

**PLANNING COMMISSION STAFF REPORT
TYPE III REVIEW**

DATE: March 19, 2021

FILE NO.: 21-004 TREE/VAR

PROJECT NAME: Mairin's Viewpoint Tree Variance

APPLICANT/OWNER: John Mahaffy

ADDRESS: 15545 Bluff Road

LEGAL DESCRIPTION: T2S R4E Section 11DA Tax Lot 400

The above-referenced proposal was reviewed as a Type III Tree Variance. The following exhibits, findings of fact, and conditions (bold text) explain the proposal and the recommended conditions of approval.

EXHIBITS:

Applicant's Submittals

- A. Land Use Application
- B. Tree Variance Narrative
- C. Arborist Report (Mary Giersch Consulting Arborist; February 15, 2021)
- D. Tree Inventory Table
- E. Tree Preservation Plan

Submitted by the City of Sandy

- F. Final Order for File No. 17-053 SUB
- G. Arborist Report (Mary Giersch Consulting Arborist; April 2020)
- H. Pictures of Tree #506
- I. Tree Covenants for Lots 1, 3, and 4 (Recorded February 18, 2021)

FINDINGS OF FACT:

1. These findings are based on the applicant's submittal received on February 17, 2021 with additional information received on February 18, 2021. The application was deemed complete on March 2, 2021 and the 120-day deadline is June 30, 2021.
2. John Mahaffy submitted an application for a variance to the tree retention standards of Section 17.102.50 to allow fewer than the minimum required retention trees. The Mairin's Viewpoint subdivision (File No. 17-053 SUB, Exhibit F) was approved with conditions on December 28, 2017 and the plat was recorded on February 24, 2021. The subdivision approval included a condition that the applicant shall submit an updated arborist report and

tree inventory for staff review and approval. The subject property is approximately 1.39 acres, which requires retention of four (4) healthy trees 11-inches diameter at breast height (DBH) or greater, that are likely to grow to maturity, and are located to minimize the potential for blow-down.

3. The applicant and project arborist have been working with staff to identify four (4) retention trees; however, there are very few retention tree candidates on the subject property due to the trees' conditions, species, and locations in relation to building footprints and public improvements. The applicant is requesting a variance to Section 17.102.50 and is proposing to retain three (3) trees and plant two (2) mitigation trees in compliance with Section 17.102.70.
4. Notification of the proposed application was mailed to property owners within 500 feet of the subject property and affected agencies on March 2, 2021. A legal notice was published in the Sandy Post on March 17, 2021. As of March 17, 2021, no written public comments were received.

17.102 – Urban Forestry

5. Chapter 17.102, Urban Forestry, applies to properties within the Sandy Urban Growth Boundary that are greater than one acre in area (including contiguous parcels under the same ownership).
6. The subject property contains approximately 1.39 acres; thus, compliance with the tree retention requirements of Chapter 17.102 is required. Chapter 17.102 requires retention of three (3) trees per acre that are 11-inches or greater diameter at breast height (DBH), in healthy condition, likely to grow to maturity, and located to minimize the potential for blow-down. Thus, the minimum retention requirement for the subject property is 4 trees.
7. As noted above, the original subdivision approval (File 17-053 SUB) included a condition that the applicant shall submit an updated arborist report and tree inventory for staff review and approval. The applicant and project arborist have been working with staff to identify four (4) retention trees; however, there are very few retention tree candidates on the subject property due to the trees' conditions, species, and locations in relation to building footprints and public improvements. The applicant is requesting a variance to Section 17.102.50 and is proposing to retain three (3) trees and plant two (2) mitigation trees in compliance with Section 17.102.70. The narrative (Exhibit B) states: "While there is an existing cluster of trees on the west half of the project site, many of the trees are not healthy enough to be deemed viable candidates for preservation. The three (3) trees proposed for preservation are in fair health and were deemed not to be blow-down hazards. Only one (1) of the proposed trees slated for preservation is a coniferous species, however, the applicant proposes to plant two (2) additional, native conifers should this application be approved."
8. The three (3) trees proposed to be retained are as follows:
 - Tree #506, an 18-inch DBH bigleaf maple in fair condition
 - Tree #542, a 36-inch DBH western redcedar in fair condition
 - Tree #558, a 16-inch DBH pear in fair condition

9. Section 17.102.70 contains the Type III review process for variances to the urban forestry regulations. The Arborist Report and Tree Inventory prepared by Mary Giersch Consulting Arborist dated February 15, 2021 (Exhibits C and D) inventoried 46 trees 11-inches DBH or greater on the subject property. Of the 46, five (5) are dead, dying, or in hazard condition, and three (3) are nuisance species. Of the remaining 38 trees, 12 are in poor condition and 26 are in fair condition. The Arborist Report states that the twenty-six (26) trees with a condition rating of fair were assessed to determine if adequate root protection space was available to allow for tree preservation and long-term sustainability. Based on the assessment, three (3) trees were proposed for preservation based on their condition, size, location, and tree species construction tolerance ratings. The applicant's narrative (Exhibit B) states: "Unfortunately, due to the location of trees within the proposed lots, the public improvements required, the poor health of many onsite trees, and the presence of nuisance tree species, the applicant is unable to meet the tree preservation requirements as required in the approved Mairin's Viewpoint Subdivision Application. It is for this reason that the applicant is seeking a Type III Tree Variance for the project site."

Staff visited the site on March 9, 2021 and concurs that there are very few good candidates for retention. A majority of the trees are covered in English ivy; in some cases, the ivy has climbed so far up into the tree that it appears to have taken over the entire trunk of the tree. Staff has concerns about the health of Tree #506, which is one of the ivy-covered trees (see photos, Exhibit H). In an arborist report prepared by the project arborist and submitted to staff in April 2020 (Exhibit G), Tree #506 was evaluated as being in poor condition. The more recent arborist report (Exhibit C) evaluates Tree #506 as being in fair condition. In addition, Tree #506 is located in the northwest corner of Lot 1 within the allowable building footprint and close to the proposed future sidewalks on Dreamcatcher Avenue and Olson Street. Even if Tree #506 is healthy, staff is not convinced it will be able to be adequately protected during construction based on its location. Staff also has concerns about Tree #558 being selected as a retention tree. Tree #558 is a pear tree with many vertical water sprouts. While it was deemed to be in fair condition by the project arborist and meets the minimum size threshold for a retention tree, staff does not believe retaining a pear tree in perpetuity meets the intent of the retention tree standards, which prefers two-thirds of the retained trees to be conifer species. During the site visit, staff surveyed the site for other potential retention tree candidates and identified a few trees that appear to be healthy and have not been taken over by ivy (Tree #525, for example); however, most of the trees that were free of ivy were located within the building footprint of Lot 3. Staff also identified Tree #539, a 42-inch DBH grand fir in fair condition, as a potential candidate. Tree #539 is located on the lot with the existing house that will be retained (Lot 4) so will not be as heavily impacted by construction activity as trees on the other lots that will be developed. However, staff has talked to the property owner multiple times about retaining Tree #539 and the property owner is concerned it is too close to the existing house and poses a hazard to the existing house. Staff has had multiple conversations with both the property owner and project arborist regarding the difficulty of finding suitable retention trees on the subject property primarily due to condition, species, and location.

Based on concerns with Trees 506 and 558 and the lack of good alternative retention candidates on the site, **staff recommends the Planning Commission grant the applicant a variance to the minimum tree retention standards for the subject property. Staff further recommends the Planning Commission require the applicant to retain Tree #542 as a retention tree; however, rather than retaining Trees #506 and 558, staff recommends the Planning Commission require the applicant to mitigate for these two trees as well as for the fourth required retention tree, for a total of six (6) mitigation trees. To verify that Tree #542 remains protected and healthy through construction, the applicant shall submit a post-construction report prepared by the project arborist or other TRAQ qualified arborist. The post-construction report shall be completed after all construction on the subject property has been completed and shall assess the condition of the required retention tree. If the retention tree is damaged or otherwise compromised and needs to be removed, the applicant shall apply for a hazard tree removal permit and shall replace mitigation trees at a higher mitigation ratio based on the size of the tree removed; the applicant shall also be required to pay a third-party arborist review fee for any trees proposed for removal from the property in the future.** If the Planning Commission decides to require that the applicant plant the six (6) required mitigation trees rather than paying the fee-in-lieu, the post-construction arborist report will need to verify that the mitigation trees are alive. If the post-construction arborist report determines that any of the newly planted mitigation trees were damaged or are unhealthy, the applicant shall plant a new mitigation tree(s) or shall pay the \$500 fee-in-lieu of mitigation tree per required mitigation tree to have the trees planted off-site.

10. Section 17.102.50(B) includes tree protection requirements. The narrative (Exhibit B) states that the applicant has worked with the project arborist to modify the root protection zones of the three (3) trees being preserved, to accommodate both public and private improvements. The typical root protection zone is the critical root zone. Per the Pacific Northwest International Society of Arboriculture (ISA), the ISA defines the critical root zone (CRZ) as “an area equal to a 1-foot radius from the base of the tree’s trunk for each 1 inch of the tree’s diameter at 4.5 feet above grade (referred to as diameter at breast height).” Often the dripline is used to estimate a tree’s CRZ; however, it should be noted that a tree’s roots typically extend well beyond its dripline. The typical minimum root protection zone (MRPZ) is 0.5 feet per 1-inch DBH, which is the minimum setback to be protected from the trunk of a tree in feet when impacted on one side of the root system. The Arborist Report (Exhibit C) specifies modified root protection zones for each tree that do not adhere to the standard critical root zone. The proposed root protection zones in relation to the standard CRZ and MRPZ are as follows:

Tree #	Size (DBH, inches)	Standard CRZ (1 foot per 1-inch DBH; feet)	Standard MRPZ (0.5 feet per 1-inch DBH; feet)	Project Arborist’s Recommended Root Protection Zone (feet)
506	18	18	9	15 feet north, south, east; 10 feet west
542	36	36	18	27 feet south and east; 16 feet north and west
558	16	16	8	16 feet north, south, and east; 6 feet south

The Arborist Report notes that the arborist has not been provided detailed development plans and that the root protection zone recommendations are subject to change based on updated development plans. Typical tree protection standards include no impact to the MRPZ but allow up to 25 percent of the CRZ to be impacted provided the work is done under supervision of the project arborist. The City of Sandy typically requires the fencing to be placed at the CRZ around each tree; if work needs to be done within the CRZ, the fencing can be opened to allow construction workers inside provided they are accompanied by the project arborist. Staff is concerned that the root protection zones identified by the project arborist will be insufficient to protect the retention trees. The root protection zone proposed by the project arborist is less than the standard CRZ on all sides for both Trees #506 and 542. Staff is particularly concerned for Tree #542 as the project arborists' recommendation for tree fencing placement is significantly inside the standard CRZ area and is even within the standard minimum root protection zone on the north and west sides. It is unclear why tree fencing couldn't be placed at the CRZ for Tree #542, particularly on the south and east sides as the CRZ would be outside any proposed building footprint or stormwater infrastructure. The root protection zone proposed by the project arborist for Tree #558 is located at the CRZ on the north, south, and east sides. The reason it is less on the south side (6 feet instead of 16 feet) is that the south property boundary is 6 feet from the tree. No construction activity will be occurring on the property to the south so the proposed tree protection fencing for Tree #558 should be sufficient to protect the tree. Based on staff's recommendation regarding the requested variance, only Tree #542 would require tree protection fencing. Condition D.3 of the final order for File No. 17-053 SUB (Exhibit F) requires that tree protection fencing be installed 5 feet outside of the dripline around all trees to be retained on the site. **Therefore, in order to remain in compliance with approval for the subdivision (File No. 17-053 SUB), the applicant shall install tree protection fencing for Tree #542 located 5 feet outside of the dripline. The applicant may enter the critical root zone of Tree #542 to complete work in up to 25 percent of the CRZ under supervision of a TRAQ certified arborist; however, no construction activity shall occur within the minimum root protection zone (0.5 feet per 1-inch DBH), including, but not limited to dumping or storage of materials such as building supplies, soil, waste items, equipment, or parked vehicles. The applicant shall submit a post-construction report prepared by the project arborist or other TRAQ qualified arborist that assesses the condition of the retention tree after all construction activity on the subject property has been completed.** If the Planning Commission decides to retain Trees #506 and 558, the tree protection fencing shall be installed 5 feet outside the dripline of Trees #506 and 558; up to 25 percent of the CRZs of Tree #506 may be impacted if the work is done under the supervision of a TRAQ certified arborist.

11. Section 17.102.60 contains tree replanting requirements. The applicant's narrative (Exhibit B) states: "Tree removal will happen prior to commencing construction on the approve Mairin's Viewpoint Subdivision. Proper BMP's will be provided throughout construction activities to minimize erosion, and final replanting and soil stabilization will be done upon completion of project improvements and site grading. The final soil stabilization will occur pursuant to this section. The applicant proposes to replant two (2) trees to mitigate the fourth and final tree required for preservation from the approved Mairin's Viewpoint Subdivision

Application. No FSH exists on the project site, nor will any tree removal occur that is not associated with the approved tree removal plan.” Based on staff’s recommendation to only retain Tree #542, six (6) mitigation trees would be required.

12. The intent of the Urban Forestry code is “to conserve and replenish the ecological, aesthetic and economic benefits of urban forests.” The intent of the tree retention standard is to protect large, healthy trees that are likely to grow to maturity. While the code does allow newly-planted trees to substitute for retained trees, the intent is not to remove all of the existing trees on a site and replace them with newly-planted trees. All trees provide important benefits, but large, mature trees provide greater and more immediate ecological value, including reducing urban heat island effect, providing habitat, managing stormwater, and improving air quality. Thus, while the code sets a substitution ratio of at least two mitigation trees for every one protected tree that is removed, it would be nearly impossible to determine, for example, how many young 6 foot tall mitigation Douglas firs it would actually take to provide value equal to that of a mature 60-inch DBH Douglas fir. In addition, most development sites are graded or otherwise impacted during construction, leaving the soil compacted. This creates harsh conditions for newly planted mitigation trees, which often struggle to survive in the compacted soils. The applicant is proposing to plant two (2) mitigation trees to substitute for retention of the fourth required retention tree. The two (2) mitigation trees are proposed to be Douglas fir trees planted in the southwest corner of Lot 4. With previous subdivisions in Sandy, staff has witnessed that many of the mitigation trees planted on private lots are illegally removed after the house receives a certificate of occupancy, or the new homeowner doesn’t water the trees and they die within a couple years. Once the subdivision is fully built out, it will be difficult for staff or code enforcement to monitor the health of the mitigation trees if they are not located in a visible location close to a public right-of-way. Based on staff’s recommendation, six (6) mitigation trees would be required. Due to concerns related to the long-term health and retention of the mitigation trees on private property, **staff recommends the Planning Commission require the applicant to pay a fee-in-lieu of mitigation tree of \$500 for each required mitigation tree for a total of \$3,000.** The fee-in-lieu would be used to plant and maintain six (6) mitigation trees on a City-owned site in the same watershed, for example the City-owned property directly east of the subject property. Should the Planning Commission instead decide to require the mitigation trees to be planted on the private lots, staff recommends the following conditions:
- The applicant shall plant the six (6) required mitigation trees in the 20-foot setback from Bluff Road on Lots 5 and 6 so that staff can more easily monitor their health.
 - The mitigation trees shall be 6-8 foot tall native evergreens of quality nursery stock.
 - The applicant shall not anchor anything to the mitigation trees, compact the soil under the dripline, or otherwise harm or damage the mitigation trees.
 - The mitigation trees shall be planted per the City of Sandy standard planting detail. All ties and burlap shall be removed from the root ball prior to planting. If the burlap cannot be completely removed from the root ball without compromising the integrity of the root ball, the burlap shall be removed from at least the top one third of the side of the root ball. If the mitigation trees are staked, the applicant shall use loosely tied twine to tie the trees to the stake and the twine shall be removed after the first growing season but no later than one year from being planted.

- The mitigation trees shall be adequately watered during the first three dry seasons (summers). The applicant shall submit details on the proposed irrigation system for the mitigation trees prior to any approved tree removal or other activity on the site.
- In order to improve the chance of survival for newly-planted mitigation trees, the applicant shall amend and aerate the soil to a depth of 3 feet in a 15 foot radius around the location of each proposed mitigation tree. The applicant shall submit written confirmation from the project landscape company stating that soil amendment and aeration were completed prior to planting the mitigation trees.

13. As a condition of approval in the Final Order for File No. 17-053 SUB (Exhibit F), the applicant was required to record a tree protection covenant. On February 18, 2021, the applicant recorded a tree covenant for Lots 1, 3, and 4 (Exhibit I) as three separate documents that include the species and location of the three (3) retention trees proposed by the applicant (Trees #506, 542, and 558) on each respective lot. Based on the staff recommendation to only retain Tree #542, only the tree covenant for Lot 3 is needed. **The applicant shall terminate the tree covenants for Lots 1 and 4.** If the Planning Commission requires the applicant to plant the six (6) mitigation trees rather than paying the fee-in-lieu of mitigation trees as recommended by staff, the applicant will need to record a tree covenant that includes the species and locations of the six (6) mitigation trees as well.

14. The applicant did not indicate if there are nests in the trees proposed for removal. **If the trees are removed during prime nesting season (February 1- July 31), the applicant shall check for nests prior to tree removal. If nests are discovered, the applicant shall delay tree removal until after the nesting season or shall hire a professional to relocate the nests to an appropriate nearby location, provided the species using the nest is not invasive.**

RECOMMENDATION:

Staff recommends the Planning Commission approve the requested variance to the tree retention standards of Section 17.102.50 in compliance with Section 17.102.70. Staff further recommends the Planning Commission require the applicant to retain Tree #542 as a retention tree; however, rather than retaining Trees #506 and 558, staff recommends the Planning Commission require the applicant to mitigate for these two trees as well as for the fourth required retention tree, for a total of six (6) mitigation trees. Staff recommends that the Planning Commission require the applicant pay the mitigation tree fee-in-lieu of \$500 per tree for a total of \$3,000.

The conditions below are draft conditions of approval based on the staff recommendation.

DRAFT CONDITIONS OF APPROVAL:

A. The applicant shall retain Tree #542 and pay a fee-in-lieu of mitigation tree of \$500 for each required mitigation tree for a total of \$3,000.

B. Prior to earthwork, grading, or excavation the applicant shall complete the following and receive necessary approvals as described:

1. Apply for and receive approval for a grading and erosion control permit in conformance with City standards detailed in Section 15.44 of the Municipal Code.
2. Submit proof of receipt of a Department of Environmental Quality 1200C permit.
3. Per the conditions of approval for File No. 17-053 SUB, have a licensed pest control agent evaluate the site to determine if pest eradication is needed. Submit the evaluation to the City of Sandy for review and approval.
4. Request an inspection and receive approval of erosion control measures.
5. Install tree protection fencing 5 feet outside of the dripline of Tree #542, in compliance with the final order for File No. 17-053 SUB. The tree protection fencing shall be 6 feet tall no-jump horse fencing supported with metal posts placed no farther than ten feet apart installed flush with the initial undisturbed grade. The applicant shall affix a laminated sign (minimum 8.5 inches by 11 inches) to the protection fencing indicating that the area behind the fence is a tree protection area and that the fence shall not be removed or relocated. Up to 25 percent of the critical root zone (1-foot per 1-inch DBH) may be impacted by development provided the work occurs under supervision of the project arborist or another TRAQ certified arborist; however, no construction activity shall occur within the minimum root protection zone (0.5 feet per 1-inch DBH), including, but not limited to dumping or storage of materials such as building supplies, soil, waste items, equipment, or parked vehicles. The applicant shall retain the project arborist or another TRAQ certified arborist onsite for any construction activity within the critical root zone of a retention tree.
6. Request inspection and receive City approval of tree protection fencing prior to any tree removal, grading, or other construction activity on the site.

C. Within 90 days from the end of construction, the applicant shall submit a post-construction report prepared by the project arborist or other TRAQ qualified arborist. The post-construction report shall be completed after all construction on the subject property has been completed and shall assess the condition of the retention tree. If the retention tree was damaged or otherwise compromised and needs to be removed, the applicant shall apply for a hazard tree removal permit and shall replace mitigation trees at a higher mitigation ratio based on the size of the tree removed; the applicant shall also be required to pay a third-party arborist review fee.

D. Terminate the tree covenants for Lots 1 and 4 within 90 days of issuance of the final order. Submit a copy of the terminations of the tree covenants to the Planning Division.

E. General Conditions of Approval

1. If the trees as approved by Planning Commission are removed during prime nesting season (February 1- July 31), the applicant shall check for nests prior to tree removal. If nests are discovered, the applicant shall delay tree removal until after the nesting season or shall hire a professional to relocate the nests to an appropriate nearby location, provided the species using the nest is not invasive.
2. Successors-in-interest of the applicant shall comply with requirements of this final order. In the event the applicant should sell or lease the property upon which the condition contained in this document apply, the sale or lease will be subject to the restrictions and conditions described herein. The conditions shall run with the land and are binding on applicant's heirs, personal representatives, successors, and assigns.
3. Activity within the right-of-way (e.g., staging, etc.) requires a separate right-of-way permit through the Public Works Department.