Notice of Public Hearing on 131 Butterfield Rd Application for Tree Removal
REUTER PRE-HEARING COMMENTS

FACT 1
Our neighbor Anne rejected our proposed compromise—to preserve the tree while addressing safety concerns through arborist recommended cabling and pruning—stating it doesn't address whole tree failure. But she is incorrect, because as arborist Ben Anderson states:

> *"Well maintained and properly installed cables between co-dominant stems are very good at mitigating the likelihood of failure. They are commonly installed between co-dominant stems of redwoods and I have never seen such a tree fail when the cables are properly maintained… The risk of stem failure from the co-dominant stems can be sufficiently mitigated using cables in accordance with industry standard."*

Opinions between arborists on the effectiveness of cables may vary, but the procedure is widely used in the tree care industry for good reason—namely it's proven to be successful at mitigating whole tree failure.

FACT 2
The fact that it's a co-dominant tree was discussed in each arborist report, with the implication that it can be a contributing factor toward trunk failure. But given that this is an incredibly common feature with redwoods, it alone does not portend trunk failure. At this point with no consensus between the 4 consulting arborists on its safety risk, a tree removal order would be based solely on conjecture—as it has been deemed to otherwise be a healthy tree by all the arborists. Further testing would need to be conducted as stated in Ed Gurka's report:

> *"Co-dominant stems… can lead to a failure when the competing stems separate. There is no visual indication that this exists and can only be detected through resistance drill testing or tomography that reveals integrity of the internal wood. This testing and interpretation of the test reading would provide a more accurate potential of a stem failure."*

Before mandating the trees removal, it's reasonable to expect adequate proof from the town—not merely suspicion—that trunk failure is more likely here than with any other co-dominate redwood in San Anselmo. If further testing does prove that there is some hidden structural defect, we would certainly comply with the tree's removal.

FACT 3
We realize our neighbor is fearful of another fallen branch damaging her roof—the event that precipitated the tree's initial removal order, an unfortunate yet typical occurrence with redwood trees. This is why we're proposing aggressive pruning to mitigate the chance of that happening again. We'd go so far as to have all the branches on the 131 side of the tree removed as described in the attached statement from arborist Ben Anderson (and illustrated by the photos of trees burned in Calistoga's Tubbs fire):

> *"Removing the branches over the 131 property will be visually striking, but is preferable to the removal of the entire tree and losing all the benefits it provides. This will nearly abate the risk of branch failure onto the 131 property and should not significantly impact the long-term health of the tree."*

Because this was the first instance of damage in the 20 years we've lived here, full tree removal seems like an extreme reaction when there are alternate tree care practices that can mitigate the safety risk. There's no denying that whole tree removal is the safest solution, but it's not the only solution.

Client: Bill and Katie Reuter
Project Location: 127 Butterfield Road, San Anselmo
Arborist: Ben Anderson

URBAN FORESTRY ASSOCIATES, INC.

To whom it may concern,

I was hired by Bill and Katie Reuter to assess the mature redwood tree on the apparent property line between 127 and 131 Butterfield Road. I concluded the tree is healthy with co-dominant stems and a history of poor pruning practice over the 131 property. Since my inspection, the Reuters received a notice from the Town, ordering the tree's removal. I disagree with this order and believe the subject tree is not unlike many of the redwood trees found in the community, and if this tree is removed it will set a dangerous precedent for any future neighbor conflicts in which one property owner does not like a neighbor's trees. All options should be explored short of removing the subject tree.

The tree was also inspected by three other consulting arborists: James MacNair, Ed Gurka, and Dan McKenna. Of the four arborists that examined the tree, only one (James McNair) goes so far as to formally recommend its removal. The remaining arborists acknowledge that the safest option is whole-tree removal, but that can be said of any tree. Including removal as the only option to abate all risk is standard procedure for ISA Tree Risk Assessment Qualification methodology and is not the same as recommending tree removal.

The main concern seems to be regarding future branch failure onto the 131 property. If this is the case, aggressively pruning back the branches just on that side of the canopy could significantly mitigate this risk. To mitigate the risk to the greatest extent possible (short of tree removal), all the branches could be removed back to the trunk on that side of the tree. This option is not unlike conditions to which the tree is well-adapted. Entire canopies can be burned off during fires and, as can be seen all over the Tubbs Fire site, redwoods can sprout an entirely new canopy from dormant buds under the bark. If there are no branches to fail, the risk of branch failure is abated. The new canopy should be thicker and can be maintained closer to the trunk. Figure 1 shows a redwood in Petaluma that was lion tailed in 2013 and the subsequent sprout growth from the trunk. Assuming the subject tree sprouts in a similar manner, the sprouts could be hedged back every few years to whatever length is desired.

As stated in several of the reports, the elevated risk associated with branch failure is the result of poor pruning over the 131 property. The Reuters have owned and enjoyed this tree for decades. They should not be required to remove a valuable tree that provides many benefits to the property and community. The benefits of urban trees are well documented but largely apply only to large, mature trees. Large trees like this should be protected from unwarranted removal. The Municipal Code of San Anselmo states this well:

> The uncontrolled removal or destruction of trees destroys the scenic beauty, contributes to erosion, increases flood hazards, reduces property values, increases the costs of the construction and maintenance of drainage systems through the increased flow and diversion of surface waters, and adversely affects the local economy by reducing the attractiveness and desirability of the area as a place to live, work, and visit. In addition, the trees of the Town are an integral part of the Town's complex environmental system, the functioning of which does not depend on or conform to the arbitrary delineations of property (San Anselmo Municipal Code Chapter 13 – Private trees 4-13.01 – Purpose).

Co-dominant stems in a tree are a structural defect that elevate the likelihood of failure, but it is incredibly common and by no means should it serve as a litmus test for removal. If this does serve as the primary reason to mandate the removal of a tree, prepare to lose many of the large trees in San Anselmo. Well maintained and

properly installed cables between co-dominant stems are very good at mitigating the likelihood of failure. They are commonly installed between co-dominant stems of redwoods and I have never seen such a tree fail when the cables are properly maintained.

If a defect in the base more substantial than co-dominant stems is suspected, further testing should be required before tree removal is mandated. A tree should not be removed simply because of the possibility or suspicion of a defect. Similarly, the tree should not be removed due to suspicion of root damage. If large roots were severed that could compromise stability, they can be exposed to confirm or dismiss this suspicion.

Redwoods are incredibly hardy trees that tolerate much more abuse than most tree species. They are not generally subject to the types of pests that kill and destabilize stressed trees of other species. In most instances, the vitality of a stressed redwood can be increased by increasing the available water for the plant. The subject tree is part of a stand of healthy trees. The roots of all three trees are almost certainly grafted and the trees share nutrients. If the tree is aggressively pruned, it will benefit from support from the other two trees as it generates new foliage.

In summary, removing the branches over the 131 property will be visually striking, but is preferable to the removal of the entire tree and losing all the benefits it provides. This will nearly abate the risk of branch failure onto the 131 property and should not significantly impact the long-term health of the tree. Even in the very unlikely event the tree does eventually die as the result of the pruning, at least an effort will have been made to save the tree. The risk of stem failure from the co-dominant stems can be sufficiently mitigated using cables in accordance with industry standards. I will always support the removal of an urban tree when I believe it has reached the end of its safe utility period but I do not believe that is the case for this tree.

Benjamin Anderson, Urban Forester
ISA Board Certified Master Arborist & TRAQ
WE:10160B
(415) 454-4212

Figure 1. Example tree in Petaluma and the response to an aggressive pruning.