



March 27, 2020

Coby Friedman,  
CF Contracting, Inc.,  
96 Forrest Ave,  
Fairfax, CA 94930

**Re: Arborist Report for vacant lots 59 and 60 (APN #012-141-59 and APN# 012-141-60), and  
Ross Street Terrace, San Rafael, Marin County, CA**

Dear Mr. Friedman:

This letter summarizes the methods and results of an arborist survey performed on March 3, 2020 at the site of a proposed residential construction project for two new single-family homes on two vacant parcels (Lot 59 and Lot 60; APNs #012-141-59 and 102-141-60) located in the City of San Rafael, Marin County, California (Project Area). The survey was conducted by ISA-Certified Arborist, Scott Yarger (ISA #WE-9300A) for the purpose of inventorying the number of trees proposed for removal within Lots 59 and 60, and along the proposed new Ross Street Terrace Roadway. This report was prepared in direct response to the City of San Rafael's requirement for an arborist report to be included with the Application for a Design Review Permit and Lot Line Adjustment associated with the Project.

The Project proposes to construct two single-family residences on two vacant hillside parcels (Lot 59 and Lot 60), implement a Lot Line Adjustment, and develop a new access road, Ross Street Terrace, with associated retaining walls. The proposed publicly accessible road, Ross Street Terrace, would be accessible from Ross Street, to the south, and would consist of approximately 0.1 mile of retention wall on both sides of the new road. The Project will remove approximately 58 trees, including 20 native and 38 non-native trees.

### **Regulatory Background**

City of San Rafael Municipal Code: Chapter 11.12, "Trees" of the San Rafael Municipal Code regulates the planting, cutting, pruning, or removal of trees on City-owned properties and/or in the City right-of-way per; administered by the Department of Public Works. Chapter 14.12, "Hillside Overlay District", and Chapter 14.25, Environmental and Design Review and Permits require tree replacement for the removal of "significant trees" associated with development projects on hillside properties:

- Pursuant to Chapter 11.12 of the Municipal Code, the City of San Rafael regulates the planting, cutting, pruning, breaking, injuring, removing, or spraying of trees along any public street, sidewalk or walkway in the city.
- A permit from the Department of Public Works is required for any of the aforementioned impacts to trees in the city right-of-way.

- Pursuant to Chapter 14.12, and 14.24 of the Municipal Code outline development standards within the Hillside Overlay District. Tree replacement is typically required for removal of “significant trees” defined as “oaks (*Quercus* spp.) that measure six-inches in diameter or greater, and other trees that measure 12 inches in diameter or greater at four and one-half feet above the root crown (diameter at breast height [DBH]).”
- Three replacement trees are typically required per each significant tree to be removed. This requirement is administered by the City of San Rafael, Planning Division, Community Development Department.

## Methods

On March 3, 2020, ISA-Certified Arborist, Scott Yarger, traversed the Project Area and vicinity on foot to evaluate, identify and inventory all trees 6 inches or greater in Diameter at Breast Height (DBH) within the Project Area. Locations of surveyed trees were recorded using a handheld GPS unit with sub-meter accuracy. Each tree was given an aluminum tree tag with unique identification number. Information including species, DBH, dripline radius, approximate height, health, structure, and overall condition ratings were recorded.

General notes on the condition of the protected trees were taken, including health, structure, and overall condition. Assessment of the health, structure, and overall condition of each tree was conducted according to the narratives listed in Table 1.

Table 1. Rating narratives for tree assessment

<b>Health</b>	
Good	Tree is free from symptoms of disease and stress
Fair	Tree shows some symptoms of disease or stress including twig and small branch dieback, evidence of fungal / parasitic infection, thinning of crown, or poor leaf color
Poor	Tree shows symptoms of severe decline
<b>Structure</b>	
Good	Tree is free from major structural defects.
Fair	Tree shows some structural defects in branches but overall structure is stable.
Poor	Tree shows structural failure of a major branch or co-dominant trunk, or structural insecurity such as major heart rot or cavities which could affect the tree’s overall stability.
<b>General Condition</b>	
Good	Tree shows condition of foliage, bark, and overall structure characteristic of the species and lacking obvious defect, or disease
Fair	Tree shows condition of foliage, bark, and overall structure characteristic of the species with some evidence of stress, defect, or disease
Poor	Tree shows condition of foliage, bark, and overall structure uncharacteristic of the species and/or with obvious evidence of stress, defect, decline or disease.

Potential impacts to significant trees and City trees were analyzed by comparing tree survey data with the Project's Landscape Plans (SKR Design 2016, Joseph Farrell Architecture 2019) which depicted all tree removals within the Lots and within the adjacent portions of the proposed Ross Street Terrace. Additional trees surveyed along Ross Street Terrace between the lots and Ross. The results of the impacts assessment is provided below and shown in Appendix A.

## Results

A total of 58 trees were identified within the Project Area, including 15 significant trees, 38 potential City trees located in the Ross Street Terrace right-of-way, and five (5) non-protected trees located in the private parcels but not large enough to be considered significant trees per the Municipal Code. A complete list of all trees surveyed is presented in Attachment A. A map showing the location of each tree in relation to Project activities is provided in Attachment B. Representative photographs are provided in Attachment C.

Significant trees within the Project Area were composed of two native species, coast live oak (*Quercus agrifolia*), and California buckeye (*Aesculus californica*), and five non-native species. Four of the five non-native species, are considered invasive weeds by the California Invasive Plant Council (Cal-IPC), including silver wattle (*Acacia dealbata*), cherry plum (*Prunus cerasifera*), glossy privet (*Ligustrum lucidum*), and blackwood acacia (*Acacia melanoxylon*). Potential City trees located in the Ross Street Terrace right-of-way included many of the same species, California bay (*Umbellularia californica*), and several additional non-native species including olive (*Olea europaea*), Monterey pine (*Pinus radiata*), and red gum (*Eucalyptus camaldulensis*).

The overall condition, health, and structure of trees inventoried during this assessment ranged from poor to good, with most trees ranking fair in all categories. Trees ranking poor in condition, health or structure, included most of the non-native, invasive silver wattle trees, olives, and cherry plum (*Prunus cerasifera*) which exhibited poor, multi-trunked, and/or leaning growth forms, typical of these weedy species. Trees that ranked "good" in overall condition included many of the native coast live oak trees, and one very large, dominant red gum (tree #736).

Common maladies observed affecting trees in the Project Area, included codominant trunks with included bark, poor, leaning growth forms, minor to significant internal decay and dieback, minor to significant limb failure, twig and leaf galls, and ivy infestation. The observed maladies and considerations of severity, along with species characteristics guided the assignment of the structural condition, health, and overall condition score for each tree. The overall condition, structural condition, health of inventoried trees was found to be generally fair. Table 2 below summarizes the assessment results of all inventoried trees in the Project Area.

Table 2. Tree Assessment Results Summary

Criteria Assessed/Rating	Condition	Health	Structure
Good	7 (12%)	16 (28%)	8 (14%)
Fair	41 (71%)	35 (60%)	30 (52%)
Poor	10 (17%)	7 (12%)	20 (34%)

The Project has been designed to retain five native coast live oak and California bay trees, including the largest coast live oak significant tree within the parcels, tree #771 a 47.9-inch DBH multi-trunked tree in the southwest corner of the parcels. The Project will potentially remove 14 significant trees, 34 potential City trees in the Ross Street Terrace right-of-way, and five non-protected invasive silver wattle trees. Permits from the City of San Rafael will be required for the removal of significant and street trees. Tree replacement may be required for the removal of the 14 significant trees, at a 3 to 1 ratio (replacement trees to trees removed), for a total of 42 potential replacement trees.

## **Summary and Recommendations**

A total of 58 trees were identified within the Project Area, including 15 significant trees, 38 potential City trees located in the Ross Street Terrace right-of-way, and five (5) non-protected trees located in the private parcels but not large enough to be considered significant trees per the Municipal Code.

The Project has been designed to retain five native coast live oak and California bay trees, and the Project will potentially remove 14 significant trees, 34 potential City trees, and five non-protected invasive silver wattle trees. Permits from the City of San Rafael will be required for the removal of significant and street trees. Conditions of approval may require tree replacement for significant trees.

A complete list of all trees surveyed is presented in Attachment A. A map showing the location of each tree in relation to Project activities is provided in Attachment B. Representative photographs are provided in Attachment C.

## **Recommended Tree Protection Measures**

In order to avoid and minimize damage to existing trees which are not proposed for direct impact by project activities, the following tree protection measures are recommended during construction:

- All construction activity (grading, filling, paving, landscaping etc.) shall respect the root protection zone (RPZ) around all trees within the vicinity of the project area that are to be preserved. The RPZ should be a distance of 1.0 times the dripline radius measured from the trunk of the tree. Exception to this standard could be considered on a case-by-case basis, provided that it is demonstrated that an encroachment into the RPZ will not affect the root system or the health of the tree, and is authorized by an ISA-Certified Arborist or comparable specialist.
- Temporary protective fencing shall be installed protecting the dripline of existing trees prior to commencement of any construction activity conducted within 25' of the tree canopy. The fence shall be clearly marked to prevent inadvertent encroachment by heavy machinery.
- Access within the fenced area shall be restricted, and fencing shall remain in place until all site work is completed. If temporary access is necessary within a fenced area, a six-inch layer of clean bark should be placed in all areas requiring access. If equipment access is required, it should be approved by a Certified Arborist, the mulch should be overlaid with metal plates to distribute compressive forces evenly and to minimize soil compaction.
- If grading, excavation, or construction activities are required within a TPZ where tree protection fencing impedes necessary work flow, trunk protection planks consisting of 2x4 wood planks shall be installed around the trunk of the tree, underlain by foam sheeting or

straw wattles, and fastened in place with straps, to prevent inadvertent damage to the trunks of trees.

- An ISA-Certified Arborist or tree specialist shall be retained to perform any necessary pruning of trees during construction activity.
- Roots exposed, as a result of construction activities shall be covered with wet burlap to avoid desiccation, and should be buried as soon as practicable.
- Construction materials or heavy equipment shall not be stored within the root protection zone of preserved trees.
- Construction materials shall be properly stored away from existing trees to avoid spillage or damage to trees.

Please feel free to contact me if you have any questions or concerns.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Scott Yarger', with a long horizontal flourish extending to the right.

Scott Yarger  
ISA-Certified Arborist WE-9300A  
yarger@wra-ca.com

Enclosures:

- Attachment A – Tree Survey Table
- Attachment B – Project Figures
- Attachment C – Representative Photographs

## References

- City of San Rafael. 2019. Municipal Code: Chapter 11.12, "Trees", and Chapter 14.25, "Environmental and Design Review and Permits." Available online at: [https://library.municode.com/ca/san\\_rafael/codes/code\\_of\\_ordinances](https://library.municode.com/ca/san_rafael/codes/code_of_ordinances). Accessed: March 2020.
- Joseph Farrell Architecture. 2019. Proposed Overall Landscape Plan for Friedman Residence, Ross Terrace, San Rafael, CA (APN 012-141-59 and -60). November 1.
- SKR Design. 2016. Existing Site Trees, and Proposed Existing Site Tree Removal for 33 & 41 Clayton Street, San Rafael, CA. July 12.

Attachment A –  
Tree Survey Table

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Appendix A. CF Contracting Lots 59 and 60 Ross Street Terrace San Rafael, CA, Tree Survey Table, March 2020.

Tag ID	Species	Common Name	Multi-trunk	Diameter	Diameter	Diameter	Diameter	Diameter	Total Diameter (inches)	Potential Impact	Municipal Code Status	Approximate Dripline Radius (feet)	Approximate Height (feet)	Condition	Health	Structure
735	<i>Acacia dealbata</i>	Silver wattle	Yes	6.5	7.6	6.5	9.3	6.3	36.2	Remove	City Tree	30	20	Fair	Fair	Poor
736	<i>Eucalyptus camaldulensis</i>	Red gum	No	54.7	0.0	0.0	0.0	0.0	54.7	Remove	City Tree	35	70	Good	Good	Good
737	<i>Acacia dealbata</i>	Silver wattle	Yes	10.2	6.1	0.0	0.0	0.0	16.3	Remove	City Tree	18	18	Fair	Fair	Poor
738	<i>Eucalyptus camaldulensis</i>	Red gum	Yes	11.2	6.3	5.8	4.6	0.0	27.9	Remove	City Tree	14	35	Fair	Fair	Fair
739	<i>Umbellularia californica</i>	California bay	Yes	4.3	3.8	0.0	0.0	0.0	8.1	Remove	City Tree	10	16	Fair	Good	Fair
740	<i>Eucalyptus camaldulensis</i>	Red gum	Yes	11.4	12.0	0.0	0.0	0.0	23.4	Remove	City Tree	18	45	Fair	Good	Fair
741	<i>Acacia dealbata</i>	Silver wattle	No	8.1	0.0	0.0	0.0	0.0	8.1	Remove	City Tree	15	10	Poor	Fair	Poor
742	<i>Quercus agrifolia</i>	Coast live oak	No	10.0	0.0	0.0	0.0	0.0	10.0	Remove	City Tree	8	28	Fair	Fair	Fair
743	<i>Acacia dealbata</i>	Silver wattle	No	11.0	0.0	0.0	0.0	0.0	11.0	Remove	City Tree	12	35	Fair	Fair	Fair
744	<i>Acacia melanoxylon</i>	Blackwood acacia	Yes	8.0	7.5	8.5	3.5	0.0	27.5	Remove	City Tree	12	30	Fair	Fair	Fair
745	<i>Olea europaea</i>	Olive	Yes	8.7	8.7	9.0	7.8	0.0	34.2	Remove	City Tree	11	25	Fair	Fair	Poor
746	<i>Quercus agrifolia</i>	Coast live oak	No	6.8	0.0	0.0	0.0	0.0	6.8	Remove	City Tree	8	22	Fair	Good	Fair
747	<i>Acacia dealbata</i>	Silver wattle	No	7.0	0.0	0.0	0.0	0.0	7.0	Remove	City Tree	15	10	Fair	Poor	Fair
748	<i>Quercus agrifolia</i>	Coast live oak	No	26.9	0.0	0.0	0.0	0.0	26.9	Remove	City Tree	20	35	Good	Good	Good
749	<i>Olea europaea</i>	Olive	Yes	6.4	5.2	0.0	0.0	0.0	11.6	Remove	City Tree	8	13	Fair	Fair	Fair
750	<i>Acacia dealbata</i>	Silver wattle	No	14.5	0.0	0.0	0.0	0.0	14.5	Remove	City Tree	20	30	Poor	Fair	Poor
751	<i>Acacia dealbata</i>	Silver wattle	No	10.3	0.0	0.0	0.0	0.0	10.3	Remove	City Tree	10	18	Fair	Fair	Fair
752	<i>Acacia dealbata</i>	Silver wattle	No	11.4	0.0	0.0	0.0	0.0	11.4	Remove	City Tree	15	25	Fair	Fair	Poor
753	<i>Acacia dealbata</i>	Silver wattle	Yes	8.5	6.9	6.9	0.0	0.0	22.3	Remove	City Tree	18	20	Fair	Poor	Poor
754	<i>Quercus agrifolia</i>	Coast live oak	No	6.1	0.0	0.0	0.0	0.0	6.1	Remove	City Tree	10	13	Fair	Good	Fair
755	<i>Quercus agrifolia</i>	Coast live oak	No	6.3	0.0	0.0	0.0	0.0	6.3	Remove	City Tree	6	22	Fair	Good	Fair
756	<i>Ligustrum lucidum</i>	Glossy privet	No	6.0	0.0	0.0	0.0	0.0	6.0	Remove	City Tree	10	18	Fair	Fair	Fair
757	Unknown fruit tree	Unknown fruit tree	No	9.3	0.0	0.0	0.0	0.0	9.3	Remove	City Tree	15	24	Fair	Fair	Fair
758	<i>Pinus radiata</i>	Monterey pine	No	26.1	0.0	0.0	0.0	0.0	26.1	Remove	City Tree	20	38	Fair	Fair	Good
759	<i>Quercus agrifolia</i>	Coast live oak	No	7.8	0.0	0.0	0.0	0.0	7.8	Remove	City Tree	12	16	Good	Good	Fair
760	<i>Hesperocyparis macrocarpa</i>	Monterey cypress	No	28.0	0.0	0.0	0.0	0.0	28.0	Remove	Significant Tree	18	60	Fair	Fair	Fair
761	<i>Olea europaea</i>	Olive	Yes	9.0	6.5	4.0	3.0	3.0	25.5	Remove	City Tree	12	20	Fair	Fair	Poor
762	<i>Quercus agrifolia</i>	Coast live oak	Yes	15.3	15.3	0.0	0.0	0.0	30.6	Remove	City Tree	20	40	Good	Good	Good
763	<i>Aesculus californica</i>	California buckeye	Yes	12.1	12.1	0.0	0.0	0.0	24.2	Remove	Significant Tree	30	18	Poor	Poor	Poor
764	<i>Prunus cerasifera</i>	Cherry plum	Yes	8.5	6.4	0.0	0.0	0.0	14.9	Remove	Significant Tree	14	16	Fair	Fair	Fair
765	<i>Acacia melanoxylon</i>	Blackwood acacia	Yes	7.4	5.5	4.6	4.6	0.0	22.1	Remove	Significant Tree	14	28	Fair	Fair	Poor
766	<i>Ligustrum lucidum</i>	Glossy privet	Yes	7.9	5.4	6.9	0.0	0.0	20.2	Remove	Significant Tree	10	18	Fair	Fair	Fair
767	<i>Acacia dealbata</i>	Silver wattle	No	8.0	0.0	0.0	0.0	0.0	8.0	Remove	Non-protected	12	35	Fair	Good	Fair
768	<i>Grevillea robusta</i>	Silk oak	No	18.2	0.0	0.0	0.0	0.0	18.2	Remove	Significant Tree	13	40	Fair	Fair	Good
769	<i>Quercus agrifolia</i>	Coast live oak	No	12.5	0.0	0.0	0.0	0.0	12.5	Remove	Significant Tree	25	30	Fair	Good	Fair
770	<i>Ligustrum lucidum</i>	Glossy privet	Yes	4.1	4.9	4.1	0.0	0.0	13.1	Remove	Significant Tree	8	15	Fair	Fair	Poor
771	<i>Quercus agrifolia</i>	Coast live oak	Yes	18.9	17.6	11.4	0.0	0.0	47.9	Remain	Significant Tree	25	28	Fair	Fair	Fair
772	<i>Quercus agrifolia</i>	Coast live oak	No	13.6	0.0	0.0	0.0	0.0	13.6	Remove	Significant Tree	12	22	Fair	Fair	Fair
773	<i>Quercus agrifolia</i>	Coast live oak	No	10.5	0.0	0.0	0.0	0.0	10.5	Remove	Significant Tree	12	18	Good	Good	Good
774	<i>Quercus agrifolia</i>	Coast live oak	Yes	9.7	8.9	0.0	0.0	0.0	18.6	Remove	Significant Tree	15	18	Fair	Good	Fair
775	<i>Acacia dealbata</i>	Silver wattle	No	10.2	0.0	0.0	0.0	0.0	10.2	Remove	Non-protected	30	8	Poor	Fair	Poor
776	<i>Acacia dealbata</i>	Silver wattle	No	9.5	0.0	0.0	0.0	0.0	9.5	Remove	Non-protected	10	35	Fair	Fair	Fair
777	<i>Acacia dealbata</i>	Silver wattle	Yes	5.2	5.6	0.0	0.0	0.0	10.8	Remove	Non-protected	30	20	Poor	Fair	Poor
778	<i>Acacia dealbata</i>	Silver wattle	Yes	4.3	3.1	5.6	2.6	0.0	15.6	Remove	Significant Tree	25	25	Fair	Fair	Fair
779	<i>Acacia dealbata</i>	Silver wattle	Yes	9.4	7.1	7.0	7.0	0.0	30.5	Remove	Significant Tree	30	40	Poor	Fair	Poor
780	<i>Acacia dealbata</i>	Silver wattle	Yes	9.0	7.5	0.0	0.0	0.0	16.5	Remove	City Tree	25	28	Fair	Fair	Poor

Appendix A. CF Contracting Lots 59 and 60 Ross Street Terrace San Rafael, CA, Tree Survey Table, March 2020.

Tag ID	Species	Common Name	Multi-trunk	Diameter	Diameter	Diameter	Diameter	Diameter	Total Diameter (inches)	Potential Impact	Municipal Code Status	Approximate Dripline Radius (feet)	Approximate Height (feet)	Condition	Health	Structure
781	<i>Acacia dealbata</i>	Silver wattle	No	6.2	0.0	0.0	0.0	0.0	6.2	Remove	City Tree	25	18	Poor	Poor	Poor
782	<i>Acacia dealbata</i>	Silver wattle	No	11.5	0.0	0.0	0.0	0.0	11.5	Remove	City Tree	30	20	Poor	Poor	Poor
783	<i>Acacia dealbata</i>	Silver wattle	No	9.5	0.0	0.0	0.0	0.0	9.5	Remove	Non-protected	15	40	Good	Good	Good
784	<i>Acacia dealbata</i>	Silver wattle	Yes	8.4	6.5	0.0	0.0	0.0	14.9	Remove	Significant Tree	20	35	Fair	Fair	Fair
786	<i>Quercus agrifolia</i>	Coast live oak	No	12.5	0.0	0.0	0.0	0.0	12.5	Remove	City Tree	15	28	Fair	Good	Fair
787	<i>Umbellularia californica</i>	California bay	Yes	4.0	3.5	3.5	3.5	0.0	14.5	Remove	City Tree	12	15	Fair	Fair	Poor
788	<i>Quercus agrifolia</i>	Coast live oak	No	18.0	0.0	0.0	0.0	0.0	18.0	Remain	City Tree	20	28	Good	Good	Good
789	<i>Umbellularia californica</i>	California bay	Yes	14.0	7.0	0.0	0.0	0.0	21.0	Remain	City Tree	20	30	Fair	Fair	Fair
790	<i>Prunus cerasifera</i>	Cherry plum	Yes	4.0	4.0	0.0	0.0	0.0	8.0	Remove	City Tree	10	12	Poor	Poor	Poor
791	<i>Umbellularia californica</i>	California bay	Yes	7.0	3.5	0.0	0.0	0.0	10.5	Remain	City Tree	9	15	Fair	Fair	Fair
792	<i>Prunus cerasifera</i>	Cherry plum	Yes	5.5	3.5	5.0	4.0	0.0	18.0	Remove	City Tree	10	15	Poor	Poor	Poor
793	<i>Umbellularia californica</i>	California bay	Yes	13.7	8.5	0.0	0.0	0.0	22.2	Remain	City Tree	18	30	Fair	Fair	Fair

Attachment B-  
Project Figures

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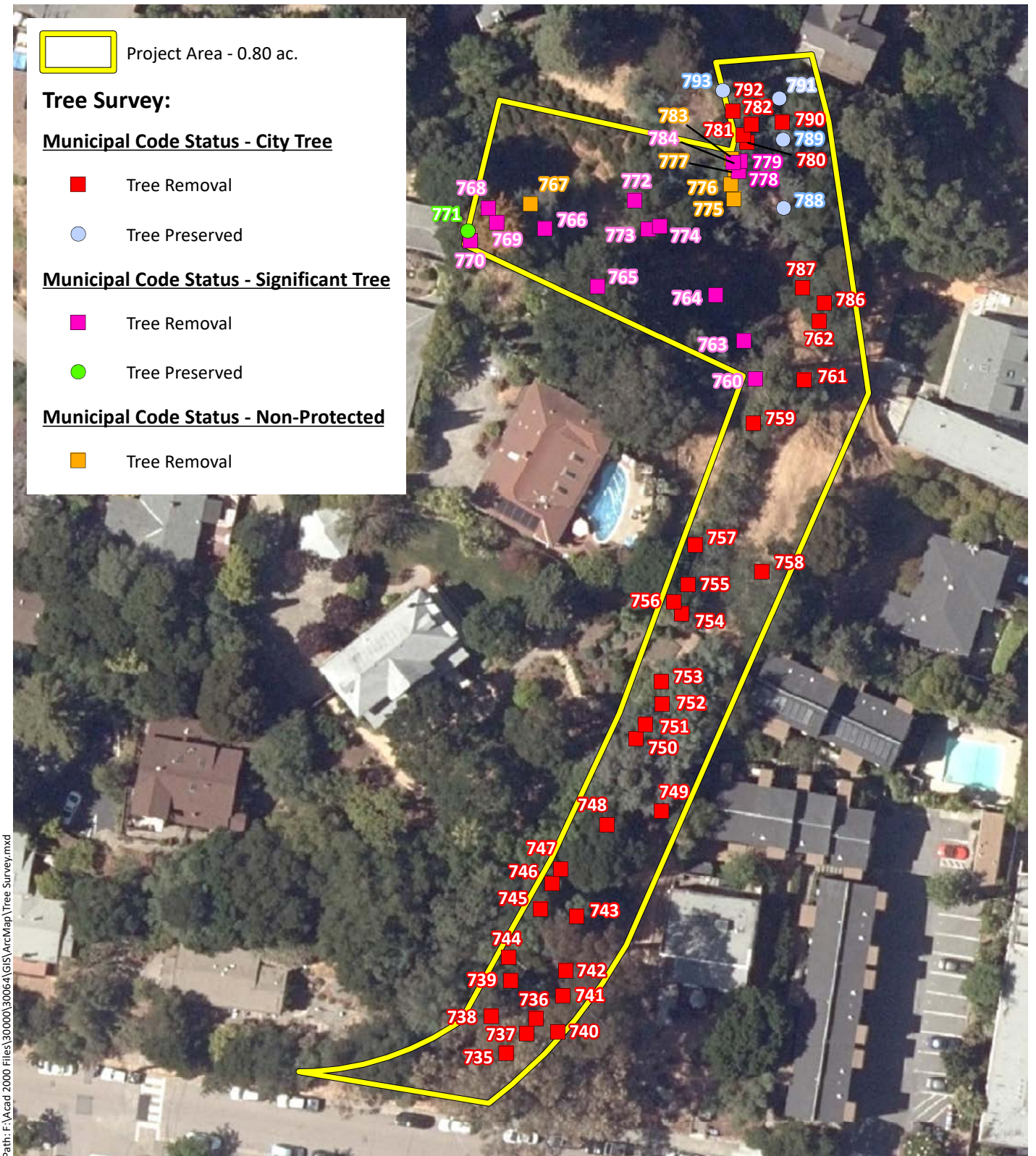
**Figure 1. Project Area Regional Location Map**

CF Contracting Lots 59 and 60 Ross Street Terrace  
San Rafael, California

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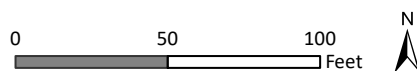




Sources: Marin County 2018 Aerial, WRA | Prepared By: mrochelle, 3/23/2020

**Figure 2. Tree Survey**

CF Contracting Lots 59 and 60 Ross Street Terrace  
San Rafael, California



Attachment C-  
Site Photographs

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**Photograph 1.** Photograph depicting non-native, invasive silver wattle (*Acacia dealbata*), significant trees #778 and #779 to be removed within the parcels. These trees exhibit poor structure, with several leaning codominant trunks.



**Photograph 2.** Photograph depicting a native coast live oak (*Quercus agrifolia*), tree #748, a 26.9-inch City tree within the Ross Street Terrace right-of-way, which is proposed for removal.





**Photograph 3.** Photograph depicting tree #763, a 24.2-inch aggregate DBH multi-trunked California buckeye (*Aesculus californica*), a significant tree located in the parcels. This tree ranked poor in condition, health, and structure with major internal decay and dieback, and is proposed for removal.



**Photograph 4.** Photograph depicting tree #739, an 8.1-inch aggregate DBH California bay (*Umbellularia californica*) City tree in the Ross Street right-of-way, to be removed. A large, 54.9-inch red gum (*Eucalyptus camaldulensis*) City tree proposed for removal can be seen at left.