
HORTICULTURAL

Associates

Consultants in Horticulture and Arboriculture

TREE PRESERVATION AND MITIGATION REPORT

1385 West College Avenue
Santa Rosa, CA

Prepared for:

McKellar McGowan LLC
5075 Shoreham Pl #280
San Diego, CA 92122

Prepared by:

John C. Meserve
ISA Certified Arborist/WE #0478A
ISA Qualified Tree Risk Assessor/TRAQ
ASCA Qualified Tree and Plant Appraiser/TPAQ

February 14, 2020

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Mr. Scott Parker
McKellar McGowan LLC
5075 Shoreham Pl #280
San Diego, CA 92122

Re: Completed *Tree Preservation and Mitigation Report*, 1345 West College Avenue, Santa Rosa, California

Scott,

Attached you will find our completed *Tree Preservation and Mitigation Report* for the above noted project site. A total of 57 trees were evaluated and this includes all trees greater than 6 inches in trunk diameter that were present, per the Santa Rosa Tree Ordinance.

Each tree is identified in the field with a numbered rigid aluminum tag placed on the trunk at approximately eye level. This tag number corresponds to the numbers utilized in the attached chart.

All trees in this report were evaluated and documented for species, size, health, and structural condition. The *Tree Inventory Chart* also includes information about expected impacts of the proposed development plan, and also recommendations for action based on the plan reviewed.

The *Tree Location Plan* shows the location and numbering sequence of all evaluated trees.

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. If more extensive investigation is desired please let us know. No other trees are included in this report. If other trees need to be included it is the responsibility of the client to provide that direction.

EXISTING SITE CONDITION SUMMARY

The project site consists of property with two homes, a barn, and a remnant English Walnut orchard.

EXISTING TREE SUMMARY

Species native to the site includes Valley Oak.

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Non-native ornamental species present include Sweetgum, Honeylocust, Fig, English Walnut, Apple, Stone Pine, Mimosa, and Olive

CONSTRUCTION IMPACT SUMMARY

All trees at this site will require removal. Mitigation replacement calculations are included in the attached chart.

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

Regards,



John C. Meserve
ISA Certified Arborist, WE #0478A
ISA Qualified Tree Risk Assessor/TRAQ
ASCA Qualified Tree and Plant Appraiser/TPAQ



TREE INVENTORY CHART

TREE INVENTORY
1385 West College Avenue
Santa Rosa, CA

February 14, 2020

Tree #	Species	Common Name	Trunk (dbh ± inches)	Height (± feet)	Radius (± feet)	Health 1 - 5	Structure 1 - 4	Expected Impact	Recommendations	Mitigation Required
900	<i>Quercus lobata</i>	Valley Oak	27	45	30	3	3	3	2	27
901	<i>Quercus lobata</i>	Valley Oak	34.5	50	34	3	3	3	2	34.5
902	<i>Juglans regia</i>	English Walnut	9+7	15	15	3	3	3	2	11
903	<i>Juglans regia</i>	English Walnut	11.5+12	25	20	3	3	3	2	17
904	<i>Juglans regia</i>	English Walnut	10.5	20	16	3	3	3	2	10.5
905	<i>Juglans regia</i>	English Walnut	10	20	14	3	3	3	2	10
906	<i>Juglans regia</i>	English Walnut	9	15	14	2	3	3	2	9
907	<i>Juglans regia</i>	English Walnut	25	25	22	3	2	3	2	25
908	<i>Juglans regia</i>	English Walnut	11.5	18	14	2	2	3	2	11.5
909	<i>Juglans regia</i>	English Walnut	8	20	15	2	3	3	2	8
910	<i>Juglans regia</i>	English Walnut	6+8	18	14	2	3	3	2	10
911	<i>Ficus carica</i>	Fig	7+9.5+7	10	10	3	2	3	2	0
912	<i>Juglans regia</i>	English Walnut	8	15	12	2	2	3	2	8
913	<i>Juglans regia</i>	English Walnut	7.5	14	10	2	3	3	2	7.5
914	<i>Juglans regia</i>	English Walnut	15	25	20	3	3	3	2	15
915	<i>Juglans regia</i>	English Walnut	7.5+9.5+5.5+6	15	16	3	3	3	2	15

TREE INVENTORY
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Tree #	Species	Common Name	Trunk (dbh ± inches)	Height (± feet)	Radius (± feet)	Health 1 - 5	Structure 1 - 4	Expected Impact	Recommendations	Mitigation Required
916	<i>Juglans regia</i>	English Walnut	10.5	18	16	3	3	3	2	10.5
917	<i>Juglans regia</i>	English Walnut	15	20	18	3	3	3	2	15
918	<i>Juglans regia</i>	English Walnut	12.5	25	18	3	3	3	2	12.5
919	<i>Juglans regia</i>	English Walnut	12	20	18	3	3	3	2	12
920	<i>Juglans regia</i>	English Walnut	9	15	10	2	2	3	2	9
921	<i>Juglans regia</i>	English Walnut	11+8+7+11	25	18	3	3	3	2	16
922	<i>Juglans regia</i>	English Walnut	12.5	18	16	3	3	3	2	12.5
923	<i>Malus domestica</i>	Edible Apple	9+7	12	8	2	1	3	2	0
924	<i>Juglans regia</i>	English Walnut	8	14	14	2	2	3	2	8
925	<i>Juglans regia</i>	English Walnut	17.5	20	20	3	3	3	2	17.5
926	<i>Juglans regia</i>	English Walnut	8	15	12	2	2	3	2	8
927	<i>Juglans regia</i>	English Walnut	13	15	18	3	3	3	2	13
928	<i>Juglans regia</i>	English Walnut	6+5.5+3.5	15	10	2	3	3	2	9
929	<i>Juglans regia</i>	English Walnut	12	25	18	3	3	3	2	12
930	<i>Juglans regia</i>	English Walnut	12	20	18	3	3	3	2	12
931	<i>Juglans regia</i>	English Walnut	10.5	20	18	2	3	3	2	10.5

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Tree #	Species	Common Name	Trunk (dbh ± inches)	Height (± feet)	Radius (± feet)	Health 1 - 5	Structure 1 - 4	Expected Impact	Recommendations	Mitigation Required
932	<i>Juglans regia</i>	English Walnut	9	15	14	2	3	3	2	9
933	<i>Juglans regia</i>	English Walnut	15.5	25	20	2	1	3	2	15.5
934	<i>Pinus pinea</i>	Stone Pine	38	45	30	4	2	3	2	38
935	<i>Albizia julibrissin</i>	Mimosa	8	12	16	2	2	3	2	8
936	<i>Juglans regia</i>	English Walnut	13	20	18	3	3	3	2	13
937	<i>Juglans regia</i>	English Walnut	20	20	20	3	3	3	2	20
938	<i>Juglans regia</i>	English Walnut	14	20	18	2	3	3	2	14
939	<i>Juglans regia</i>	English Walnut	8	12	10	2	3	3	2	8
940	<i>Juglans regia</i>	English Walnut	5.8	10	8	2	3	3	2	5.5
941	<i>Juglans regia</i>	English Walnut	20	30	24	3	2	3	2	20
942	<i>Juglans regia</i>	English Walnut	16.5	25	18	2	2	3	2	16.5
943	<i>Juglans regia</i>	English Walnut	19	15	18	2	1	3	2	19
944	<i>Albizia julibrissin</i>	Mimosa	23	35	26	2	3	3	2	23
945	<i>Albizia julibrissin</i>	Mimosa	14.5	25	20	2	3	3	2	14.5
946	<i>Juglans regia</i>	English Walnut	19.5	30	20	3	2	3	2	19.5
947	<i>Liquidambar styraciflua</i>	Sweetgum	22.5	25	20	3	1	3	2	22.5

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February 14, 2020

Tree #	Species	Common Name	Trunk (dbh ± inches)	Height (± feet)	Radius (± feet)	Health 1 - 5	Structure 1 - 4	Expected Impact	Recommendations	Mitigation Required
948	<i>Albizia julibrissin</i>	Mimosa	10.5	18	16	2	1	3	2	10.5
949	<i>Ficus carica</i>	Fig	12.5	10	8	2	1	3	2	0
950	<i>Juglans regia</i>	English Walnut	20	30	24	3	2	3	2	20
951	<i>Albizia julibrissin</i>	Mimosa	15	25	18	3	1	3	2	15
952	<i>Gleditsia triacanthos</i>	Honeylocust	16.5	30	22	3	2	3	2	16.5
953	<i>Liquidambar styraciflua</i>	Sweetgum	16	35	24	3	3	3	2	16
954	<i>Liquidambar styraciflua</i>	Sweetgum	10	25	16	2	2	3	2	10
955	<i>Liquidambar styraciflua</i>	Sweetgum	11	25	16	3	2	3	2	11
956	<i>Liquidambar styraciflua</i>	Sweetgum	16	45	22	3	2	3	2	16
957	<i>Olea europaea</i>	Olive	23	40	24	4	3	3	2	0
									Total Mitigation Inches	777.5

777.5 total inches divided by 6 and multiplied by 2 = 259 x 15 gallon replacement trees required

KEY TO TREE
INVENTORY CHART

KEY TO TREE INVENTORY CHART

1385 West College Avenue
Santa Rosa, California

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 and 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, to the nearest one-half inch, to document its diameter at 24" 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.

Expected Impacts

Considering the proximity of construction activities, type of activities, tree species, and tree condition - the following ratings are used to estimate the amount of impact on tree health and stability. Most trees will tolerate a (1) rating, many trees could tolerate a (2) rating with careful consideration and mitigation, but trees with a (3) rating are poor candidates for preservation due to their very close proximity to construction or because they are located within the footprint of construction and cannot be preserved.

- (3) A significant impact on long term tree integrity can be expected as a result of proposed development.
- (2) A moderate impact on long term tree integrity can be expected as a result of proposed development.
- (1) A minor impact on long term tree integrity can be expected as a result of proposed development.
- (0) No impact is expected

Recommendations

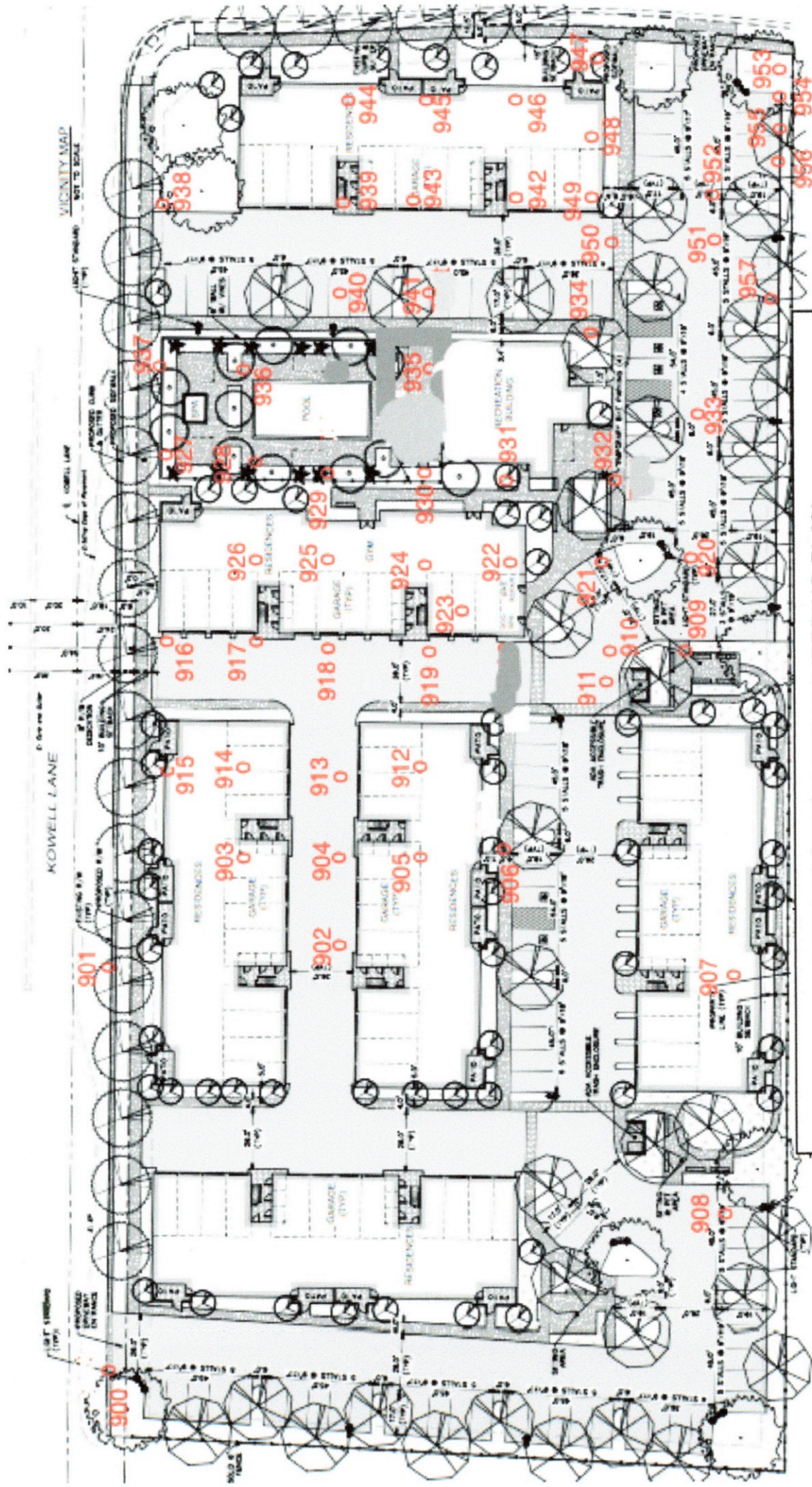
Recommendations are provided for removal or preservation. For those being preserved, protection measures and mitigation procedures to offset impacts and improve tree health are provided.

- (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, raise, or provide necessary clearance. Prune to reduce branches that are over-loaded, over-extended, largely horizontal, arching, or have foliage concentrated near the branch ends, per International Society of Arboriculture Pruning Standards.

Pruning to occur by, or under the supervision of, an Arborist certified by the International Society of Arboriculture. Pruning Standards are attached to this report.
- (10) Grading and underground construction may have an impact on this tree. Review again after construction documents are available.
- (11) This tree is located on the adjacent property.

TREE LOCATION PLAN



TREE LOCATION AND NUMBERING PLAN
 1385 West College Avenue, Santa Rosa, CA