

From: Darren Nash, Associate Planner

Subject: Continued Hearing -- Oak Tree Removal Permit (OTR 16-004) / 1803 Spring Street.

regarding a request by Bruce Eisengart (property owner / applicant) to approve the

removal of one potentially hazardous 44-inch Valley Oak tree

November 1, 2016

Date:

Facts

- 1. The 44-inch Valley Oak tree is located on the former Hometown Nursery site located at 1803 Spring Street, see Attachment 1 and 2.
- 2. The site has not been occupied since the nursery was relocated from the site in 2007. The property is currently for sale.
- 3. There are a total of three large oak trees located on the site. The subject tree is a 44-inch Valley Oak. The two other oak trees on the site would remain. See site plan, Attachment 2.
- 4. The Oak Tree Removal permit is being requested because the tree is potentially hazardous due to a decay cavity in the lower trunk, as documented in the attached arborist reports.
- 5. This oak tree removal request was considered by the City Council on October 4, 2016, where, after hearing from staff and the Arborist, Council continued the item and requested additional testing to evaluate how much decay is present in the trunk of the tree to better help determine the condition of the tree.
- 6. On October 13, 2016, Chip Tamagni of A&T Arborists performed additional wood density testing with the use of a resistograph. After drilling numerous holes, additional information was provided by the resistograph. See Arborist letter dated October 14, 2016. (Attachment 4, Exhibit A).
- 7. As a result of the resistograph test, the Arborist indicates the following:
 - The tree is decaying faster than the tree is healing, resulting in the tree eventually failing;
 - The decay will lead to stem failure at some point in the trees life:
 - The tree is at the upper end of being considered a "moderate risk" on a vacant site, however once the site is developed and the target is changed, the tree will "absolutely need to be removed."
- 8. Chip Tamagni concludes that as a result of the resistograph test, that there are patches of decay in various areas within the trunk of the tree that does "pose a risk today". He indicates that significant pruning of the tree, including the removal of the northerly scaffold branch, would reduce the risk of failure at the present time, but at the point when the lot develops, any structures built on the site would be at immediate risk. Mr. Tamagni recommends that the tree be removed at this time, prior to future development.

Options

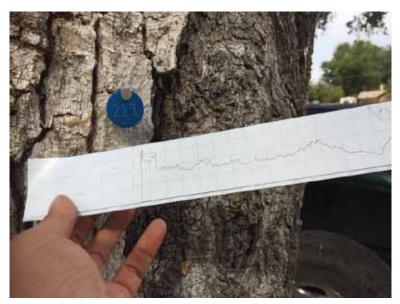
- 1. Approve Draft Resolution A, approving OTR 16-004, allowing the removal of one 44-inch Valley Oak tree, based on the Arborist report that the tree is potentially hazardous, as indicated by the evidence of the cavity of decay in the tree trunk, and require seven (7) 1.5-inch diameter Valley Oak replacement trees to be planted on site, at the direction of the Arborist.
- 2. Table the Oak Tree Removal request for 6-months and request mitigation pruning of the tree and reevaluation prior to consideration of the removal request.
- 3. Refer back to staff for additional analysis.

Analysis and Conclusions

Option 1:

The arborist, Chip Tamagni, conducted the requested resistograph testing which staff observed. The arborist's conclusion is that the resistograph confirmed the potential hazard, the Arborist supports the need for removal. The report discusses alternatives to removal, such as mitigation pruning, additionally since the site is vacant, the amount of risk to the target zone is lower than if it were developed. The Arborist acknowledges that the tree could be retained as is and considered in the future at the time of development of the site, however he concludes that adding development within the target area of the tree would then exceed the "target" threshold and need to be removed. The Arborist under his professional opinion, has indicated that the tree should be removed at this time. After reviewing the arborist report (Exhibit C of Resolution A), the Council may determine there is enough information to allow removal of the tree. Onsite replacement trees would be required as mitigation to the tree removal.





October 13, 2016 resistograph test of tree by arborist Chip Tamagni

Option 2:

The Arborist Report indicates that trimming is an option to reduce the risk of a failure for the present time. Since there is no development proposed at this time, a second option could be to table the Oak Tree Removal request for 6-months and request mitigation pruning of the tree. In 6-months the tree could be re-evaluated prior to consideration of the removal request. This option would allow the 44-inch Valley Oak, which has significant aesthetic value, to remain on site until it can be re-evaluated with future development plans.

Option 3:

Council may refer Oak Tree Removal permit back to staff and the arborist for additional analysis.

Fiscal Impact

There is not a fiscal impact to the City related to this oak tree removal request. Any additional review by an Arborist or special testing would need to be funded by the applicant. Oak trees can provide value to a property, and be an aesthetic value to the City as a whole.

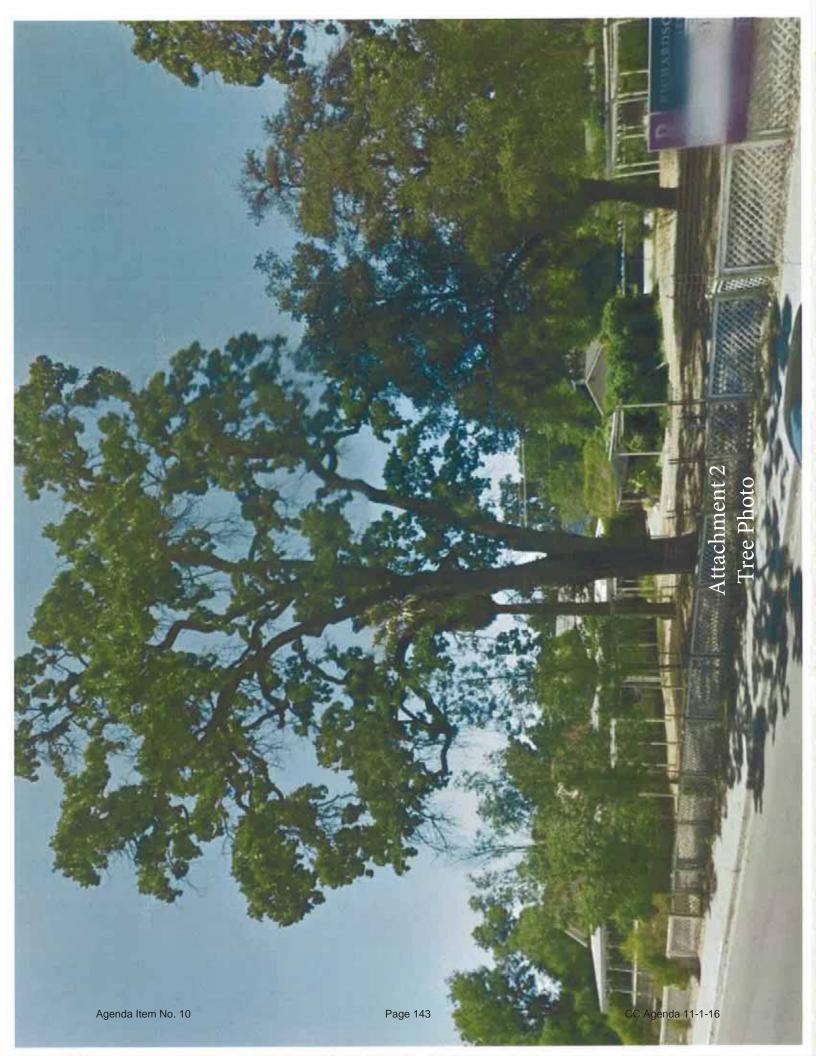
Recommendation

Approve Draft Resolution A (Option 1), approving OTR 16-004, allowing the removal of one 44-inch Valley Oak tree, based on the Arborist report that the tree is potentially hazardous, as indicated by the evidence of the cavity of decay in the tree trunk, and require seven 1.5-inch diameter Valley Oak replacement trees to be planted on site, at the direction of the Arborist.

Attachments

- 1. Vicinity Map/Oak Tree Location Plan
- 2. Photo of Tree
- 3. Resolution A Approval of the removal of the tree
 - a. March 29, 2016 A&T Arborist Report incudes photos of cavity
 - b. July 10, 2016 A&T Arborist Report (addendum)
 - c. October 14, 2016 A&T Arborist Report (addendum)

44-inch Valley Oak 18th St Attachment 1 Vicinity Map



Attachment 3 Draft Resolution A

RESOLUTION 16-xxx

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PASO ROBLES
AUTHORIZING THE REMOVAL OF
ONE HAZARDOUS 44-INCH DIAMETER VALLEY OAK TREE
AT 1803 SPRING (OTR 16-004)
(EISENGART – HOMETOWN NURSERY)

WHEREAS, Bruce Eisengart has submitted a request to remove one oak tree, on the lot located at 1803 Spring Street; and

WHEREAS, the trees proposed to be removed is one 44-inch diameter Valley Oak; and

WHEREAS, the site has not been occupied since Hometown Nursery relocated from the site in 2007; the site is currently for sale; and

WHEREAS, Chip Tamagni, Arborist has provided information indicating that the tree trunk contains 30-percent decay through the trunk at the 4.5-foot level, and that there could be additional decay in other areas of the tree, and recommends that the tree be removed to prevent future hazard in Exhibit A and B; and

WHEREAS, on October 4, 2016, the City Council evaluated this oak tree removal request and after hearing from staff and the Arborist, it was agreed upon by all that it would be beneficial to perform additional testing to evaluate how much decay is present in the trunk of the tree to better help determine the condition of the tree; and

WHEREAS, on October 13, 2016, Chip Tamagni of A&T Arborists performed additional wood density testing with the use of a resistograph, he concluded that there are patches of decay in various areas within the trunk of the tree that does "pose a risk today" and recommends that the tree be removed at this time, prior to future development as documented in Exhibit C; and

WHEREAS, if the tree is approved to be removed, there are two other oak trees on the lot that would be preserved; and

WHEREAS, the Community Development Director could not make the determination that the tree is "clearly dead or diseased beyond correction," and therefore, Section 10.01.050.C of the Oak Tree Ordinance would consider the tree "healthy" and require that the City Council make the determination of whether the tree should be removed or not, after consideration of the factors listed in Section 10.01.050.D; and

SECTION 1. Pursuant to Paso Robles Municipal Code section 10.01.050.D., and based on the entire record including all written and oral evidence presented, the City Council finds as follows:

1. Having considered the factors outlined in Section 10.01.050.D.1. of the Paso Robles Municipal Code, and the information provided by the Arborist in Exhibit A, B and C, the City Council finds the 44-inch Valley Oak tree is potentially hazardous due to significant decay of the trunk.

SECTION 2: APPROVAL

NOW, THEREFORE, BE IT RESOLVED, that the City Council of the City of El Paso de Robles does hereby:

- 1. Authorize the removal of the 44-inch Valley Oak tree located at 1803 Spring St., based on the findings.
- 2. Require seven (7) 1.25-inch diameter oak tree replacement trees to be planted on site at the direction of the Arborist to mitigate the visual impact of the tree's removal.

PASSED AND ADOPTED by the City Council of the City of El Paso de Robles this 1st day of November 2016 by the following vote:

AYES: NOES: ABSTAIN: ABSENT:		
	Steven W. Martin, Mayor	
ATTEST:		
Kristen L. Buxkemper, Deputy City Clerk		
Kristeri L. Dukkemper, Deputy City Clerk		

Exhibits

- A. March 29th A&T Arborist Report incudes photos of cavity
- B. July 10th A&T Arborist Report (addendum)
- C. October 14th A&T Arborist Report (addendum)



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Bruce

3-29-16

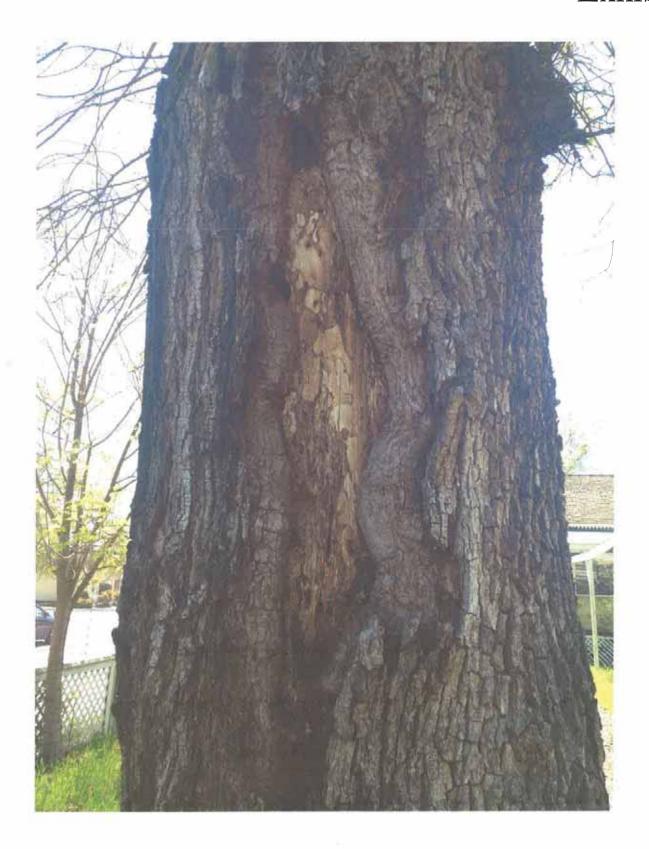
City of Paso Robles
Community Development Dept.

Re: Old Hometown Nursery Valley Oak Tree

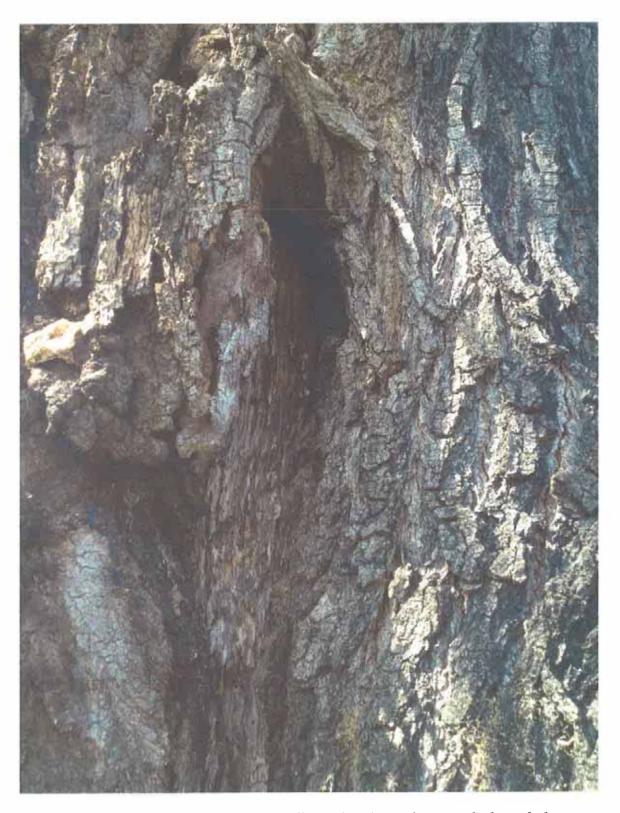
This report is in regard to the diseased 44" valley oak (*Quercus lobata*) located at the old hometown nursery site in the 18th block of Spring Street. We inspected the trees on this property many years ago for potential development and this tree concerned us back then as far as safety is concerned. The tree has a significant cavity that encompasses well over the 30% cross sectional threshold that would dictate it as a hazard tree. The cavity is located at about four feet above the ground as seen in the photograph. There are two nesting holes that extend deep into the cavity. Concern is that this tree may fail at this location which would result in entire tree failure. This consequences could be catastrophic as a large portion of this tree extends over Spring Street. We strongly recommend removal at this point in time. Pruning at this point in time will not sufficiently reduce the hazard.

Please feel free to contact us with any questions

Chip Tamagni
Certified Arborist #WE 6436-A
California State Pest Control Advisor #75850
Certified Hazard Risk Assessor #1209
Cal Poly B.S. Forestry and Natural Resources Management



Notice the nesting holes at the upper left and top of the cavity.



This view is from the backside of the tree illustrating the cavity extends through the entire trunk.



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City of Trase Robies Community Development Dept.

7-10-16

Warren Frace, City of Paso Robles

Re: Old Hometown Nursery Valley Oak Tree

I revisited the site and drilled into the tree in various locations and angles through both areas of decay and found the following that corresponds to the diagram:

- When drilling from the north facing cavity, sound wood was reached at 8" drilling to the southwest, 9 inches to the south and I buried the 12" drill and hit no sound wood when drilling to the south/southeast.
- When drilling from the eastern cavity, sound wood was reached at 8" when drilling due west, no sound wood was reached when drilling to the northwest, and no sound wood was found when drilling to the south west.

From the diagram, it appears that there is at least 25-30% decay across the plane of the tree. Most likely, the decay extends to at least 30% which is the ISA threshold for action to the tree. That action could be trimming to reduce weight which may prevent failure at this time, however, that may be "kicking the can down the road" if the tree continues to decay. Furthermore, the test drilling was done in one plane at approximately 4.5 feet above the ground. There most likely are additional pockets of decay either above or below the testing area. The tree appears to be trying very hard to compartmentalize this decay by trying to close up the wounds which could have been a result of excess water throughout the years when the nursery was in operation.

Included is a diagram illustrating the approximate locations of the decay at the 4.5 foot level. We feel this tree is potentially hazardous and consideration should be given to removing this tree before it collapses onto Spring Street.

Exhibit B

While this tree is an aesthetically important tree, it appears to be in a hazardous condition from the testing that we performed. Granted, it is a difficult decision to remove it, however, public safety has to take precedence in this situation.

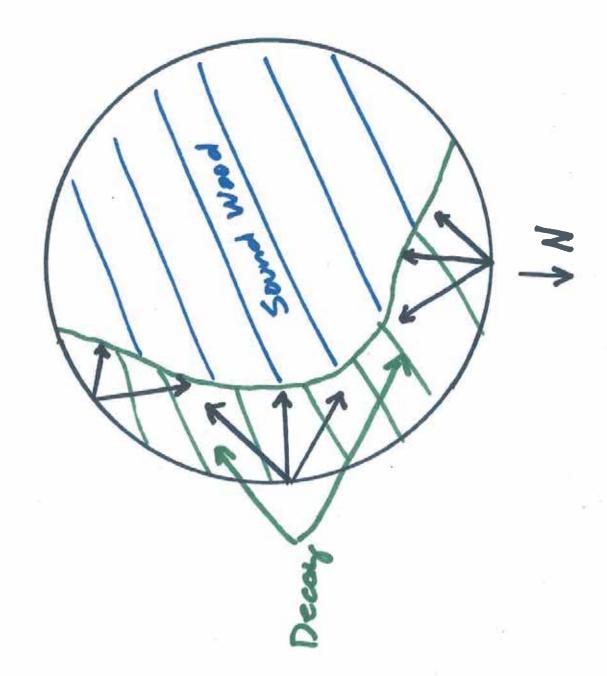
Chip Tamagni
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California State Pest Control Advisor #75850
Certified Hazard Risk Assessor #1209
Cal Poly B.S. Forestry and Natural Resources Management

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City of Para Robles Community Commont Dept.

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10-14-16

Darren Nash and Warren Frace, City of Paso Robles

Re: 44" valley oak at old Hometown Nursery site

Per the City Council resolution on 10-4-2016, it was agreed more testing could be done to determine the amount of decay in the 44 inch diameter valley oak tree (*Quercus* lobata) located at the old Hometown Nursery site on Spring Street. Generally, trees start growing with great vigor, enter a middle period where growth slows down, and then a final period where decline and decay can overtake the growth, eventually leading to death and failure. The size of this tree indicates it is most likely at the beginning of the final period of growth. We base this on the fact that the tree is approximately 220 years old. We had estimated by core drilling that the percentage of decay in a trunk cross section at about six to seven feet off of the ground was +/- 30%. This amount of decay would dictate the tree as being hazardous depending on target locations. Currently, the site is vacant with a cyclone fence with a locked gate. Any failure within the site would potentially damage the old nursery building that does have some historical value. There is also the possibility the tree could fail on to Spring Street where pedestrians and vehicular traffic present occasional to frequent targets. Future site development would most likely present multiple permanent targets or high use areas. As the tree presents some historical significance, we want to present accurate information so a rational decision can be made.

On 10-13-16, we measured the decay in the subject tree using a resistograph that can detect decay up to 14 inches deep. A resistograph measures wood density resistance as a 1/8 inch drilling needle bores into the tree and plots the result onto graph paper. We tested three separate cross sections of the tree. One was at about two feet off of the ground. The next area was about five feet off of the ground and the final area was about seven to eight feet off of the ground.

We only tested two locations at the lower level and both of them encountered solid wood to the maximum testing depth of 14 inches. This leads us to believe that the

decay does not extend down into the root system. However, there is always the potential that there is internal decay beyond our testing capability.

We tested four locations at the four foot level. We found one continuous pocket of decay that varies from six to three back to nine inches wide by about three feet long. The decay is located towards the north side of the tree where there are some visible sections of the decay.

We tested six more locations at approximately seven to eight feet off of the ground. We discovered a section of continuous decay that varied from three to 12 inches thick by about 30 inches wide also on the north side of the trunk. It is fairly obvious that the decay is continuous from the four foot level and increases in size up to the eight foot level. The decay at this level originates at the surface and extends inward whereas the lower level decay is mainly internal due to some wound wood development. The seven to eight foot level was as high as we could reach to test, however, the visible decay extends higher up the tree and this testing gives us a pretty good idea of the extent of the decay.

There are areas around the visible decay that have varying amounts callus tissue or wound wood. This new wood forms around the areas of decay. It is very strong wood as it forms a shell over and around the decay and can in some instances be all that is holding the tree up. Its rate of formation depends on overall tree health and the rate of decay. Nothing in our testing or any other method can determine whether the decay has stopped forming nor can we tell if the tree is healing faster than it is decaying. What we do know is the tree is not a young vigorous tree anymore. It is at a stage in its lifecycle where decay can overtake wound wood development. We do know that the callus tissue is currently forming outside of the decay from visual observation. In the case the tree is decaying faster than the wound wood is structurally replacing it, the tree will eventually fail. We cannot determine the answer to this question. This particular decay appears to be heart rot possibly caused by past mechanical damage. These kinds of decay generally lead to stem failure at some point in the tree's life.

When making a true risk assessment, the following parameters are used per <u>Tree</u> <u>Risk Assessment in Urban Areas and the Urban/Rural Interface</u> course manual:

- Probability of Failure 1-5 points
- Size of defective part 1-3 points
- The Target Area 1-4 points

Probability of Failure – We feel this tree rates a 3. That is defined as, "Areas of decay that may be expanding". The cavity opening is not greater than 30% of the tree circumference.

Size of Defective Part – The rating for a 3 is based on the part most likely to fail which is over 20 inches in diameter whether that be the trunk one of the two major scaffolds.

The Target Area – We rate it in its current state as a 2. "Valuable buildings are at the edge of the striking distance, people are within striking distance less than 50% of the time span in any one day, week, or month, and do not stay within the striking range very long". Once the site gets developed, this rating will go up to a 3 at a minimum and most likely a 4. Spring Street, on some of the busier days, could really be rated a 4 which

would immediately make the tree more hazardous. *One fact that needs to be made really clear is a tree is only a hazard if there is a target* it can strike if it fails. The degree of risk increases as use under the tree increases

The total of the above parameters is eight. This means the tree has, "Well defined issues – retain and monitor". The currently is at the upper end of being a moderate risk. Once the site has any development, the Target Area will dramatically change therefore increasing risk. The new interpretation will be, "The assessed issues have now become very clear. The probability of failure is now getting serious, or the target area and/or site rating and/or site context have changed such that mitigation measures should now be on a schedule with a clearly defined timeline for action."

In our opinion, the tree does pose a hazard today. The known decay varies from about 18% at the four foot level to about 28% at the seven to eight foot level. We know with certainty that the area of decay extends longitudinally from below the four foot level to above the eight foot level in varying degrees. We also know with certainty that the decay has spread from the initial wound area to deep within the trunk both above and below the visible area. There is a potential for main stem failure both within the site and onto Spring Street. Due to the periodic traffic, both vehicular and pedestrian, a target is not always in the potential fall path of the tree. There is no guarantee someone or something would not be struck, but the odds are reduced as use under the tree is not 100% of the time. Some extensive pruning including removing the large scaffold limb to the north and other weight reduction measures will possibly, with absolutely no guarantee, reduce this risk for the *present time*. Once the site gets developed, the tree would absolutely have to be removed as the degree of risk would be unacceptable per this assessment. We included a hand drawn graph illustrating the extent of decay.

Please feel free to contact us with any questions.

Chip Tamagni
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Cal Poly B.S. Forestry and Natural Resources Management

Exhibit C

