[EXTERNAL] Project Calistoga Cottages Subdivision

Lynn Denley-Bussard <ldenleybussard@gmail.com>

Fri 4/26/2024 10:58 AM

To:Janusek, Mike <mjanusek@srcity.org>
Cc:Paul Bussard <paulebussard@gmail.com>;Lynn Denley-Bussard <ldenleybussard@gmail.com>

3 attachments (6 MB)

Letter to Mike Janusek_4-25-2024.pdf; 408 Calistoga Road_Fire & Tree Danger_5-1-2024.pdf; Tree Report by Ryan Hagstrom.pdf;

Dear Mr. Janusek,
My wife and I will be out of town, so we are unable to attend the Neighborhood Meeting on May 1, 2024, so we submitted our letter and supporting documents to the Planning Department yesterday, April 25, 2024.

We have several areas of grave concern about the Calistoga Cottages project. These dangers make the proposed subdivision map of three additional homes unadvisable, although one might be possible.

We have attached an electronic copy of our letter and supporting materials for your records.

Please let us know you have received these files and how you plan to address our concerns at the neighborhood meeting on May 1, 2024.

Sincerely,

Paul E. Bussard Lynn Denley-Bussard

Attachments
1. Letter to Mike Janusek submitted to the Planning Department, dated April 25, 2024
2. Supporting materials in a PDF slide set
3. Tree report from arborist Ryan Hagstrom, dated 8-17-22

Paul & Lynn Bussard
5232 Monte Verde Drive
Santa Rosa, CA 95409
707-696-4616

April 25, 2024

Mr. Mike Janusek
Project Planner
City of Santa Rosa

Re: Calistoga Cottages
408 Calistoga Road
Santa Rosa, CA 95409

Dear Mr. Janusek,

My wife and I will be out of town, so we are unable to attend the Neighborhood Meeting on May 1, 2024, so we are sending you this letter. We have several areas of grave concern about the Calistoga Cottages project. These dangers make the proposed subdivision map of three additional homes unadvisable, although one might be possible.

1. During the Tubbs Fire in 2017 and the Glass Fire in 2020, embers caused the ignition of over 50% of the homes. Carried by strong winds, embers fly through the air and rain down on vulnerable homes, often miles ahead of flames.
    a. After the Glass Fire, CAL FIRE designated the foot of the Macayamas Mountains in eastern Santa Rosa as an FHSZ, an Extremely High Fire Danger Zone. https://egis.fire.ca.gov/FHSZ/
        i. Any home within a one mile radius of an FHSZ is located in the "Ember Zone", a High Fire Severity Zone.
        ii. According to state defensive space guidelines, any new home built within an Extremely High or a High Fire Severity Zone requires a minimum of 100 feet of defensible space around it.
        iii. Slide 1 of the attached PDF presentation indicates a one-mile radius around 408 Calistoga Road and shows where it overlaps with the state FHSZ.
    b. The Santa Rosa Fire Department, Fire Protection Bureau, map indicates the local VHFSZ, Very High Fire Safety Zone. It runs down the center of Monte Verde Drive, only ~170 feet away from the proposed subdivision.
        i. Slide 2 of the attached PDF presentation indicates the City VHFSZ in relation to 408 Calistoga Road.
        ii. Any subdivision map near a local VHFSZ should be evaluated for fire danger prior to submission to the Planning Commission.
    c. In a wildfire, there will never be enough firefighting resources to protect every home. That's why defensible space is so important.

        i. During the Tubbs Fire, firefighters worked courageously to save Maria Carrillo HS and Rincon Valley JH while many homes in the "Ember Zone" in eastern Santa Rosa burned to the ground.
    d. "Climate change is increasing the wildfire threat across the globe. With fire activity forecast to increase by over 50% by the end of the century, the last decade of heightened wildfire losses is just the tip of the iceberg." (Willow Labs)
2. A subdivision map submitted to the Planning Department for approval should contain an accurate representation of all tree drip lines. We have mentioned the lack of accurate tree drip lines twice before, but the subdivision map is still inaccurate. Therefore, we submit Slide 3, an aerial photograph of 408 Calistoga Road, prepared by arborist Ryan Hagstrom. This aerial photograph shows there are:
    a. Two Valley Oak trees, one on each side of the entrance to the proposed driveway (circled in yellow). They have overlapping drip lines and interwoven root zones. These trees are not accurately represented on the current subdivision map.
    b. Three Valley Oak trees on the north side of the driveway at 408 Calistoga Road (circled in blue) have drip lines that overlap the proposed driveway. These trees are not accurately represented on the subdivision map.
    c. Two Valley Oak trees located directly behind the existing house at 408 Calistoga Road (circled in purple) whose drip lines and root zones overlap with the driveway turnaround. These trees should be added to the subdivision map.
    d. Two Valley Oak trees located on the eastern property line (Tree #1 and Tree #2, outlined in red). These two young Valley Oak trees are owned jointly by 408 Calistoga Road and 5232 Monte Verde Drive. These trees need to be added to the subdivision map.
    e. Two Valley Oak trees located on the north property line (Tree #3 and Tree #4, circled in red). These trees need to be added to the subdivision map as their drip lines and root zones extend onto the proposed subdivision and impact future development.
    f. How does the city plan to warn potential buyers of the limitations inherent in this subdivision? For example, how will new homeowners be informed that they cannot dig, pour a concrete patio, or install a pool or hot tub in their backyard, because they would damage the root zones of these protected trees?
    g. The City must adhere to a standard of reasonable care while performing any acts that could foreseeably harm others. Therefore, a tree protection zone along the northern and eastern fence lines should be required on this subdivision map, so that potential buyers are aware of the city ordinances that limit the use of their property. Otherwise, city staff could be sued for failure to adhere to a standard of reasonable care.
3. As shown in Slide 4, Valley Oak trees (Quercus lobata) are native, heritage trees, protected by City ordinances. "The City Council finds and declares that trees contribute greatly to the health, safety and general welfare of all of the City's citizens and that the preservation and proper maintenance of trees is a matter of citywide concern. (Chapter 17-24.010)
    a. As shown in Slide 5, Valley Oaks are not small ornamental trees. They are the largest oak trees in North America. According to Calspace, Valley Oaks at maturity will be 60 to 100 feet tall.
    https://www.calscape.org/
        i. At full maturity, Valley Oak trees will have a drip line radius of ~25 feet.

ii. The root zone of these trees will extend an additional 10 feet beyond the drip line, so the protected root zone of these trees at maturity will be ~35 feet away from the trunk of the tree.

b. We have taken additional photographs of the unique grove of Valley Oak trees, located at 5220 Monte Verde Drive and 5232 Monte Verde Drive.
   i. Slide 6 shows the two Valley Oak trees located on the fence line between 408 Calistoga Road and 5232 Monte Verde Drive.
   ii. Slide 7 shows the Valley Oak tree in the southeast corner of 5220 Monte Verde. It is nearly ~40 feet tall. This tree has a present drip line of ~22.75 feet and a root zone of ~32.75 feet.
   iii. Slide 8 shows two of the three Valley Oak trees located on the property line between 408 Calistoga Road and 5220 Monte Verde.
      1. Slide 7 clear shows how the Valley Oak trees tower over the existing home at 408 Calistoga Road

c. The drip line and root zones of the four Valley Oak trees shown in Slides 6, 7 & 8 extend a significant distance over and under the property into 408 Calistoga Road and this distance will expand over time as the trees mature.
   i. "As a rule, it is recommended that properties be built at least a distance equivalent to the tree's height away from that tree. Attempts to insert a root barrier around a construction (eg. a polypropylene or similar geomembrane) to dissuade root growth near a foundation often only cause roots to grow under and around it." (Architect's Journal)
   ii. "Severing just one of a tree's major roots during careless excavation for construction or services can cause the loss of up to 20 per cent of the root system; this undermines the tree's ability to absorb water and also leaves it unstable in high winds." (Architect's Journal)
   iii. According to Booska v. Patel (1994) "there is no absolute privilege for cutting the roots when the result causes damage to or kills the tree and therefore the party that injures the tree is responsible for the damage caused to the tree." (California Lawyers Association).

d. "No concrete or asphalt paving shall be placed over the root zones of protected trees." Chapter 17-24 (D5)
   i. The City defines the "Root zone" as the area of ground around the trunk of a tree which includes the drip line and an additional 10 foot wide circular strip of ground around the outside of the drip line. (Chapter 17-24 (N)

e. "No artificial irrigation shall occur within the root zone of oaks." Chapter 17-24 (D5)
   i. The California Native Plant Society warns: "Best not to provide irrigation within 30 feet of established valley oaks. They'll often absorb too much water, causing limbs to break off".

4. In the interest of safety and transparency, the subdivision map should include a heritage tree easement, extending for 30 feet along the north and east property lines of 408 Calistoga Road, so future property owners and City planners are aware of the danger of trenching, grading, paving, or irrigating too close to a protected tree.
   a. How will a new homeowner know they can't install a concrete patio in their backyard or put in a vegetable garden within 30 feet of a protected tree unless a tree easement appears on the subdivision map?

    b. How will a City planner in the future understand the danger of approving an in-ground pool behind a house built here unless there is a tree easement that appears on the subdivision map?

5. The City should not approve a subdivision map that is inherently dangerous and could harm others in the foreseeable future.
    a. Under the California Tort Claim Act, the government can be held legally responsible for damages caused by:
        i. The negligent acts of employees
        ii. The negligent acts of independent contractors
        iii. Premises liability for dangerous conditions on public land
        iv. The public entities' failure to carry out a duty imposed by law

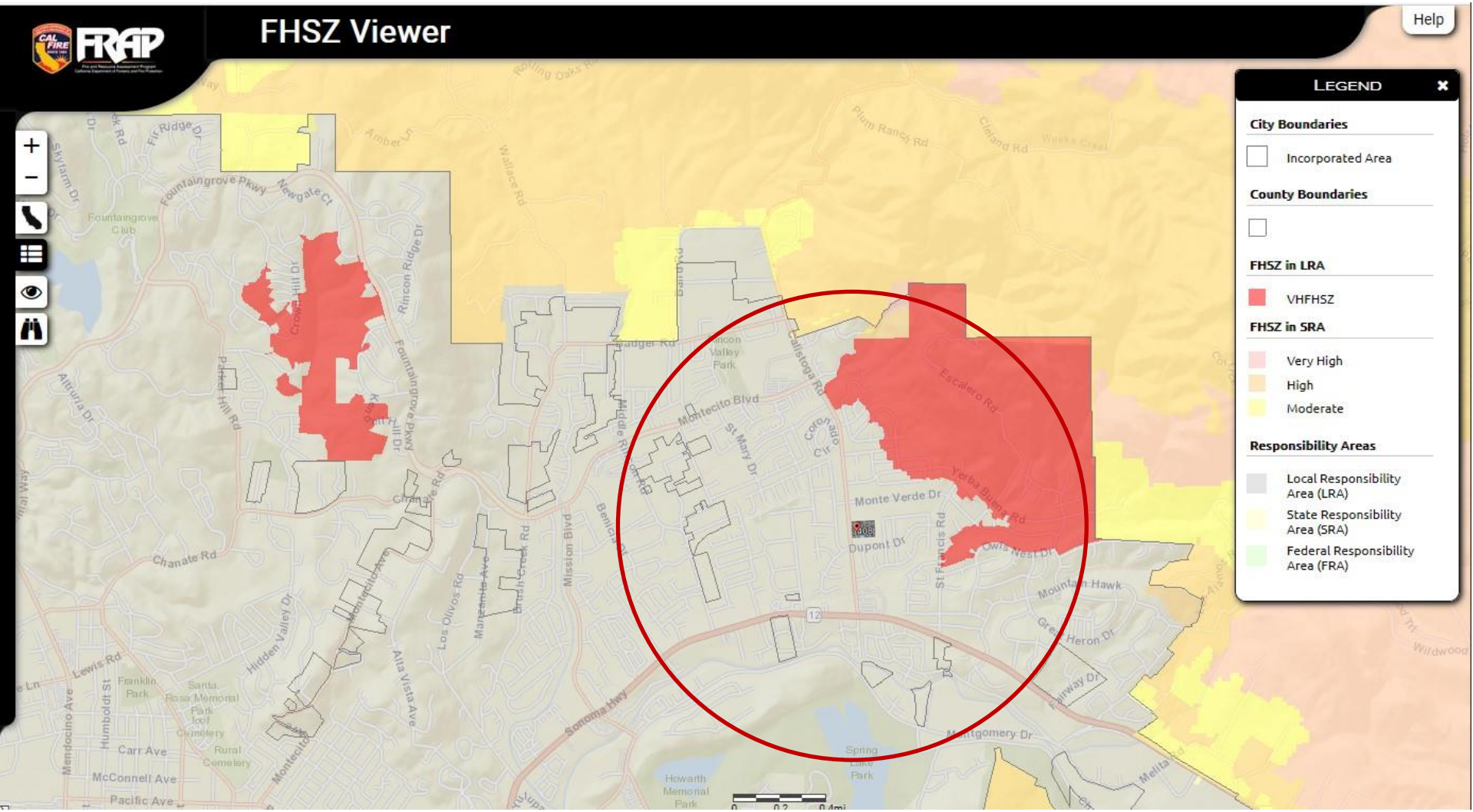
Please let us know you have received these files and how you plan to address our concerns at the neighborhood meeting on May 1, 2024.

Sincerely.

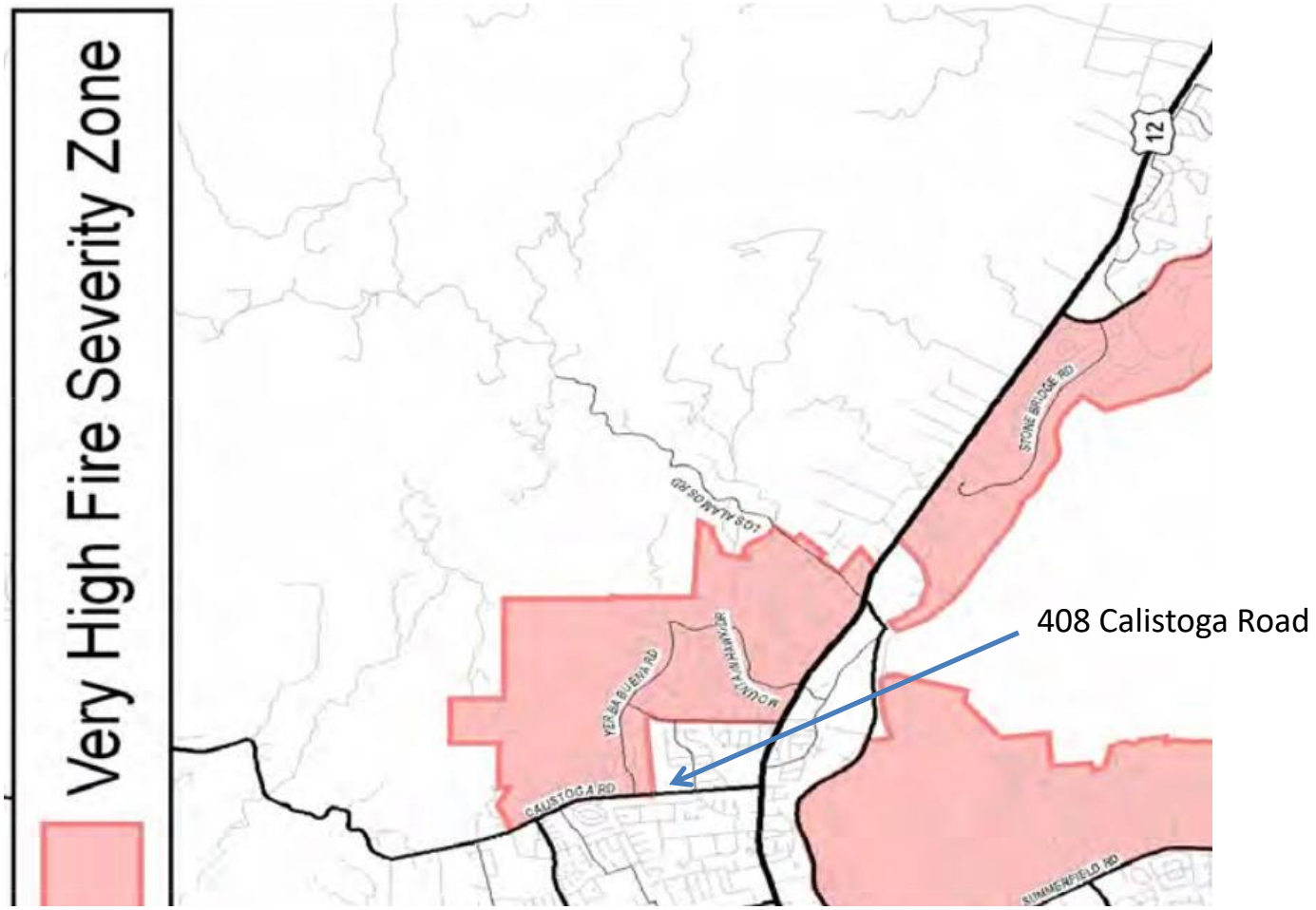
Paul E. Bussard Lynn Denley-Bussard

Attachments
1. A PDF slide set
2. Tree report from arborist Ryan Hagstrom, dated 8-17-22

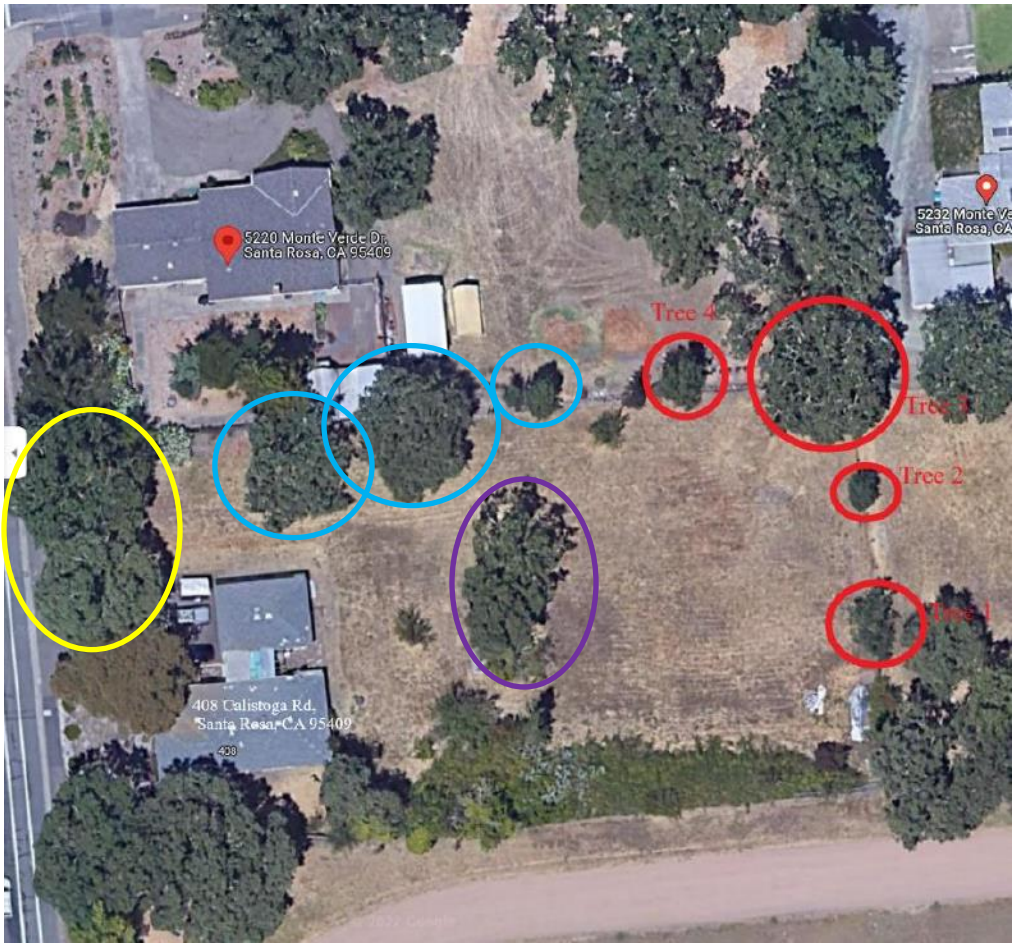
408 Calistoga Road is within a California State High-Fire “Ember Zone”



Santa Rosa Fire Department
Very High Fire Safety Zone (VHFSZ) Map

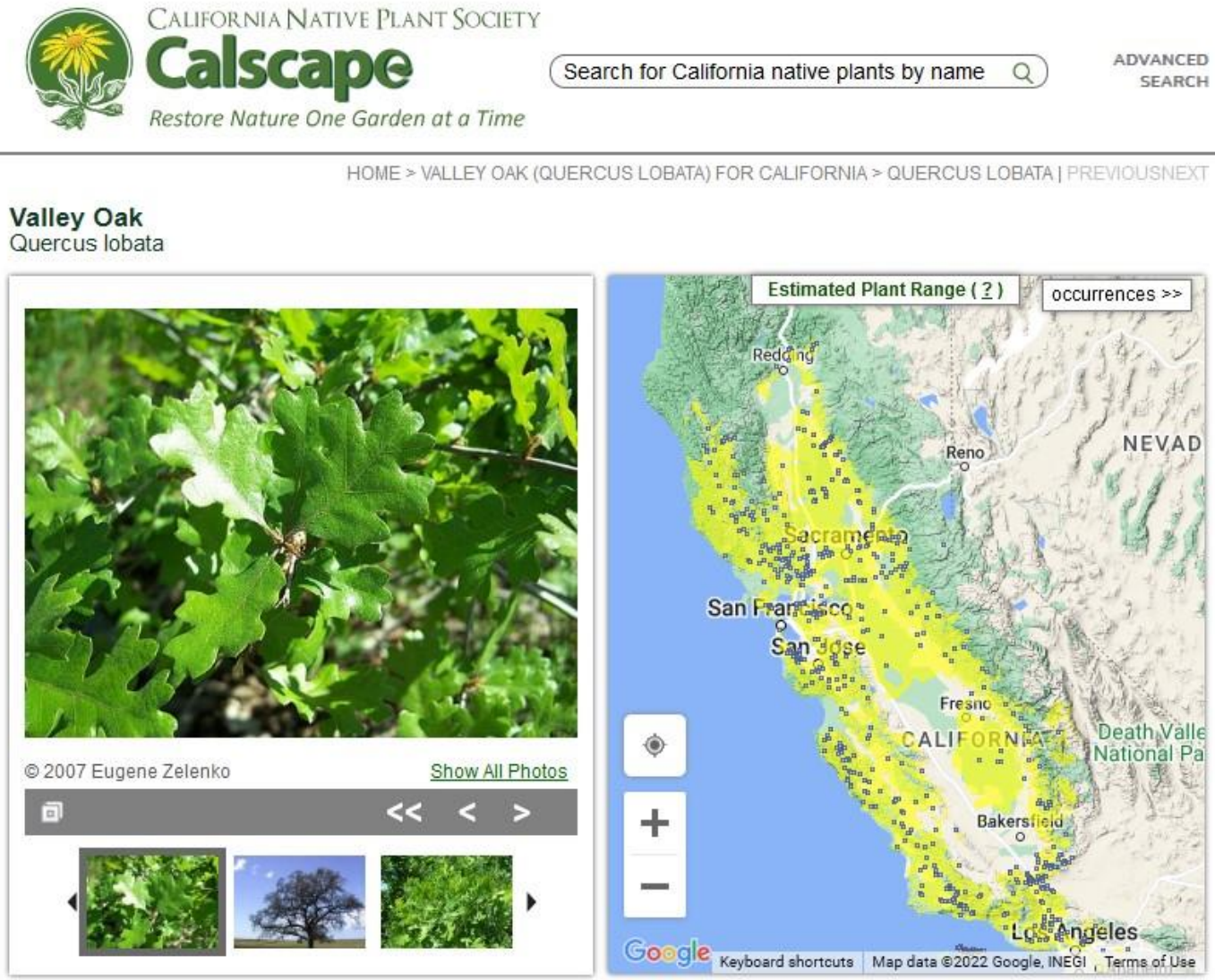


Arborist's Aerial Photo of Tree Drip Lines at 408 Calistoga Road



The City defines the root zone of a tree as 10 feet beyond the drip line.

California Native Plant Society
Description of Valley Oak (Quercus lobata)



California Native Plant Society
Description of Valley Oak (Quercus lobata)

Add to My Plant List

About Valley Oak (Quercus lobata)

58 Nurseries Carry This Plant Add to My Plant List

The Valley Oak grows into the largest of North American oaks. It ranges over the hot interior valleys of California where there is a water table within reach of the roots. Valley Oaks grow quickly, reaching 20 feet in 5 years, and 40 feet in 10 years, and up to 60 feet in 20 years. Mature specimens may attain an age of up to 600 years. Its thick, ridged bark is characteristic and evokes alligator hide. The sturdy trunk of the Valley oak may exceed two to three meters in diameter and its stature may approach 100 feet in height.

The branches have an irregular, spreading and arching appearance that produce a profound leafless silhouette in the clear winter sky. During Autumn leaves turn a yellow to light orange color but become brown during mid to late fall. In advancing age the branches assume a drooping characteristic. Its pewter-colored rippled bark adds to the attractive aesthetic of this species. Typically, leaves are five to ten centimeters in length and are roundly and deeply lobed. The leaf width is approximately one half its length. Each leaf is matte green with an underneath pale green appearance; moreover, the leaf is covered with abundant soft fuzz, yielding an almost velvety feeling. When a fresh leaf is rubbed or broken, an aromatic scent is exuded, evoking a forest odor. The wood is a dull brown approaching yellow. Over most of the range, acorns fall in October. A variety of mammals and birds eat them, including the Acorn Woodpecker, Western Scrub Jay, Yellow-billed Magpie, and California ground squirrel. Like many oaks, Valley Oaks can tolerate wild fires. Although smaller individuals may be top-killed, most resprout from the root crown. Valley oak tolerates cool wet winters and hot dry summers, but requires abundant water. It is most abundant in rich deep soils of valley floors below 600 meters in elevation but can also be found at elevations up to 5,600 ft.. Valley oak is found in dense riparian forests, open foothill woodlands and valley savannas. Commonly associated trees are Coast live oak, Interior live oak, Blue oak, Black walnut, California Sycamore and Ghost pine. The Valley oak is widely distributed in the California Central Valley and many smaller valleys such as the San Fernando Valley.

Because of its eventual size, it may not be appropriate for the average residential garden. Best not to provide irrigation within 30 feet of established valley oaks. They'll often absorb too much water, causing limbs to break off.

They are messy but beautiful. Best to plant near a water source.

Plant Description

Plant Type
Tree

Size
60 - 100 ft tall
50 ft wide

Form
Rounded, Upright Columnar

Growth Rate
Fast, Moderate

Dormancy
Winter Deciduous

Fragrance
Fragrant - Pleasant

Flower Color
Yellow, Cream, Green

Flowering Season
Spring, Winter

Wildlife Supported

Oaks generally are very important to wildlife including birds, mammals, reptiles, amphibians, and invertebrates. Many insects are attracted to Oaks generally, including the following butterflies which use Oaks as host plant: California Sister, Propertius Duskywing, Mournful Duskywing, Golden Hairstreak, and Gold-Hunter's Hairstreak.

Slide 6 – Trees 1 and 2 between 408 Calistoga Road and 5232 Monte Verde Drive

Slide 7 – Tree 3 between 408 Calistoga Road and 5220 Monte Verde Drive

Slide 8 - Trees 4 and 5 between 408 Calistoga Road and 5220 Monte Verde Drive

Hagstrom and Sons Tree Service
P.O. Box 2081, Santa Rosa CA 95405
HagstromandSons@gmail.com
(707)579-4374
License # 693877

To Lynn Bussard,

I was contacted by you on 8/17/22 to write an observation report on 4 oak trees. The oak trees were in your south field / back yard at 5232 Monte Verde Dr, Santa Rosa, Ca. 95409 and in your neighbors Ken Grandall's back yard at 5220 Monte Verde Dr, Santa Rosa, Ca. 95409.

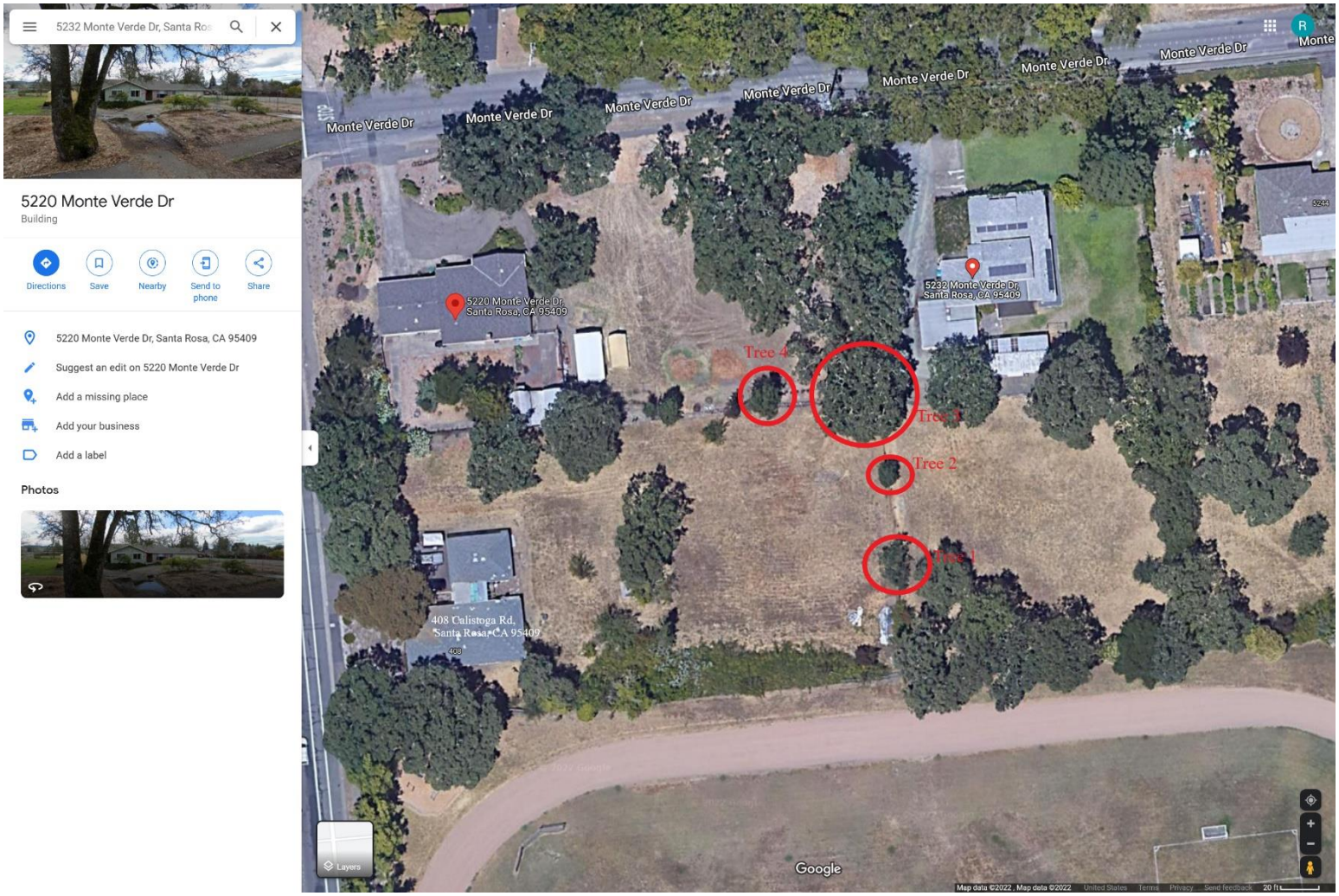
Observations and Discussion:

Two of the valley oaks (*Quercus lobata*) were in your south field along your west property fence line that is against the property at 408 Calistoga Rd, Santa Rosa, CA 95409. The south most valley oak (Tree 1) had a DBH of 8.9 inches. The other valley oak (Tree 2) was north of the first valley oak along the same property fence line. It had a DBH of 7.6 inches.

The other 2 oak trees were in your neighbors Ken Grandall's back yard was along the south property that that is again the property at 408 Calistoga Rd, Santa Rosa, CA 95409. The first valley oak (Tree 3) was at the southeast corner of Ken's property. It was where all 3 properties met. It had a DBH of 28.7 inches. This was the largest of the 4 oak trees. The other valley oak (Tree 4) was just west of the large oak tree but still along the property fence line that is against the property at 408 Calistoga Rd, Santa Rosa, CA 95409.

All 4 trees had nice full canopies and did not show any sign of major rot. The trees overall seemed healthy and in good condition. All trees, especially heritage trees, need to have their root system projected from construction damage. I do not recommend that any construction takes place between the trunk of the tree to 10 feet outside of the trees drip zone because this could cause soil compaction and root death. If construction occurs in the zone, the trees could decline and die.

Tree Picture:



Tree 1

Tree 2

Tree 3

Tree 4

Limits and Arborist Disclaimer

My investigation was limited to above-ground observations of the subject trees and the surrounding sites. My investigation was based solely upon my site inspections on Aug 17, 2022. No excavation was performed. All of the information provided to me regarding the history of the project and the trees was assumed to be true. If any information is found to be flase, the conclusion in this report may be invalidated.

Arborists are tree specialists who use their educations, knowledge, training and experience to examine trees, recommend measures to enhance the beauty and health of trees, and to attempt to reduce the risk of living near trees. 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 that can fail in ways we do not fully understand. Conditions are often hidden within trees and/or below ground. Arborists can only search for obvious, visible indicators of structural defects. There can be hidden defects within trees that are undetectable. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period of time. Likewise, remedial treatments, like any medicine, cannot be guaranteed.

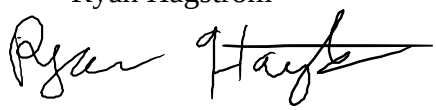
All trees will fail given time. The ideal situation is when a tree declines or otherwise shows obvious symptoms of hazard, and the tree (or the hazardous part of the tree) is removed before the failure occurs. The Arborist integrates all applicable information about the tree and the site and makes a judgment about the potential timing and consequence to failure. Tree hazard management is an imperfect science.

It is very important to understand however, that assessing the safety of trees and/or predicting whether or not a particular tree will fail in a particular way will never be a perfect science.

Pruning or other procedures performed on trees *may*, in certain circumstances and when applied intelligently, reduce a tree hazard and perhaps make a tree safer than before the procedure was performed. Pruning or their procedures can never be guaranteed to make a tree absolutely safe.

To live near a tree is to accept some degree of risk. The only way to eliminate all risk from trees is to eliminate all trees.

Ryan Hagstrom



Isa Certified Arborist WE-11539A.
Registered Consulting Arborist #674
ISA Tree Risk Assessment Qualified