

September 9, 2019

Mike Bassoni Harker School PO Box 9067 San Jose, CA 95157

Re: Harker School 4525 Union Ave. San Jose, CA

Dear Mike.

I am writing you regarding the Coast Live Oak tree that is located at your Middle Campus. Upon my inspection this tree is in serious decline and has approximately forty percent loss of canopy. It has early signs of Phytophthora ramorum and had issues with various beetles of which we began spraying for this year. The pathogen Phytophthora ramorum destroys the plant growing tissue called cambium as well as the vascular system phloem and xylem cells which are responsible for tree life. The presence of the pathogen in this tissue causes girdling, which eventually leads to blight.

Reddish brown sap oozing from the tree trunk is a wound response to the pathogen. It usually takes the form of droplets. It is one of the visual diagnostic indicators of disease presence. A thorough site and tree examination and assessment as well as an experienced understanding of the disease complex is very important for diagnosis, several other pathogens produce similar bleeding symptoms. Removing the bark over an infection area reveals dark zonal lines and diseased tissue within the zonal borders.

An oak may be infected up to one year or more before symptoms appear. In our experience, once a bleeding lesion appears, tree mortality of coast live oaks can follow approximately two years later. We have also experienced trees infected by Phytophthora ramorum and ambrosia beetles to the point of girdling of over fifty percent of a tree circumference that stay green and healthy appearing after four years of treatment. This in field observation proves that there are no hard and fast rules that apply to each and every tree.

There are no additional types of treatments that we can do to try and save this tree other than what we are currently doing with Agrifos and Pentrabark application of which there is still no guarantee. Any sort of construction impacts or transplanting would lead to the ultimate demise of this tree. If in fact this tree is in the way of construction, it should be removed and replaced with a new Coast Live Oak of similar size, one that is viable for survival and long-term preservation.



Our goal is to maintain your trees for safety, appearance, and long-term preservation. Arborists are tree specialists who use their education, knowledge, training, and expertise to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce 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 structure failure of a tree. Trees are living organisms that fail in ways we do not fully understand. Conditions are often hidden within trees and below the ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specific period of time. Likewise, femedial treatments, like medicine, cannot be guaranteed. Trees can be managed, but they cannot be controlled. To five near trees is to accept some degree of risk. The only way to climinate all risk associated with trees is to eliminate all trees.

Thank You, Jee Nama I.S.A. Certified Arborist #WE-3238A