

DEVELOPMENT SERVICES DEPARTMENT ENVIRONMENTAL COORDINATOR 450 110<sup>th</sup> Ave NE., P.O. BOX 90012 BELLEVUE, WA 98009-9012

#### **OPTIONAL DETERMINATION OF NON-SIGNIFICANCE (DNS) NOTICE MATERIALS**

The attached materials are being sent to you pursuant to the requirements for the Optional DNS

Process (WAC 197-11-355). A DNS on the attached proposal is likely. This may be the only

opportunity to comment on environmental impacts of the proposal. Mitigation measures from standard

codes will apply. Project review may require mitigation regardless of whether an EIS is prepared. A

copy of the subsequent threshold determination for this proposal may be obtained upon request.

File No. 19-103347-LO

Project Name/Address: Bellefield Office Park VMP at 1450 114th Ave SE

Planner: Reilly Pittman

Phone Number: 425-452-4350

Minimum Comment Period: February 21, 2019

Materials included in this Notice:

- Blue Bulletin
- Checklist
- Vicinity Map
- \_\_\_\_ Plans
  - Other: Vegetation Management Plan

#### OTHERS TO RECEIVE THIS DOCUMENT:

State Department of Fish and Wildlife / <u>Sterwart.Reinbold@dfw.gov;</u> <u>Christa.Heller@dfw.wa.gov;</u>

- State Department of Ecology, Shoreline Planner N.W. Region / <u>Jobu461@ecy.wa.gov</u>; <u>sepaunit@ecy.wa.gov</u>
- Army Corps of Engineers <u>Susan.M.Powell@nws02.usace.army.mil</u>
- Attorney General <u>ecyolyef@atg.wa.gov</u>
- Muckleshoot Indian Tribe Karen.Walter@muckleshoot.nsn.us; Fisheries.fileroom@muckleshoot.nsn.us

City of Bellevue Submittal Requirements	27

### ENVIRONMENTAL CHECKLIST

<u>12/2</u>1/00

Thank you in advance for your cooperation and adherence to these procedures. If you need assistance in completing the checklist or have any questions regarding the environmental review process, please visit or call the Permit Center (425-452-6864) between 8 a.m. and 4 p.m., Monday through Friday (Wednesday, 10 to 4). Our TTY number is 425-452-4636.

#### INTRODUCTION Purpose of the Checklist:

The State Environmental Policy Act (SEPA), chapter 43.21c RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the City of Bellevue identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the City decide whether an EIS is required.

#### Instructions for Applicants:

This environmental checklist asks you to describe some basic information about your proposal. Answer the questions briefly, with the most precise information known, or give the best description you can. You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the Planner in the Permit Center can assist you. The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. Include references to any reports or studies that you are aware of which are relevant to the answers you provide. The City may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impacts.

**Use of a Checklist for Nonproject Proposals:** A nonproject proposal includes plans, policies, and programs where actions are different or broader than a single site-specific proposal.

For nonproject proposals, complete the Environmental Checklist even though you may answer "does not apply" to most questions. In addition, complete the Supplemental Sheet for Nonproject Actions available from Permit Processing.

For nonproject actions, the references in the checklist to the words *project*, *applicant*, and *property* or *site* should be read as *proposal*, *proposer*, and *affected geographic area*, respectively.

Attach an 8<sup>1</sup>/<sub>2</sub>" x 11" vicinity map which accurately locates the proposed site.

City of Bellevue Submittal Requirements

27a

City of Delievue Submittal Nequirements	<b>Z</b> /a
ENVIRONMENTAL CHECKLIST	
	12/21/00
If you need assistance in completing the checklist or have any questions regarding the environme	
process, please visit or call the Permit Center (425-452-6864) between 8 a.m. and 4 p.m., Monday	y through Friday
(Wednesday, 10 to 4). Our TTY number is 425-452-4636.	
BACKGROUND INFORMATION	
Property Owner: Regency Bellefield Holdings	
Proponent: Talon M Management Partners, LLC	
1450 114 <sup>th</sup> Avenue SE, Suite 205	
Bellevue, WA 98004	
Contact Darson Kenny Beeth The Wetershed Company	
Contact Person: Kenny Booth, The Watershed Company (If different from the owner. All questions and correspondence will be directed to the individual listed	
	.)
Address: 750 Sixth Street South, Kirkland, WA 98033	
Phone: (425) 822-5242	
Proposal Title:	
Bellefield Office Park VMP	
Proposal Location (Street address and nearest cross street or intersection) Provide a legal description	otion if available:
The Vegetation Management Plan would apply to an approximately 65-acre area in the City generally bounded by 112 <sup>th</sup> Ave SE to the west, SE 8 <sup>th</sup> Street to the north, the main Mercer Sto the east, and the Mercer Slough Right Channel to the south. Please see the map include Vegetation Management Plan for a graphic depiction of the subject area.	Slough channel
Parcels at least partially located in the subject area include the following: 052405UNKN, 06	6287UNKN,

0662880040.

0662870020, 0662870060, 0662870070, 0662870110, 066288TRCT, 0662880010, 0662880020, 0662880030,

Please attach an 8½" X 11" vicinity map that accurately locates the proposal site.

Give an accurate, brief description of the proposal's scope and nature:

- 1. General description: The proposed Vegetation Management Plan involves the management of existing vegetation within the Bellefield Office Park. Management activities include removal of non-native/invasive vegetation, native restoration, tree-pruning, tree removal, and in-fill planting.
- 2. Acreage of site: Approximately 65 acres.
- 3. Number of dwelling units/buildings to be demolished: Not applicable.
- 4. Number of dwelling units/buildings to be constructed: **Not applicable.**
- 5. Square footage of buildings to be demolished: Not applicable.
- 6. Square footage of buildings to be constructed: **Not applicable.**
- 7. Quantity of earth movement (in cubic yards): No significant earth movement is proposed in connection with the Vegetation Management Plan. Limited ground disturbance could occur incidental to some vegetation management activities (such as plant replacement); however, any disturbed soils would be replaced and existing grades maintained.
- 8. Proposed land use: The current land use is Office (O). No change in land use is proposed.
- 9. Design features, including building height, number of stories, and proposed exterior materials: **Not applicable.**
- 10. Other Not applicable.

Estimated date of completion of the proposal or timing of phasing:

The proposed Vegetation Management Plan (VMP) would replace an existing plan, originally approved in 2013. No substantive changes are being made to the VMP. Work under the new VMP would begin to be implemented after all required approvals are obtained and would continue indefinitely into the future or until a time at which the City indicates expiration of the Vegetation Management Plan. Activities are expected to occur year-round; however, all activities must comply with the rainy season provisions as established in Chapter 23.76 of the Bellevue Land Use Code.

Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

The Vegetation Management Plan is expected to cover all routine vegetation management activities within the office park. Activities not covered by the standards established in the Vegetation Management Plan would be subject to individual permit requirements with the City of Bellevue.



List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

## Bellefield Office Park Vegetation Management Plan, prepared by The Watershed Company (November 2018).

## Talon Bellefield Office Park Property – Wetland Delineation Study, prepared by The Watershed Company (September 4, 2012).

Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. List dates applied for and file numbers, if known.

#### No applications are currently pending related to the activities covered under this project proposal. Unrelated work by Sound Transit is occurring along the western edge of the Bellefield property.

List any government approvals or permits that will be needed for your proposal, if known. If permits have been applied for, list application date and file numbers, if known.

# The proposal requires a Critical Areas Land Use Permit as well as a Clearing and Grading Permit from the City of Bellevue. State and/or federal permits are not anticipated for work covered by the Vegetation Management Plan.

Please provide one or more of the following exhibits, if applicable to your proposal. **Not applicable.** (Please check appropriate box(es) for exhibits submitted with your proposal):

- □ Land Use Reclassification (rezone) Map of existing and proposed zoning
- Preliminary Plat or Planned Unit Development Preliminary plat map
- Clearing & Grading Permit
   Plan of existing and proposed grading
   Development plans
- Building Permit (or Design Review)
   Site plan
   Clearing & grading plan
- □ Shoreline Management Permit Site plan



#### A. ENVIRONMENTAL ELEMENTS

#### 1. EARTH

- a. General description of the site (circle one): Flat Rolling Hilly Steep slopes Mountains Other:
- b. What is the steepest slope on the site (approximate percent slope)?

#### The steepest slope on the site is approximately 20 percent.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

According to Natural Resources Conservation Service (NRCS) soil maps, almost 90 percent of the subject area is comprised of Seattle Muck (Sk). The remaining 10 percent of the subject area is mapped as Alderwood gravelly sandy loam; it is mapped along 112<sup>th</sup> Avenue on the west side of the site. Site soils have been affected by the lowering of Lake Washington in 1916 and placement of fill material in the 1970s (which is not reflected in the NRCS soils map). Today the site contains a mix of organic and imported mineral soils.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

Site soils have been affected by the lowering of Lake Washington in 1916 and placement of fill material in the 1970s. Today the site contains a mix of organic and imported mineral soils. Portions of the original fill have subsided over the years.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

No significant filling or grading is proposed in connection with the Vegetation Management Plan. Limited ground disturbance could occur incidental to some vegetation management activities (such as plant replacement); however, any disturbed soils would be replaced and existing grades maintained.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Limited erosion could occur due to vegetation clearing. However, appropriate temporary erosion control BMPs would be employed as needed.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

## The proposed Vegetation Management Plan does not include the placement of any new permanent impervious surfaces.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

Temporary erosion control BMPs would be employed as needed.

- 2. AIR
  - a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

During Vegetation Management Plan implementation, emissions to the air including equipment exhaust and dust could result from landscaping equipment. These emissions would be temporary and rapidly dissipated.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

There are no known off-site sources of emissions or odor that may affect the proposal.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Standard methods of reducing impacts to air would be employed, including managing exposed soils.

#### 3. WATER

- a. Surface:
- Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

Yes. The subject area is surrounded by Mercer Slough, which flows in to Lake Washington. Several wetlands are also located in the subject area. For further details on wetlands in the subject area, please refer to the Vegetation Management Plan and the Talon Bellefield Office Park Property – Wetland Delineation Study, prepared by The Watershed Company (September 4, 2012).

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

Yes, some vegetation management activities could occur within wetlands and also within 200 feet of Mercer Slough.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

## No filling will occur within the Mercer Slough. Work within wetlands would be limited to plant replacement and mulch placement.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

Yes, some Vegetation Management Plan activities could occur within areas designated as 100year floodplain. However, these activities will not impact flood storage capacity or alter the floodplain in any way.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No intentional discharges of waste materials to surface waters would occur during vegetation management activities. All appropriate BMPs would be implemented to prevent such discharges.

- b. Ground
- 1. Will ground water be withdrawn, or will water be discharged to ground water? Give a general description, purpose, and approximate quantities if known.

## There will be no withdrawal of, or discharge to, ground water associated with implementation of the Vegetation Management Plan.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals...; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

## There will be no waste material from septic tanks or other sources discharged into the ground as part of the vegetation management activities.

- c. Water runoff (including stormwater):
- 1. Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

No new sources of water runoff are proposed as part of the Vegetation Management Plan. Runoff quantities and flow patterns are not expected to change markedly; however, in some cases, landscaping conversions and/or restoration plantings may decrease the overall quantity of runoff from the subject area.

2) Could waste materials enter ground or surface waters? If so, generally describe.

During vegetation management activities, fuel, lubricant or other material spills from equipment could enter ground or surface waters. However, spill cleanup equipment would be present on-site during vegetation management activities.

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

Temporary erosion control BMPs would be employed as needed.

#### 4. PLANTS

- a. Check types of vegetation found on the site and circle appropriate measurements or list species:
  - deciduous tree: alder, maple, aspen, other
  - evergreen tree: **fir**, **cedar**, **pine**, **other**

$\boxtimes$	shrubs
	pasture
	crop or grain
$\boxtimes$	wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other
	water plants: water lily, eelgrass, milfoil, other
$\boxtimes$	other types of vegetation

The site contains an extensive list of vegetation species. For details regarding the vegetation found in the subject area, please see the Bellefield Office Park Vegetation Management Plan prepared by The Watershed Company (November 2018).

b. What kind and amount of vegetation will be removed or altered?

Invasive vegetation to be removed includes bindweed, evergreen blackberry, Himalayan blackberry, climbing nightshade, creeping buttercup, English holly, English ivy, English laurel, European mountain ash, knotweed, poison hemlock, reed canarygrass, Robert's geranium, and yellow-flag iris. Tree removal will be limited to hazard trees. Shrub removal will occur only when necessary for access or maintenance activities or as part of landscaping conversions. All areas cleared of vegetation will be replanted.

c. List threatened or endangered species known to be on or near the site.

No known threatened or endangered plant species have been documented in the City of Bellevue.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Vegetation management activities include removal of non-native/invasive vegetation, native restoration, tree-pruning, tree removal, and in-fill planting. All activities will be carried out utilizing best management practices for work in critical areas and critical area buffers. Overall, invasive removal, native restoration, and other vegetation activities are expected to maintain or improve net critical area functions and values within the subject area.

#### 5. ANIMALS

a. Circle any birds and animals that have been observed on or near the site or are known to be on or near the site:

birds: **hawk**, **heron**, **eagle**, **songbirds**, other: mammals: **deer**, bear, elk, **beaver**, other: **coyote** fish: bass, **salmon**, **trout**, herring, shellfish, other:

b. List any threatened or endangered species known to be on or near the site.

Adult and juvenile chinook salmon and steelhead trout, both listed as Threatened under the federal Endangered Species Act (ESA), migrate through Lake Washington and into Mercer Slough. Adults migrate upstream to reach spawning grounds; juveniles migrate downstream from their natal streams to reach the ocean. Lake Washington and Mercer Slough potentially contain bull trout, a salmonid listed as Threatened under the federal ESA. Lake Washington and Mercer Slough also contain coho salmon, a Species of Concern under the federal ESA.

Bald eagles, listed as Species of Concern under the federal ESA, commonly forage and nest next to large open waters and may pass through the office park. No raptor nests were noted

#### during project fieldwork.

c. Is the site part of a migration route? If so, explain.

Adult and juvenile salmon migrate up and downstream, respectively, through Mercer Slough. Migrating waterfowl may use the slough as resting and foraging areas during spring and fall migrations.

d. Proposed measures to preserve or enhance wildlife, if any:

All significant trees will be preserved, with the exception of hazard trees. Cut trees will be retained as wildlife snags where possible, and cut and pruned material will be left onsite, where appropriate. Tree replacement, invasive removal, native restoration, and other vegetation activities are expected to maintain or improve net critical area functions and values within the subject area.

#### 6. ENERGY AND NATURAL RESOURCES

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

## The types of energy likely to be used to implement the proposed Vegetation Management Plan include gas-powered vehicles and hand-held equipment.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

#### No such features are proposed.

#### 7. ENVIRONMENTAL HEALTH

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

Typical environmental health hazards related to landscaping could occur during implementation of the Vegetation Management Plan.

1) Describe special emergency services that might be required.

Special emergency services are not anticipated to be required. In the unlikely event that an accident (spill, fire, other exposure) were to occur involving toxic chemicals or hazardous wastes, the local fire department's hazardous materials team would respond. If necessary, local medical services might also be required. Safety and accident response supplies would be on-site.

2) Proposed measures to reduce or control environmental health hazards, if any:

Standard precautions would be taken to ensure the safety of work crews. A crew supervisor would be contacted by a crew member immediately upon discovery of a spill. The crew



supervisor would then ensure that the spill is cleaned up in an appropriate manner and would contact the appropriate authorities, if necessary.

- b. Noise
- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

Because some Vegetation Management Plan activities are likely to occur within or adjacent to roads and parking lots, noise associated with vehicular traffic is expected. However, such noise would not affect Vegetation Management Plan activities.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Noises that would be created or associated with implementation of the Vegetation Management Plan include those typically associated with vegetation management activities, such as noises that emanate from mowing equipment or blowers. These noises would only occur in a given area periodically and would be of limited duration. Noise would be limited to normal daytime working hours pursuant to Bellevue City Code 9.18.

3) Proposed measures to reduce or control noise impacts, if any:

Noises associated with implementation of the Vegetation Management Plan would only occur in a given area periodically and would be of limited duration. Noise would be limited to normal daytime working hours pursuant to Bellevue City Code 9.18.

#### 8. LAND AND SHORELINE USE

a. What is the current use of the site and adjacent properties?

The site is currently used as an office park. The office park is situated between the preserved natural areas of the Mercer Slough Nature Park and the City of Bellevue's urban core.

b. Has the site been used for agriculture? If so, describe.

Yes. The Bellefield Office Park was built within the historic extent of Lake Washington and Mercer Slough. Prior to the lowering of Lake Washington in 1916 as a result of the construction of the Hiram Chittenden Locks, the subject area was underwater and formed part of Lake Washington. Following the lowering of the lake level, the area emerged as a peat bog wetland that was subsequently used for agriculture.

c. Describe any structures on the site.

A total of 15 one- and two-story office buildings occupy the subject area.

d. Will any structures be demolished? If so, what?

No.

e. What is the current zoning classification of the site?

#### Office (O).

f. What is the current comprehensive plan designation of the site?

#### Office (O).

g. If applicable, what is the current shoreline master program designation of the site?

#### Urban Conservancy.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

## The on-site wetlands and Mercer Slough have been classified as "environmentally sensitive" areas. Additionally, Mercer Slough is within the mapped 100-year floodplain.

i. Approximately how many people would reside or work in the completed project?

#### Not applicable.

j. Approximately how many people would the completed project displace?

#### Not applicable.

k. Proposed measures to avoid or reduce displacement impacts, if any:

#### Not applicable.

I. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

#### Proposed Vegetation Management Plan activities would not affect existing land use.

#### 9. HOUSING

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

#### Not applicable.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or lowincome housing.

#### Not applicable.

c. Proposed measures to reduce or control housing impacts, if any:

#### No such measures are necessary.

#### **10. AESTHETICS**

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

#### No structures are proposed as part of the Vegetation Management Plan.

b. What views in the immediate vicinity would be altered or obstructed?

Views in the immediate vicinity may be minimally altered as a result of implementing the Vegetation Management Plan. Management activities include removal of non-native/invasive vegetation, native restoration, tree-pruning, tree removal, and in-fill planting.

c. Proposed measures to reduce or control aesthetic impacts, if any:

Development of the Vegetation Management Plan included consideration of aesthetics, including sight distances. Additionally, areas of invasive species removal will be replanted with native vegetation.

#### 11. LIGHT AND GLARE

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

No light or glare will be produced by the proposed Vegetation Management Plan activities.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

No.

c. What existing off-site sources of light or glare may affect your proposal?

Proposed Vegetation Management Plan activities would not be affected by off-site sources of light or glare.

d. Proposed measures to reduce or control light and glare impacts, if any:

No such measures are necessary.

#### 12. RECREATION

a. What designated and informal recreational opportunities are in the immediate vicinity?

Mercer Slough Nature Park is located to the south and east of the subject area. The waters of Mercer Slough that surround the subject area are part of the Mercer Slough Water Trail.

b. Would the proposed project displace any existing recreational uses? If so, describe.

No.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

No such measures are necessary.

#### 13. HISTORIC AND CULTURAL PRESERVATION

a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.



According to the Department of Archeology and Historic Preservation's (DAHP) WISAARD (Washington Information System for Architectural and Archaeological Records Data) website, the Frederick W. Winters House (Washington Heritage Register and National Register) is next to the site on the grounds of the Mercer Slough Nature Park, situated approximately 1,000 feet from the subject area.

b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

#### No such landmarks or evidence is known to be on or next to the site.

c. Proposed measures to reduce or control impacts, if any:

Should historic, archeological, scientific or culturally significant items be encountered during implementation of maintenance activities, work would be temporarily stopped while the appropriate agencies are notified.

#### **14. TRANSPORTATION**

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

Access to the site is via a bridge on 114<sup>th</sup> Avenue SE (taking access from SE 8<sup>th</sup> Street) and a second bridge on SE 15<sup>th</sup> Street (taking access from 112<sup>th</sup> Avenue SE).

b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

The nearest King County Metro transit stop is located at the entrance to the office park (corner of 112<sup>th</sup> Avenue SE and SE 15<sup>th</sup> Street).

c. How many parking spaces would the completed project have? How many would the project eliminate?

It is not anticipated that the proposed Vegetation Management Plan would create or eliminate parking spaces. However, the plan does allow for restoration of existing paved surfaces with vegetation. This could result in a loss of parking spaces. However, any removal of parking spaces would be reviewed under a separate permit application.

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

No.

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

The project will not use, or occur in the immediate vicinity of, water, rail, or air transportation.

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

Traffic generation would not change as result of the proposed project.

g. Proposed measures to reduce or control transportation impacts, if any:

#### No such measures are necessary.

#### 15. PUBLIC SERVICES

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

No.

b. Proposed measures to reduce or control direct impacts on public services, if any.

#### No such measures are necessary.

#### 16. UTILITIES

- a. Circle utilities currently available at the site: **electricity**, **natural gas**, **water**, **refuse service**, **telephone**, **sanitary sewer**, septic system, other.
- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

No additional utilities are proposed as part of the Vegetation Management Plan.

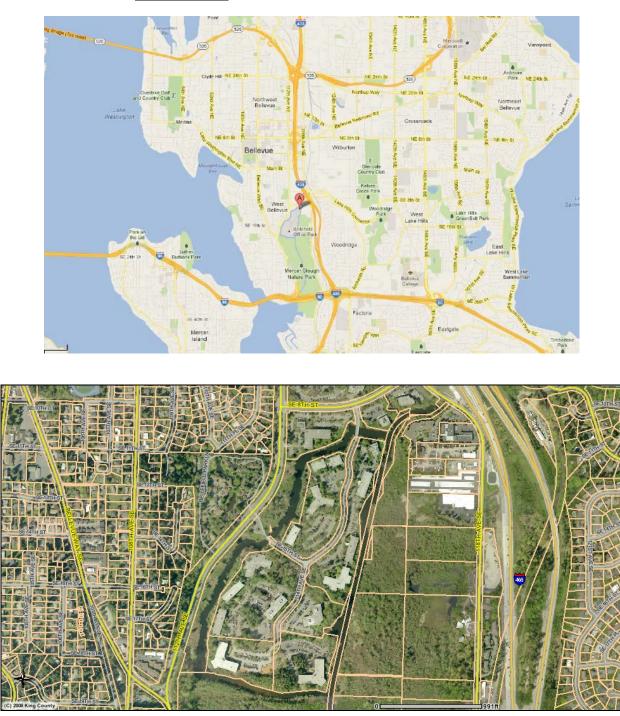
#### Signature

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature

Kenny Booth, AICP Senior Planner The Watershed Company

Date Submitted:



Vicinity Map from Google Maps (top) and iMAP (bottom)

## BELLEFIELD OFFICE PARK Vegetation Management Plan

Prepared for:



Talon M Management Partners, LLC 1450 114th Avenue SE, Suite 205 Bellevue, WA 98004









### November 2018

Watershed Company Reference No. 120710

The Watershed Company Contact Person: Kenny Booth, AICP Senior Planner

Prepared by:



750 Sixth Street South | Kirkland | WA 98033 p 425.822.5242 f 425.827.8136 watershedco.com This page left intentionally blank.

## VEGETATION MANAGEMENT PLAN Bellefield Office Park

Prepared for:



Talon M Management Partners, LLC 1450 114<sup>th</sup> Avenue SE, Suite 205 Bellevue, WA 98004

Prepared by:



750 Sixth Street South Kirkland, WA 98033 p 425.822.5242 f 425.827.8136 watershedco.com

November 2018

The Watershed Company Reference Number: 120710

The Watershed Company Contact Person: Kenny Booth, AICP Senior Planner

**Cite this document as:** The Watershed Company. November 2018. Bellefield Office Park: Vegetation Management Plan. This page left intentionally blank.

# TABLE OF CONTENTS

		F	Page #
1	Intr	roduction	1
2	Site	e History	2
3	Cur	rrent Site Description	3
	3.1	Critical Areas	3
	3.2	Soils	3
	3.3	Vegetation	4
	3.4	Habitat	6
	3.	.4.1 Species of Local Importance	7
4	Loc	cal Regulations	8
5	Mai	nagement Zones and Objectives	12
	5.1	Zone 1 – Building Entrances and Monuments	12
	5.2	Zone 2 – Access Roads - Shoulders and Sightlines	13
	5.3	Zone 3 – Maintained Semi-natural Areas	13
	5.4	Zone 4 – Limited Maintenance Natural Areas	13
	5.5	Zone 5 - Trails	14
	5.6	Zone 6 – Mercer Slough Fringe	14
6	Veg	getation Management Activities	15
	6.1	Sight Distance Clearing	15
	6.2	Building Entrance Improvements	16
	6.3	Landscaping conversions	16
	6.4	Invasive Species Removal	17
	6.5	Tree Removal	19
	6.6	Vegetation Pruning	20
	6.7	Plant Replacement	21
	6.8	New Plantings	21
	6.9	Soil Amendment/Mulch	22
	6.10	Pesticide Usage	22
	6.11	Utility Maintenance and Repair	22
	6.12	Parking Lot Maintenance	23
	6.13	Prohibitions	23
7	Cor	ntingency Plan	24
8	Fur	nctional Assessment	24

# LIST OF FIGURES

Figure 1.	Bellefield Office Park, approximate vegetation management area	2
Figure 2.	Bellefield Office Park landscape overview	6

# LIST OF TABLES

Table 1. Native plants observed within the management area by strata.	4
Table 2. Invasive weeds identified and the associated King County management state	us.
	5
Table 3. Species of Local Importance as defined in LUC 20.25H.150.A.	8
Table 4. Invasive weeds in the VMP and recommended control measures	18
Table 5. Recommended planting densities	19

# APPENDICES

- Appendix A: Site Photos Existing Conditions
- Appendix B: Existing Conditions Wetland Map
- Appendix C: Map of Vegetation Management Zones
- Appendix D: Zone Activity Summary
- Appendix E: Planting Guidelines
- Appendix F: Tree Evaluation Form

## VEGETATION MANAGEMENT PLAN

### BELLEFIELD OFFICE PARK

## **1** INTRODUCTION

The Bellefield Office Park is an approximately 65-acre office park built in the 1970's and 1980's within the historic boundaries of the Mercer Slough wetland area. It borders 112<sup>th</sup> Avenue SE to the west, SE 8<sup>th</sup> Street to the north, and areas of the Mercer Slough Nature Park to the east and south (see Figure 1). The main Mercer Slough channel is on the eastern edge of the office park, while the Mercer Slough Right Channel is on the north, west and south sides of the office park. With the exception of several buildings along SE 8th Street, the entirety of the office park is located between these two channels and essentially functions as an island accessed by two bridges. A total of 15 one- and two-story office buildings occupy the island, with additional associated drive aisles, parking lots, and landscaped areas making up the remainder of the land area. Pedestrian trails link the buildings and parking areas and otherwise provide recreational opportunities for tenants. Access to the park is via a bridge on 114<sup>th</sup> Avenue SE (taking access from SE 8th Street) and a second bridge on SE 15th Street (taking access from 112<sup>th</sup> Avenue SE). In addition to being located directly adjacent to the Mercer Slough, the Bellefield Office Park includes dozens of fragmented wetlands. As portions of the original fill have subsided over the years, small wetland areas have appeared in heavily manicured areas of the park as well as the more natural areas.

In 2008, when the global economy declined the ownership group of Bellefield Office Park began to see occupancy levels within the park decline. Occupancy in the first quarter of 2008 was 98% and declined to 64% by 2012. As result of the poorly performing asset the ownership group slashed operating budgets. Specifically, the landscape budget was cut by 62% between the years of 2010 and 2012. During this timeframe little to no landscape maintenance was performed on the property as evidenced by the budgets cuts. The ownership group officially defaulted on their loan in April of 2012 and Talon Portfolio Services was court appointed as the General Receiver. As the General Receiver, Talon Portfolio Services was tasked to return the asset to a Class A operated property.

Landscape and vegetation maintenance activities within the office park, including wetland areas, came under scrutiny in 2012. After several years of limited to no landscape, activities aimed at returning the site to a maintenance level commensurate with pre-foreclosure conditions resulted in a stop-work order (13-103857-EA) from the City of Bellevue (City). As a result, an initial vegetation management plan (VMP) was prepared and submitted to the City in 2013. The VMP was intended to aid the property owners, managers, and landscape contractors in resuming landscape maintenance activities while simultaneously outlining objectives and appropriate actions that could be undertaken, in the short- and long-term, throughout all areas of the office park. The 2013 VMP was ultimately approved by the City and acted as the official guiding document for vegetation management activities on the Bellefield Office Park property. The VMP is set to expire in July of 2019, and as such, a new VMP will need to be approved by the City in order for on-site vegetation management activities to continue. This document represents a new version of the VMP, though no substantive changes are being made.

Upon City of Bellevue approval of this new VMP, compliance with the management prescriptions and best management practices found in this document shall constitute compliance with City of Bellevue critical area and critical area buffer landscaping and vegetation management regulations.



Figure 1. Bellefield Office Park, approximate vegetation management area.

# 2 SITE HISTORY

The Bellefield Office Park was built within the historic extent of Lake Washington and the Mercer Slough. Prior to the lowering of Lake Washington in 1916 as a result of the construction of the Hiram Chittenden Locks, the subject area was underwater and formed part of Lake Washington. Following the lowering of the lake level, the area emerged as a peat bog wetland that was subsequently used for agriculture. In the early 1970's non-structural fill was imported and placed on top of the peat. Filling was augmented by spoils from the dredging of existing and new channels along the slough.

Development on the newly created island began in 1974 with construction of the first office building. Over the subsequent years, additional office buildings were constructed, with much of the north end developed prior to 1980 and the south end developed by 1990.

Due to the source of the historic, non-structural fill on the island, the Environmental Protection Agency completed a site assessment in 1986 and the Washington Department of Ecology eventually determined the site eligible for 'No Further Action' upon the recording of a Restrictive Covenant for the property. The covenant, still in place today, allows for any contaminated soils to remain in place until such time that substantial new improvements, which result in excavation of hazardous soils, occur. It is the intention of this VMP to comply with the covenant by proposing activities and actions that do not exceed any development threshold spelled out in the covenant.

# **3** CURRENT SITE DESCRIPTION

### 3.1 Critical Areas

Bellefield Office Park was built within the historic extent of Mercer Slough and the area retains numerous wetland pockets, some of which are continuous with the adjacent City of Bellevue Mercer Slough Nature Park.

The Watershed Company completed a wetland delineation study for a southern portion of the site in August 2012; the remainder of the vegetation management area was evaluated at a reconnaissance level in February 2013. Delineated and approximated wetland areas are depicted on the map in Appendix B. All on-site wetlands and their respective buffers are regulated by the City of Bellevue's critical areas regulations (Chapter 20.25H of the Bellevue Land Use Code [LUC]).

### 3.2 Soils

According to Natural Resources Conservation Service (NRCS) soil maps, almost 90 percent of the vegetation management area is comprised of Seattle Muck (Sk). Sk is an organic poorly drained soil characterized by a high water table and frequent inundation. The remaining 10 percent of the area is mapped as Alderwood gravelly sandy loam; it is mapped along 112<sup>th</sup> Avenue on the west side of the site.

Site soils have been affected by the lowering of Lake Washington in 1916 and the placement of fill material in the 1970s (which is not reflected in the NRCS soils map). Today the site contains a mix of organic and imported mineral soils.

### 3.3 Vegetation

The vegetation management area contains a mix of native and ornamental plants. Landscaping areas around building entrances typically contain non-native ornamental shrubs and groundcovers. Native salal and Oregon grape are also common groundcover plants around buildings and within parking medians at the north end of the site. Birch trees are common and many areas are maintained as lawn.

Native wetland pockets vary in character. Forest cover commonly includes black cottonwood and Pacific willow. Wetland shrub areas are characterized by vine maple, red-osier dogwood, hardhack spirea, twinberry and willows. Emergent wetlands are characterized by cattails or lawn grass mixed with buttercup, sedges and rushes. Dense cattails extend up to the edge of parking lots and roads in areas, particularly at the south end of the site. Despite being a native species, cattail in this setting is demonstrating invasive qualities by growing as a monoculture and excluding other native plants. Native plants identified in the management area include, but are not limited to the species listed in Table 1.

Invasive weedy plant species within the vegetation management area are primarily English ivy and Himalayan blackberry. Locally-dominant patches of other weed species are also present. Table 2 below lists observed occurrences of invasive plants onsite. Onsite weed species are generally not regulated by King County because they are already widespread within the County. However, control is recommended where feasible to prevent widespread infestation and competition with more desirable species.

	Common Name	Botanical Name		Common Name	Botanical Name
	Big-leaf maple	Acer macrophyllum	Groundcovers	American brooklime	Veronica americana
	Black cottonwood	Populus balsamifera		Arrowleaf	Alisma trivale
	Cascara	Rhamnus purshiana		Bracken fern	Pteridium aquilinum
Trees	Douglas-fir	Pseudotsuga menziesii		Curly dock	Rumex crispus
Ē	Hooker's willow	Salix hookeriana		Deer fern	Blechnum spicant
	Lodgepole pine	Pinus contorta		Field horsetail	Equisetum arvense
	Lombardy poplar	Populus nigria		Field mint	Mentha arvensis
	Pacific willow	Salix lucida ssp. Iasiandra		Giant horsetail	Equisetum telmateia

Table 1. Native plants observed within the management area by strata.

	Paper birch	Betula papyrifera		Lady fern	Athyrium filix-femina
	Red alder	Alnus rubra		Lawn grasses	Poa sp.
	Sitka willow	Salix sitchensis		Miners lettuce	Claytonia sibirica
	Western hemlock	Tsuga heterophylla		Slough sedge	Carex obnupta
	Western red cedar	Thuja plicata		Small bedstraw	Galium trifidum
	Beaked hazelnut	Corylus cornuta		Small fruited bulrush	Scirpus microcarpus
	Hardhack spirea	Spiraea douglasii		Soft rush	Juncus effusus
	Nootka rose	Rosa nutkana		Spike rush	Eleocharis sp.
	Red elderberry	Sambucus racemosa	Vine	Sword fern	Polystichum munitum
	Red huckleberry	Vaccinium parvifolium		Watson's willowherb	Epilobium ciliatum
Shrubs	Red-osier dogwood	Cornus sericea		White clover	Trifolium repens
Shr	Salal	Gaultheria shallon		Trailing blackberry	Rubus ursinus
	Salmonberry	Rubus spectabilis			
	Snowberry	Symphoricarpos albus	1		
	Tall Oregon grape	Mahonia aquifolium			
	Twinberry	Lonicera involucrata			
	Vine maple	Acer circinatum			

Common Name	Botanical Name	King County Status
Bindweed	Convolvulus sp.	weed of concern
Blackberry, Evergreen	Rubus laciniatus	non-regulated noxious weed
Blackberry, Himalayan	R. armeniacus	non-regulated noxious weed
Climbing nightshade	Solanum dulcamara	weed of concern
Creeping buttercup	Ranunculus repens	weed of concern
English holly	llex aquifolium	weed of concern
English ivy	Hedera helix	non-regulated noxious weed
English laurel	Prunus laurocerasus	weed of concern
European mountain ash	Sorbus aucuparia	weed of concern
Knotweed	Polynonum sp.	non-regulated noxious weed
Poison hemlock	Conium maculatum	non-regulated noxious weed
Reed canarygrass	Phalaris arundinacea	non-regulated noxious weed
Robert's geranium	Geranium robertianum	non-regulated noxious weed
Yellow-flag iris	Iris pseudacorus	non-regulated noxious weed

## 3.4 Habitat

The majority of the 65-acre vegetation management area is encircled by Mercer Slough and is adjacent to the Mercer Slough Nature Park to the south and east. As shown in the aerial overview below (Figure 2), the Bellefield Office Park is situated between the preserved natural areas of the Nature Park and the City of Bellevue's urban core. Onsite, a fragmented mosaic of wetlands and maintained landscaping surrounds the existing buildings, access roads, and parking lots.

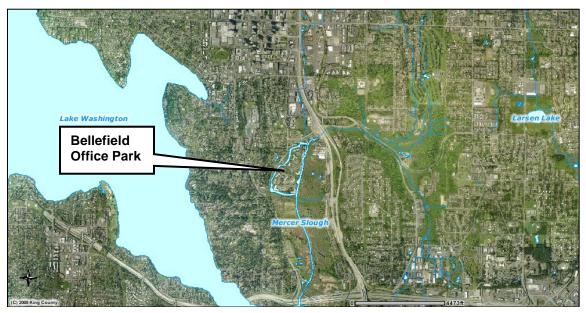


Figure 2. Bellefield Office Park landscape overview

The management area provides habitat for birds, herptiles, and small mammals. Highly mobile species such as birds are the most likely to cross the numerous breaks in the onsite habitat to reach and utilize the vegetated areas. The patches of native habitat may support herptile and small mammal species whose lifecycle needs can be met without the need to leave the site. However, these taxa are more likely to avoid unvegetated areas and roads, and they would face impediments to immigration from outside sources. Less mobile species and species requiring large home ranges are unlikely to utilize the property consistently, as the fragmented nature of the habitat patches is not conducive to supporting their needs for extended periods.

Habitat patches within developed urban areas are vital to urban bird conservation, although they don't support the species that larger forests on the outskirts of urbanizing areas can. Songbirds in particular are likely to use forested areas in the vegetation management area. Birds are better able than other wildlife species to travel among habitat fragments, such as those within the office park. As described above, some herptiles may have their entire life cycle requirements met in the office park wetlands and natural areas, particularly in areas of seasonal inundation, and native frogs were observed in many emergent wetlands at the south end of the property at the time of our August 2012 wetland delineation study. However, amphibians likely avoid migration across developed and highly used areas into and out of the adjacent Mercer Slough Nature Park. The park may provide a source of herptiles to onsite wetlands that are contiguous with the park or separated by only narrow and lightly used breaks.

The diversity of plant species and structure throughout the site provides for many different food and cover opportunities for wildlife. Berry-producing plants within the vegetation management area, such as salmonberry and snowberry, provide a food source for songbirds, and other plants provide seeds, cones, and catkins for wildlife. Non-native blackberry brambles also provide a food source and refuge for birds and small mammals. A structurally diverse community of trees and shrubs provide perching and nesting opportunities, and cattails may attract specialized species such as red-winged blackbird and marsh wren.

Waterfowl frequent areas of seasonal and permanent inundation and may occasionally use the vegetation management area's wetlands. The presence of development and human disturbance probably would deter more sensitive species and limit use of the vegetation management area to synanthropic species such as Canada goose and mallard. However, a wider range of waterfowl species make use of the slough itself. Anadromous and resident fish utilize the surrounding Mercer Slough.

### 3.4.1 Species of Local Importance

The City of Bellevue designates habitat associated with species of local importance as a critical area (LUC 20.25H.150.B). Species of local importance (LUC 20.25H.150.A) are listed in Table 3.

Considering onsite conditions and landscape position, the vegetation management area may provide habitat, primarily perching and foraging habitat, for the following species of local importance: red-tailed hawk, merlin, great blue heron, pileated woodpecker, Vaux's swift, and purple martin. Bald eagles and osprey commonly forage and nest next to large open waters and may pass through the office park. No raptor nests were noted during our fieldwork, but three bald eagle nests are mapped within a one-mile radius (WDFW, PHS on the Web). The eastern channel of Mercer Slough is mapped by King County as part of the Coho and Chinook salmon and steelhead trout distribution area; cutthroat trout and sockeye salmon are mapped within the entire slough channel. In general, wetland areas that are continuous with Mercer Slough and fringe wetlands tend to have the more intact habitat features than the maintained office park interior.

Common name	Scientific name
Bald eagle	Haliaeetus leucocephalus
Peregrine falcon	Falco peregrinus
Common loon	Gavia immer
Pileated woodpecker	Dryocopus pileatus
Vaux's swift	Chaetura vauxi
Merlin	Falco columbarius
Purple martin	Progne subis
Western grebe	Aechmophorus occidentalis
Great blue heron	Ardea herodias
Osprey	Pandion haliaetus
Green heron	Butorides striatus
Red-tailed hawk	Buteo jamaicensis
Western big-eared bat	Plecotus townsendii
Keen's myotis	Myotis keenii
Long-legged myotis	Myotis volans
Long-eared myotis	Myotis evotis
Oregon spotted frog	Rana pretiosa
Western toad	Bufo boreas
Western pond turtle	Clemmys marmorata
Chinook salmon	Oncorhynchus tshawytscha
Bull trout	Salvelinus confluentus
Coho salmon	Oncorhynchus kisutch
River lamprey	Lampetra ayresi

Table 3. Species of Local Importance as defined in LUC 20.25H.150.A.

## 4 LOCAL REGULATIONS

Vegetation management activities within critical areas and critical area buffers in the City of Bellevue are regulated under the Critical Areas Overlay District regulations (LUC 20.25H) and are also subject to the Critical Areas Land Use Permit criteria found in LUC 20.30P. Applicable regulations from those Code sections are listed below (in italics) along with project-specific responses.

### 20.30P.140 Critical Areas Land Use Permit Decision Criteria

A. The proposal obtains all other permits required by the Land Use Code.

<u>Response</u>: In addition to a Critical Areas Land Use Permit, the project applicant will apply for a Clear and Grade Permit from the City of

Bellevue. No other City of Bellevue land use or construction permits will be required of this project.

*B.* The proposal utilizes to the maximum extent possible the best available construction, design and development techniques which result in the least impact on the critical area and critical area buffer.

<u>Response</u>: The proposed project involves the management of existing vegetation within the Bellefield Office Park. Management activities include removal of non-native/invasive vegetation, native restoration, tree-pruning, tree removal, and in-fill planting. All activities will be carried out utilizing best management practices for work in critical areas and critical area buffers. Overall, invasive removal, native restoration, and other vegetation activities are expected to maintain or improve net critical area functions and values within the vegetation management area.

*C. The proposal incorporates the performance standards of Part 20.25H LUC to the maximum extent applicable.* 

<u>Response:</u> See the discussion of wetland and stream performance standards (per LUC 20.25H.080A and 100) below for compliance with all applicable performance standards.

*D. The proposal will be served by adequate public facilities including streets, fire protection, and utilities.* 

<u>Response:</u> The proposed VMP will not alter existing utilities and it will not result in the need for additional public facilities.

E. The proposal includes a mitigation or restoration plan consistent with the requirements of LUC 20.25H.210; except that a proposal to modify or remove vegetation pursuant to an approved Vegetation Management Plan under LUC 20.25H.055.C.3.i shall not require a mitigation or restoration plan.

<u>Response</u>: As indicated, a mitigation or restoration plan is not required for proposals involving vegetation management plans.

*F.* The proposal complies with other applicable requirements of this code.

<u>Response</u>: The proposed VMP complies with all other applicable City of Bellevue Land Use Codes, including 20.25H and 23.76.

# LUC 20.25H.055.C.3.i.vi – Vegetation Management Plan Requirements

- (1) A description of existing site conditions, including existing critical area functions and values;
- (2) A site history;
- (3) A discussion of the plan objectives;
- (4) A description of all sensitive features;
- (5) Identification of soils, existing vegetation, and habitat associated with species of local importance present on the site;
- (6) Allowed work windows;
- (7) A clear delineation of the area within which clearing and other vegetation management practices are allowed under the plan; and
- (8) Short- and long-term management prescriptions, including characterization of trees and vegetation to be removed, and restoration and revegetation plans with native species, including native species with a lower growth habit. Such restoration and revegetation plans shall demonstrate that the proposed Vegetation Management Plan will not significantly diminish the functions and values of the critical area or alter the forest and habitat characteristics of the site over time.

<u>Response:</u> This Vegetation Management Plan includes all of the above described components.

# LUC 20.25H.080.A & 100, Stream and Wetland Performance Standards

1. (A). Lights shall be directed away from the stream (wetland).

<u>Response:</u> No lights are proposed as part of the vegetation management project.

2. (B.) Activity that generates noise such as parking lots, generators, and residential uses, shall be located away from the stream (wetland), or any noise shall be minimized through use of design and insulation techniques.

<u>Response</u>: The proposed project will not generate any significant amounts of noise. The only new noise generated within the project area would be vegetation management activities (mowing, pruning, blowing). Activities would occur sporadically during weekday work hours and would be minimized to the maximum extent feasible. Noises are most likely to be incidental to adjacent office-related noise (primarily vehicular traffic). Adjacent critical area functionality is already impacted by the established land use and VMP activities are not expected to significantly alter the existing functions and values. 3. (C.) Toxic runoff from new impervious area shall be routed away from the stream (wetlands).

<u>Response</u>: No new impervious surfaces are proposed as part of the project.

4. (D.) Treated water may be allowed to enter the stream (wetland) critical area buffer.

<u>Response</u>: As indicated in the prior response, new impervious surfaces are not proposed and there is no proposed change in current drainage patterns. Therefore, water treatment is not necessary.

5. (E.) The outer edge of the stream (wetland) critical area buffer shall be planted with dense vegetation to limit pet or human use.

<u>Response</u>: Vegetation management activities are planned throughout areas of wetland, wetland buffer, and stream buffer. Areas of invasive species removal will be replanted with native vegetation.

6. (F.) Use of pesticides, insecticides and fertilizers within 150 feet of the edge of the stream critical area buffer shall be in accordance with the City of Bellevue's "Environmental Best Management Practices," now or as hereafter amended. (Ord. 5680, 6-26-06, § 3)

<u>Response:</u> All activities associated with vegetation management, including pesticide, insecticide and fertilizer usage, will be in compliance with the City of Bellevue's "Environmental Best Management Practices".

# 20.25H.160 Performance standards – Habitat Associated with Species of Local Importance

If habitat associated with species of local importance will be impacted by a proposal, the proposal shall implement the wildlife management plan developed by the Department of Fish and Wildlife for such species. Where the habitat does not include any other critical area or critical area buffer, compliance with the wildlife management plan shall constitute compliance with this part.

<u>Response:</u> Vegetation management activities are not expected to impact habitat associated with species of local importance.

# 5 MANAGEMENT ZONES AND OBJECTIVES

Management of on-going vegetation activities within the Bellefield Office Park is the main objective of this VMP. Extensive fieldwork was undertaken prior to original development of this plan. Fieldwork included a comprehensive wetland delineation within the southern half of the office park and a wetland reconnaissance within the northern half. In addition to wetland delineation and reconnaissance, the completed fieldwork included a detailed inventory of existing vegetation within the office park. This information has been utilized to divide the entire office park into distinct and separate zones. All areas of the office park currently not occupied by buildings or impervious surfaces have been given a zone designation. Zones are based on several factors including, adjacency to buildings and paved areas, existing vegetation, presence or absence of wet conditions, past maintenance patterns, and future objectives. Based on these criteria, a total of six main zones were identified. In general, zones are listed in the order of level of maintenance or alteration allowed. Therefore, Zone 1 shall have the most flexibility while Zone 6 is essentially a 'no touch' zone. A detailed description of the zones is found below and a map of the zones can be found in Appendix C.

In general, objectives for each zone are to efficiently manage the office park in a fashion that allows for continued office use while protecting the abundant natural resources on the property. Vegetation management includes consideration of the following factors: existing infrastructure, sight distance, erosion control, water quality, stormwater infiltration, safety requirements, invasive species control, and vegetation and wildlife habitat preservation and enhancement.

### 5.1 Zone 1 – Building Entrances and Monuments

<u>Description</u>: This zone includes all areas within the immediate vicinity of building entrances and monument sign locations at street intersections. In general, these areas have been maintained in the most ornamental fashion of all areas of the office park. The entrance areas are adjacent to walkways, drive aisles, and building doors. Common vegetation found in these areas includes invasive English ivy, salal, and ornamental shrubs. The monument sign locations include areas of ornamental or highly manicured native vegetation surrounding signs indicating building names.

Maintenance activities in Zone 1 are likely to include landscaping conversions (new plantings or plant replacements), mowing, pruning, invasive removal, leaf-litter removal, and mulch applications.

<u>Objectives:</u> This VMP is intended to provide flexible management prescriptions for maintaining and improving these highly altered and extremely visible areas of the office park. These areas will be updated from time-to-time, to remain current and to help attract tenants, and this plan intends to provide the flexibility for this to occur. Following Crime Prevention Through Environmental Design (CPTED) principles, the VMP seeks to establish and maintain clearly defined entries and visible monument signs.

### 5.2 Zone 2 – Access Roads - Shoulders and Sightlines

<u>Description:</u> While not including the paved portion of the roadways or sidewalks, this zone includes all areas immediately adjacent to the main roadways within the office park. This includes the road shoulders and areas within the vicinity of intersections. Maintenance activities in Zone 2 are likely to include mowing, pruning, landscaping conversions (new plantings or plant replacements), leaf-litter removal and mulch applications.

<u>Objectives:</u> The intent of this zone is to provide flexibility related to vehicular and pedestrian safety while also allowing for cohesion with adjacent zones.

### 5.3 Zone 3 – Maintained Semi-natural Areas

<u>Description</u>: This zone covers building perimeters and most vegetated areas in the office park interior. This zone is characterized by interior landscaping and parking lot medians, some of which contain densely vegetated wetland pockets. Vegetation in this zone commonly contains trees with mowed lawn understory, locally dominant shrub patches, and cattail monocultures. Invasive ivy surrounds the perimeter of several buildings within this zone and a few locally dominant patches of non-native blackberry are present. Any future conversion from paved surface to vegetated area shall be given a Zone 3 designation.

Activities in Zone 3 are likely to include mowing, pruning, landscaping conversions (new plantings or plant replacements), invasive weed removal, leaf-litter removal and mulch applications.

<u>Objectives:</u> The intent of this zone is to provide practical management prescriptions that allow reasonable maintenance of high-visibility, high-traffic areas to increase pedestrian safety and maintain an office park aesthetic. General principles of CPTED will guide maintenance decisions, such as improving site operations/controls and fostering natural surveillance by maximizing sight corridors.

### 5.4 Zone 4 – Limited Maintenance Natural Areas

<u>Description</u>: Relatively intact wetlands, vegetated primarily by native trees and shrubs, were selected for this zone designation. These wetland pockets, which

are concentrated at the south end of the management area, are relatively large and have permanent and/or seasonal inundation hydroperiods.

Annual vegetation management in Zone 4 will be limited to the perimeter and primarily consist of pruning and mowing to manage encroachment into adjacent parking spaces and usable areas. New plantings or plant replacements, invasive weed removal, and hazard tree removal may also occur in this zone.

<u>Objectives:</u> Given the proximity to parking lots, access roads and buildings, some periodic maintenance of these wetland areas is necessary. Providing clear guidance on the limits of pruning and general maintenance to minimize critical area disturbance to the extent practicable is the intent of this zone.

### 5.5 Zone 5 - Trails

<u>Description</u>: This zone includes all existing trail areas within the Bellefield Office Park. Onsite trails are graveled and approximately 5 feet wide. Currently, vegetation on either side of the trail is mowed or cut back. The open space around trail segments varies, but is generally 3 feet from either trail edge at a minimum. Vegetation within this maintained zone is commonly grass lawn, but also includes shrubs and trees. Some picnic tables and benches lie along trail; the perimeter of those features will need to be maintained as well.

Maintenance activities in Zone 5 are restricted and will likely be limited to pruning and mowing in the short-term. Over the long-term, new plantings or plant replacements, invasive weed removal, and hazard tree removal may also occur in this zone.

<u>Objectives:</u> It is the intent of this zone to provide for continued safe pedestrian access throughout the office park while also protecting adjacent native vegetation.

### 5.6 Zone 6 – Mercer Slough Fringe

<u>Description:</u> This zone primarily includes those areas of the office park waterward of the perimeter trail zone. This area directly abuts the adjacent Mercer Slough and contains significant blocks of existing native vegetation. Existing native vegetation includes paper birch, black cottonwood, red alder, red-osier dogwood, red elderberry, and hardhack spirea. Locally dominant nonnative blackberry patches occur throughout the zone. The fringe zone also contains mowed lawn, which extends up to the edge of the slough channel at several locations in the northern end of the site.

Allowed maintenance actions in Zone 6 are limited and primarily consist of invasive removal, hazard tree removal, and restoration planting. Since mowed

lawn currently characterizes portions of this zone, mowing may continue until restoration planting is implemented.

<u>Objectives:</u> It is the intent of this zone to provide for preservation of existing native vegetation while allowing for restoration of degraded areas. Allowed maintenance in this zone is restricted to maintaining or improving existing conditions.

## **6** VEGETATION MANAGEMENT ACTIVITIES

This section identifies specific vegetation management activities proposed under this VMP. As described above in Section 5, activities are tied to specific and distinct zones throughout the office park. Appendix D includes a summary of allowed activities within each of the six zones.

### 6.1 Sight Distance Clearing

<u>Description</u>: Pruning, trimming or weeding undesirable vegetation that is limiting sight distance, limiting complete and safe use of the roadways within the office park, limiting the viewing of required signage, obstructing utilities, or preventing the ingress and egress for maintenance of such utilities.

<u>BMP Approach</u>: In general, the sight distance clearing activities should be limited to an established road shoulder width, sight-distance triangle, or view corridor as applicable. Sight distance clearing is expected to occur in Zones 2 through 4. The extent of clearing will be the minimum necessary to alleviate any of the above described sight distance obstructions.

Pruning of native trees and shrubs should be limited to the extent necessary to accomplish the objective, and should in no case endanger the plant or plants. Pruning that may be done any time of year with little impact to the living tree or shrub includes removal of diseased, broken, dying or dead limbs. Live branch pruning should be performed late in the dormant season or very early spring, before new buds form. Branch collars should not be removed or injured, and cut branches should not be painted. The definition of pruning does not include topping trees which is an inappropriate technique that can lead to increased risk of tree failure. Pruned materials should be placed so that they do not interfere with the growth of other vegetation, or should be disposed of off-site. All pruning should be done by a qualified professional in conformance with International Society of Arboriculture (ISA) standards. In general, pruning of landscaped areas should encourage and direct new growth, maintain plant health, maintain landscape visibility, and improve safety.

Weeding or removal of non-native plants that present an ongoing problem because of their growth patterns or prolificacy should be considered. Any removed vegetation must be replaced with appropriate native species, as identified in Appendix E.

### 6.2 Building Entrance Improvements

<u>Description</u>: Building entrance and monument sign improvements will entail pruning, weeding, and landscaping conversions or plant removal followed by installation of new plants. In some circumstances building entrance improvements will include ADA upgrades that may entail grading and/or building activities. Grading and building activities are not covered by this VMP; although vegetation alterations and enhancements associated with grading or building would be covered by this VMP. These activities are limited exclusively to Zone 1.

<u>BMP Approach</u>: Prior to the start of work, wetland and non-wetland areas as approximated on the figure in Appendix B should be reviewed. Vegetation changes or improvements must take into account plant tolerance for wetland or non-wetland conditions as applicable. The plant species guidelines in Appendix E shall be consulted prior to species selection.

Soil disturbance during replanting should be the minimum necessary to complete installation. Care must be taken to leave soils intact and maintain the existing grade.

Any pruning or weeding activities should follow BMPs listed in the clearing section above (Section 6.1).

### 6.3 Landscaping Conversions

Description: Within Zones 1, 2 and 3, it is proposed that some areas be converted from one general type of vegetation to another. This would primarily consist of a shift from lawn to native trees and shrubs or a converse shift from trees and shrubs to lawn. The general goal is a consolidation of lawn into fewer and larger areas, while installing native plantings in smaller landscape areas. This approach results in simplified maintenance by directing mowing activities to fewer and larger areas of lawn, while improving vegetation quality within the more fragmented areas of the office park.

<u>BMP Approach</u>: The following considerations should guide landscaping conversions. 1) Lawn areas that are difficult to mow due to variable grade or moisture conditions are good candidates for conversion to a low-maintenance planting plan. Lawn areas may be replanted with emergent plants, such as

rushes, that do not require mowing, or trees and shrubs. 2) Landscaped plant beds that are high-maintenance and not well suited to the surrounding land use may be converted to lawn or replanted with more suitable plant species.

Landscaping conversions must either maintain or improve the existing condition of native vegetation within wetland and wetland buffer areas. Known wetland areas (as documented in Appendix B) that are vegetated by native trees and shrubs may not be converted to mowed lawn.

Prior to the start of work, wetland and non-wetland areas as approximated on the figure in Appendix B should be reviewed. Vegetation changes or improvements must take into account plant tolerance for wetland or nonwetland conditions as applicable. The plant species guidelines in Appendix E shall be consulted prior to species selection.

Soil disturbance during replanting should be the minimum necessary to complete installation. Care must be taken to leave soils intact and maintain the existing grade.

Any pruning or weeding activities should follow BMPs listed in the clearing section above (Section 6.1).

### 6.4 Invasive Species Removal

<u>Description</u>: The removal of non-native species for the purposes of promoting the successful establishment of native plantings that might otherwise have difficulty competing with aggressive invasive plants. Site-wide locally dominant patches of invasive weeds will be targeted for eradication. Weeds listed on the King County or Washington State Noxious Weeds List will be selectively removed over time.

<u>BMP Approach</u>: The landscape contractor selected to complete this work must be familiar with native and non-native plant species in our region to ensure inadvertent native plant damage is avoided.

An integrated pest management (IPM) approach should be used to control invasive weeds throughout the management area. IPM is a sustainable approach to weed control that considers budget restrictions, environmental impacts, and health risks. IPM employs cultural, mechanical, biological, and chemical modes of control. A qualified site manager or crew leader should determine when pesticide use (chemical control) is appropriate. Chemical control should be the last option after trying all reasonable and cost effective non-chemical control options. Manual removal is the preferred control method for invasive weeds. Any pesticides (herbicide, insecticide, fungicide) must be applied by a State licensed applicator in accordance with the product labeling. Due to the prevalence of onsite wetlands and proximity to Mercer Slough, any herbicide product used at this site should be limited to those approved for aquatic-areas.

Invasive plant species observed in the management area and recommended control measures are listed in the table below.

Common Name	Botanical Name	Control Measures*
Bindweed	Convolvulus sp.	Loosen soil and grub out vines by the root.
Blackberry, Evergreen Blackberry, Himalayan	Rubus laciniatus Rubus armeniacus	Manual control is recommended. Cut vines back, then grub out by the root. Repeat as new sprouts emerge. Pesticide may be applied to large/problematic infestations.
Climbing nightshade	Solanum dulcamara	Loosen soil and grub out vines by the root.
Creeping buttercup	Ranunculus repens	Manually dig out, removing roots and runners.
English holly	llex aquifolium	Small plants: grub out by the root.
		Large plants: cut at the base and apply herbicide to the base to control resprouting.
English ivy	Hedera helix	Manual removal is highly effective. Loosen soil with a shovel or weed fork and pull vines out by the roots. Dispose of uprooted plant material off-site. Repeat as new sprouts emerge.
English laurel	Prunus laurocerasus	Small plants: grub out by the root.
		Large plants: cut at the base and apply herbicide to the base to control resprouting.
European mountain ash	Sorbus aucuparia	Small plants: grub out by the root.
		Large plants: cut at the base and apply herbicide to the base to control resprouting.
Knotweed	Polynonum sp.	Small patches can be removed by manually digging up roots. Cutting, covering and herbicide stem injections are also viable IPM control methods. All knotweed plant material must be disposed of in the garbage. This plant spreads vegetatively and by seed.
Poison hemlock	Conium maculatum	Pull up or dig out individual plants by the root. Wear protective gear. Dispose of plant material and seed heads off-site.
Reed canarygrass	Phalaris arundinacea	Cut back and keep shaded.
Robert's geranium	Geranium robertianum	Pull out by the root.
Yellow-flag iris	Iris psuedacorus	IPM control methods include manual rhizome removal, covering, and pesticide applications.

Table 4. Invasive weeds in the VMP and recommended control measures.

\*Manual control is the primary methodology; other cultural, biological or chemical controls may be used on a case-by-case basis at the direction of the site manager or crew leader.

When invasive weed removal results in significant patches of bare ground, new plants shall be installed to replace them. See Appendix E for a list of appropriate species for the site. Native plants are preferred site-wide. The recommended plant densities for replanting are listed in the table below.

Plant type	Spacing (triangular on-center)
Trees	9-feet
Shrubs	6-feet
Emergent groundcovers	3-feet
Stakes (e.g. willow)	1-foot

### 6.5 Tree Removal

### Hazard Trees:

<u>Description</u>: Periodic management of significant trees that have become a hazard will be a necessary part of long-term site management. Removal of significant trees (greater than 8-inches diameter, measured 4 feet above existing grade) requires approval from a certified arborist. Depending on the arborist's recommendations, hazard tree management may involve pruning, complete removal, or snag creation.

<u>BMP Approach</u>: Grounds inspections should be conducted periodically by the landscape contractor or property manager. Monitoring should occur on a recurring basis. For the purposes of this activity, hazard trees include those significant trees (greater than 8-inches diameter, measured four feet above existing grade) that are at risk of failure (including branches) and that are an imminent threat to public safety or are posing an imminent risk of damage to an existing structure, roadway, parking area, walkway, or other permanent improvement. Hazard trees may include trees that are healthy but are growing in a fashion that puts their (or others) future health at risk (e.g., thinning in limited circumstances). Upon a determination that a significant tree poses a hazard, an arborist shall be consulted to confirm the hazard level and determine mitigation actions. If an arborist determines that conditions are not favorable to tree replacement in the same location, native shrubs and/or groundcover can be substituted and tree replacement can occur elsewhere on the property at a 4:1 ratio.

Alternatively, if it would not cause an ongoing hazard or negatively impact habitat, it may be more beneficial to leave a snag rather than entirely remove the tree. In this case, an arborist shall be consulted regarding whether leaving a snag is appropriate under existing conditions, whether on-site tree replacement is advised, and if so, in what ratio. Cut hazard trees should generally be left on-site to function as habitat features unless otherwise advised by an arborist. Written approval from arborists (see Appendix F) shall be kept on-file with the property manager.

### Non-Significant Trees:

Description: Non-significant trees (less than 8-inches diameter, measured 4 feet above existing grade) may be managed without approval of an arborist. Removal of non-significant trees may only be done to reduce overcrowding of vegetation, to remove trees that, if left, will cause significant damage to sidewalks, parking areas, buildings, underground utilities, overhead wires or other structures, and to conform to the site distance clearing requirements outlined elsewhere in this VMP. Small tree removal shall be the minimum necessary to accomplish the tasks described above.

<u>BMP Approach</u>: Grounds inspections should be conducted periodically by the landscape contractor or property manager. Monitoring should occur on a recurring basis. Upon a determination that a non-significant tree poses future damage to sidewalks, parking areas, buildings, underground utilities, overhead wires, or other structures, the tree can be removed. The removal shall be the minimum necessary to alleviate the concern. Within wetlands and in most other circumstances, removal shall constitute cutting trees flush with the ground surface and shall not entail removal of the rootball or other ground disturbance within. Removal of non-significant trees shall be mitigated through replanting at a 1:1 ratio with appropriate native species (see Appendix E). Tree replacement can occur elsewhere on the property in a location that is not expected to result in future risk to structures.

### 6.6 Vegetation Pruning

<u>Description</u>: Maintaining vegetation management zones will require pruning on an annual or bi-annual basis over the long-term. Some zones, such as Zone 5, may only require periodic maintenance to control potential hazards. However, constant maintenance will be necessary to maintain sight distances, parking medians, building entrances and pedestrian trails.

<u>BMP Approach</u>: Pruning of native trees and shrubs should be limited to the extent necessary to accomplish the objective, and should in no case endanger the plant or plants. Pruning that may be done any time of year with little impact to the living tree or shrub includes removal of diseased, broken, dying or dead limbs. Live branch pruning should be performed late in the dormant season or very early spring, before new buds form. Branch collars should not be removed or injured, and cut branches should not be painted. The definition of pruning does not include topping trees which is an inappropriate technique that can lead to increased risk of tree failure. Pruned materials shall be placed so that they do not interfere with the growth of other vegetation, or should be disposed of off-

site. All pruning shall be done by a qualified professional in conformance with ISA standards. In general, pruning of landscaped areas should encourage and direct new growth, maintain plant health, maintain landscape visibility, and improve safety.

### 6.7 Plant Replacement

<u>Description:</u> Plant replacements are anticipated over the long-term to maintain a healthy landscape. To maintain the grounds, dead or dying plants may be replaced over time. Additionally, plants that are not suitable in their current location due to VMP zone objectives or general site conditions may be replaced with one or more alternate plants. This includes trees less than 8 inches in diameter. Pruning options will be considered before selecting plants for removal and replacement.

<u>BMP Approach</u>: Prior to the start of work, wetland and non-wetland areas as approximated on the figure in Appendix B should be reviewed. Replacement plants must take into account plant tolerance for wetland or non-wetland conditions as applicable. The plant species guidelines in Appendix E shall be consulted prior to species selection. In general, removed plants and replacement plants should be of equivalent size when a 1:1 ratio is used. Otherwise, the replacement plant ratio should be increased to account for any reduction in plant size.

Soil disturbance during replanting should be the minimum necessary to complete installation. Care must be taken to leave soils intact and maintain the existing grade.

### 6.8 New Plantings

<u>Description</u>: New trees, shrubs and herbaceous plants may be installed over time. New plantings are likely to occur over the long-term as part of future restoration within Zones 4 and 6.

<u>BMP Approach</u>: Prior to the start of work, wetland and non-wetland areas as approximated on the figure in Appendix B should be reviewed. New plant selections must take into account plant species tolerance for wetland or non-wetland conditions as applicable. The plant species guidelines in Appendix E shall be consulted prior to species selection.

Soil disturbance during replanting should be the minimum necessary to complete installation. Care must be taken to leave soils intact and maintain the existing grade.

### 6.9 Soil Amendment/Mulch

<u>Description:</u> Site soils are generally nutrient-rich and soil amendments are not needed in most cases. Any soil amendments would entail incorporation of compost to improve plant health and vigor. A mulch-layer or mulch-rings may be applied as needed to suppress weed growth and retain soil moisture. It is the intent of this VMP to limit soil/mulch activities to those practices that do not trigger the need for permit coverage from either the U.S. Army Corps of Engineers or the Washington Department of Ecology.

<u>BMP Approach</u>: Prior to the start of work, wetland and non-wetland areas as approximated on the figure in Appendix B should be reviewed. Soil amendments should not be placed in wetland areas. Care must be taken to leave wetland soils intact and maintain the existing grade.

Arborist wood chips (chipped woody material, approximately one- to three-inch pieces) are the recommended mulch material. Mulch applications should be three to four inches deep. An 18-inch diameter is recommended for mulch rings. Compost and mulch should be free of weed seeds, garbage, or other contaminants.

### 6.10 Pesticide Usage

<u>Description:</u> Where manual invasive weed control efforts are unsuccessful, pesticide use may be permitted. The term pesticides, includes herbicides and fungicides. Any pesticide applications would target specific species and/or problem areas following an IPM approach, which is described in Section 6.4.

<u>BMP Approach</u>: As per the sustainable IPM strategy, non-chemical controls should be used where feasible to limit or avoid pesticide use. A qualified site manager or crew leader should determine when pesticide use (chemical control) is appropriate. Any pesticide application must be administered by a State licensed applicator in accordance with product label application rates and provisions. Any herbicide product used within the vegetation management area shall be limited to those approved for aquatic-areas.

### 6.11 Utility Maintenance and Repair

<u>Description:</u> Organic peat soils that underlie fill throughout the office park continue to subside. This disrupts utility connections and warrants periodic maintenance and repair. Utilities are primarily located along the perimeter of each building. Utilities repairs will occur on an as-needed basis and will involve limited and temporary soil disturbance. Vegetation impacts are expect to be minimal, since most utility connections are concentrated in narrow nonvegetated or sparsely vegetated strips within the building setbacks. <u>BMP Approach</u>: Prior to the start of work, wetland and non-wetland areas as approximated on the figure in Appendix B should be reviewed. If the utility work lies within a wetland, then the protocol should be reviewed to determine if local, state and/or federal permits are required. If the work will occur in non-wetland, then work may proceed following the BMPs listed below.

The area of temporary disturbance should be the minimum necessary to complete the maintenance or repair task. Disturbed soils should be replaced upon completion of work to restore the pre-existing grade. Any disturbed vegetation should be restored to the pre-existing condition through seeding or replanting as appropriate. Any material stockpiles should be stored outside of wetlands and buffers. All debris should be hauled away upon completion of work.

### 6.12 Parking Lot Maintenance

<u>Description</u>: The open parking lots continue to subside, which causes asphalt cracks and flood hazards. To maintain the parking lots and associated access roads as functional amenities, periodic repaving is necessary. Additionally, dense and overhanging vegetation in parking lot medians encroaches into parking spaces and obscures sightlines. In addition to repaving, parking lot maintenance, as it relates to vegetation activities, includes conversion of pavement to pervious vegetated areas and temporary disturbance of buffer areas associated with repaving.

<u>BMP Approach</u>: Prior to the start of work, wetland and non-wetland areas as approximated on the figure in Appendix B should be reviewed. Since wetland conditions extend up to the edge of existing paving in many locations, care must be taken to limit repaving work to the existing developed footprint. The contractor must have a Certified Erosion and Sediment Control Lead (CESCL) on-staff and appropriate temporary protection measures should be taken during construction. Any material stockpiles should be stored outside of wetlands and (vegetated) buffers. All debris should be hauled away upon completion of work. In those instances that pavement is converted to a pervious surface, a Zone 3 designation shall be applied and the new pervious area shall be restored according to the planting guidelines in Appendix E.

### 6.13 Prohibitions

The following actions are not authorized under this vegetation management plan. Under no circumstances can the following occur:

- No change of grade or significant soil disturbance is allowed within wetland areas
- No topping of trees (excluding snag creation from hazard trees)

- No excessive pruning of shrubs (such as topping) unless it will promote healthy new growth in accordance with ISA standards
- No cutting of significant trees without hazard tree removal approval from a certified arborist
- No heavy equipment use or stockpiling within wetland areas
- No debris disposal in wetlands or wetland buffers (excluding woody debris generated by hazard tree removal)

# 7 CONTINGENCY PLAN

This section outlines procedures to follow in instances of inadvertent or unforeseen critical area or critical area buffer impacts that may occur, which are not covered in this VMP. During these instances, as soon as an impact is identified, all work will stop except that which is needed to immediately stabilize the site for safety or erosion control concerns. A qualified professional wetland biologist shall be contacted to make an immediate site inspection. During the inspection, the following information will be collected by the wetland biologist:

- 1. The extent of the impact will be sketched onto an appropriate site plan or map of the area.
- 2. The impact area will be photographed from several locations and perspectives sufficient to capture the nature and extent.
- 3. The nature and extent of the impact will be summarized in writing.
- 4. A short term plan for stabilization, erosion control, etc. will be developed, if needed.

Following the site visit, the wetland biologist shall furnish a summary of the impact in memorandum format to the property manager or owner for distribution to the City. The memo may contain recommendations for repair or mitigation. However, the final plan for rectifying the impact will require approval from the City prior to implementation. Once the City has approved the general strategy for repair or mitigation, the professional shall develop a draft repair/mitigation plan and distribute to the property manager/owner and the City.

# 8 FUNCTIONAL ASSESSMENT

It is the intention of this VMP to ensure that no significant diminishment in critical area and critical area buffer functions and values results from future

landscape maintenance activities at the Bellefield Office Park. The activities covered under this VMP provide the opportunity to couple routine maintenance with habitat management and enhancement. It is the goal of this document for BMPs to maintain the site in a manner consistent with the established land use and critical area protections. The following paragraphs describe how the methods outlined in this document accomplish this goal.

VMP Zones and clear BMPs for maintenance tasks will focus and restrict vegetation maintenance to maximize critical area protections amidst the existing development at this unique site.

BMPs designed for hazard tree removal include retention of standing and downed wood. These are valuable habitat features for wildlife, including birds, herptiles, and small mammals. When safety dictates the removal of a hazard tree, the VMP prescribes replanting ratios to off-set the loss and snag creation where feasible. Enhancing a proximate critical area with native species designed to meet future safety needs preserves habitat function by promoting a lowmaintenance landscape that require less intrusion for ongoing maintenance.

Invasive weed control following an IPM approach is a long-term goal for the vegetation management area. Controlling and removing localized weed patches will improve the natural character of the site and allow more native plants to become established. Left untended, invasive plants common to the site, such as English ivy and non-native blackberry, would continue to spread. Controlling these weeds will benefit existing native plants, reduce further losses, and make the vegetation more sustainable.

Additionally, any invasive weed removal that results in bare ground will be accompanied by installation of replacement plants in the form of native species. Not only is this likely to result in denser, more complex vegetative structure than the existing infestation, and provide an aesthetic visual screen, but the resultant native plant community will represent an improvement from a wildlife perspective. Limiting the use of herbicides further protects the functions of buffers and critical areas.

Landscaping conversions should reduce or consolidate mowed areas throughout the office park. Several small wetland pockets in parking lot medians will likely be replanted with an emergent plant community that doesn't require mowing or a shrub/tree community. This will improve water quality functions within those wetlands. Consolidating high-maintenance areas, such as grass lawn, is intended to reduce site disturbance overall. Additionally, installing the right plant in the right place minimizes maintenance for the long-term and creates a more sustainable landscape. Following this VMP will also foster a more diverse habitat designed to enhance not only habitat function, but other buffer functions such as stormwater flow attenuation, and water quality improvement.

Landscaping conversions, plant replacement, and restoration activities will include wetland and buffer enhancements. Successful and well-planned enhancement by definition results in buffer and critical area improvement. This VMP promotes enhancement where feasible, particularly in the Mercer Slough Fringe (Zone 6).

This VMP recognizes the need for expedient and unrestrictive maintenance. Provisions for short- and long-term activities allow the office park to be returned to its pre-foreclosure status while concurrently making improvements that benefit the office park and embedded critical areas. Careful adherence to this VMP should result in a functional and professional office park with a selectively managed landscape that at a minimum maintains, and over the long-term improves, existing critical area functions and values. APPENDIX A

### **Site Photos – Existing Conditions**

(Photos taken November 2018)

This page left intentionally blank.



Photo 1. Zone 1 – Building entrance (Arbor building)

Photo 2. Zone 1 – Building entrance (Alderwood building)



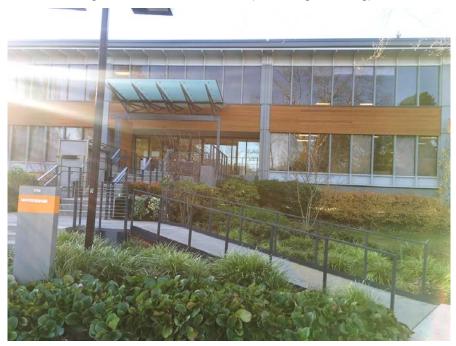


Photo 3. Zone 1 – Building entrance and monument (Woodridge building)

Photo 4. Zone 1 – Building monument (Primrose School)



Photo 5. Zone 2 – Access road



Photo 6. Zone 2 - Access road shoulders and sightlines



Photo 7. Zone 2 Access road shoulders and sightlines (construction on 114<sup>th</sup>)



Photo 8. Zone 3 – Maintained semi-natural area, northern end of site.





Photo 9. Zone 3 - Maintained semi-natural area at southern end of site.

Photo 10. Zone 4 - Natural area, limited maintenance





Photo 11. Zone 4 - Natural area, limited maintenance

Photo 12. Zone 4 - Natural area, limited maintenance





Photo 13. Zone 4 – Natural area, limited maintenance

Photo 14. Zone 5 - Trails.



Photo 15. Zone 5 - Trails.



Photo 16. Zone 5 - Trails.



Photo 17. Zone 5 - Trails.



Photo 18. Zone 6 – Mercer Slough fringe (looking south from west of buildings)





Photo 19. Zone 6 – Mercer Slough fringe (looking south from west of buildings)

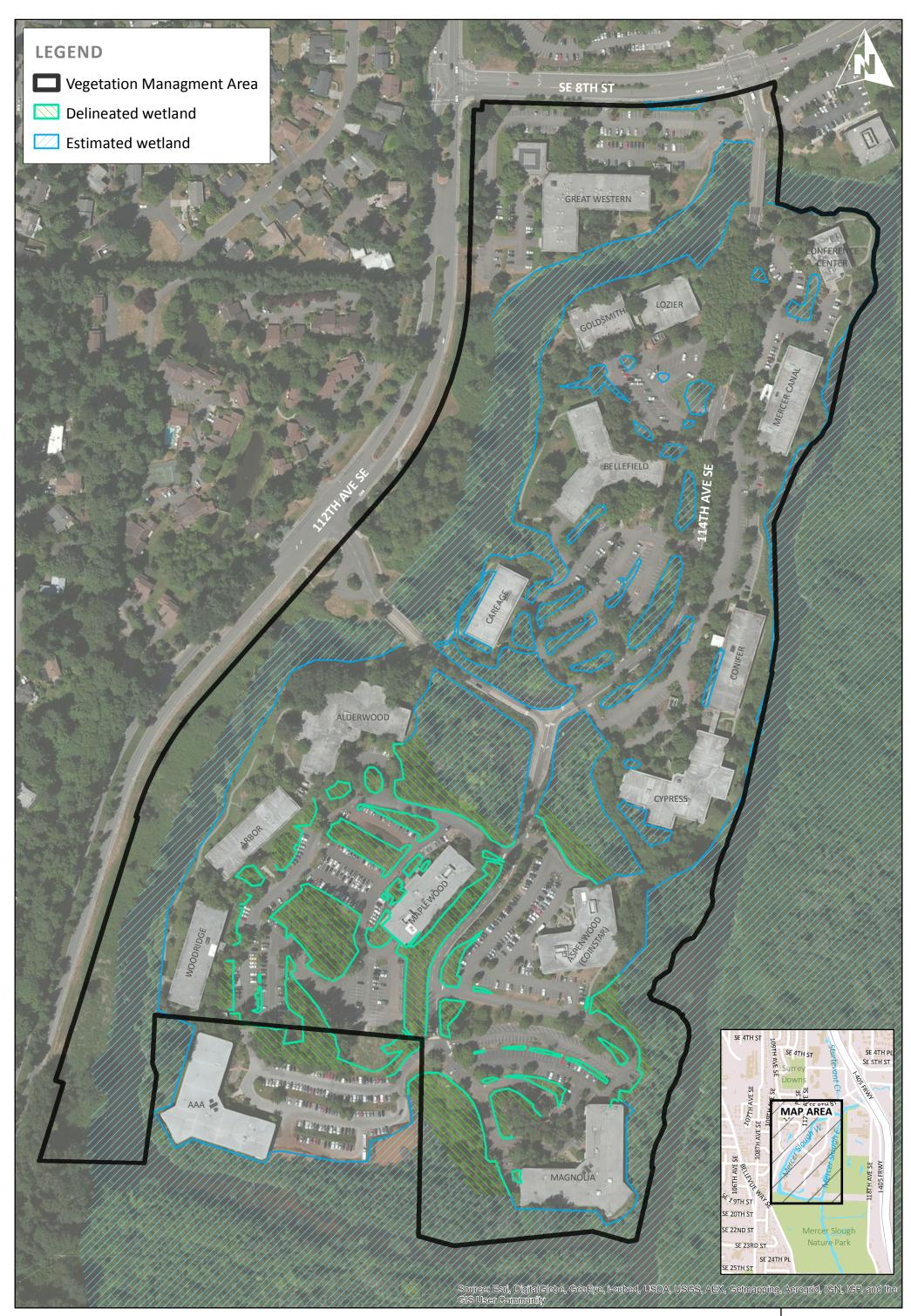
Photo 20. Zone 6 – Mercer Slough fringe (looking south from west of buildings)



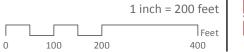
APPENDIX B

### **Existing Conditions – Wetland Map**

This page left intentionally blank.



# **Approximate Extent of Wetlands**





This page left intentionally blank.

APPENDIX C

# Map of Vegetation Management Zones

This page left intentionally blank.

### LEGEND

Monument

--- Shared-use Trail - 2.5 mi.

Vegetation Managment Area

### **Vegetation Management Zones**

- 1) Building entrances and monuments 3.2 ac.
- 2) Site access, roads, and sightlines 4.6 ac.
- 3) Maintained, semi-natural 8.8 ac.
- 4) Natural, limited maintenance 4.2 ac.
  - 5) Trail buffer 3.0 ac.
  - 6) Mercer Slough fringe 11.5 ac.



ALDERWOOD

A 20 8 82 84

SE 8TH ST

GATEWAY 112

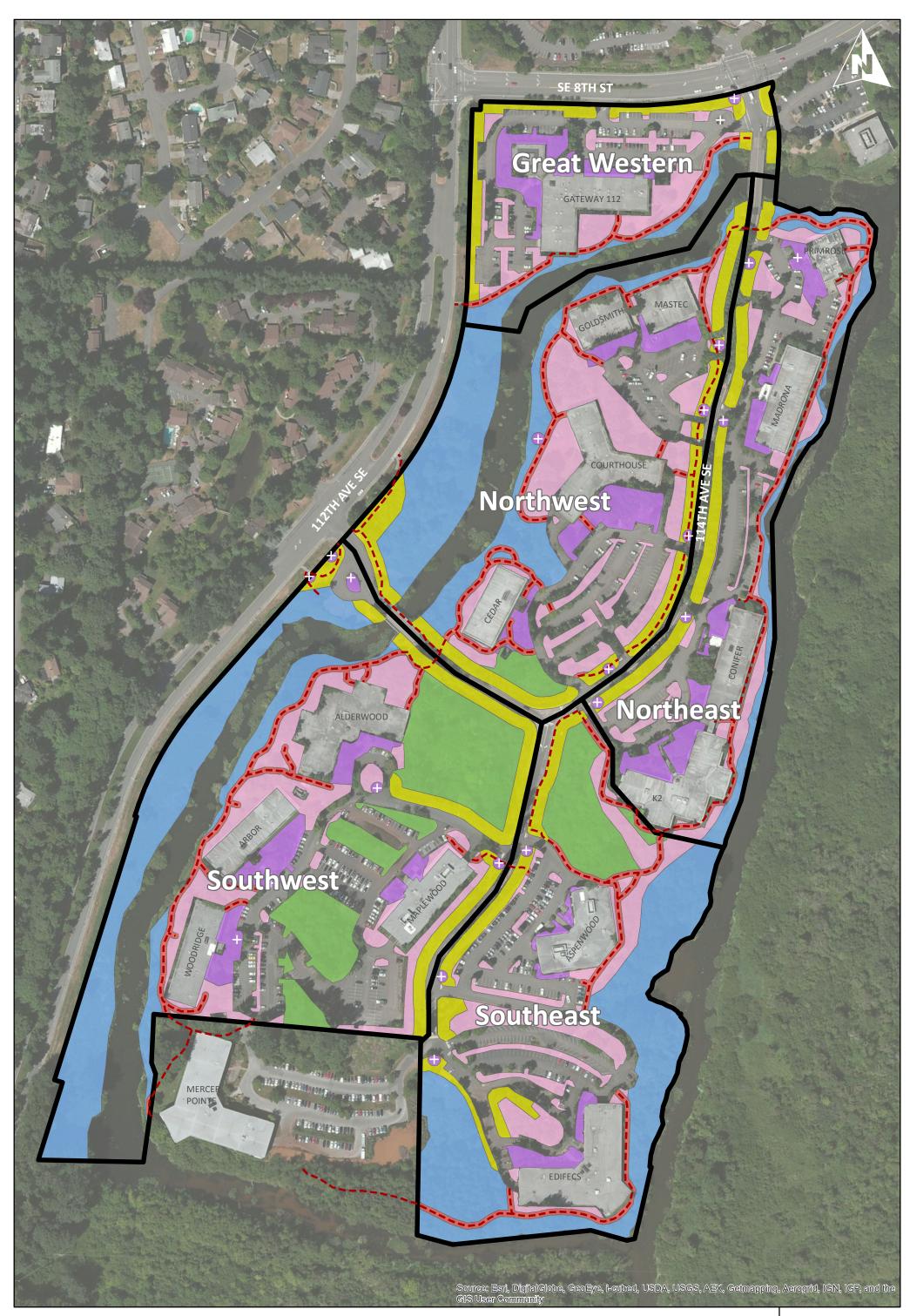
GOLDSMI

COURTHOUSE

BELLEFIELD OFFICE COMPLEX - VEGETATION MANAGEMENT PLAN Vegetation Management Zones



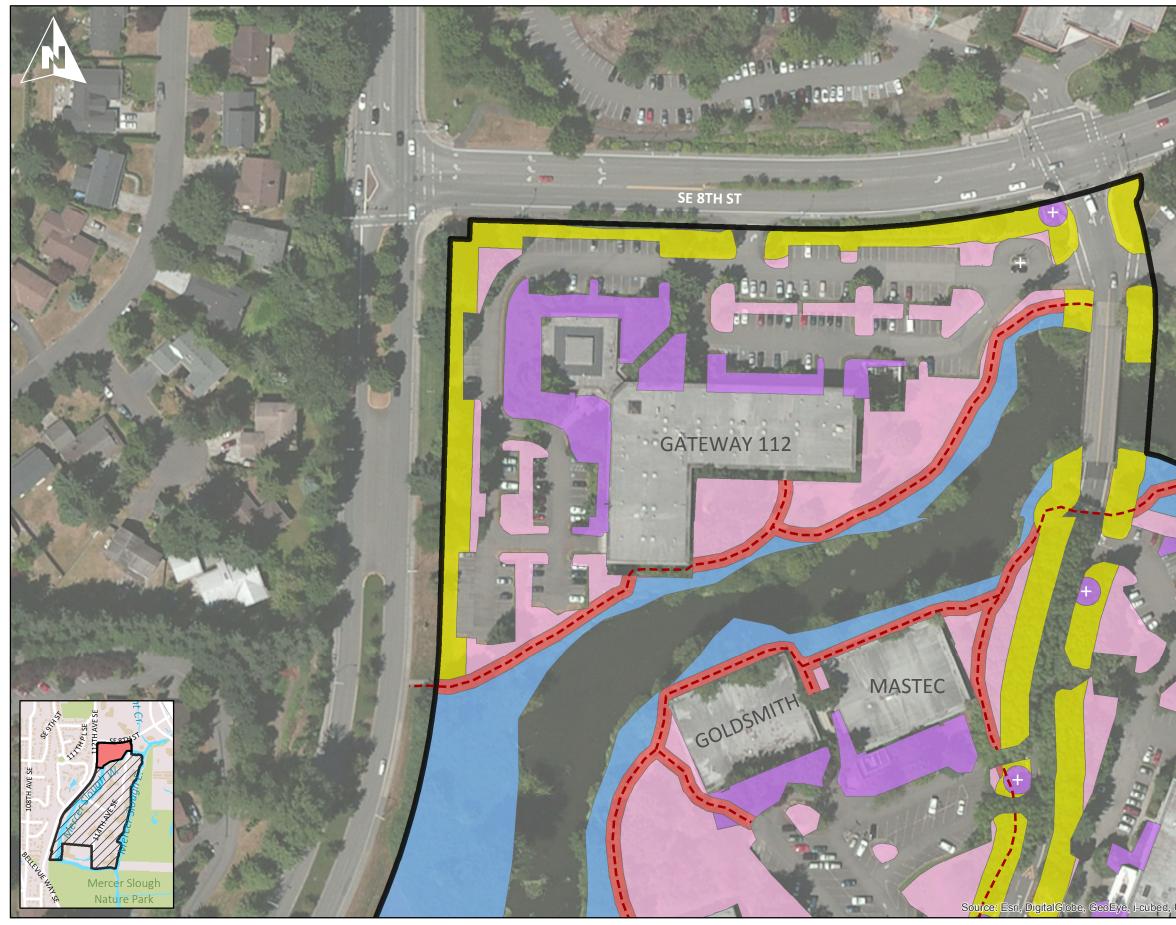




# BELLEFIELD OFFICE COMPLEX - VEGETATION MANAGEMENT PLAN Field Map Index







BELLEFIELD OFFICE COMPLEX - VEGETATION MANAGEMENT PLAN Field Map 1: Great Western



- Monument
- Shared-use Trail
- Uegetation Managment Area

#### Vegetation Management Zones

- 1) Building entrances and monuments
- 2) Site access, roads, and sightlines
- 3) Maintained, semi-natural
- 4) Natural, limited maintenance
- 5) Trail buffer
- 6) Mercer Slough fringe

USDA, USCS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community

200

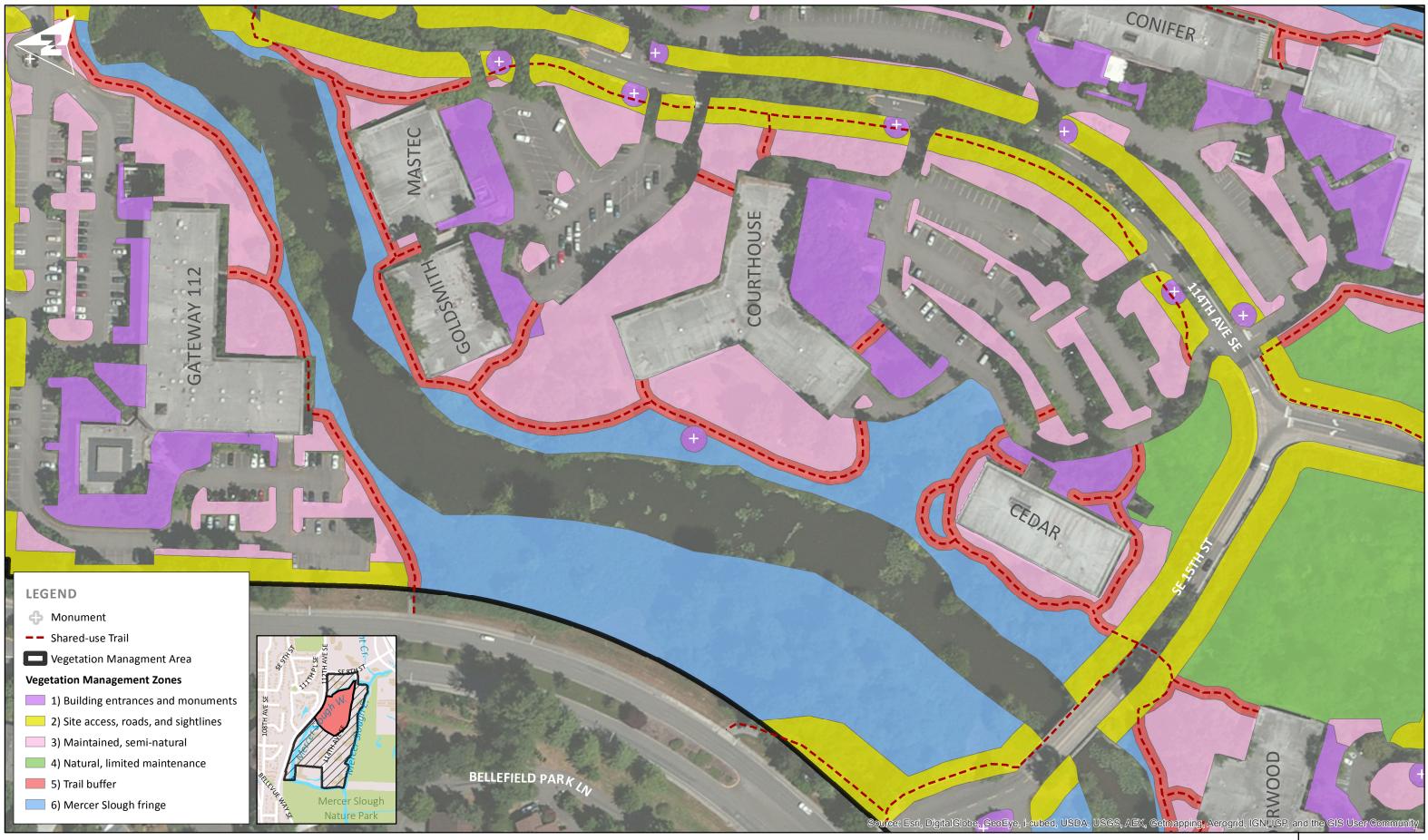
1 inch = 100 feet

Feet

300



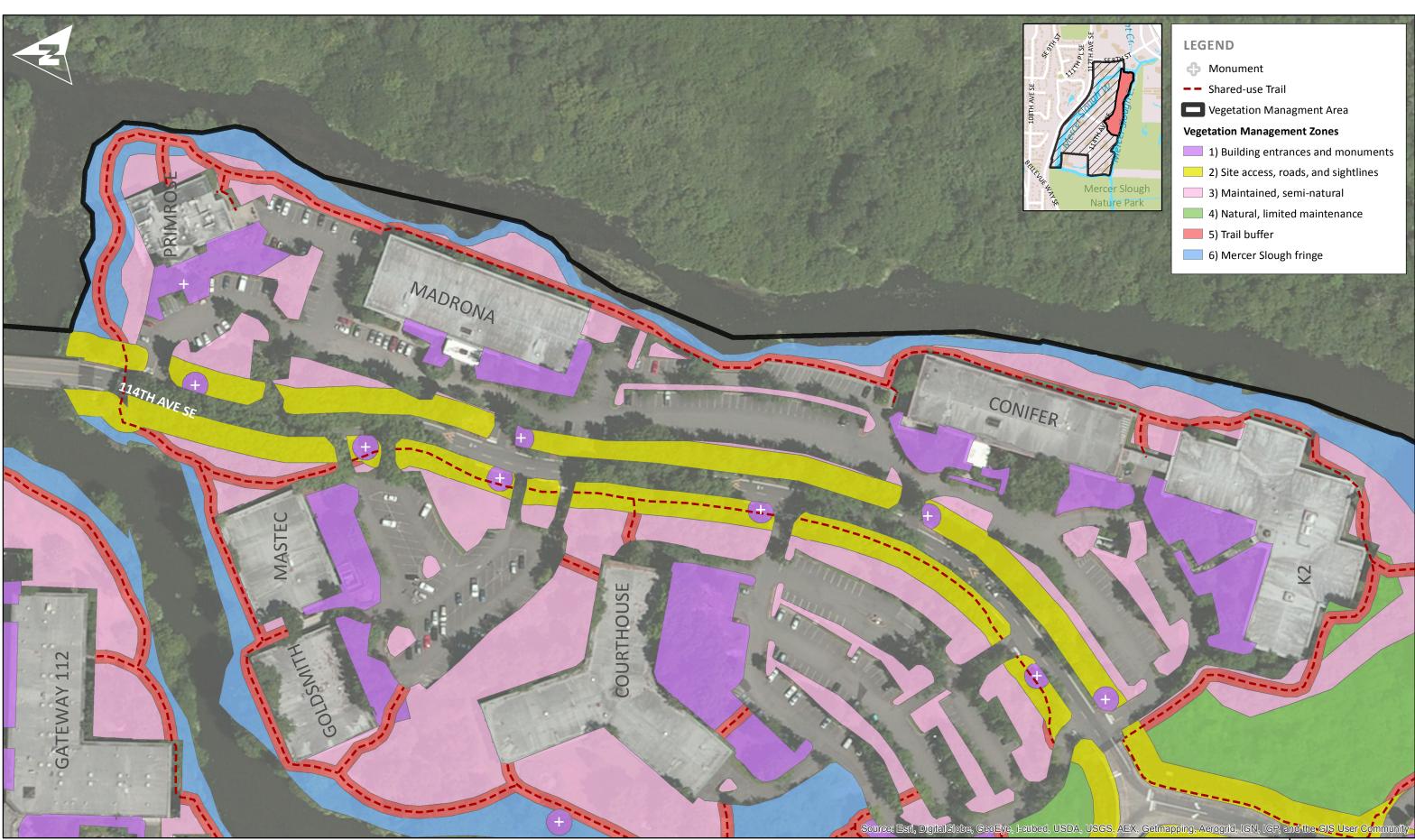
PRIMRO



# Field Map 2: Northwest

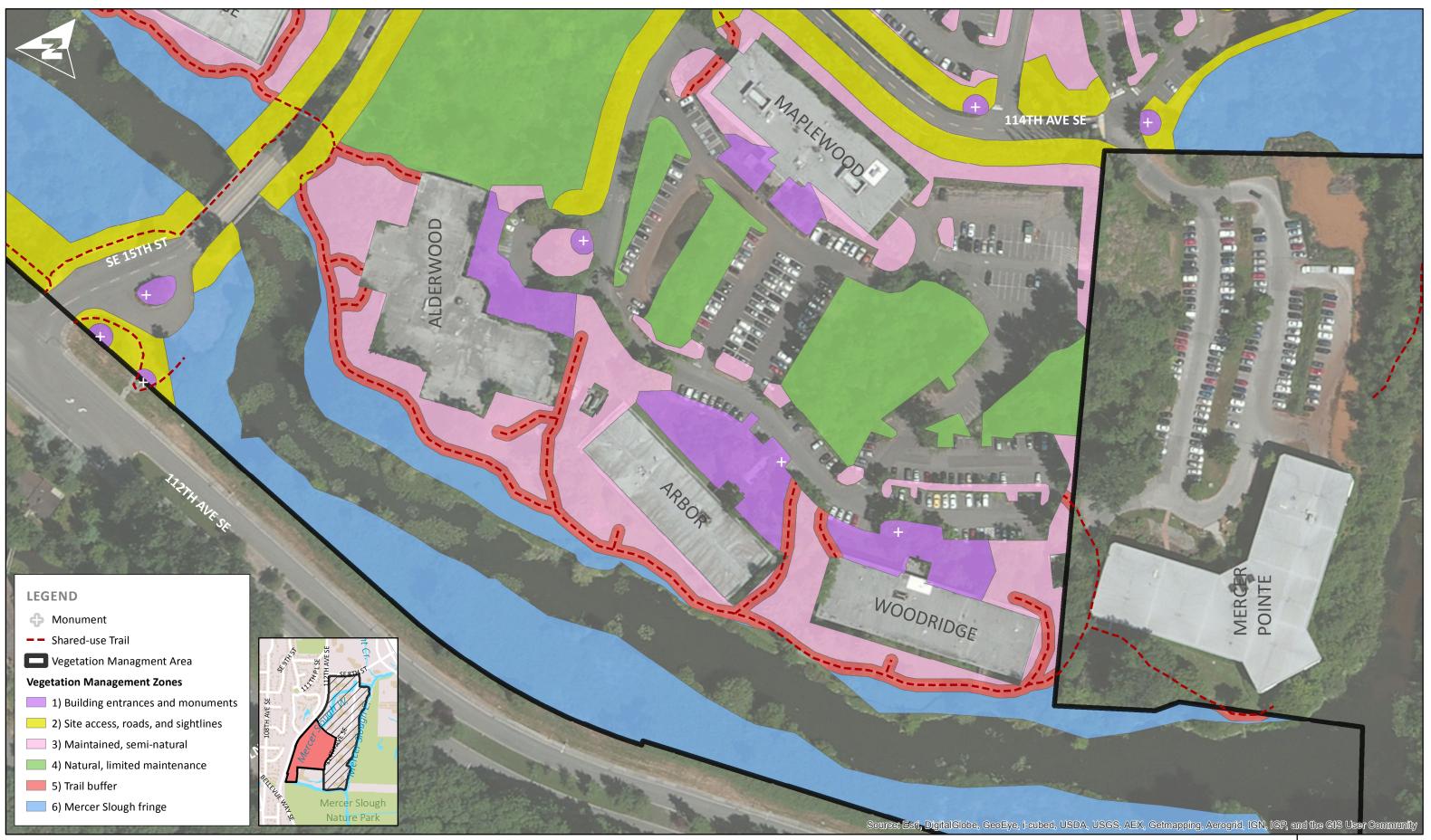


	1 inch = 100 feet
	Feet
200	300



# Field Map 3: Northeast





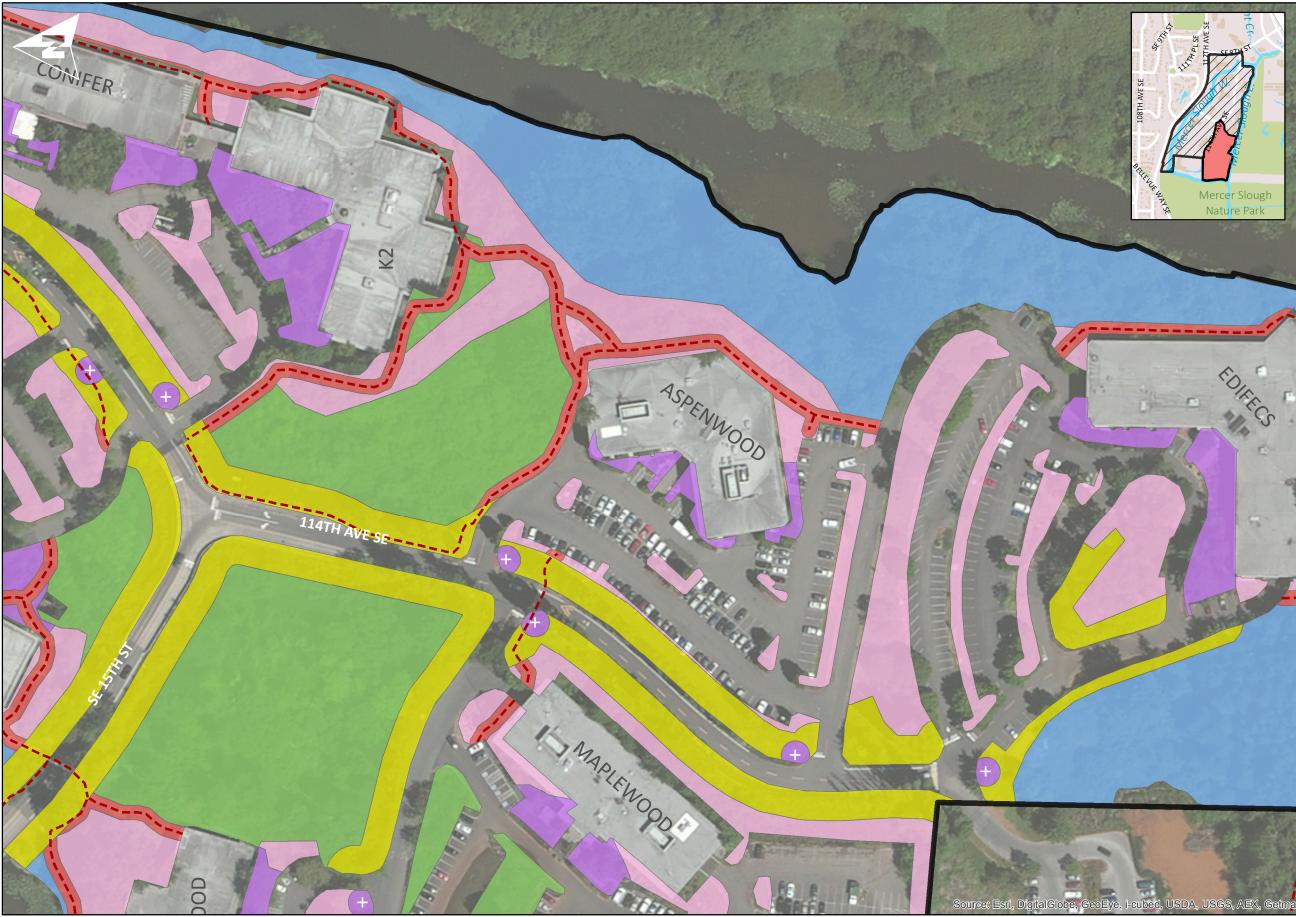
# Field Map 4: Southwest

0 50



1 inch = 100 feet

200



BELLEFIELD OFFICE COMPLEX - VEGETATION MANAGEMENT PLAN

## Field Map 5: Southeast

50

	LEGEND
	🕂 Monument
100	<ul> <li>Shared-use Trail</li> </ul>
	Vegetation Managment Area
1010	Vegetation Management Zones
1	1) Building entrances and monuments
	2) Site access, roads, and sightlines
100	3) Maintained, semi-natural
	4) Natural, limited maintenance
	5) Trail buffer
	6) Mercer Slough fringe



1 inch = 100 feet Feet

300

APPENDIX D

## **Zone Activity Summary**

### **Zone Activity Summary**

Zones	Sight	Building	Landscape	Invasive	Tree I	Removal	Vegetation	Plant	New	Soil	Pesticide	Utility	Parking Lot
	Distance Clearing	Entrance s	Conversion s	Species Removal	Hazard Trees	Non-Significant Trees	Pruning	Replacemen t	Plantings	Amendment/ Mulch	Usage	Maintenance and Repair	Maintenance
Zone 1 – Building Entrances and Monuments	Allowed (1, 2, 3, 4, 13)	Allowed (13)	Allowed (18)	Allowed (5)	Allowed (6)	Allowed (17)	Allowed (8, 9)	Allowed	Allowed	Allowed (13)	Allowed (14)	Allowed (13, 15)	Allowed (16)
Zone 2 – Access Road – Shoulders & Sightlines	Allowed (1, 2, 3, 4, 13)	Not Permitted	Allowed (18)	Allowed (5)	Allowed (6)	Allowed (17)	Allowed (8, 9)	Allowed	Allowed	Allowed (13)	Allowed (14)	Allowed (13, 15)	Allowed (16)
Zone 3 – Maintained Semi- natural Areas	Allowed (1, 2, 3, 4, 13)	Not Permitted	Allowed (18)	Allowed (5)	Allowed (6)	Allowed (17)	Allowed (8, 9)	Allowed	Allowed	Allowed (13)	Allowed (14)	Allowed (13, 15)	Allowed (16)
Zone 4 – Limited Maintenance Natural Areas	Not Permitted	Not Permitted	Not Permitted	Allowed (5)	Allowed (6, 7)	Allowed (17)	Allowed (8, 9, 10)	Allowed (11)	Allowed (12)	Allowed (13)	Allowed (14)	Allowed (13, 15)	Allowed (16)
Zone 5 – Trail	Not Permitted	Not Permitted	Not Permitted	Allowed (5)	Allowed (6, 7)	Allowed (17)	Allowed (8, 9, 10)	Allowed (11)	Allowed (12)	Allowed (13)	Allowed (14)	Allowed (13, 15)	Not Permitted
Zone 6 – Mercer Slough Fringe	Not Permitted	Not Permitted	Not Permitted	Allowed (5)	Allowed (6, 7)	Not Permitted	Not Permitted	Not Permitted	Allowed (12)	Not Permitted	Not Permitted	Allowed (13, 15)	Not Permitted

1. Sight distance clearing can occur in those areas of restricted vehicular sight-lines, as determined by the property manager or owner's representative. See Section 6.1.

2. Pruning or trimming must be the minimum necessary to alleviate the safety concern.

3. Live branch pruning shall be performed late in the dormant season or very early spring; no tree topping may occur.

4. Plant replacement is allowed when pruning cannot achieve the desired result.

5. Invasive removal that results in bare ground shall include the planting of species as outlined in Appendix E.

6. Hazard tree removal may occur in any zone pursuant to the restrictions and mitigation requirements of the VMP and only after written approval by a qualified arborist (see Appendix F).

7. Hazard tree removal within Zones 4, 5, and 6 is only allowed in instances of imminent threat to public safety or imminent risk of damage to an existing structure or other permanent improvement.

8. Pruning or trimming must be the minimum necessary to alleviate the safety concern.

9. Live branch pruning shall be performed late in the dormant season or very early spring; no tree topping may occur.

10. Vegetation pruning within Zones 4 and 5 limited to safety and sight distance clearing.

11. Only permitted in those circumstances where a sight distance or safety concern warrants a different plant species.

12. Allowed only as in-fill plantings of native species for enhancement purposes or for replacement of invasive species.

13. Within wetlands, activities are restricted to avoid any wetland fill. No grade change is allowed within a wetland.

14. Allowed in limited circumstances for invasive removal in accordance with an IPM approach; applications must be done by a State licensed applicator.

15. Work within a wetland (see Appendix B) may require state/federal permits. Disturbed soils shall be replaced and replanted as outlined in Appendix E.

16. Temporary impacts to adjacent vegetated areas should be restored upon completion of parking lot maintenance. New wetland impacts are not authorized under this VMP.

17. Removal of non-significant trees is allowed within any zone other than Zone 6 pursuant to the mitigation requirements of the VMP.

18. Known wetland areas (see Appendix B) may not be converted to lawn.

APPENDIX E

## **Planting Guidelines**

Planting within Zone 1 shall abide by the following standards:

- Wetland mapping in Appendix B shall be consulted prior to plant selection.
- Puget Sound lowland native plants are recommended.
- Ornamental plants are allowed, when the following criteria are met:
  - Plants must be non-invasive. Plants on the King County Noxious Weed list, in any class, are not allowed.
  - Plants must be non-aggressive and non-spreading, such that they will not spread out of their designated planting areas.
  - In general, large trees and shrubs should not be used near buildings, or in any area where they would grow to a size that would need future thinning or removal.
- Ornamental plants should reflect the overall character of the Bellefield site.

Based upon the above standards, the following recommended plant list for Zone 1 has been developed. However, the list is not inclusive of all the potential plants that can be used in Zone 1. Provided the above standards are met, additional plantings can also be utilized.

	Trees	Shrubs	Groundcover					
Drier	<i>Arbutus menzeisii /</i> Pacific Madrone <i>Malus fusca /</i> Western Crabapple <i>Psuedotsuga menzeisii /</i> Douglas-fir	Holodiscus discolor / Oceanspray Hydrangea quercifolia / Oakleaf Hydrangea Mahonia × media 'Charity'/ Hybrid Mahonia Philadelphus spp. / Mock Orange Ribes spp. / Gooseberries and Currants	Arctostaphylos uva-ursi / Kinnikinnick Aruncus sylvester / Goatsbeard Epimedium spp. / Bishop's Hat Gaultheria shallon / Salal Mahonia aquifolium / Tall Oregon Grape					
Moist	Cratageus douglasii / Black Hawthorn Populus tremula 'Erecta' / Swedish Columnar Aspen	Callicarpa bodinieri var. giraldii 'Profusion' / Beautyberry Sambucus nigra 'Eva' Black Lace / Purple Cutleaf Elderberry Spiraea spp. / Spirea Vaccinium ovatum / Evergreen Huckleberry Viburnum nudum 'Brandywine' / Brandywine Viburnum Viburnum edule / Squashberry Shrub roses Symphoricarpos albus / Snowberry	Ajuga spp. / Bugle Heuchera spp. / Coral bells Miscanthus spp. / Fountaingrass Oxalis spp. / Sorrel Ornamental grasses Polystichum munitum / Sword fern Blechnum spicant / Deer Fern					
Wetter	Betula papyrifera / Paper Birch Betula utilis var. jacquemontii / Whitebarked Himalayan birch Pinus contorta / Shore Pine Picea sitchensis / Sitka Spruce* Fraxinus latifolia / Oregon Ash* *Do not plant near buildings or infrastructure.	Cornus sanguinea 'Midwinter Fire' / Bloodtwig Dogwood Cornus sericea 'Flaviramea' / Yellow Dogwood Physocarpus spp. 'Center glow,' 'Coppertina,' 'Diablo,' etc. / Ornamental Ninebarks	<ul> <li>Carex spp. / Sedges**</li> <li>Scirpus microcarpus / Small- flowered Bulrush**</li> <li>Scirpus validus / Soft-stem</li> <li>Bullrush**</li> </ul>					

### Zone 1. Recommend Plant List (all Zone 6 species are also recommended)

The following tables establish the recommended plant lists for Zones 2 through 6. The plant list for each zone is sub-divided by general tolerances for dry, moist or wet soil conditions. This is intended to guide plant selection. These plant lists are not intended to be all inclusive. Other plant species, such as those on the King County 'go native' plant lists, may be used as well.

	Trees	Shrubs	Groundcover				
Drier	<i>Malus fusca /</i> Western Crabapple <i>Psuedotsuga menzeisii /</i> Douglas-fir	Holodiscus discolor / Oceanspray Ribes sanguineum / Red Flowering Currant Symphoricarpos albus / Snowberry	Arctostaphylos uva-ursi / Kinnikinnick Aruncus sylvester / Goatsbeard Epimedium spp. / Bishop's Hat Gaultheria shallon / Salal Mahonia aquifolium / Hollyleaved Barberry				
Moist	Arbutus menzeisii / Pacific Madrone Betula papyrifera / Paper Birch Cratageus douglasii / Black Hawthorn Picea sitchensis / Sitka Spruce	Philadelphus lewisii / Mock Orange Vaccinium ovatum / Evergreen Huckleberry Viburnum edule / Squashberry	<i>Lupinus polyphyllus /</i> Bigleaf Lupine				
Wetter	Betula papyrifera / Paper Birch Pinus contorta / Shore Pine	Cornus sericea 'Flaviramea' / Yellow Dogwood Spiraea douglasii / Hardhack	Juncus effusus / Soft rush Juncus ensifolius / Daggerleaf rush Juncus tenuis / Slender rush Scirpus microcarpus / Small- flowered Bulrush Scirpus validus / Soft-stem Bullrush				

Zone 2 – Access Roads -	- Shoulders and Sightlines	(all Zone 6 species	s can also be used)

### Zone 3 – Maintained, Semi-natural Areas (all Zone 6 species can also be used)

	Trees	Shrubs	Groundcover
Drier	Acer macrophyllum / Bigleaf maple Malus fusca / Western Crabapple <i>Psuedotsuga</i> menzeisii / Douglas-fir	Holodiscus discolor / Oceanspray Symphoricarpos albus / Snowberry Vaccinium ovatum / Evergreen Huckleberry	Aruncus sylvester / Goatsbeard
Moist	<i>Arbutus menzeisii /</i> Pacific Madrone <i>Cratageus douglasii /</i> Black Hawthorn <i>Picea sitchensis /</i> Sitka Spruce	Philadelphus lewisii / Mock Orange Ribes sanguineum / Red Flowering Currant Viburnum edule / Squashberry	<i>Lupinus polyphyllus /</i> Bigleaf Lupine
Wetter	Betula papyrifera / Paper Birch Pinus contorta / Shore Pine Picea sitchensis / Sitka Spruce	Cornus sericea 'Flaviramea' / Yellow Dogwood Spiraea douglasii / Hardhack	Juncus effusus / Soft rush Juncus ensifolius / Daggerleaf rush Juncus tenuis / Slender rush Scirpus microcarpus / Small- flowered Bulrush Scirpus validus / Soft-stem Bullrush

	Trees	Shrubs	Groundcover
Drier	<i>Psuedotsuga menzeisii /</i> Douglas-fir	Corylus cornuta / Hazelnut	Aruncus sylvester / Goatsbeard
Moist	<i>Cratageus douglasii /</i> Black Hawthorn <i>Picea sitchensis /</i> Sitka Spruce	Acer circinatum / Vine Maple	<i>Lupinus polyphyllus /</i> Bigleaf Lupine
Wetter	<i>Betula papyrifera / Paper Birch Pinus contorta / Shore Pine</i>	<i>Cornus sericea</i> / Red-osier Dogwood	<i>Carex obnupta</i> / Slough sedge

### Zone 5 – Trails (all Zone 6 species can also be used)

	Trees	Shrubs	Groundcover						
Drier	Malus fusca / Western	Symphoricarpos albus /	Aruncus diocius / Goatsbeard						
	Crabapple	Snowberry							
	Psuedotsuga menzeisii /	Vaccinium ovatum /							
	Douglas-fir	Evergreen Huckleberry							
Moist	Arbutus menzeisii / Pacific	Philadelphus lewisii / Mock	Lupinus polyphyllus / Bigleaf						
	Madrone	Orange	Lupine						
	Cratageus douglasii / Black	Viburnum edule /							
	Hawthorn	Squashberry							
	Picea sitchensis / Sitka Spruce								
Wetter	Pinus contorta / Shore Pine	Cornus sericea / Red-osier	Carex obnupta / Slough						
	Picea sitchensis / Sitka Spruce	Dogwood	sedge Juncus effusus / Soft						
		Cornus sericea 'Flaviramea' /	rush						
		Yellow Dogwood							

	Trees	Shrubs	Groundcover
Drier	Acer macrophyllum / Bigleaf maple Psuedotsuga menzeisii / Douglas-fir Pyrus fusca / Pacific Crabapple	<i>Corylus cornuta /</i> Hazelnut <i>Oemleria cerasiformis /</i> Indian Plum	Aruncus sylvester / Goatsbeard
Moist	Betula papyrifera / Paper Birch Thuja plicata / Western Red Cedar	Acer circinatum / Vine Maple Ribes divaricatum / Coast Black Gooseberry Ribes lacustre / Prickly Currant Ribes sanguineum / Red Flowering Currant Rosa nutkana / Nootka Rose Rubus spectabilis / Salmonberry Sambucus racemosa / Red Elderberry	Achillea millefolium / Western Yarrow Athyrium filix-femina / Lady Fern Dryopteris austriaca / Spreading Wood Fern Gaultheria shallon / Salal Polystichum munitum / Sword Fern Pteridium aquilinum / Bracken Fern
Wetter	Fraxinus latifolia / Oregon Ash Pinus contorta / Shore Pine Salix lucida / Pacific Willow Salix scouleriana / Scouler Willow Salix sitchensis / Sitka Willow Picea sitchensis / Sitka Spruce	<i>Cornus sericea /</i> Red-osier Dogwood <i>Lonicera involucrata /</i> Twinberry <i>Physocarpus capitata /</i> Ninebark	Carex canescens / Silvery sedge Carex deweyana / Dewey's sedge Carex obnupta / Slough sedge Carex pachystachya / Pachystachy sedge Carex stipata / Sawbeak sedge

Zone 6 – Mercer Slough Fringe – Listed species are acceptable in all zones.

# APPENDIX F Tree Evaluation Form

## ISA Basic Tree Risk Assessment Form

Clie	ent	Date		Tir	ne				
	dress/Tree location								
Tre	e species dbh	Height	Cr	rown spi	read dia				
Ass	essor(s) Tools used		re no Sheet or Crown spread dia Time frame or Time frame or						
	Target Assessment								
Target number	Target description	Target protection			Occupancy rate 1-rare 2 - occasional 3 - frequent 4 - constant	Practical to move target?	Restriction practical?		
2				_					
3				_					
4				_					
4	Site Factors								
		Tanaaraah			0/	A			
Site Soil Pre Vig Pes	changes None       Grade change       Site clearing       Changed soil hydrology       Rod         conditions       Limited volume       Saturated       Shallow       Compacted       Pavement of valing wind direction         vailing wind direction       Common weather       Strong winds       Ice       Snow         Tree Health and Species I         or Low       Normal       High       Foliage       None (seasonal)       None (dead	ot cuts	% Describ scribe % Chlo	rotic	% Nec	crotic _			
	wn density Sparse Normal Dense Interior branches Few Normal ent or expected change in load factors Tree Defects and Conditions Affecting the	e Likelihood of Failu		Moss 🗆					
	Dead twigs/branches      % overall       Max. dia       Codom         Broken/Hangers       Number       Max. dia       Weak a         Over-extended branches        Previou         Pruning history        Dead/N         Crown cleaned        Thinned          Reduced        Topped	□ inant □ ttachments □ is branch failures □ Λissing bark □ Canker □ Heart se growth	s/Galls/Bur twood dec	Cav Sim ls 🗆 Sap ay 🗆	Includ ity/Nest hole ilar branches wood damag	ed bark % c present ge/decay	c 🗆 circ. t 🗆 y 🗆		
	Part Size       Fall Distance       Part Si         Load on defect       N/A I       Minor       Moderate I       Significant I       Load on	ze n defect N/A 🗆	Mino	Fall Di	stance Ioderate□ Si	ignifican	 .t 🗆		
	— Trunk —	— Roots	and Ro	ot Col	lar —		$\overline{}$		
	Codominant stems       Included bark       Cracks       Dead         Sapwood damage/decay       Cankers/Galls/Burls       Sap ooze       Ooze         Lightning damage       Heartwood decay       Conks/Mushrooms       Cracks         Cavity/Nest hole       % circ.       Depth       Poor taper       Root p         Lean       °       Corrected?       Response growth       Condition (s) of concern       Condition	ouried/Not visible Dec C C Cut/Damaged ate lifting sse growth	Depth ay 🗆 roots 🗆	Distanc	_ Stem Conks/Musl Cavity 🗆 ce from trunl Soil we	% circ. Ink weakness 🗖			
	,	n defect N/A 🗆 Nod of failure Improbal			Ioderate□ Si robable □ Ir	0			

Risk Categorization																			
	Likelihood																		
Target	Target Condition(s)		Failure				Impact				Failure & Impact (from Matrix 1)					Consequences			
(Target number or description)	Tree part	of concern	Improbable	Possible	Probable	Imminent	Very low	Low	Medium	High	Unlikely	Somewhat	Likely	Very likely	Negligible	Minor	Significant	Severe	Risk rating (from Matrix 2)

. . .

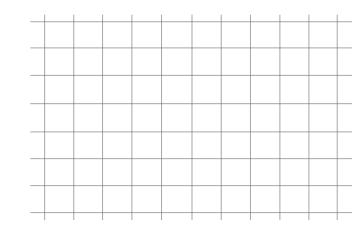
#### Matrix I. Likelihood matrix.

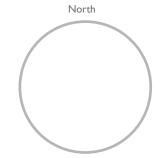
Likelihood	Likelihood of Impact					
of Failure	Very low	Low	Medium	High		
Imminent	Unlikely	Somewhat likely	Likely	Very likely		
Probable	Unlikely	Unlikely	Somewhat likely	Likely		
Possible	Unlikely	Unlikely	Unlikely	Somewhat likely		
Improbable	Unlikely	Unlikely	Unlikely	Unlikely		

### Matrix 2. Risk rating matrix.

Likelihood of	Consequences of Failure					
Failure & Impact	Negligible	Minor	Significant	Severe		
Very likely	Low	Moderate	High	Extreme		
Likely	Low	Moderate	High	High		
Somewhat likely	Low	Low	Moderate	Moderate		
Unlikely	Low	Low	Low	Low		

### Notes, explanations, descriptions





### **Mitigation options**

1	_ Residual risk								
2	_ Residual risk								
3	Residual risk								
4	Residual risk								
Overall tree risk rating Low D Moderate D High D Extreme D									
Overall residual risk None Low Moderate High Extreme Recommended inspection interview	rval								
Data									
Inspection limitations  None  Visibility  Access  Vines  Root collar buried Describe									