Willow Creek Greenway Boardwalk Design Review, Variance and Tree Plan Applications

Date: December 2023

Updated April 2024

Submitted to: City of Beaverton

Community Development Department

Planning Division PO Box 4755

Beaverton, OR 97076

Applicant: Tualatin Hills Park & Recreation District

15707 SW Walker Road Beaverton, OR 97006

AKS Job Number: 8015-01



12965 SW Herman Road, Suite 100 Tualatin, OR 97062 (503) 563-6151

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15707 SW Walker Road Beaverton, OR 97006

Property Owners: Tualatin Hills Park & Recreation District

15707 SW Walker Road Beaverton, OR 97006

Applicant's Consultant: AKS Engineering & Forestry, LLC

12965 SW Herman Road, Suite 100

Tualatin, OR 97062

Contact: Glen Southerland, AICP
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Site Location: No site address

Generally south of NW Cornell Road, West of NW 158th and NW Waterhouse Avenue, north of NW Silverado

Drive

Washington County

Assessor's Map: 1N132BC Tax Lot 3001

Site Size: ±0.55 acres improvement area

±5.87 acres total

Land Use Districts: Residential Mixed B (RMB)

I. Executive Summary

AKS Engineering & Forestry, LLC, on behalf of Tualatin Hills Park & Recreation District (THPRD), the Applicant, is submitting this land use application to accommodate maintenance replacement of a raised boardwalk pathway between the Waterhouse Trail, a regional trail facility, and NW Waterhouse Avenue. The Willow Creek Greenway was originally constructed between 1982 and 1984 with the Waterhouse subdivision and was dedicated to Tualatin Hills Park & Recreation District. The boardwalk has been part of previous bonds for maintenance efforts but is currently nearing the end of its serviceable life. The age of the boardwalk can sometimes provide difficulty for people with disabilities due to warping and lifting of boards and slipperiness in some areas. Reconstruction of the facility is required in order to make the boardwalk more accessible and ensure continued usability of the path.

The Willow Creek Greenway provides both connectivity and opportunities for enjoyment of the Willow Creek natural area. Greenways are important pieces of THPRD's community trail system as they provide the public with access to natural resource areas. Pedestrian and bicycle connectivity is provided between the Moshofsky Woods Natural Area, to the Waterhouse Trail through Waterhouse Linear Park, and provides connectivity to NW Jeffrey Place and NW 161st Place, finally leading to NW Waterhouse Avenue.

Design Review 3

As the project has proposed to meet the Design Review Guidelines of Development Code of the City of Beaverton (BDC) 60.05.45 rather than the standards of BDC 60.05.25, a Design Review 3 application is required. The project involves a raised boardwalk through the Willow Creek riparian, wetland, and vegetated corridor areas. Lighting is undesirable along this stretch of pathway because it is likely to disturb flora and fauna within the greenway and residential neighbors to the south of the project site. THPRD general policy is to refrain from lighting district facilities and to typically provide lighting only at trail connections and street crossings. Lighting is currently available at connections to NW 161st Place and NW Jeffrey Place and at the NW Waterhouse Avenue trailhead.

Due to the sensitive nature of the area, the project is planned to consist of a boardwalk rather than a paved, at-grade pathway. Additionally, the width of the boardwalk is also proposed to be narrower than otherwise required by the City's Engineering Design Manual Standard Drawing 700 to minimize impacts. These standards require shared use paths to provide a minimum width of 10 feet within a 15-foot-wide corridor. For this project, an Engineering Design Exception Request will be submitted to allow a width of 8 feet.

Tree Plan 2

The project involves realignment and straightening of the pathway through the natural areas adjacent to Willow Creek. Realignment of the path is being undertaken to better meet the Americans with Disabilities Act Accessibility Guidelines (ADAAG) while avoiding the greatest number of trees and sensitive areas.

Variance

As this project involves the maintenance replacement of a boardwalk within a sensitive area, a variance is requested in order to avoid providing lighting. The facility is not currently lighted, and the addition of lighting could disturb nearby wildlife, as well as disturb residential neighbors and invite undesirable off-hours usage.

This application includes the City of Beaverton (City) application forms, written materials, and preliminary plans necessary for City staff to review and determine compliance with the applicable approval criteria. The evidence is substantial and supports the City's approval of the application.

II. Site Description/Setting

The greenway trail is located within Washington County Assessor's Map 1N132BC, Tax Lot 3001, and east of the Bonneville Power Administration Corridor/Waterhouse Trail Facilities. The property, positioned along the Willow Creek wetlands, was platted as Tract A of the Waterhouse Plat in 1984 and was inventoried as part of City of Beaverton Significant Grove B (G19). The area has also been identified as the location of Class I and II Riparian Wildlife Habitat. The subject site and residential area to the south are zoned Residential Mixed B (RMB). Areas north of the site are zoned Office Industrial (OI) and Community Service (CS).

III. Applicable Review Criteria

ORS 197.195(1) describes how certain standards can be applied as part of a limited land use application. The applicable land use regulations for this application are found in the Beaverton Development Code. Pursuant to ORS 197.195(1), Comprehensive Plan provisions (as well as goals, policies, etc. from within the adopted elements of the Comprehensive Plan) may not be used as a basis for a decision or an appeal of a decision unless they are specifically incorporated into the land use regulations. While this application may respond to Comprehensive Plan and/or related documents, such a response does not imply or concede that said provisions are applicable approval criteria. Similarly, the Applicant does not waive its right to object to the attempted implementation of these provisions unless they are specifically listed in the applicable land use regulations, as is required by ORS 197.195(1).

Pursuant to ORS 197.522, if this application is found to be inconsistent with the applicable land use regulations, the Applicant may offer an amendment or propose conditions of approval to make the application consistent with applicable regulations. In fact, the local government is obligated to consider and impose any conditions of approval proposed by the Applicant if such conditions would allow the local government to approve an application that would not otherwise meet applicable approval criteria.

Development Code of the City of Beaverton

Chapter 20 – LAND USES

20.05. Residential Land Use District

20.05.20. Land Uses

The following Land Uses are classified in the following three categories: Permitted (P) including their accessory uses and structures, Conditional Uses (C), or Prohibited (N) uses as identified in the table below for Residential Zoning Districts.

:	Table 20.05.20.A Residential - Category and Specific Use			P: Permitted C: Conditional N: Prohibited Superscript Refers to Use Restrictions				
		MR	RMA	RMB	RMC			
Civic ¹⁵								
12. Recreation	A. Public Parks, Parkways, Playgrounds, and	С	С	С	C			
	Related Facilities							
	B. Public Dog Parks or Dog Runs	С	С	С	C			
	C. Public Recreational Facilities	С	C	C	C			
	D. Community Gardens	P	P	P	P			
^{15.} Public Art shall be permitted pursuant to Section 60.50.25.13.								

Chapter 30 – NONCONFORMING USES

30.35. Uses Under Conditional Use Provisions Not Nonconforming Uses.

A use that was permitted before this ordinance required a Conditional Use Permit shall not be deemed a nonconforming use despite the failure to obtain a Conditional Use Permit, but shall without further action be considered a conforming use.

Response:

The proposed use involves the maintenance replacement of a trail within the Residential Mixed B (RMB) zoning district. Public parks, parkways, playgrounds, and related facilities require a Conditional Use Permit within the RMB zone. The site, originally platted in 1984 as part of the Waterhouse Plat, was conveyed to THPRD in 1985. The site was annexed into the City of Beaverton in 1985. Per BDC 30.35, the use was permitted prior to requiring a Conditional Use Permit and is therefore a conforming use and a new Conditional Use Permit is not required.

Chapter 40 - APPLICATIONS

40.03. Facilities Review Committee

Consistent with Section 10.95.3. (Facilities Review Committee) of this Code, the Facilities Review Committee shall review the following land use applications: all Conditional Use, Design Review Two, Design Review Three, Downtown Design Review Two, Downtown Design Review Three, Single-Detached and Middle Housing Design Review Two, Single-Detached and Middle Housing Design Review Three, Public Transportation Facility Reviews, Street Vacations, and applicable Land Divisions. Applicable land division applications are Replats, Partitions, Subdivisions, Fee Ownership Partitions, and Fee Ownership Subdivisions. In making a recommendation on an application to the decision making authority, the Facilities Review Committee shall base its recommendation on a determination of whether the application satisfies all the following technical criteria. The applicant for development must establish that the application complies with all relevant standards in conformance with Section 50.25.1.B., and all the following criteria have been met, as applicable:

- 1. All Conditional Use, Design Review Two, Design Review Three, Downtown Design Review Two, Downtown Design Review Three, Single-Detached and Middle Housing Design Review Two, Single-Detached and Middle Housing Design Review Three, and applicable Land Division applications:
 - A. All critical facilities and services related to the proposed development have, or can be improved to have, adequate capacity to serve the proposed development at the time of its completion.

Response:

Chapter 90 of the City of Beaverton Development Code (BDC) defines critical facilities and/or services to include, "public water, public sanitary sewer, storm water drainage,

treatment, and detention, transportation, and fire protection." The modification of the boardwalk use does not impact critical facilities or services such as those listed.

Water – There are no water facilities within the project area.

Sanitary Sewer – The boardwalk is planned to be constructed to span a 15-foot-wide utility easement within the eastern portion of the project site. An 8-inch concrete sanitary sewer line extends from NW Jeffrey Place to a 21-inch sanitary sewer line north of the project site. Within the western portion of the project site, two 8-inch sanitary sewer lines extend from NW 161st Place and NW Waterhouse Avenue to the 21-inch line north of the Willow Creek project site.

Stormwater Facilities – Three existing stormwater lines extend from nearby rights-of-way to the creek basin. The project does not propose to reposition or disturb these stormwater facilities.

Transportation – Per the *Active Transportation Plan* (February 2018), the Willow Creek Boardwalk is part of the City's Neighborhood Bikeway network. The boardwalk links the Waterhouse Trail to NW Jeffery Place, NW 161st Place, and NW Waterhouse Avenue.

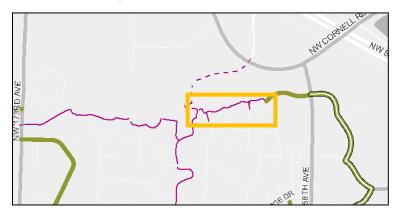


Figure 1: Excerpt of Neighborhood Bikeway Detail Map from the City of Beaverton's *Active Transportation Plan* (site in orange)

Emergency Services – The area is currently served by the City of Beaverton Police Department and Tualatin Valley Fire & Rescue and will continue to be served by these agencies following the modification of the boardwalk.

Therefore, this standard is met.

B. Essential facilities and services related to the proposed development are available, or can be made available, with adequate capacity to serve the development prior to its occupancy. In lieu of providing essential facilities and services, a specific plan may be approved if it adequately demonstrates that essential facilities, services, or both will be provided to serve the proposed development within five (5) years of occupancy.

Response:

Chapter 90 of the City of Beaverton Development Code (BDC) defines essential facilities and/or services to include, "schools, transit improvements, police protection, on-site pedestrian and bicycle facilities in public the right-of-way."

The proposed project will not impact essential services such as schools, transit service, or police protection, as it does not increase residential density or create traffic. The project involves pedestrian and bicycle facilities, which are proposed for improvement for safer and easier access by the public to provide enjoyment of the Willow Creek Greenway and natural area and provide non-vehicular through-connection from the Waterhouse Trail to NW Waterhouse Avenue and NW 158th Avenue beyond.

The site is currently served by the City of Beaverton Police Department and Tualatin Valley Fire & Rescue and will continue to be served by these entities following completion of the project.

This standard is met.

C. The proposed development is consistent with all applicable provisions of CHAPTER 20 (Land Uses), or Sections 20.25 and 70.15 if located within the Downtown Design District, unless the applicable provisions are modified by means of one or more applications which shall be already approved or which shall be considered concurrently with the subject application; provided, however, if the approval of the proposed development is contingent upon one or more additional applications, and the same is not approved, then the proposed development must comply with all applicable provisions of CHAPTER 20 (Land Uses) or Sections 20.25 and 70.15 if located within the Downtown Design District.

Response:

As discussed herein, the project satisfies the applicable provisions of Chapter 20. This standard is met.

D. The proposed development is consistent with all applicable provisions of CHAPTER 60 (Special Requirements) and all improvements, dedications, or both, as required by the applicable provisions of CHAPTER 60 (Special Requirements), are provided or can be provided in rough proportion to the identified impact(s) of the proposed development.

Response:

As discussed herein, the project satisfies application provisions of Chapter 60, as addressed later within this written narrative. Therefore, this standard is met.

E. Adequate means are provided or can be provided to ensure continued periodic maintenance and necessary normal replacement of the following private common facilities and areas, as applicable: drainage facilities, roads and other improved rights-of-way, structures, recreation facilities, landscaping, fill and excavation areas, screening and fencing, ground cover, garbage and recycling storage areas, and other facilities not subject to maintenance by the City or other public agency.

Response:

The Applicant will ensure the performance of routine periodic maintenance and the necessary normal replacement of landscaping, structures, and other facilities that are not maintained by the City. At present, the Willow Creek Greenway features benches, trash receptacles, and signage which are proposed to be retained and/or relocated as part of this proposed project. This requirement is satisfied.

F. There are safe and efficient vehicular and pedestrian circulation patterns within the boundaries of the development.

The proposed project is replacement and realignment of a boardwalk pathway within and adjacent to a natural area. As shown on the Preliminary Site Plan included as Exhibit A, safe and efficient pedestrian circulation is provided on-site. The proposed pathway materials and alignment are expected to provide access compliant with the Americans with Disability Act (ADA) guidelines. Vehicular access is not currently provided nor proposed. This standard is met.

> G. The development's on-site vehicular and pedestrian circulation systems connect to the surrounding circulation systems in a safe, efficient, and direct manner.

Response:

The Willow Creek Greenway project involves the reconstruction and realignment of an existing walkway as it reaches the end of its serviceable life in order to provide safer and more efficient pedestrian access. Vehicular circulation to the site is not provided nor proposed. This standard is satisfied.

> H. Structures and public facilities serving the development site are designed in accordance with adopted City codes and standards and provide adequate fire protection, including, but not limited to, fire flow.

Response:

The project involves an elevated boardwalk structure. As applicable, the structure has been designed to meet the relevant adopted City codes and standards, including those related to fire protection. This requirement is met.

> T. Structures and public facilities serving the development site are designed in accordance with adopted City codes and standards and provide adequate protection from crime and accident, as well as protection from hazardous conditions due to inadequate, substandard or ill-designed development.

Response:

The project has been designed with the relevant City codes and standards in mind. The proposed materials (Exhibit K) are anticipated to prevent hazardous conditions for the public. This requirement is met.

> J. Grading and contouring of the development site is designed to accommodate the proposed use and to mitigate adverse effect(s) on neighboring properties, public right-of-way, surface drainage, water storage facilities, and the public storm drainage system.

Response:

Grading and contouring of the site have been designed to minimize project impacts on natural resources. Neighboring properties, public rights-of-way, surface drainage, water storage, and public storm drainage systems are anticipated to remain generally unchanged from their current condition. This standard is met.

> K. Access and facilities for physically handicapped people are incorporated into the development site and building design, with particular attention to providing continuous, uninterrupted access routes.

Response:

Access for people with disabilities has been considered as part of the realignment of the Willow Creek Boardwalk. The facility, which previously had many turns, undulations, and narrow sections, as well as uplifting and slippery boards, created challenges to ADA access and maintenance. The route has been designed to meet ADA standards upon reconstruction. The pathway will be straightened where possible and the selected materials shown for example within Exhibit K are anticipated to require less maintenance while providing a safer surface for traction. This requirement is satisfied.

L. The application includes all required submittal materials as specified in Section 50.25.1. of the Development Code.

Response:

The materials specified within BDC 50.25.1 have been submitted as part of this application. This requirement is met.

40.20. Design Review

40.20.15. Application

There are three (3) Design Review applications which are as follows: Design Review Compliance Letter, Design Review Two, and Design Review Three.

[...]

- 3. Design Review Three.
 - A. Threshold. An application for Design Review Three shall be required when an application is subject to applicable design standards and/or guidelines and one or more of the following thresholds describe the proposal:
 - 1. New construction of more than 50,000 gross square feet of non-residential floor area where the development does not abut any Residential zoning district.
 - 2. New construction or addition of more than 30,000 gross square feet of non-residential floor area where the development abuts or is located within any Residential zoning district.
 - 3. Building additions in Residential, Commercial, or Multiple Use zones more than 30,000 gross square feet of floor area.
 - 4. Building additions in industrial zones more than 30,000 gross square feet.
 - 5. Construction of a permanent structure, not considered a building, in commercial, industrial, multiple use zones, or for approved Conditional Uses in residential zones, which exceeds 10,000 square feet in size and is a use permitted within the underlying zoning district.
 - 6. Projects proposed utilizing the options described in Section 40.20.10.5.
 - 7. New parks in Residential zoning districts.
 - 8. A project meeting the Design Review Compliance Letter thresholds which does not meet an applicable design standard(s).
 - 9. A project meeting the Design Review Two thresholds which does not meet an applicable design standard.

Response:

The project involves an elevated boardwalk structure which provides access through a sensitive area and is adjacent to residences. Lighting is not desired as part of the project; therefore, as the applicable design standards cannot be met, the proposed project meets

Threshold 9 for Design Review Three. The applicable guidelines are addressed later within this written narrative. These requirements are satisfied.

B. Procedure Type. The Type 3 procedure, as described in Section 50.45. of this Code, shall apply to an application for Design Review Three. The decision making authority is the Planning Commission.

Response:

It is understood that this application will be reviewed as a Type 3 procedure.

- C. Approval Criteria. [ORD 4365; October 2005] In order to approve a Design Review Three application, the decision making authority shall make findings of fact based on evidence provided by the applicant demonstrating that all the following criteria are satisfied:
 - 1. The proposal satisfies the threshold requirements for a Design Review Three application.

Response:

As previously discussed, the application requires a Design Review Three application by meeting the threshold requirements for such an application. This criterion is met.

2. All City application fees related to the application under consideration by the decision making authority have been submitted.

Response:

Included with this application is payment for the applicable fees. This criterion is met.

3. For proposals meeting Design Review Three application thresholds numbers 1 through 7, the proposal is consistent with all applicable provisions of Sections 60.05.35 through 60.05.50 (Design Guidelines).

Response:

The applicable sections of the Design Guidelines are addressed later within this written narrative. This standard is met.

- 4. For additions to or modifications of existing development, the proposal is consistent with all applicable provisions of Sections 60.05.35 through 60.05.50 (Design Guidelines) or can demonstrate that the additions or modifications are moving towards compliance with specific Design Guidelines if any of the following conditions exist:
 - a. A physical obstacle such as topography or natural feature exists and prevents the full implementation of the applicable guideline; or
 - b. The location of existing structural improvements prevent the full implementation of the applicable guideline; or
 - c. The location of the existing structure to be modified is more than 300 feet from a public street.

Response:

The applicable guidelines of BDC Section 60.05.50 are reviewed later within this written narrative.

5. The proposal complies with the grading standards outlined in Section 60.15.10 or approved with an Adjustment or Variance.

Response:

The standards of BDC 60.15.10 are reviewed within that section of this written narrative. This requirement is met.



- 6. For DRBCP proposals which involve the phasing of required floor area, the proposed project shall demonstrate how future development of the site, to the minimum development standards established in the Development Code or greater, can be realistically achieved at ultimate build out of the DRBCP.
- 7. For proposals meeting Design Review Three application Threshold numbers 8 or 9, where the applicant has decided to address a combination of standards and guidelines, the proposal is consistent with all applicable provisions of Sections 60.05.15 through 60.05.30 (Design Standards) except for the Design Standard(s) where the proposal is instead subject to the applicable corresponding Design Guideline(s).
- 8. For proposals meeting Design Review Three application Threshold numbers 8 or 9, where the applicant has decided to address Design Guidelines only, the proposal is consistent with the applicable provisions of Sections 60.05.35 through 60.05.50 (Design Guidelines).

The proposal is consistent with the applicable Design Standards or Guidelines. Consistency is demonstrated within the relevant written narrative responses to the BDC. These standards are met.

9. Applications and documents related to the request, which will require further City approval, shall be submitted to the City in the proper sequence.

Response:

The required applications and documents related to the request have been submitted to the City for approval in the proper sequence. This requirement is met.

D. Submission Requirements. An application for a Design Review Three shall be made by the owner of the subject property, or the owner's authorized agent, on a form provided by the Director and shall be filed with the Director. The Design Review Three application shall be accompanied by the information required by the application form, and by Section 50.25. (Application Completeness), and any other information identified through a Pre-Application Conference.

Response:

The required materials identified during the pre-application conference have been submitted with this application for Design Review Three. This standard is met.

- E. Conditions of Approval. The decision making authority may impose conditions on the approval of a Design Review Three application to ensure compliance with the approval criteria.
- F. Appeal of a Decision. Refer to Section 50.70.
- G. Expiration of a Decision. Refer to Section 50.90.
- H. Extension of a Decision. Refer to Section 50.93.

Response: These standards, as applicable, are understood.

40.90. Tree Plan

40.90.15. Application

There are three (3) Tree Plan applications which are as follows: Tree Plan One, Tree Plan Two, and Tree Plan Three.



[...]

2. Tree Plan Two

- A. Threshold. An application for Tree Plan Two shall be required when none of the actions listed in Section 40.90.10. apply, none of the thresholds listed in Section 40.90.15.1. apply, and one or more of the following thresholds apply:
 - 1. Removal of five (5) or more Community Trees, or more than 10% of the number of Community Trees on the site, whichever is greater, within a one (1) calendar year period, except as allowed in Section 40.90.10.1.
 - 2. Multiple Use zoning district: Removal of up to and including 85% of the total DBH of non-exempt surveyed tree(s) found on the project site within SNRAs, Significant Groves, or Sensitive Areas as defined by Clean Water Services.
 - 3. Commercial, Residential, or Industrial zoning district: Removal of up to and including 75% of the total DBH of non-exempt surveyed tree(s) found on the project site within SNRAs, Significant Groves, or Sensitive Areas as defined by Clean Water Services.
 - 4. Removal of a Significant Individual Tree(s).

Response:

The project involves tree removal within a Significant Grove within the Residential Mixed B (RMB) zoning district. A number of trees on the site have been surveyed, and fewer than 75 percent of the total diameter at breast height (DBH) have been proposed for removal.



Figure 2: Excerpt of the City's Tree Inventory

Additional details are available within the Arborist Report (Exhibit H). This standard is met.

B. Procedure Type. The Type 2 procedure, as described in Section 50.40. of this Code, shall apply to an application for Tree Plan Two. The decision making authority is the Director.

Response:

A Tree Plan Two would typically require a Type 2 procedure; however, a Type 3 Design Review Three is also required. The Tree Plan Two application will be reviewed concurrently with the Design Review Three with decision by the Planning Commission.

- C. Approval Criteria. In order to approve a Tree Plan Two application, the decision making authority shall make findings of fact based on evidence provided by the applicant demonstrating that all the following criteria are satisfied:
 - 1. The proposal satisfies the threshold requirements for a Tree Plan Two application.

The proposed project meets at least one of the listed threshold requirements of BDC 40.90.15.2.A for a Tree Plan Two application. This standard is met.

2. All City application fees related to the application under consideration by the decision making authority have been submitted.

Response:

The required fees have been submitted with the application package. This standard is satisfied.

3. If applicable, removal of any tree is necessary to observe good forestry practices according to recognized American National Standards Institute (ANSI) A300-1995 standards and International Society of Arborists (ISA) standards on the subject.

Response:

An Arborist Report (Exhibit H) has been prepared by a certified arborist regarding the project with specifications for tree preservation and removal. This standard is met.

4. If applicable, removal of any tree is necessary to accommodate physical development where no reasonable alternative exists.

Response:

Removal of several trees is required to accommodate the pathway where they are within or immediately adjacent to the new alignment. The alignment of the path was selected to minimize impacts to the sensitive areas surrounding Willow Creek while also improving ADA access on the boardwalk. The minimum number of trees have been selected for removal to accommodate the new alignment with arborist observation during some construction and demolition activities to prevent damage to additional trees.

5. If applicable, removal of any tree is necessary because it has become a nuisance by virtue of damage to property or improvements, either public or private, on the subject site or adjacent sites.

Response:

Several tree specimens have been identified as in poor health by the project arborist. These trees will be removed to prevent future hazards to users of the boardwalk and the boardwalk itself. Ash trees have also been identified on the site adjacent to the proposed boardwalk. Because of the imminent threat of Emerald Ash Borer, the Applicant is requesting to remove these trees in order to prevent similar hazards to the boardwalk and users. The reasoning for removal during construction is threefold: to do so while equipment and workers are available on the project site and the threat to the boardwalk facility and to neighboring properties is minimized, to prevent the future need for monitoring of the trees for disease and maintenance, and to minimize the possibility for future limb drops and tree falls from damaged ash trees. This requirement is met.

6. If applicable, removal is necessary to accomplish public purposes, such as installation of public utilities, street widening, and similar needs, where no reasonable alternative exists without significantly increasing public costs or reducing safety.

Response:

As previously stated, removal of a number of trees is required in order to accommodate the accessibility of the pathway while protecting the Willow Creek natural area. This standard is met.

> 7. If applicable, removal of any tree is necessary to enhance the health of the tree, grove, SNRA, or adjacent trees, or to eliminate conflicts with structures or vehicles. [ORD 4584; June 2012]

Response:

The removal of the prescribed trees is proposed to remove conflicts with the boardwalk or future use of the boardwalk as well as hinder the spread of Emerald Ash Borer. This standard is met.

> 8. If applicable, removal of a tree(s) within a SNRA or Significant Grove will not result in a reversal of the original determination that the SNRA or Significant Grove is significant based on criteria used in making the original significance determination.

Response:

The Willow Creek Boardwalk project site occupies the southernmost extent of Significant Grove B (G19). As such, most of the trees on the site and the significance of the grove will be unaffected by the construction of the boardwalk facility. This requirement is met.

> 9. If applicable, removal of a tree(s) within a SNRA or Significant Grove will not result in the remaining trees posing a safety hazard due to the effects of windthrow.

Response:

The trees proposed for removal are clustered along the southern property line of the Significant Grove. The remaining trees are unlikely to pose a hazard of windthrow as a result of the removal. Arborist involvement is planned during tree removal, demolition, and construction to identify conditions which may result in safety hazards. This requirement is satisfied.

> 10. The proposal is consistent with all applicable provisions of Section 60.60. (Trees and Vegetation) and Section 60.67. (Significant Natural Resources).

Response:

The applicable standards are reviewed within narrative responses to Sections 60.60 and 60.67. This standard is met.

> 11. Grading and contouring of the site is designed to accommodate the proposed use and to mitigate adverse effects on neighboring properties, public right-of-way, surface drainage, water storage facilities, and the public storm drainage system.

Response:

Grading of the site has not been proposed due to the raised construction of the pathway, which allows the natural contours of the site to be maintained. The construction of the boardwalk is not anticipated to have adverse effects on neighboring properties, public rights-of-way, surface drainage, water storage facilities, or to the public storm drainage



system. Please see the Preliminary Plans (Exhibit A) for further details. This requirement is met.

- 12. The proposal contains all applicable application submittal requirements as specified in Section 50.25.1. of the Development Code.
- 13. Applications and documents related to the request, which will require further City approval, shall be submitted to the City in the proper sequence.

Response:

The required materials have been provided as part of this application. These standards are met.

D. Submission Requirements. An application for a Tree Plan Two shall be made by the owner of the subject property, or the owner's authorized agent, on a form provided by the Director and shall be filed with the Director. The Tree Plan Two application shall be accompanied by the information required by the application form, and by Section 50.25. (Application Completeness), and any other information identified through a Pre-Application Conference.

Response:

This application includes the required materials. This standard is met.

- E. Conditions of Approval. The decision making authority may impose conditions on the approval of a Tree Plan Two application to ensure compliance with the approval criteria. In addition to the approval criteria, the decision making authority may also impose other conditions of approval to ensure that the proposed tree work meets all requirements listed in Section 60.60. (Trees and Vegetation).
- F. Appeal of a Decision. Refer to Section 50.65.
- G. Expiration of a Decision. Refer to Section 50.90.
- H. Extension of a Decision. Previous approval of Tree Plan Two proposal shall not be extended.

Response: These standards are understood.

40.95. Variance

40.95.05.Purpose

The purpose of a Variance application is to provide for the consideration of varying from the applicable provisions of the Development Code where it can be shown that, owing to special and unusual circumstances, the literal interpretation of these provisions would cause an undue or unnecessary hardship without a corresponding public benefit. This Section is carried out by the approval criteria listed herein.

40.95.10. Applicability

A Variance application may only be requested for those proposals that request a variance of more than fifty percent (50%) from the numerical Site Development Requirements contained in CHAPTER 20 (Land Uses), Section 70.15 (Downtown Zoning and Streets), Section 60.11 (Food Cart Pod Regulations), or any numerical requirements contained in Section 60.40. (Sign Regulations) and Section 60.55. (Transportation Facilities), excluding Section 60.55.30.

40.95.15. Application

There is a single Variance application which is subject to the following requirements.

1. Variance.



- A. Threshold. An application for Variance shall be required when the following threshold applies:
 - 1. A change of more than fifty percent (50%) to the numerical standards specified in the Site Development Requirements contained in CHAPTER 20 (Land Uses) or Section 70.15 (Downtown Zoning and Streets) if the site is located within the Downtown Design District. This threshold does not apply where credits have been earned for height increase through Habitat Friendly Development Practices, as described in Sections 60.12.40.4., .5., .6. and .7.
 - 2. Any change from the numerical requirements contained in Section 60.40. (Sign Regulations).
 - 3. Excluding Section 60.55.30., any change from the numerical requirements contained in Section 60.55. (Transportation Facilities).
 - 4. A change of more than fifty percent (50%) from the numerical Food Cart Pod standards specified in Section 60.11.10 and 60.11.15 of this Code.

A variance is requested to the lighting standards of BDC 60.55.25.10.B.7. This standard requires that walkways be lighted to 0.5 foot-candles. Due to the special nature of this site, lighting is expected to invite undesirable off-hours usage, disturb neighbors, and disturb wildlife within the natural area.

The area is not currently lighted and, unless otherwise posted, THPRD's general policy does not permit night-time use of the District's facilities to protect public safety. The boardwalk, built above grade, could lead to user injuries when used during night hours through the possibility of trips and falls. The applicable approval criteria are reviewed below.

B. Procedure Type. The Type 3 procedure, as described in Section 50.45. of this Code, shall apply to an application for Variance. The decision making authority shall be the Planning Commission.

Response:

This variance application is in addition to a Type 3 Design Review 3 application. As such, this standard is met.

- C. Approval Criteria. In order to approve a Variance application, the decision making authority shall make findings of fact based on evidence provided by the applicant demonstrating that all the following criteria are satisfied:
 - 1. The proposal satisfies the threshold requirements for a Variance application.

Response:

The proposed variance involves a numerical standard of BDC 60.55.25, satisfying Threshold 3 of BDC 40.95.15.1, above. This criterion is met.

2. All City application fees related to the application under consideration by the decision making authority have been submitted.

Response:

The appropriate application fee has been submitted as part of this application package. This criterion is met.



3. Special conditions exist which are peculiar to the land, structure, or building involved and which are not applicable to other lands, buildings, or structures in the same zoning district.

Response:

The project involves the maintenance replacement of an elevated boardwalk, which is an unusual structure, within a natural resource, a special condition within a typically-zoned RMB area. These special conditions warrant a variance to the typical walkway lighting standards and provide a situation where additional consideration is needed.

> 4. Strict interpretation of the provisions of this ordinance would deprive the applicant of the rights commonly enjoyed by other properties in the same zoning district under the terms of the Development Code. [ORD 4584; June 2012]

Response:

Strict interpretation of these zoning regulations would cause a number of conflicts that would deprive the Applicant of the rights commonly enjoyed by other properties within the RMB zone. While other property owners are able to light their homes and businesses within the levels and methods prescribed by the zoning code, the Applicant is a public entity proposing to provide a public walkway through a natural area. Lighting within this area would be disruptive, as previously discussed, and would involve significant efforts and costs to provide fixtures that would resist both weather and vandalism.

> The special conditions and circumstances do not result from the actions of the applicant and such conditions and circumstances do not merely constitute financial hardship or inconvenience.

Response:

The conditions and circumstances present are not resulting from the actions of the Applicant. The need for a variance is due to the presence of a natural resource area on the site. The difficulties with providing lighting extend beyond financial hardship and inconvenience and involve not only user safety concerns, but concerns for neighbor livability and well-being of adjacent wildlife.

> 6. If more than one (1) variance is being requested, the cumulative effect of the variances result in a project which is still consistent with the overall purpose of the applicable

Response:

The application does not include more than one variance; therefore, this standard does not apply.

> 7. Any variance granted shall be the minimum variance that will make possible a reasonable use of land, building, and structures.

Response:

The variance is the minimum variance required to allow the safe and reasonable use of the site and structure. Providing any amount of lighting, even less than the 0.5 foot candles required by code, still requires the installation of lighting, the creation of an attractive nuisance, and the nighttime disturbance of a natural area.

> For a proposal for a variance from sign regulations, no variance shall be granted unless it can be shown that there are special circumstances involving size, shape, topography, location or surroundings attached to the property referred to

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in the application, which do not apply generally to other properties in the same zoning district, and that the granting of the variance will not result in material damage or prejudice to other property in the vicinity and not be detrimental to the public safety and welfare. Variances shall not be granted merely for the convenience of the applicant or for the convenience of regional or national businesses which wish to use a standard sign.

Response:

The project does not involve a sign or variance related to a sign. Therefore, this standard is not applicable.

9. The proposal is consistent with all applicable provisions of CHAPTER 20 (Land Uses) or Section 70.15 (Downtown Zoning and Streets) if the site is located within the Downtown Design District, unless the applicable provisions are subject to an Adjustment, Planned Unit Development, or Variance which shall be already approved or considered concurrently with the subject proposal.

Response:

To the extent that they apply, this proposal meets the provisions of Chapter 20. The standards of Section 70.15 do not apply to this project. This standard is met.

10. The proposal is consistent with all applicable provisions of CHAPTER 60 (Special Requirements) and that all improvements, dedications, or both required by the applicable provisions of CHAPTER 60 (Special Requirements) are provided or can be provided in rough proportion to the identified impact(s) of the proposal.

Response:

The applicable requirements of Chapter 60 are evaluated later within this written narrative in detail. The proposed project provides the required improvements or can provide improvements in rough proportion to the impact of the proposal. This standard is met.

11. The proposal contains all applicable application submittal requirements as specified in Section 50.25.1 of the Development Code.

Response:

The requirements of Section 50.25.1 are reviewed later within this written narrative. This standard is met.

12. Applications and documents related to the request, which will require further City approval, shall be submitted to the City in the proper sequence.

Response:

All applicable documents and application forms have been or will be submitted to the City in the proper sequence. This standard is met.

D. Submission Requirements. An application for a Variance shall be made by the owner of the subject property, or the owner's authorized agent, on a form provided by the Director and shall be filed with the Director. The Variance application shall be accompanied by the information required by the application form, and by Section 50.25. (Application Completeness), and any other information identified through a Pre-Application Conference.

The application has been submitted by the owner of the subject property and their authorized agent on forms provided by the City.

- E. Conditions of Approval. The decision making authority may impose conditions on the approval of a Variance application to ensure compliance with the approval criteria. When considering a Variance application to the numerical sign regulations in Section 60.40. (Sign Regulations), the decision making authority shall review all of the existing or proposed signs for the development. The decision making authority may also impose other conditions of approval to require:
 - 1. Removal or alteration of conforming or nonconforming signs to achieve compliance with the standards contained in Section 60.40. (Sign Regulations).
 - 2. Removal or alteration of conforming or nonconforming signs in order to establish a consistent sign design throughout the development.
 - 3. Sign permit applications for signs erected without permits or removal of such illegal signs.
- F. Appeal of a Decision. Refer to Section 50.70.
- G. Expiration of a Decision. Refer to Section 50.90.
- H. Extension of a Decision. Refer to Section 50.93.

Response: These standards are understood.

Chapter 50 - PROCEDURES

50.20. Pre-Application Conference

1. With the exception of City initiated or Wireless Facility applications, a preapplication conference shall be required for all proposals which require Type 2 or Type 3 applications. An applicant may choose to forgo the required preapplication conference for a Type 2 application upon completion of a form for that purpose provided by the Director. A pre-application conference is optional for an applicant for proposals which require only Type 1 applications.

Response:

The project involves a Type 3 application; therefore, a pre-application conference regarding the project was held on August 23, 2023. The City's Pre-Application Conference Notes are attached as Exhibit C. This standard is satisfied.

[...]

6. If a complete application relating to a proposed development action that was the subject of a pre-application conference has not been submitted within one year of the conference, the applicant shall schedule a current pre-application conference.

Response:

This application package has been submitted within one year of a pre-application conference on the subject. This standard is met.

50.25. Application Completeness

1. A complete application is one which contains the information required by the Director to address the relevant criteria, development requirements, and procedures of this Code. Non-Discretionary Annexation Related Zoning Map Amendment and Discretionary Annexation Zoning Map Amendment applications processed by the City shall be determined to be complete upon submittal of a valid annexation petition or executed annexation agreement.



All other complete applications shall consist of the requisite number of copies of the following:

- A. A completed original application form provided by the Director and application checklist provided by the Director, signed by:
 - 1. The applicant.

[...]

Response:

An application form signed by the appropriate parties is included with the application materials. This requirement is met.

B. A written statement, supported by substantial evidence, that identifies the criteria and development regulations considered relevant to the application, states the facts alleged to show that the application complies with applicable criteria and development regulations, and explains why the application should be approved based on the criteria and development regulations and facts set forth in the application. In addition to addressing applicable criteria and development regulations relevant to the application type, the written statement shall address all the applicable technical criteria specified in Section 40.03. (Facilities Review Committee) of the Code.

Response:

This narrative and accompanying documents respond to applicable approval criteria, regulations, and development standards. This submittal requirement is met.

C. The Director may require an applicant to submit information in addition to that required on the form to aid in deciding whether an application satisfies applicable criteria and development regulations. The Director shall attempt to identify additional necessary information in the pre-application conference.

Response:

This application includes the additional materials noted by the City staff in the Pre-Application Conference Notes (Exhibit C). This requirement is met.

D. The information required by Section 50.30.4. regarding Neighborhood Meeting requirements, if applicable.

Response:

Neighborhood meetings were held on September 12, 2023 and February 13, 2024, and the required documentation is included in Exhibit E. This submittal requirement is satisfied.

E. For a Type 2 or Type 3 application, a copy of the pre-application conference summary.

Response:

This project was discussed with City staff at a pre-application conference held on August 23, 2023, and a copy of the Pre-Application Conference Notes is included in Exhibit C. This submittal requirement is met.

F. Documentation from service providers, as determined by the Director, stating that essential and critical facilities are available or can be made available or will not be adversely affected by the proposal.

Response:

As discussed in the Pre-Application Conference Notes (Exhibit C), a Pre-Screening Site Assessment form from Clean Water Services is required and is included in Exhibit G. No other Service Provider Letters were required. This submittal requirement is met.



G. The applicable fee in effect at the date of submittal.

Response:

Payment of applicable fees for this application is included with the submittal. This requirement is satisfied.

[...]

50.30. Neighborhood Review Meeting

[...]

2. Prior to submittal of an application subject to a Type 3 procedure, the applicant shall provide an opportunity to meet with neighboring property owners, residents and businesses (hereinafter collectively referred to as "neighbors") as well as representatives from the NAC within whose boundaries the site is located or within the notice radius to review the proposal. The applicant shall not be required to hold more than one Neighborhood Review Meeting provided such meeting is held within six months prior to submitting an application for one specific site. This requirement does not apply to applications required by Design Review Three threshold number 7 (Section 40.20.15.3.A.7.) or applications for Quasi-Judicial Zoning Map Amendment (Section 40.97.15.1.), Discretionary Annexation Related Zoning Map Amendment (Section 40.97.15.4.).

3. Procedures.

- A. Except as otherwise provided in this section, the applicant shall select the meeting time and place according to the preference indicated by the relevant NAC. Preference should be given to a regularly scheduled meeting time of the NAC in which the project is located. The starting time selected shall be limited to a weekday evening after 6:00 p.m. or a weekend at any reasonable time and shall not occur on a National holiday. The meeting shall be held at a location open to the public and in compliance with the Americans with Disabilities Act within the boundaries of the NAC or at a similar location within the City of Beaverton. A sign at least 22" x 28" in size with minimum 2" lettering shall be placed at the main entrance of the building where the meeting will take place at least one hour prior to the meeting. Such sign will announce the meeting, that the meeting is open to the public, and that interested persons are invited to attend. This sign shall be removed upon conclusion of the meeting by the applicant.
- B. The applicant shall send by regular mail a written notice announcing the Neighborhood Review Meeting to: the Director, property owners within 500 feet of the property involved in the anticipated application and to representatives of all NACs and Washington County's Community Participation Organizations (CPO) whose boundaries are within 500 feet of the subject property. The notice shall include the date, time and location of the meeting and briefly discuss the nature and location of the proposal. The notice shall be mailed not less than 20 calendar days prior to the meeting date. The Director shall maintain on file in the Community Development Department, current addresses of NAC Officers and/or representatives and related NAC information, including regularly scheduled or monthly meeting dates, times and locations. [ORD 4782; April 2020]

The mailing list shall be based on the most recent property tax assessment rolls of the Washington County Department of Assessment and Taxation. At the request of the applicant, and upon



- payment of the applicable fee, the City will provide the required mailing list.
- C. Not less than 20 calendar days prior to the Neighborhood Review Meeting, the applicant shall post a notice on the property which is subject of the proposed application. The notice shall be posted within 50 feet of an adjoining public right-of-way in a manner that can be read from the right-of-way. The notice shall state that the site may be subject to a proposed development and shall set forth the name of the applicant and a telephone number where the applicant can be reached for additional information. The site shall remain posted until the conclusion of the Neighborhood Review Meeting. The applicant may purchase a second sign from the City or create a sign to post at the Neighborhood Review Meeting location.

Standard signs are available from the City upon payment of a fee. The City will not be responsible for posting of any signs.

- D. At the Neighborhood Review Meeting, the applicant shall describe the proposed application to persons in attendance. The attendees may identify any issues that they believe should be addressed in the proposed application and recommend that those issues be submitted for City consideration and analysis.
- E. At the Neighborhood Review Meeting, the applicant shall take notes of the discussion on the proposed application. After the meeting and before submitting an application to the City, the applicant shall send a copy of the meeting notes to the Chairperson of the NAC in which the project is to be located by certified mail.

Response:

The project site is within the boundaries of the Five Oaks/Triple Creek Neighborhood Association Committee (NAC). The Applicant participated in a regularly scheduled meeting of the NAC held at 7:00 p.m. on September 12, 2023. Notice of the meeting was mailed to all property owners within 500 feet of the property and to the listed representatives. A notice of the meeting was posted on the project site August 23, 2023—greater than 20 calendar days prior to the Neighborhood Review Meeting. At the Neighborhood Review Meeting, the project team described the proposed application, answered questions, and took comments regarding the project. Following the meeting, the Applicant's consultant provided a copy of the meeting notes to NAC Chairperson David Kamin via email and certified mail.

A second neighborhood meeting was held on February 13, 2024, pursuant to the requirements of BDC 50.30.3.B. Written notice of the meeting was mailed to property owners within 500 feet of the subject site, the Beaverton Community Development Director, and representatives of the NAC and Washington County Community Participation Organizations (CPOs) within 500 feet of the subject site on January 23, 2024. A notification sign was placed on the site on January 23, 2024. Following the second meeting, a summary of the meeting was mailed to the Chairperson of the NAC via email and certified mail on March 29, 2024. These criteria are met.

- 4. To comply with this section, an applicant shall submit the following information with the application:
 - A. A copy of the notice sent to surrounding property owners and the NAC Representatives as described in Section 50.30.3.B.



- В. A copy of the mailing list used to send out meeting notices as described in Section 50.30.3.B.
- C. A written statement containing the information posted on the property as described in Section 50.30.3.C.
- D. An affidavit of mailing and posting notices as described in Sections 50.30.3.A through C.
- E. Copies of written materials and 8.5" x 11" size plans presented at the Neighborhood Review Meeting.
- F. Notes of the meeting, including the meeting date, time, and location, the name and address of those attending, and a summary of oral and written comments received.
- G. A certified mail receipt indicating mailing of the meeting notes to the Chairperson of the NAC.
- H. If responses to the meeting notice were not received by the applicant and no one attended the Neighborhood Review Meeting or persons in attendance made no comments, the applicant shall submit evidence as indicated above, with the notes reflecting the absence of comment, attendance, or both.
- 5. Failure of a property owner to receive notice shall not invalidate the Neighborhood Review Meeting proceedings.

Neighborhood meetings were held on September 12, 2023 and February 14, 2024, and the required documentation is included in Exhibit F. This submittal requirement is satisfied.

Chapter 60 - SPECIAL REQUIREMENTS

Design Review Design Principles, Standards and Guidelines 60.05.

60.05.10. Design Principles.

The following design principles are general statements to guide the development of the built environment, the appearance of that development, and the effect of that development on the existing surroundings. The design guidelines and standards implement these principles.

- 1. Building Design and Orientation. Design buildings that enhance the visual character of the community and take into account the surrounding neighborhoods, provide permanence, and create a sense of place. In Residential, Commercial and Multiple Use districts, design buildings that contribute to a safe, high quality pedestrian-oriented streetscape.
- 2. Multiple Use District Building Orientation and Design. Locate buildings so they are conveniently and safely accessible from on-site and off-site sidewalks and streets, and so buildings near the edge of a right of way provide a high quality, pedestrian oriented streetscape, contribute to safety by offering "eyes on the street" and promote pedestrian safety and use. Provide a pedestrianfriendly environment through building and site design treatments that may vary in nature and degree depending on the character of the urban area, the characteristics of the street, and the type of use and development proposed.
- 3. Circulation and Parking Design. Provide integrated multi-modal circulation and parking improvements that are safe and convenient, connect to surrounding neighborhoods and streets, and serve the needs of development.
- Landscape, Open Space, and Natural Areas Design. Create landscape areas 4. that contribute to the aesthetics of the community, conserve, protect, enhance



or restore natural features and the natural environment, provide an attractive setting for buildings, and provide safe, interesting outdoor spaces for residents, customers, employees, and the community. Whenever possible, utilize native vegetative species which are disease and drought tolerant.

5. Lighting Design. Provide exterior lighting for buildings, parking lots, pedestrian pathways, vehicular areas, pedestrian plazas, public open spaces to ensure public safety and convenience, and to minimize excessive illumination on environmentally sensitive areas, adjoining properties, and streets.

Response:

Lighting is not included as part of this application to replace the Willow Creek Boardwalk due to the location of the facility within a sensitive area and adjacent to residences. The Lighting Design Guidelines are addressed in response to Section 60.05.45.

60.05.11. Applicability of Design Standards to Residential Uses

60.05.15. Building Design and Orientation Standards.

Response:

The proposed project involves an elevated walkway structure and does not involve a building in a typical sense or residential uses. Therefore, these standards do not apply.

60.05.20. Circulation and Parking Design Standards.

Unless otherwise noted, all standards apply to all uses in all zoning districts except RMA, RMB, and RMC. In the RMA, RMB, and RMC districts, these standards apply to multi-dwellings, compact detached housing, and non-residential uses. In no case shall the standards apply to middle housing or single-detached dwellings (except compact detached housing) in the RMA, RMB, or RMC districts.

Response:

The project involves a greenway trail within the RMB district.

- 1. Connections to the public street system.
 - A. Pedestrian, bicycle, and motor vehicle connections shall be provided between the on-site circulation system and adjacent existing and planned streets as specified in Tables 6.1 through 6.6 and Figures 6.1 through 6.23 of the Comprehensive Plan Transportation Element. For properties within the South Cooper Mountain Community Plan area, pedestrian, bicycle, and motor vehicle connections shall be provided between the on-site circulation system and adjacent existing and planned streets and trails as specified in Figure 10: Community Plan Street Framework and Figure 11: Community Plan Bicycle & Pedestrian Framework of the South Cooper Mountain Community Plan. Deviations from Figure 10: Community Street Framework or Figure 11: Community Plan Bicycle & Pedestrian Framework shall be reviewed through the Planned Unit Development application. Streets and bicycle and pedestrian connections shall extend to the boundary of the parcel under development and shall be designed to connect the proposed development's streets, bicycle connections, and pedestrian connections to existing and future streets, bicycle connections, and pedestrian connections.

Response:

The proposed walkway is, by definition, a pedestrian connection. The boardwalk is planned to provide pedestrian and bicycle connectivity to existing streets and regional trail connections. The pathway is shown on the specified Comprehensive Plan Transportation Element documents.

2. Loading areas, solid waste facilities and similar improvements.



[...]

Response:

No new loading areas, solid waste facilities, or similar improvements are planned as part of this project. This subsection is not applicable.

3. Pedestrian circulation.

- Pedestrian connections shall be provided that link to adjacent existing and planned pedestrian facilities as specified in Tables 6.1 through 6.6 and Figures 6.1 through 6.23 of the Comprehensive Plan Transportation Element, and to the abutting public street system and on-site buildings, parking areas, and other facilities where pedestrian access is desired. For properties within the South Cooper Mountain Community Plan Area, pedestrian connections shall be provided that link to adjacent existing and planned pedestrian facilities as specified in Figure 10: Community Plan Street Framework and Figure 11: Community Plan Bicycle & Pedestrian Framework of the South Cooper Mountain Community Plan and to the abutting public street system and on-site buildings, parking areas, and other facilities where pedestrian access is desired. Deviations from Figure 10: Community Street Framework or Figure 11: Community Plan Bicycle & Pedestrian Framework shall be reviewed through the Planned Unit Development application. Pedestrian connections shall be provided except when one or more of the following conditions exist:
 - 1. Where physical or topographic conditions, such as a grade change of ten (10) feet or more at a property line to an adjacent pedestrian facility, make connections impractical,
 - 2. Where uses including manufacturing, assembly, fabricating, processing, packing, storage and wholesale and distribution activities which are the principle use of a building in Industrial districts occur,
 - 3. Where on-site activities such as movement of trucks, forklifts, and other large equipment would present potential conflicts with pedestrians, or
 - 4. Where buildings or other existing development on adjacent lands physically preclude a connection now or in the future.

Response:

The purpose of the proposed project is to provide pedestrian connections through the Willow Creek natural area between the Waterhouse Trail and adjacent streets. The listed conditions are not a factor in providing a pedestrian connection onsite.

- B. A reasonably direct walkway connection is required between primary entrances, which are the main point(s) of entry where the majority of building users will enter and leave, and public and private streets, transit stops, and other pedestrian destinations.
- C. A reasonably direct pedestrian walkway into a site shall be provided for every 300 feet of street frontage or for every eight aisles of vehicle parking if parking is located between the building and the street. A reasonably direct walkway shall also be provided to any accessway abutting the site. This standard may be waived when topographic conditions, man-made features, natural areas, etc. preclude walkway extensions to adjacent properties.

Response:

While the site does not feature a building or parking, the trail provides connection to each adjacent right-of-way in a reasonably direct manner. These standards are met.

- D. Pedestrian connections through parking lots shall be physically separated from adjacent vehicle parking and parallel vehicle traffic through the use of curbs, landscaping, trees, and lighting, if not otherwise provided in the parking lot design.
- E. Where pedestrian connections cross driveways or vehicular access aisles a continuous walkway shall be provided and shall be composed of a different paving material than the primary on-site paving material.

Parking lots, driveways, and other areas of vehicular access are not provided on the site; therefore, these standards do not apply to the project.

F. Pedestrian walkways shall have a minimum of five (5) foot wide unobstructed clearance and shall be paved with scored concrete or modular paving materials. In the event that the Americans with Disabilities Act (ADA) contains stricter standards for any pedestrian walkway, the ADA standards shall apply.

Response:

The walkway is proposed to be 8 feet in width and provide ADA access via a hard-surfaced decking material to provide improved traction and efficiency for maintenance.

4. Street frontages and parking areas.

[...]

5. Parking area landscaping.

 $[\ldots]$

6. Off-Street parking frontages in Multiple Use zones.

[...]

7. Sidewalks along streets and primary building elevations in Commercial and Multiple Use zones.

[...]

Response:

The project does not include parking areas and is not within a Multiple Use or Commercial zoning district. These subsections do not apply.

- 8. Connect on-site buildings, parking, and other improvements with identifiable streets and drive aisles in Residential, Commercial, and Multiple Use zones.
- 9. Ground floor uses in parking structures.

Response:

This application does not involve a parking structure, on-site buildings, parking, or streets and drives. These requirements do not apply to the project.

60.05.25. Landscape, Open Space, and Natural Areas Design Standards.

Unless otherwise noted, all standards apply to all uses in all zoning districts except RMA, RMB, and RMC. In the RMA, RMB, and RMC districts, these standards apply to multi-dwellings, compact detached housing, and non-residential uses. In no case shall the standards apply to middle housing or single-detached dwellings (except compact detached housing) in the RMA, RMB, or RMC districts.

[...]

- 5. Minimum landscape requirements for non-residential developments and Mixed Use Development.
 - A. A minimum portion of the total gross lot area shall be landscaped:



1. Conditional Uses in Residential districts, and all uses in Commercial and Industrial districts, fifteen (15) percent;

Response:

Parks are permitted conditionally within the Residential Mixed B (RMB) district; therefore, at least 15 percent of the site, or ± 0.88 acres of the total ± 5.87 -acre site, is required to meet the minimum landscape requirements.

2. All uses in Multiple Use districts, ten (10) percent.

Response:

The subject site is in a Residential district. This standard is not applicable.

3. Environmentally sensitive areas shall be counted towards the minimum landscape requirement. Aboveground landscaped water quality treatment facilities shall be counted toward the minimum landscape requirement.

Response:

Per the Natural Resources Assessment – Natural Resources Existing Conditions (Exhibit I), the Applicant's Natural Resources team evaluated the site and determined that the site contained $\pm 10,497$ square feet of on-site wetland area, $\pm 4,908$ square feet of creek on-site, and a combined $\pm 32,896$ square feet of vegetated corridor. This total of $\pm 48,301$ square feet is 84 percent of the ± 1.32 -acre project site or 18.9 percent of the total site area. These areas exceed the minimum landscape requirements for non-residential developments within the RMB district, and these requirements are met.

- B. The following minimum planting requirements for required landscaped areas shall be complied with. These requirements shall be used to calculate the total number of trees and shrubs to be included within the required landscape area:
 - 1. One (1) tree shall be provided for every eight hundred (800) square feet of required landscaped area. Evergreen trees shall have a minimum planting height of six (6) feet. Deciduous trees shall have a minimum caliper of 1.5 inches at time of planting.

Response:

Per the above standard, the required landscaped area, ±38,354 square feet, equates to 48 trees required. As part of the assessment of the site, a partial tree inventory of 86 trees with a DBH over 10 inches was completed. Twenty-nine trees are planned as mitigation plantings for proposed tree removals. The remainder of the site, which has not been inventoried, is also heavily vegetated with trees. Therefore, the site will exceed the minimum requirements for trees provided for required landscaped area. This requirement is satisfied.

- 2. One (1) evergreen shrub having a minimum mature height of forty-eight (48) inches shall be provided for every four hundred (400) square feet of required landscaped area.
- 3. Live ground cover consisting of low-height plants, or shrubs, or grass shall be planted in the portion of the landscaped area not occupied by trees or evergreen shrubs. Bare gravel, rock, bark or other similar materials may be used, but are not a substitute for ground cover plantings, and shall be limited to no more than twenty-five (25) percent of the required landscape area.



As a natural area, it is difficult to ascertain the number of shrubs and amount of ground cover within the site. Judging by aerials of the site, this property situated on Willow Creek is well planted with established vegetation and contains no visible patches of bare earth. Site photos and mapping exhibits are available within the Natural Resource Assessment (Exhibit I). This requirement is met.

- C. A hard surface pedestrian plaza or combined hard surface and soft surface pedestrian plaza, if proposed shall be counted towards meeting the minimum landscaping requirement, provided that the hard-surface portion of the plaza shall not exceed twenty-five (25) percent of the minimum landscaping requirement for Conditional Uses in Residential districts, and shall be comprised of the following:
 - 1. Brick pavers, or stone, scored, or colored concrete; and,
 - 2. One (1) tree having a minimum mature height of twenty (20) feet for every three hundred (300) square feet of plaza square footage; and,
 - 3. Street furniture including but not limited to benches, tables, chairs and trash receptacles; and,
 - 4. Pedestrian scale lighting consistent with the City's Technical Lighting Standards.

Response:

A hard surface pedestrian plaza is not proposed; however, entry paths to this trail segment feature benches and tree plantings as part of the planned vegetated corridor rehabilitation. Lighting is provided by adjacent street lighting, but as discussed within this written narrative, additional lighting along the boardwalk is not proposed.

D. All building elevations visible from and within 200 feet of a public street that do not have windows on the ground floor shall have landscaping along their foundation, which shall be counted toward the minimum landscaped requirement. This landscaping requirement shall not apply to portions of the building facade that provide access for pedestrians or vehicles to the building, for plazas adjacent to the building, or when the building is within three (3) feet of the property line. The foundation landscaping shall be at least five (5) feet wide; and shall be comprised of the following:

[...]

Response:

Buildings are not planned as part of this project. These standards do not apply.

6. Common Greens.

[...]

7. Shared Courts for Compact Detached Housing.

[...]

- 9. Fences and walls.
 - A. Fences and walls shall be constructed of any materials commonly used in the construction of fences and walls such as wood, stone, rock, or brick, or other durable materials.
 - B. Chain link fences are acceptable as long as the fence is coated and includes slats made of vinyl, wood or other durable material. Slats may not be required when visibility into features such as open space,



- natural areas, parks and similar areas is needed to assure visual security, or into on-site areas in industrial zones that require visual surveillance.
- C. Masonry walls shall be a minimum of six inches thick. All other walls shall be a minimum of three inches thick.
- D. For manufacturing, assembly, fabricating, processing, packing, storage and wholesale and distribution activities which are the principle use of a building in Industrial districts, the preceding standards apply when visible from and within 200 feet of a public street.
- E. Fences and walls:
 - 1. May not exceed three feet in height in a required front yard along streets, except required above ground stormwater facilities fencing which may be four feet in height in a required front yard, and eight feet in all other locations.
 - 2. May be permitted up to six feet in a required front yard along designated Collector and Arterial streets.
 - 3. For detached housing along streets and housing facing common greens and shared courts in Multiple Use zones, 3 feet high fences and walls are permitted in front of the building, and on corner lots abutting a street, along the side of the building. Higher fences and walls are permitted on corner lots along the side of the building beginning within 15 feet of the back end of the building nearest to the property line.

The project may require relocation and reconstruction of some existing residential fences along the property boundary where encroachment has occurred. The fencing will meet the applicable standards at the time of demolition and construction.

- 10. Minimize significant changes to existing on-site surface contours at residential property lines.
 - A. Where grading is proposed, the requirements listed in Section 60.15.10 shall apply.
 - B. Notwithstanding the requirements of subsection A. above, grading within 25 feet of a property line shall not change the existing slopes by more than ten percent within a tree root zone of an identified Significant Individual Tree, identified Historic Tree, or a tree within an identified Significant Grove or Significant Natural Resource Area located on an abutting property unless evidence provided by a certified arborist supports additional grading that will not harm the subject grove or tree.

Response:

Regrading of the site to alter the existing surface contours, especially at residential property lines, has not been anticipated. These requirements do not apply.

11. Integrate water quality, quantity, or both facilities. Non-vaulted surface stormwater detention and treatment facilities having a side slope greater than 2:1 shall not be located between a street and the front of an adjacent building.

Response:

Stormwater detention and treatment facilities are not planned as the project does not propose to construct greater than 500 square feet of additional impervious surface.



12. Natural areas. Development on sites with City-adopted natural resource features such as streams, wetlands, significant trees and significant tree groves, shall preserve and maintain the resource without encroachment into any required resource buffer standard unless otherwise authorized by other City or CWS requirements.

Response:

This standard is understood. The Willow Creek Boardwalk was designed to prevent significant encroachment into sensitive areas while allowing ADA-accessible, safe, and efficient pedestrian connectivity.

- 13. Landscape buffering and screening. All new development and redevelopment in the City subject to Design Review shall comply with the landscape buffering requirements of Table 60.05-2. and the following standards. For purposes of this Section, a landscape buffer is required along the property lines between different zoning district designations. A landscape buffer is required for non-residential land uses and parks in Residential zoning districts. Both buffering standards and side and rear building setback requirements shall be met. Only landscaping shall be allowed in the landscape buffer areas. Buffer areas and building setback standards are measured from the property line, they are not additive. Where a yard setback width is less than a landscape buffer width, the yard setback width applies to the specified buffer designation (B1, B2, or B3 as appropriate). A landscape buffer width cannot exceed a minimum yard setback dimension. In addition, the buffer area and landscape standard are intended to be continuously applied along the property line, except as authorized under Section 60.05.45.10.
 - A. Applicability of buffer standards:

 $[\ldots]$

4. The buffer standards shall not apply along property lines where a non-residential use is already buffered by a natural feature or an open space dedication, if such a natural buffer or dedication is at least 40 feet in width, or if the width of the natural feature or open space dedication and the density and quality of landscaping meet or exceed the applicable landscape buffer standard.

[...]

Response:

The non-residential use proposed is part of an open space dedication for the Willow Creek natural area and boardwalk. The greenway tract has a minimum width of ± 100 feet, greater than the 40-foot requirement. The area beyond the project site was not surveyed for vegetation; therefore, where the proposal cannot meet these standards, the guidelines of BDC 60.05.45 are addressed below.

B. B1-Low screen buffer: This buffer is intended to provide a minimal amount of transitional screening between zones. This buffer consists of 1) one (1) tree having a minimum planting height of six (6) feet for every thirty (30) linear feet; and 2) live ground cover consisting of low-height plants, or shrubs, or grass proportionately spaced between the trees with actual spacing for low height plants or shrubs dependent upon the mature spread of the vegetation. Bare gravel, rock, bark or other similar materials may be used, but are not a substitute for ground cover plantings, and shall be limited to no more than twenty-five (25) percent of the required buffer area. Deciduous trees having a minimum two-inch caliper at time of planting may be planted in the B1 buffer required for across the street.

The project is required to provide a 10-foot landscaped buffer planted to the B1 standard along the northeast property line abutting NW Cornell Road and NW 158th Avenue. This area is greater than 300 feet from the project site and consists of Willow Creek and natural vegetation including shrubs, groundcover, and trees. The area beyond the project area was not surveyed for vegetation; therefore, where the proposal cannot meet these standards, the guidelines of BDC 60.05.45 are addressed below.

[...]

D. B3-High screen buffer: This buffer is intended to provide a high degree of visual screening between zones. This buffer consists of minimum six (6)-foot high fully sight obscuring fences or walls with an adjoining landscape area on the interior of the fence when the fence is proposed within three (3) feet of the property line. If the fence is proposed to be setback from the property line more than three feet, the landscaping shall be on the exterior of the fence within a landscape area a minimum of five (5) feet in width, with adequate provision of access and maintenance of the landscaped area. The height of the fence shall be measured from the property on which the fence is to be located, and, if located on a wall, shall be in addition to the height of the wall. The landscape area shall be planted with one (1) tree having a minimum planting height of six (6) feet for every thirty (30) linear feet, filled between with evergreen shrubs which reach a minimum height of four (4) to six (6) feet within two (2) years of planting. Live ground cover consisting of low-height plants, or shrubs, or grass shall be planted in the portion of the landscaped area not occupied by trees or evergreen shrubs. Actual spacing for low height plants or shrubs or evergreen shrubs shall be dependent upon the mature spread of the selected vegetation. Bare gravel, rock, bark or other similar materials may be used, but are not a substitute for ground cover plantings, and shall be limited to no more than twentyfive (25) percent of the required landscape area.

Response:

As pictured within several of the attached exhibits, the area is in a natural state with a number of trees and shrubs and no typical "use" associated with the site. Fencing was provided by the developer of the Waterhouse subdivision along the southern boundary of the site. The Applicant proposes to relocate some sections of this fencing that have encroached upon the THPRD property. The pathway is generally separated from the property line by a 10-foot-wide buffer, but this distance decreases to inches in some locations where the alignment of the pathway has attempted to avoid Willow Creek. Where the application does not meet the standards of BDC 60.05.25, the written narrative addresses applicable design review guidelines of BDC 60.05.45.

- E. Changes to buffer widths and standards: Required buffer widths and buffer standards are the minimum requirements for buffering and screening. Changes in buffer widths and standards shall be reviewed through the public hearing process, except for the following:
 - 1. A request for a reduction in the buffer width when a B2 or B1 buffer standard is required and the reduction in buffer width is five (5) feet or less, shall be reviewed through administrative authorization provided that the next highest buffer standard is implemented.

Requests for changes in buffer widths and buffer standards shall only be authorized in review of the Design Review Guidelines for Landscape buffering and screening (60.05.45.11).

F. Landscaping buffering installation: All required buffering shall be installed prior to occupancy permit issuance.

[...]

Response:

These standards are understood.

14. Community Gardens [ORD 4697; December 2016]

[...]

15. South Cooper Mountain Community Plan Open Space and Natural Resources

[...]

Response:

The project does not propose a community garden and is not located within the South Cooper Mountain Community Plan area. These subsections do not apply.

60.05.30. Lighting Design Standards.

Unless otherwise noted, all standards apply to all uses in all zoning districts except RMA, RMB, and RMC. In RMA, RMB, and RMC, these standards apply only to multidwellings, compact detached housing, and non-residential uses.

Response:

The project involves an elevated boardwalk through a significant tree grove and wetland area. As permanent lighting of this area could disrupt wildlife, disturb residential neighbors of the trail, and invite use of the pathway at park off-hours, lighting has not been proposed. This application includes a Design Review Three approval that addresses the guidelines of BDC 60.05.50 later within this written narrative.

60.05.45. Landscape, Open Space and Natural Areas Design Guidelines.

Unless otherwise noted, all guidelines apply in all zoning districts.

[...]

- 7. Fences and walls.
 - A. Fences and walls should be constructed of attractive, durable materials. (Standard 60.05.25.9)
 - B. Fences and walls constructed in front yards adjacent to public streets should provide the opportunity to view into the setback from the street unless high traffic volumes or other conflicts warrant greater security and protection. (Standard 60.05.25.9.E)

Response:

Fences and walls are not proposed as part of this project; however, some encroaching homeowner fences will need to be relocated to their respective property lines. The fences, where feasible, will likely be reconstructed as originally built and will meet the applicable standards.

8. Changes to existing on-site surface contours at residential property lines. The perimeters of properties should be graded in a manner to avoid conflicts with abutting residential properties such as drainage impacts, damage to tree root zones, and blocking sunlight. (Standard 60.05.25.10)

Changes to on-site grading have not been proposed. Drainage impacts, damage to tree root zones, and sunlight blocking have not been anticipated as a result of the project.

9. Integrate water quality, quantity, or both facilities. Above-ground stormwater detention and treatment facilities should be integrated into the design of a development site and, if visible from a public street, should appear as a component of the landscape design. (Standard 60.05.25.11)

Response:

As the project involves a boardwalk that allows stormwater to reach the ground beneath, no additional impervious surfaces have been proposed. Please see the Preliminary Stormwater Report and Stormwater Management Worksheet (Exhibit J) for further details.

- 10. Natural areas. Natural features that are indigenous to a development site, such as streams, wetlands, and mature trees should be preserved, enhanced and integrated when reasonably possible into the development plan. (Standard 60.05.25.12)
- 11. Landscape buffering and screening.
 - A. A landscape buffer should provide landscape screening, and horizontal separation between different zoning districts and between non-residential land uses and residential land uses. The buffer should not be applicable along property lines where existing natural features such as flood plains, wetlands, riparian zones and identified significant groves already provide a high degree of visual screening. (Standard 60.05.25.13)
 - B. When potential impacts of a Conditional Use are determined, or when potential conflicts of use exist between adjacent zoning districts, such as industrial uses abutting residential uses, landscape screening should be dense, and the buffer width maximized. When potential conflicts of uses are not as great, such as a commercial use abutting an industrial use, less dense landscape screening and narrower buffer width is appropriate. (Standard 60.05.25.13)
 - C. Landscape buffering should consist of a variety of trees, shrubs and ground covers designed to screen potential conflict areas and complement the overall visual character of the development and adjacent neighborhood. (Standard 60.05.25.13)
 - D. When changes to buffer widths and buffer standards are proposed, the applicant should describe the physical site constraints or unique building or site characteristics that merit width reduction. (Standard 60.05.25.13.E).

Response:

The Willow Creek Boardwalk is an existing pathway through a Significant Tree Grove which has been planned for reconstruction and realignment. The realigned pathway will generally follow the same path as the previous boardwalk. Vegetation exists in the area, and where feasible, is planned to be retained. Traditional landscaping buffers are not desired due to the natural state of the area. Maintenance and establishment of traditional landscaping would pose difficulties within this area. Additionally, the topography and natural features require that the path abut the property line, in some areas with minimal buffer. A study and design associated with the project has not found alternative methods of making these areas passable without the path lying adjacent to the property line.

As this is an established pathway, well-liked and well-used by the public, keeping the alignment as close as possible to the previous path and minimizing impacts to the wetland and vegetated corridor were of concern. As part of this project, wetland and vegetated corridor mitigation plantings as well as tree removal mitigation plantings have been identified to supplement this natural area. This combination of extenuating factors and mitigation will provide the best screening and buffering possible in the situation.

60.05.50. Lighting Design Guidelines.

Unless otherwise noted, all guidelines apply to all uses in all zoning districts, except RMA, RMB, and RMC. In RMA, RMB, and RMC, these guidelines apply only to multi-dwellings, compact detached housing, and non-residential uses.

- 1. Lighting should be utilized to maximize safety within a development through strategic placement of pole-mounted, non-pole mounted and bollard luminaires. (Standards 60.05.30.1 and 2)
- 2. Pedestrian scale lighting should be an integral part of the design concept except for industrial projects. Poles and fixtures for pole-mounted lighting should be of a consistent type throughout the project. The design of wall-mounted lighting should be appropriate to the architectural design features of the building. (Standard 60.05.30.2)
- 3. Lighting should minimize direct and indirect glare impacts to abutting and adjacent properties and streets by incorporating lens shields, shades or other measures to screen the view of light sources from residences and streets. (Standards 60.05.30.1 and 2)
- 4. On-Site lighting should comply with the City's Technical Lighting Standards. (Standards 60.05.30.1 and 2.) Where the proposal does not comply with Technical Lighting standards, the applicant should describe the unique circumstance attributed to the use or site where compliance with the standard is either infeasible or unnecessary.

Response:

Lighting is not included in this application as permanent lighting of this area could disrupt wildlife, disturb residential neighbors of the trail, and invite use of the pathway at park off-hours. The location of the boardwalk routes through the Willow Creek natural area, a wetland and vegetated corridor surrounding Willow Creek. Lighting meeting the standards of this code would create an environmental impact to wildlife within the natural area as well as significantly increase construction costs and require additional design considerations. The boardwalk is currently located within a floodplain and, due to seasonal flooding and beaver activity, can potentially be flooded. While the proposed project will minimize sections of flooding, lighting installed within the area would likely require additional maintenance and could potentially pose a safety hazard.

60.10. Floodplain Regulations 60.10.05. Purpose.

Regulations governing development within floodplains are intended to recognize the need to protect the health, safety and welfare of the community, and maintain the functions and values of floodplains through control of development within the floodplain area so as to minimize public and private losses due to flooding. The preservation of natural features and topography as an aid in floodplain management is a primary purpose of these regulations. However, in the administration of these regulations the existing pattern of man-made improvements shall in some areas be recognized as a constraint on achieving this purpose. The provisions of this Section are designed to:

- 1. Protect human life, health, and property;
- 2. Minimize expenditure of public money, costly repairs of flood damage, and costly flood control projects;
- 3. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- 4. Minimize prolonged business interruptions;
- 5. Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in an area of special flood hazard;
- 6. Help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas;
- 7. Make information available upon request to potential buyers that property is in an area of special flood hazard;
- 8. Ensure that those who occupy areas of special flood hazard assume responsibility for their actions.
- 9. Maintain the functions and values of floodplains, such as allowing for the storage and conveyance of stream flows through existing and natural flood conveyance systems.

60.10.10. Floodplain Designation.

1. Consistent with Clean Water Services Design and Construction Standards, the floodplain is the flood management area and shall include those areas identified by the Federal Insurance Administration in a scientific and engineering report entitled "The Flood Insurance Study for Washington County, Oregon and Incorporated Areas," with amendments, dated October 19, 2018, with accompanying Flood Insurance Rate Maps (FIRM), is hereby adopted by reference and declared to be a part of this ordinance. The City of Beaverton shall notify the U.S. Department of Homeland Security's Federal Emergency Management Agency as soon as possible, but no later than six months after the date such information becomes available, of any changes to the base flood elevation, by submitting technical or scientific data. Such a submission is necessary so that upon confirmation of those physical changes affecting flooding conditions, risk premium rates and flood plain management requirements will be based upon current data. The Flood Insurance Study and revisions are on file with the City Engineer and the City Recorder. [ORD 3563; May 1987] [ORD 4130; December 2000] When base flood elevation data has not been provided in accordance with this section, the City Engineer shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, state, or other source in order to administer City of Beaverton Code Section 9.05.060, subsections A and D, relating to site development. For all development applications, the best available information as determined by the City Engineer shall be used in the determination of the floodplain limits.

Response:

The floodway, determined per FEMA Flood Insurance Rate Maps effective October 19, 2018, and the Zone AE boundary, determined per a Flood Insurance Study dated October 19, 2018. The best available information was used to determine the floodplain limits; therefore, this criterion is met.

2. When interpretation is requested by a property owner, or designee concerning the exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions), or if a development application is received for a site where a floodplain is unclear or lacks an established elevation, the City Engineer shall require the concerned person or applicant to provide a detailed hydraulic data report prepared in accordance with standard engineering practice by a registered engineer with background in the area of hydrology and hydraulics. This report shall include, but is not limited to, water profiles and discharge rates for the channel and the hydrology for the tributary areas. The report shall document the base flood elevation and specific limits of inundation within a floodplain designated on a FIRM map in Zone A or in Zone AO or along a stream corridor beyond the FIRM studied limits. After review of the available data and the report, the base flood elevation shall be established by the City Engineer.

> All applicable floodplain regulations for preservation of flood conveyance and flood storage of sites and building elevation requirements shall be determined from the base flood elevation as established by the City Engineer. A person dissatisfied with the City Engineer's decision may appeal that decision in the same manner as provided in Beaverton Code Section 9.05.091.

Response:

The applicable base flood elevation has been determined and is shown on the Preliminary Plans (Exhibit A). The Applicant has prepared a No-Rise Analysis and Report and No-Rise Certification for submittal to the City Floodplain Manager. These documents are submitted as part of Exhibit M.

The degree of flood protection required by this ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Large floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This ordinance does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This ordinance shall not create liability on the part of the City, any officer or employee thereof, or the Federal Insurance Administration, for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made hereunder.

Response:

These standards are understood.

Uncontained areas of hazardous materials, as defined by the Department of Environmental Quality, are prohibited in the floodplain. Any storage or placement of materials in the floodplain that would obstruct the flow of water or reduce the available flood holding capacity of a site is prohibited.

Response:

Hazardous materials have not been proposed as part of this project nor has storage or placement of materials within the floodplain which would obstruct the flow of water or reduce the holding capacity been proposed. This criterion is met.

60.10.15. Development in Floodway.



- 1. Development in the floodway is prohibited, with the following exceptions, pursuant to the site development ordinance, which requires hydrological and hydraulic analyses demonstrating the proposed encroachment would not increase flood levels during the base flood discharge;
 - A. Stormwater outfall pipes and other drainage; improvements;
 - B. Bridges;
 - C. Culverts;
 - D. Public utility lines;
 - E. Trails or bike paths;
 - F. Roads and other uses identified on the City's Transportation Plan; and
 - G. Stream habitat restoration, including vegetated corridor enhancement.
 - H. Grading associated with A through G above.

Response:

The proposed development avoids the floodway wherever possible and involves the reconstruction of a trail and bike path through the Willow Creek area, an exempt activity. The construction method involves an elevated walkway with minimal ground disturbance in order to prevent alteration of the floodplain and floodway, including the increase of flood levels. These standards are met.

- 60.10.20. Commercial and Industrial Uses in the Floodway Fringe.
- 60.10.25. Residential Uses in the Floodway Fringe.
- 60.10.30. Development of Critical Facilities within the Floodway Fringe.

Response:

The project has not proposed commercial, industrial, residential, or critical infrastructure within the floodway. These standards do not apply.

60.15. Land Division Standards

60.15.10. Grading Standards.

1. Applicability. The on-site surface contour grading standards specified in Section 60.15.10.3. are applicable to all land use proposals where grading is proposed, including land division proposals and design review proposals, as applicable. This Section does not supersede Section 60.05.25. (Design Review) and the exemptions listed in Section 60.15.10.2. will apply equally to design review proposals.

Response:

The application involves a design review proposal without grading or land division; therefore, these standards do not apply.

60.55. Transportation Facilities

60.55.05. Purpose and Intent.

It is the purpose and intent of this chapter to establish design standards and performance requirements for all streets and other transportation facilities constructed or reconstructed within the City of Beaverton.

60.55.10. General Provisions.

 All public and private transportation facilities shall be designed and improved in accordance with the standards of this code and the Engineering Design Manual and Standard Drawings. In addition, when development abuts or impacts a transportation facility under the jurisdiction of one or more other



- governmental agencies, the City shall condition the development to obtain permits required by the other agencies.
- 2. In order to protect the public from potentially adverse impacts of the proposal, to fulfill an identified need for public services related to the development, or both, development shall provide traffic capacity, traffic safety, and transportation improvements in rough proportion to the identified impacts of the development.
- 3. For applications that meet the threshold criteria of section 60.55.15. (Traffic Management Plan) or of section 60.55.20. (Traffic Impact Analysis), these analyses or limited elements thereof may be required.
- 4. The decision-making authority may impose development conditions of approval per Section 10.65.1. of this code. Conditions of approval may be based on the Traffic Management Plan and Traffic Impact Analysis. Additional street, bicycle, and pedestrian connections may also be required per 60.55.25. (Street and Bicycle and Pedestrian Connection Requirements).
- 5. Dedication of right-of-way shall be determined by the decision-making authority.
- 6. Traffic calming may be approved or required by the decision-making authority in a design of the proposed and/or existing streets within the Area of Influence or any additional locations identified by the City Engineer. Traffic calming measures shall be designed to City standards.
- 7. Intersection performance shall be determined using the Highway Capacity Manual 2000 published by the Transportation Research Board. The City Engineer may approve a different intersection analysis method prior to use when the different method can be justified. Terms used in this subsection are defined in the Highway Capacity Manual 2000.

At a minimum, the impacts of development on a signalized intersection shall be mitigated to peak hour average control delay no greater than 65 seconds per vehicle using a signal cycle length not to exceed 120 seconds. The volume-to-capacity ratio for each lane group for each movement shall be identified and considered in the determination of intersection performance. The peak hour volume-to-capacity (V/C) ratio for each lane group shall be no greater than 0.98. Signal progression shall also be considered. If the intersection is under County or ODOT jurisdiction, the V/C ratio for each lane group shall not exceed the V/C ratio imposed by that jurisdiction.

At a minimum, the impacts of development on a two-way or an all-way stopcontrolled intersection shall be mitigated to a peak hour average control delay of no greater than 45 seconds per vehicle.

If the existing control delay or volume-to-capacity ratio of an intersection is greater than the standards of this subsection, the impacts of development shall be mitigated to maintain or reduce the respective control delay or volume-to-capacity ratio.

60.55.15. Traffic Management Plan.

Where development will add 20 or more trips in any hour on a residential street, a Traffic Management Plan acceptable to the City Engineer shall be submitted in order to complete the application. A residential street is any portion of a street classified as a Local Street or Neighborhood Route and having abutting property zoned RMA, RMB, or RMC.



Response:

The proposed development will not add 20 or more trips per hour to any surrounding streets, as it is an existing pedestrian facility that will be reconstructed for accessibility and durability.

60.55.20. Traffic Impact Analysis.

For each development proposal that exceeds the Analysis Threshold of 60.55.20.2, the application for land use or design review approval shall include a Traffic Impact Analysis as required by this code. The Traffic Impact Analysis shall be based on the type and intensity of the proposed land use change or development and its estimated level of impact to the existing and future local and regional transportation systems.

- 1. Engineer Certification. The Traffic Impact Analysis shall be prepared and certified by a traffic engineer or civil engineer licensed in the State of Oregon.
- 2. Analysis Threshold.
 - A. A Traffic Impact Analysis is required when the proposed land use change or development will generate 300 vehicles or more per day (vpd) in average weekday trips as determined by the City Engineer.
 - B. A Traffic Impact Analysis or some elements of a Traffic Impact Analysis may be required when the volume threshold under subsection A. of this section is not met but the City Engineer finds that the traffic impacts attributable to the development have the potential to significantly impact the safe and efficient operation of the existing public transportation system.

[...]

Response:

The proposal involves a pedestrian connection and walkway; therefore, vehicle trips are not anticipated as a result of the project, and the threshold for Traffic Impact Analysis is not met.

60.55.25. Street and Bicycle and Pedestrian Connection Requirements.

1. All streets shall provide for safe and efficient circulation and access for motor vehicles, bicycles, pedestrians, and transit. Bicycle and pedestrian connections shall provide for safe and efficient circulation and access for bicycles and pedestrians.

Response:

The proposed trail improvements will provide safer and more efficient circulation and access for bicycles and pedestrians, especially those with accessibility issues, through the construction of an ADA compliant pathway. The path route has been designed to be more level and straighter than the original alignment, allowing easier access to the public. This standard is met.

2. The Comprehensive Plan Transportation Element Figures 6.1 through 6.23 and Tables 6.1 through 6.6 shall be used to identify ultimate right-of-way width and future potential street, bicycle, and pedestrian connections in order to provide adequate multi-modal access to land uses, improve area circulation, and reduce out-of-direction travel. For properties within the South Cooper Mountain Community Plan area, Figure 10: Community Plan Street Framework and Figure 11: Community Plan Bicycle & Pedestrian Framework of the South Cooper Mountain Community Plan shall be used to identify functional classifications of streets, future streets, bicycle, and pedestrian connections. Streets and bicycle and pedestrian connections shall extend to the boundary of the parcel under development and shall be designed to connect the proposed development's streets, bicycle connections, and

pedestrian connections to existing and future streets, bicycle connections, and pedestrian connections. Trails identified in Figure 11: Community Plan Bicycle & Pedestrian Framework shall be designed to meet applicable Tualatin Hills Parks & Recreation (THPRD) District trail design standards, unless otherwise approved by THPRD. Deviations from Figure 10: Community Street Framework or Figure 11: Community Plan Bicycle & Pedestrian Framework shall be reviewed through the Planned Unit Development application.

3. Where a future street or bicycle and pedestrian connection location is not identified in the Comprehensive Plan Transportation Element, where abutting properties are undeveloped or can be expected to be redeveloped in the near term, and where a street or bicycle and pedestrian connection is necessary to enable reasonably direct access between and among neighboring properties, the applicant shall submit as part of a complete application, a future connections plan showing the potential arrangement of streets and bicycle and pedestrian connections that shall provide for the continuation or appropriate projection of these connections into surrounding areas.

Response:

The project involves maintenance replacement of a THPRD trail. The existing pathway is shown on the applicable Comprehensive Plan Transportation Element Figures and included within the pertinent Tables. Upon completion of the trail reconstruction, the pathway will maintain the connections illustrated between the local transportation facilities. The project site is not located within a specified Community Plan area. Therefore, the standard is met.

4. Streets and bicycle and pedestrian connections shall extend to the boundary of the parcel under development and shall be designed to connect the proposed development's streets, bicycle connections, and pedestrian connections to existing and future streets, bicycle connections, and pedestrian connections. A closed-end street, bicycle connection, or pedestrian connection may be approved with a temporary design.

Response:

The Willow Creek Boardwalk was constructed as part of the Waterhouse subdivision. The reconstructed boardwalk has been designed to utilize the same connections to local trails and streets. This requirement is met.

5. Whenever existing streets and bicycle and pedestrian connections adjacent to or within a parcel of land are of inadequate width, additional right-of-way may be required by the decision-making authority.

Response:

Surrounding rights-of-way are of adequate width. This standard does not apply.

- 6. Where possible, bicycle and pedestrian connections shall converge with streets at traffic-controlled intersections for safe crossing.
- 7. Bicycle and pedestrian connections shall connect the on-site circulation system to existing or proposed streets, to adjacent bicycle and pedestrian connections, and to driveways open to the public that abut the property. Connections may approach parking lots on adjoining properties if the adjoining property used for such connection is open to public pedestrian and bicycle use, is paved, and is unobstructed.

Response:

Connections to surrounding streets and adjacent bicycle and pedestrian connections are established and not proposed to change with this project. The pathway connections currently meet this standard and will continue to meet the requirement following reconstruction and realignment of the boardwalk.



8. To preserve the ability to provide transportation capacity, safety, and improvements, a special setback line may be established by the City for existing and future streets, street widths, and bicycle and pedestrian connections for which an alignment, improvement, or standard has been defined by the City. The special setback area shall be recorded on the plat.

Response:

The project involves an established subdivision and reconstruction of a pathway. This standard does not apply.

9. Accessways are one or more connections that provide bicycle and pedestrian passage between streets or a street and a destination. Accessways shall be provided as required by this code and where full street connections are not possible due to the conditions described in Section 60.55.25.14.

An accessway will not be required where the impacts from development, redevelopment, or both are low and do not provide reasonable justification for the estimated costs of such accessway.

- A. Accessways shall be provided as follows:
 - 1. In any block that is longer than 600 feet as measured from the near side right-of-way line of the subject street to the near side right-of-way line of the adjacent street, an accessway shall be required through and near the middle of the block.
 - 2. If any of the conditions described in Section 60.55.25.14. result in block lengths longer than 1200 feet as measured from the near side right-of-way line of the subject street to the near side right-of-way line of the adjacent street, then two or more accessways may be required through the block.
 - 3. Where a street connection is not feasible due to conditions described in Section 60.55.25.14. one or more new accessways to any or all of the following shall be provided as a component of the development if the accessway is reasonably direct: an existing transit stop, a planned transit route as identified by TriMet and the City, a school, a shopping center, or a neighborhood park.
 - 4. The City may require an accessway to connect from one culde-sac to an adjacent cul-de-sac or street.
 - 5. In a proposed development or where redevelopment potential exists and a street connection is not proposed, one or more accessways may be required to connect a cul-de-sac to public streets, to other accessways, or to the project boundary to allow for future connections.
 - 6. Within the South Cooper Mountain Community Plan area, the City may require an accessway to connect from multiuse paths or trails to streets, multi-use paths, or trails.

Response:

The boardwalk pathway was designed as part of the Waterhouse subdivision in order to provide connection through the natural area for bicyclists and pedestrians. The project involves reconstruction and realignment of the pathway to better meet ADA standards, construct with materials that will provide better safety and durability, and reduce future maintenance needs. New accessways, new streets, and projects within the South Cooper Mountain Community Plan area are not proposed; therefore, these standards do not apply.



- В. Accessway Design Standards.
 - Accessways shall be as short as possible and wherever practical, straight enough to allow one end of the path to be visible from the other.
 - 2. Accessways shall be located to provide a reasonably direct connection between likely pedestrian and bicycle destinations.

Response:

While a direct path between pathway entrances is not possible, the boardwalk has been designed, as practicable, to be as short as possible and provide reasonably direct connection for pedestrians and bicyclists. These requirements, as applicable, are met.

- 10. Pedestrian Circulation.
 - A. Standards for Single-Detached Dwellings and Middle Housing.
 - В. Standards for Other Development.
 - 1. Walkways are required between parts of a development where the public is invited or allowed to walk.
 - 2. A walkway into the development shall be provided for every 300 feet of street frontage. A walkway shall also be provided to any accessway abutting the development.
 - 3. Walkways shall connect building entrances to one another and from building entrances to adjacent public streets and existing or planned transit stops. Walkways shall connect the development to walkways, sidewalks, bicycle facilities, alleyways and other bicycle or pedestrian connections on adjacent properties used or planned for commercial, multidwelling, institution or park use. The City may require connections to be constructed and extended to the property line at the time of development.
 - Walkways shall be reasonably direct between pedestrian 4. destinations and minimize crossings where vehicles operate.
 - 5. Walkways shall be paved and shall maintain at least five (5) feet of unobstructed width. Walkways bordering parking spaces shall be at least seven feet wide unless concrete wheel stops, bollards, curbing, landscaping, or other similar improvements are provided which prevent parked vehicles from obstructing the walkway. Stairs or ramps shall be provided where necessary to provide a reasonably direct route. The slope of walkways without stairs shall conform to City standards.
 - 6. The Americans with Disabilities Act (ADA) contains different and stricter standards for some walkways. The ADA applies to the walkway that is the principal building entrance and walkways that connect transit stops and parking areas to building entrances. Where the ADA applies to a walkway, the stricter standards of ADA shall apply.

Response:

The Willow Creek Boardwalk is proposed for realignment in order to, in part, provide greater accessibility to people with disabilities. The boardwalk will be reconstructed out of more durable materials to prevent board lift, will be straightened to provide more



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direct routing, and is proposed to be widened in order to allow easier transit by two-way pedestrian traffic. These requirements, as applicable, are met.

> 7. On-site walkways shall be lighted to 0.5 foot-candle level at initial luminance. Lighting shall have cut-off fixtures so that illumination does not exceed 0.5 foot-candle more than five (5) feet beyond the property line.

Response:

Lighting has not been proposed as part of this project. Lighting requirements are addressed in response to BDC Section 60.05.50.

- 11. Pedestrian Connections at Major Transit Stops. Commercial and institution buildings at or near major transit stops shall provide for pedestrian access to transit through the following measures:
 - A. For development within 200 feet of a Major Transit Stop:
 - 1. Either locate buildings within 20 feet of the property line closest to the transit stop, a transit route or an intersecting street, or provide a pedestrian plaza at the transit stop or a street intersection;
 - 2. Provide a transit passenger landing pad accessible to persons with disabilities if required by TriMet and the City;
 - 3. Provide a reasonably direct pedestrian connection between the transit stop and building entrances on the site;
 - 4. Where substantial evidence of projected transit ridership or other transit impacts is presented to conclude both that a nexus exists between the proposed development and public transit and that the degree of impact provides reasonable justification, the City may require the developer to grant a public easement or dedicate a portion of the parcel for transit passenger bench(es), shelter, or both, and, if appropriate, the construction of a transit passenger bench, shelter, or both; and,
 - 5. Provide lighting at the transit stop to City standards.
 - В. Except as otherwise provided in subsection A. of this section, for development within 300 feet of a Major Transit Stop, provide walkways connecting building entrances and streets adjoining the site, and pedestrian connections to adjoining properties, except where such a connection is impracticable pursuant to subsection 14. of this section.

Response:

The project is greater than 300 feet from a Major Transit Stop and does not provide "buildings"; therefore, these standards do not apply.

12. Assessment, review, and mitigation measures (including best management practices adopted by local agencies) shall be completed for bicycle and pedestrian connections located within the following areas: wetlands, streams, areas noted as Significant Natural Resources Overlay Zones, Significant Wetlands and Wetlands of Special Protection, and Significant Riparian Corridors within Volume III of the Comprehensive Plan Statewide Planning Goal 5 Resource Inventory Documents and Significant Natural Resources Map, and areas identified in regional and/or intergovernmental resource protection programs.

"Assessment" for the purposes of this section means to assess the site-specific development compatibility issues. Site-specific compatibility issues include but are not limited to lighting, construction methods, design elements, rare plants, and human/pet impacts on the resource. "Review" for the purposes of this section includes but is not limited to obtaining appropriate permits from appropriate resource agencies. Mitigation measures, including appropriate use restrictions, required by local, state, and federal agencies shall be completed as part of the construction project. If the project will irreparably destroy the resource, then the resource will take precedence over the proposed bicycle and pedestrian connection.

Response:

The assessment of the appropriateness of the facility took place when the boardwalk was originally constructed in the 1980s. The boardwalk continues to be appropriate for the site with the proposed method of construction and does not currently provide or propose to provide lighting as a result. The project proposes to rehabilitate the vegetated corridor in the area of the boardwalk with additional plantings. The mitigation plantings will allow the public, via this well-used trail connection, to experience a functioning wetland ecosystem while providing connections to surrounding paths, neighborhoods, and streets.

13. New construction of bicycle and pedestrian connections along residential rear lot lines is discouraged unless no comparable substitute alignment is possible in the effort to connect common trip origins and destinations or existing segment links.

Response:

The proposed alignment of the pathway requires construction adjacent to residential rear lot lines due to the proximity of Willow Creek and its associated vegetated corridor. Many segments of the existing boardwalk are immediately adjacent to the rear lot lines and, where possible, the pathway will be relocated to provide additional distance.

- 14. Street and Bicycle and Pedestrian Connection Hindrances. Street, bicycle, and/or pedestrian connections are not required where one or more of the following conditions exist:
 - A. Physical or topographic conditions make a general street, bicycle, or pedestrian connection impracticable. Such conditions include but are not limited to the alignments of existing connecting streets, freeways, railroads, slopes in excess of City standards for maximum slopes, wetlands or other bodies of water where a connection could not reasonably be provided;
 - B. Existing buildings or other development on adjacent lands physically preclude a connection now and in the future, considering the potential for redevelopment; or,
 - C. Where streets, bicycle, or pedestrian connections would violate provisions of leases, easements, covenants, or restrictions written and recorded as of May 1, 1995, which preclude a required street, bicycle,

Response:

Streets are not proposed nor practicable through the natural area. The Willow Creek Boardwalk provides bicycle and pedestrian connectivity to reasonably connect area streets and destinations.

60.55.30. Minimum Street Widths.

60.55.35. Access Standards

[...]



Response: These standards do not apply to the proposed project.

60.55.40. Transit Facilities.

 $[\ldots]$

Response:

Transit facilities are not planned as part of this application. This segment of the Willow Creek Boardwalk connects to surrounding rights-of-way at locations that do not currently have transit service.

60.60. Trees and Vegetation

[...]

60.60.15. Pruning, Removal, and Preservation Standards.

[...]

- 2. Removal and Preservation Standards.
 - A. All removal of Protected Trees shall be done in accordance with the standards set forth in this section.

Response: Removal and preservation specifications are provided within the Arborist Report attached as Exhibit H.

B. Removal of Landscape Trees and Protected Trees shall be mitigated, as set forth in section 60.60.25.

Response: The details of BDC 60.60.25 are reviewed under that section.

- C. For SNRAs and Significant Groves, the following additional standards shall apply:
 - 1. The minimum DBH of non-exempt surveyed trees that must be preserved on a site is as follows:
 - a. Multiple Use zoning districts: Fifteen percent (15%) of the DBH of non-exempt surveyed trees found on a project site.
 - b. Residential, Commercial, or Industrial zoning district: Twenty five percent (25%) of the DBH of non-exempt surveyed trees found on a project site

Response:

The site is located within a Significant Grove within the Residential Mixed B (RMB) zoning district, a residential zoning district. Therefore, 25 percent of the surveyed DBH on the project site must be preserved. Of the trees surveyed, which do not include those present on the entire site to the north and east of the boardwalk, 36.9 percent of the non-exempt tree DBH are planned to be retained. This requirement is met.

- 2. DBH to be retained shall be preserved in cohesive areas, termed Preservation Areas, when development is proposed in SNRAs or Significant Groves.
- 3. Native understory vegetation and trees shall be preserved in Preservation Areas.
- 4. Preservation Areas, conditioned for protection through the Development Review process, shall be preserved in clusters that are natural in appearance rather than in linear strips. Preservation Areas should connect with adjoining portions of the Significant Grove or SNRA on other sites.



- 5. Preservation Areas, conditioned for protection through the Design Review process, shall be set aside in conservation easements and recorded with a deed restriction with Washington County, unless otherwise approved by the City. The deed restriction shall prohibit future development and specify the conditions for maintenance if the property is not dedicated to a public agency.
- 6. Preservation Areas, conditioned for protection through the Land Division process, shall be set aside in tracts and recorded with a deed restriction with Washington County, unless otherwise approved by the City. The deed restriction shall prohibit future development and specify the conditions for maintenance if the property is not dedicated to a public agency.

Response:

The property was created as a Tract with the Waterhouse plat and intended to preserve vegetated corridors, wetland, and riparian areas associated with Willow Creek. The area will largely be retained as vegetated, natural area as part of and following the boardwalk project. Trees are planned for retention as part of cohesive areas within the tract. These standards are met.

- 7. Within the development review process, where a person is presented with a particular decision whether to retain a native or non-native tree, the native species shall be retained provided all other considerations between the two categories of trees remain equal.
 - Non-native tree species may also be retained for aesthetic, unique condition, size, and wildlife habitat purposes.
- 8. Hazardous and dead trees within Significant Groves and SNRAs should be fallen only for safety and left at the resource site to serve as habitat for wildlife, unless the tree has been diagnosed with a disease and must be removed from the area to protect the remaining trees.

Response:

Approximately 31 trees must be removed to provide clearance for the updated boardwalk alignment and assist mitigation of future hazards from the Emerald Ash Borer beetle. Infestation of these trees could pose a threat to trail users and neighboring properties through weakening, causing failure of the tree and limb drop. Several of the trees selected for removal are hazardous and/or dead while others may become hazardous or die at a future date as Emerald Ash Borer spreads throughout the state. Mitigation will be provided as necessary to replace trees within the Significant Grove to the City's standards.

60.60.20. Tree Protection Standards during Development.

- 1. Trees classified as Protected Trees under this Code shall be protected during development in compliance with the following:
 - A. A construction fence must be placed around a tree or grove beyond the edge of the root zone. The fence shall be placed before physical development starts and remain in place until physical development is complete. The fence shall meet the following:
 - 1. The fence shall be a four foot (4') tall orange plastic or snow fence, secured to six foot (6') tall metal posts, driven two feet (2') into the ground. Heavy 12 gauge wire shall be strung



between each post and attached to the top and midpoint of each post. Colored tree flagging indicating that this area is a tree protection zone is to be placed every five (5) linear feet on the fence to alert construction crews of the sensitive nature of the area.

- 2. Other City approved protection measures that provide equal or greater protection may be permitted, and may be required as a condition of approval.
- В. Within the protected root zone of each tree, the following development shall not be permitted:
 - 1. Construction or placement of new buildings.
 - 2. Grade change or cut and fill, except where hand excavation is approved with the submittal of an arborist's report, as part of application approval.
 - 3. New impervious surfaces.
 - 4. Trenching for utilities, irrigation, or drainage.
 - 5. Staging or storage of any kind.
 - 6. Vehicle maneuvering or parking

Response:

Tree protection details are provided within the Arborist Report (Exhibit H). These requirements are met.

60.60.25. Mitigation Requirements.

- 1 The following standards shall apply to mitigation for the removal of Significant Individual Trees or trees within Significant Groves or SNRAs.
 - Α. All mitigation tree planting shall take place in conformance with accepted arboricultural practices and shall be spaced a minimum of ten (10) feet apart.
 - В. As of May 19, 2005, all trees planted for the purpose of tree removal mitigation shall be maintained in accordance with the approved mitigation plan. Monitoring of mitigation planting shall be the ongoing responsibility of the property owner where mitigation trees are located, unless otherwise approved through Development Review. Monitoring shall take place for a period of two (2) years. Trees that die shall be replaced in accordance with the tree replacement standards of this section.
 - C. As of May 19, 2005, all trees planted for the purpose of tree removal mitigation shall be set aside in a conservation easement or a separate tract and shall be designated as "Mitigation Trees" and recorded with a deed restriction identifying the trees as "Mitigation Trees".
 - D. Each Mitigation Tree planted shall be insured through a performance security, equal to 110 percent of the cost of the landscaping, filed with the City for a period of two (2) years to ensure establishment of the mitigation planting.
 - E. Street trees shall not be counted as providing mitigation of a SNRA or Significant Grove.
 - F. Transplanting trees within the project site is not subject to mitigation. However, a performance security is required for



transplanted tree(s) to insure that the tree(s) will be replaced if the tree(s) is dead or dying at the end of two (2) years.

Response:

Approximately 800 tree plantings are planned as part of mitigation of vegetated corridors on the site. Tree mitigation details are provided within the Preliminary Plans (Exhibit A) and the Arborist Report (Exhibit H). These requirements are met.

- Mitigation for the removal of trees from Significant Groves or SNRAs shall be required as follows:
 - A. Calculate the total DBH of the trees to be removed. Denote both deciduous and coniferous trees in separate tables; however, both tables will result in the sum total of the DBH to be removed.
 - B. If the total DBH of trees to be removed is less than or equal to 50% of the total DBH of surveyed trees on the site, then no mitigation is required for the trees to be removed.
 - C. If the total DBH of trees to be removed is greater than 50% of the total DBH of surveyed trees on site, then mitigation is required for the amount of DBH to be removed that exceeds 50% of the total DBH of surveyed trees on site.

For example, if 75 inches is the total amount of DBH to be removed from a site and 60 inches of DBH represents 50% of the total surveyed DBH, then 15 inches of DBH is the total required amount of mitigation.

Response:

Tree protection details are provided within the Arborist Report (Exhibit H). These requirements are met.

Mitigation Calculations for Willow Creek Boardwalk Site	
DBH of Surveyed Trees	1126.00
DBH Proposed for Removal (MAXIMUM removal allowed is 75%	710.00
Surveyed Tree DBH)	
Mitigation Threshold (50% Surveyed Tree DBH)	563.00
DBH to be Mitigated (75% DBH Removal- 50% DBH Threshold =	147.00
25% Surveyed DBH)	
On Site Significant Grove Mitigation (50% of the DBH to be	73.50
mitigated)	

- 3. In addition to the requirements listed in Section 60.60.25.1. Mitigation Requirements, the following mitigation requirements shall apply for the removal of trees from Significant Groves or SNRAs.
 - A. Dead or dying trees within a Significant Grove or SNRA shall be fallen when required for safety. Such tree falling shall not require mitigation. However, the fallen log should remain in the Significant Grove or SNRA, to serve as habitat for wildlife, unless the tree has been diagnosed with a disease and the log must be removed from the area to protect the remaining trees.
 - B. All trees planted for mitigation must meet the following minimum requirements:
 - i. Deciduous trees shall be replaced with native deciduous trees that are no less than two caliper inches (2") in diameter
 - ii. Coniferous trees shall be replaced with native coniferous trees that are no less than three feet (3') in height and no



more than four feet (4') in height. A three foot (3') mitigation tree shall equate to 2" DBH and four foot (4') mitigation tree will equate to 3" DBH.

iii. The total linear DBH measurement of the trees to be removed shall be mitigated with the necessary number of trees at least two caliper inches (2") in diameter.

Response:

Tree protection details are provided within the Arborist Report (Exhibit H). These requirements are met.

- 4. Significant Grove or SNRA on-site mitigation, 2:1 planting ratio.
 - A. Residential, Commercial, or Industrial zoning districts: For tree removal proposals which remove more than 50% and up to and including 75% of the surveyed non-exempt DBH, if all mitigation tree planting is to occur on-site, the ratio for planting shall be on a 2:1 basis.

For example, if 20 inches of DBH is the total amount of required mitigation, if all the mitigation planting occurs on the site where the removal is to occur, then only 10 inches of DBH is required to be planted.

B. Multiple Use zoning districts: For tree removal proposals which remove more than 50% and up to and including 85% of the surveyed non-exempt DBH, if all mitigation tree planting is to occur on-site, the ratio for planting shall be on a 2:1 basis.

For example, if 20 inches DBH is the total amount of required mitigation, if all the mitigation planting occurs on the site where the removal is to occur, then only 10 inches of DBH is required to be planted.

- 5. Significant Grove or SNRA off-site mitigation, 1:1 planting ratio.
 - A. Residential, Commercial, or Industrial zoning districts: For tree removal proposals which remove more than 50% and up to and including 75% of the surveyed non-exempt DBH, if mitigation tree planting is to occur off-site, the ratio for planting shall be on a 1:1 basis.
 - B. Multiple Use zoning districts: For tree removal proposals which remove more than 50% and up to and including 85% of the surveyed non-exempt DBH in Multiple Use zones, if mitigation tree planting is to occur off-site, the ratio for planting shall be on a 1:1 basis.

[...]

7. In-Lieu fee. If the total caliper inch on-site- or off-site tree planting mitigation does not equal the DBH inch removal or if no tree planting mitigation is proposed, the remaining or total caliper inch tree planting mitigation shall be provided as a fee in-lieu payment. The in-lieu fee shall be specified in the Community Development In-Lieu Fee schedule. Fee revenues shall be deposited in the City's Tree Mitigation Fund.

The following two tables illustrate how required mitigation will be calculated:

Mitigation Example for Multiple Use Zones - SAMPLE SITE*		
DBH of Surveyed Trees	1318.00	
DBH Proposed for Removal (MAXIMUM removal allowed is	1120.00	
85% Surveyed Tree DBH)		
Mitigation Threshold (50% Surveyed Tree DBH)	659.00	
DBH to be Mitigated (85% DBH Removal- 50% DBH Threshold	461.00	
= 25% Surveyed DBH)		
On Site Mitigation (50% of the DBH to be mitigated)	230.50	
Off Site OR Partial Off Site Mitigation (100% of the DBH to be	461.00	
mitigated)		

*Please note: This "Sample Site" is fictional and is only meant to be a representation of how the regulations of Section 60.60. (Trees and Vegetation) could be applied to a site.

Mitigation Example for All Other Zones - SITE SAMPLE*	
DBH of Surveyed Trees	1318.00
DBH Proposed for Removal (MAXIMUM removal allowed is 75%	988.00
Surveyed Tree DBH)	
Mitigation Threshold (50% Surveyed Tree DBH)	659.00
DBH to be Mitigated (75% DBH Removal- 50% DBH Threshold =	329.00
25% Surveyed DBH)	
On Site Mitigation (50% of the DBH to be mitigated)	164.50
Off Site OR Partial Off Site Mitigation (100% of the DBH to be	329.00
mitigated)	
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*Please note: This "Sample Site" is fictional and is only meant to be a representation of how the regulations of Section 60.60. (Trees and Vegetation) could be applied to a site.

Response:

Mitigation has been planned on-site for this Significant Grove within a Residential zoning district. The total size of the trees removed has been provided on the attached Preliminary Plans (Exhibit A) and Arborist Report (Exhibit H).

60.67. Significant Natural Resources

60.67.05. Local Wetland Inventory.

Prior to issuing a development permit, the Local Wetland Inventory map shall be reviewed to determine if the site proposed for development is identified as the location of a significant wetland.

- 1. Development activities and uses permitted on a proposed development site identified as the possible location of a significant natural resource, including significant wetlands shall be subject to relevant procedures and requirements specified in CHAPTER 50, of this ordinance.
- 2. Upon City's determination that a site contains wetland as identified on the Local Wetland Inventory map, notice of the proposed development shall be provided to the Division of State Lands (DSL) in a manner and form prescribed by DSL pursuant to ORS requirements.

60.67.10. Significant Riparian Corridors.

Prior to issuing a development permit, the list of Significant Riparian Corridors shall be reviewed to determine if the site proposed for development is identified as being listed corridor.

1 Development activities and uses permitted on a proposed development site identified as the possible location of a significant natural resource, including significant riparian corridors, shall be subject to relevant procedures and requirements specified in CHAPTER 50 of this ordinance.

Response:

The relevant requirements have been addressed. The project site is adjacent to Willow Creek and associated wetlands and vegetated corridors. As such, applications will be required from the Army Corps of Engineers, Department of State Lands, and Clean Water Services. A wetland delineation has been submitted for concurrence and is attached as Exhibit I.

IV. Conclusion

The required findings have been made, and this written narrative and accompanying documentation demonstrate that the application is consistent with the applicable provisions of the Beaverton Development Code. The evidence in the record is substantial and supports approval of the application. Therefore, the Applicant respectfully requests that the City approve this Design Review and Tree Plan application.



Exhibit A: Preliminary Plans (Updated)



Exhibit B: Application Forms (Updated)



Exhibit C: Pre-Application Conference Notes



Exhibit D: Washington County Assessor's Map



Exhibit E: Ownership Information



Exhibit F: Neighborhood Meeting Materials (Updated)



Exhibit G: Service Provider Letters (Updated)



Exhibit H: Arborist Report



Exhibit I: Wetland and Water Delineation Report



Exhibit J: Preliminary Stormwater Report (Updated)



Exhibit K: Materials Examples



Exhibit L: Design Exception Request (New)



Exhibit M: No-Rise Analysis and Certification (New)