

## 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. 20-123105-LO

Project Name/Address: Phantom Lake Forest Restoration at 15604 SE 16th St.

Planner: Reilly Pittman

425-452-4350

rpittman@bellevuewa.gov

Minimum Comment Period: January 28, 2021

Materials included in this Notice:

<b>V</b>	Blue Bulletin
V	Checklist
V	Vicinity Map
V	Plans
	Othor:

## OTHERS TO RECEIVE THIS DOCUMENT:

- ☑ State Department of Fish and Wildlife
- ☑ State Department of Ecology, Shoreline Planner N.W. Region
- Army Corps of Engineers
- ☑ Attorney General
- ☑ Muckleshoot Indian Tribe

## City of Bellevue Submittal Requirements

27

## **ENVIRONMENTAL CHECKLIST**

12/21/00

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 8½" x 11" vicinity map which accurately locates the proposed site.

City of Bellevue Submittal Requirements

27a

## **ENVIRONMENTAL CHECKLIST**

12/21/00

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.

#### **BACKGROUND INFORMATION**

Property Owner: City of Bellevue, Parks and Community Services

Proponent: City of Bellevue, Parks and Community Services

450 110<sup>th</sup> Avenue NE Bellevue, WA 98009

Contact Person: Rick Bailey

(If different from the owner. All questions and correspondence will be directed to the individual listed.)

Address: 450 110<sup>th</sup> Avenue NE, Bellevue, WA 98009

Phone: **(425) 239-9677** 

Proposal Title:

#### **Phantom Lake Forest Restoration**

Proposal Location (Street address and nearest cross street or intersection) Provide a legal description if available:

Phantom Lake Park 2098 156th Ave SE Bellevue, WA 98007

Cross Streets: 156th Ave SE & SE 20 PI

Parcel # 0224059194

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:

General description: A degraded area of the park lacks the vegetative composition of a healthy urban forest and, as a result, has suppressed ecosystem services. This area is currently overrun with invasive species and lacks a diverse urban tree canopy and native understory. The proposed project will seek to restore this area of the park.

- 1. Acreage of site: The entire parcel is approximately 24 acres in size. The project area, located within the southwestern portion of the parcel, is approximately 2 acres.
- 2. Number of dwelling units/buildings to be demolished: Not applicable.
- 3. Number of dwelling units/buildings to be constructed: Not applicable.
- 4. Square footage of buildings to be demolished: Not applicable.
- 5. Square footage of buildings to be constructed: Not applicable.
- 6. Quantity of earth movement (in cubic yards): No grading will occur. Minor import of compost/ mulch will be added for planting purposes, outside of on-site wetlands/streams.
- 7. Proposed land use: The current land use designation is R-1. 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:

Proposed restoration activities would commence upon receipt of all applicable permits and pursuant to any wet weather restrictions.

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

No additional plans or proposals are associated with this project.

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

Phantom Lake Forest Restoration – Restoration Plan, The Watershed Company, December 11, 2020.

Phantom Lake Forest Restoration – Critical Areas Narrative, The Watershed Company, December 11, 2020.

Phantom Lake Forest Restoration - Shoreline Narrative, The Watershed Company, December 11, 2020.



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.

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, Shoreline Exemption, and Clearing and Grading Permit from the City of Bellevue. The project will also require a Stormwater Permit from the Department of Ecology.

(Please	e 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

Please provide one or more of the following exhibits, if applicable to your proposal.



## 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)?

There are slopes of approximately 5-10%.

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, the project area includes Arents/Alderwood gravelly sandy loam, with 6 to 15 percent slopes, as well as Seattle muck.

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

None that are known.

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

No grading will occur. Minor import of compost/mulch outside of wetlands/streams will occur for the restoration planting.

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

Limited erosion could occur due to clearing of invasive vegetation and soil amendment activities. 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 restoration activities do 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 restoration 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 project will occur within and directly adjacent to wetlands. A stream and the Phantom Lake shoreline also lie within proximity of the project area.

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, proposed work will occur within 200 feet of the aforementioned wetland, stream, and shoreline.

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 excavation or filling will occur within wetlands or streams. Soil amendment will be limited to areas outside of wetlands boundaries. Work within wetlands would be limited to new plantings.

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.

Based upon a review of King County FEMA floodplain maps, the eastern boundary of the project area is roughly congruent with the Phantom Lake 100-year floodplain boundary. Therefore, work is unlikely to occur within the floodplain.

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 restoration 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 restoration 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 restoration 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 restoration plan. Runoff quantities and flow patterns are not expected to change markedly; however, restoration plantings may decrease the overall quantity of runoff from the project area.

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

During restoration 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:

a. Check types of vegetation found on the site and circle appropriate measurements or list species:

Temporary erosion control BMPs would be employed as needed.

#### 4. PLANTS

$\boxtimes$	deciduous tree: alder, maple, aspen, other
$\boxtimes$	evergreen tree: fir, cedar, pine, other
	shrubs
	pasture
	crop or grain
$\boxtimes$	wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other - slough sedge
	water plants: water lily, eelgrass, milfoil, other
$\boxtimes$	other types of vegetation: Himalayan blackberry, English ivy, English holly, Reed canary
ara	ss



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

The goal of the project is to remove invasive plants and replant with native or native compatible species. Invasive species to be removed include reed canarygrass, Himalayan blackberry, English ivy, and English holly. The total project area is approximately 2 acres.

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:

The project includes the removal of invasive vegetation and the planting of native species. Proposed tree species include Sitka spruce, Pacific willow, Sitka willow, Scouler's willow, Oregon ash, white fir, incense cedar, giant sequoia, western red cedar, and Douglas-fir. Proposed shrubs include red-osier dogwood, cluster rose, serviceberry, oceanspray, tall Oregon grape, osoberry, salmonberry, red elderberry, vine maple, and red huckleberry. Groundcover species include salal, dull mahonia, and western swordfern.

Plantings represent a dense and diverse native plant assemblage appropriate to the eco-region and growing conditions on-site. New plantings will provide food, cover, and nesting opportunities for wildlife and will help to outcompete any invasive species that remain in adjacent areas. Overall, the project will result in no net loss of shoreline ecological functions.

#### 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: <a href="https://heron.neagle">hawk</a>, <a href="heron.neagle">heron</a>, <a href="heron.neagle">eagle</a>, <a href="songbirds">songbirds</a>, <a href="heron.neagle">other</a>: ducks, red-winged black bird mammals: <a href="heron.neagle">deer</a>, bear, elk, beaver, other: fish: <a href="heron.neagle">bass</a>, salmon, trout, herring, shellfish, <a href="heron.neagle">other</a>: Black Crappie, Yellow Perch, and Brown Bullhead Catfish

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

No such species are known to occur within the vicinity of the project site.

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

No.

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

Plantings represent a dense and diverse native plant assemblage appropriate to the eco-region and growing conditions on-site. New plantings will provide food, cover, and nesting opportunities for wildlife and will help to outcompete any invasive species that remain in adjacent areas. Overall, the project will result in no net loss of shoreline ecological functions.



#### 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 restoration plan include gaspowered 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 restoration 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) was 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)?

Noise within the vicinity of the project area is primarily limited to vehicular traffic along 156<sup>th</sup> Ave SE. However, such noise would not affect restoration 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 associated with the restoration project would be limited to construction equipment during implementation. However, 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:

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 project area is within Phantom Lake Park, which extends to the north and east. Single-family parcels are located south as well as west of the project area.

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

Part of the parcel (north of the project) has been used for agriculture, based on 1936 aerial photos, from approximately the 1930's to mid-2000's. The proposed project area has remained forested during this time period.

c. Describe any structures on the site.

No structures are present within the project area.

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

No.

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

R-1.

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

P/SF-L.

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

**Urban Conservancy – Open Space.** 

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

The on-site wetlands and stream have been classified as "environmentally sensitive" areas.

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 restoration 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 low-income 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 restoration plan.

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

Restoring areas with amended soils and native plantings are likely to improve views in the vicinity of the project area.

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

No such measures are necessary.

#### 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 restoration 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 restoration 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?

The project site is located within Phantom Lake Park. Walking trails encompass the park; there are also fishing opportunities, as well as a small dock.

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, no places or objects are known to be located within the vicinity of the project 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 restoration 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 156<sup>th</sup> Avenue SE. Access will not change as a result of the restoration project.

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 south of the project site, at the intersection of 156<sup>th</sup> Avenue SE and SE 24<sup>th</sup> Street.



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

The proposed restoration plan would not create or eliminate parking spaces.

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 a 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 restoration 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

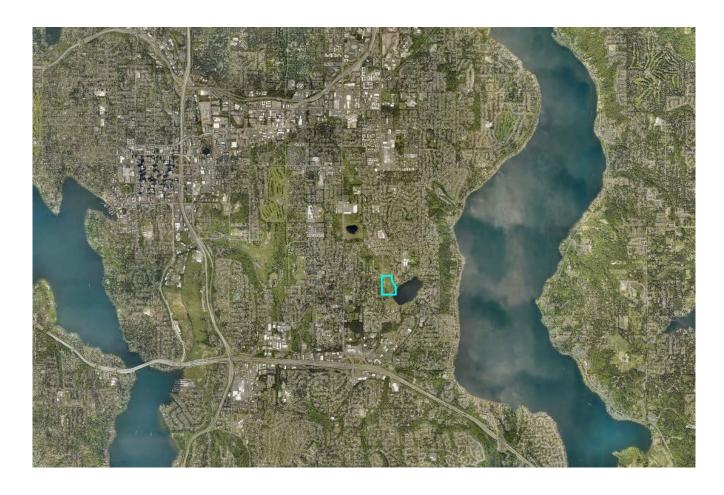
Kenny Booth, AICP Senior Planner

The Watershed Company

Date Submitted:

12-11-20

## **Vicinity Map** from King County iMAP







## TECHNICAL MEMORANDUM



Date: December 11, 2020
To: Jammie Kingham

From: Kenny Booth, AICP; Lucas Vannice, RLA

TWC Project Number: 160813.9

Project Name: Phantom Lake Forest Restoration

## Subject: Critical Areas Narrative

This memo is intended to provide an overview of the Phantom Lake Forest Restoration project, while also documenting how the project complies with specific City of Bellevue critical areas regulations.

Description of the project site, including landscape features, existing development, and site history as applicable.

Response: This project seeks to restore a degraded area within Phantom Lake Park, approximately two acres in size, which lacks the vegetative composition of a healthy urban forest and, as a result, has suppressed ecosystem services. This area is currently overrun with invasive species and lacks a diverse urban tree canopy and native understory. Existing tree species present include red alder, bigleaf maple, western red cedar, Oregon ash, black cottonwood, and Sitka spruce. Understory species include red-twig dogwood, devil's club, and a significant presence of invasive species, including reed canarygrass, Himalayan blackberry, English ivy, and English holly. The project area includes a stream and wetland area, with decreased ecological function resulting from preponderance of invasive species. Wetland and stream areas were not formally delineated; areas are approximated on project plans. It is assumed that all work would occur within these critical areas, or their respective buffers.

Phantom Lake Forest Restoration Critical Areas Narrative December 2020 Page 2

The two acre project area is situated in the southwestern portion of the park. The more developed portions of Phantom Lake Park (mowed lawn, walking trails) form the western and southern boundaries of the project area. The northern and eastern boundaries are characterized by a change in vegetative composition. The eastern project area boundary also roughly coincides with the 100-year floodplain for Phantom Lake. Therefore, it assumed that proposed activities would occur outside of regulated frequently flooded area. Areas further to the north of the project limits have historically been used for agriculture, whereas the specific project area appears to have been forested since at least 1936.

## A description of how the design constitutes the minimum necessary impact to the critical area.

**Response:** The proposed project includes the removal of invasive species within an area of Phantom Lake Park. Following invasive removal, native plantings would be installed. The import of compost/mulch would occur as part of planting efforts. However, no fill would be placed directly within wetlands or streams, and all work is estimated to occur outside of the 100-year floodplain.

Complete avoidance of the project would result in the retention of invasive species and the overall degraded condition. Therefore, avoidance is not feasible. Impacts within the project area are limited to temporary disturbance associated with invasive species removal and the planting of native vegetation. Minimization efforts will be employed to limit disturbance during construction, including the use of temporary erosion control measures such as the implementation of straw wattles. In addition, work will be accomplished with hand labor and hand-operated equipment, and likely during the non-rainy season. Overall, the proposed project represents the minimum necessary impact to on-site critical areas and buffer.

A description of why there is no feasible alternative with less impact to the critical area, critical area buffer, or critical area structure setback.

**Response:** The goal of this project is to improve critical areas and the urban forest in the immediate proximity of those critical areas by removing invasive plants and restoring with native and/or native compatible trees, shrubs, and ground cover. Impacts are limited to temporary disturbance associated with these activities and cannot be avoided in order to fulfill the project purpose. Therefore, there is no feasible alternative with less impact to on-site critical areas and buffers.

A description of alternatives considered and why the alternative selected is preferred.

**Response:** While there may be additional areas within the park's boundaries to restore, the two-acre project area proposed for restoration presents the greatest invasive assemblage and thus priority need for restoration within the park. Additional restoration opportunities within the park may be pursued in the future.

A summary of how the proposal meets each of the decision criteria contained in Land Use Code Section 20.30P.

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

**Response:** The narrative accompanies an application for a Critical Areas Land Use Permit (LO), with SEPA review. A Shoreline Exemption has also been submitted concurrently. A Clearing and Grading Permit will also be necessary to authorize implementation of the restoration plan. No other permits from the City of Bellevue are expected to be necessary.

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;

**Response:** The goal of this project is to improve critical areas and the urban forest in the immediate proximity of those critical areas by removing invasive plants and restoring with native and/or native compatible trees, shrubs, and ground cover. Standard BMPs will be followed to minimize disturbance during restoration, including appropriate erosion control measures and invasive species removal protocols. These actions will result in the minimum necessary disturbance to the critical areas and buffers.

C. The proposal incorporates the performance standards of Part <u>20.25H</u> LUC to the maximum extent applicable;

**Response:** See below for stream (per LUC 20.25H.080.A) and wetland (per LUC 20.25H.100) performance standard compliance.

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

**Response:** The proposed restoration project will be served by adequate public facilities; the need for new services will not result from the project.

Phantom Lake Forest Restoration Critical Areas Narrative December 2020 Page 4

E. The proposal includes a mitigation or restoration plan consistent with the requirements of LUC <u>20.25H.210</u>; 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;

**Response:** A restoration plan has been prepared in accordance with the requirements of LUC 20.25H.210. The plan (Phantom Lake Forest Restoration – Restoration Plan, The Watershed Company, December 11, 2020) has been submitted concurrently with this project narrative.

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

**Response:** The proposed project complies with all other applicable City of Bellevue Land Use Codes.

A summary of how the proposal meets each of the criteria and performance standards contained in Land Use Code Section 20.25H associated with the critical area you are modifying.

## 20.025H.055.C.3.i - Performance Standards.

Vegetation Management. Modification of vegetation in a <u>critical area</u> or <u>critical area</u> buffer that is not considered routine maintenance under subsection <u>C.3.h</u> of this section may be allowed if it meets the requirements of this section. Except where otherwise noted, a <u>Critical Areas Land Use</u> Permit is required. The following activities may also require a <u>Clearing</u> and Grading Permit, Chapter <u>23.76</u> BCC and/or SEPA review and must comply with all other <u>Land Use</u> Code provisions related to tree preservation and landscaping, including but not limited to LUC <u>20.20.520</u> and <u>20.20.900</u>.

- i. Noxious Species. The removal of the following vegetation with hand labor and hand-operated equipment from a <u>critical area</u> buffer, or from a geologic hazard <u>critical area</u>, is allowed without requiring a <u>Critical Areas Land Use</u> Permit or a Vegetation Management Plan:
- (A) Invasive and noxious weeds;
- (B) English ivy (Hedera helix);
- (C) Himalayan blackberry (Rubus discolor, R. procerus); and
- (D) Evergreen blackberry (Rubus laciniatus).

**Response:** The project proposes the removal of invasive vegetation and the planting of native species. These activities will be conducted consistent with the provisions outlined

in LUC 20.25H.055.C.3.i.i; however, some invasive species removal will occur within an on-site wetland, therefore, a Critical Areas Land Use Permit will be acquired.

This project seeks to restore a degraded area within Phantom Lake Park, approximately two acres in size, which lacks the vegetative composition of a healthy urban forest and, as a result, has suppressed ecosystem services. This area is currently overrun with invasive species and lacks a diverse urban tree canopy and native understory. Existing tree species present include red alder, bigleaf maple, western red cedar, Oregon ash, black cottonwood, and Sitka spruce. Understory species include red-twig dogwood, devil's club, and a significant presence of invasive species, including reed canarygrass, Himalayan blackberry, English ivy, and English holly. The project area includes a stream and wetland area, with decreased ecological function resulting from preponderance of invasive species. Specifically, in the northern portion of the project area, there is a monoculture of reed canarygrass growing within and adjacent to the wetland. The stream is also degraded by large concentrations of Himalayan blackberry

Overall, the project area lacks the vegetative composition of a healthy urban forest and, as a result, has suppressed ecosystem services. It is currently overrun with invasive species and lacks a diverse urban tree canopy and native understory. The proposed project will remove existing invasive plants and plant native or native compatible trees, shrubs, and ground cover. Upon maturity, a net gain in habitat functions is expected.

## 20.25H.080.A & 20.25H.100 - Performance Standards - Streams and Wetlands

1. Lights shall be directed away from the stream/wetland.

**Response:** No lights are proposed for this project.

2. 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.

**Response:** Noises associated with the restoration project would be limited to construction equipment during implementation. However, noise would be limited to normal daytime working hours pursuant to Bellevue City Code 9.18. Upon project completion, the project will not generate noise.

3. Toxic runoff from new impervious area shall be routed away from the stream/wetlands.

Phantom Lake Forest Restoration Critical Areas Narrative December 2020 Page 6

**Response:** The proposed restoration does not include any new impervious areas and no toxic runoff is expected. No new sources of water runoff are proposed as part of the restoration plan. Runoff quantities and flow patterns are not expected to change markedly; however, restoration plantings are likely to decrease the overall quantity of runoff and improve infiltration capabilities.

4. Treated water may be allowed to enter the stream/wetland critical area buffer.

**Response:** Water treatment is not a proposed component of the project and as mentioned above, no new impervious surfaces or toxic runoff are proposed.

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

**Response:** The proposed project consists of invasive vegetation removal and the planting of native species within critical areas and critical area buffer buffers. Thus, buffer areas within the project area will be enhanced with dense vegetation, further limiting pet and human intrusion into the area.

6. 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.

**Response:** Generally, noxious species control efforts in the project area will employ manual removal. If chemical removal must take place, application of such treatments would follow all City of Bellevue, King County, and/or Department of Ecology provisions and BMPs. Further, if allowed, a licensed pesticide applicator would apply all such treatments.

7. All applicable standards of Chapter 24.06 BCC, Storm and Surface Water Utility Code, are met.

**Response:** The project seeks to improve ecosystem functions over the existing condition. No intentional discharges of waste materials to surface waters would occur during restoration activities. Further, all appropriate BMPs would be implemented to prevent such discharges. Because the project will result in greater than one-acre of clearing, a stormwater general permit from the WA Dept. of Ecology will be obtained.





**VICINITY MAPS** 

# **SHEET INDEX**

- L1.0 EXISTING CONDITIONS
- L1.1 TREE INVENTORY MAP L1.2 TREE INVENTORY TABLE (1 OF 2)
- L1.3 TREE INVENTORY TABLE (2 OF 2)
- L2.0 TESC AND SOIL PREPARATION PLAN
- L2.1 TESC AND SOIL PREPARATION DETAILS
- L3.0 PLANTING PLAN
- L3.1 PLANT SCHEDULE AND DETAILS
- L4.0 SPECIFICATIONS
- L5.0 MAINTENANCE AND MONITORING NOTES

# **NOTES**

- 1. CONTOURS, PATHS, ROADS, AND PARCEL INFORMATION IS DERIVED FROM GIS DATA ACCESSED THROUGH BELLEVUE GIS DATA PORTAL.
- 2. APPROXIMATE WETLAND INFORMATION DERIVED FROM U.S. FISH & WILDLIFE SERVICE NATIONAL WETLANDS INVENTORY (NWI) WETLANDS MAPPER.
- 3. SIGNIFICANT TREES WERE INVENTORIED BY THE WATERSHED COMPANY ISA CERTIFIED ARBORISTS ON JUNE 17, 2020. GEOSPATIAL DATA WAS COLLECTED IN THE FIELD USING A GPS-ENABLED TABLET AND DATA COLLECTION SOFTWARE. GPS DATA IS BELIEVED RELIABLE FOR GENERAL PLANNING AND MOST REGULATORY PURPOSES. HOWEVER, ACCURACY IS VARIABLE AND SHOULD NOT BE CONSIDERED EQUIVALENT TO A PROFESSIONAL LAND SURVEY. NO WARRANTY IS EXPRESSED OR IMPLIED.

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STORATION

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PROJECT MANAGER: LV DESIGNED: DRAFTED: CHECKED: MSF / KB

JOB NUMBER:

160813.9 SHEET NUMBER: L1.0 OF 10

LV |

ALDER), R. ARMENIACUS

APPROXIMATE WETLAND BOUNDARY

APPROXIMATE STREAM CENTERLINE

EXISTING TREES

CONTOUR LINES

PROJECT LIMITS

**EXISTING PATHWAY** 

PARCEL BOUNDARY

VEGETATION COMMUNITY #1

VEGETATION COMMUNITY #2

VEGETATION COMMUNITY #3

(REDTWIG DOGWOOD).

VEGETATION COMMUNITY #4

**VEGETATION COMMUNITY #5** 

-THUJA PLICATA (WESTERN

HOLY) AND R. ARMENIACUS.

- REDUCED R. ARMENIACUS.

AND CORNUS STOLONIFERA

AREA; POTENTIAL WETLAND.

- ACER MACROPHYLLUM (BIGLEAF

(DEVIL'S CLUB) UNDERSTORY.

ARUNDINACEA (REED

-MONOCULTURE OF PHALARIS

CANARYGRASS). APPEARS TO HAVE

HYDROLOGY; POTENTIAL WETLAND.

-NEAR-MONOCULTURE UNDERSTORY

OF RUBUS ARMENIACUS (HIMALAYAN

DOMINATED BY SALIX SPP. (WILLOW)

WATERCOURSE OBSERVED IN THIS

MAPLE) WITH OPLOPANAX HORRIDUS

REDCEDAR), POLYSTICHUM MINITUM

SPECTABILIS (SALMONBERRY) WITH

SOME ILEX AQUIFOLIUM (ENGLISH

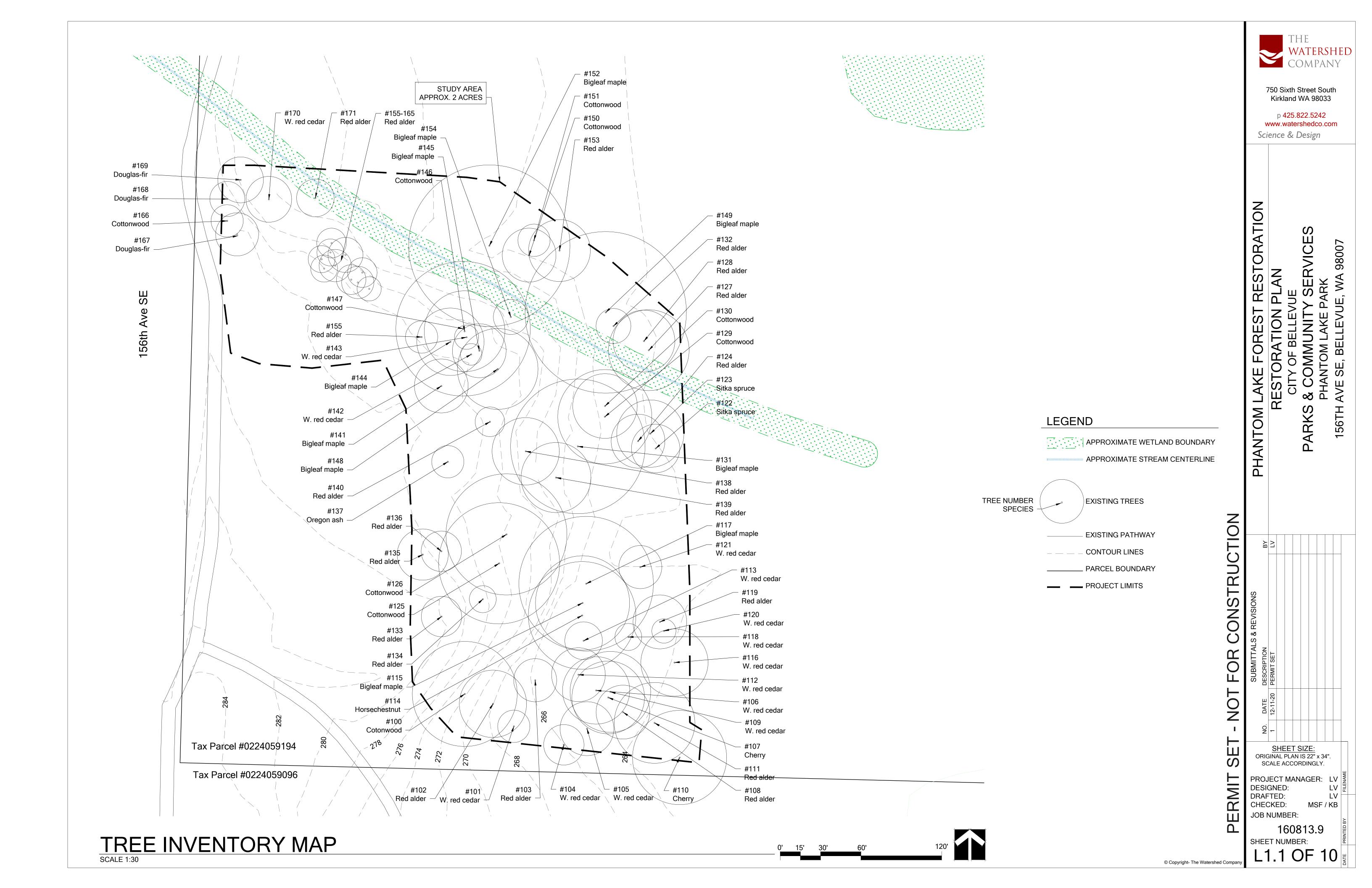
(WESTERN SWORDFERN) RUBUS

(ENGLISH IVY) GROWING UP SOME

BLACKBERRY). HEDERA HELIX

| VEGETATION COMMUNITY #7 -C.STOLONIFERA, R. ARMENIACUS

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		EV / DEC	# STEMS	DBH (IN)	неіднт (ғт)	IUS (FT)	CONDITION
TAG#	TREE NAME	EV	S #	COMB DBH	HEIG	RADIUS	NOO
100	Populus trichocarpa (Black cottonwood)	D	1	42.5	90	39	Good
101	Thuja plicata (Western red cedar)	E	1	36.0	80	12	Fair
102	Alnus rubra (Red alder)	D	1	15.0	50	25	Fair
103	Alnus rubra (Red alder)	D	1	12.0	25	16	Good
104	Thuja plicata (Western red cedar)	E	1	56.0	90	15	Fair
105	Thuja plicata (Western red cedar)	E	1	25.0	55	20	Poor
106	Thuja plicata (Western red cedar)	E	1	36.0	80	25	Good
107	Prunus sp. (Cherry species)	D	1	8.0	30	27	Good
108	Alnus rubra (Red alder)	D	1	20.0	30	20	Fair
109	Thuja plicata (Western red cedar)	E	1	36.0	90	30	Fair
110	Prunus sp. (Cherry species)	D	1	23.0	30	35	Good
111	Alnus rubra (Red alder)	D	1	24.0	60	30	Fair
112	Thuja plicata (Western red cedar)	E	1	10.0	55	20	Good
113	Thuja plicata (Western red cedar)	E	1	40.0	110	14	Good
114	Aesculus hippocastanum (Horsechestnut)	D	3	19.7	70	40	Good
115	Acer macrophyllum (Bigleaf maple)	D	1	21.0	80	35	Good
116	Thuja plicata (Western red cedar)	E	1	37.0	110	25	Good
117	Acer macrophyllum (Bigleaf maple)	D	1	30.0	80	25	Fair

		EV / DEC	# STEMS	MB DBH (IN)	EIGHT (FT)	ADIUS (FT)	ONDITION
118	Thuja plicata (Western red cedar)	E	1	16.0	40	10	Good
119	Alnus rubra (Red alder)	D	1	30.0	60	20	Good
120	Thuja plicata (Western red cedar)	Е	1	14.0	45	9	Fair
121	Thuja plicata (Western red cedar)	E	1	40.0	100	16	Good
122	Picea sitchensis (Sitka spruce)	E	1	30.0	100	18	Fair
123	Picea sitchensis (Sitka spruce)	E	1	30.0	110	25	Fair
124	Alnus rubra (Red alder)	D	1	18.0	60	20	Very Poor
125	Populus trichocarpa (Black cottonwood)	D	1	35.0	110	45	Good
126	Populus trichocarpa (Black cottonwood)	D	1	35.0	110	45	Good
127	Alnus rubra (Red alder)	D	1	17.0	65	30	Fair
128	Alnus rubra (Red alder)	D	1	17.0	45	23	Fair
129	Populus trichocarpa (Black cottonwood)	D	1	17.0	50	35	Fair
130	Populus trichocarpa (Black cottonwood)	D	1	25.0	55	24	Fair
131	Acer macrophyllum (Bigleaf maple)	D	1	38.0	100	50	Good
132	Alnus rubra (Red alder)	D	1	18.0	40	13	Fair
133	Alnus rubra (Red alder)	D	1	10.0	30	15	Poor
134	Alnus rubra (Red alder)	D	1	9.0	25	10	Fair
135	Alnus rubra (Red alder)	D	1	11.0	30	19	Fair
136	Alnus rubra (Red alder)	D	2	8.5	35	15	Fair
137	Fraxinus latifolia (Oregon ash)	D	1	13.0	40	12	Poor

PHANTOM LAKE FOREST RESTORATION
RESTORATION PLAN
CITY OF BELLEVUE
PARKS & COMMUNITY SERVICES
PHANTOM LAKE PARK
156TH AVE SE, BELLEVUE, WA 98007

THE WATERSHED

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L1.2 OF 10

TREE INVENTORY TABLE (1 OF 2)

137	Fraxinus latifolia (Oregon ash)	□ EV / DEC	1 # STEMS	(NI) HBQ BW (IN)	(FT) THEIGHT (FT)	2 ADIUS (FT)	NOILIONO Poor
138	Alnus rubra (Red alder)	D	1	14.0	65	25	Fair
139	Alnus rubra (Red alder)	D	2	15.0	65	26	Fair
140	Alnus rubra (Red alder)	D	1	22.0	60	11	Fair
141	Acer macrophyllum (Bigleaf maple)	D	1	25.0	70	20	Good
142	Thuja plicata (Western red cedar)	E	1	11	40	8	Good
143	Thuja plicata (Western red cedar)	E	1	8	20	9	Good
144	Acer macrophyllum (Bigleaf maple)	D	2	22	75	25	Good
145	Acer macrophyllum (Bigleaf maple)	D	1	8	40	20	Good
146	Populus trichocarpa (Black cottonwood)	D	1	30	100	30	Good
147	Populus trichocarpa (Black cottonwood)	D	1	45	110	25	Excellen
148	Acer macrophyllum (Bigleaf maple)	D	1	26	70	30	Good
149	Acer macrophyllum (Bigleaf maple)	D	1	45	100	30	Good
150	Populus trichocarpa (Black cottonwood)	D	1	24	45	20	Good
151	Populus trichocarpa (Black cottonwood)	D	1	19	35	12	Good
152	Acer macrophyllum (Bigleaf maple)	D	2	38.5	100	30	Fair
153	Acer macrophyllum (Bigleaf maple)	D	2	27	70	23	Good
154	Acer macrophyllum (Bigleaf maple)	D	1	24	60	13	Good
155	Alnus rubra (Red alder)	D	1	14	65	12	Good
156	Alnus rubra (Red alder)	D	1	10	45	9	Poor

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RESTORATION PLAN
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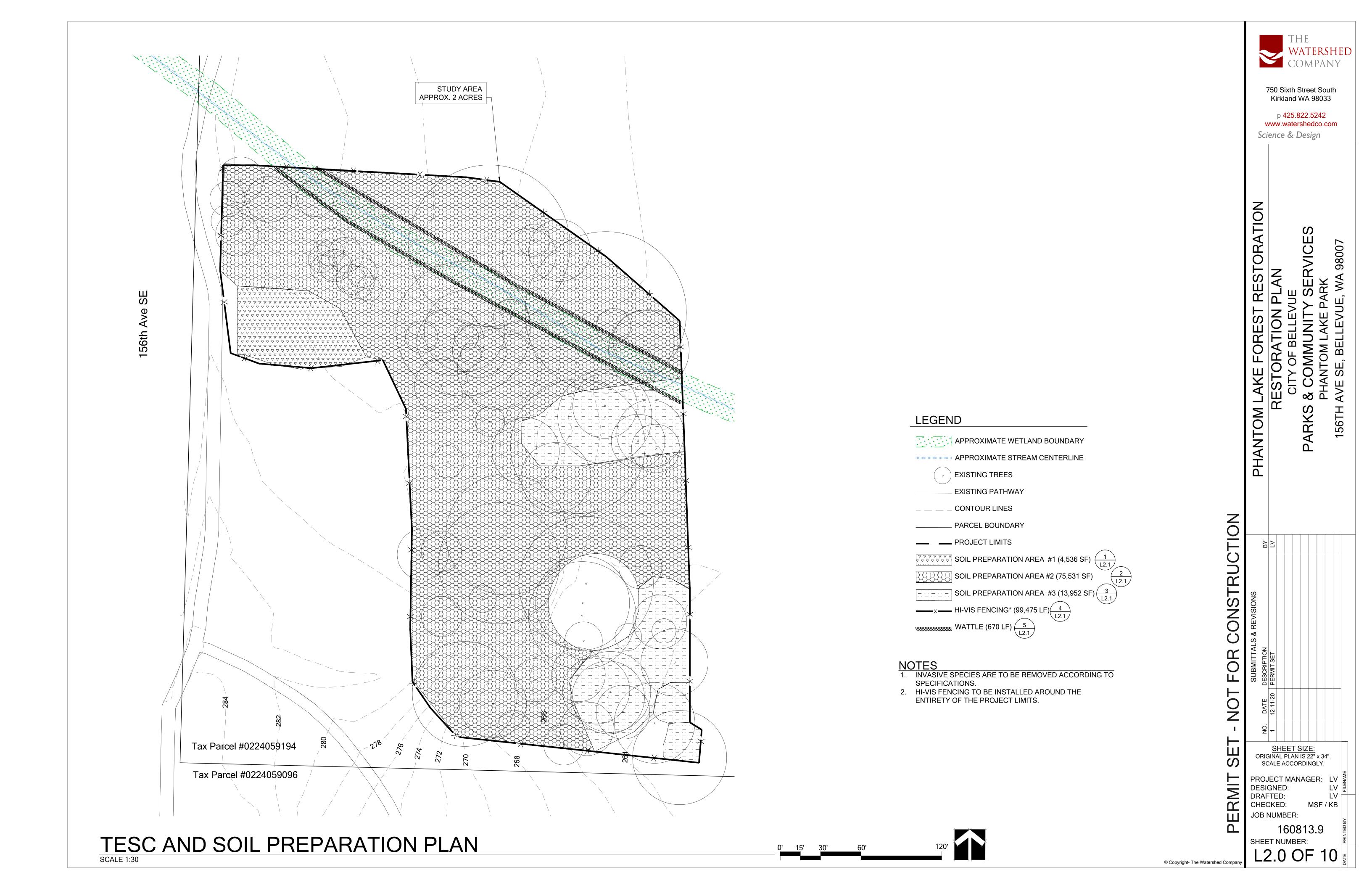
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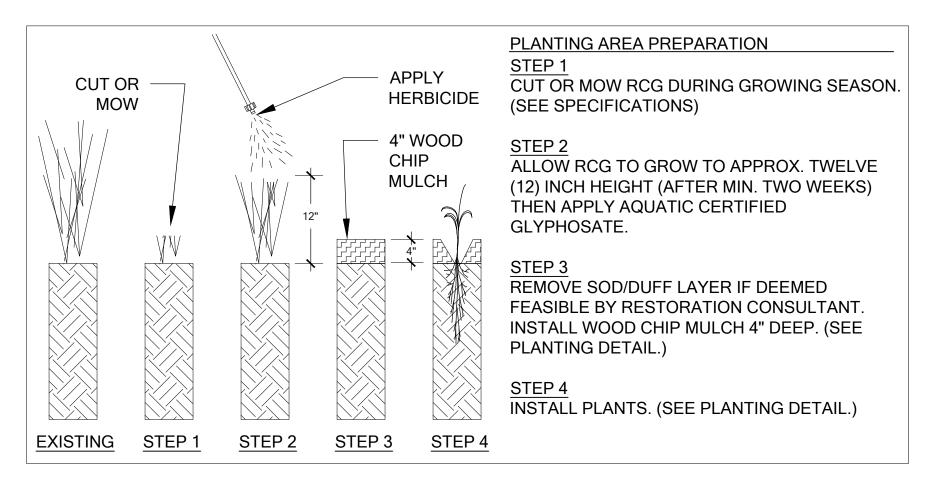
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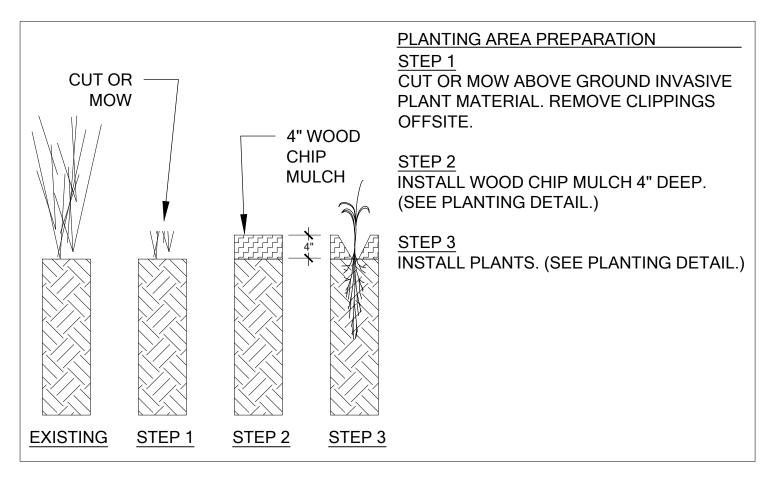
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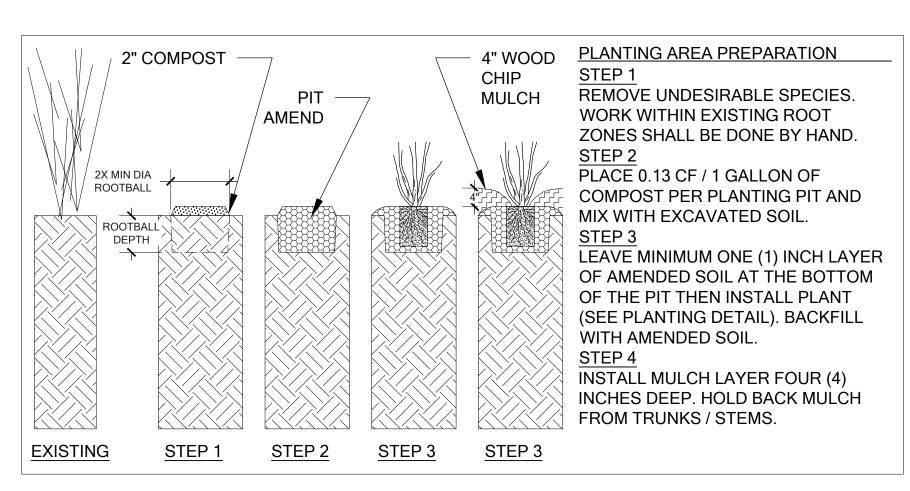
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L1.3 OF 10









**SOIL PREPARATION AREA 1** 

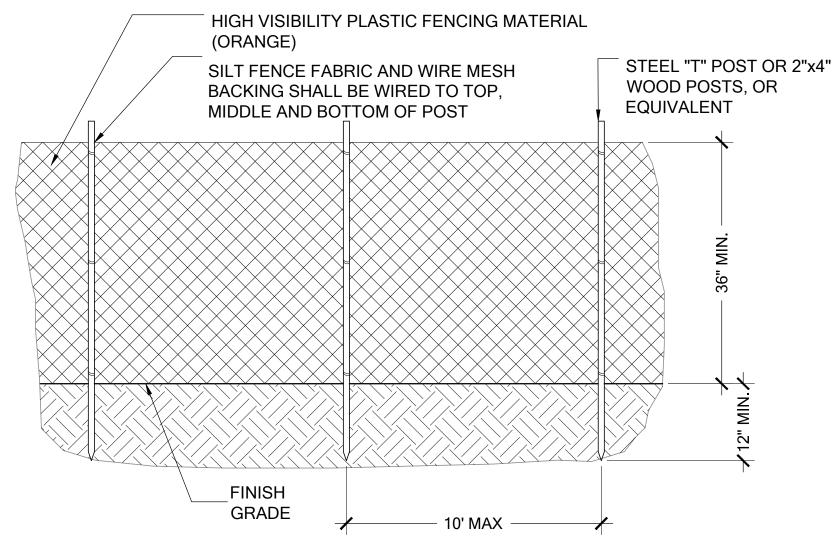
NOT TO SCALE

**SOIL PREPARATION AREA 2** 

NOT TO SCALE

**SOIL PREPARATION AREA 3** 

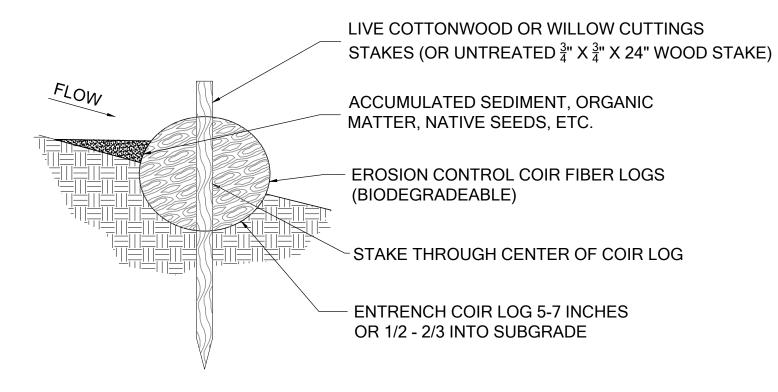
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- 1. DO NOT NAIL OR STAPLE FENCE TO EXISTING TREES OR UTILITY POLES.
- 2. ANY DAMAGE TO THE FENCE SHALL BE REPAIRED IMMEDIATELY.

HI-VIS FENCING

NOT TO SCALE



NOTE: INSTALL STRAW WATTLES PARALLEL TO SLOPE CONTOUR PER SURFACE WATER DESIGN MANUAL - APPENDIX D (D.2.1.2.5)

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TESC AND SOIL PREPARATION DETAILS

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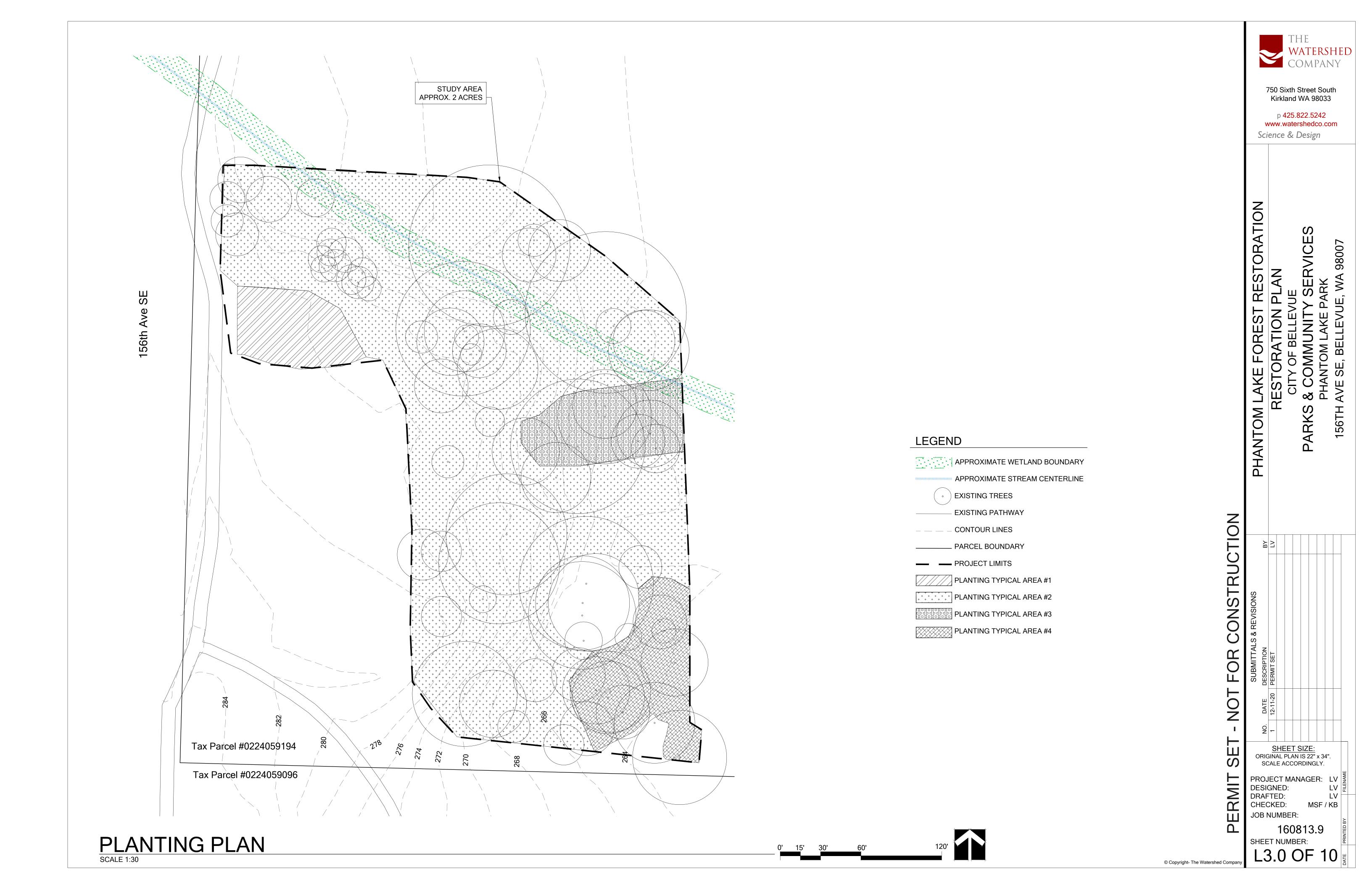
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160813.9 SHEET NUMBER:

L2.1 OF 10



CANDIDATE PLANT LIST AREA 1 (4,53			
TREES	QUANTITY	SPACING	SIZE
PICEA SITCHENSIS / SITKA SPRUCE	14	9' O.C.	5 GAL.
SALIX LUCIDA / PACIFIC WILLOW	14	9' O.C.	1 GAL.
SALIX SITCHENSIS / SITKA WILLOW	14	9' O.C.	1 GAL.
SALIX SCOULERIANA / SCOULER'S WILLOW	14	9' O.C.	1 GAL.
SHRUBS			
CORNUS STOLONIFERA / RED-OSIER DOGWOOD	125	6' O.C.	1 GAL.

CANDIDATE PLANT LIST AREA 3 (6,050 SF)

**TREES** 

**SHRUBS** 

FRAXINUS LATIFOLIA / OREGON ASH

PICEA SITCHENSIS / SITKA SPRUCE

ROSA PISOCARPA / CLUSTER ROSE

CORNUS STOLONIFERA / RED-OSIER DOGWOOD

CANDIDATE PLANT LIST AREA 2 (75,531 SF)					
TREES	QUANTITY	<u>SPACING</u>	SIZE		
ABIES CONCOLOR / WHITE FIR	227	9' O.C.	1 GAL.		
CALOCEDRUS DECURRENS / INCENSE CEDAR	227	9' O.C.	1 GAL.		
SEQUOIADENDRON GIGANTEUM / GIANT SEQUOIA	227	9' O.C.	1 GAL.		
THUJA PLICATA / WESTERN REDCEDAR	227	9' O.C.	1 GAL.		
SHRUBS					
AMELANCHIER ALNIFOLIA / SERVICEBERRY	352	6' O.C.	1 GAL.		
HOLODISCUS DISCOLOR / OCEANSPRAY	352	6' O.C.	1 GAL.		
MAHONIA AQUIFOLIUM / TALL OREGON GRAPE	352	6' O.C.	1 GAL.		
OEMLERIA CERASIFORMIS / OSOBERRY	352	6' O.C.	1 GAL.		
RUBUS SPECTABILIS / SALMONBERRY	352	6' O.C.	1 GAL.		
SAMBUCUS RACEMOSA / RED ELDERBERRY	352	6' O.C.	1 GAL.		

SIZE	-
1" CAL.	I
6' TALL	-
	<u> </u>
1 GAL.	1
1 GAL.	ı

**SPACING** 

9' O.C.

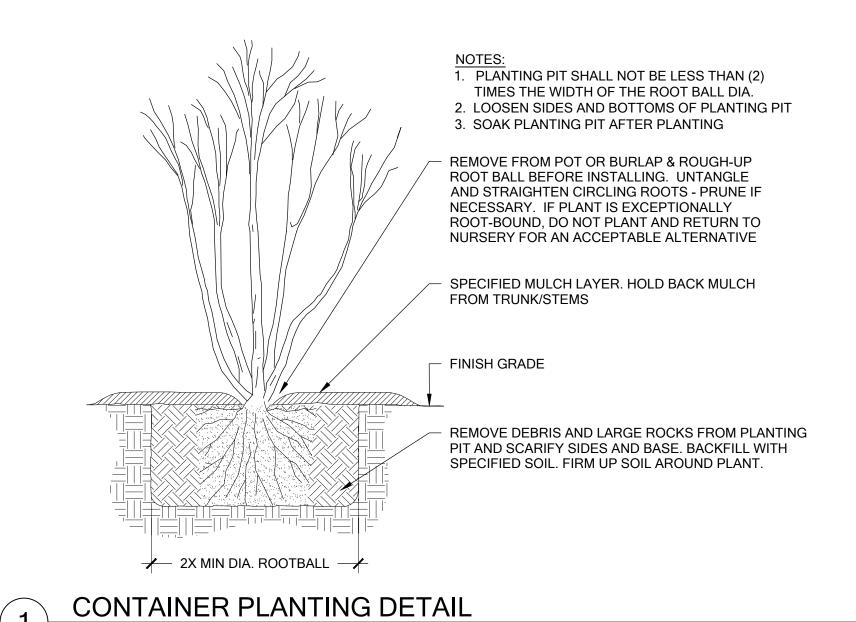
9' O.C.

6' O.C.

6' O.C.

QUANTITY

CANDIDATE PLANT LIST AREA 4 (7,910 SF)					
TREES	QUANTITY	SPACING	SIZE		
PSEUDOTSUGA MENZIESII / DOUGLAS-FIR	12	9' O.C.	1 GAL.		
THUJA PLICATA	12	9' O.C.	1 GAL.		
SHRUBS					
ACER CIRCINATUM / VINE MAPLE	19	6' O.C.	1 GAL.		
RUBUS SPECTABILIS / SALMONBERRY	19	6' O.C.	1 GAL.		
VACCINIUM PARVIFOLIUM / RED HUCKLEBERRY	19	6' O.C.	1 GAL.		
GROUNDCOVER					
GAULTHERIA SHALLON / SALAL	50	3' O.C.	1 GAL.		
MAHONIA NERVOSA / DULL MAHONIA	50	3' O.C.	1 GAL.		
POLYSTICHUM MUNITUM / WESTERN SWORDFERN	50	3' O.C.	1 GAL.		



Scale: NTS

FOREST RESTORATION PHANTOM LAKE FORES.

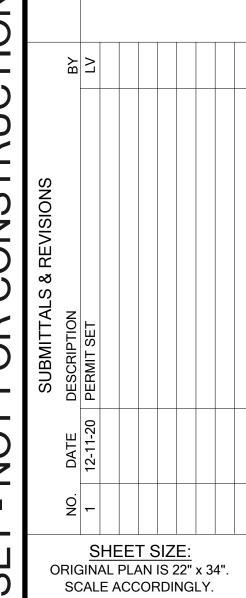
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PLANT SCHEDULE AND DETAILS

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160813.9 L3.1 OF 10

## **GENERAL NOTES**

## QUALITY ASSURANCE

- 1. PLANTS SHALL MEET OR EXCEED THE SPECIFICATIONS OF FEDERAL, STATE, AND LOCAL LAWS REQUIRING INSPECTION FOR PLANT DISEASE AND INSECT CONTROL
- 2. PLANTS SHALL BE HEALTHY, VIGOROUS, AND WELL-FORMED, WITH WELL DEVELOPED, FIBROUS ROOT SYSTEMS, FREE FROM DEAD BRANCHES OR ROOTS. PLANTS SHALL BE FREE FROM DAMAGE CAUSED BY TEMPERATURE EXTREMES, LACK OR EXCESS OF MOISTURE, INSECTS, DISEASE, AND MECHANICAL INJURY. PLANTS IN LEAF SHALL BE WELL FOLIATED AND OF GOOD COLOR. PLANTS SHALL BE HABITUATED TO THE OUTDOOR ENVIRONMENTAL CONDITIONS INTO WHICH THEY WILL BE PLANTED (HARDENED-OFF)
- TREES WITH DAMAGED, CROOKED, MULTIPLE OR BROKEN LEADERS WILL BE REJECTED. WOODY PLANTS WITH ABRASIONS OF THE BARK OR SUN SCALD WILL BE REJECTED.
- 4. NOMENCLATURE: PLANT NAMES SHALL CONFORM TO FLORA OF THE PACIFIC NORTHWEST BY HITCHCOCK AND CRONQUIST. UNIVERSITY OF WASHINGTON PRESS, 2018 AND/OR TO A FIELD GUIDE TO THE COMMON WETLAND PLANTS OF WESTERN WASHINGTON & NORTHWESTERN OREGON, ED. SARAH SPEAR COOKE. SEATTLE AUDUBON SOCIETY, 1997.

## **DEFINITIONS**

- PLANTS/PLANT MATERIALS. PLANTS AND PLANT MATERIALS SHALL INCLUDE ANY LIVE PLANT MATERIAL USED ON THE PROJECT. THIS INCLUDES BUT IS NOT LIMITED TO CONTAINER GROWN, B&B OR BAREROOT PLANTS: LIVE STAKES AND FASCINES (WATTLES); TUBERS, CORMS, BULBS, ETC.; SPRIGS, PLUGS. AND LINERS.
- CONTAINER GROWN. CONTAINER GROWN PLANTS ARE THOSE WHOSE ROOTBALLS ARE ENCLOSED IN A POT OR BAG IN WHICH THAT PLANT GREW

## SUBSTITUTIONS

- 1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN SPECIFIED MATERIALS IN ADVANCE IF SPECIAL GROWING, MARKETING OR OTHER ARRANGEMENTS MUST BE MADE IN ORDER TO SUPPLY SPECIFIED MATERIALS.
- 2. SUBSTITUTION OF PLANT MATERIALS NOT ON THE PROJECT LIST WILL NOT BE PERMITTED UNLESS AUTHORIZED IN WRITING BY THE RESTORATION CONSULTANT.
- IF PROOF IS SUBMITTED THAT ANY PLANT MATERIAL SPECIFIED IS NOT OBTAINABLE, A PROPOSAL WILL BE CONSIDERED FOR USE OF THE NEAREST EQUIVALENT SIZE OR ALTERNATIVE SPECIES, WITH CORRESPONDING ADJUSTMENT OF CONTRACT PRICE.
- SUCH PROOF WILL BE SUBSTANTIATED AND SUBMITTED IN WRITING TO THE CONSULTANT AT LEAST 30 DAYS PRIOR TO START OF WORK UNDER THIS SECTION.

# **INSPECTION**

- PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE RESTORATION CONSULTANT FOR CONFORMANCE TO SPECIFICATIONS, EITHER AT TIME OF DELIVERY ON-SITE OR AT THE GROWER'S NURSERY. APPROVAL OF PLANT MATERIALS AT ANY TIME SHALL NOT IMPAIR THE SUBSEQUENT RIGHT OF INSPECTION AND REJECTION DURING PROGRESS OF THE WORK.
- PLANTS INSPECTED ON SITE AND REJECTED FOR NOT MEETING SPECIFICATIONS MUST BE REMOVED IMMEDIATELY FROM SITE OR RED-TAGGED AND REMOVED AS SOON AS POSSIBLE.
- THE RESTORATION CONSULTANT MAY ELECT TO INSPECT PLANT MATERIALS AT THE PLACE OF GROWTH. AFTER INSPECTION AND ACCEPTANCE, THE RESTORATION CONSULTANT MAY REQUIRE THE INSPECTED PLANTS BE LABELED AND RESERVED FOR PROJECT. SUBSTITUTION OF THESE PLANTS WITH OTHER INDIVIDUALS, EVEN OF THE SAME SPECIES AND SIZE, IS UNACCEPTABLE.

# MEASUREMENT OF PLANTS

- 1. PLANTS SHALL CONFORM TO SIZES SPECIFIED UNLESS SUBSTITUTIONS ARE MADE AS OUTLINED IN THIS CONTRACT.
- 2. HEIGHT AND SPREAD DIMENSIONS SPECIFIED REFER TO MAIN BODY OF PLANT AND NOT BRANCH OR ROOT TIP TO TIP. PLANT DIMENSIONS SHALL BE MEASURED WHEN THEIR BRANCHES OR ROOTS ARE IN THEIR NORMAL POSITION.
- 3. WHERE A RANGE OF SIZE IS GIVEN, NO PLANT SHALL BE LESS THAN THE MINIMUM SIZE AND AT LEAST 50% OF THE PLANTS SHALL BE AS LARGE AS THE MEDIAN OF THE SIZE RANGE. (EXAMPLE: IF THE SIZE RANGE IS 12" TO 18", AT LEAST 50% OF PLANTS MUST BE 15" TALL.).

## **SUBMITTALS**

## PROPOSED PLANT SOURCES

WITHIN 45 DAYS AFTER AWARD OF THE CONTRACT, SUBMIT A COMPLETE LIST OF PLANT MATERIALS PROPOSED TO BE PROVIDED DEMONSTRATING CONFORMANCE WITH THE REQUIREMENTS SPECIFIED. INCLUDE THE NAMES AND ADDRESSES OF ALL GROWERS AND NURSERIES.

## PRODUCT CERTIFICATES

- 1. PLANT MATERIALS LIST SUBMIT DOCUMENTATION TO CONSULTANT AT LEAST 30 DAYS PRIOR TO START OF WORK UNDER THIS SECTION THAT PLANT MATERIALS HAVE BEEN ORDERED. ARRANGE PROCEDURE FOR INSPECTION OF PLANT MATERIAL WITH CONSULTANT AT TIME OF SUBMISSION
- 2. HAVE COPIES OF VENDOR'S OR GROWERS' INVOICES OR PACKING SLIPS FOR ALL PLANTS ON SITE DURING INSTALLATION. INVOICE OR PACKING SLIP SHOULD LIST SPECIES BY SCIENTIFIC NAME, QUANTITY, AND DATE DELIVERED (AND GENETIC ORIGIN IF THAT INFORMATION WAS PREVIOUSLY REQUESTED)

## DELIVERY, HANDLING, & STORAGE

## NOTIFICATION

CONTRACTOR MUST NOTIFY CONSULTANT 48 HOURS OR MORE IN ADVANCE OF DELIVERIES SO THAT CONSULTANT MAY ARRANGE FOR INSPECTION.

## PLANT MATERIALS

- TRANSPORTATION DURING SHIPPING, PLANTS SHALL BE PACKED TO PROVIDE PROTECTION AGAINST CLIMATE EXTREMES, BREAKAGE AND DRYING. PROPER VENTILATION AND PREVENTION OF DAMAGE TO BARK, BRANCHES, AND ROOT SYSTEMS MUST BE ENSURED.
- 2. SCHEDULING AND STORAGE PLANTS SHALL BE DELIVERED AS CLOSE TO PLANTING AS POSSIBLE. PLANTS IN STORAGE MUST BE PROTECTED AGAINST ANY CONDITION THAT IS DETRIMENTAL TO THEIR CONTINUED HEALTH AND VIGOR
- 3. HANDLING PLANT MATERIALS SHALL NOT BE HANDLED BY THE TRUNK, LIMBS, OR FOLIAGE BUT ONLY BY THE CONTAINER, BALL BOX, OR OTHER PROTECTIVE STRUCTURE, EXCEPT BAREROOT PLANTS SHALL BE KEPT IN BUNDLES UNTIL PLANTING AND THEN HANDLED CAREFULLY BY THE TRUNK OR STEM.
- 4. LABELS PLANTS SHALL HAVE DURABLE, LEGIBLE LABELS STATING CORRECT SCIENTIFIC NAME AND SIZE. TEN PERCENT OF CONTAINER GROWN PLANTS IN INDIVIDUAL POTS SHALL BE LABELED. PLANTS SUPPLIED IN FLATS, RACKS, BOXES, BAGS, OR BUNDLES SHALL HAVE ONE LABEL PER GROUP.

# WARRANTY

# PLANT WARRANTY

PLANTS MUST BE GUARANTEED TO BE TRUE TO SCIENTIFIC NAME AND SPECIFIED SIZE, AND TO BE HEALTHY AND CAPABLE OF VIGOROUS GROWTH.

# REPLACEMENT

- 1. PLANTS NOT FOUND MEETING ALL OF THE REQUIRED CONDITIONS AT THE CONSULTANT'S DISCRETION MUST BE REMOVED FROM SITE AND REPLACED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- 2. PLANTS NOT SURVIVING AFTER ONE YEAR TO BE REPLACED AT THE CONTRACTOR'S EXPENSE.

# PLANT MATERIAL

# GENERAL

- PLANTS SHALL BE NURSERY GROWN IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICES UNDER CLIMATIC CONDITIONS SIMILAR TO OR MORE SEVERE THAN THOSE OF THE PROJECT SITE.
- 2. PLANTS SHALL BE TRUE TO SPECIES AND VARIETY OR SUBSPECIES. NO CULTIVARS OR NAMED VARIETIES SHALL BE USED UNLESS SPECIFIED AS SUCH.

# QUANTITIES

SEE PLANT LIST ON ACCOMPANYING PLANS AND PLANT SCHEDULES.

# ROOT TREATMENT

- CONTAINER GROWN PLANTS (INCLUDES PLUGS): PLANT ROOT BALLS MUST HOLD TOGETHER WHEN THE PLANT IS REMOVED FROM THE POT, EXCEPT THAT A SMALL AMOUNT OF LOOSE SOIL MAY BE ON THE TOP OF THE ROOTBALL.
- 2. PLANTS MUST NOT BE ROOT-BOUND; THERE MUST BE NO CIRCLING ROOTS PRESENT IN ANY PLANT INSPECTED.
- ROOTBALLS THAT HAVE CRACKED OR BROKEN WHEN REMOVED FROM THE CONTAINER SHALL BE REJECTED.

# INVASIVE REMOVAL AND MULCHING

## **GENERAL NOTES**

PROJECT LIMITS ARE INCLUDED IN THE PLANS. AND WILL BE DEMARCATED BY THE CITY OF BELLEVUE PRIOR TO THE START OF WORK. CONTRACTOR WILL COVER ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES NECESSARY FOR THE PERFORMANCE OF ALL WORK INCLUDED IN THE SCOPE OF WORK. ALL FIELD WORK SHALL BE PERFORMED UNDER THE SUPERVISION OF A QUALIFIED CREW SUPERVISOR THAT HAS RELEVANT FIELD EXPERIENCE IN WETLAND RESTORATION/MAINTENANCE. ALL DEBRIS SHALL BE PROPERLY DISPOSED OF OFF-SITE UNLESS THERE IS PRIOR APPROVAL BY CITY OF BELLEVUE STAFF TO COMPOST ONSITE. CONTRACTOR IS RESPONSIBLE FOR FOLLOWING ALL LOCAL, STATE AND FEDERAL GUIDELINES WHEN APPLYING PESTICIDES AND HERBICIDES TO THE SITE. CONTRACTOR IS RESPONSIBLE FOR POSTING ALL REQUIRED PUBLIC NOTIFICATIONS AND REMOVING ALL NECESSARY SITE SIGNAGE WITHIN 24 HOURS AFTER RE-ENTRY PERIOD. THE CONTRACTOR WILL ENSURE THAT ALL EMPLOYEES COMPLY WITH ALL CITY OF BELLEVUE, WISHA, AND WASHINGTON STATE INDUSTRIAL REGULATIONS AND PRACTICES. THE CONTRACTOR MUST USE THE WSDA PESTICIDE APPLICATION RECORD (VERSION 1) FORM WHICH CAN BE FOUND AT HTTPS://AGR.WA.GOV/PESTFERT/PESTICIDES/DOCS/RECFORM4226.PDF. THE CONTRACTOR MUST PROVIDE THE CITY WITH ALL PESTICIDE APPLICATION RECORDS WITHIN TWENTY-FOUR HOURS OF APPLICATION PREVAILING WAGES ARE REQUIRED. CONTRACTOR IS RESPONSIBLE FOR OBTAINING PREVAILING WAGE RULING FROM L&I.

CITY OF BELLEVUE PARKS & COMMUNITY SERVICES NATURAL RESOURCE **DIVISION CONTACT;** 

> JAMMIE KINGHAM **BELLEVUE PARKS** 450 110 IH AVE NE BELLEVUE, WA 98004 JKINGHAM@BELLEVUEWA.GOV

## WORK DESCRIPTION

1) MANUAL, MECHANICAL AND CHEMICAL REMOVAL OF ALL INVASIVE/NOXIOUS PLANTS IDENTIFIED ON THE KING COUNTY NOXIOUS

HTTPS://WWW.KINGCOUNTY.GOV/SERVICES/ENVIRONMENT/ANIMALS-AND-PLANTS/NOXIOUS-WEEDS/LAWS/LIST.ASPX. SEE TREATMENT

- METHODS FOR KEY TARGET SPECIES AND OPTIMAL TIMING FOR COMMON WEEDING ACTIVITIES AND SPECIFICATIONS. TREATMENT FOR ANY INVASIVE / NOXIOUS PLANTS DISCOVERED ON-SITE THAT ARE NOT LISTED IN THE KEY TARGET SPECIES TREATMENT METHODS BELOW MUST FIRST BE APPROVED BY THE CITY OF BELLEVUE.
- 2) ALL HERBICIDES USED MUST BE APPROVED FOR AQUATIC SITES AND ALL APPLICATIONS MUST BE MADE UNDER DIRECT SUPERVISION OF A LICENSED PESTICIDE APPLICATOR. APPLICATION METHODS MAY INCLUDE LANCE, CUT STUMP, FOLIAR SPRAY, CUT & DAB, OR STEM INJECTION. SEE DESCRIPTION OF HERBICIDE APPLICATION METHODS.
- 3) PHYSICAL AND CHEMICAL TREATMENTS OF ALL INVASIVE SPECIES SHOULD BE CONDUCTED TWO-THREE TIMES IN 2021 BEFORE NOVEMBER
- 4) AFTER INITIAL REMOVAL OF ALL INVASIVE PLANTS, THE ENTIRE PROJECT SITE SHOULD BE MULCHED WITH 4" OF GUARANTEED, WEED-FREE COURSE WOOD CHIP MULCH.
- 5) CONTRACTOR MUST PROVIDE NOTIFICATION AND COORDINATION OF ALL ACTIVITIES WITH JAMMIE KINGHAM NO LESS THAN 72 HOURS BEFORE BEGINNING WORK
- 6) ALL WORK SHALL BE PERFORMED BETWEEN THE HOURS OF 7:00AM AND 5:00PM MONDAY THROUGH FRIDAY.

# TREATMENT METHODS FOR KEY TARGET SPECIES

- REED CANARY GRASS SHOULD BE MOWED OR CUT TO GROUND LEVEL BEFORE GOING TO SEED. ONCE IT REACHES 12" HEIGHT AFTER MOWING, THE REGROWTH SHOULD BE SPRAYED WITH AN AQUATIC-APPROVED HERBICIDE CONTAINING 2% GLYPHOSATE AND 1% AQUATIC SURFACTANT. REPEAT TREATMENT THROUGHOUT GROWING SEASON ONCE IT REACHES 12".
- HIMALAYAN BLACKBERRY SHOULD BE MOWED DOWN TO GROUND LEVEL IN EARLY SPRING. WHEN THE REGROWTH HAS REACHED AT LEAST 18" HIGH AND IS IN FULL LEAF (ABOUT 6 WEEKS TO 2 MONTHS AFTER MOWING), IT SHOULD BE SPRAYED WITH 1-2% TRICLOPYR AND 1% SURFACTANT. IF THERE IS VISIBLE RE-GROWTH AT THE TIME OF NATIVE PLANT INSTALLATION, THE ROOT BALL SHALL BE GRUBBED OUT AND REPLACED WITH A NATIVE PLANT. COMPLETE COVERAGE OF ALL CANES AND LEAVES IS ESSENTIAL FOR MAXIMUM EFFECTIVENESS. REPEAT TREATMENT THROUGHOUT GROWING SEASON.
- MORNING GLORY SHOULD BE TREATED WITH AQUATIC-APPROVED HERBICIDE CONTAINING 2% OF GLYPHOSATE WITH 1% SURFACTANT.
- ENGLISH IVY GROWING ON THE GROUND SHOULD BE HAND PULLED AND ALL ROOTS REMOVED. ENGLISH IVY GROWING ON TREES SHOULD BE CUT AT CHEST HEIGHT, CLEARING A 1- OR 2-FOOT-WIDE SECTION ALL THE WAY AROUND THE TREE TRUNK, TAKING CARE NOT TO DAMAGE THE TRUNK. CLIPPERS, LOPPERS OR EVEN A SMALL SAW MAY BE NEEDED TO CUT THROUGH THE VINES DEPENDING ON THEIR THICKNESS. PULL OR PRY THE VINES OFF THAT SMALL SECTION. LEAVE THE VINES ABOVE THE CLEARED SPACE TO DIE AND DO NOT TRY TO PULL THEM OFF THE TREE; PULLING ON THEM COULD DAMAGE THE TREE'S BARK. AS THE VINES DIE OVER 1 TO 2 YEARS, THEY WILL GRADUALLY DRY UP AND FALL OFF THE TREE.
- INVASIVE TREES OR WOODY SHRUBS SHOULD BE CONTROLLED BY PULLING OR TREATING WITH A CUT STUMP/FRILLING METHOD USING AQUATIC-APPROVED HERBICIDE CONTAINING 100%

TRICLOPYR OR EZ JECT COPPERHEAD IMAZAPYR PELLETS. IF ANY OF THESE SPECIES HAVE A DIAMETER LESS THAN 1 INCH, REMOVE THE ENTIRE PLANT WITH A WEED WRENCH

# OPTIMAL TIMING FOR COMMON WEEDING ACTIVITIES AND SPECIFICATIONS:

 REED CANARY GRASS SHOULD BE MOWED OR CUT DOWN TO GROUND LEVEL, IDEALLY IN SPRING OR SUMMER AND TREATED WITH AN AQUATIC-APPROVED HERBICIDE MULTIPLE TIMES DURING GROWING SEASON TO MINIMIZE REGENERATION

- HIMALAYAN BLACKBERRY ROOTS SHOULD BE COMPLETELY REMOVED FROM THE SOIL AND REMOVED FROM SITE ANYTIME DURING THE YEAR WHEN REGROWTH IS EXPOSED. FOLIAR SPRAY OR CUT/DAB IN SPRING-FALL WITH AN AQUATIC-APPROVED HERBICIDE WHEN REGROWTH HAS REACHED 18". EARLY MORNING SPRAY IS RECOMMENDED TO AVOID ENDANGERING POLLINATOR
- MORNING GLORY SHOULD BE ROUTINELY PULLED FROM NATIVE PLANTS AND GRUBBED WITHIN 12" OF WOODY STEMS. CHEMICAL TREATMENT IS DETERMINED NECESSARY, FOLIAR SPRAY IS MOST EFFECTIVE FOLLOWING FLOWERING TIME IN LATE FALL BEFORE DIEBACK.
- ENGLISH IVY ON THE GROUND SHOULD BE HAND PULLED AND ALL ROOTS REMOVED. ENGLISH IVY ON TREES SHOULD BE CUT AT CHEST HEIGHT, CLEARING A 1- OR 2-FOOT-WIDE SECTION ALL THE WAY AROUND THE TREE TRUNK, TAKING CARE NOT TO DAMAGE THE TRUNK. CLIPPERS, LOPPERS OR EVEN A SMALL SAW MAY BE NEEDED TO CUT THROUGH THE VINES DEPENDING ON THEIR THICKNESS. PULL OR PRY THE VINES OFF THAT SMALL SECTION. LEAVE THE VINES ABOVE THE CLEARED SPACE TO DIE AND DO NOT TRY TO PULL THEM OFF THE TREE; PULLING ON THEM COULD DAMAGE THE TREE'S BARK. AS THE VINES DIE OVER 1 TO 2 YEARS, THEY WILL GRADUALLY DRY UP AND FALL OFF THE TREE.
- INVASIVE TREES OR WOODY SHRUBS WITHIN THE ENHANCEMENT AREA (ENGLISH HOLLY, ENGLISH LAUREL AND CHERRY LAUREL MOUNTAIN ASH, ENGLISH HAWTHORN, WILD AND DOMESTIC CHERRY, BUTTERFLY BUSH, SCOT'S BROOM) SHOULD BE CONTROLLED DURING THE ACTIVE GROWING SEASON AND AFTER FULLY LEAFING OUT.

# A DESCRIPTION OF HERBICIDE APPLICATION METHODS IS PROVIDED BELOW FOLIAR: APPLIED TO LEAVES AND GREEN STEMS. AVOID DRIFT AT

- CUT & DAB: CUT STEMS OF TARGET WEED SPECIES BETWEEN 6"AND 12" ABOVE THE GROUND SURFACE, AND IMMEDIATELY APPLY AN HERBICIDE TO THE FRESH CUT
- FRILL & TREAT: FOR ALL INVASIVE TREES OR WOODY SHRUBS GREATER THAN 3" DIAMETER AT 6" ABOVE GROUND, DO NOT CUT THE TREE/SHRUB DOWN, BUT INSTEAD CLEAR BRANCHES NECESSARY TO ACCESS THE MAIN TRUNK(S). MAKE A SERIES OF DOWNWARD ANGLED CUTS THROUGH THE BARK AND CAMBIUM LEAVING THE FRILL CONNECTED TO THE TREE. MAKE THESE CUTS COMPLETELY AROUND THE ENTIRE CIRCUMFERENCE OF THE TRUNK 12" ABOVE THE GROUND SURFACE. IMMEDIATELY APPLY HERBICIDE TO THE CAMBIUM OF THE FRESHLY FRILLED TRUNK AT THE RECOMMENDED RATE
- LANCE: USED FOR WOODY INVASIVE SPECIES GREATER THAN 2.5" DIAMETER AT 6" ABOVE GROUND SURFACE. DO NOT CUT THE TREE/SHRUB DOWN, BUT INSTEAD CLEAR BRANCHES NECESSARY TO ACCESS THE MAIN TRUNK(S) AND USE A LANCE PER THE MANUFACTURER'S INSTRUCTIONS TO INJECT IMAZAPYR PELLETS INTO THE TREE AT THE RATE OUTLINED IN THE MANUFACTURER'S INSTRUCTIONS. FOR TREES GREATER THAN 6" DIAMETER AT 6" ABOVE THE GROUND, CONSULT WITH CITY OF BELLEVUE PARKS STAFF BEFORE TREATING.
- CUT STUMP: APPLIED TO WOODY INVASIVE SPECIES SMALLER THAN 2.5" DIAMETER AT 6" ABOVE GROUND. CUT THE TREE/SHRUB DOWN TO A STUMP 6 INCHES HIGH. APPLY TRICLOPYR IMMEDIATELY TO ENTIRE SURFACE OF THE STUMP/STEM AT THE RATES OUTLINED IN THE MANUFACTURER'S INSTRUCTIONS. CUT ALL BRANCHES TO LENGTHS 18" OR LESS AND SCATTER. AVOIDING DIRECT GROUND CONTACT.
- BLUE DYE MUST BE USED TO VERIFY FOLIAR CHEMICAL APPLICATION OR CUT-DAB/FRILL ON 100% OF TARGET WEED SPECIES. WOODY MATERIAL THAT IS LANCED SHALL HAVE VISIBLE SHELL CASINGS.
- CHEMICAL APPLICATIONS SHALL RESULT IN LESS THAN 5% OFF-TARGET DAMAGE TO NATIVE PLANTS.
- CHEMICALLY TREATED SPECIES SHOULD SHOW CLEAR SIGNS OF DIEBACK STARTING WITHIN 2 MONTHS OF TREATMENT.
- THE CONTRACTOR SHOULD PLACE REQUIRED SIGNAGE PRIOR TO CHEMICAL APPLICATIONS IN FRONT OF THE AREA TREATED AND AT KEY POINTS ALONG THE PUBLIC TRAILS CONSISTENT WITH MANUFACTURER'S LABEL. FOR EXAMPLE: LABELS THAT LIMIT ENTRY UNTIL AFTER A PRODUCT IS DRY SHOULD BE POSTED DURING APPLICATION AND UNTIL THE PRODUCT IS DRY. THE CONTRACTOR SHOULD REMOVE SIGNAGE AS SOON AS CONDITIONS ALLOW.

**NATERSHED** 

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**PHANTO** 

SHEET SIZE: ORIGINAL PLAN IS 22" x 34". SCALE ACCORDINGLY. PROJECT MANAGER: LV

**DESIGNED**: LV | DRAFTED: CHECKED: MSF / KB JOB NUMBER:

160813.9 SHEET NUMBER:

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# MAINTENANCE AND MONITORING NOTES

THIS PLAN HAS BEEN PREPARED AS PART OF THE FOREST RESTORATION AT PHANTOM LAKE PARK. THE LOCATION OF THE PROJECT IS ON THE WEST SIDE OF PHANTOM LAKE WITHIN THE LAKE HILLS GREENBELT AT 2064-2098 156<sup>TH</sup> AVE SE, BELLEVUE WA. THIS RESTORATION PLAN SEEKS TO ENHANCE SUBSTANTIAL PORTIONS OF ECOLOGICALLY DEGRADED AREAS WITHIN THE PROJECT LIMITS AT PHANTOM LAKE PARK. THE RESTORATION OF THIS AREA RESULTS IN NO NET LOSS OF OVERALL TREE COVERAGE. THE PROPOSED RESTORATION AREA CURRENTLY LACKS A NATIVE UNDERSTORY AND EVERGREEN CANOPY AND IS DOMINATED BY NON-NATIVE SPECIES SUCH AS HIMALAYAN BLACKBERRY, REED CANARY GRASS, MORNING GLORY, AND

TO ACHIEVE THE ENHANCEMENT OBJECTIVES, THE PLAN CALLS FOR THE RESTORATION OF OVER 2 ACRES OF PHANTOM LAKE PARK THROUGH THE REMOVAL OF INVASIVE SPECIES AND THE PLANTING OF NATIVE TREES, SHRUBS, AND GROUNDCOVER. THE RESTORATION AREA COVERS 94,019 SQUARE FEET. TREE SPECIES PROPOSED INCLUDE WHITE FIR, INCENSE CEDAR, DOUGLAS-FIR, INCENSE CEDAR, WESTERN REDCEDAR, SITKA SPRUCE, PACIFIC WILLOW, SITKA WILLOW, SCOULER'S WILLOW, OREGON ASH, AND GIANT SEQUOIA. SHRUB SPECIES PROPOSED INCLUDE SERVICEBERRY, OCEANSPRAY, SALMONBERRY, RED ELDERBERRY, VINE MAPLE, RED HUCKLEBERRY, RED-OSIER DOGWOOD, CLUSTER ROSE, TALL OREGON GRAPE, AND OSOBERRY. GROUNDCOVER SPECIES INCLUDE WESTERN SWORDFERN, SALAL, AND DULL MAHONIA. PLANTS ON THIS LIST WERE CHOSEN WITH A CHANGING CLIMATE IN MIND, AND CAN TOLERATE DRIER SUMMERS AND MORE SPORADIC RAINFALL AS ANTICIPATED FOR THE NEXT CENTURY.

## MITIGATION NOTES

## 1.1 OVERVIEW

THIS RESTORATION AREA WILL BE CONTINUALLY MAINTAINED AND MONITORED BY CITY OF BELLEVUE PARKS & COMMUNITY SERVICES NATURAL RESOURCE DIVISION. THE PLAN DETAILS METHODS OF INVASIVE SPECIES REMOVAL, SPECIFIES APPROPRIATE SPECIES FOR PLANTING AND PLANTING TECHNIQUES, DESCRIBES PROPER MAINTENANCE ACTIVITIES, AND SETS FORTH PERFORMANCE STANDARDS. THIS WILL ENSURE THAT RESTORATION PLANTINGS WILL BE MAINTAINED, MONITORED, AND SUCCESSFULLY ESTABLISHED FOLLOWING IMPLEMENTATION. COMPONENTS OF THE MAINTENANCE AND MONITORING PLAN ARE DETAILED BELOW.

## 1.2 GOALS

- 1. IMPROVE FOREST FUNCTION BY LIMITING INVASIVE AND/OR NOXIOUS WEED COVER ON-SITE.
- 2. IMPROVE FOREST FUNCTION BY ESTABLISHING DENSE VEGETATION THAT IS APPROPRIATE TO THE ECO-REGION AND SITE.
- 3. INCREASE HABITAT FUNCTION BY ADDING HABITAT COMPLEXITY. PROVIDE REFUGE FOR SMALL MAMMALS AND INVERTEBRATES. PROVIDE PERCHING, NESTING, AND FORAGING HABITAT FOR NATIVE

# 1.3 PERFORMANCE STANDARDS

THE STANDARDS LISTED BELOW WILL BE USED TO JUDGE THE SUCCESS OF THE PLAN OVER TIME.

# 1. SURVIVAL:

a. ACHIEVE 100% SURVIVAL OF INSTALLED PLANTS AT THE END OF YEAR 1. THIS STANDARD MAY BE MET THROUGH PLANT ESTABLISHMENT OR THROUGH REPLANTING AS NECESSARY TO ACHIEVE THE REQUIRED NUMBERS.

# 2. TREE AND SHRUB COVER:

- a. ACHIEVE 40% COVER OF SHRUBS AND SAPLING TREES BY YEAR 2. NATIVE VOLUNTEER SPECIES MAY COUNT TOWARD THIS COVER STANDARD.
- b. ACHIEVE 60% COVER OF SHRUBS AND SAPLING TREES BY YEAR 3. NATIVE VOLUNTEER SPECIES MAY COUNT TOWARD THIS COVER STANDARD.
- c. ACHIEVE 80% COVER OF SHRUBS AND SAPLING TREES BY YEAR5. NATIVE VOLUNTEER SPECIES MAY COUNT TOWARD THIS COVER STANDARD.

# 3. PERENNIAL AND GROUNDCOVER COVER:

- a. ACHIEVE 30% COVER OF NATIVE PERENNIALS AND GROUNDCOVER BY YEAR 2. NATIVE VOLUNTEER SPECIES MAY COUNT TOWARDS THIS COVER STANDARD.
- b. ACHIEVE 40% COVER OF NATIVE PERENNIALS AND GROUNDCOVER BY YEAR 3. NATIVE VOLUNTEER SPECIES MAY COUNT TOWARDS THIS COVER STANDARD.
- c. ACHIEVE 60% COVER OF NATIVE PERENNIALS AND GROUNDCOVER BY YEAR 5. NATIVE VOLUNTEER SPECIES MAY COUNT TOWARDS THIS COVER STANDARD.
- 4. SPECIES DIVERSITY: ESTABLISH AT LEAST SEVEN TREE SPECIES BY YEAR 3. ESTABLISH AT LEAST FOUR NATIVE SHRUB SPECIES BY YEAR 3. NATIVE VOLUNTEER SPECIES MAY COUNT TOWARD THESE

## STANDARDS.

5. INVASIVE SPECIES COVER: AERIAL COVER FOR ALL NON-NATIVE, INVASIVE AND NOXIOUS WEEDS WILL NOT EXCEED 10% AT ANY YEAR. INVASIVE SPECIES INCLUDE, BUT ARE NOT LIMITED TO, HIMALAYAN BLACKBERRY, ENGLISH IVY AND IVY SPECIES, CUT LEAF BLACKBERRY, KNOTWEEDS, REED CANARYGRASS, CHERRY LAUREL, AND ENGLISH HOLLY...

## 1.4 MAINTENANCE

THE SITE WILL BE MAINTAINED IN ACCORDANCE WITH THE FOLLOWING INSTRUCTIONS AND AS-NEEDED BY THE CITY OF BELLEVUE PARKS & COMMUNITY SERVICES NATURAL RESOURCE DIVISION..

1) FOLLOW THE RECOMMENDATIONS NOTED DURING ANY MAINTENANCE FIELD OBSERVATIONS.

## 2) GENERAL WEEDING FOR ALL PLANTING AREAS:

- a. AT LEAST TWICE YEARLY, REMOVE BY HAND ALL COMPETING WEEDS AND WEED ROOTS FROM BENEATH EACH INSTALLED PLANT AND ANY UNDESIRABLE VEGETATION TO A DISTANCE OF 18 INCHES FROM THE MAIN PLANT STEM. WEEDING SHOULD OCCUR AS NEEDED THROUGHOUT SPRING AND SUMMER. FREQUENT WEEDING WILL RESULT IN LOWER MORTALITY, LOWER PLANT REPLACEMENT COSTS, AND INCREASED LIKELIHOOD OF MEETING PERFORMANCE STANDARDS BY YEAR-5.
- b. DO NOT WEED THE AREA NEAR THE PLANT BASES WITH STRING TRIMMER (WEED WHACKER). NATIVE PLANTS ARE EASILY DAMAGED OR KILLED, AND WEEDS EASILY RECOVER AFTER TRIMMING.
- c. SELECTIVE APPLICATIONS OF HERBICIDE MAY BE NEEDED TO CONTROL INVASIVE SPECIES, ESPECIALLY WHEN INTERMIXED WITH NATIVE SPECIES. HERBICIDE APPLICATION, WHEN NECESSARY, SHALL BE CONDUCTED PER CITY OF BELLEVUE STANDARDS. SEE SPECIFICATIONS.
- 3) REPLACE MULCH AS NECESSARY TO MAINTAIN A 4-INCH THICK LAYER, RETAIN SOIL MOISTURE, AND LIMIT WEEDS.
- 4) SUPPLEMENTAL IRRIGATION BY WATERING TRUCK OR TEMPORARY IRRIGATION SYSTEM SHOULD BE PROVIDED FROM JUNE 1 THROUGH SEPTEMBER 30 FOR THE FIRST TWO YEARS FOLLOWING INSTALLATION. IRRIGATION BEYOND THE SECOND YEAR MAY BE NEEDED BASED ON SITE PERFORMANCE OR SIGNIFICANT REPLANTING.
- 5) APPLY SLOW RELEASE GRANULAR FERTILIZER TO EACH INSTALLED PLANT ANNUALLY IN THE SPRING (BY JUNE 1) OF YEARS 2 THROUGH 5.

# 1.5 CONSTRUCTION NOTES

NOTE: THE WATERSHED COMPANY [(425)822-5242] PERSONNEL, OR OTHER PERSONS QUALIFIED TO EVALUATE ENVIRONMENTAL RESTORATION PROJECTS WILL MONITOR:

# 1) ALL SITE PREPARATION

- a. INVASIVE SPECIES REMOVAL
- b. SOIL PREPARATION.
- c. MULCH PLACEMENT.

# 2) PLANT MATERIAL INSPECTION

- a. PLANT MATERIAL DELIVERY INSPECTION.
- b. 100% PLANT INSTALLATION INSPECTION.

# GENERAL WORK SEQUENCE

- 1) CLEAR PLANTING AREA OF ALL INVASIVE VEGETATION, INCLUDING BUT NOT LIMITED TO HIMALAYAN BLACKBERRY, REED CANARY GRASS, AND ENGLISH IVY.
- 2) MANUALLY OR MECHANICALLY REMOVE ALL INVASIVE VEGETATION PER THE SPECIFICATIONS.

# 3) INSTALL MULCH.

- 4) ALL PLANT INSTALLATION IS TO TAKE PLACE DURING THE DORMANT SEASON (OCTOBER  $15^{\mathrm{TH}}$ -MARCH  $1^{\mathrm{ST}}$ ) FOR BEST SURVIVAL.
- 5) PREPARE A PLANTING PIT FOR EACH PLANT AND INSTALL PER THE PLANTING DETAILS.
- 6) INSTALL A TEMPORARY, ABOVE GROUND IRRIGATION SYSTEM TO PROVIDE FULL COVERAGE TO ALL PLANTS WITHIN THE RESTORATION AREA.

# CONTINGENCIES

IF THERE IS A SIGNIFICANT PROBLEM WITH THE ENHANCEMENT AREAS MEETING PERFORMANCE STANDARDS, A CONTINGENCY PLAN WILL BE DEVELOPED AND IMPLEMENTED. CONTINGENCY PLANS CAN INCLUDE, BUT ARE NOT LIMITED TO: SOIL AMENDMENT, ADDITIONAL PLANT INSTALLATION, AND PLANT SUBSTITUTIONS OF TYPE, SIZE, QUANTITY, AND LOCATION.

# PHANTOM LAKE FOREST RESTORATION RESTORATION PLAN

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SUBMITTALS & REVISIONS

NO. DATE DESCRIPTION

1 12-11-20 PERMIT SET

ORIGINAL PLAN IS 22" x 34". SCALE ACCORDINGLY.

PROJECT MANAGER: LV

DESIGNED:

JOB NUMBER:

SHEET NUMBER:

DRAFTED: CHECKED:

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MAINTENANCE AND MONITORING NOTES

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