quercus lobata</i>	Valley Oak	7+6+5	30	15	4	3	On		X	13
30	<i>Quercus agrifolia</i>	Coast Live Oak	8	15	16	4	3	On			13
31	<i>Umbellularia californica</i>	California Bay Laurel	14+18+18+12	50	16	3	2.5	On		X	13
32	<i>Quercus lobata</i>	Valley Oak	36+13	50	30	3.5	3	On		X	13

Tree #	Species	Common Name	Trunk (dbh ± inches)	Height (± feet)	Radius (± feet)	Health 1 - 5	Structure 1 - 4	On/Off Site	Exempt Species	Heritage Tree	Recommendations
33	<i>Ligustrum lucidum</i>	Glossy Privet	±12+14	dead	-	-	-	Off	-	-	-
34	<i>Acer macrophyllum</i>	Big Leaf Maple	±12	30	25	4	3	On			13
35	<i>Acer macrophyllum</i>	Big Leaf Maple	±13	40	25	4	3	On			13
36	<i>Quercus lobata</i>	Valley Oak	±40	45	30	4	3	On		X	13

KEY TO TREE
INVENTORY CHART

KEY TO TREE INVENTORY CHART

Tree Number

Each tree has been identified in the field with an aluminum tag and reference number. Tags are attached to the trunk at approximately eye level. The *Tree Location Plan* illustrates the location of each numbered tree.

Species

Each tree has been identified by genus, species and common name. Many species have more than one common name.

Trunk

Each trunk has been measured or estimated, in inches, to document its diameter, at 4.5 feet above adjacent grade. Trunk diameter is a good indicator of age, and is commonly used to determine mitigation replacement requirements.

Height

Height is estimated in feet, using visual assessment.

Radius

Radius is estimated in feet, using visual assessment. Since many canopies are asymmetrical, it is not uncommon for a radius estimate to be an average of the canopy size.

Health

The following descriptions are used to rate the health of a tree. Trees with a rating of 4 or 5 are very good candidates for preservation and will tolerate more construction impacts than trees in poorer condition. Trees with a rating of 3 may or may not be good candidates for preservation, depending on the species and expected construction impacts. Trees with a rating of 1 or 2 are generally poor candidates for preservation.

- (5) Excellent - health and vigor are exceptional, no pest, disease, or distress symptoms.
- (4) Good - health and vigor are average, no significant or specific distress symptoms, no significant pest or disease.
- (3) Fair - health and vigor are somewhat compromised, distress is visible, pest or disease may be present and affecting health, problems are generally correctable.
- (2) Marginal - health and vigor are significantly compromised, distress is highly visible and present to the degree that survivability is in question.
- (1) Poor - decline has progressed beyond the point of being able to return to a healthy condition again. Long-term survival is not expected. This designation includes dead trees.

Structure

The following descriptions are used to rate the structural integrity of a tree. Trees with a rating of 3 or 4 are generally stable, sound trees which do not require significant pruning, although cleaning, thinning, or raising the canopy might be desirable. Trees with a rating of 2 are generally poor candidates for preservation unless they are preserved well away from improvements or active use areas. Significant time and effort would be required to reconstruct the canopy and improve structural integrity. Trees with a rating of 1 are hazardous and should be removed.

- (4) Good structure - minor structural problems may be present which do not require corrective action.
- (3) Moderate structure - normal, typical structural issues which can be corrected with pruning.
- (2) Marginal structure - serious structural problems are present which may or may not be correctable with pruning, cabling, bracing, etc.
- (1) Poor structure - hazardous structural condition which cannot be effectively corrected with pruning or other measures, may require removal depending on location and the presence of targets.

Recommendations

Recommendations are provided for removal or preservation. For those being preserved, protection measures and mitigation procedures to offset impacts and improve tree health are provided.

- (1) Preservation appears to be possible.
- (2) Removal is required due to significant development impacts.
- (3) Removal is recommended due to poor health or hazardous structure.
- (4) Removal is required due to significant development impacts and poor existing condition.
- (5) Removal is recommended due to poor species characteristics.
- (6) Install temporary protective fencing at the edge of the dripline, or edge of approved construction, prior to beginning grading or construction. Maintain fencing in place for duration of all construction activity in the area.
- (7) Maintain existing grade within the fenced portion of the dripline. Route drainage swales and all underground work outside the dripline.
- (8) Place a 4" layer of chipped bark mulch over the soil surface within the fenced dripline prior to installing temporary fencing. Maintain this layer of mulch throughout construction.
- (9) Prune to clean the canopy, per International Society of Arboriculture pruning standards.
- (10) Prune to thin the canopy, per International Society of Arboriculture pruning standards.
- (11) Prune to raise the canopy, per International Society of Arboriculture pruning standards.

(12) Prune to provide clearance for adjacent improvements, per International Society of Arboriculture pruning standards.

(13) Potential development impacts are unknown at the time this report is being prepared.

TREE LOCATION PLAN

TREE LOCATION AND NUMBERING PLAN

201 FARMERS LANE
Santa Rosa, California

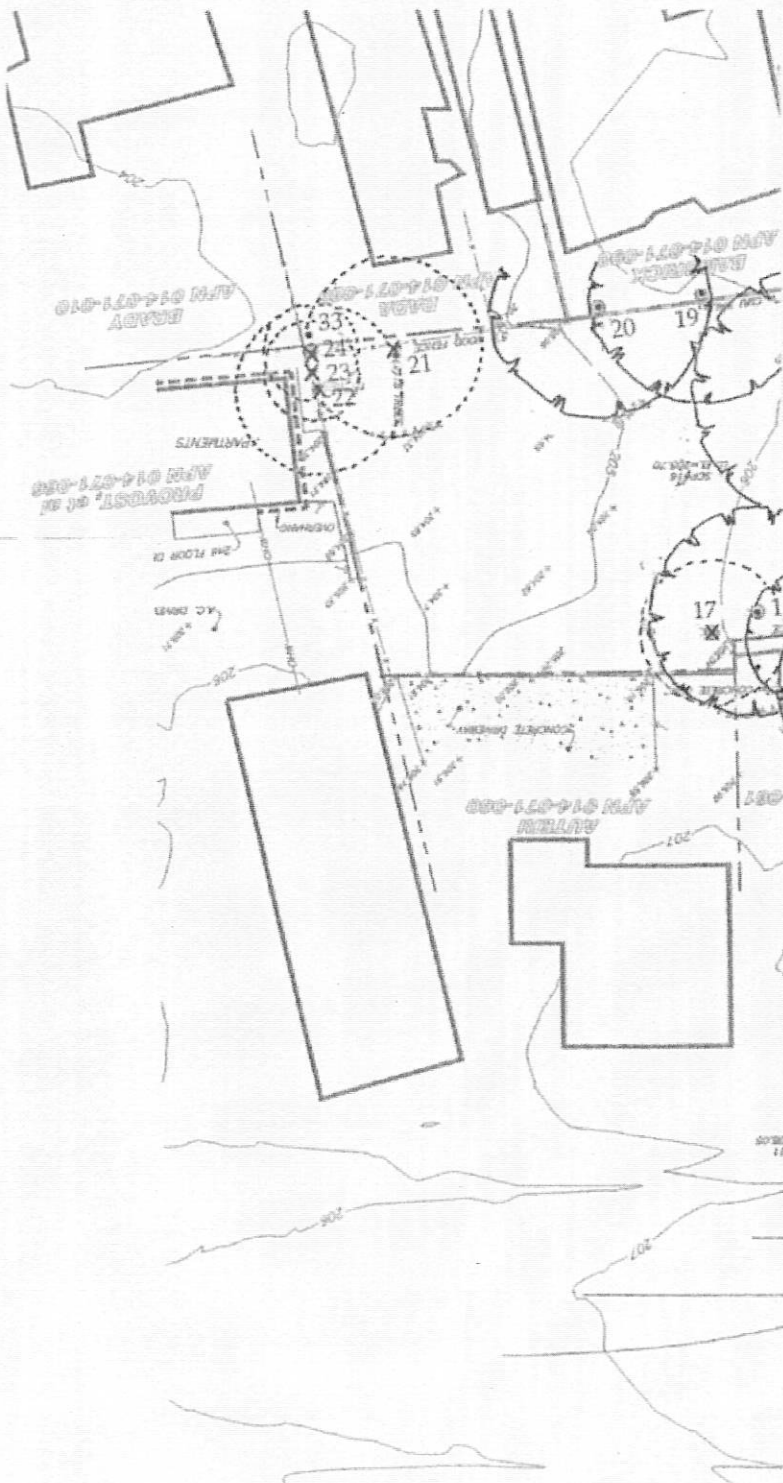
THIS PLAN TO BE USED IN CONJUNCTION WITH
TREE PRESERVATION AND MITIGATION PLAN
DATED 10/31/14

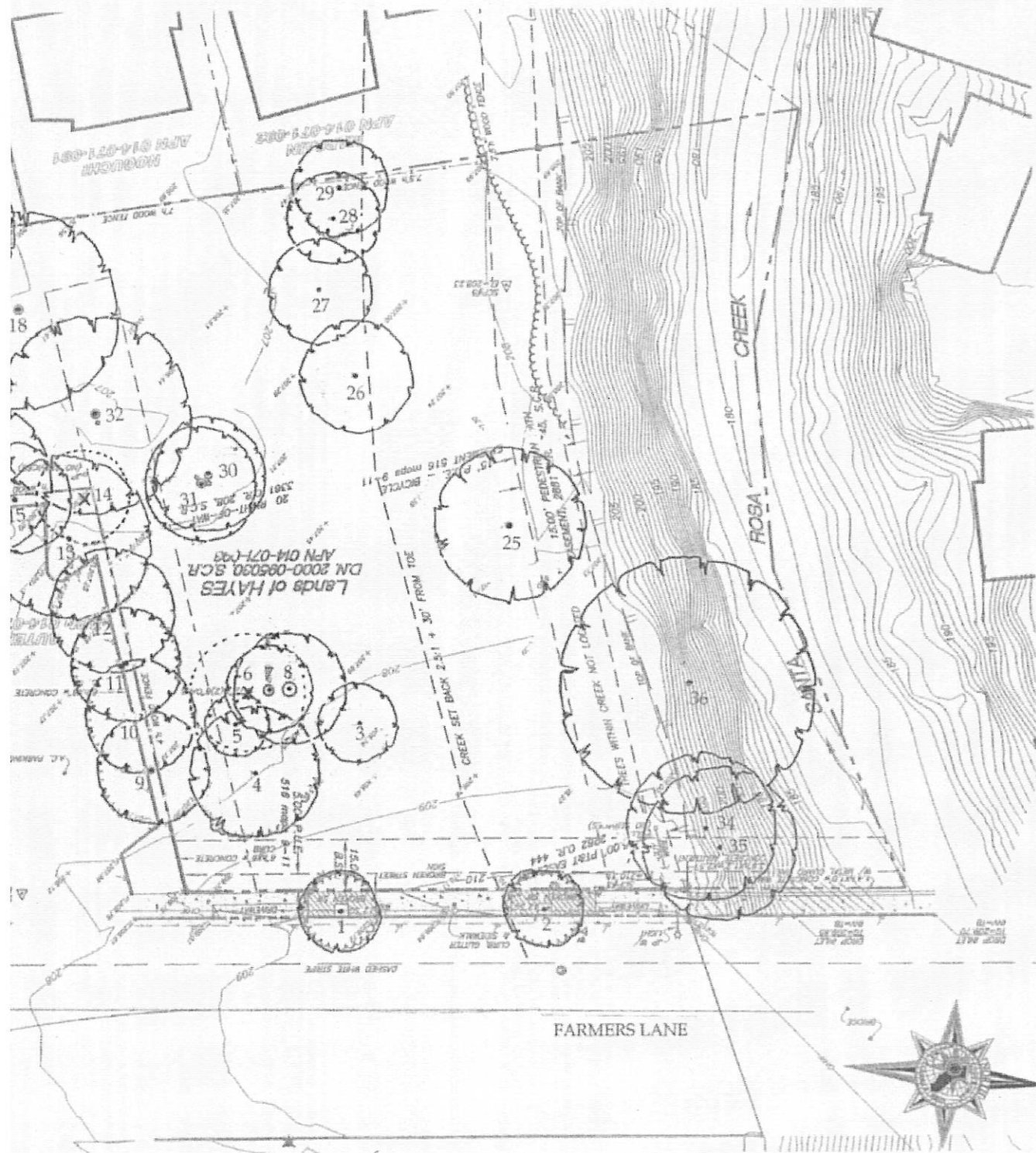
JOHN C. MESERVE

CONSULTING ARBORIST

Member, American Society of Consulting Arborists
International Society of Arboriculture, WE #0476A

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P.O. BOX 1261, GLEN ELLEN, CA 95442
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AUG 10 2016

CITY OF SANTA ROSA

Santa Rosa, CA

TREE INVENTORY

NOTE: Tree inventory conducted by Horticultural Associates on October 30, 2014. Recommendation 13 states: "Potential development impacts are unknown at the time this report is being prepared." An updated Arborist's Report is needed to analyze trees impacted by construction.

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KEY

REMOVED HERITAGE TREE

PRESERVED HERITAGE TREE

REMOVED EXEMPT TREE

EXISTING TREES

REMOVED HERITAGE TREES REQUIRING REPLACEMENT

(as per Santa Rosa City Code: 17-24.050 Tree Alteration, removal or relocation on property proposed for development)

SPECIES	COMMON NAME	TOTAL TRUNK DBH	NEW TREES NEEDED TO COMPLY (15-Gallon)
Quercus agrifolia	Coast Live Oak	56 inches	20
Quercus lobata	Valley Oak	103inches	36
Umbellularia californica	California Bay Laurel	62 inches	22

PRESERVED HERITAGE TREES

SPECIES	COMMON NAME	TOTAL TRUNK DBH	QUANTITY
Quercus agrifolia	Coast Live Oak	109 inches	3
Quercus lobata	Valley Oak	65 inches	3
Pseudotsuga menziesii	Douglas Fir	35 inches	1

PROPOSED TREES

NEW HERITAGE TREE REPLACEMENTS

SPECIES	COMMON NAME	SIZE	QUANTITY (Mitigation value to be determined by City)
Quercus lobata	Valley Oak	36" BOX	4

NEW NON-HERITAGE TREE REPLACEMENTS

SPECIES	COMMON NAME	SIZE	QUANTITY (Mitigation value to be determined by City)
Arbutus unedo 'Compacta'	Dwarf Strawberry Tree	15 Gal.	7
Cercis canadensis	Eastern Redbud	24" Box	4
Cercis x 'Merlot'	Merlot Redbud	15 Gal.	6