



MEMORANDUM

Community Services Department

DATE: February 14, 2018

TO: Urban Forestry Board

FROM: Jakob Trconic, Parks Section Manager

SUBJECT: Heritage Tree Appeal – 467 Carmelita Drive

RECOMMENDATION

Deny the appeal and allow the approved Douglas fir tree to be removed.

FISCAL IMPACT - None.

BACKGROUND

Article II, Protection of the Urban Forest, Sections 32.22 through 32.38 of the City Code, was established to preserve large trees within the City which are growing on private or public lands. The preservation program contributes to the welfare and aesthetics of the community and retains the great historical and environmental value of these trees. The Parks and Open Space Manager, under the authority granted in the Code to the Community Service Director, has been designated as the enforcement agent in this matter. Under the Code, there are specific criteria for removal. The determination on each application is based upon a minimum of one of the following conditions. The decision maker shall consider additional criteria, if applicable, in weighing the decision to remove a Heritage tree, with the emphasis on the intent to preserve Heritage trees.

- 1. The condition of the tree with respect to age of the tree relative to the life span of that particular species, disease, infestation, general health, damage, public nuisance, danger of falling, proximity to existing or proposed structures, and interference with utility services.
- 2. The necessity of the removal of the Heritage tree in order to construct improvements and/or allow reasonable and conforming use of the property when compared to other similarly situated properties.

- 3. The nature and qualities of the tree as a Heritage tree, including its maturity, its aesthetic qualities such as its canopy, its shape and structure, its majestic stature, and its visual impact on the neighborhood.
- 4. Good forestry practices such as, but not limited to, the number of healthy trees a given parcel of land will support and the planned removal of any tree nearing the end of its life cycle and the replacement of young trees to enhance the overall health of the urban forest.
- 5. Balancing Criteria: In addition to the criteria referenced above which may support removal, the decision maker shall also balance the request for removal against the following which may support or mitigate against removal:
 - A. The topography of land and effect of the requested removal on erosion, soil retention, water retention, and diversion or increased flow of surface waters.
 - B. The effect of the requested removal on the remaining number, species, size, and location of existing trees on the site and in the area.
 - C. The effect of the requested removal with regard to shade, noise buffers, protection from wind damage and air pollution, and the effect upon the historic value and scenic beauty and the health, safety, prosperity, and general welfare of the area and the City as a whole.

Also within the Code Section 32.31, an appeals process has been included that states:

"Any person aggrieved or affected by a decision on a requested removal may appeal the decision by filing a written notice of appeal with the city clerk stating the grounds for the appeal, and paying the requisite appeal fee, as established by council resolution, within ten (10) calendar days after the notice of the decision is posted or mailed."

HERITAGE TREE REMOVAL REQUEST

An application submitted by Judy Jen to remove two Heritage-sized *Pseudotsuga menziesii* (Douglas fir) trees was received on November 21, 2017. The criteria for removal listed in the comment section were codominant stems and hazardous. The boxes were checked for: (1) Condition of tree with respect to age; (2) The nature and qualities of the trees as a Heritage tree; and (3) Good forestry practices. Staff visited the site to observe the trees and their condition. A decision to approve the removal of the

tree with codominant stems and a denial for the second tree were posted on December 8, 2017.

An appeal was filed by Norma Jean Bodey Galiher on December 19, 2018 for the Douglas fir tree that was approved. The appeal letter states: "It is not apparent to us that its condition justifies removal." The appellants feel they are stakeholders desiring to see remaining Heritage trees preserved and that their appeal coincides with the City's stated objective of preserving the urban forest. The letter also suggests mitigation suggestions provided by a consulting arborist that were attached. The letter continues to discuss and point out the value of trees and the many benefits they provide.

ANALYSIS

When evaluating Heritage Tree Removal Applications, staff looks to see if the reason(s) for removal on the application match what is observed in the field. If the reason(s) meet the criteria, staff looks to see if issue(s) regarding the tree can be reasonably mitigated. Based on inspection and evaluation of *Pseudotsuga menziesii* (Douglas fir) Tree No. 1 with codominant stems and a review of the arborist guidance/notes on basic mitigation, the appeal should be denied.

- Pseudotsuga menziesii (Douglas fir) tree's entire range include Oregon, Washington, and parts of the Rocky Mountains and extends to Alaska and California as far south as Fresno County. In coastal climates, it is fast-growing, feathery, dark green, with slightly drooping branchlets. They tolerate wind and will grow in most soils. The common name is misleading since it is not a true fir, (i.e., not a member of the genus Abies). Douglas firs are medium-size to extremely large evergreen trees—70′ to 330′ tall (although only Coast Douglas firs reach such great height). In its natural range, Douglas fir is very long-lived; ages in excess of 500 years are not uncommon and some have exceeded 1,000 years. Trees in urban setting will have a shorter life expectancy of around 100 years or longer. Trees tend to lose lower branches as the trees age. Staff estimates the trees to be around 65′ tall and approximately 50 to 60 years old.
- The application had an attachment with some notes in relation to guidance from Ray Morneau, a consulting arborist, in relation to mitigating issues when dealing with codominant stems. Staff felt that, due to the severity of the codominance and the large portion of included bark where the two unions meet, that removal of one or the other would not be an option because it would leave a very large wound that would be difficult for this tree to recover from, especially considering the length and depth of the inclusion. The tree would also become unbalanced because each leader is made up of half of the canopy. The remaining canopy

would then be subject to a major change in wind dynamics and the aesthetics of what was left would be far from attractive. Staff feels that cabling is not an acceptable approach to defects in trees because they do not prevent the potential for a failure at a weakened union with included bark and would pose other negative factors such as reduced flexibility in trees and a potential for reduction in resistance wood that forms in moving branches. Cabling was used extensively in the past, but it is used less frequently now that the reality of weakened unions is more clearly understood and they are used in limited applications where risks to homes or other high-risk targets are not in close proximity.

- The upper canopy of the tree is already fairly sparse so there would not be a lot of pruning that could take place to mitigate the overall weight that is acting on the union of the two leaders. The majority of the forces are related to the size and weight of the wood mass in the leaders themselves. Thinning the canopy would reduce the sail effect on the canopy, specifically if it was a full and dense-canopied tree, but this is not the case. Staff feels that end weight pruning would only slightly reduce the forces acting on the union.
- Staff felt that pruning the larger tree would be a good choice based on the past branch failures noted in the canopy since it did not appear that the tree had been pruned for some time. Pruning to mitigate future branch failures in this tree was an option and is why it was denied.
- The notes also mentioned the relationship that trees have and that they do better in a community environment. Trees tend to improve the environment around them as they drop leaves that decompose and improve the soil around them. Evergreen conifers tend to increase acidity of the soil as their pine needles decompose and this is beneficial to them if the needles are allowed to remain in place. Trees can grow to form root systems that can grow together and can benefit all the trees in the system. Removal of a tree does not eliminate the connections between the root systems and the remaining tree(s). Staff would argue that in nature, a grove of trees is different from trees in the urban environment where the major factor on the change in a grove of trees would be the potential of wind dynamics to adversely affect the dynamics of the other remaining tree(s) if one or more were to be removed. In this case, staff feels the distance between the two trees would not drastically change the dynamics surrounding the remaining tree and that it would adapt to any changes over time. One could argue that trees also compete for nutrients, light, space, and resources just as they improve the conditions and environment in a mutually beneficial way.

• Both trees appear to have some issues with overall canopy vigor with thin branching and dieback of needles in sections of the canopy. Staff is not sure of the exact reasons for the browning and thinning of areas around the canopy but drought and possibly canker could be factors. Trees can live for many years with canker and, therefore, even if the trees had canker, it would not be a reason for consideration for removal at this time. Both canker and drought stress would show the symptoms of twig and branch dieback but neither would affect the overall viability of the tree(s). The trees are still growing, although at different rates, and they have plenty of room to grow. Staff does not feel the removal of the one tree would negatively impact the remaining tree in a substantial way.

SUMMARY

Staff is of the opinion that it is reasonable to remove the tree with codominant stems due the higher potential for leader failure and the risk of the target areas of either in the event of a major failure. Removal of either leader is not an option based on the extent and size of the inclusion of bark. Pruning to mitigate does not eliminate the potential for failure based on the heavy weight of the existing leader(s)' size and weight.

Staff recommends the appeal be denied and the *Pseudotsuga menziesii* (Douglas fir Tree No. 1) be allowed to be removed.

JT/7/CSD 221-02-14-18M-E-1

Attachment: 1. Appeal Packet

cc: F/c